#### ATC CONSTRUCTION and MITIGATION PLAN

## Cardinal - Hickory Creek 345 kV Transmission Line Project

### **Segment E2 Mount Horeb to Dodgeville**

American Transmission Company LLC, by its corporate manager, ATC Management Inc. (ATC), ITC Midwest, LLC (ITC), and Dairyland Power Cooperative (DPC) 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 Cardinal - Hickory Creek 345 kV Transmission Line Project (Permit #IP-SC-2019-25-03588). 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 #76). The Public Service Commission of Wisconsin granted the applicants a Certificate of Public Convenience and Necessity (CPCN) for the project under docket 5-CE-146; the Final Decision and Order includes a requirement to develop and submit a CMP for each construction segment. As the Project Construction Manager for Segment E2 of the project, ATC has prepared this CMP for this segment, which is located in Dane and Iowa Counties and is approximately 22 miles long extending from structure 147263 to 147400.

Sections A-M of this CMP follow those items outlined in General Condition #78 of the WDNR utility permit, and N-P address additional items specified in the Public Service Commission of Wisconsin (PSCW) Order. The CMP provides additional detail as required by several permit conditions and order points. It does not list every permit condition or order point, and ATC understands that all permit conditions and order points are required, even if not described within this document. Attachments are labeled according to the CMP Sections and are included as outlined below:

Attachment C1: GIS Shapefiles

Attachment D1: CMP Access Map

Attachment E1: Wetland Summary Table

Attachment E2: Wetland Photos

Attachment E3: Off-ROW Evaluation Summary Table

Attachment F1: Waterway Summary Table

Attachment K1: Revised WDNR Table 1 – Segment E2

Attachment L1: Fisheries Waiver Package (Includes Waterway Photos and TCSB Cross Sections)

Attachment N1: Revegetation and Monitoring Plan

Attachment P1: Structure Removal Process

## A. Overall Project Sequencing and Scheduling - ATC

The ATC Managed portion of the project consists of Segment E3 (Cardinal to Mount Horeb), Segment E2 (Mount Horeb to Dodgeville), and Segment E1 (Dodgeville to Hill Valley). Work will also be conducted at substations connected to this portion of the Project including Hill Valley, Cardinal, and other remote substations. ATC's work will generally proceed from east (Segment E3) to west (Segment E1) beginning with ROW clearing on Segment E3 in October 2021 and ending with restoration on Segment E1 in late 2023 or early 2024.

The following summarizes the anticipated timing of construction along the ATC Managed portion of the Project:

- ROW Clearing: October 2021 July 2022
- Structure Foundations: March 2022 April 2023
- Install Structures: May 2022 June 2023
- Install Conductor: June 2022 September 2023
- Mat removal, ROW cleanup and restoration are scheduled to occur as portions of the Project are completed. It is anticipated this will occur from the fall of 2022 to the fall of 2023. Additional restoration activities may extend into 2024 depending on weather and soil conditions.

## B. Segment E2 Sequencing and Scheduling

Vegetation clearing within Segment E2 (Mount Horeb to Dodgeville) is anticipated to begin in December 2021. The following summarizes the anticipated timing of construction within Segment E2:

- ROW Clearing: December 2021 May 2022
- Mat placement, where needed for ROW Clearing: beginning December 2021
- Additional mat placement for construction: May 2022 September 2022
- Structure Foundations: July 2022 December 2022
- Install Structures: August 2022 January 2023
- Install Conductor: October 2022 March 2023
- Mat removal, ROW cleanup and restoration within Segment E2 is scheduled to occur in the fall of 2022 and spring of 2023 following completion of construction, although actual dates for restoration will be weather dependent.

### C. GIS Shapefiles

The Project Shapefiles including structure locations, wetland matting locations, TCSBs, and off-ROW access for Segment E2 are included as Attachment C1.

#### D. Final Access Plan Map

An Access Map for Segment E2 is provided in Attachment D1. This map shows the location of wetlands and waterways, structure locations, temporary clear span bridge (TCSB) crossings, vehicle access both on and off-ROW, and mat storage/staging areas near the ROW. Orange lines identified as Construction Access are inclusive of all project activities. Green lines identify vehicle access that will be used for limited project activities, specifically vegetation management and wire stringing. Access is depicted in portions of the ROW where vehicle travel is most likely, however actual vehicle travel lanes within the ROW will be determined in the field based on topographic features. Access routes are not drawn to scale, and some work activities will extend the full width of the ROW.

The Access Map provides an approximate visual representation of the construction matting to be placed within wetlands. The placement of wetland matting during construction may be adjusted from what is shown to account for site conditions such as unstable soils, topography, or obstructions. Adjustments will attempt minimize wetland impacts where possible while facilitating safe equipment access.

The off-ROW access routes and laydown yards, including some that were not identified in the Application for PSCW Certificate of Public Convenience and Necessity and WDNR Utility Permit (Joint Application), have been reviewed and evaluated with respect to threatened or endangered species, historic resources, wetlands, waterways or other sensitive resources. Potential impacts to these resources are outlined within this CMP and this CMP serves as notification pursuant to Wis. Admin. Code § PSC 111.71.

The laydown yards that have been identified for use as part of the Project were included in the Segment E3 CMP. In the case that additional laydown yards or off-ROW access paths are identified, the Applicants will complete an environmental review of these areas and submit the necessary information to the PSCW prior to establishing any such areas in accordance with Wis. Admin. Code § PSC 111.71.

## **E. Wetland Impact Minimization**

Wetlands were identified in 2017 and 2020 as described in the revised Wetland Delineation Report dated March 1, 2021. Wetland delineation fieldwork completed during the 2020 growing season included confirmation of previously identified wetland boundaries, revised wetland boundaries where applicable, and updated wetland / waterway characteristics. A summary of wetlands within Segment E2 including a description of vegetative communities, survey method, and summary of changed conditions (if applicable) are included in the Wetland Summary Table (Attachment E1). Pre-construction photographs of wetlands along the ROW of Segment E2 are provided in Attachment E2.

The off-ROW access routes and staging areas were evaluated for wetlands and waterways using a combination of onsite determinations where access was available and off-site review. Resources used to assist in the assessment included U.S. Geological Survey (USGS) topographic data, U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) soil survey, WDNR Wisconsin Wetland Inventory (WWI) mapping, WDNR Surface Water Data Viewer, and aerial photography. A summary of

the characteristics the off-ROW access routes and the wetland determination methods are included in the Off-ROW Evaluation Table in Attachment E3.

The following subsections describe the construction activities that will occur within wetlands and the minimization measures that will be taken to reduce wetland impacts. The measures described in other sections of this CMP such as the Invasive Species Management Plan (Section H) and Wetland Restoration and Revegetation Plan (Section I) will also minimize wetland impacts.

### Structures in Wetland

No permanent structures will be placed in wetlands within Segment E2.

# **Temporary Guard Structures**

No temporary guard structures will be placed in wetlands within Segment E2.

### Structure Removal

No structures will be removed from wetlands within Segment E2.

# **Wetland Crossings**

Locations where vehicle access will cross wetlands within Segment E2 are presented on the Access Map. Access through wetlands has been avoided or minimized where feasible; however, complete avoidance of all wetlands along this segment is not possible due to project alignment and the configuration of these wetlands. Locations where access routes are shown to avoid wetlands may need to be crossed by light duty vehicles for wire stringing activities.

Construction matting may be used to facilitate access and minimize impacts in wetlands. WDNR Table 1 (Attachment K) provides the area of temporary construction matting within each wetland.

Most off-ROW access paths occur in upland areas that are comprised of driveways, farm lanes, or cropped agricultural fields. However, the following off-ROW access routes are anticipated to be located in wetlands as described below:

- One potential access path is located within a pasture between Structures 147308 and 147309
  crosses a mapped waterway (S-R07A, B, and C) and possible wetlands (S-W02b-n). Field access
  to this off-ROW was not available, therefore the configuration of the wetlands were aerially
  determined and potential matting impacts estimated.
- An off-ROW access path will be required south of the ROW within wetland S-W05-r for safe equipment access to the ROW.
- Due to topographic constraints within the ROW, an off-ROW access path will be required immediately south of the ROW within wetland S-W06.

- Due to topographic constraints within the ROW, an off-ROW access path will be required immediately south of the ROW within wetland S-W17 along an existing path.
- An off-ROW access path will be required south of the ROW within wetland S-W18 along an existing driveway and trail.

No other off-ROW access routes in Segment E2 cross wetlands or waterways.

### Wetland Impact Summary

Construction of Segment E2 will result in 1.29 acres temporary wetland fill for construction matting and permanently clear 0.97 acres of shrub and forested wetland.

For Segment E2, the WDNR permit (Permit #IP-SC-2019-25-03588) previously authorized 1.03 acres temporary wetland fill for construction matting and permanently clear 1.05 acres shrub and forested wetland.

### **Erosion Control**

A segment-specific Erosion Control Plan (ECP) will be developed to meet the requirements of NR 151 and NR216 and included in ATC's Notice of Intent to be submitted to WDNR under separate cover. This plan will also address erosion control in proximity to wetlands. Disturbance within wetlands will be minimized by implementation of techniques such as the use of low ground pressure tires or tracked vehicles, and/or the use of construction matting to help reduce soil rutting and vegetation disturbance. Use of erosion control devices (ECDs) such as silt fencing, straw logs, or other measures will be installed as necessary to minimize potential wetland impacts.

## F. Waterway Crossings and Impact Minimization Discussion

Waterways along Segment E2 will be crossed using a Temporary Clear Span Bridge (TCSB) to avoid instream disturbance by construction equipment. Up to 21 TCSB crossings will be required along Segment E2 (WDNR Table 1, Attachment K1). TCSBs are generally installed and will remain in place for the duration of the project. However, some TCSBs are needed only to allow access for ROW clearing and will be removed upon completion of that activity. Plan and cross-sectional view drawings for each bridge crossing and photos of accessible crossing locations are provided in Attachment L1 (Fisheries Waiver Package).

Waterways S-R07A, S-R07B, and S-R07C are all associated with a mapped WDNR 24k waterway (an UNT to Smith Conley Creek). ATC does not yet have permission to field review this off-ROW access route, therefore the exact locations and characteristics of the waterway at the construction access route have not been determined. An estimate of locations and crossing characteristics have been provided.

### **Culvert Replacement**

One culvert will be replaced along waterway S-R03A on an existing gravel access drive. The existing culvert has been damaged and does not function properly. This proposed activity will meet the conditions outlined in the WDNR Culvert Replacement-Same Location Exemption Checklist #12 (R 06/2019). A fisheries waiver has been requested for this location and is included in Attachment L.

### Waterway Impact Summary

Segment E2 will require the placement of 21 TCSBs to facilitate construction access. The WDNR permit (Permit #IP-SC-2019-25-03588) previously authorized the placement of 33 TCSBs.

### **Erosion Control**

A segment-specific Erosion Control Plan (ECP) will be developed to meet the requirements of NR 151 and NR216 and included in ATC's Notice of Intent to be submitted to WDNR under separate cover. This plan will also address erosion control in proximity to waterways and TCSBs.

## **Bridge Clearance**

Descriptions of the waterways are provided in Attachment F1, and the bridge cross sections and photos provided in Attachment L1 (Fisheries Waiver Package). Based on the waterway characteristics and topography adjacent to the crossings, all of the proposed 21 TCSBs would not likely have 5 feet of clearance between the water surface and bridge.

ATC requests the WDNR allow less than 5 feet of navigation for the TCSBs crossings contained within this plan. The waterways crossed by the project are not known to have navigation or snowmobile use primarily due to constraints such as the width/depth of the waterway, culvert crossings at roadways, and/or thick vegetation that limits access (see Attachment F). Due to these limitations, the waterways are anticipated to have infrequent or no watercraft use.

## Water Withdrawal

During construction of concrete foundations, water may be pumped into the borehole to maintain the integrity of the excavation and suitable surface waters adjacent to the ROW may be used as a source of this water. At this time, no waterways along Segment E2 have been identified for water withdrawals. If surface water withdrawals are required, they will meet the following conditions:

- 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 will avoid placement of a structure on the bed of the waterway in accordance with Ch. 30.12 (Wis. Stats.).

#### **G. Endangered Resources Plan**

ATC consulted with the WDNR to develop a Certified Endangered Resources (ER) Review (ERR18-130). The Certified ER Review has been amended annually and incorporates species survey results. The amendment identifies which state-listed species have required follow-up actions and the specific areas along Segment E2 where measures are required to avoid and minimize direct or indirect impacts to state-listed species. These follow-up actions and measures will be implemented as described in the ER Review. Furthermore, the amendment identifies voluntary measures recommended to avoid and minimize impacts to other sensitive state-listed species or resources. These measures will be implemented where feasible. The amendment table will continue to be updated, as necessary, and will serve as a communication and coordination tool to be used among ATC, WDNR, and the construction contractor(s).

A Biological Opinion was issued for the project for potential adverse effects to federally listed species. Nondiscretionary measures were included to minimize effects from the project. ATC will implement those measures within the applicable locations.

### H. Invasive Species Management Plan

Plant communities and dominant vegetation within the ROW of Segment E2 were documented during field evaluations in 2017 and 2020. 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.

The majority of Segment E2 follows the existing STH 151 road ROW, frequently crossing town and county roadways. Segment E2 is also located along adjacent pastures, agricultural lands, woodlands, and other undeveloped and developed areas. The following summarizes invasive species observed in vegetative communities along the Segment E2 project corridor. Numerous Restricted species were identified, however no Prohibited species were observed.

In general, Segment E2 is commonly dominated by a variety of non-native species, including Eurasian cool season grasses such as Kentucky blue grass (*Poa pratensis*) and smooth brome grass (*Bromus inermis*). Invasive species were observed throughout the majority of the segment, primarily outside active agricultural fields. Wild parsnip (*Pastinaca sativa*), crown vetch (*Coronilla varia*), and a few scattered locations of Canada thistle (*Cirsium arvense*) were very common in disturbed, open areas and were especially abundant along roadway areas subject to regular mowing.

Along fence lines and field edges and within other areas between agricultural fields, invasive shrubs were common including common buckthorn (*Rhamnus cathartica*), white mulberry (*Morus alba*), invasive honeysuckle shrubs (*Lonicera* spp.) and occasionally Autumn olive (*Elaeagnus umbellata*) and Siberian elm (*Ulmus pumila*). These areas also commonly contained populations of wild parsnip, garlic mustard (*Allaria petiolata*), and Dame's rocket (*Hesperis matronalis*).

Where E2 extends into wooded areas, honeysuckle and common buckthorn shrubs were typically observed, with their abundance ranging from scattered to dominant. Other common invasive species observed within these communities included garlic mustard and Dame's rocket.

Wetland communities observed along Segment E2 include mostly degraded wet meadow, hardwood swamp, shrub-carr, shallow marsh, sedge meadow, degraded sedge meadow, and farmed wetlands. None of the wetlands along this segment are extensive, higher quality communities as they have been degraded by invasive species. Reed canary grass (*Phalaris arundinacea*) (not included in NR 40) and narrow-leaf cattail (*Typha angustifolia*) were commonly observed within many of these wetlands. In addition, common buckthorn and honeysuckle shrubs are scattered to common within some wetland areas.

### General BMPs

Many locations within the Project ROW and along access routes are comprised of vegetative communities that contain invasive species, as described above. The following general BMPs will be used during construction along Segment E2 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 use 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.
  - O When working in areas infested with invasive species, remove mud and plant material from construction matting and equipment. A fabric barrier may be placed below construction matting to avoid contact with invasive vegetation and soil material.
- 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.
  - o In areas requiring clearing, a layer of wood chips may be left on the ground to act as a barrier between vehicles and the ground surface. Wood chips will not exceed 2 inches in depth within wetland areas.

## Restoration and landscaping

- Seed mixes have been developed for the Project and will be installed in accordance with the Revegetation and Monitoring plan (Attachment N1).
- Revegetate disturbed soils as soon as feasible with an appropriate temporary cover crop to minimize invasive species establishment. As necessary, a perennial seed mix shall be installed during the appropriate seeding window.

## Aquatic invasive species

All equipment used for withdrawing water (i.e. pumps, hoses, machinery, etc.) will be adequately decontaminated/disinfected for aquatic invasive species.
 Decontamination/disinfection can be accomplished by allowing equipment to dry thoroughly for at least 5 days or by using another appropriate method identified in NR 329.04, prior to being used in non-infested waters of the state.

### Location-Specific BMPs

Location-specific BMPs will be applied to the following locations because of their relative diversity and/or limited population of invasive species. The approximate extent and locations of these areas are identified on the Access Map with a corresponding Location ID. Flagging, fencing and/or signage will be used in the field to mark these locations.

| Location ID | Description   |
|-------------|---|
| INV-14      | A small population of plumeless thistle ( <i>Carduus acanthoides</i> ) was observed just south of structure 147395. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.  |
| INV-15      | A small population of plumeless thistle was observed between CTH JG and structure 147389. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.  |
| INV-16      | The forested area surrounding structure 147385 on the east side of Sand Rock Road has a diverse plant community with few invasive species. Attempts should be made to minimize work activities on the slope in this woodland. If this area cannot be avoided, then the vehicles should be cleaned prior to entry. |
| INV-17      | One small population of Japanese hedge parsley ( <i>Torilis japonica</i> ) was observed between structures 147383 and 147384. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.  |
| INV-18      | One small population of wild chervil ( <i>Anthriscus sylvestris</i> ) was observed between structures 147371 and 147372. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.   |

| INV-19 | A small population of nodding thistle ( <i>Carduus nutans</i> ) and plumeless thistle was observed just northwest of structure 147369. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area. |
|--------|---|
| INV-20 | A small population of teasel ( <i>Dipsacus fullonum</i> ) is located just west of structure 147356. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.                                    |
| INV-21 | A small community of spotted knapweed ( <i>Centaurea stoebe</i> ) and teasel is located just west of structure 147340. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.                 |
| INV-22 | Two small populations of spotted knapweed are located in the area surrounding structure 147338. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.  |
| INV-23 | A few small populations of poison hemlock were observed between structures 147336 and 147337. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.  |
| INV-24 | Two small populations of teasel are located just southwest of structure 147336. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.  |
| INV-25 | A small population of plumeless thistle is located next to structure 147334. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.   |
| INV-26 | A small population of spotted knapweed is located just west of structure 147334. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.   |
| INV-27 | A small population of nodding thistle was observed between structures 147329 and 147330. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.   |
| INV-28 | A small population of spotted knapweed is located just northeast of structure 147326.  This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.   |
| INV-29 | A small population of teasel is located just west of structure 147319. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.   |

| INV-30 | A small population of teasel is located just north of structure 147311. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.   |
|--------|--|
| INV-31 | Wooded area with multiflora rose ( <i>Rosa multiflora</i> ) and common buckthorn observed in understory north of structure 1470308. Avoid moving chipped material from the area and remove soil/debris from vehicles after accessing the area. |
| INV-32 | Wooded area with multiflora rose and common buckthorn observed in understory between structures 1470305 and 147306. Avoid moving chipped material from the area and remove soil/debris from vehicles after accessing the area.                 |
| INV-33 | One population of leafy spurge ( <i>Euphorbia esula</i> ) was observed between structure 147279 and CTH Y. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.                                |
| INV-34 | A small population of teasel is located on the east side of CTH Z between structures 147268 and 147269. This area will be avoided if possible, or remove soil/debris from vehicles after accessing the area.                                   |

Location-specific BMPs may be implemented elsewhere within Segment E2 if ATC encounters a localized population of an invasive species other than those discussed above during future field visits.

### I. Wetland Restoration and Revegetation Plan

A project-specific Revegetation and Monitoring Plan, which addresses both wetland and upland areas is discussed in Section N, below and included as Attachment N1.

### J. Post-Construction Monitoring Plan

ATC will conduct post-construction monitoring of portions of the Project, as described in the Revegetation and Monitoring Plan (Attachment N1). The plan provides details on the communities to be monitored, the performance standards for monitoring, and the reporting requirements. A summary of the post-construction monitoring requirements for uplands and wetlands are provided below.

In addition to the post-construction monitoring described above, and in accordance with Conditions #32 and #38 of the WDNR utility permit, ATC will conduct frequent inspections (e.g., weekly and after a significant rainfall event) of erosion and sediment controls during and after construction, which will include areas within and adjacent to wetlands and waterways. These inspections will occur until disturbed areas are stabilized and meet the thresholds outlined in NR216.

#### K. Revised WDNR Table 1

The WDNR Table 1 for Segment E2 is provided in Attachment K1. This table has been revised to reflect the approved route, updated wetland boundaries, construction access, and construction plan.

#### L. Fisheries Waiver

ATC is requesting the seasonal restriction for placement and removal of TCSBs be waived for all waterway TCSB crossings and one culvert replacement along this segment. A fisheries waiver request package is included in Attachment L1. This attachment contains descriptions of waterways, TCSB cross sections, photos, and maps.

## M. Waterway Navigability Determination Request

A navigability determination was previously requested at seven locations within the project ROW in which the WDNR 24K Hydro layer identified a waterway. The WDNR determined on 9/2/2021 and 10/20/2020 that no Ch. 30 permit is required at Q-UNT11, S-UNT1, S-UNT2, S-UNT3, S-UNT4, S-R21, and S-R30. These features are identified on the Access Map, but are not included in the WDNR Permitting Table (Attachment K).

In addition to the components outlined in General Condition #78 of the WDNR utility permit (Sections A-M), the following information is provided in this CMP as requested by the PSCW Order:

#### N. Revegetation Plan

A project specific Revegetation and Monitoring Plan has been developed which includes guidance for revegetation following construction, provides protocols for monitoring wetland and upland areas post-construction, and describes reporting for post-construction monitoring. The plan includes seed mixes and recommended areas for their use, in accordance with Order Points 30-33. The Revegetation and Monitoring Plan is provided in Attachment N1.

### O. Independent Monitor Roles and Responsibilities

The PSC Final Decision and WDNR Utility Permit authorized the hiring of a combined Independent Environmental Monitor (IEM) and Independent Agricultural Monitor (IAM) for construction of the project. The Independent Monitor will work for and report directly to the PSC. The Independent Monitor will be responsible for monitoring ATC and contractor activities that might affect the environment and agricultural lands, during the construction project. The Independent Monitor will be responsible for monitoring the company's compliance with the requirements and practices identified in the following documents:

- PSC Final Decision and Order, including the agricultural conditions recommended by Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) and approved by the Commission.
- WDNR Utility Permit IP-SC-2019-25-03588
- WPDES Stormwater Discharge permit
- Certified Endangered Resource Review (#18-130)
- The project Avian Protection Plan, including Bald Eagle Nest Management Plan
- This Construction Mitigation Plan (CMP)

#### P. Agricultural Conditions

The following agricultural conditions will be employed during construction:

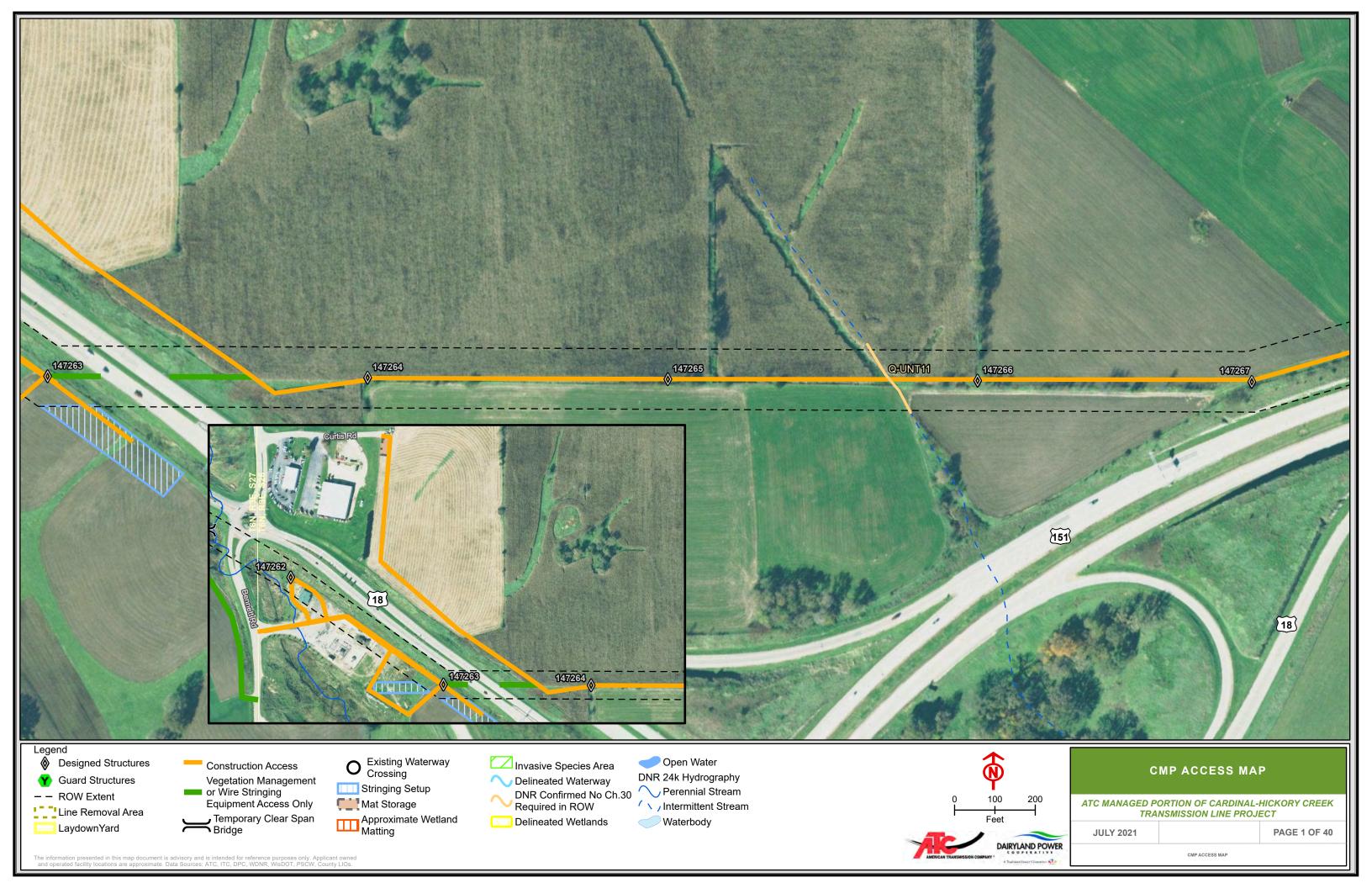
- a) Mitigation measures to address potential significant rutting in agricultural areas may include:
  - i) Placing construction mats on the access routes and work areas,
  - ii) Using approved alternate access,
  - iii) Changing type of equipment used, or
  - iv) Temporarily suspending work until the area dries out or firms up.

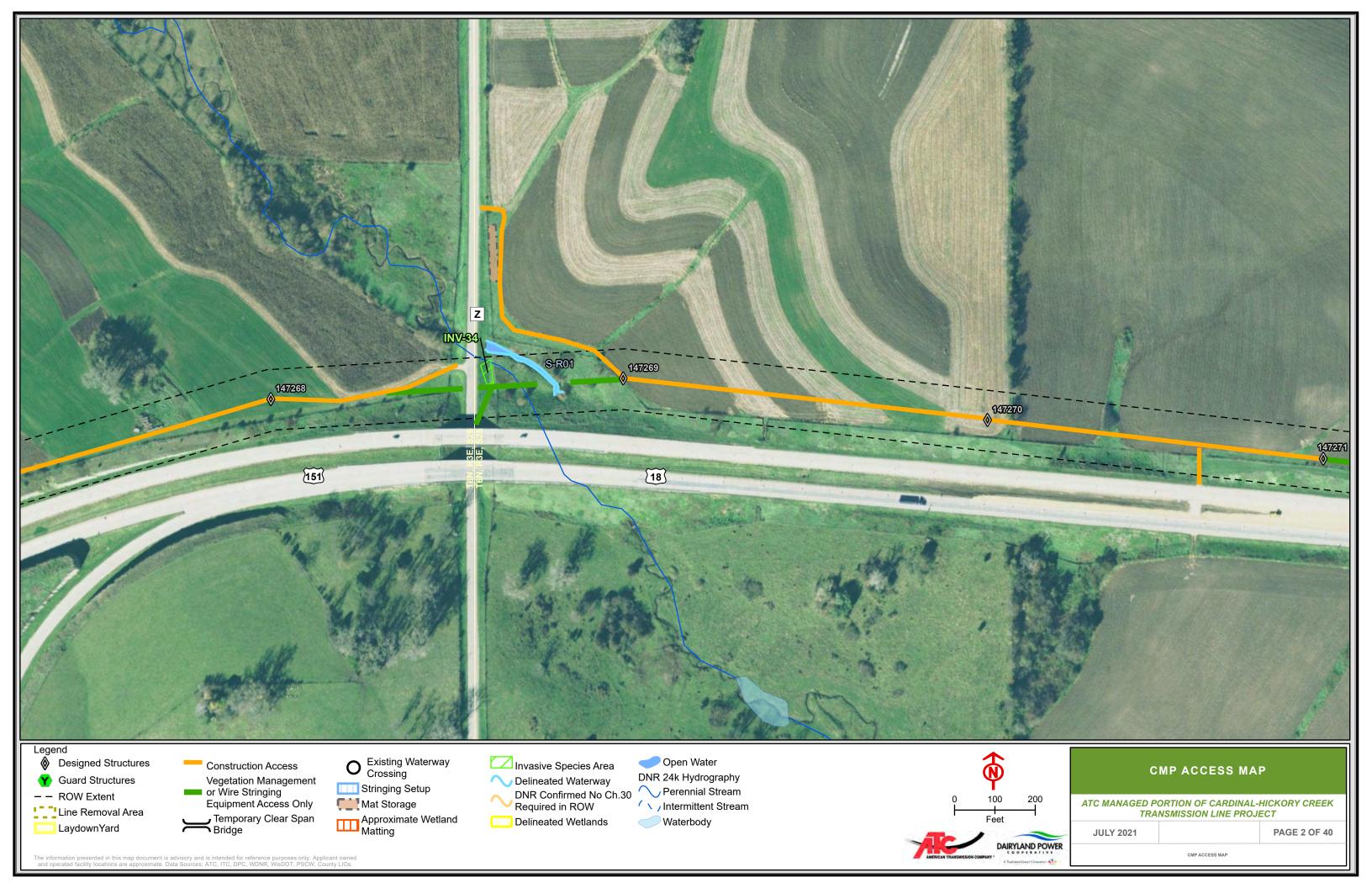
If project construction causes significant ruts in cropland or pasture the Contractor shall repair the ruts as soon as practical.

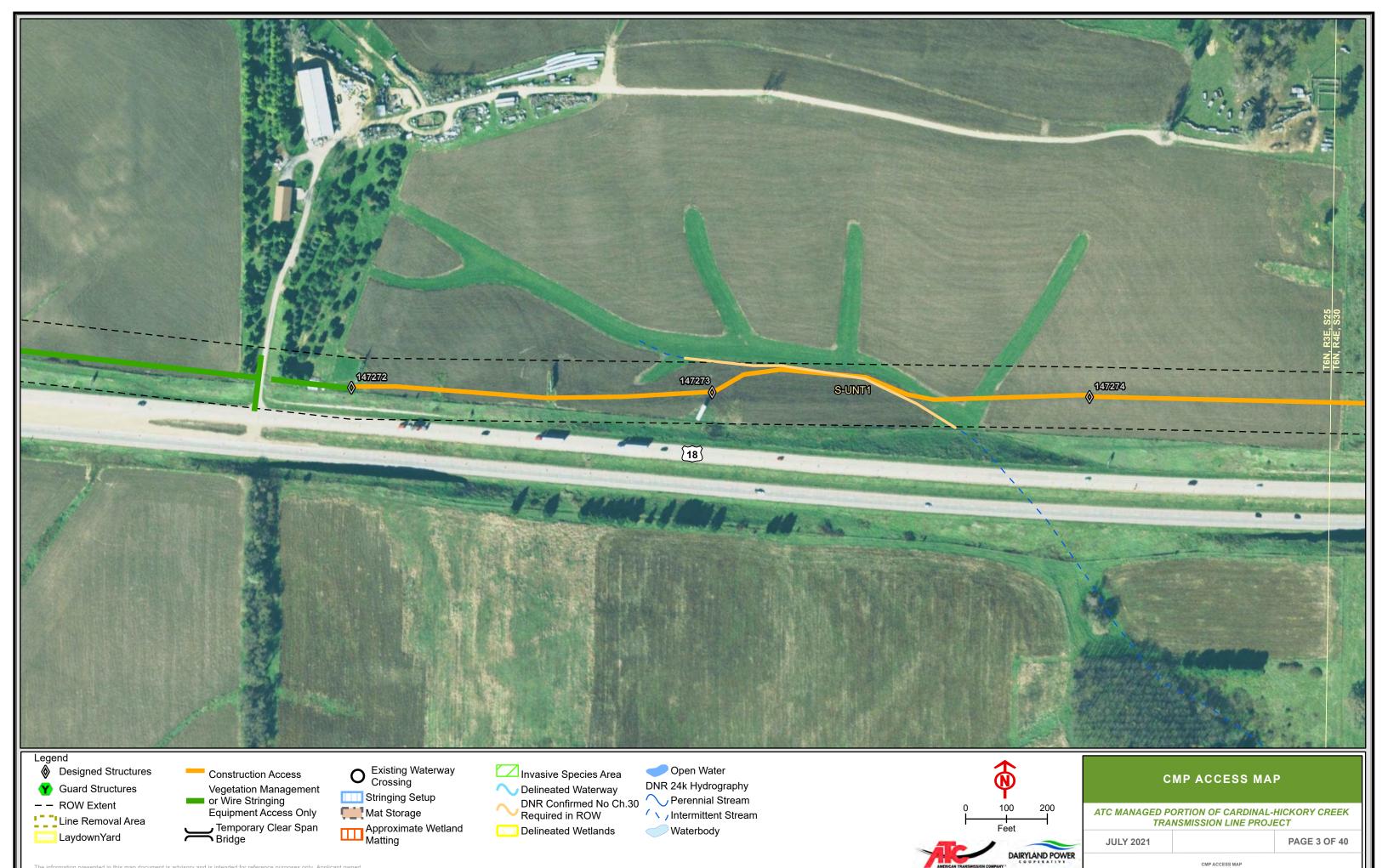
- b) The Contractor shall strip and segregate all topsoil at all excavation sites located within cropped and uncropped areas in agricultural fields, and all areas where grading is required within agricultural fields. Stripped topsoil will be hauled away or stockpiled near the location where it was removed and will be replaced as soon as practicable. If necessary, new topsoil will be spread if topsoil has been lost or substantially mixed with subsoils.
- c) All parent material/spoil excavated will be removed from agricultural fields, unless the landowner agrees to have it disposed of on his/her land at an upland location.
- d) Every reasonable effort shall be made so as not to damage drainage systems (ie terracing drain tiles, grass waterways, etc). If damage occurs to drainage systems the contractor will work with the agricultural operator and/or landowner to repair the damage.
- f) In the event soils sensitive to compaction are encountered in areas of agricultural production, contractor will minimize impacts to these soils by using protective measures such as avoidance, matting and changing type of equipment used. Winter work can be implemented if site conditions warrant.
- g) In the case of organic farms, landowners will be consulted to minimize potential impacts to their organic farming status.
- h) Several existing transmission line structures will be removed as part of this Project. The Structure Removal Procedure (Attachment P1) provides additional detail regarding structure removals within agricultural lands.

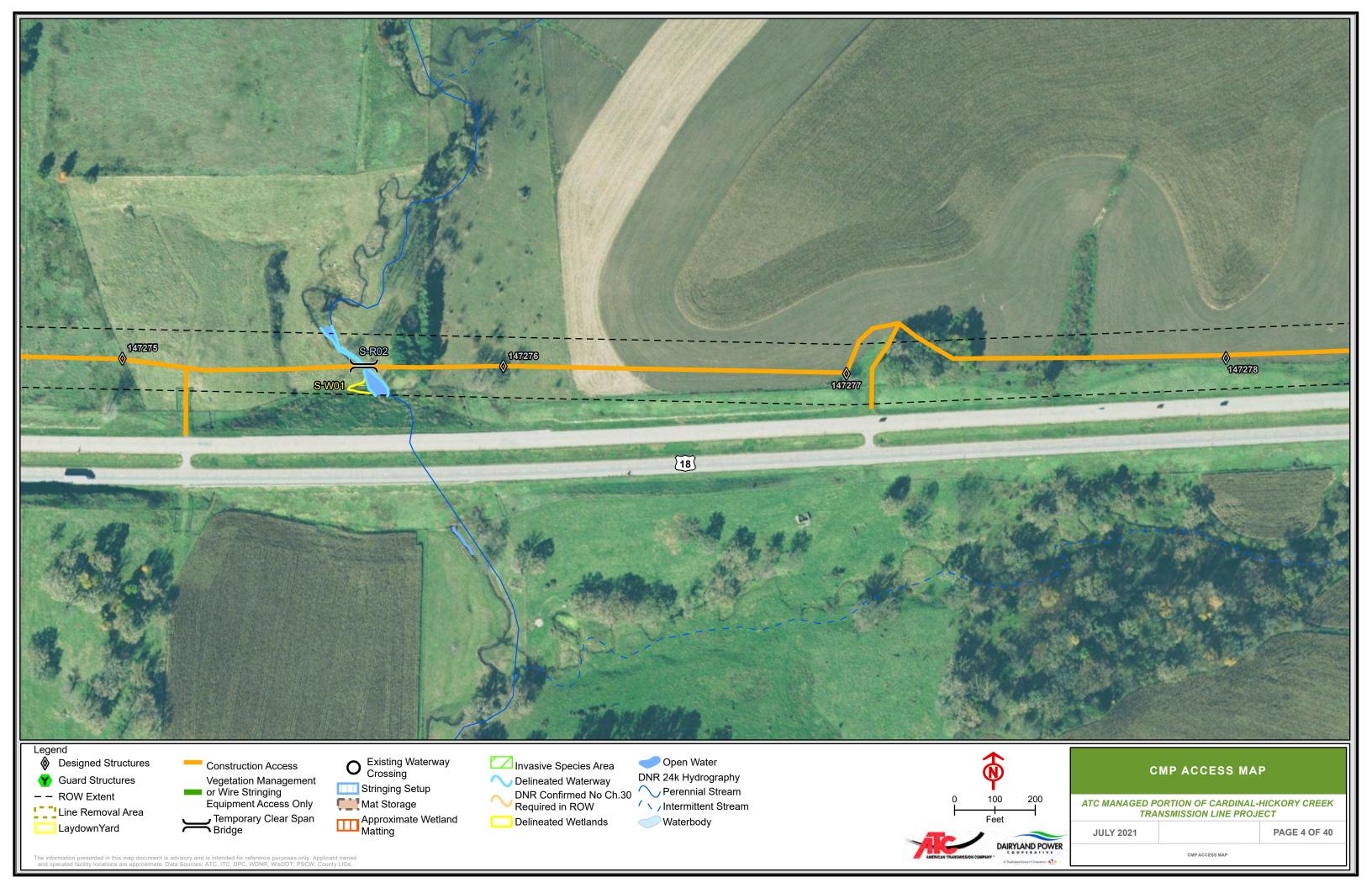
# **Attachment D**

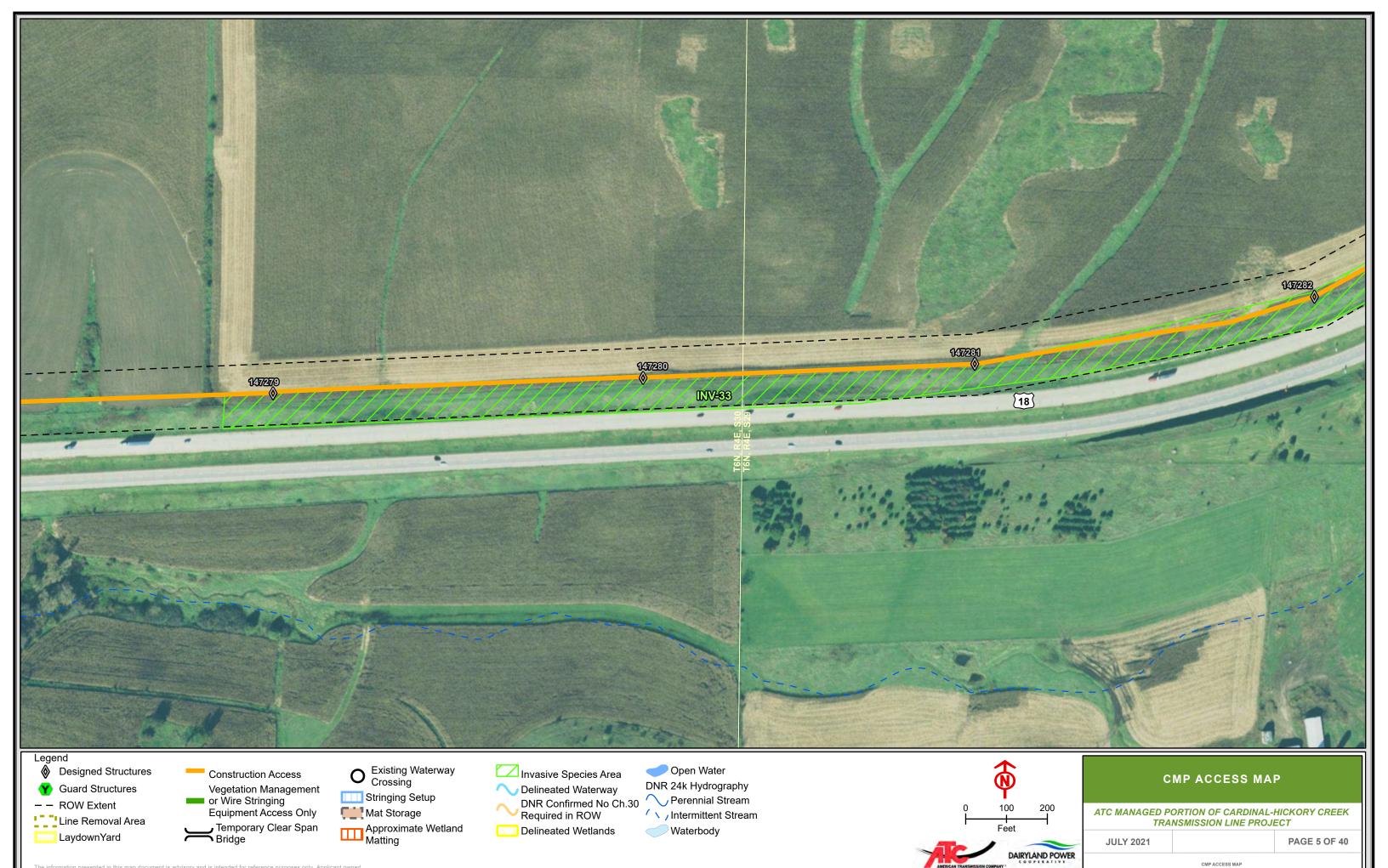
**CMP Access Map** 

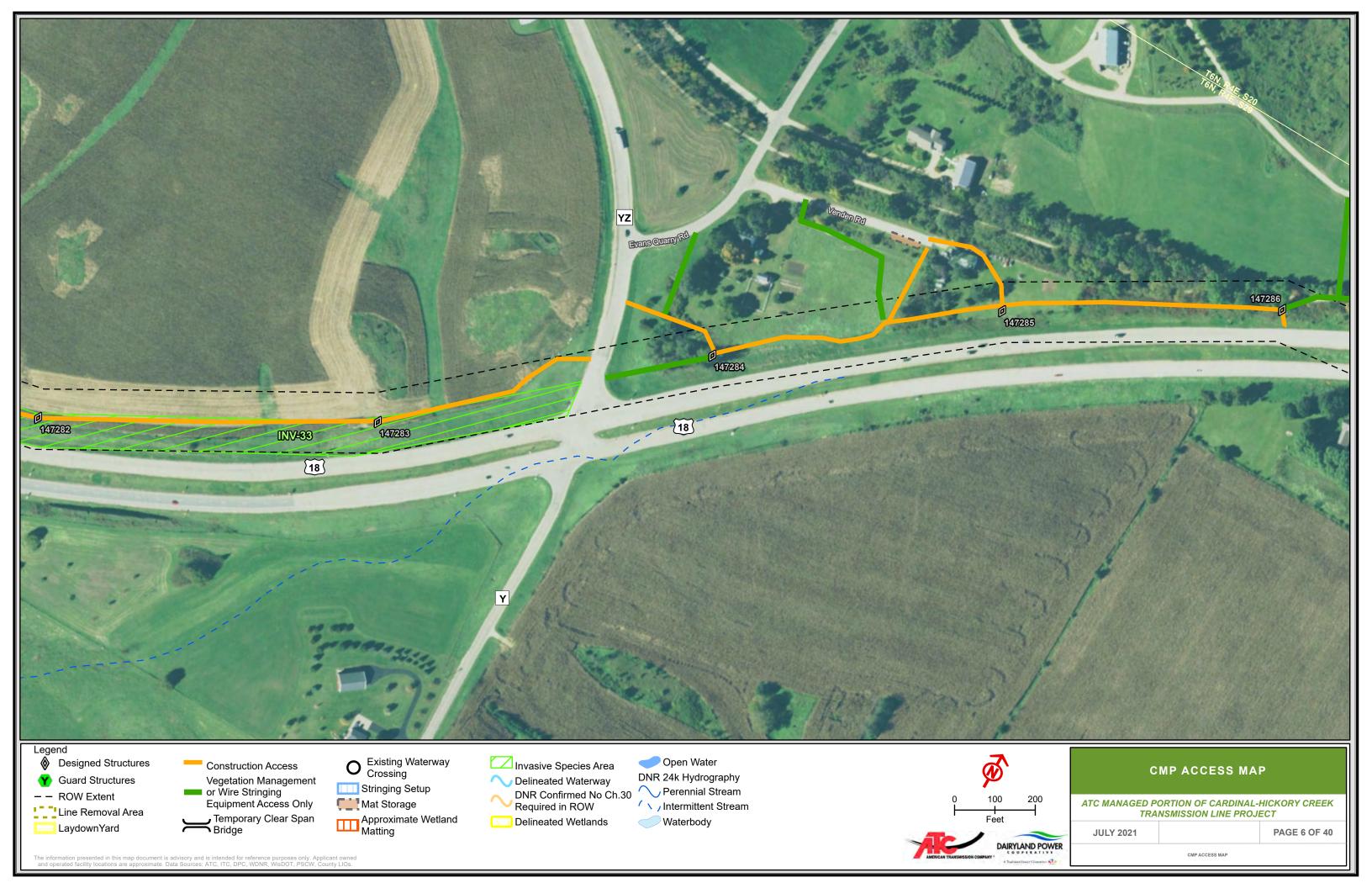


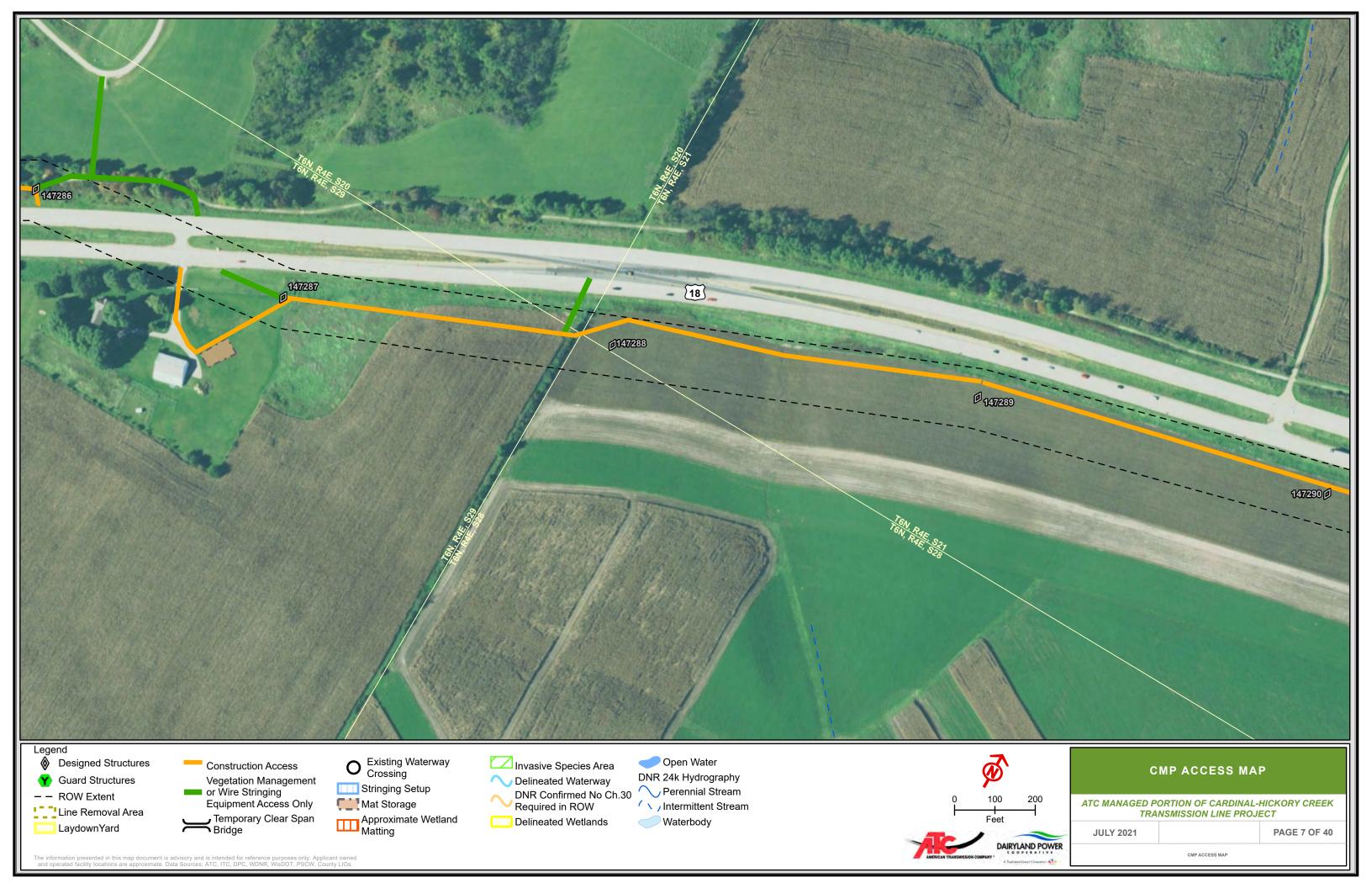


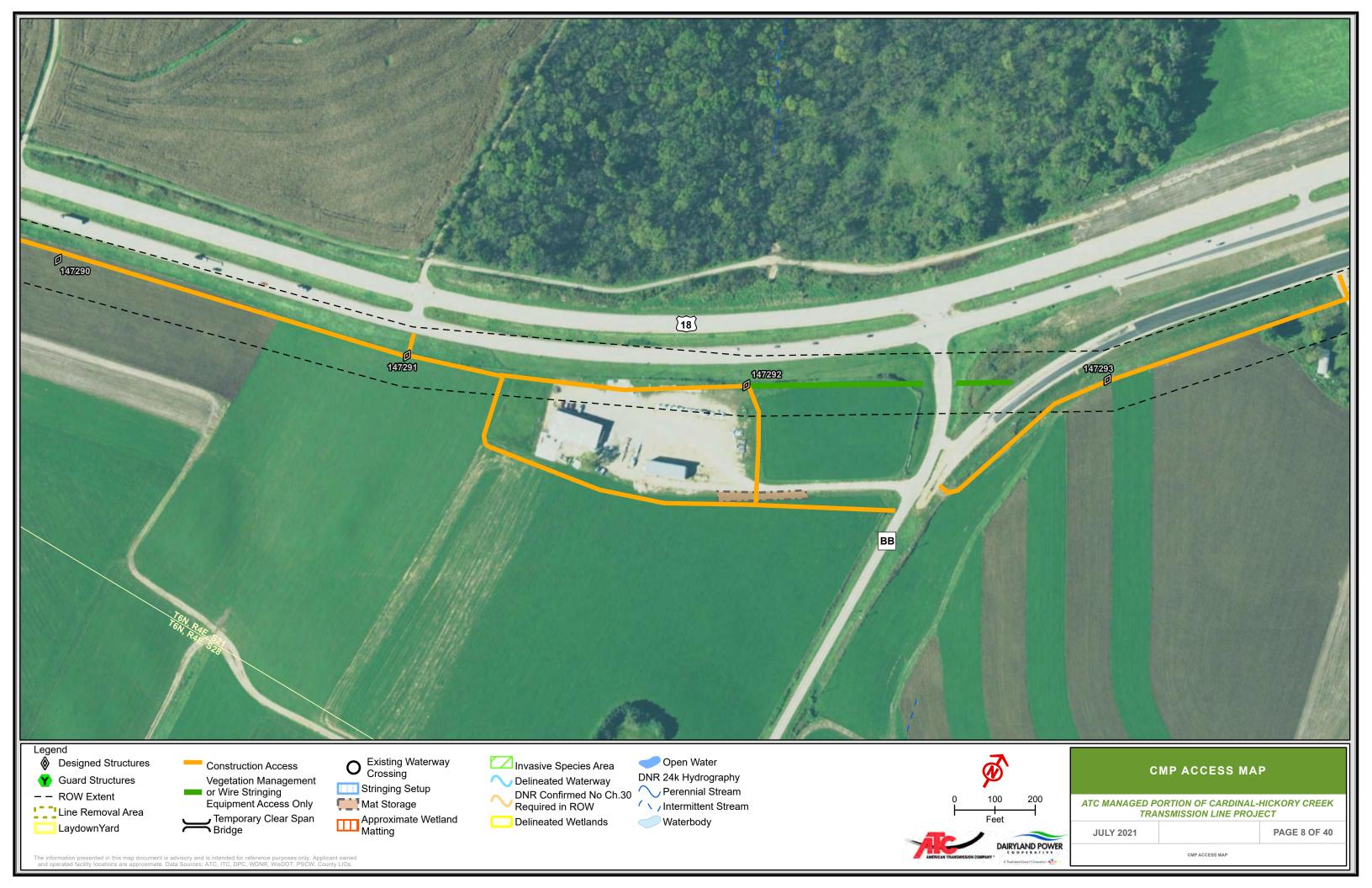


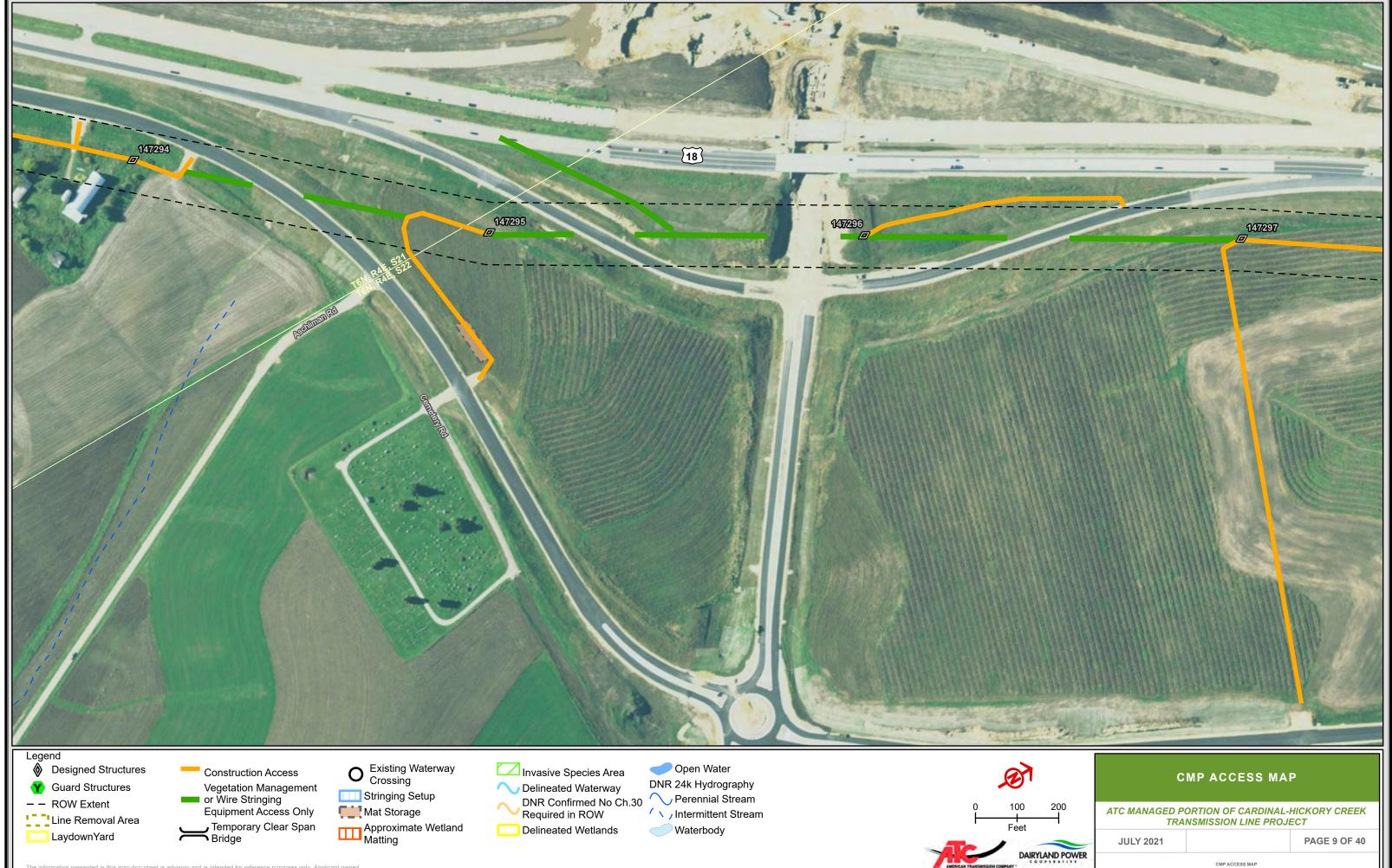


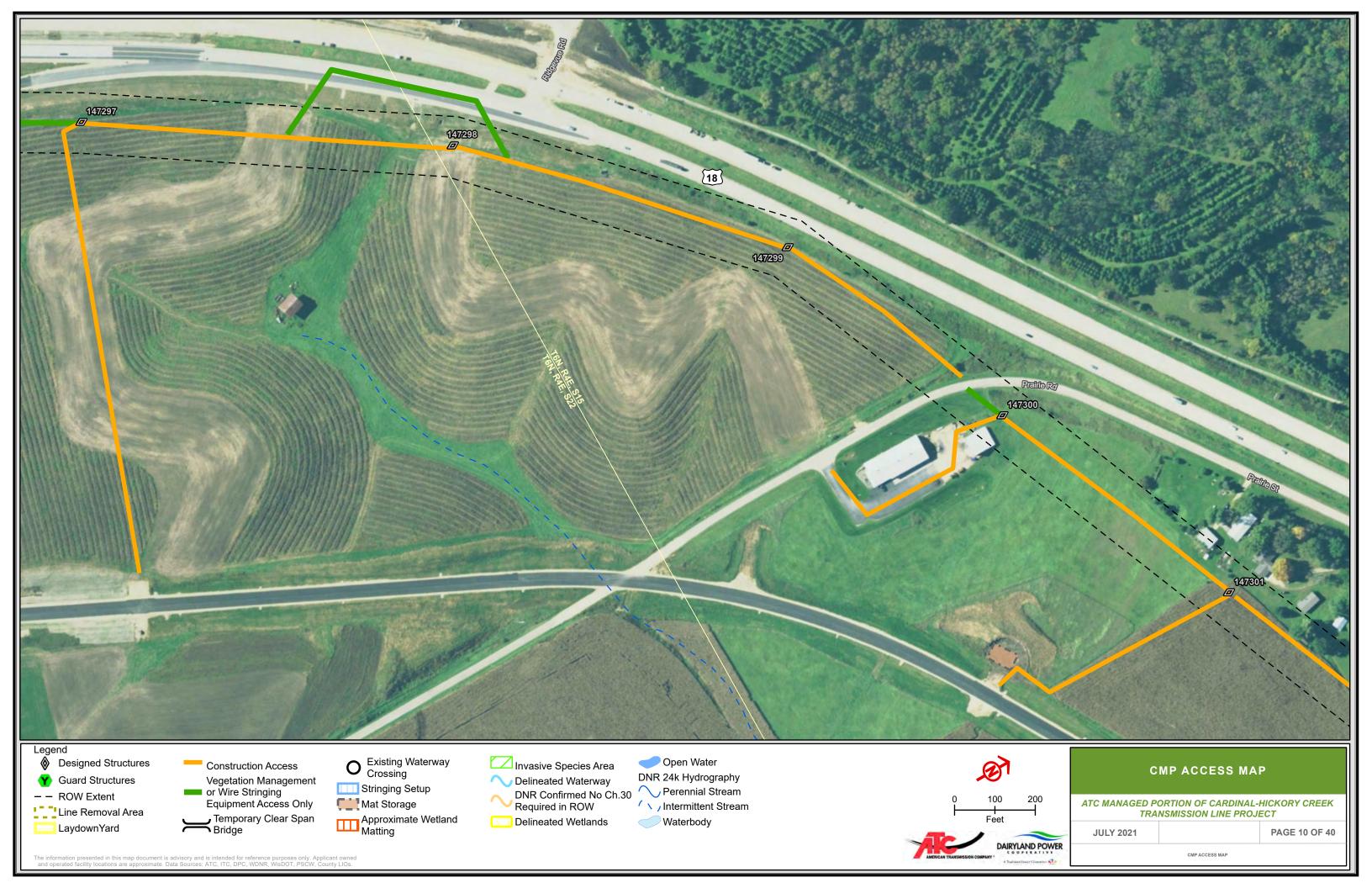


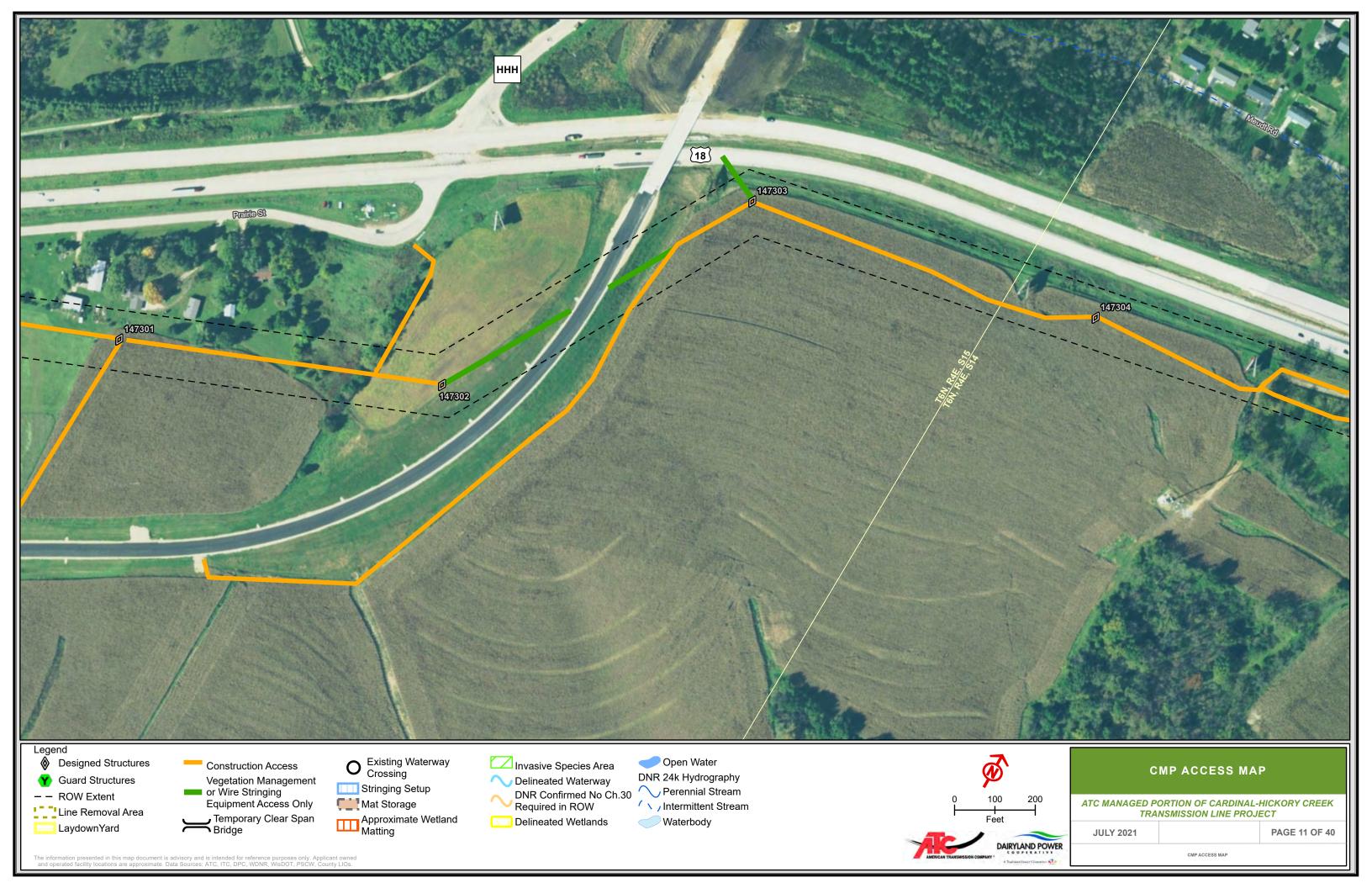


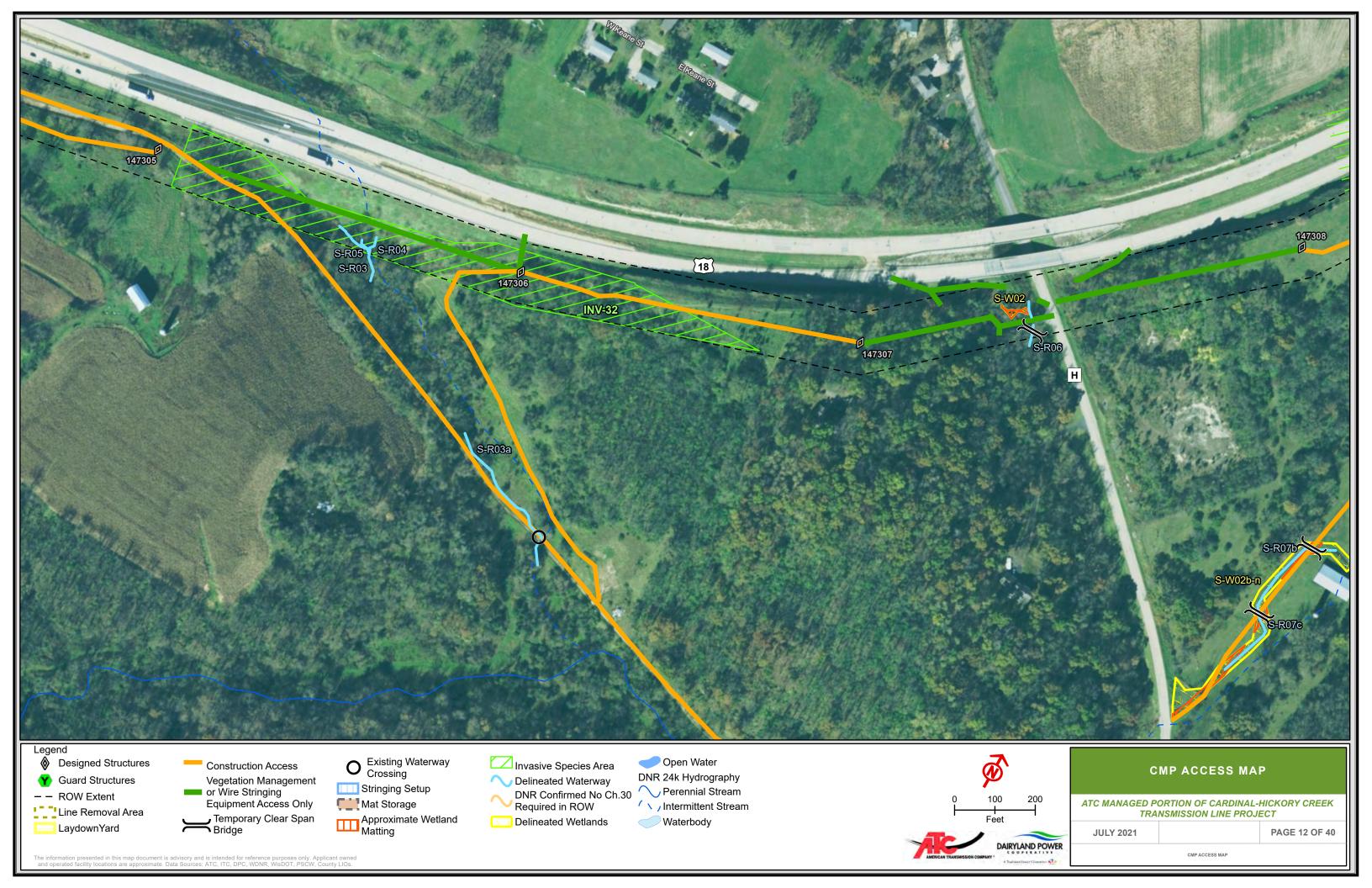


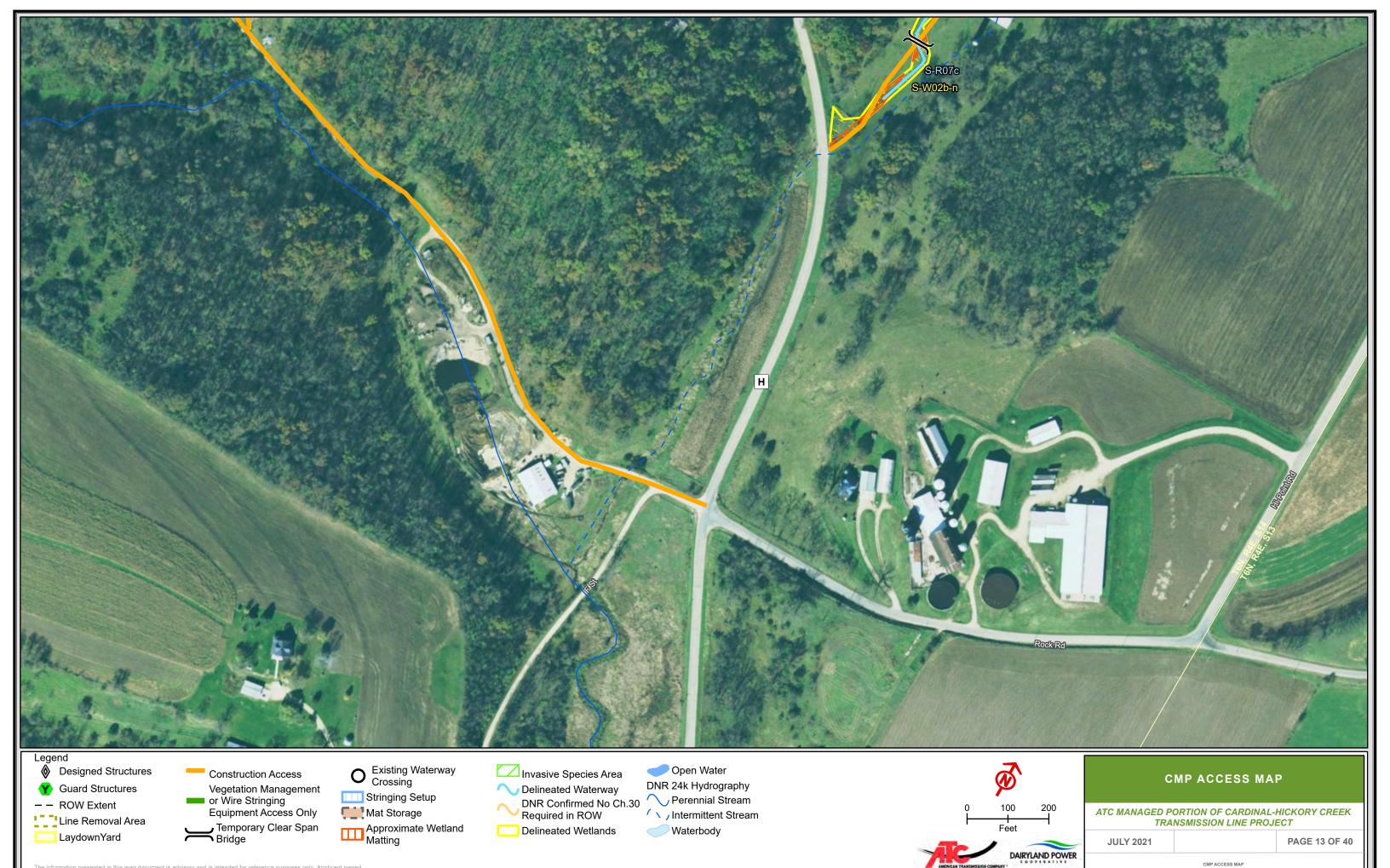


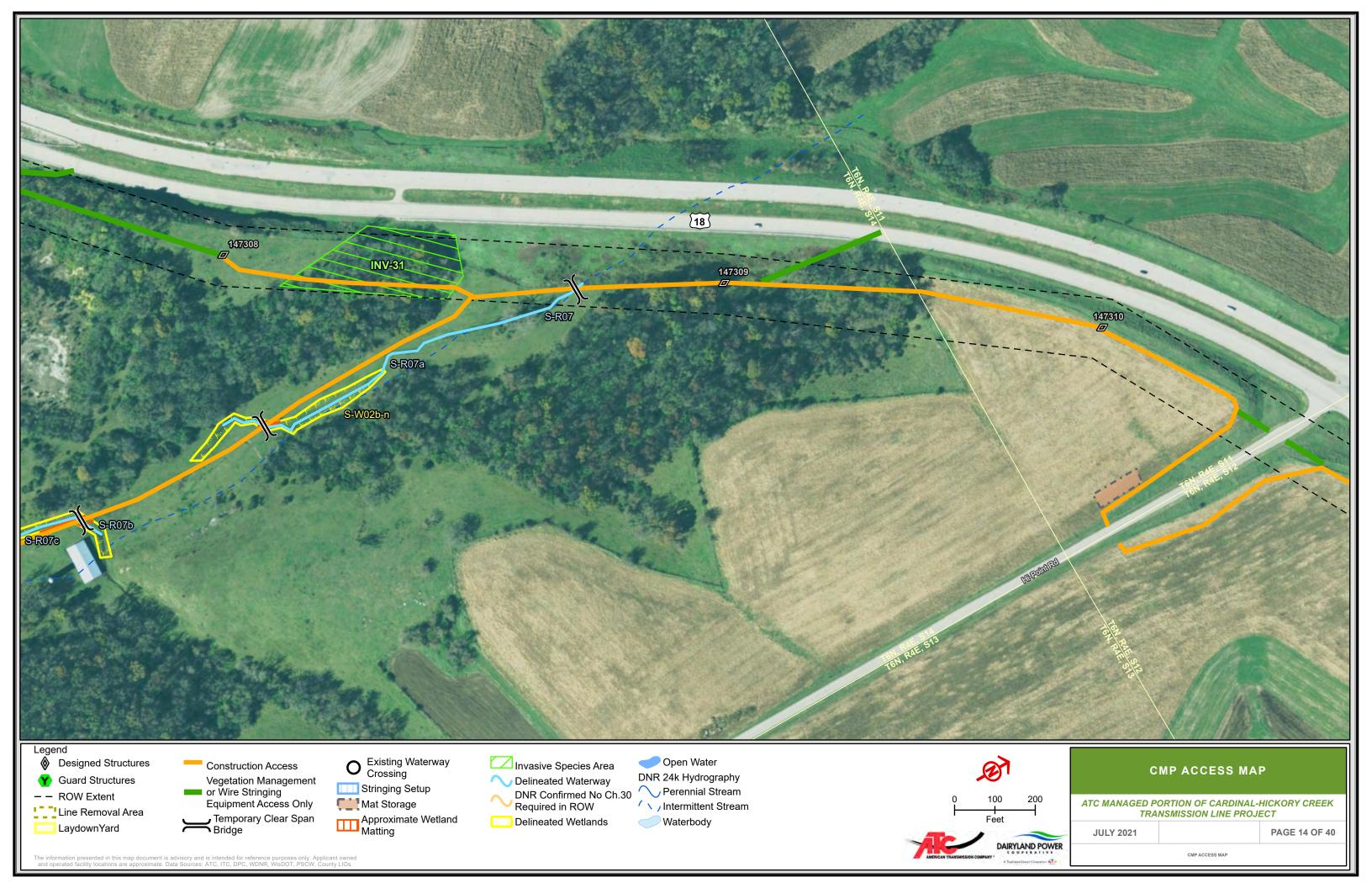


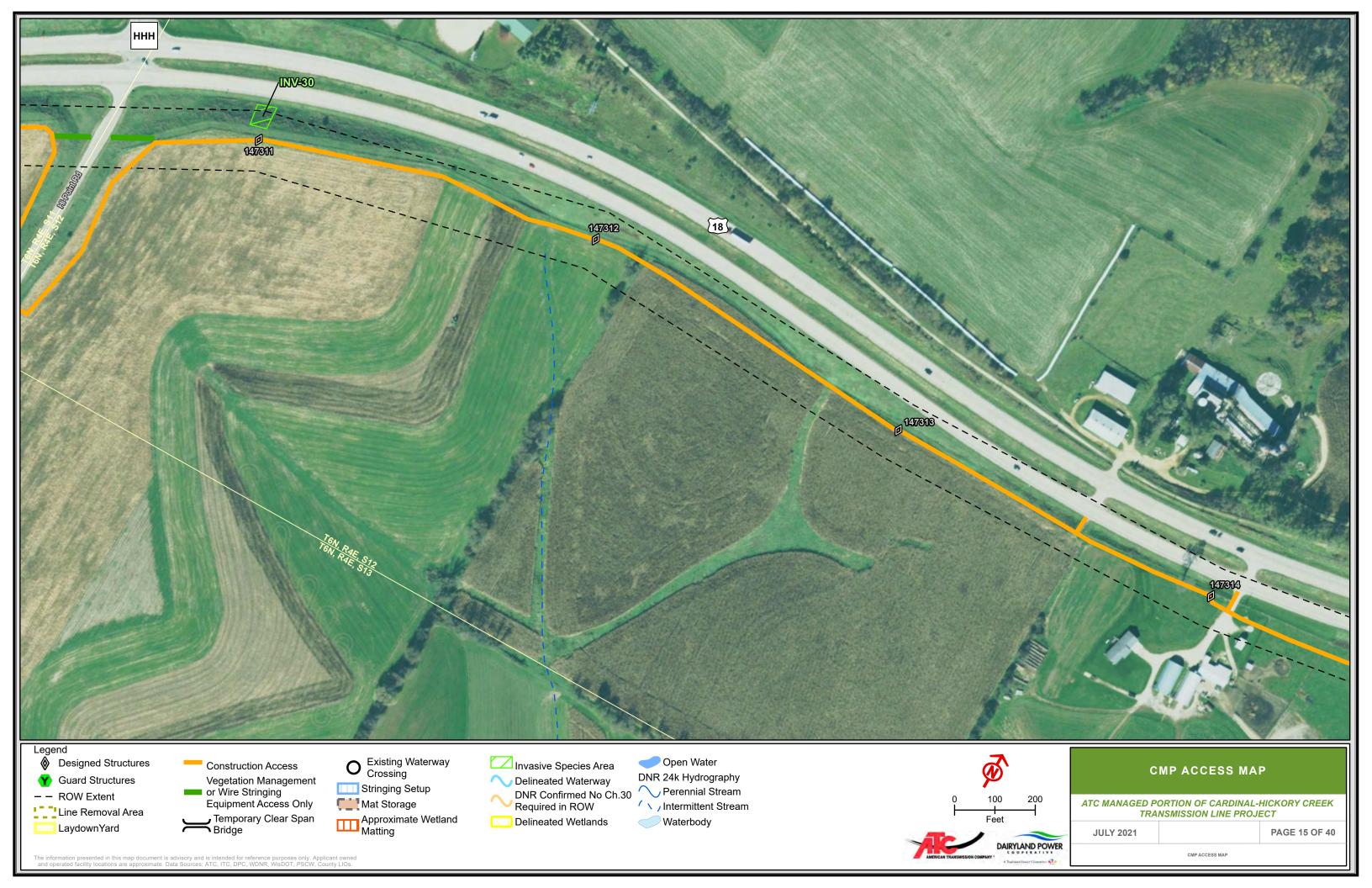


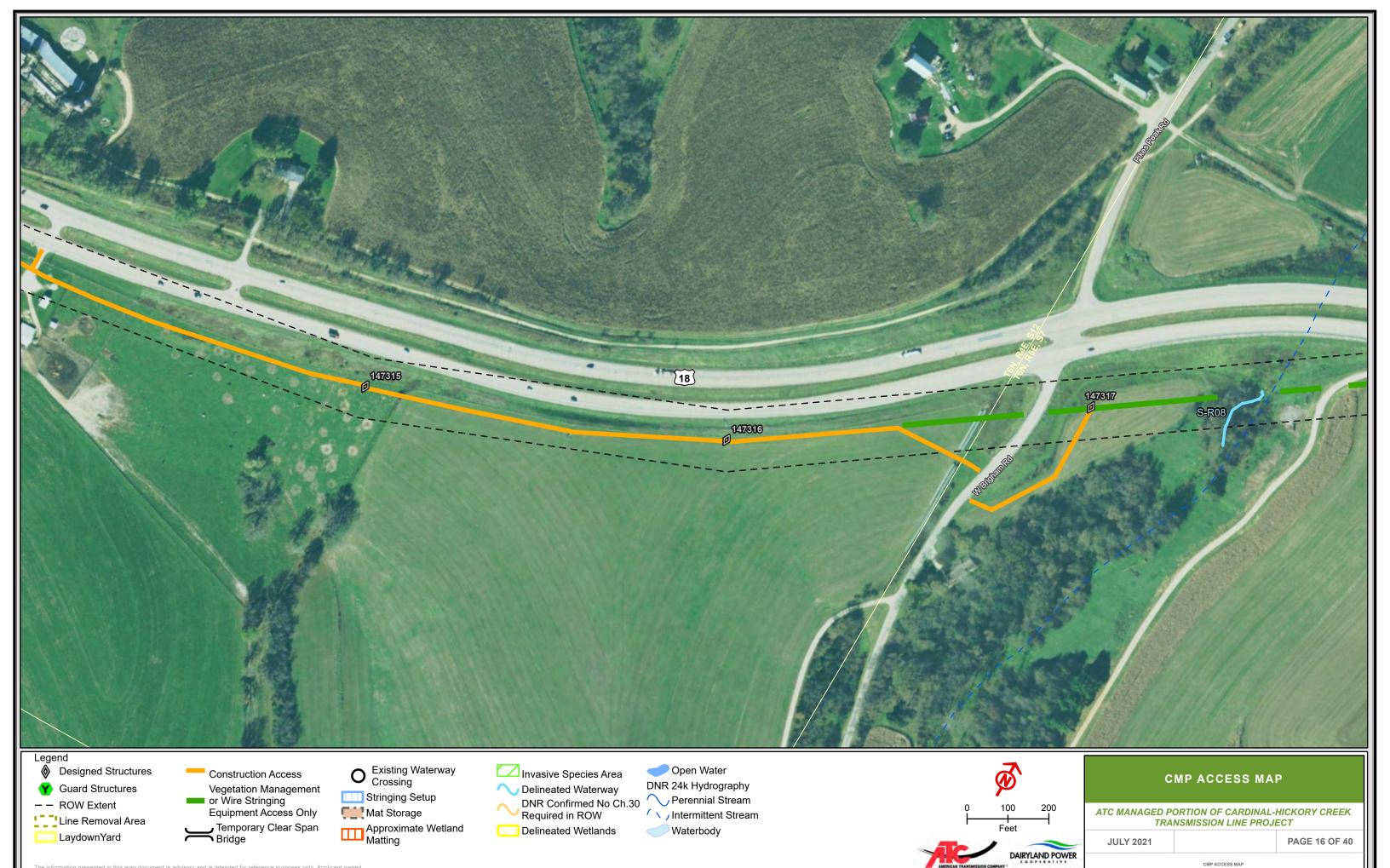


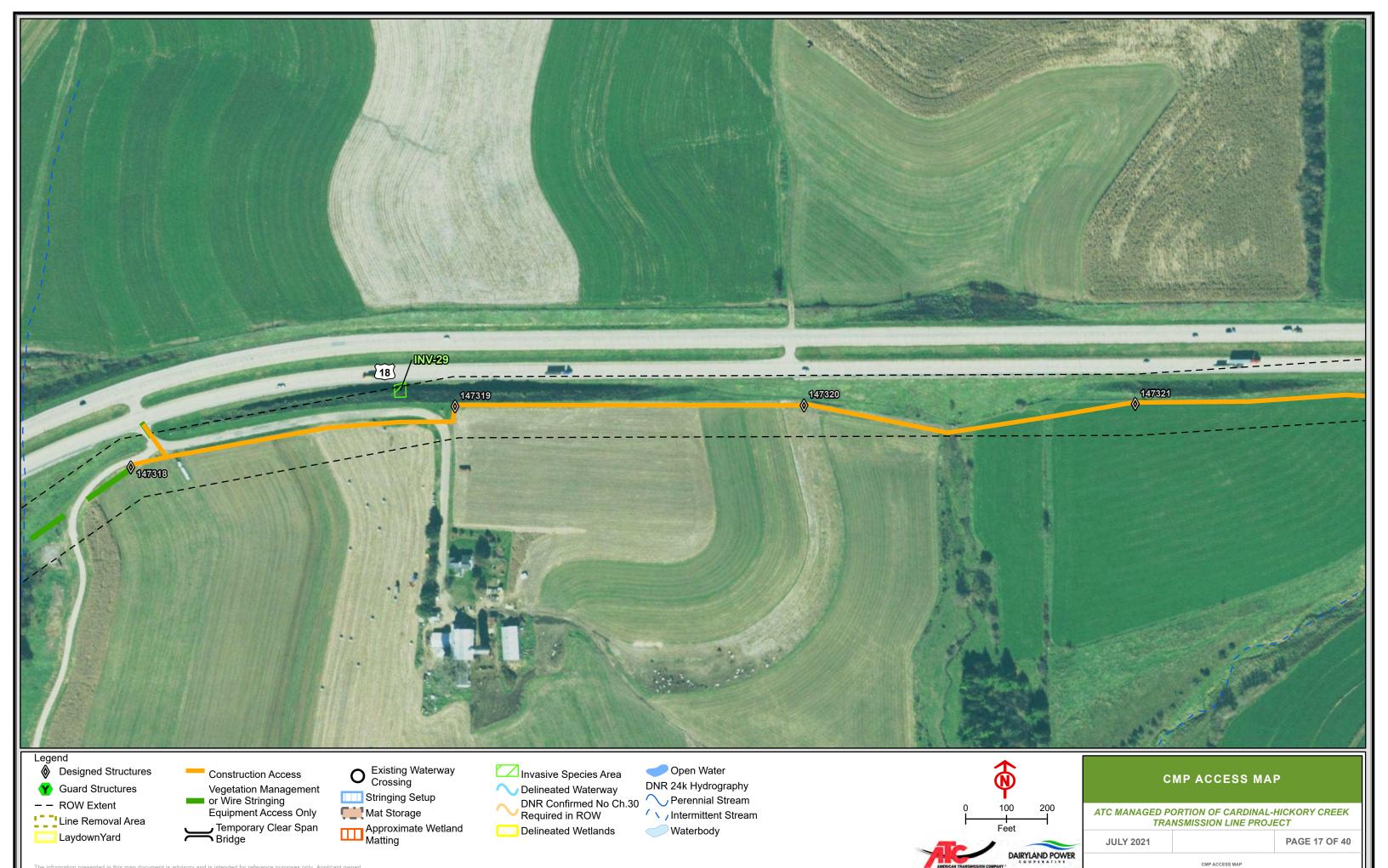


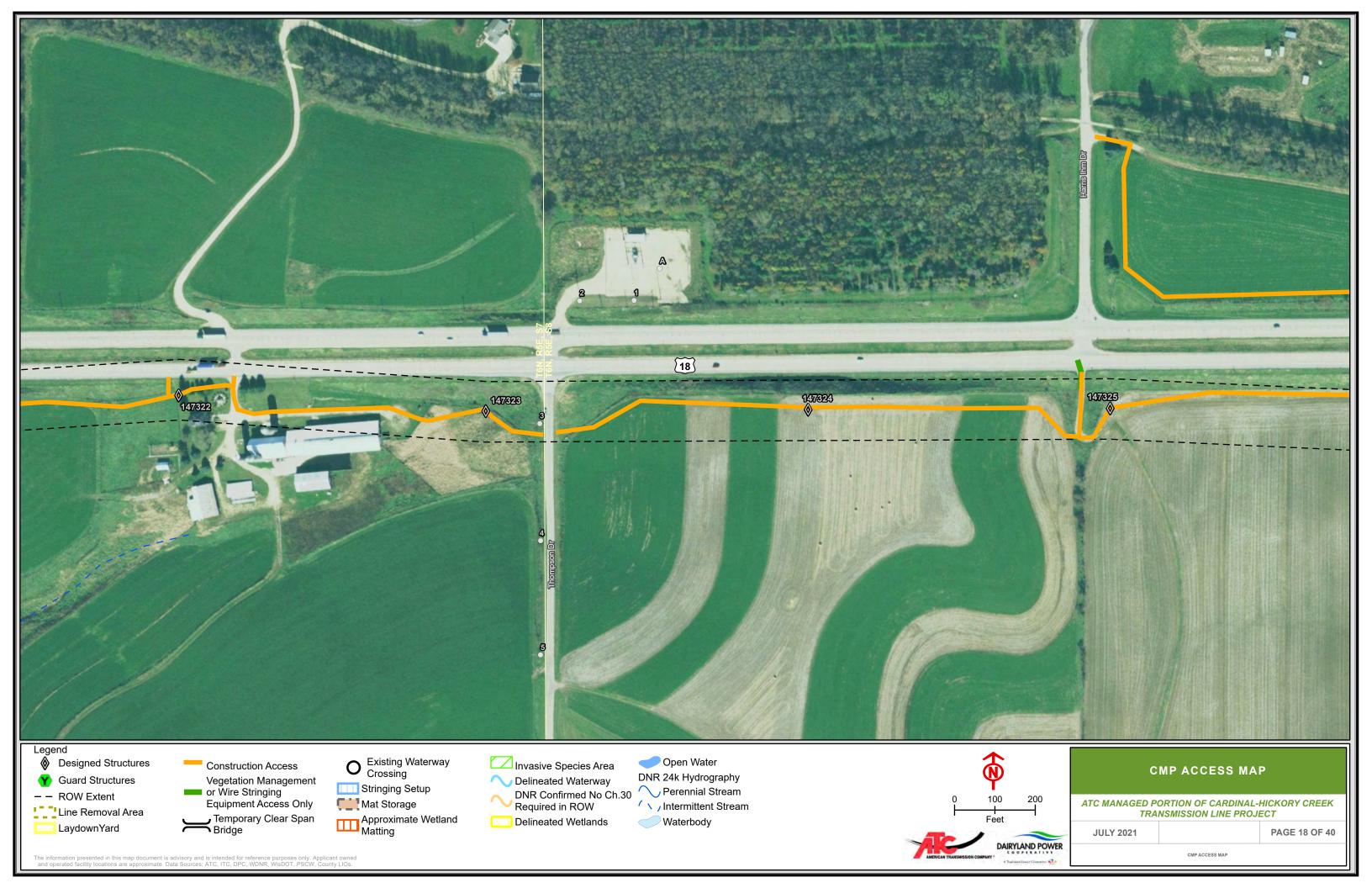


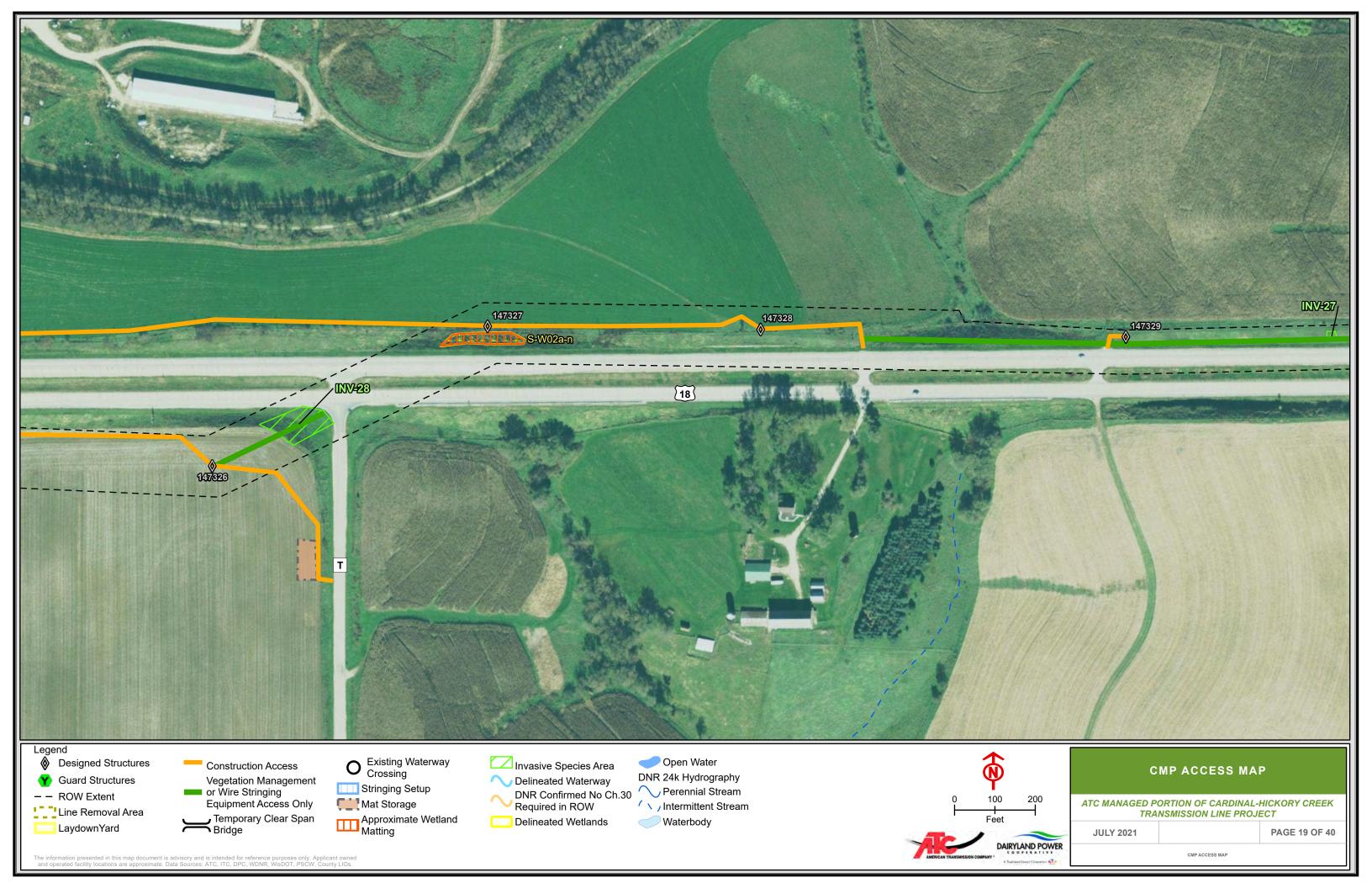


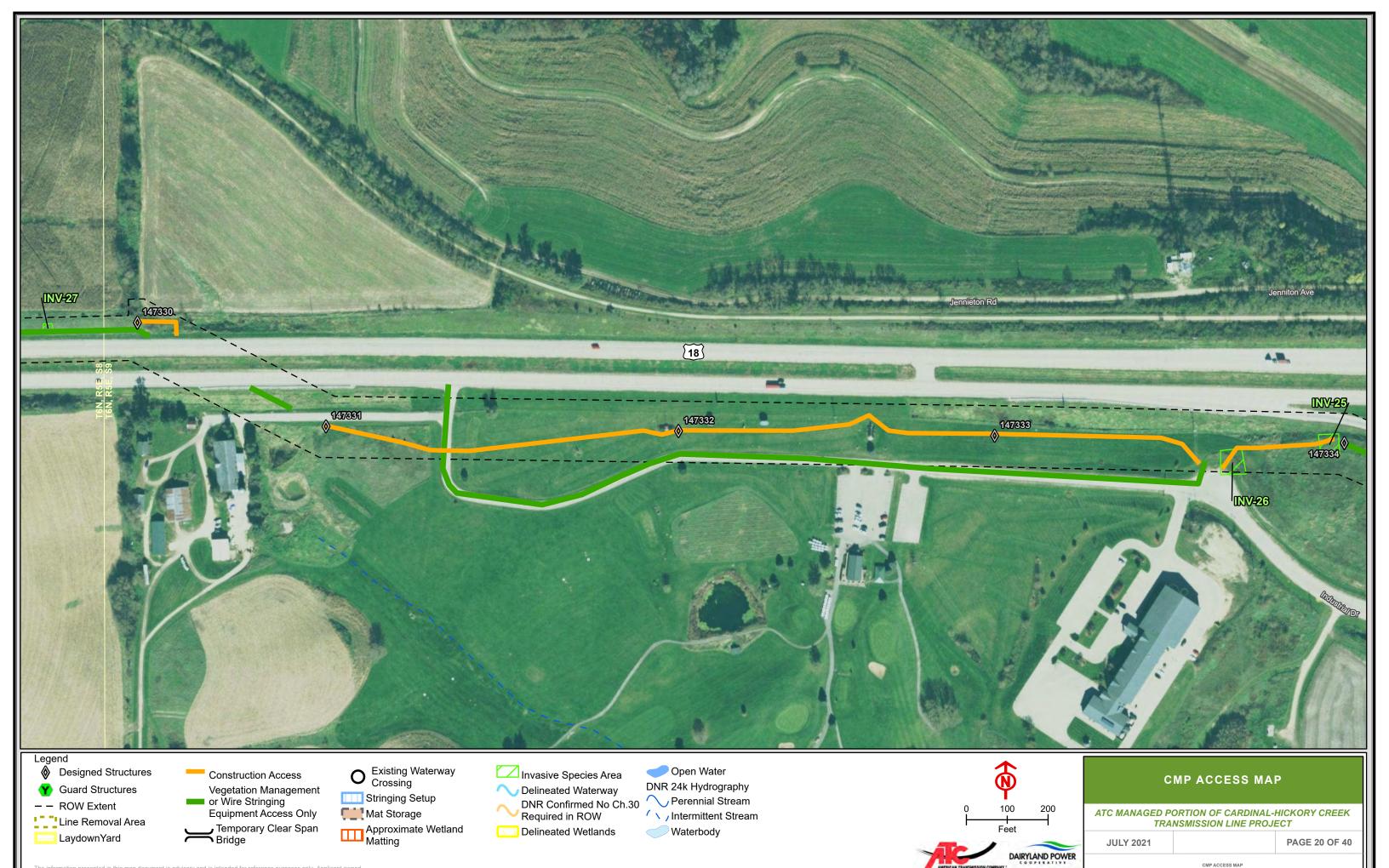










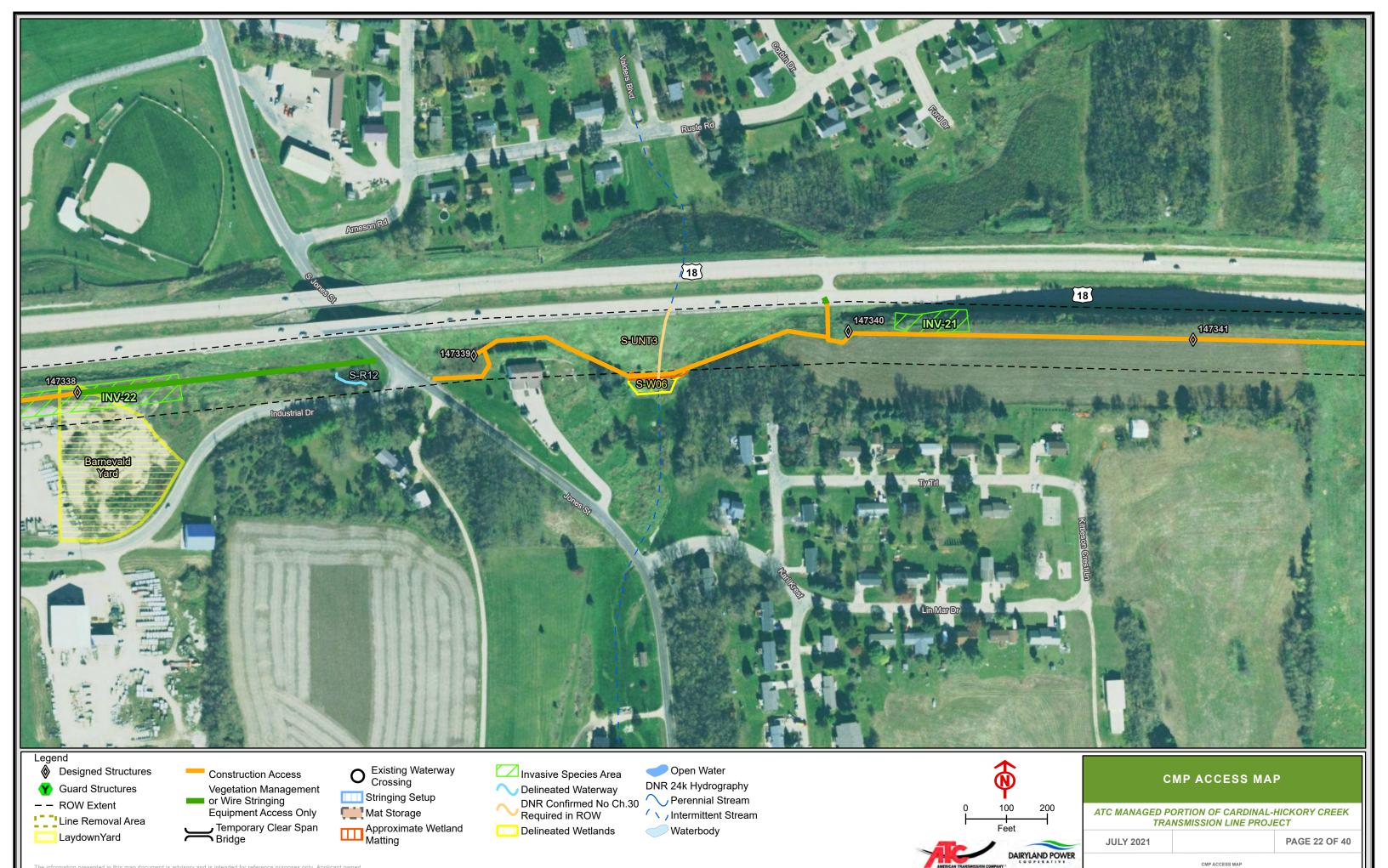


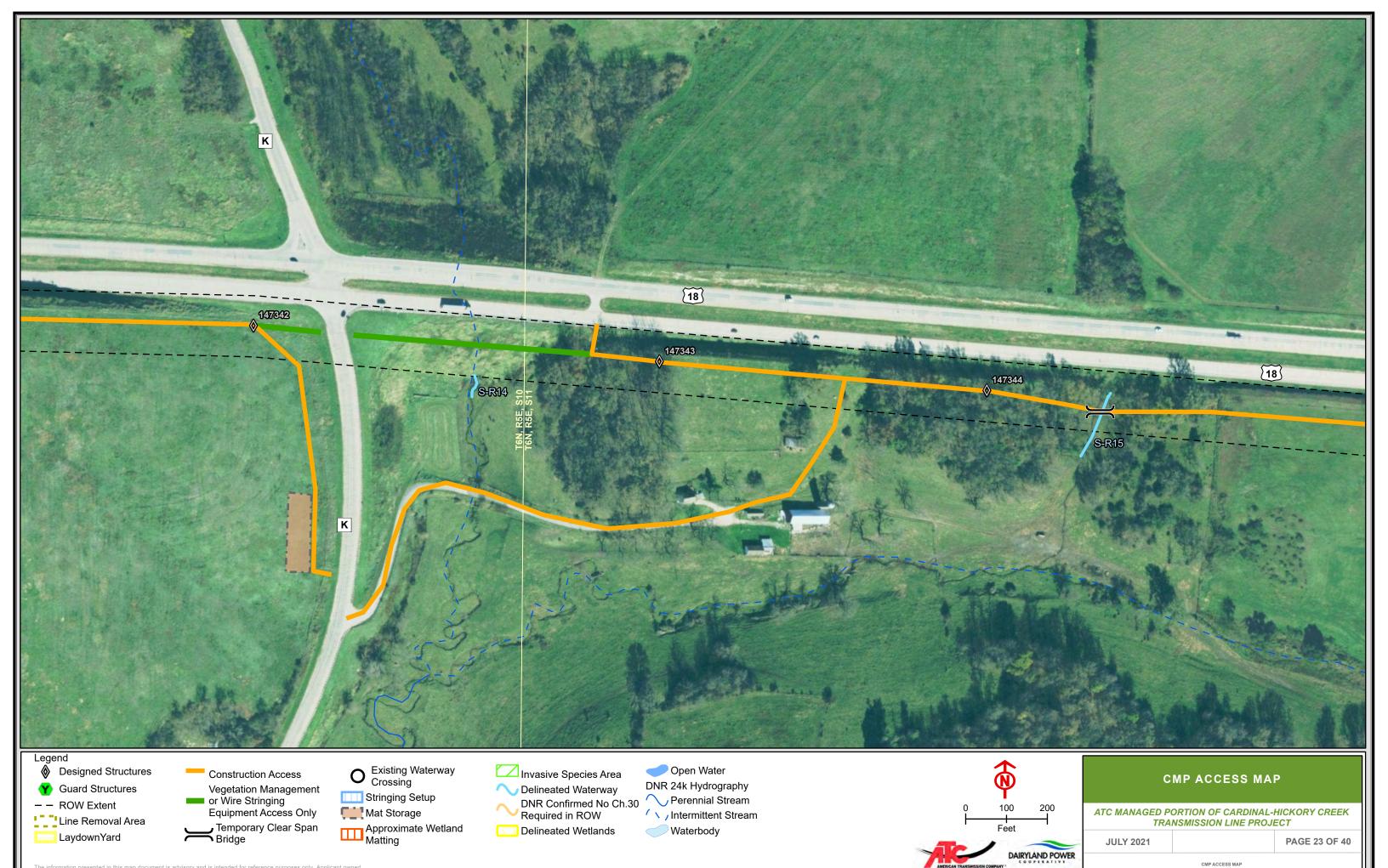


DAIRYLAND POWER

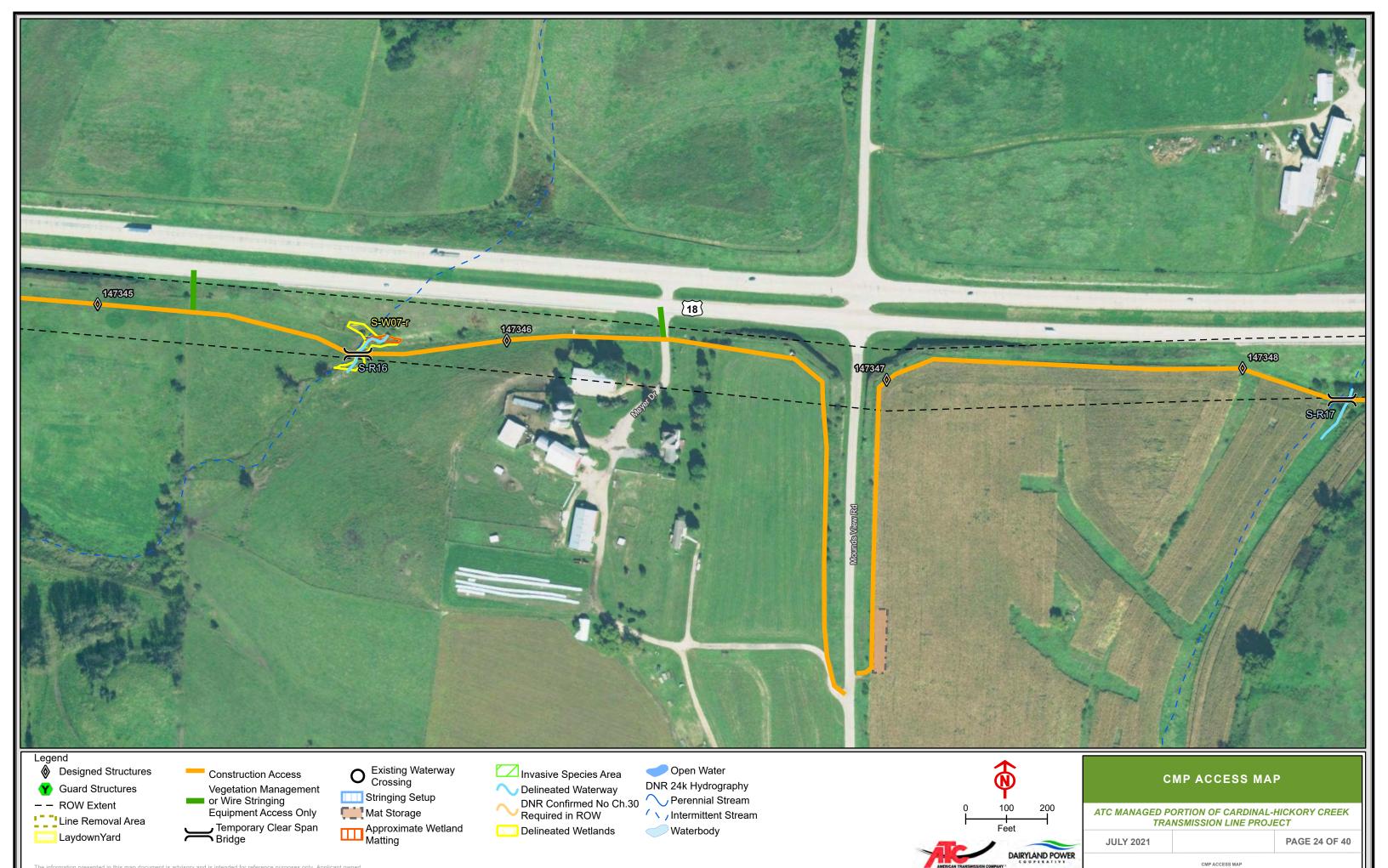
CMP ACCESS MAP



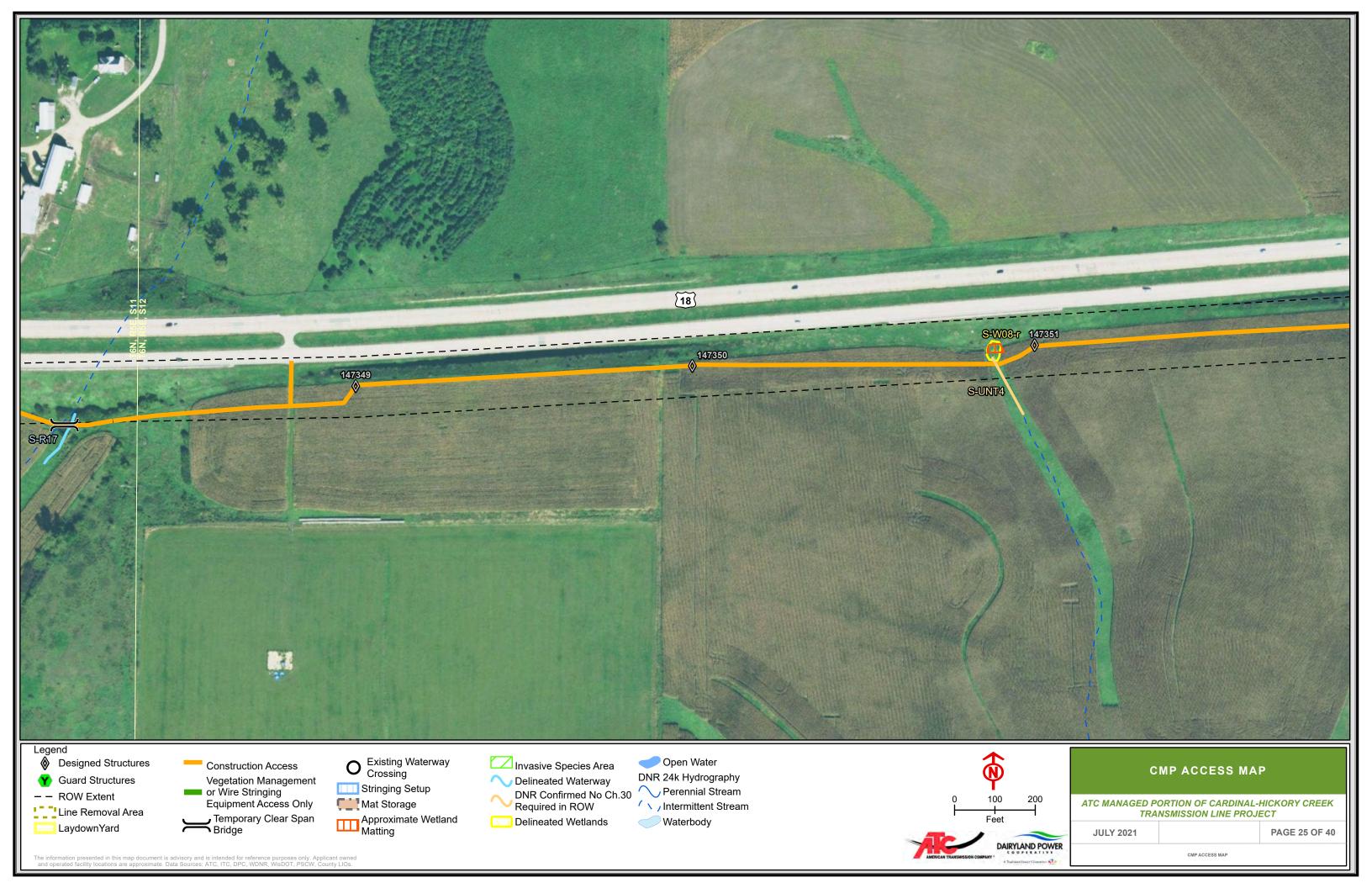


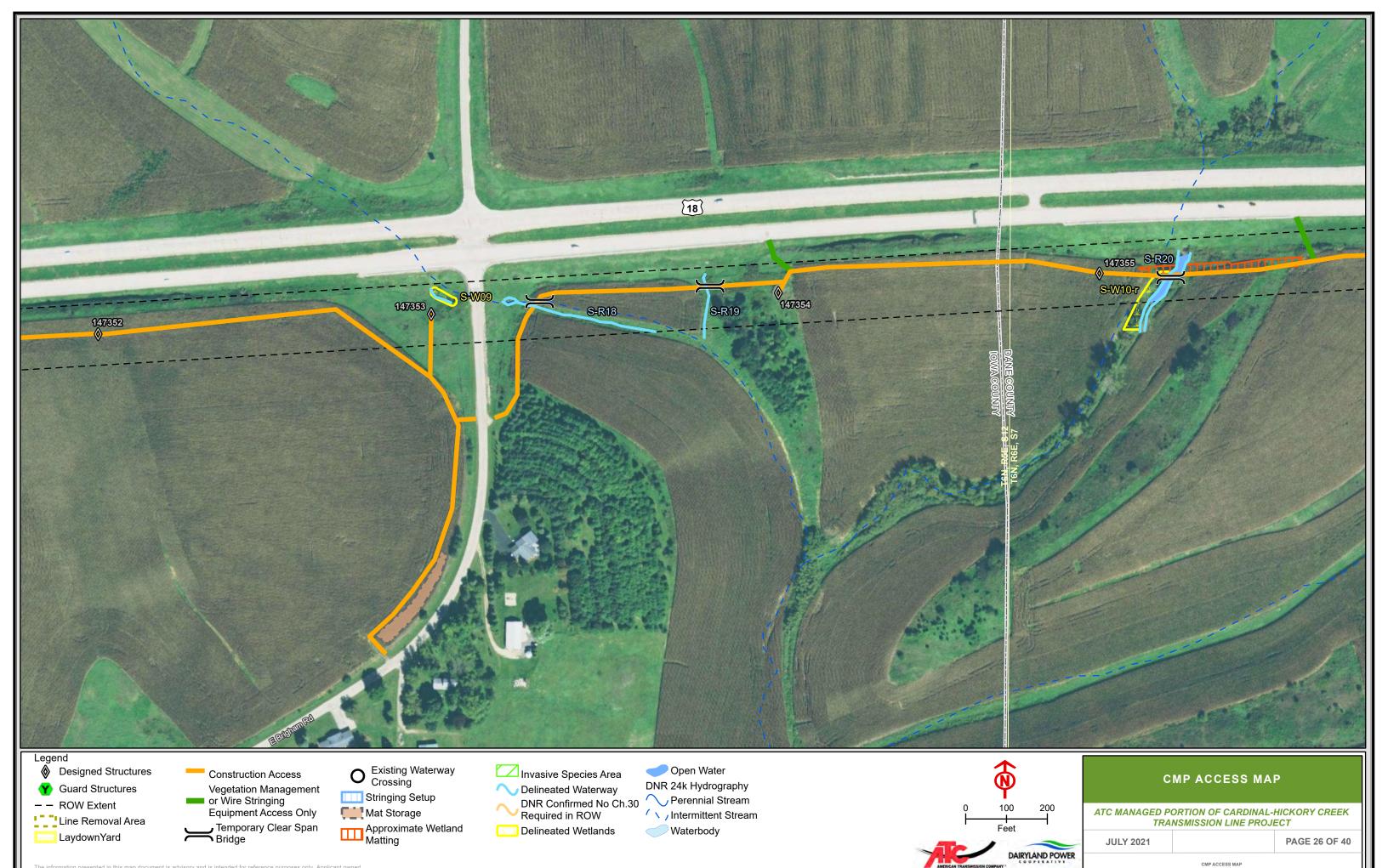


The information presented in this map document is advisory and is intended for reference purposes only. Applicant own and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIO

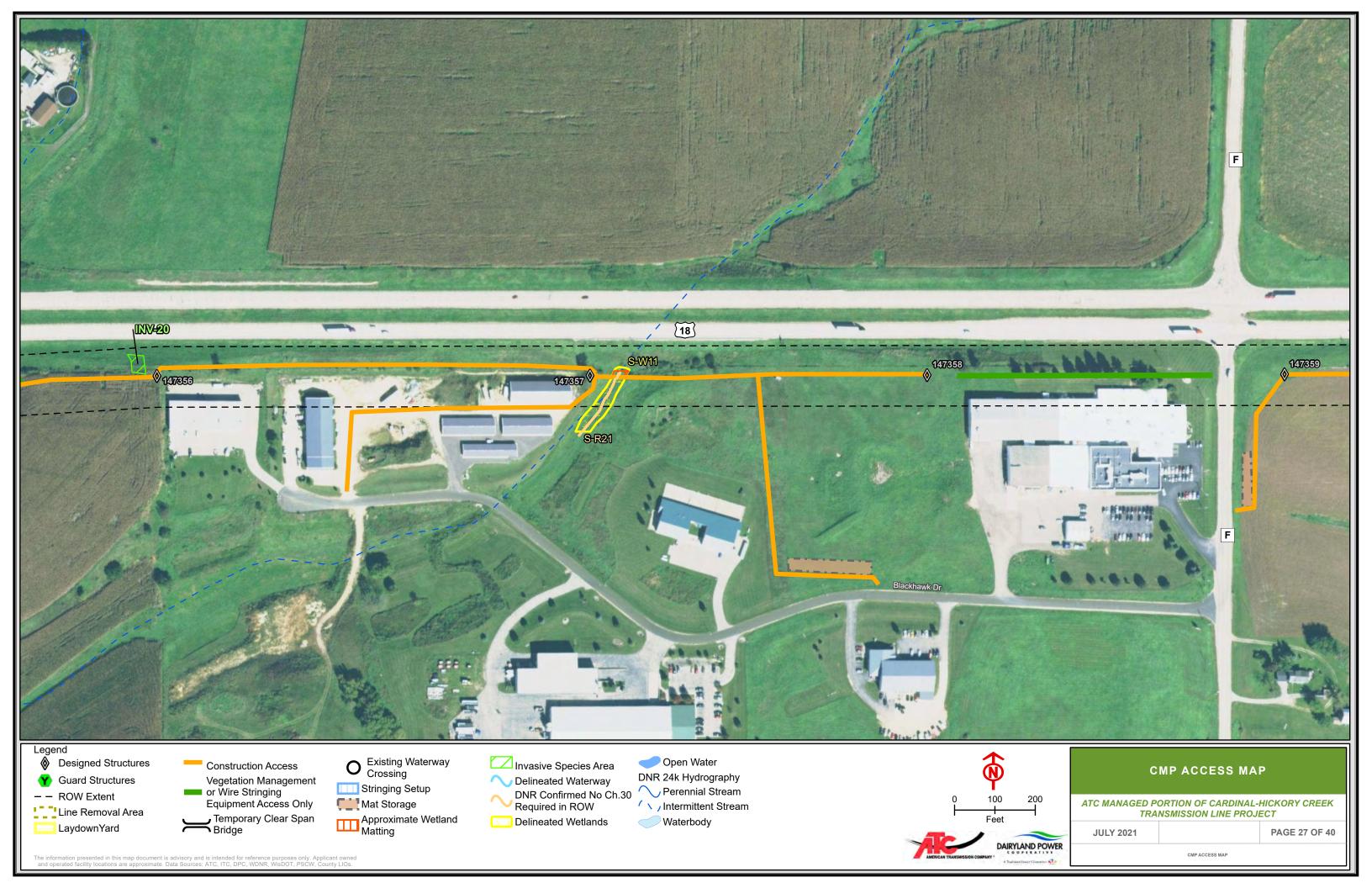


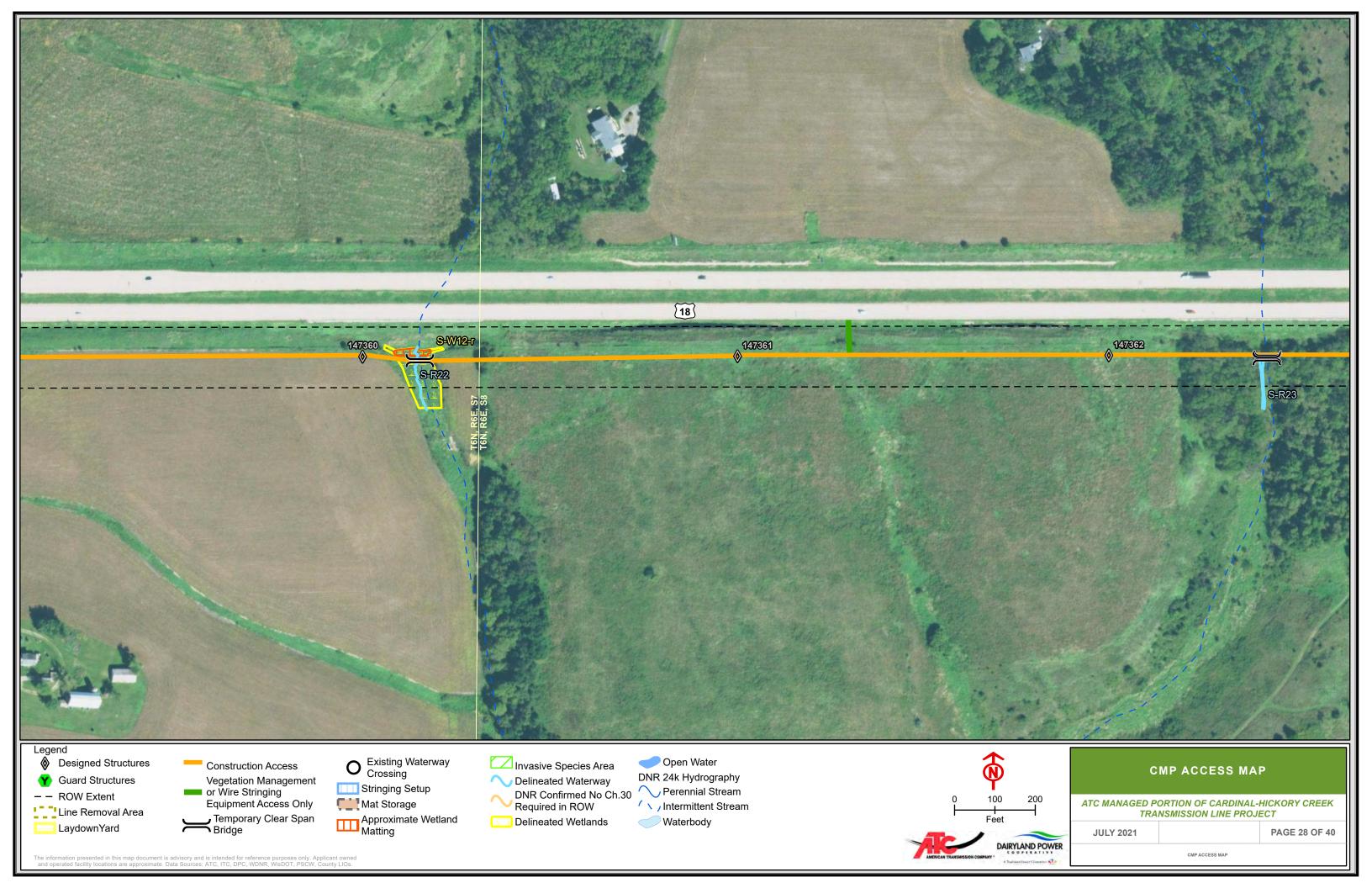
The information presented in this map document is advisory and is intended for reference purposes only. Applicant own and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs

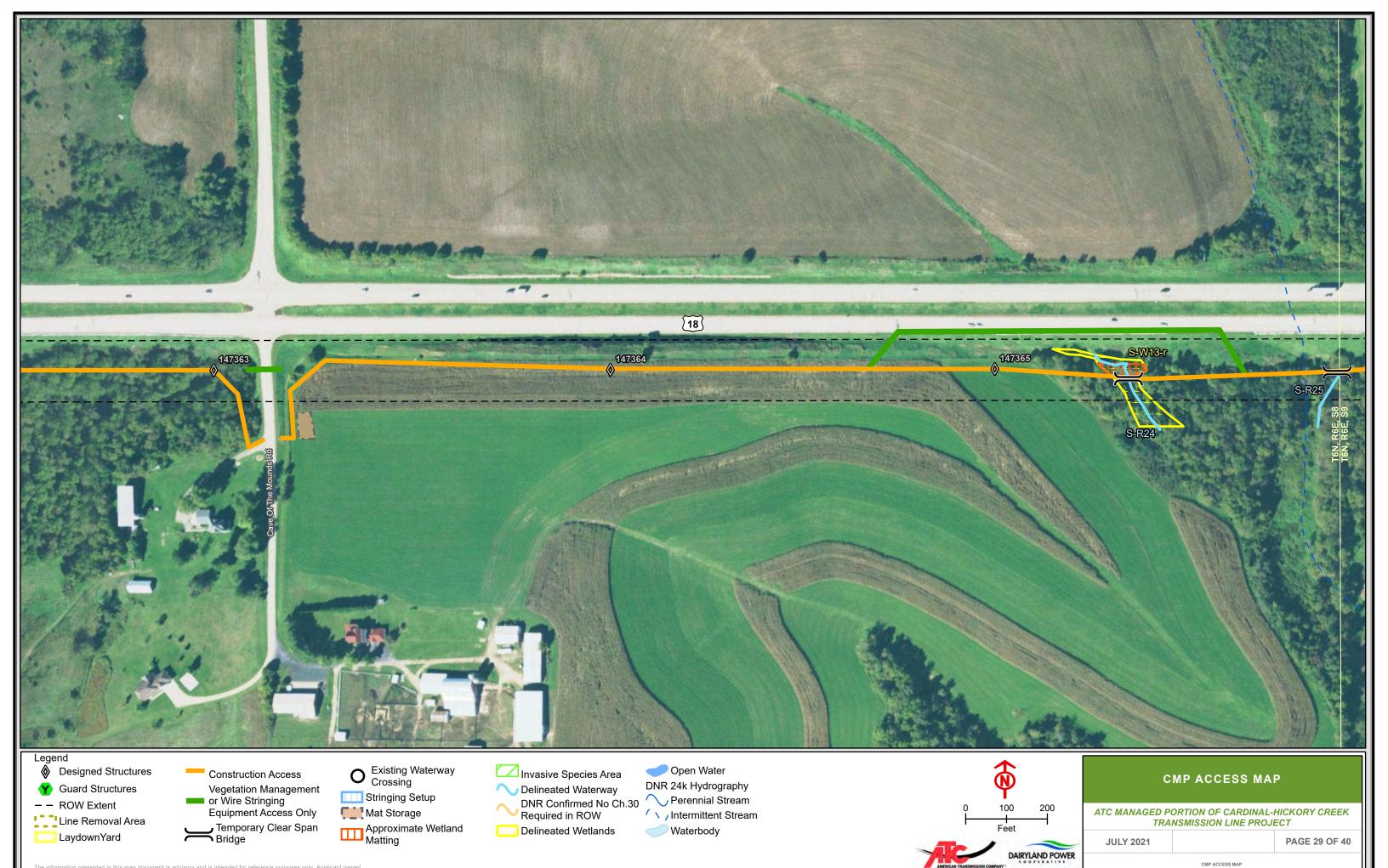




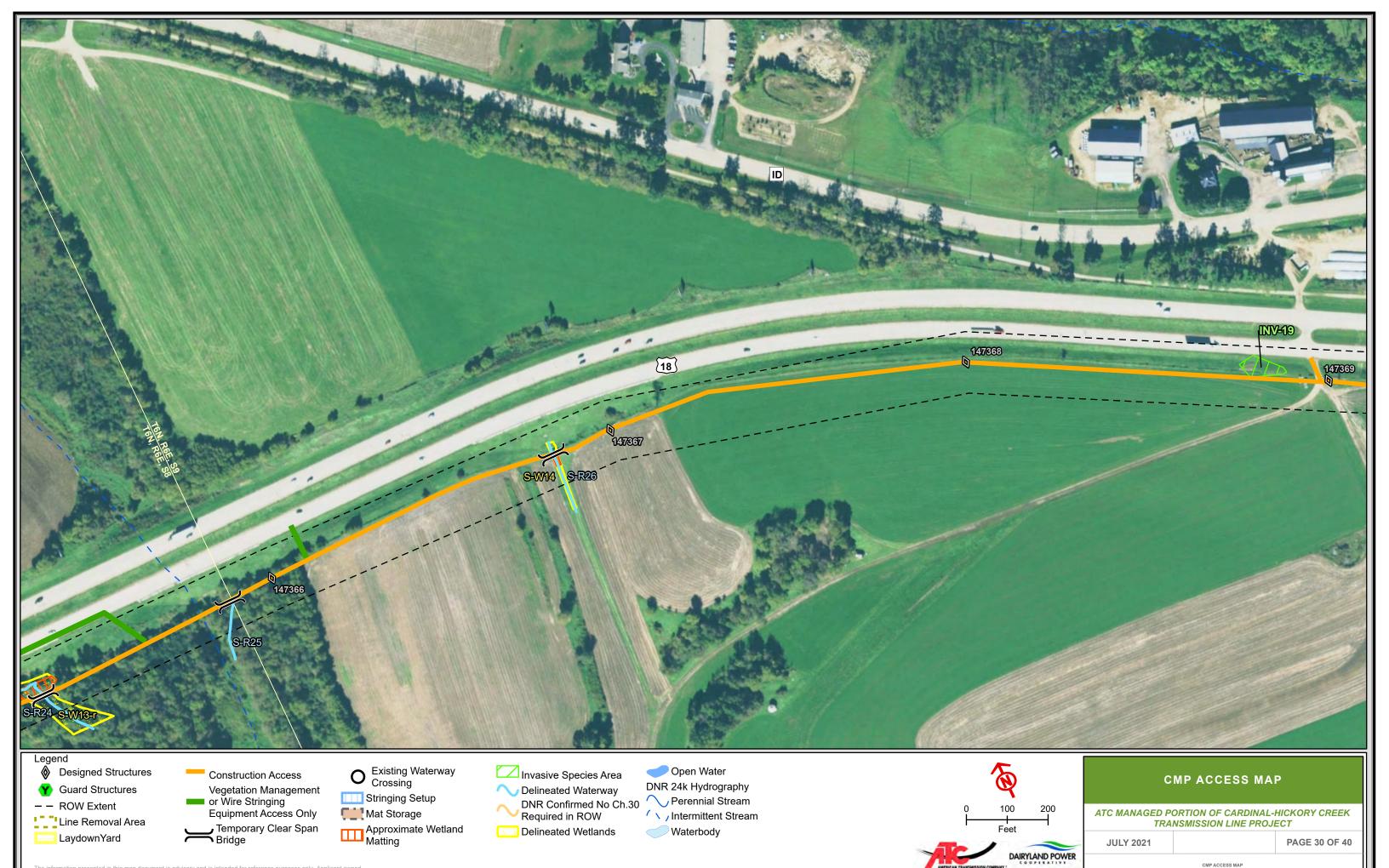
The information presented in this map document is advisory and is intended for reference purposes only. Applicant owner and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs.



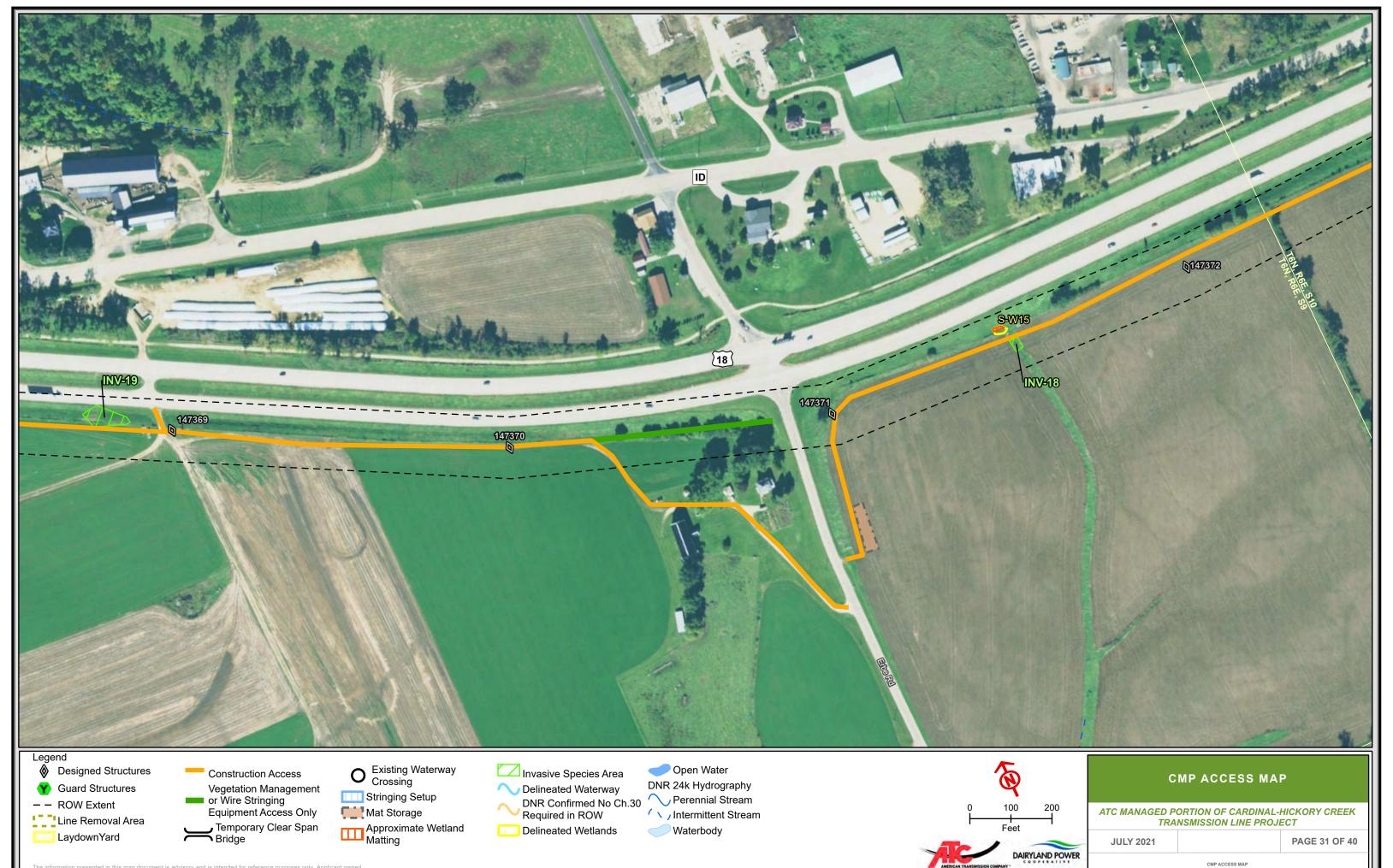




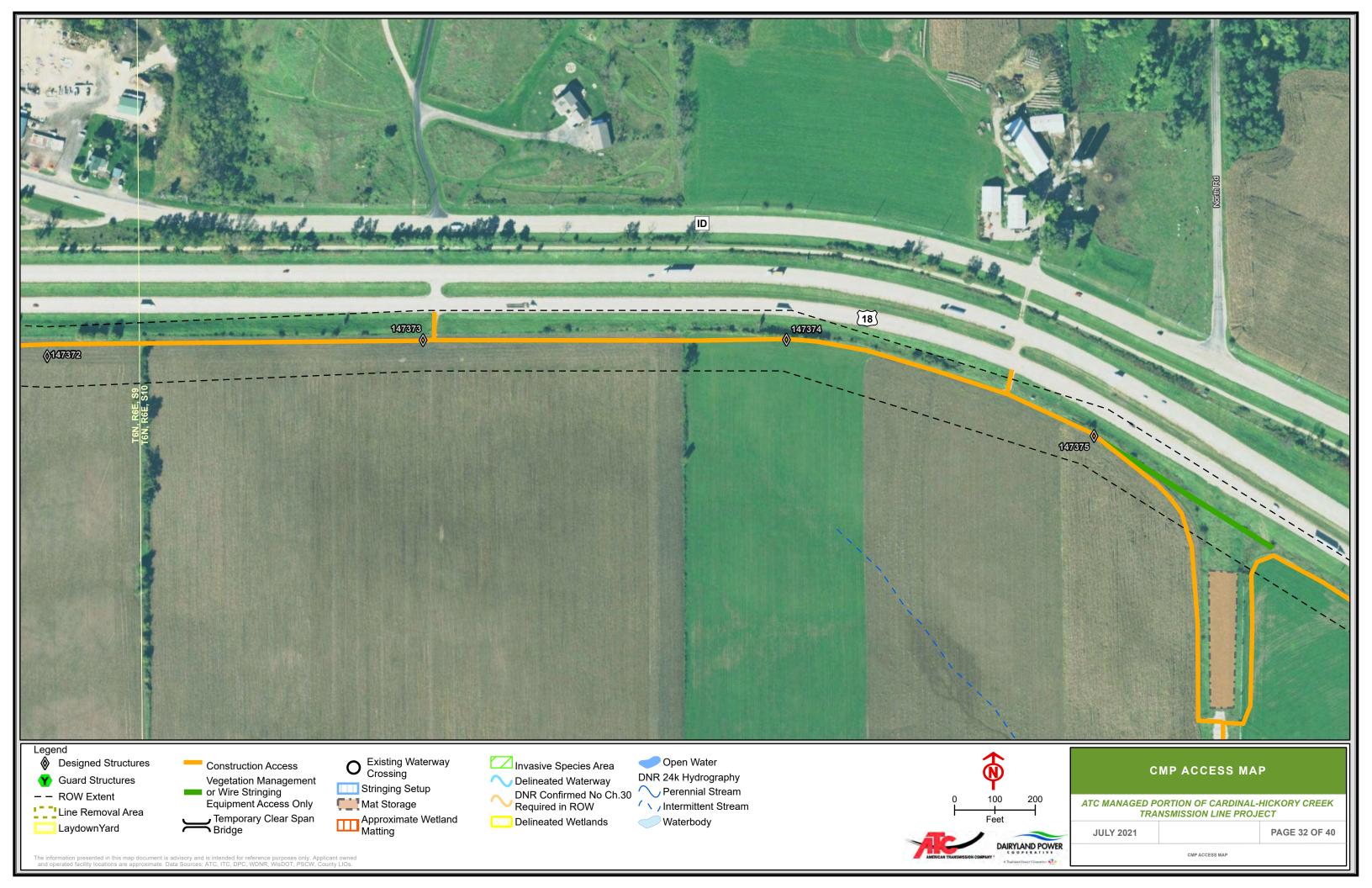
The information presented in this map document is advisory and is intended for reference purposes only. Applicant owned and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs.

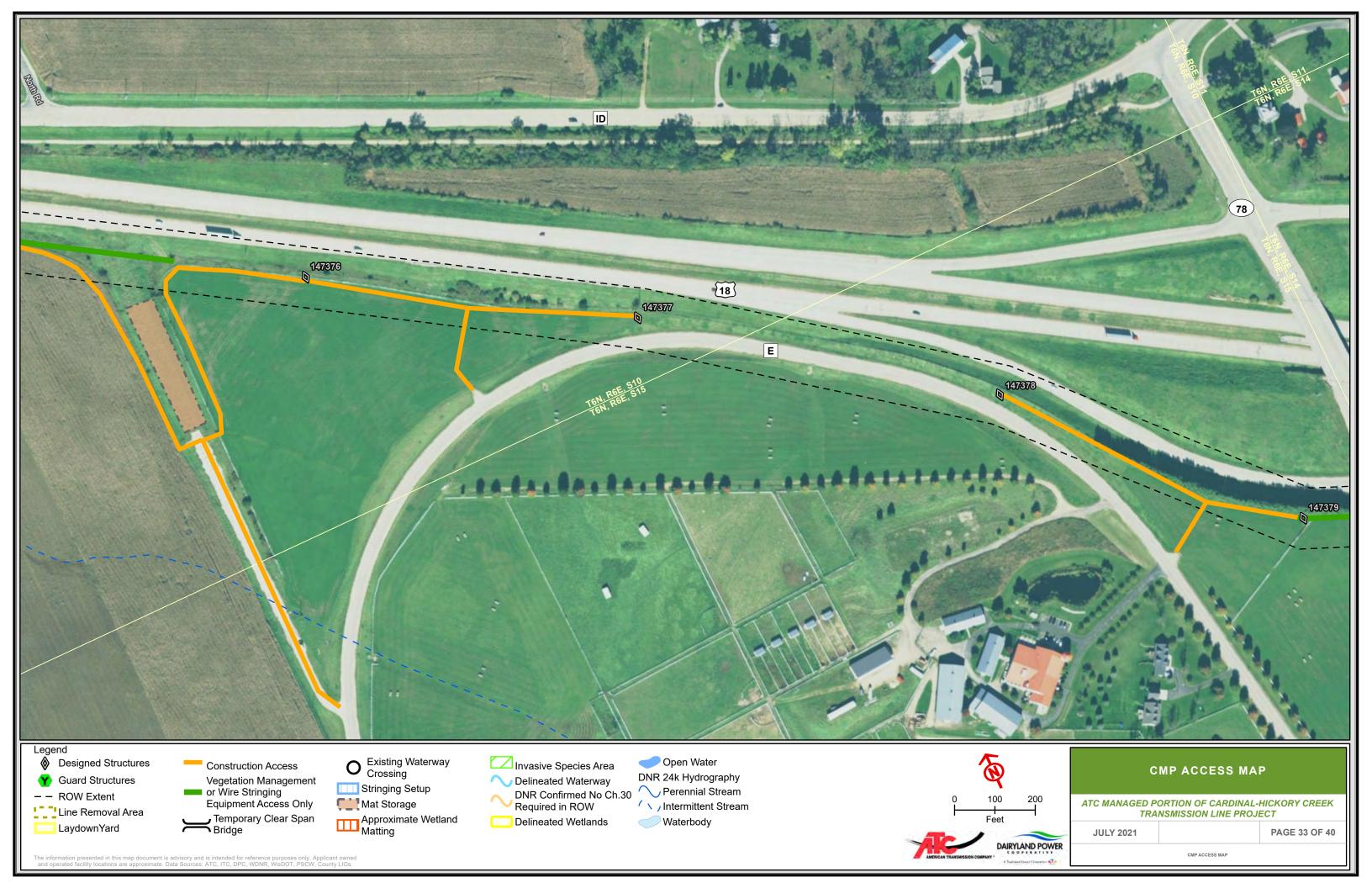


The information presented in this map document is advisory and is intended for reference purposes only. Applicant owne and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs.

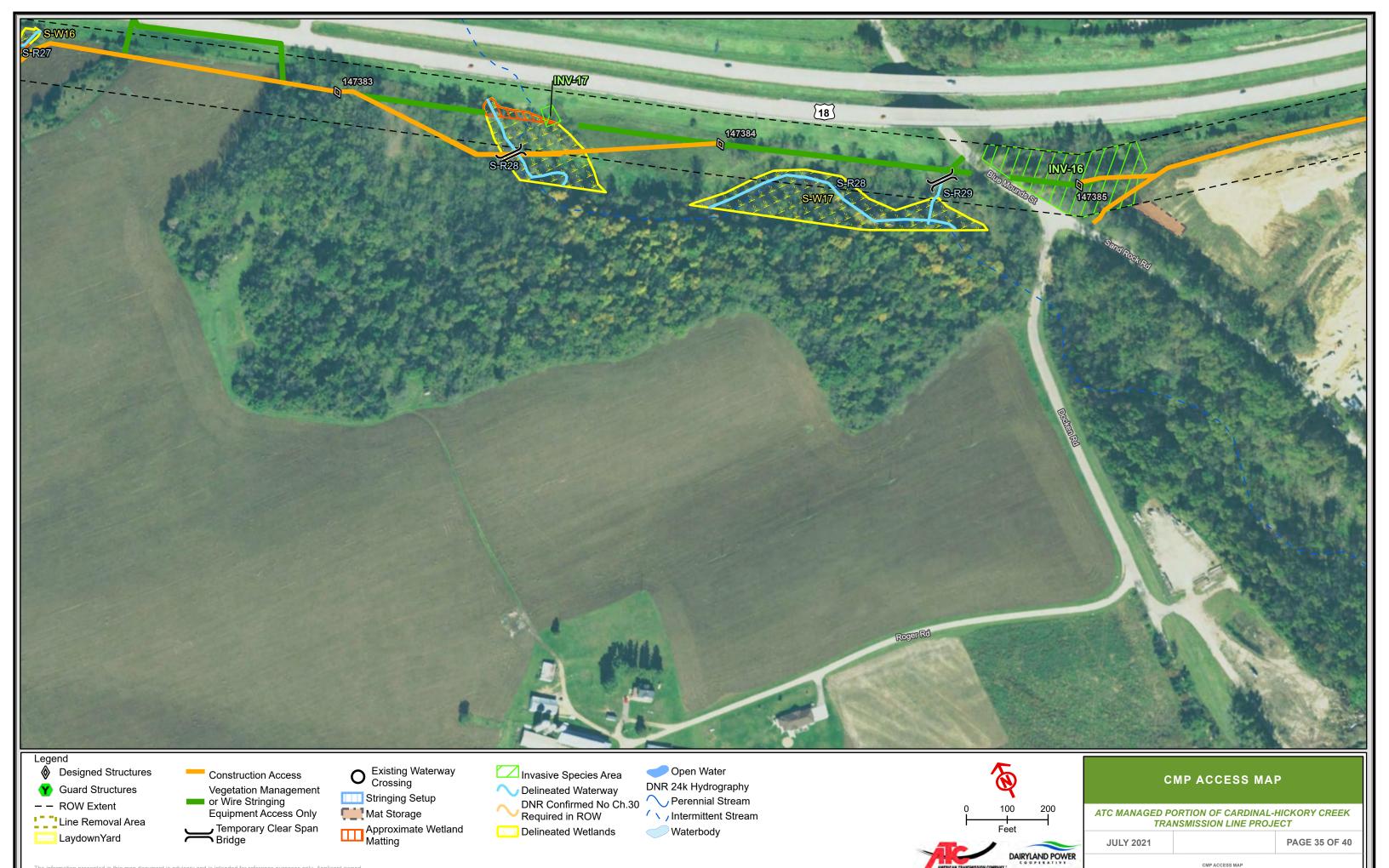


The information presented in this map document is advisory and is intended for reference purposes only. Applicant owned and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs.

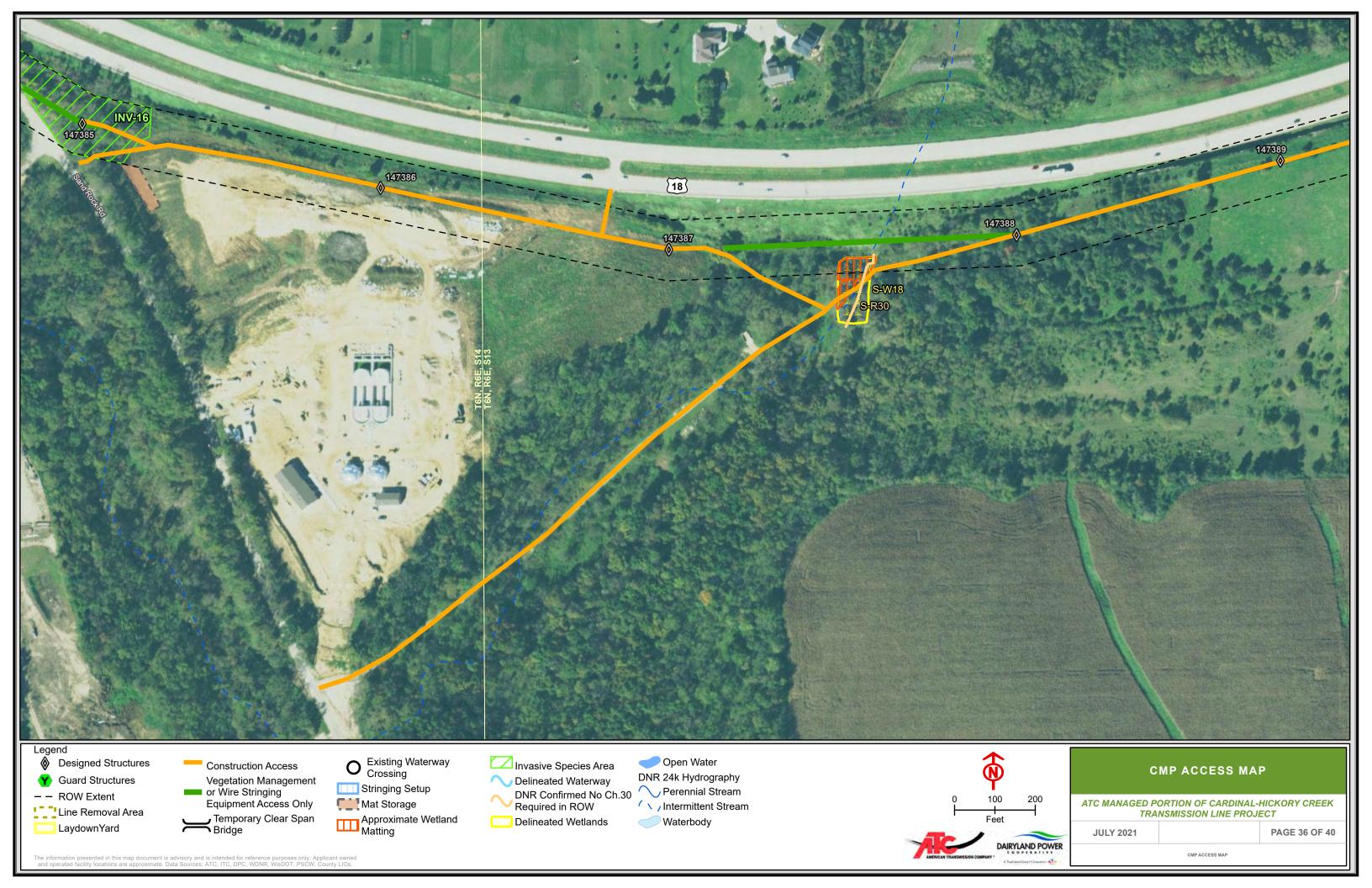


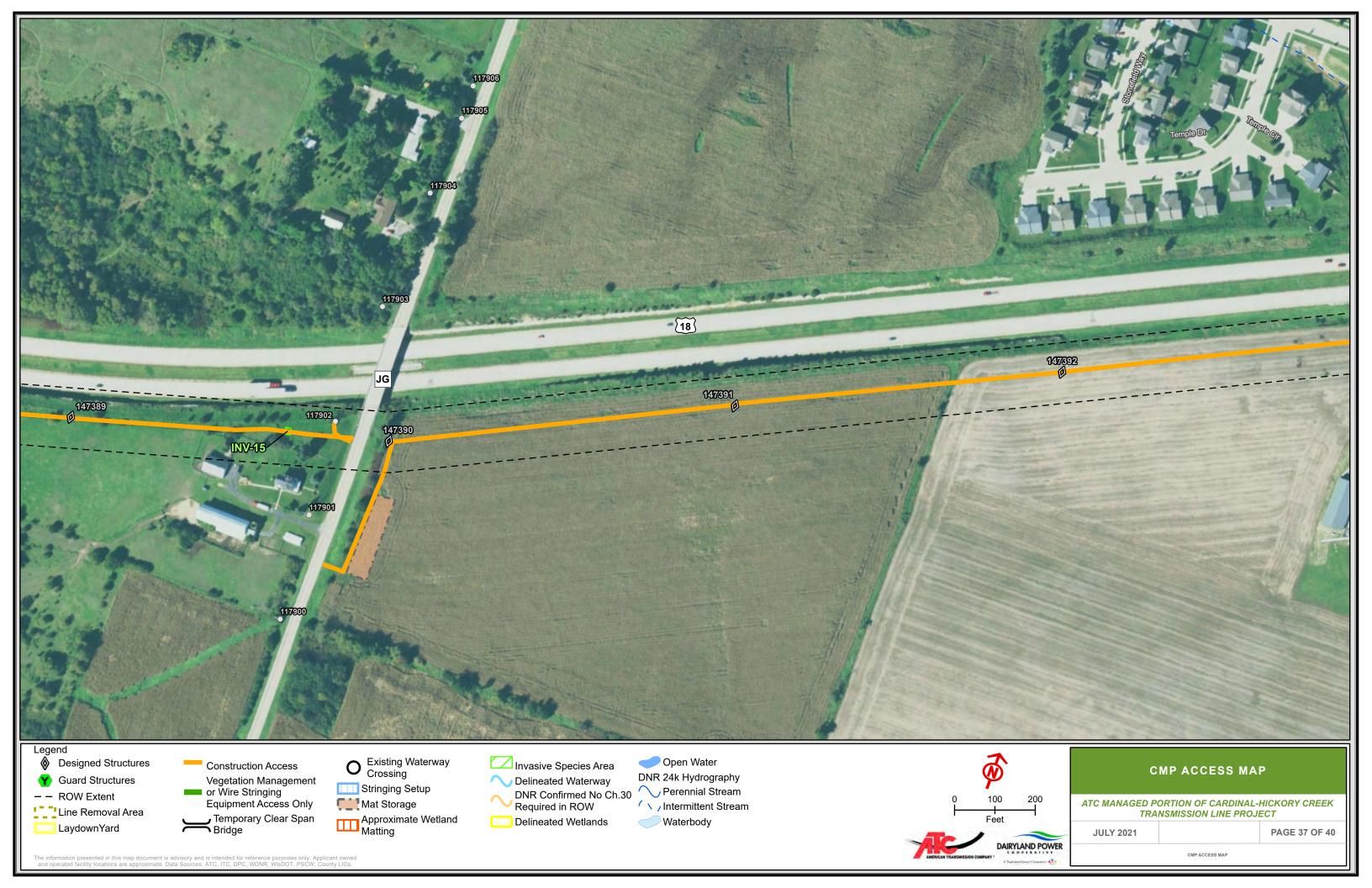


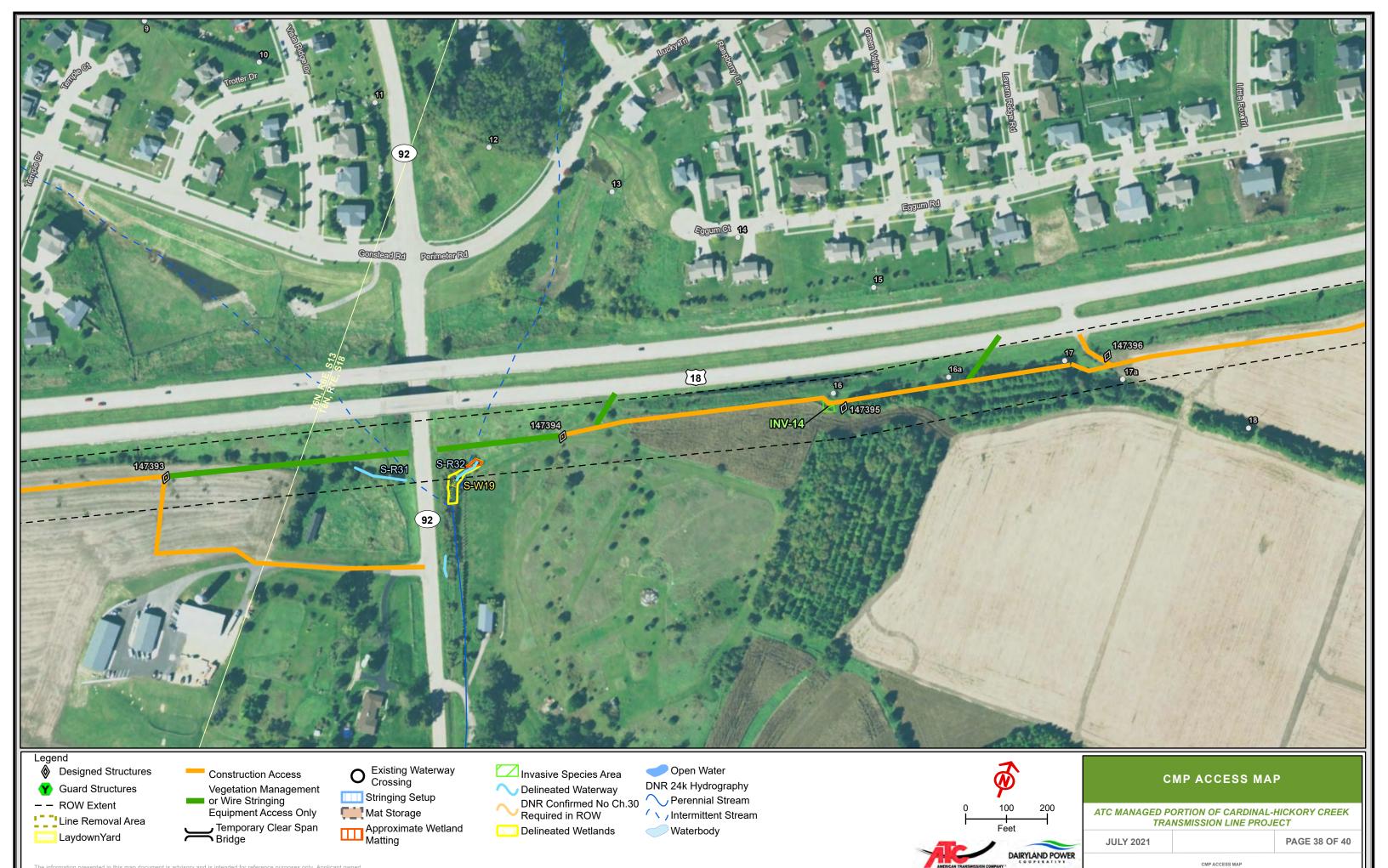




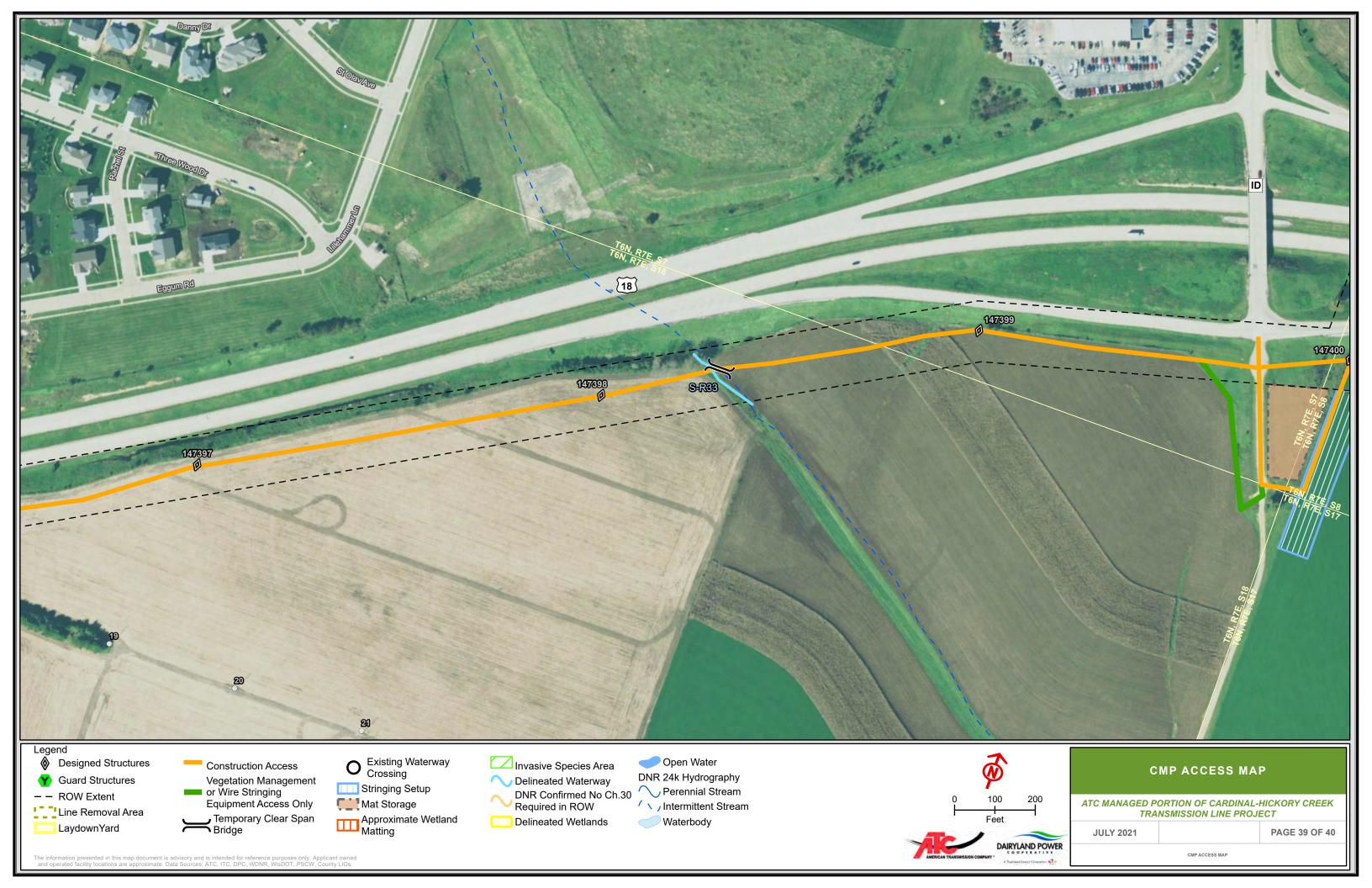
The information presented in this map document is advisory and is intended for reference purposes only. Applicant owned and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs.

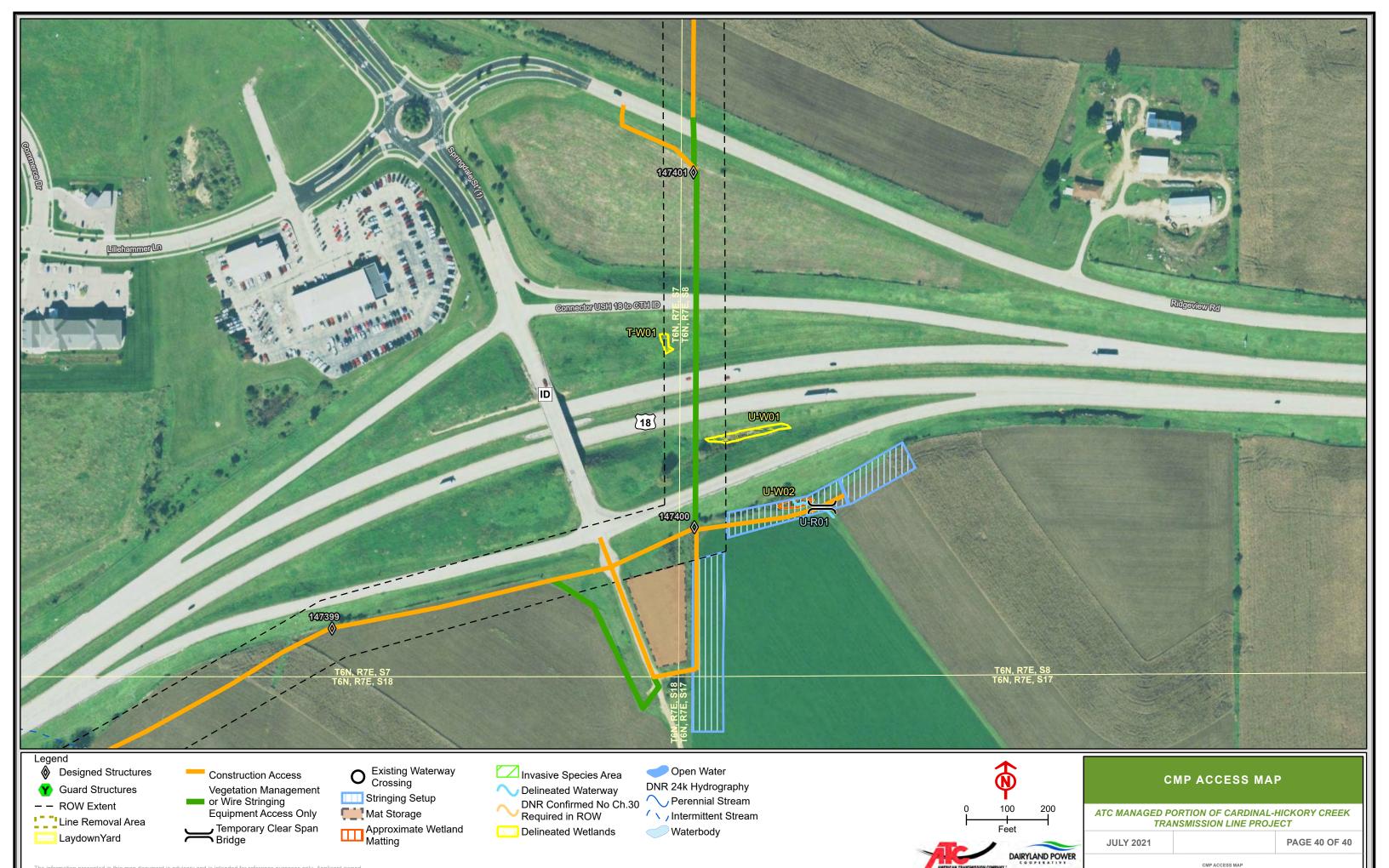






The information presented in this map document is advisory and is intended for reference purposes only. Applicant own and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIO





The information presented in this map document is advisory and is intended for reference purposes only. Applicant own and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs

#### Attachment E

# Wetland Summary Table Wetland Photos Off-Row Evaluation Summary Table

Attachment E1. Summary of Wetlands Identified within Segment E2

| Construction<br>Segment <sup>1</sup> | Wetland ID <sup>2</sup> | Special Designation <sup>3</sup> | Resource<br>Classification <sup>4</sup>      | Cowardin<br>Classification | Survey<br>Technique <sup>5</sup> | Wetland Description   |
|--------------------------------------|-------------------------|----------------------------------|--|----------------------------|----------------------------------|---|
| E2                                   | S-W01                   | Wetland                          | Sedge Meadow                                 | PEM1C                      | F/V                              | Sedge meadow riparian to S-R02 and dominated by sedge species, orange jewelweed, spike rush, bulrush, and box elder.  |
|                                      |                         |                                  |  |                            |                                  | Field-verified in 2020. Sedge meadow riparian to S-R02 and dominated by hairy-fruit lake sedge, orange jewelweed, cut-leaf coneflower, and reed canary grass.   |
| E2                                   | S-W02                   | Wetland                          | Shrub Carr                                   | PSS1B                      | F                                | Wet meadow seep area associated with S-R06 dominated by RCG, orange jewelweed, stinging nettle, avens, box elder, currant, and elderberry.  |
|                                      |                         |                                  |  |                            |                                  | Plant community updated to shrub carr in 2020 due to growth of woody vegetation; dominated by box elder and American black current in the shrub layer and orange jewelweed and RCG in the herb layer; associated with runoff from STH 151 embankment slope.   |
| E2                                   | S-W02b-n                | Wetland                          | Wet Meadow                                   | PEM1B                      | А                                | New wet meadow wetland aerially identified outside the ROW within a pasture along S-R07.  |
| E2                                   | S-W02a-n                | Wetland                          | Wet Meadow                                   | PEM1B                      | F                                | New wetland area delineated in 2020. Wet meadow along STH 151 embankment dominated by RCG, cattails, and giant goldenrod.   |
| E2                                   | S-W03-r                 | Wetland                          | Wet Meadow                                   | PEM1B                      | F                                | Wet meadow grass swale between commercial land and highway ramp.  |
|                                      |                         |                                  |  |                            |                                  | Wetland field-delineated in 2020 with slight adjustments to wetland boundary. Dominated by RCG.   |
| E2                                   | S-W04                   | Wetland                          | Shrub Carr                                   | PSS1B                      | F                                | Shrub carr depressional wetland associated with S-R10 and dominated by yellow rocket, RCG, broad leaved cattail, and sandbar willow.  |
| E2                                   | S-W05-r                 | Wetland                          | Wet Meadow                                   | PEM1B                      | F/V                              | Wet meadow dominated by RCG along S-R11.  |
|                                      |                         |                                  |  |                            |                                  | Wetland was aerially-identified in 2017 and field-verified in 2020. Wetland boundary was shifted to the east to match observed wetland field conditions.  |
| E2                                   | S-W06                   | Wetland                          | Wet Meadow                                   | PEM1B                      | F                                | Reed canary grass wet meadow community originally field-delineated in 2017, confirmed in 2020. Field-verified from DOT ROW. Located on south boundary of the project ROW.   |
| E2                                   | S-W07-r                 | Wetland                          | Wet Meadow                                   | PEM1B                      | F                                | Wet meadow associated with S-R16 and dominated by RCG and orange jewelweed.   |
|                                      |                         |                                  |  |                            |                                  | Wetland area extended to northwest along embankment slope in 2020. Additional dominant species included stinging nettle, yellow rocket, and burdock.  |
| E2                                   | S-W08-r                 | Wetland                          | Shrub Carr                                   | PSS1B                      | F                                | Seep shrub carr area dominated by RCG and sandbar willow.   |
|                                      |                         |                                  | Wet Meadow                                   | РЕМ1В                      |                                  | Wetland boundary adjusted in 2020 to exclude grassed area between two farm fields dominated by smooth brome and lacking wetland conditions. Shrubs were cleared since 2017 investigation.  Wet meadow comprised of reed canary grass and few sandbar willow shrubs.                                   |
| E2                                   | S-W09                   | Wetland                          | Wet Meadow                                   | PEM1B                      | F                                | Wetland associated with S-R18 and dominated by RCG and narrow leaved cattail.   |
|                                      |                         |                                  |  |                            |                                  | Wetland boundary confirmed in 2020: Wet meadow associated with S-R18 and dominated by RCG, orange jewelweed, asters and giant ragweed.  |
| E2                                   | S-W10-r                 | Wetland                          | Shrub Carr/ Wet<br>Meadow/ Farmed<br>Wetland | PSS1B/ PEM1B/<br>PEM1Bf    | F                                | Wet meadow and sedge meadow complex associated with waterway S-R20 into farmed wetland on private property. Sedge meadow dominated by orange jewelweed, RCG, sandbar willow, and elderberry; wet meadow with similar herbaceous layer; and farmed wetland planted to soybeans and with giant ragweed. |

Attachment E1. Summary of Wetlands Identified within Segment E2

| Construction<br>Segment <sup>1</sup> | Wetland ID <sup>2</sup> | Special Designation <sup>3</sup>                       | Resource<br>Classification <sup>4</sup> | Cowardin<br>Classification | Survey<br>Technique <sup>5</sup> | Wetland Description  |
|--------------------------------------|-------------------------|--|---|----------------------------|----------------------------------|--|
|                                      |                         |  | Shrub<br>Carr/Hardwood<br>Swamp         | PSS1B/ PFO1B               |                                  | Wetland boundary reduced in size during 2020 investigation to exclude previously mapped wet meadow areas dominated by smooth brome and wild parsnip, and farmed wetland areas with healthy corn and lack of wetland indicators. Wetland consists of narrow shrub-carr/hardwood swamp community associated with waterway S-R20 comprised of reed canary grass and sandbar willow shrubs underneath peachleaf willow trees.  |
| E2                                   | S-W11                   | Wetland  | Wet Meadow                              | PEM1B                      | F                                | Wet meadow associated with S-R21 and dominated by RCG.   |
| E2                                   | S-W12-r                 | Wetland  | Wet Meadow                              | PEM1B                      | F                                | Wet meadow associated with S-R22 and dominated by RCG.   |
|                                      |                         |  |   |                            |                                  | Wetland extended slightly to northeast and northwest in 2020 to follow wetland conditions.   |
| E2                                   | S-W13-r                 | Wetland  | Wet Meadow/<br>Hardwood Swamp           | PEM1B / PFO1B              | F                                | Wet meadow and hardwood swamp complex associated with S-R24. Wet meadow dominated by RCG and bittersweet nightshade. Hardwood swamp dominated by American black currant, bittersweet nightshade, common buckthorn, green ash, and box elder.   |
|                                      |                         |  |   |                            |                                  | Wetland area extended to west within DOT ROW along toe of embankment slope in 2020.  |
| E2                                   | S-W14                   | Wetland  | Wet Meadow                              | PEM1B                      | F                                | Wet meadow associated with S-R26 and dominated by RCG and bittersweet nightshade.  |
| E2                                   | S-W15                   | Wetland  | Wet Meadow                              | PEM1B                      | F                                | Wet meadow dominated by RCG.   |
| E2                                   | S-W16                   | Wetland  | Shrub Carr                              | PSS1B                      | F                                | Weedy shrub carr associated with S-R27 dominated by a dense canopy of box elder and sandbar willow over a herbaceous layer of orange jewelweed, Dame's rocket, and burdock.  Wetland area confirmed in 2020. Shrub-carr with boxelder trees and sandbar willow in canopy over orange jewelweed, Dame's rocket, reed canary grass and garlic mustard.   |
| E2                                   | S-W17                   | Wetland, adjacent to<br>ASNRI Class II Trout<br>Stream | Shrub Carr/<br>Hardwood Swamp           | PSS1B/ PFO1B               | F                                | Shrub carr wetland associated with S-R28 and dominated by RCG, orange jewelweed, and sandbar willow. Possible hardwood swamp on adjacent property.  Wetland area confirmed in 2020. Vegetative communities and species further refined: Shrub-carr community in northwest portion dominated by RCG, orange jewelweed, and garlic mustard underneath sandbar willow shrubs and canopy of cottonwood, box elder and walnut trees. Hardwood swamp community in southeast portion comprised of box elder, walnut and basswood trees over RCG, curly dock, dame's rocket, and garlic mustard. |
| E2                                   | S-W18                   | Wetland  | Shrub Carr                              | PSS1B                      | F                                | Weedy shrub carr community surrounded by upland thicket and associated with S-R30. Community dominated by orange jewelweed, RCG, and curly dock under sandbar willow and common buckthorn shrubs.  |
| E2                                   | S-W19                   | Wetland, adjacent to<br>ASNRI water (Deer<br>Creek)    | Shrub Carr                              | PSS1B                      | F                                | Shrub carr wetland associated with S-R32 and dominated by RCG and sandbar willow.  |

<sup>&</sup>lt;sup>1</sup> Construction Segment of the ATC Managed portion of the Project.

<sup>&</sup>lt;sup>2</sup> Feature ID: W# = wetland. Suffixes indicate changes to the feature in 2020: "-r" = revised wetland boundary, "-n" = new feature identified

<sup>&</sup>lt;sup>3</sup> Designated features refer to wetlands within or immediately adjacent to waterways considered to be Areas of Special Natural Resource Interest (ASNRI) per NR 103.04 WI. Admin. Code.

<sup>&</sup>lt;sup>4</sup> Wetland descriptions are based on Eggers and Reed Classification system.

<sup>&</sup>lt;sup>5</sup> Survey Technique includes: F = in-field characterization; A = off-site characterization (e.g., aerial photograph interpretation); and V = off-site characterization with limited field verification (e.g., feature viewed from public ROW such as a nearby road)



062\_S-W01\_Sedge meadow riparian wetland along S-R02\_2020-06-16\_view\_N



063\_S-W01\_Sedge meadow riparian wetland along S-R02\_2020-06-16\_view\_N



063\_S-W01\_Sedge meadow riparian wetland along S-R02\_2020-06-16\_NE



067\_S-W02\_Shrub-carr seep area associated with S-R06\_2020-06-15\_view\_E



068\_S-W02\_Shrub-carr seep area associated with S-R06\_2020-06-15\_view\_NE



073\_S-W02a-n\_Wet meadow dominated by RCG, cattails, and giant goldenrod\_2020-06-11\_view\_E



068\_S-W02\_Shrub-carr seep area associated with S-R06\_2020-06-15\_view\_NW



073\_S-W02a-n\_Wet meadow dominated by RCG, cattails, and giant goldenrod\_2020-06-11\_view\_W



074\_S-W02a-n\_Wet meadow dominated by RCG, cattails, and giant goldenrod\_2020-06-11\_view\_W



076\_S-W03-r\_Wet meadow swale\_2020-06-09\_view\_E



075\_S-W03-r\_Wet meadow swale\_2020-06-09\_view\_SE



077\_S-W03-r\_Wet meadow swale\_2020-06-09\_view\_NE



078\_S-W04\_Shrub-carr depressional wetland associated with S-R10\_2020-06-09\_view\_NE



081\_S-W05-r\_Wet meadow dominated by RCG along S-R11\_2020-06-09\_view\_NE



080\_S-W04\_Shrub-carr depressional wetland associated with S-R10\_2020-06-09\_view\_SW



082\_S-W05-r\_Wet meadow dominated by RCG along S-R11\_2020-06-09\_view\_S



087\_S-W06\_Wet meadow dominated by RCG\_2017-06-09\_view\_W



091\_S-W07-r\_Wet meadow associated with S-R16\_2020-06-08\_view\_SE





092\_S-W07-r\_Wet meadow associated with S-R16\_2020-06-08\_view\_E



092\_S-W07-r\_Wet meadow associated with S-R16\_2020-06-08\_view\_S



097\_S-W08-r\_Wet meadow dominated by RCG and few sandbar willow shrubs\_2020-06-08\_view\_N





098\_S-W08-r\_Wet meadow dominated by RCG and few sandbar willow shrubs\_2020-06-08\_view\_N



100\_S-W09\_Wet meadow associated with S-R18a\_2017-06-14\_view\_SE



101\_S-W09\_Wet meadow associated with S-R18a\_2020-06-08\_view\_SE



101\_S-W09\_Wet meadow associated with S-R18a\_2020-06-08\_view\_NW



104\_S-W10-r\_Narrow shrub-carr and hardwood swamp associated with S-R20\_2020-06-04\_view\_SE



105\_S-W10-r\_Narrow shrub-carr and hardwood swamp associated with S-R20\_2020-06-04\_view\_N



106\_S-W10-r\_Narrow shrub-carr and hardwood swamp associated with S-R20\_2020-06-04\_view\_S



105\_S-W10-r\_Narrow shrub-carr and hardwood swamp associated with S-R20\_2020-06-04\_view\_SW



107\_S-W11\_Wet meadow associated with S-R21; area of pooling water at culvert\_2020-06-04\_view\_S



107\_S-W11\_Wet meadow associated with S-R21\_2020-06-04\_view\_S



110\_S-W12-r\_Wet meadow associated with S-R22\_2020-06-04\_view\_W



109\_S-W12-r\_Wet meadow associated with S-R22\_2020-06-04\_view\_S



113\_S-W13-r\_Wet meadow and hardwood swamp complex associated with S-R24\_2020-06-04\_view\_SE



114\_S-W13-r\_Wet meadow and hardwood swamp complex associated with S-R24\_2020-06-04\_view\_S



118\_S-W14\_Wet meadow associated with S-R26\_2020-06-04\_view\_S





119\_S-W14\_Wet meadow associated with S-R26\_2018-01-05\_view\_S



120\_S-W15\_Wet meadow dominated by RCG\_2020-06-03\_view\_E



120\_S-W15\_Wet meadow dominated by RCG\_2020-06-03\_view\_W





121\_S-W16\_Weedy shrub-carr associated with S-R27\_2020-10-30\_view\_E



121\_S-W16\_Weedy shrub-carr associated with S-R27\_2020-10-30\_view\_NE







124\_S-W16\_Weedy shrub-carr associated with S-R27\_2020-06-08\_view\_NE



126\_S-W17\_Shrub-carr and hardwood swamp complex associated with S-R28\_2020-06-08\_view\_SE



128\_S-W17\_Shrub-carr and hardwood swamp complex associated with S-R28\_2020-06-08\_view\_SE





129\_S-W17\_Shrub-carr and hardwood swamp complex associated with S-R28\_2020-06-08\_view\_S



129\_S-W17\_Shrub-carr and hardwood swamp complex associated with S-R28\_2020-06-08\_view\_SW



131\_S-W18\_Weedy shrub-carr surrounded by upland thicket and associated with S-R30\_2020-06-02\_view\_E

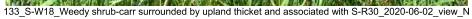


130\_S-W17\_Shrub-carr and hardwood swamp complex associated with S-R28 and S-R29\_2020-06-08\_view\_S



131\_S-W18\_Weedy shrub-carr surrounded by upland thicket and associated with S-R30\_2020-06-02\_view\_SE







136\_S-W19\_Shrub-carr associated with S-R32\_2020-06-02\_view\_N



133\_S-W18\_Weedy shrub-carr surrounded by upland thicket and associated with S-R30\_2020-06-02\_view\_SW



137\_S-W19\_Shrub-carr associated with S-R32\_2020-06-02\_view\_SW

# Segment E2-Wetlands 2020 Photos



139\_S-W19\_Shrub-carr associated with S-R32\_2020-06-02\_view\_SW

| Lo. Segine | nt E2 Off-ROW Eva       | aluation                   |   |                           |                               | Wetland /                 | Access Route                    |                    |
|------------|-------------------------|----------------------------|---|---------------------------|-------------------------------|---------------------------|---------------------------------|--------------------|
| Segment    | Access Route<br>Name/ID | Construction Phase for Use | Access Route Land Use / Land Cover<br>Description   | Wetland Present?<br>(Y/N) | Waterway<br>Present?<br>(Y/N) | Waterway Survey Technique | Reviewed in Delineation Report? | Access Map<br>Page |
| E2         | E2-147263               | Construction               | Formly developed area in western portion. Gravel and grassy farm access in southern portion. Farm field on east side.                         | N                         | N                             | F/V                       | N                               | 1                  |
| E2         | E2-147264               | Construction               | Cropland  | N                         | N                             | F/V                       | N                               | 1                  |
| E2         | E2-147264MS             | Mat Storage                | Cropped field   | N                         | N                             | F                         | N                               | 1                  |
| E2         | E2-147269               | Construction               | Access along edge of cropped field, crosses upland grass swale before entering ROW.   | N                         | N                             | V                         | Y                               | 2                  |
| E2         | E2-147269MS             | Mat Storage                | Cropped field   | N                         | N                             | V                         | N                               | 2                  |
| E2         | E2-147271               | Construction/<br>Permanent | Field access driveway   | N                         | N                             | F                         | N                               | 2                  |
| E2         | E2-147275               | Construction/<br>Permanent | Field access driveway   | N                         | N                             | F                         | N                               | 3                  |
| E2         | E2-147277               | Construction/<br>Permanent | Field entrance adjacent to woodland and cropped field. Portion goes through woodland (not observed due to access).                            | N                         | N                             | A/V                       | N                               | 3                  |
| E2         | E2-147284               | Construction/<br>Permanent | Crosses mowed DOT ROW into upland woodland.   | N                         | N                             | F                         | N                               | 6                  |
| E2         | E2-147284VM             | VM                         | Mowed DOT ROW and unmainained/brushy area between ROW and residential lawn.   | N                         | N                             | F/V                       | N                               | 6                  |
| E2         | E2-147285VM             | VM                         | Grassy pasture.   | N                         | N                             | V                         | N                               | 6                  |
| E2         | E2-147285MS             | Mat Storage                | Grassy road ROW.  | N                         | N                             | F                         | N                               | 6                  |
| E2         | E2-147285               | Construction               | Two paths. One crosses pasture and one passes through buildings along driveway then through unmaintained/ brushy portion of residential yard. | N                         | N                             | F                         | N                               | 6                  |
| E2         | E2-147285               | Construction               | Access change - through pasture   | N                         | N                             | F                         | N                               | 6                  |
| E2         | E2-147286               | Construction               | DOT ROW + graveled Military Ridge Trail   | N                         | N                             | F                         | N                               | 7                  |
| E2         | E2-147286VM             | VM                         | Cropped field   | N                         | N                             | F                         | N                               | 7                  |
| E2         | E2-146286VM             | VM                         | Access change - gravel driveway from Evans Quarry Rd connects to path through cropped field.  | N                         | N                             | A/V                       | N                               | 7                  |
| E2         | E2-147287               | Construction/<br>Permanent | Existing driveway, pasture.   | N                         | N                             | V                         | N                               | 7                  |
| E2         | E2-147287MS             | Mat Storage                | Residential lawn, pasture.  | N                         | N                             | V                         | N                               | 7                  |

| Segment | Access Route<br>Name/ID | Construction Phase for Use | Access Route Land Use / Land Cover Description   | Wetland Present?<br>(Y/N) | Waterway<br>Present?<br>(Y/N) | Wetland /<br>Waterway<br>Survey<br>Technique <sup>1</sup> | Access Route<br>Reviewed in<br>Delineation Report?<br>(Y/N) | Access Map<br>Page |
|---------|-------------------------|----------------------------|--|---------------------------|-------------------------------|---|---|--------------------|
| E2      | E2-147291               | Construction               | Cropped field  | N                         | N                             | F   | N   | 8                  |
| E2      | E2-147292               | Construction               | Cropped fields surrounding lumber yard, crosses existing gravel driveway at east end of parking lot.   | N                         | N                             | F   | N   | 8                  |
| E2      | E2-147292MS             | Mat Storage                | Cropped field adjacent to gravel drive.  | N                         | N                             | F   | N   | 8                  |
| E2      | E2-147293               | Construction               | Gravel farm access and farm lane.  | N                         | N                             | F   | N   | 8                  |
| E2      | E2-147295               | Construction/<br>Permanent | Gravel farm access and cropped field.  | N                         | N                             | V   | N   | 9                  |
| E2      | E2-147294               | Construction               | Cropped field  | N                         | N                             | V   | N   | 9                  |
| E2      | E2-147295MS             | Mat Storage                | Cropped field  | N                         | N                             | V   | N   | 9                  |
| E2      | E2-147295VM             | VM                         | DOT ROW along off ramp.  | N                         | N                             | F   | N   | 9                  |
| E2      | E2-147296               | Construction               | DOT ROW along on ramp.   | N                         | N                             | F   | N   | 9                  |
| E2      | E2-147297               | Construction               | Cropland   | N                         | N                             | A/V   | N   | 9                  |
| E2      | E2-147298VM             | VM                         | DOT ROW  | N                         | N                             | F   | N   | 10                 |
| E2      | E2-147300               | Construction               | Existing asphalt driveway and gravel parking lot   | N                         | N                             | V   | N   | 10                 |
| E2      | E2-147301               | Construction/<br>Permanent | Gravel field access and cropped field.   | N                         | N                             | V   | N   | 10                 |
| E2      | E2-147301MS             | Mat Storage                | Pasture  | N                         | N                             | A/V   | N   | 10                 |
| E2      | E2-147302               | Construction               | Edge of farmed field, follows woodland edge.   | N                         | N                             | A/V   | N   | 11                 |
| E2      | E2-147303               | Construction               | Gravel field access, edge of cropped field and mowed DOT ROW.  | N                         | N                             | A/V   | N   | 11                 |
| E2      | E2-147303VM             | VM                         | DOT ROW  | N                         | N                             | F   | N   | 11                 |
| E2      | E2-147305               | Construction/ Permanent    | Gravel driveway through mostly wooded community.   | N                         | Y - Existing culvert crossing | F   | N   | 12                 |
| E2      | E2-147306               | Construction/<br>Permanent | Existing gravel/ direct road passes through developed area (southeast) and forest community. Trail continues NW through upland grassland/meadow. | N                         | N                             | F   | N   | 12                 |
| E2      | E2-147307VM             | VM                         | DOT ROW  | N                         | N                             | F   | N   | 12, 12             |

| Segment | Access Route<br>Name/ID | Construction Phase for Use | Access Route Land Use / Land Cover Description   | Wetland Present?<br>(Y/N)                                    | Waterway<br>Present?<br>(Y/N)            | Wetland /<br>Waterway<br>Survey<br>Technique <sup>1</sup> | Access Route<br>Reviewed in<br>Delineation Report?<br>(Y/N) | Access Map<br>Page |
|---------|-------------------------|----------------------------|--|--|--|---|---|--------------------|
| E2      | E2-147309               | Construction               | Crosses through pasture at road. Potential wetlands (S-W02b-n) and waterways (S-R07A, S-R07B, and S-R07C) along access route. <b>No access to route.</b> | Y - Temporary wetland<br>matting included in<br>WDNR Table 1 | Y - TCSBs<br>included in<br>WDNR Table 1 | А   | N   | 13, 14             |
| E2      | E2-147309VM             | VM                         | DOT ROW, woodland  | N  | N  | F   | N   | 14                 |
| E2      | E2-147310               | Construction/<br>Permanent | Cropland   | N  | N  | F/V   | Y   | 14                 |
| E2      | E2-147310MS             | Mat Storage                | Cropped field  | N  | N  | V   | Y   | 14                 |
| E2      | E2-147311               | Construction               | Cropland   | N  | N  | V   | N   | 15                 |
| E2      | E2-147316               | Construction               | Mowed grassland/road embankment.   | N  | N  | F   | N   | 16                 |
| E2      | E2-147317               | Construction/<br>Permanent | Cropland planted to soybeans, south end borders upland old field community.  | N  | N  | V   | N   | 16                 |
| E2      | E2-147325               | Construction/VM            | Existing graveled field access from US 18/151.   | N  | N  | V   | N   | 18                 |
| E2      | E2-147326               | Construction               | Roadside grass and cropped field.  | N  | N  | V   | N   | 19                 |
| E2      | E2-147326MS             | Mat Storage                | Cropped field  | N  | N  | V   | N   | 19                 |
| E2      | E2-147327               | Construction               | Farm access driveway and cropped field along highway ROW.  | N  | N  | F   | N   | 19                 |
| E2      | E2-147331VM             | VM                         | Paved frontage road  | N  | N  | F   | N   | 20                 |
| E2      | E2-147336               | Construction/VM            | Paved/ gravel gas station parking lot.   | N  | N  | F   | N   | 21                 |
| E2      | E2-147337VM             | VM                         | Two paths in grassy area between frontage road and on ramp. Access route crosses next to wetland (S-W05a) and crosses waterway (S R11).                  | Y - Temporary wetland<br>matting included in<br>WDNR Table 1 | Y - TCSB<br>included in<br>WDNR Table 1  | F   | N   | 21                 |
| E2      | E2-147337               | Construction               | Gravel parking lot, driveway   | N  | N  | V   | N   | 21                 |
| E2      | E2-147338MS             | Mat Storage                | Gravel parking lot   | N  | N  | V   | N   | 22                 |
| E2      | E2-147338VM             | VM                         | Grassy area along frontage road.   | N  | N  | V   | N   | 22                 |
| E2      | E2-147339               | Construction               | Wetland (S-W06)  | Y - Temporary wetland<br>matting included in<br>WDNR Table 1 | N  | F   | N   | 22                 |
| E2      | E2-147342               | Construction               | Grassland/ old field   | N  | N  | V   | Υ   | 23                 |
| E2      | E2-147342MS             | Mat Storage                | Grassland/ old field   | N  | N  | V   | Y   | 23                 |
| E2      | E2-147344               | Construction               | Asphalt driveway, grassland/ pasture in east end. <b>No access.</b>  | N  | Y - Existing culvert crossing            | A/V   | Y   | 23                 |

| Segment | Access Route<br>Name/ID | Construction Phase for Use | Access Route Land Use / Land Cover Description   | Wetland Present?<br>(Y/N) | Waterway<br>Present?<br>(Y/N)           | Wetland /<br>Waterway<br>Survey<br>Technique <sup>1</sup> | Access Route<br>Reviewed in<br>Delineation Report?<br>(Y/N) | Access Map<br>Page |
|---------|-------------------------|----------------------------|--|---------------------------|---|---|---|--------------------|
| E2      | E2-147346               | Construction               | Farm driveway and edge of cropped field.   | N                         | N                                       | V   | Y   | 24                 |
| E2      | E2-147347               | Construction               | Edge of cropped field.   | N                         | N                                       | V   | Y   | 24                 |
| E2      | E2-147347MS             | Mat Storage                | Cropped field.   | N                         | N                                       | V   | Y   | 24                 |
| E2      | E2-147349               | Construction               | Edge of roadside grassed area at bottom of highway embankment. Crosses waterway (S-R17) at culvert outlet. | N                         | Y - TCSB<br>included in<br>WDNR Table 1 | F   | N   | 25                 |
| E2      | E2-147353               | Construction               | Three segments. West to structure 147352: cropped field. Eastern two: grassland.                           | N                         | N                                       | V   | N   | 26                 |
| E2      | E2-147353MS             | Mat Storage                | Cropped field  | N                         | N                                       | V   | N   | 26                 |
| E2      | E2-147354               | Construction/<br>Permanent | Mowed field access through grassland, cropped field  | N                         | N                                       | F   | Y   | 26                 |
| E2      | E2-147354VM             | VM                         | DOT ROW  | N                         | N                                       | F   | N   | 26                 |
| E2      | E2-147356VM             | VM                         | DOT ROW  | N                         | N                                       | F   | N   | 26                 |
| E2      | E2-147357               | Construction               | Existing gravel driveway/ parking lot.   | N                         | N                                       | V   | N   | 27                 |
| E2      | E2-147358               | Construction/<br>Permanent | Mowed hayfield/grassland.  | N                         | N                                       | F   | N   | 27                 |
| E2      | E2-147358MS             | Mat Storage                | Mowed field adjacent to access road.   | N                         | N                                       | F   | N   | 27                 |
| E2      | E2-147359               | Construction/<br>Permanent | Mowed DOT ROW, cropped field   | N                         | N                                       | V   | Y   | 27                 |
| E2      | E2-147359MS             | Mat Storage                | Adjacent to access road in cropped field.  | N                         | N                                       | V   | Y   | 27                 |
| E2      | E2-147363               | Construction               | Existing paved driveway, upland forest   | N                         | N                                       | V   | Y   | 29                 |
| E2      | E2-147364               | Construction/<br>Permanent | Grassland (unmaintained DOT ROW), cropped field  | N                         | N                                       | V   | N   | 29                 |
| E2      | E2-147364MS             | Mat Storage                | Cropped field  | N                         | N                                       | V   | N   | 29                 |
| E2      | E2-147365VM             | VM                         | DOT ROW  | N                         | N                                       | F   | N   | 29                 |
| E2      | E2-147370               | Construction               | Existing gravel driveway/ field access. Forks near ROW, east fork crosses cropped field.                   | N                         | N                                       | V   | Y   | 31                 |
| E2      | E2-147371               | Construction               | Existing field access drive and cropped field.   | N                         | N                                       | V   | Y   | 31                 |
| E2      | E2-147371MS             | Mat Storage                | Adjacent to access road in cropped field.  | N                         | N                                       | V   | Y   | 31                 |
| E2      | E2-147375               | Construction               | Existing pavement/ old roadway, cropped field.   | N                         | N                                       | F   | Y   | 32                 |
| E2      | E2-147375MS             | Mat Storage                | Paved access road.   | N                         | N                                       | F   | Y   | 32                 |

| Segment | Access Route<br>Name/ID | Construction Phase for Use | Access Route Land Use / Land Cover<br>Description  | Wetland Present?<br>(Y/N)                                    | Waterway<br>Present?<br>(Y/N)           | Wetland /<br>Waterway<br>Survey<br>Technique <sup>1</sup> | Access Route<br>Reviewed in<br>Delineation Report?<br>(Y/N) | Access Map<br>Page |
|---------|-------------------------|----------------------------|--|--|---|---|---|--------------------|
| E2      | E2-147376               | Construction               | Existing pavement/ old roadway, cropped field.   | N  | N                                       | V   | N   | 33                 |
| E2      | E2-147377               | Construction               | Field access driveway and cropped field.   | N  | N                                       | V   | N   | 33                 |
| E2      | E2-147379               | Construction               | Field access driveway and cropped field.   | N  | N                                       | V   | N   | 33                 |
| E2      | E2-147380               | Construction/<br>Permanent | Mowed lawn, paved driveway and parking lot.  | N  | N                                       | F   | N   | 34                 |
| E2      | E2-147381               | Construction/<br>Permanent | Mowed lawn, paved driveway and parking lot.  | N  | N                                       | F/A   | N   | 34                 |
| E2      | E2-147381MS             | Mat Storage                | Two areas - both in existing quarry/developed land.  | N  | N                                       | F   | N   | 34                 |
| E2      | E2-147382               | Construction/<br>Permanent | Located along cropped field and crosses upland grass swale. Wetland and waterway located NE of access route.   | N  | N                                       | F   | N   | 35                 |
| E2      | E2-147382VM             | VM                         | DOT ROW  | N  | N                                       | F   | N   | 35                 |
| E2      | E2-147383               | Construction/<br>Permanent | Access meanders just outside ROW from structures 147383 to 147384 down existing mowed trail through upland woodland and across wetland (S-W17) and waterway (S-R28).   | Y - Temporary wetland<br>matting included in<br>WDNR Table 1 | Y - TCSB<br>included in<br>WDNR Table 1 | F   | N   | 35                 |
| E2      | E2-147385               | Construction/<br>Permanent | Upland forest wooded path to ROW.  | N  | N                                       | F   | N   | 35                 |
| E2      | E2-147385MS             | Mat Storage                | Grassy area within quarry.   | N  | N                                       | F   | N   | 35                 |
| E2      | E2-147387               | Construction/<br>Permanent | Shared access along gravel road from Sand Rock Rd to structure 147388. Access route from the gravel road crosses through upland woodland near the ROW.   | N  | N                                       | F   | N   | 36                 |
| E2      | E2-147388               | Construction/<br>Permanent | Shared access route off of Sand Rock Rd also to structure 147387. Most of the access route is located along existing gravel driveway through upland woodland, which has two culverted waterway crossings. Access route crosses through wetland near ROW along mowed trail (S-W18). | Y - Temporary wetland<br>matting included in<br>WDNR Table 1 | Y - Existing<br>culvert crossing        | F   | Y   | 36                 |

| Segment | Access Route<br>Name/ID | Construction Phase for Use | Access Route Land Use / Land Cover<br>Description                                       | Wetland Present?<br>(Y/N) | Waterway<br>Present?<br>(Y/N) | Wetland /<br>Waterway<br>Survey<br>Technique <sup>1</sup> | Access Route<br>Reviewed in<br>Delineation Report?<br>(Y/N) | Access Map<br>Page |
|---------|-------------------------|----------------------------|---|---------------------------|-------------------------------|---|---|--------------------|
| E2      | E2-147391               | Construction               | Access change - Mowed DOT ROW and cropped field.  | N                         | N                             | V   | N   | 37                 |
| E2      | E2-147390MS             | Mat Storage                | Cropped field.  | N                         | N                             | V   | N   | 37                 |
| E2      | E2-147393               |                            | Paved driveway off of Hwy 92. Northwestern extent crosses through cropped field to ROW. | N                         | N                             | V   | N   | 38                 |
| E2      | E2-147399VM             | VM                         | Edge of cropped field.  | N                         | N                             | V   | N   | 39                 |

<sup>1</sup> The off-ROW access routes, staging areas, and laydown yards were evaluated for wetlands and waterways using a combination of onsite determinations where access was available and off-site review. Resources used to assist in the assessment included U.S. Geological Survey (USGS) topographic data, U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) soil survey, WDNR Wisconsin Wetland Inventory (WWI) mapping, WDNR Surface Water Data Viewer, and aerial photography.

Survey Technique includes: F = in-field characterization; A = off-site characterization (e.g., aerial photograph interpretation); and V = off-site characterization with limited field verification (e.g., feature viewed from public ROW such as a nearby road)

# Attachment F

**Waterway Summary Table** 

# Segment E2 - Mt Horeb - Dodgeville F1. Waterways Crossed by the Project

| Feature<br>Unique ID | Feature Type,<br>Name and<br>Designation <sup>1</sup> | Resource<br>Description      | WBIC    | Coordinates of Wate<br>Project C |           | County | Waterway Characteristics  | Navigability or Snowmobile Use Limitations   |
|----------------------|---|------------------------------|---------|----------------------------------|-----------|--------|---|--|
|                      | Designation   |                              |         | Latitude                         | Longitude |        |   |  |
| S-R02                | Waterway  | UNT to Dodge<br>Branch       | 913400  | 42.98668                         | -90.06986 | lowa   | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 6 ft, OHWM height = 1 ft; bank width = 8 ft, bank height 5 ft. Approach slope is moderate. Riparian vegetation dominated by RCG, orange jewelweed, spike rush, dark-green bulrush, box elder, and bentgrass.   | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence south of the proposed TCSB location within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.   |
| S-R06                | Waterway  | UNT to Smith Conley<br>Creek | -       | 42.99684                         | -89.9841  | lowa   | Not shown on WDNR 24K hydro layer. OHWM width = 3 ft, OHWM height = 0.5 ft; bank width = 5 ft, bank height 1 ft. Approach slope is moderate. Riparian vegetation dominated by wild parsnip, garlic mustard, smooth brome and burdock. Additional dominant riparian vegetation updated in 2020 includes orange jewelweed, giant ragweed, bittersweet nightshade, honeysuckle, and quaking aspen. | Waterway is bounded by the CTH H road culvert north of the proposed TCSB within the project ROW. The culvert, narrow size of the waterway (3 feet), and thick vegetation limit the ability to use this feature for navigation or snowmobiles   |
| S-R07                | Waterway  | UNT to Smith Conley<br>Creek | 5036406 | 43.00062                         | -89.98013 | lowa   |   | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert, fence, and narrow size of the waterway (2 feet) limit the ability to use this feature for navigation or snowmobiles.                  |
| S-R07A               | Waterway  | UNT to Smith Conley<br>Creek | 5036406 | 42.9979                          | -89.98027 | lowa   | Shown on WDNR 24K hydro layer. Property access not available along potential construction access route.   | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence approximately 600 feet north of the proposed TCSB location, and by the CTH H road embankment to the south. The culvert and and fence limit the ability to use this feature for navigation or snowmobiles.  |
| S-R07B               | Waterway  | UNT to Smith Conley<br>Creek | 5036406 | 42.9965                          | -89.98025 | lowa   | Shown on WDNR 24K hydro layer. Property access not available along potential construction access route.   | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence approximately 1400 feet north of the proposed TCSB location, and by the CTH H road embankment to the south. The culvert and and fence limit the ability to use this feature for navigation or snowmobiles. |

| S-R07C | Waterway | UNT to Smith Conley<br>Creek           | 5036406 | 42.99564  | -89.98054  | lowa | Shown on WDNR 24K hydro layer. Property access not available along potential construction access route.  | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence approximately 2000 feet north of the proposed TCSB location, and by the CTH H road embankment to the south. The culvert and and fence limit the ability to use this feature for navigation or snowmobiles. |
|--------|----------|--|---------|-----------|------------|------|--|--|
| S-R11  | Waterway | UNT to East Branch<br>Pecatonica River | 5036301 | 43.00922  | -89.897656 | lowa | slope is moderate. Riparian vegetation dominated by RCG, poison hemlock, wild parsnip, crown vetch, and burdock.   | Waterway is bounded by the USH 151 off-ramp highway culvert and Industrial Drive culverts just north and south of the proposed TCSB. The culverts limit the ability to use this feature for navigation or snowmobiles.   |
| S-R15  | Waterway | UNT to East Branch<br>Pecatonica River |         | 43.009522 | -89.872913 | lowa |  | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.   |
| S-R16  | Waterway | UNT to East Branch<br>Pecatonica River | 5036253 | 43.00915  | -89.867769 | lowa | Shown on WDNR 24K hydro layer; OHWM width = 3 ft, OHWM height = 1 ft; bank width = 5 ft, bank height = 1.5 ft. Approach slope is moderate. Riparian vegetation dominated by RCG.   | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert, fence, and narrow size of the waterway (3 feet) limit the ability to use this feature for navigation or snowmobiles.                  |
| S-R17  | Waterway | UNT to Williams-<br>Barneveld Creek    | 5036263 | 43.008808 | -89.858788 | lowa |  | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.   |
| S-R18  | Waterway | UNT to Williams-<br>Barneveld Creek    | 5036197 | 43.00962  | -89.84285  | lowa | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: Waterway bisected by Bringham Road. Eastern extent transitions to narrow drainage. OHWM width = 4 ft, OHWM height = 2 ft; bank width = 5 ft, bank height = 3 ft. Approach slope is steep. Riparian vegetation dominated by RCG, common milkweed, garlic mustard, wild grape, giant ragweed, yellow rocket, and wild parsnip. | Waterway is bounded by the USH 151 highway and E Brigham Road culvert just north of the proposed TCSB within the project ROW. The culvert limits the ability to use this feature for navigation or snowmobiles.  |

| S-R19 | Waterway  | UNT to Williams-<br>Barneveld Creek |        | 43.009644 | -89.841213 | lowa | Shown on WDNR 24K hydro layer; OHWM width = 4 ft, OHWM height = 0.75 ft; bank width = 6 ft, bank height = 1 ft. Approach slope is moderate. Riparian vegetation dominated by smooth brome, wild parsnip, and stinging nettle.  | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.  |
|-------|---|-------------------------------------|--------|-----------|------------|------|--|---|
| S-R20 | Waterway  | Williams-Barneveld<br>Creek         | 915100 | 43.00979  | -89.836953 | Dane | Shown on WDNR 24K hydro layer; Characteristics updated in 2020: OHWM width = 8 ft, OHWM height = 3 ft; bank width = 12 ft, bank height = 4 ft. Approach slope is moderate. Riparian vegetation dominated by RCG, sandbar willow, and orange jewelweed.   | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.  |
| S-R22 | Waterway  | UNT to Gordon<br>Creek              | 915100 | 43.009886 | -89.820175 | Dane | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 2 ft, OHWM height = 1 ft; bank width = 3 ft, bank height 1.5 ft. Approach slope is moderate. Riparian vegetation dominated by RCG and wild parsnip.   | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert, fence, and narrow size of the waterway (2 feet) limit the ability to use this feature for navigation or snowmobiles. |
| S-R23 | Waterway, ASNRI<br>Exceptional<br>Resource Water;<br>Class II Trout<br>Stream | Gordon Creek                        | 907300 | 43.009835 | -89.812342 | Dane | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 4 ft, OHWM height = 2 ft; bank width = 12 ft, bank height 3 ft. Approach slope is moderate. Riparian vegetation dominated by black walnut, honeysuckle, hawthorn, box elder, orange jewelweed, Dame's rocket, and garlic mustard. | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.  |

| S-R24 | Waterway  | UNT to Gordon<br>Creek            |         | 43.009924 | -89.801878 | Dane | Not shown on WDNR 24K hydro layer; OHWM width = 4 ft, OHWM height = 0.75 ft; bank width = 6 ft, bank height = 1 ft. Approach slope is moderate. Riparian vegetation dominated by box elder, black cherry, and honeysuckle in the southern upland banks and RCG, smooth brome, and wild parsnip in the WisDOT ROW banks.                      | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.  |
|-------|---|-----------------------------------|---------|-----------|------------|------|--|---|
| S-R25 | Waterway, ASNRI<br>Exceptional<br>Resource Water;<br>Class II trout<br>stream | Gordon Creek                      | 5036226 | 43.009832 | -89.799927 | Dane |  | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.  |
| S-R26 | Waterway  | UNT to Gordon<br>Creek            |         | 43.009829 | -89.796639 | Dane | Shown on WDNR 24K hydro layer; OHWM width = 1.5 ft, OHWM height = 0.5 ft; bank width = 2.5 ft, bank height 0.75 ft. Approach slope is moderate. Riparian vegetation dominated by RCG.  | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert, fence, and narrow size of the waterway (1.5 feet) limit the ability to use this feature for navigation or snowmobiles. |
| S-R28 | Waterway, ASNRI<br>Class II Trout<br>Stream                                   | West Branch Sugar<br>River        | 886100  | 42.99509  | -89.748727 | Dane | Shown on WDNR 24K hydro layer; Characteristics updated in 2020: OHWM width = 8 ft, OHWM height = 1 ft; bank width = 15 ft, bank height 3 ft. Approach slope is moderate. Riparian vegetation with 70% canopy consisting of black walnut, box elder, sandbar willow, cottonwood over RCG, orange jewelweed, garlic mustard and dame's rocket. | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.  |
| S-R29 | Waterway  | UNT to West Branch<br>Sugar River |         | 42.993895 | -89.746447 | Dane | updated in 2020: OHWM width = 2 ft, OHWM height =  | Waterway is bounded by the culvert at Blue Mounds Street just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.   |
| S-R33 | Waterway, ASNRI<br>Exceptional<br>Resource Water                              | Fryes Feeder                      | 886800  | 43.00239  | -89.70723  | Dane | Shown on WDNR 24K hydro layer; OHWM width = 4 ft, OHWM height = 1 ft; bank width = 6 ft, bank height = 1.5 ft. Approach slope is moderate. Riparian vegetation dominated by smooth brome and burdock. Additional vegetation noted in 2020: Canada goldenrod, giant ragweed, stinging nettle, cottonwood, and garlic mustard.                 | Waterway is bounded by the USH 151 highway culvert and WisDOT highway fence just north of the proposed TCSB within the project ROW. The culvert and fence limit the ability to use this feature for navigation or snowmobiles.  |

<sup>1</sup> Designated features refers to waterways considered to be Areas of Special Natural Resource Interest (ASNRI) per NR 103.04 WI. Admin.

# Segment E2 - Waterway Photos



063\_S-R02\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-16\_view\_E



064\_S-R03a\_Channel on north side of road\_view NW



063\_S-R02\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-16\_view\_N



064\_S-R03a\_Road surface at culverted crossing



064\_S-R03a\_Shallow channel on north side of road\_view\_SE



069\_S-R06\_Approach slope is moderate\_2020-06-15\_view\_NE





070\_S-R06\_Approach slope is moderate\_2020-06-15\_view\_S



071\_S-R07\_Approach slope is steep to moderate\_2020-06-12\_view\_S



082\_S-R11\_Approach slope is moderate; riparian vegetation associated with S-W05-r\_2020-06-09\_view\_N



071\_S-R07\_Approach slope is steep to moderate\_2020-06-12\_view\_SW







090\_S-R15\_Riparian vegetation dominated by burdock, box elder shrubs, other upland species\_2020-06-08\_view\_W

090\_S-R15\_Riparian vegetation dominated by burdock, box elder shrubs, other upland species\_2020-06-08\_view\_N



093\_S-R16\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-08\_view\_Ground



095\_S-R17\_Approach slope is moderate\_2020-06-08\_view\_E

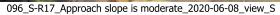


094\_S-R16\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-08\_view\_S



095\_S-R17\_Approach slope is moderate\_2020-06-08\_view\_N







101\_S-R18\_Waterway bisected by Bringham Road\_2020-06-08\_view\_SE



101\_S-R18\_Waterway bisected by Bringham Road\_2020-06-08\_view\_Ground



102\_S-R18\_Waterway transitions to narrow drainage\_2020-06-04\_view\_E







103\_S-R19\_Approach slope is moderate\_2020-06-04\_view\_W



103\_S-R19\_Approach slope is moderate\_2020-06-04\_view\_S



105\_S-R20\_Williams-Barneveld Creek; associated with S-W10-r\_2020-06-04\_view\_N



105\_S-R20\_Williams-Barneveld Creek; associated with S-W10-r\_2020-06-04\_view\_NW



106\_S-R20\_Williams-Barneveld Creek; associated with S-W10-r\_2020-06-04\_view\_S



105\_S-R20\_Williams-Barneveld Creek; associated with S-W10-r\_2020-06-04\_view\_SW



108\_S-R22\_Approach slope is moderate; riparian vegetation associated with S-W12-r\_2020-06-04\_view\_E



108\_S-R22\_Approach slope is moderate; riparian vegetation associated with S-W12-r\_2020-06-04\_view\_N



111\_S-R23\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_E



108\_S-R22\_Approach slope is moderate; riparian vegetation associated with S-W12-r\_2020-06-04\_view\_S



111\_S-R23\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_N



111\_S-R23\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_S



115\_S-R24\_Approach slope is moderate; associated with S-W13-r\_2020-06-04\_view\_E



112\_S-R23\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_S



115\_S-R24\_Approach slope is moderate; associated with S-W13-r\_2020-06-04\_view\_S



116\_S-R25\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_N



116\_S-R25\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_W



116\_S-R25\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_S



117\_S-R26\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-04\_view\_E



117\_S-R26\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-04\_view\_N



127\_S-R28\_West Branch Sugar River; approach slope is moderate\_2020-06-08\_view\_S



118\_S-R26\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-04\_view\_S



129\_S-R28\_West Branch Sugar River; approach slope is moderate\_2020-06-08\_view\_S



129\_S-R28\_West Branch Sugar River; approach slope is moderate\_2020-06-08\_view\_SE



140\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_NW



130\_S-R29\_Approach slope is steep; flows into S-R28\_2020-06-08\_view\_S



140\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_SE



141\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_NW



141\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_SW



141\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_SE

# Attachment K1

**Revised WDNR Table 1 – Segment E2** 

# **DNR Table 1: Wetland and Waterway Impact/Crossing Table**

<u>Directions</u>: Complete this table for all of the wetlands and waterways that will be impacted or crossed by any construction activity, including those crossed by equipment access, impacted by any ground disturbing activity, and crossed by utility installation/site placement. There should only be one row for each feature unique ID. Use 1 tab/sheet for each site and/or route, and break up linear routes by segment numbers. Submit this table as Excel format. Any modifications or revisions to this table must be agreed upon by all parties before filling.

To be Completed by Applicant:
PSC Docket Number: 5-CE-146
Created/Revised On: 7/27/2021
Route/Site Name: Segment E2 ATC Managed Cardinal-Hill Valley

|                          |                                    | RESOURCE INF                                  | FORMATION                         |   |  |                             |   |            |            |                  |                                       |   | CONSTRUC                | TION CROSSING MI   | ETHOD/IMPACT ACTIV                         | /ITY             |                      |                            |                                     |   |   |   | DECO   | JRCE IMPACT LO             | CATION                                 | RESO                                       | URCE IMPACT T                              | OTALS  |          |
|--------------------------|------------------------------------|---|-----------------------------------|---|--|-----------------------------|---|------------|------------|------------------|---------------------------------------|---|-------------------------|--------------------|--|------------------|----------------------|----------------------------|-------------------------------------|---|---|---|--------|----------------------------|--|--|--|--|----------|
|                          |                                    |   |                                   |   |  |                             | T   | Waterways  | T          | I                |                                       |   |                         |                    |  | Wetlands         | 3                    | T                          | T                                   | ı   | 1   |   | RESUL  | JRCE IMPACT LO             | CATION                                 |  |  |  |          |
| Segment                  | Projec<br>Compone                  |   | Feature<br>Unique ID <sup>4</sup> | Navigability<br>Determination<br>Requested <sup>5</sup> | Fish Spawning<br>Timing Restriction<br>Waiver Requested<br>6 |                             | Trench <sup>8</sup> (indicate length and width of trench in feet) | (yes/no)   |            | Other Activities | s Matting <sup>10</sup> (square feet) | Trench <sup>8</sup> (indicate length and width of trench in feet) | Trench<br>(square feet) | Location of Spoils | Wetland Spoils <sup>12</sup> (square feet) | Plow<br>(yes/no) | HDD/Bore<br>(yes/no) | Bore Pits<br>(square feet) | Grading <sup>13</sup> (square feet) | Other<br>Temporary<br>impact <sup>14</sup><br>(square feet) | Comments on Other<br>Temporary Impact <sup>15</sup> | Permanent<br>Structure/Fill<br>Placement<br>(square feet) <sup>16</sup> | County | Latitude<br>Coordinates 17 | Longitude<br>Coordinates <sup>17</sup> | Temporary<br>Wetland Fill<br>(square feet) | Permanent<br>Wetland Fill<br>(square feet) | Wetland<br>Conversion <sup>18</sup><br>(square feet) | Comments |
| Wetlands                 | Transmission                       | n line  |                                   |   |  | 1                           | <u> </u>  | <u> </u>   |            |                  | <u> </u>                              |   |                         | <u>'</u>           |  |                  | 1                    | <u> </u>                   | <u> </u>                            | 1   |   |   |        |                            |  | 1  | <u> </u>                                   |  |          |
| Segment E2<br>Segment E2 | Transmission<br>ROW<br>Access Rout | Siliub-Cail                                   | S-W02<br>S-W02b-n                 | N/A<br>N/A  | N/A<br>N/A   | N/A<br>N/A                  | N/A<br>N/A  | N/A<br>N/A | N/A<br>N/A | N/A<br>N/A       | 430<br>6,000                          |   |                         |                    |  | No<br>No         | No<br>No             |                            |                                     |   |   |   | Iowa   | 42.996829<br>42.999891     | -89.984049<br>-89.980134               | 430<br>6,000                               |  | 520<br>0   |          |
| Segment E2               | Transmission<br>ROW                |   | S-W02a-n                          | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 4,750                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Iowa   | 43.009956                  | -89.926067                             | 4,750                                      |  | 0  |          |
| Segment E2               | Transmission                       | n line Wet Meadow                             | S-W03-r                           | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 540                                   |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Iowa   | 43.008618                  | -89.904555                             | 540  |  | 0  |          |
| Segment E2               | Transmission                       | n line Shrub-Carr                             | S-W04                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 2,010                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Iowa   | 43.008536                  | -89.899448                             | 2,010                                      |  | 2,010  |          |
| Segment E2               | Transmission<br>ROW                | n line Wet Meadow                             | S-W05-r                           | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 1,360                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Iowa   | 43.009177                  | -89.897613                             | 1,360                                      |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line Wet Meadow                             | S-W06                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 3,000                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Iowa   | 43.00995                   | -89.888976                             | 3,000                                      |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line<br>Wet Meadow                          | S-W07-r                           | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 2,170                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Iowa   | 43.009183                  | -89.867764                             | 2,170                                      |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line<br>Wet Meadow                          | S-W08-r                           | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 1,390                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Iowa   | 43.009256                  | -89.850253                             | 1,390                                      |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line Wet Meadow                             | S-W09                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 1,250                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Iowa   | 43.009673                  | -89.843619                             | 1,250                                      |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line Shrub-Carr                             | S-W10-r-SC                        | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 7,380                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 43.009732                  | -89.837111                             | 7,380                                      |  | 2,100  |          |
| Segment E2               | Transmission<br>ROW                | n line Hardwood Swamp                         | S-W10-r-HS                        | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 1,400                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 43.009732                  | -89.837111                             | 1,400                                      |  | 2,000  |          |
| Segment E2               | Transmission<br>ROW                | n line Wet Meadow                             | S-W11                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 1,780                                 |   |                         | ***                |  | No               | No                   |                            |                                     |   |   |   | Dane   | 43.009872                  | -89.830160                             | 1,780                                      |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line Wet Meadow                             | S-W12-r                           | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 2,280                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 43.009882                  | -89.820170                             | 2,280                                      |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line Hardwood Swamp                         | S-W13-r-HS                        | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 2,980                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 43.009917                  | -89.801877                             | 2,980                                      |  | 7,730  |          |
| Segment E2               | Transmission<br>ROW                | n line<br>Wet Meadow                          | S-W14                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 410                                   |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 43.009844                  | -89.796629                             | 410  |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line<br>Wet Meadow                          | S-W15                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 660                                   |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 43.006386                  | -89.782712                             | 660  |  | 0  |          |
| Segment E2               | Transmission<br>ROW                | n line Shrub-Carr                             | S-W16                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 2,700                                 |   |                         |                    |  | No               | No                   | ***                        | ***                                 |   |   |   | Dane   | 42.996922                  | -89.752511                             | 2,700                                      | ***  | 4,690  |          |
| Segment E2               | Transmission<br>ROW                | n line Shrub-Carr                             | S-W17-SC                          | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 5,420                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 42.994652                  | -89.747912                             | 5,420                                      |  | 11,570   |          |
| Segment E2               | Transmission<br>ROW                | n line Hardwood Swamp                         | S-W17-HS                          | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 4,200                                 |   |                         |                    |  | No               | No                   | ***                        | ***                                 |   |   |   | Dane   | 42.994652                  | -89.747912                             | 4,200                                      | ***  | 7,000  |          |
| Segment E2               | Transmission<br>ROW                | n line<br>Shrub-Carr                          | S-W18                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 2,080                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 42.992082                  | -89.736995                             | 2,080                                      |  | 3,260  |          |
| Segment E2               | Transmission<br>ROW                | n line<br>Shrub-Carr                          | S-W19                             | N/A   | N/A  | N/A                         | N/A   | N/A        | N/A        | N/A              | 1,770                                 |   |                         |                    |  | No               | No                   |                            |                                     |   |   |   | Dane   | 42.997097                  | -89.719123                             | 1,770                                      |  | 1,380  |          |
| Waterways                |                                    |   |                                   |   |  |                             |   |            | Wetland    | Impact Totals:   | 55,960                                | N/A   | 0                       | N/A                | 0  | N/A              | N/A                  | 0                          | 0                                   | 0   | N/A   | 0.0000  | N/A    | N/A                        | N/A                                    | 55,960                                     | 0.0000                                     | 42,260   | N/A      |
| Segment E2               | Transmission<br>ROW                | n line UNT to Dodge Branch                    | S-R02                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 42.986680                  | -90.069860                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | n line UNT to Smith Conley Creek              | S-R03A                            | No  | Yes  | Replace<br>Existing Culvert | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 42.993940                  | -89.986800                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | UNT to Smith Conley Creek                     | S-R06                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 42.996840                  | -89.984100                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | UNT to Smith Conley Creek                     | S-R07                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 43.000620                  | -89.980130                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | UNT to Smith Conley Creek                     | S-R07A                            | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 42.997900                  | -89.980270                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | UN 1 to Smith Conley Creek                    | S-R07B                            | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 42.996500                  | -89.980250                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | ON TO STRICT CORREY CIGER                     | S-R07C                            | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 42.995640                  | -89.980540                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | n line UNT to East Branch<br>Pecatonica River | S-R11                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 43.009220                  | -89.897656                             | N/A  | N/A  | N/A  |          |
| Segment E2               | ROW                                | n line East Branch Pecatonica<br>River        | S-R14                             | No  | No   | Avoid / Existing<br>Culvert | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 43.010024                  | -89.879159                             | N/A  | N/A  | N/A  |          |
| Segment E2               | ROW                                | n line UNT to East Branch<br>Pecatonica River | S-R15                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 43.009522                  | -89.872913                             | N/A  | N/A  | N/A  |          |
| Segment E2               | ROW                                | n line UNT to East Branch<br>Pecatonica River | S-R16                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 43.009150                  | -89.867769                             | N/A  | N/A  | N/A  |          |
| Segment E2               | ROW                                | n line UNT to Williams-Barneveld<br>Creek     | S-R17                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 43.008808                  | -89.858788                             | N/A  | N/A  | N/A  |          |
| Segment E2               | ROW                                | n line UNT to Williams-Barneveld<br>Creek     | S-R18                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 43.009620                  | -89.842850                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | Creek   | S-R19                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Iowa   | 43.009644                  | -89.841213                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | Williams-Barneveld Creek                      | S-R20                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 43.009790                  | -89.836953                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | UNT to Gordon Creek                           | S-R22                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 43.009886                  | -89.820175                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | n line Gordon Creek                           | S-R23                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 43.009835                  | -89.812342                             | N/A  | N/A  | N/A  |          |
|                          | Transmission<br>ROW                | n line UNT to Gordon Creek                    | S-R24                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 43.009924                  | -89.801878                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | n line Gordon Creek                           | S-R25                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 43.009832                  | -89.799927                             | N/A  | N/A  | N/A  |          |
| Segment E2               | ransmission<br>ROW                 | n line UNT to Gordon Creek                    | S-R26                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 43.009829                  | -89.796639                             | N/A  | N/A  | N/A  |          |
|                          |                                    | n line West Branch Sugar River                | S-R28                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 42.995090                  | -89.748727                             | N/A  | N/A  | N/A  |          |
| Segment E2               | ROW                                | n line UNT to West Branch Sugar<br>River      | S-R29                             | No  | Yes  | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 42.993895                  | -89.746447                             | N/A  | N/A  | N/A  |          |
| Segment E2               | Transmission<br>ROW                | n line<br>Fryes Feeder                        | S-R33                             | No  | No   | TCSB                        | N/A   | No         | No         | N/A              | N/A                                   | N/A   | N/A                     | N/A                | N/A  | N/A              | N/A                  | N/A                        | N/A                                 | N/A   | N/A   | N/A   | Dane   | 43.002390                  | -89.707230                             | N/A  | N/A  | N/A  |          |

<sup>1</sup> Identify what component of the project is associated with the crossing/impact (e.g. transmission line ROW, pipeline ROW, temporary easement, off-ROW access road, laydown yard, substation, solar array, turbine, fence installation, collection line, temporary access road, permanent access road, O&M building, etc.)

<sup>2</sup> For wetlands, state the wetland type using the Eggars and Reed classification system.

<sup>3</sup> For waterways, indicate the name of the waterway (i.e. Silver Creek). If unnamed, indicate where water flows (i.e. UNT to Silver Creek).

Insert the name or label used in application (e.g. W-3, S-27). For wetland complexes, individual wetland types should each be listed in a separate row to indicate each wetland type, but be named to clearly show they are part of a larger complex (e.g. if complex W-3 is composed of 3 wetland types, each type should have its own row and be named something like: W-3A for shallow marsh, W-3B for wet meadow, and W-3C for shrub carn). For waterways, provide a feature unique ID for each DNR mapped waterway within the project area/route (including all project components), even if the DNR mapped waterway was not identified during field surveys, and for all field identified waterways that parallel the ROW and meander in and of the ROW, a separate ID should be provided to account for each time a section of that waterway enters the ROW (e.g. if stream S-1 meanders in and out of the ROW, 3 times, there should be 3 separate rows, S-1A, S-1B, and S-1C.

S All waterways mapped in the WDNR 24k hydrolayer (surface waters in surface water dataviewer) and any additional field identified waterways are considered navigable unless determined non-navigable by WDNR. Navigability determinations can only be conducted by DNR staff. Enter "yes" if a navigability determination is requested for any DNR mapped waterway not field identified, or for any field identified waterways that were observed to potentially not meet the definition of navigable. A separate submittal is required.

To protect fish spawning habitat, any in-water work (such as dredging, placement of structures in waterways, placing equipment in waterways or driving on the bed of waterways, including the use of existing fords, etc.) and placement or removal of structures across waterways (e.g. TCSB, permanent bridges, etc.), is prohibited form; certain time frames. If the applicant wishes to perform any of these regulated activities in or across waterways during the applicable timing restriction, enter 'yes' indicating a water is requested. A separate submittal is required.

Indicate how each waterway feature unique ID will be traversed by equipment (i.e. placement of TCSB's, driving on the bed, placement of temporary culvert, placement of permanent culvert, placement of ford, placemen of permanent bridge, use of existing ford/culvert/bridge, etc.).

For underground line placement only: Indicate the length and width (e.g., 10' by 5') of wetland or waterway to be open-cut trenched. This is limited to the trench itself and does not include grading or stockoiling of soils.

<sup>9</sup> Use this column to textually identify any other regulated activities occuring in waterway feature unique ID's, such as placement of power poles in this waterway, placement of temporary bore tracking cables in this waterway, channel relocation of this waterway, placement of riprap in this waterway, placement of construction matting on this waterway bed, construction of a pond within 500 feet of this waterway, fence crossing of this waterway.

10 ff construction matting (e.g. timber, composite, etc.) will be placed in wetland for vehicle/equipment access or under soil stockoiles- indicate the area (length by width) of matting to be placed in wetland (temporary fill)

11 Indicate if spoils for each trenched wetland feature unique ID will be placed in upland, in wetland or on mats. If on mats in wetland account for matting square footage in matting column.

12 If exacavated soil will be sidecast in wetlands and will not be placed on construction mats, indicate the amount of temporarily stockpiled soil here. If excavated soil will be sidecast in wetlands will be placed on mats, include the stockpile matting area under the matting column.

13 Indicate the amount of grading in wetlands not associated with trenching, such as topsoil stripping outside of trench, non-matted vehicle access that results in disturbance, etc.

14 Use this column to indicate any other activities occuring in wetlands resulting in temporary wetland fill that do not have their own column, such placement of temporary gravel for staging areas, placement of temporary locies or temporary function boxes in wetland. etc.

15 Complete this column to textually identify what construction activities are associated with the "other activities" proposed in wetlands resulting in temporary wetland fill.

16 If permanent structures or permanent fill will be placed in wetland (e.g. power pole structures, concrete fence footings, substations or other permanent buildings, permanent road fill, permanent land alteration such as grading that permanently converts wetlands to uplands, etc.), indicate the amount of permanent fill.

<sup>17</sup> Provide the lat/long coordinates in decimal degress at the location of the resource impact.

18 Conversion refers to vegetative clearing of forested and/or shrub type wetlands, resulting in an herbaceous wetland, for the purposes of construction. Mowing of pre-construction herbaceous wetland types should not be included in this column.

# Attachment L

**Fisheries Waiver Package** 

#### **Attachment L1: Fisheries Waiver Package**

#### Request Form - Waiver of Timing Restrictions for Utility Project Waterway Permits

This form shall be used to request a waiver from the time period restrictions in NR 320 through NR 345, Wis. Admin. Code, for utility projects that qualify for a General Permit or Individual Permit under Chapter 30, Wis. Statutes. The completed waiver form shall be submitted to the Department's Office of Energy, where the applicant seeks a waiver from the applicable permit conditions that places time period restrictions on the project, such as temporary clear span bridge (TCSB) placement and/or removal and in-water work. The Department signature on this form only waives the time period restrictions, and does not constitute a permit, approval, or other concurrence with the proposed project.

The following information shall be submitted with this request form:

- A typical figure/drawing of the TCSB, or construction plans for the in-water work
- Photos of each waterway
- A short narrative with information on:
  - o When the in-water work or TCSB placement and/or removal will occur
  - o Erosion controls that will be utilized
  - o How the TCSB placement and/or removal will occur (i.e. carried in and placed with equipment, assembled on site), or details on how the in-water work will be conducted
  - o Description of any bed or bank disturbance that will occur, if any

#### FOR THE APPLICANT TO COMPLETE

<u>Project name:</u> Cardinal - Hickory Creek 345 kV Transmission Line Project

**Segment E2 - Mount Horeb to Dodgeville** 

Applicant name: American Transmission Company LLC

#### Project description:

American Transmission Company LLC, by its corporate manager, ATC Management Inc. (ATC), ITC Midwest, LLC (ITC), and Dairyland Power Cooperative (DPC) 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 Cardinal - Hickory Creek 345 kV Transmission Line Project (Permit #IP-SC-2019-25-03588).

As the Project Construction Manager for this segment of the Project, ATC is requesting a waiver of seasonal restrictions for placement and removal of 21 Temporary Clear Span Bridges (TSCBs). A seasonal waiver is being requested to minimize limitations and maximize flexibility so that the contractor can work safely and efficiently across the Project. Depending on the construction activity duration and access needs at a location, TCSBs may be placed and removed more than once during the course of the Project.

Waterways will be crossed using a TCSB to avoid in-stream disturbance by construction equipment. Bridges will be constructed of timber mats or other suitable material to ensure safe and reliable equipment movement. Matting will be placed using appropriate equipment such as pulp trucks or excavators. Matting will be placed above the ordinary high water mark (OHWM) on the banks of the waterway to avoid in-stream disturbance. Erosion/sediment control will be installed to protect the banks of the waterway during use as necessary. Erosion controls may consist of silt fence, straw logs/bales, or other devices to prevent runoff or siltation into the waterway.

Once construction has been completed in the area and access across the waterway is no longer required, the TCSB and associated materials will be removed, and the area restored. Depending upon the level of disturbance, restoration may include minor grading/leveling to restore pre-existing topography, installation of seed, and stabilizing the banks with erosion control such as erosion mat and straw logs.

One culvert will be replaced along waterway S-R03A on an existing gravel access drive. The existing culvert has been damaged and does not function properly. This proposed activity will meet the conditions outlined in the WDNR Culvert Replacement-Same Location Exemption Checklist #12 (R 06/2019).

The following information is provided in the attached table:

Project/TCSB location(s), including coordinates and County(s)

Name of Waterway(s)

Waterway designations, if any

Waterway characteristics (i.e. width, depth, substrate type, etc.) if known

Photos of the proposed crossing locations and TCSB typical cross sections are attached.

#### FOR DNR FISHERIES BIOLOGIST TO COMPLETE

The applicant listed above has provided information about their proposed project in navigable waters. Based on their project description, plans, and other existing information available to me, I find that (check all applicable boxes):

| □ th | ere may be | e suitable | habitat | at or | near | the | proposed | pro | ject, |
|------|------------|------------|---------|-------|------|-----|----------|-----|-------|
|------|------------|------------|---------|-------|------|-----|----------|-----|-------|

there is no suitable habitat at or near the proposed project,

| <ul><li>there may be an impact on spawning fish or spawning activities,</li><li>there will be no impact on spawning fish or spawning activities.</li></ul> |
|--|
| Consequently, the time period restrictions of the applicable administrative code (check one box):  |
| <ul> <li>are not necessary to protect fish spawning for the proposed project, and I approve this waiver,</li> <li>or</li> </ul>                            |
| $\ \square$ are necessary to protect fish spawning for the proposed project, and I deny this waiver  |
| Additional comments:   |
| Signed by:   |

| Feature Unique ID | Feature Type, Name and   | Resource<br>Description                | WBIC    | Coordinates of Waterway Crossing Near<br>Project Centerline |            | County | Waterway Characteristics  |
|-------------------|--------------------------|--|---------|---|------------|--------|---|
|                   | Designation <sup>1</sup> |  |         | Latitude  | Longitude  |        |   |
| S-R02             | Waterway                 | UNT to Dodge<br>Branch                 | 913400  | 42.98668  | -90.06986  | lowa   | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 6 ft, OHWM height = 1 ft; bank width = 8 ft, bank height 5 ft. Approach slope is moderate. Riparian vegetation dominated by RCG, orange jewelweed, spike rush, dark-green bulrush, box elder, and bentgrass.   |
| S-R03A            | Waterway                 | UNT to Smith Conley<br>Creek           | 503649  | 42.99394  | -89.9868   | lowa   | Shown on WDNR 24K hydro layer. Existing culvert across gravel road is blocked, with washouts evident on the roadway. OHWM width = 2-3 ft, OHWM height = 1 ft; bank width = 3 ft, bank height = 1.5 ft. Approach slope is shallow. Riparian vegetation dominated by smooth brome, orange jewelweed, garlic mustard, honeysuckle, giant ragweed, burdock, yellow rocket.                          |
| S-R06             | Waterway                 | UNT to Smith Conley<br>Creek           | -       | 42.99684  | -89.9841   | lowa   | Not shown on WDNR 24K hydro layer. OHWM width = 3 ft, OHWM height = 0.5 ft; bank width = 5 ft, bank height 1 ft. Approach slope is moderate. Riparian vegetation dominated by wild parsnip, garlic mustard, smooth brome and burdock. Additional dominant riparian vegetation updated in 2020 includes orange jewelweed, giant ragweed, bittersweet nightshade, honeysuckle, and quaking aspen. |
| S-R07             | Waterway                 | UNT to Smith Conley<br>Creek           | 5036406 | 43.00062  | -89.98013  | lowa   | Shown on WDNR 24K hydro layer. Characteristics updated in 2020 within project ROW: OHWM width = 2 ft, OHWM height = 0.5 ft; bank width = 5 ft, bank height = 3 ft. Approach slope is steep to moderate. Riparian vegetation dominated by smooth brome, RCG, orchard grass, and wild parsnip.  |
| S-R07A            | Waterway                 | UNT to Smith Conley<br>Creek           | 5036406 | 42.9979   | -89.98027  | lowa   | Shown on WDNR 24K hydro layer. Property access not available along potential construction access route.   |
| S-R07B            | Waterway                 | UNT to Smith Conley<br>Creek           | 5036406 | 42.9965   | -89.98025  | Iowa   | Shown on WDNR 24K hydro layer. Property access not available along potential construction access route.   |
| S-R07C            | Waterway                 | UNT to Smith Conley<br>Creek           | 5036406 | 42.99564  | -89.98054  | Iowa   | Shown on WDNR 24K hydro layer. Property access not available along potential construction access route.   |
| S-R11             | Waterway                 | UNT to East Branch<br>Pecatonica River | 5036301 | 43.00922  | -89.897656 | lowa   | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 5 ft, OHWM height = 0.5 ft; bank width = 6 ft, bank height = 2 ft.  Approach slope is moderate. Riparian vegetation dominated by RCG, poison hemlock, wild parsnip, crown vetch, and burdock.  |
| S-R15             | Waterway                 | UNT to East Branch<br>Pecatonica River |         | 43.009522   | -89.872913 | lowa   | Not shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 3 ft, OHWM height = 0.25 ft; bank width = 4 ft, bank height = 0.5 ft. Riparian vegetation dominated by burdock, box elder shrubs, garlic mustard, raspberry, tall meadow rue and yellow rocket under a canopy of bur oak and hawthorn.   |

|       |   | UNT to East Branch                  |         |           |            |      | Shown on WDNR 24K hydro layer; OHWM width = 3 ft, OHWM height = 1 ft;  |
|-------|---|-------------------------------------|---------|-----------|------------|------|--|
| S-R16 | Waterway  | Pecatonica River                    | 5036253 | 43.00915  | -89.867769 | lowa | bank width = 5 ft, bank height = 1.5 ft. Approach slope is moderate. Riparian vegetation dominated by RCG.   |
| S-R17 | Waterway  | UNT to Williams-<br>Barneveld Creek | 5036263 | 43.008808 | -89.858788 | lowa | Shown on WDNR 24K hydro layer; OHWM width = 3 ft, OHWM height = 1 ft; bank width = 6 ft, bank height = 1 ft. Approach slope is moderate. Riparian vegetation dominated by RCG, smooth brome, Canada thistle, honeysuckle, mulberry, sandbar willow, stinging nettle, orchard grass, burdock, and garlic mustard.   |
| S-R18 | Waterway  | UNT to Williams-<br>Barneveld Creek | 5036197 | 43.00962  | -89.84285  | lowa | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: Waterway bisected by Bringham Road. Eastern extent transitions to narrow drainage. OHWM width = 4 ft, OHWM height = 2 ft; bank width = 5 ft, bank height = 3 ft. Approach slope is steep. Riparian vegetation dominated by RCG, common milkweed, garlic mustard, wild grape, giant ragweed, yellow rocket, and wild parsnip. |
| S-R19 | Waterway  | UNT to Williams-<br>Barneveld Creek |         | 43.009644 | -89.841213 | lowa | Shown on WDNR 24K hydro layer; OHWM width = 4 ft, OHWM height = 0.75 ft; bank width = 6 ft, bank height = 1 ft. Approach slope is moderate. Riparian vegetation dominated by smooth brome, wild parsnip, and stinging nettle.  |
| S-R20 | Waterway  | Williams-Barneveld<br>Creek         | 915100  | 43.00979  | -89.836953 | Dane | Shown on WDNR 24K hydro layer; Characteristics updated in 2020: OHWM width = 8 ft, OHWM height = 3 ft; bank width = 12 ft, bank height = 4 ft.  Approach slope is moderate. Riparian vegetation dominated by RCG, sandbar willow, and orange jewelweed.  |
| S-R22 | Waterway  | UNT to Gordon<br>Creek              | 915100  | 43.009886 | -89.820175 | Dane | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 2 ft, OHWM height = 1 ft; bank width = 3 ft, bank height 1.5 ft.  Approach slope is moderate. Riparian vegetation dominated by RCG and wild parsnip.  |
| S-R23 | Waterway, ASNRI<br>Exceptional<br>Resource Water;<br>Class II Trout<br>Stream | Gordon Creek                        | 907300  | 43.009835 | -89.812342 | Dane | Shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 4 ft, OHWM height = 2 ft; bank width = 12 ft, bank height 3 ft. Approach slope is moderate. Riparian vegetation dominated by black walnut, honeysuckle, hawthorn, box elder, orange jewelweed, Dame's rocket, and garlic mustard.   |
| S-R24 | Waterway  | UNT to Gordon<br>Creek              |         | 43.009924 | -89.801878 | Dane | Not shown on WDNR 24K hydro layer; OHWM width = 4 ft, OHWM height = 0.75 ft; bank width = 6 ft, bank height = 1 ft. Approach slope is moderate. Riparian vegetation dominated by box elder, black cherry, and honeysuckle in the southern upland banks and RCG, smooth brome, and wild parsnip in the WisDOT ROW banks.  |
| S-R25 | Waterway, ASNRI<br>Exceptional<br>Resource Water;<br>Class II trout<br>stream | Gordon Creek                        | 5036226 | 43.009832 | -89.799927 | Dane | Shown on WDNR 24K hydro layer; OHWM width = 8 ft, OHWM height = 1.5 ft; bank width = 12 ft, bank height 2.5 ft. Approach slope is moderate. Riparian vegetation dominated by box elder, honeysuckle, common buckthorn, Dame's rocket, garlic mustard, RCG, and American black currant.   |

| S-R26 | Waterway   | UNT to Gordon<br>Creek            |        | 43.009829 | -89.796639 | Dane | Shown on WDNR 24K hydro layer; OHWM width = 1.5 ft, OHWM height = 0.5 ft; bank width = 2.5 ft, bank height 0.75 ft. Approach slope is moderate. Riparian vegetation dominated by RCG.  |
|-------|--|-----------------------------------|--------|-----------|------------|------|--|
| S-R28 | Waterway, ASNRI<br>Class II Trout<br>Stream      | West Branch Sugar<br>River        | 886100 | 42.99509  | -89.748727 | Dane | Shown on WDNR 24K hydro layer; Characteristics updated in 2020: OHWM width = 8 ft, OHWM height = 1 ft; bank width = 15 ft, bank height 3 ft. Approach slope is moderate. Riparian vegetation with 70% canopy consisting of black walnut, box elder, sandbar willow, cottonwood over RCG, orange jewelweed, garlic mustard and dame's rocket. |
| S-R29 | Waterway   | UNT to West Branch<br>Sugar River |        | 42.993895 | -89.746447 | Dane | Not shown on WDNR 24K hydro layer. Characteristics updated in 2020: OHWM width = 2 ft, OHWM height = 1 ft; bank width = 8 ft, bank height 4 ft. Approach slope is steep. Riparian vegetation dominated by black walnut, box elder, dame's rocket, yellow rocket, orange jewelweed, and cool season grasses.                                  |
| S-R33 | Waterway, ASNRI<br>Exceptional<br>Resource Water | Fryes Feeder                      | 886800 | 43.00239  | -89.70723  | Dane | Shown on WDNR 24K hydro layer; OHWM width = 4 ft, OHWM height = 1 ft; bank width = 6 ft, bank height = 1.5 ft. Approach slope is moderate. Riparian vegetation dominated by smooth brome and burdock. Additional vegetation noted in 2020: Canada goldenrod, giant ragweed, stinging nettle, cottonwood, and garlic mustard.                 |

<sup>&</sup>lt;sup>1</sup> Designated features refers to waterways considered to be Areas of Special Natural Resource Interest (ASNRI) per NR 103.04 WI. Admin.

Segment: E2 Waterway: S-R02

**Nearest Structure**: 147276

### **Plan View** 4'x16' Support Mats 4'x16' Support Mats Stream : Stream Stream Bank Channel Bank Temporary Clear Span Bridge Engineered Steel Deck: 36' long x 16' wide Bridge Deck: Steel grate covered with plywood Channel Width = 8' **Perimeter Control** Bank Width = 12' Secured to Sides Plywood deck with **Cross Sectional View** containment fabric Engineered Steel Deck 36' long 4'x16' Mat 4'x16' Mat

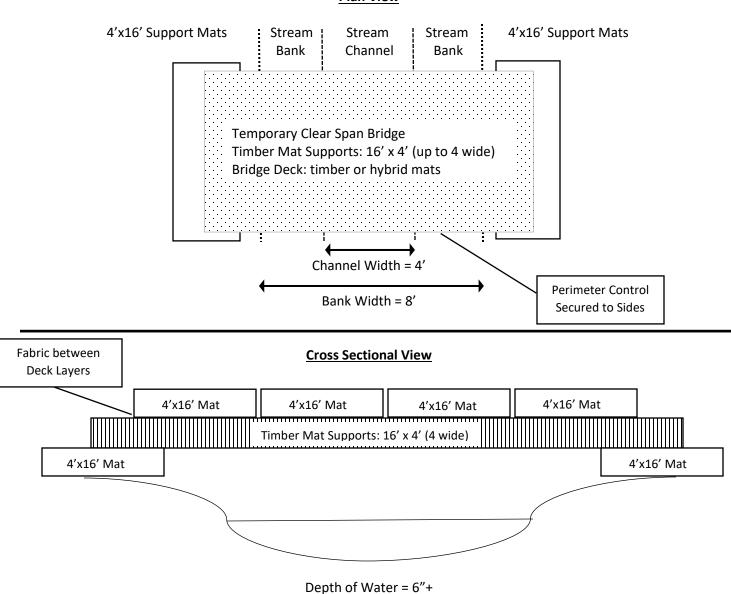
Depth of Water = 2' Height of Bank = 4'

- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Plywood deck and geotextile fabric installed on top of steel grate. Sediment logs placed along the sides for perimeter control.

Segment: E2 Waterway: S-R06

Nearest Structure: 147307

### **Plan View**

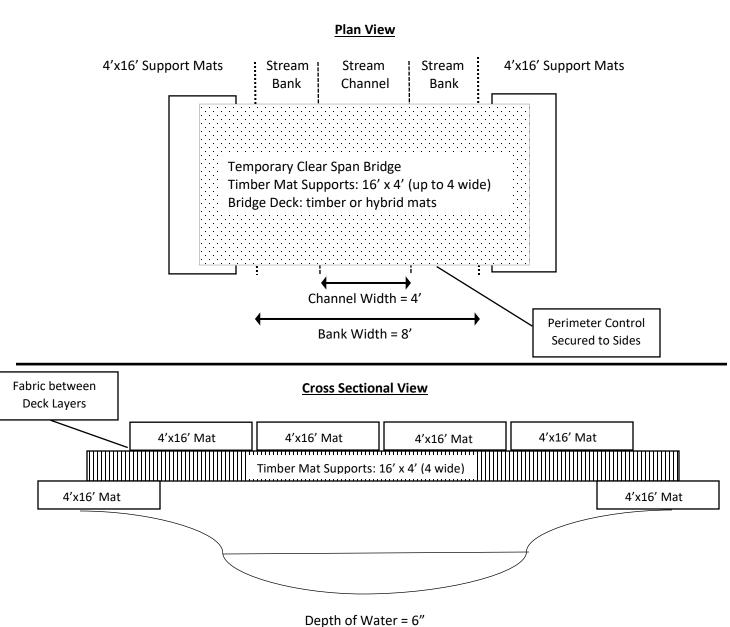


- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

Height of Bank = 2'

Segment: E2 Waterway: S-R07

Nearest Structure: 147309



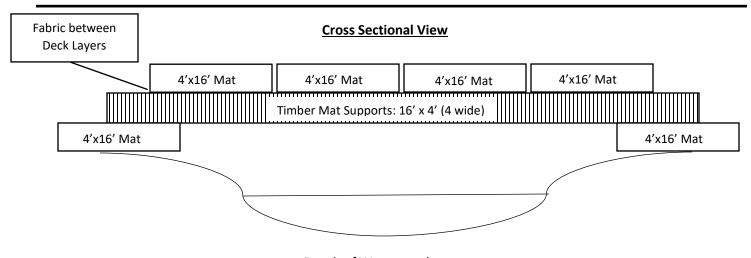
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

Height of Bank = 2'

Segment: E2 Waterway: S-R07A

Nearest Structure: 147309

### <u>Plan V</u>iew 4'x16' Support Mats 4'x16' Support Mats Stream : Stream Stream : Bank Channel Bank Temporary Clear Span Bridge Timber Mat Supports: 16' x 4' (up to 4 wide) Bridge Deck: timber or hybrid mats Channel Width = unknown **Perimeter Control** Bank Width = unknown Secured to Sides



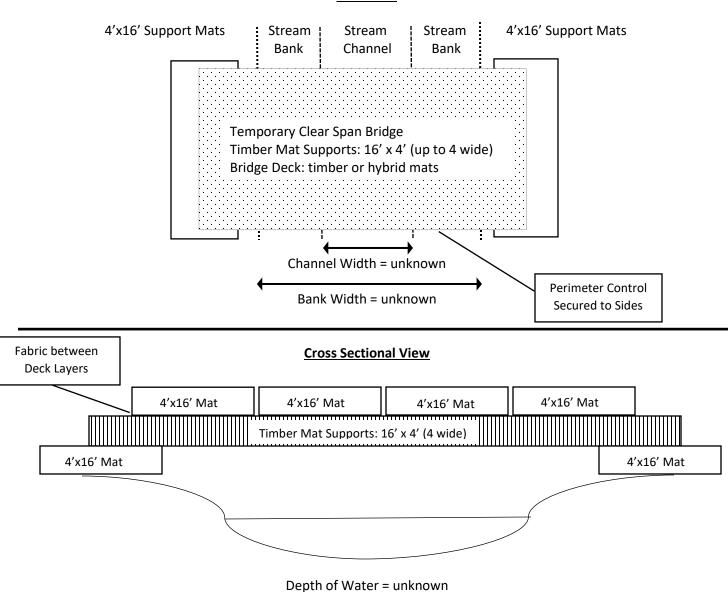
Depth of Water = unknown Height of Bank = unknown

- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.
- Access to this waterway and parcel is not available, characteristics of waterway unknown.

Segment: E2 Waterway: S-R07B

Nearest Structure: 147309





- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

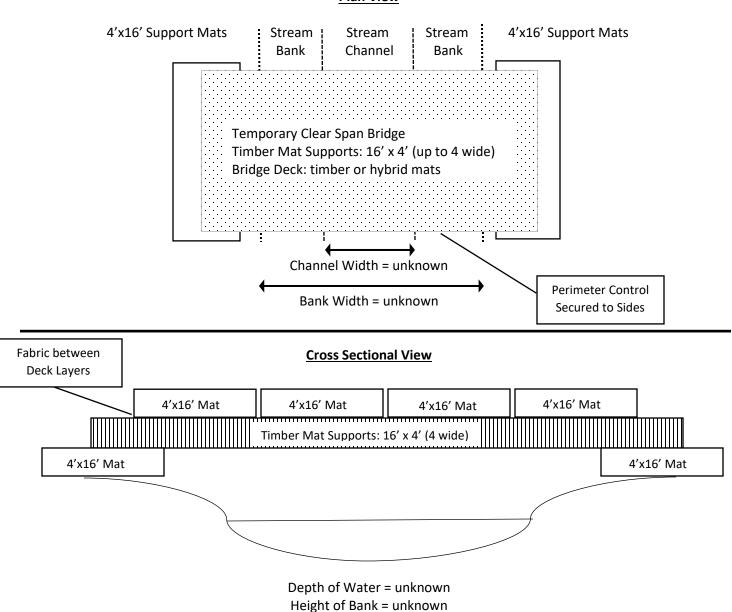
Height of Bank = unknown

• Access to this waterway and parcel is not available, characteristics of waterway unknown.

**Segment**: E2 **Waterway**: S-R07C

Nearest Structure: 147309

### <u>Plan V</u>iew

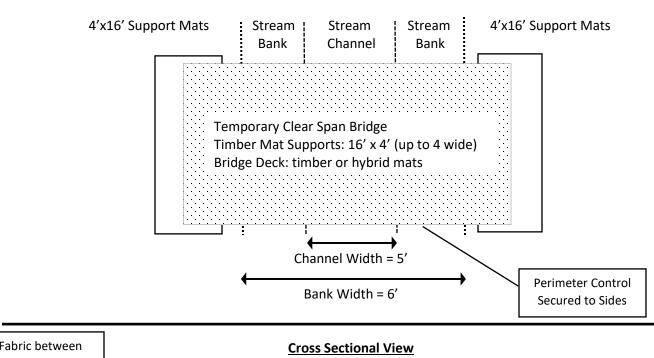


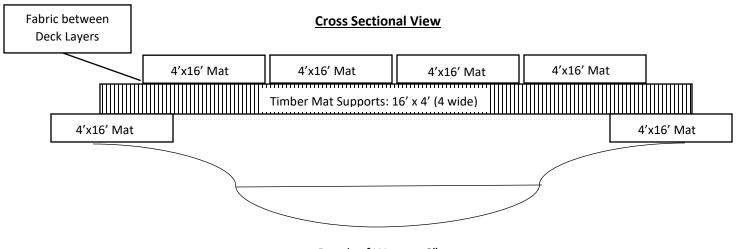
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.
- Access to this waterway and parcel is not available, characteristics of waterway unknown.

Segment: E2 Waterway: S-R11

Nearest Structure: 147337





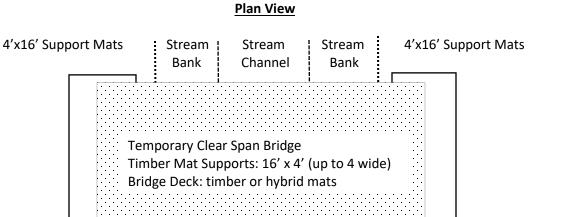


Depth of Water = 6" Height of Bank = 2'

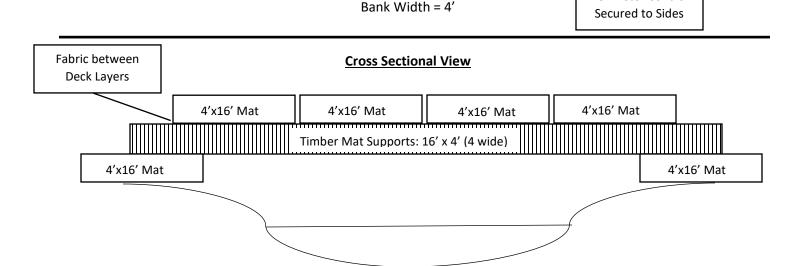
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

Segment: E2 Waterway: S-R15

Nearest Structure: 147344



**Perimeter Control** 



Channel Width = 3'

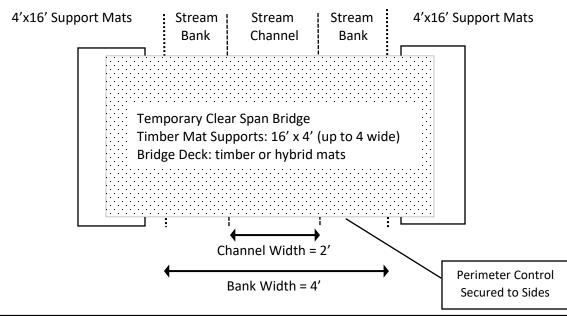
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

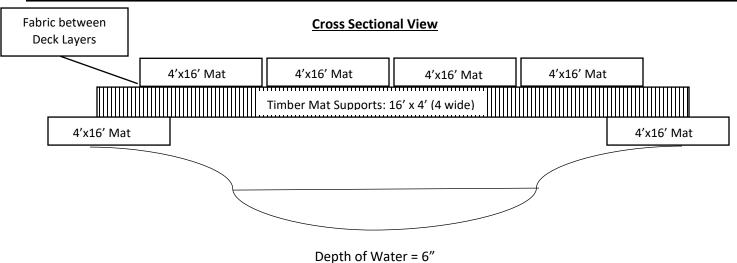
Depth of Water = 0-6" Height of Bank = 0.5-1'

**Segment**: E2 **Waterway**: S-R16

**Nearest Structure**: 147346

### **Plan View**





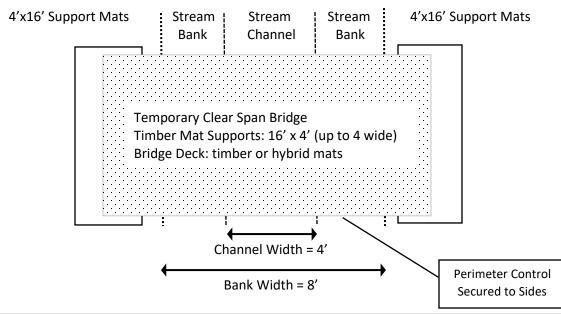
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

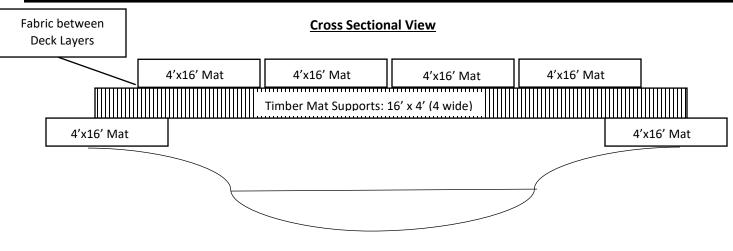
Height of Bank = 3'

Segment: E2 Waterway: S-R17

**Nearest Structure**: 147348

### **Plan View**





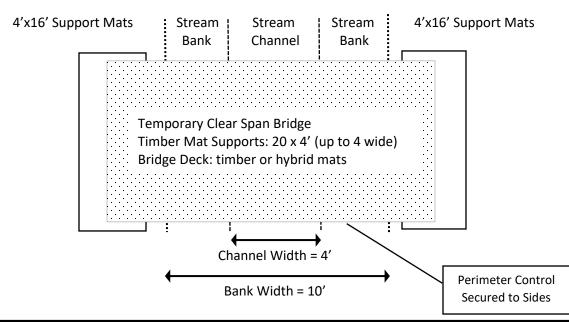
Depth of Water = 6" Height of Bank = 2'

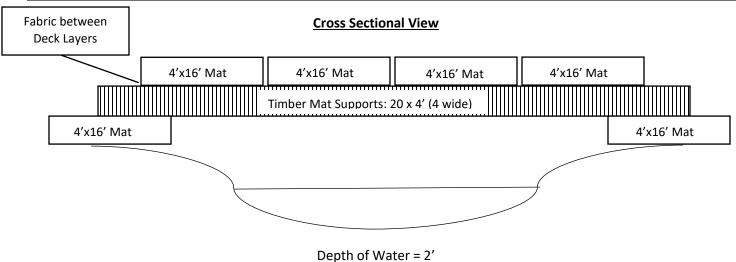
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

Segment: E2 Waterway: S-R18

**Nearest Structure**: 147353

### **Plan View**





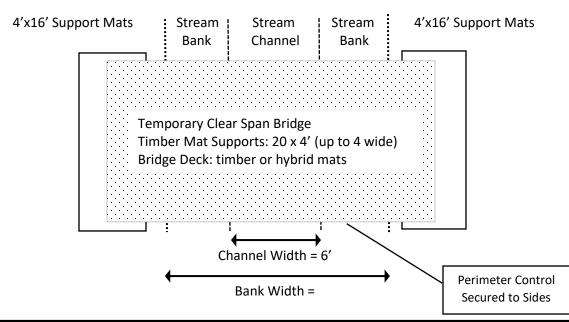
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

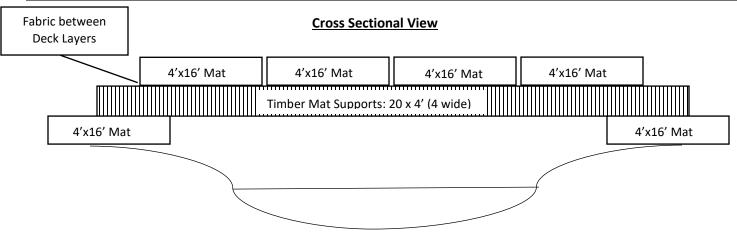
Height of Bank = 3'

Segment: E2 Waterway: S-R19

Nearest Structure: 147354

### **Plan View**





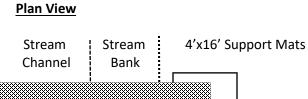
Depth of Water = 0-6" Height of Bank = 1'

- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

Segment: E2 Waterway: S-R20

Nearest Structure: 147355

4'x16' Support Mats



Temporary Clear Span Bridge Engineered Steel Deck: 36' long x 16' wide

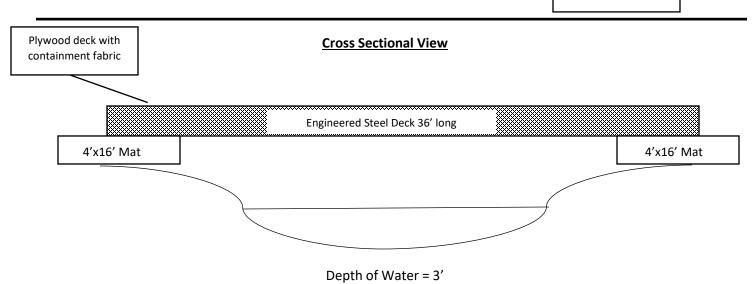
Stream :

Bank

Bridge Deck: Steel grate covered with plywood

Channel Width = 14' Bank Width = 25'

**Perimeter Control** Secured to Sides



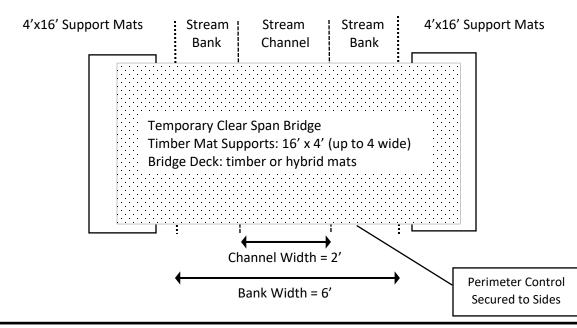
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Plywood deck and geotextile fabric installed on top of steel grate. Sediment logs placed along the sides for perimeter control.

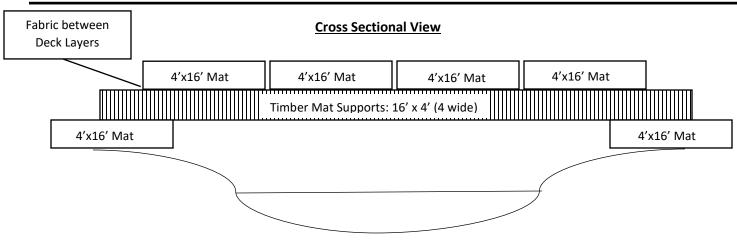
Height of Bank = 5'

Segment: E2 Waterway: S-R22

Nearest Structure: 147357







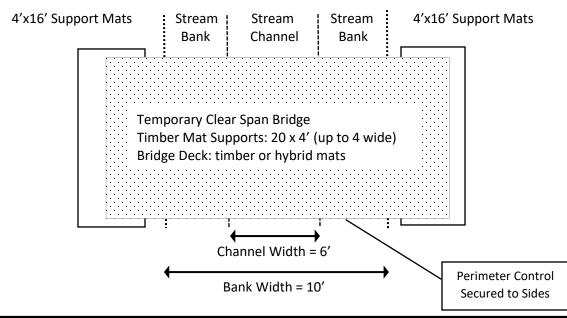
Depth of Water = 6" Height of Bank = 1'

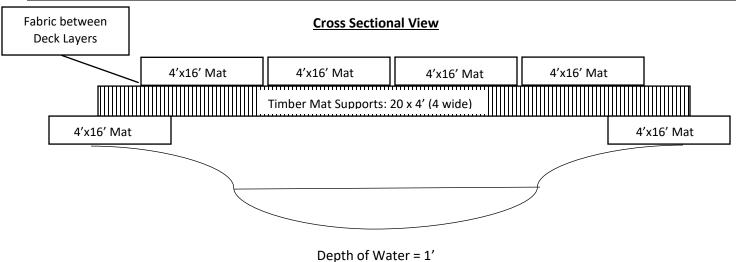
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

Segment: E2 Waterway: S-R23

**Nearest Structure**: 147362

### **Plan View**





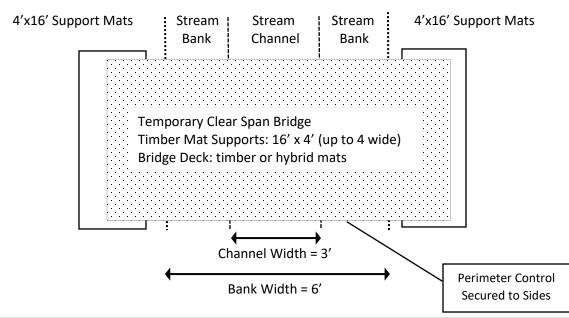
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

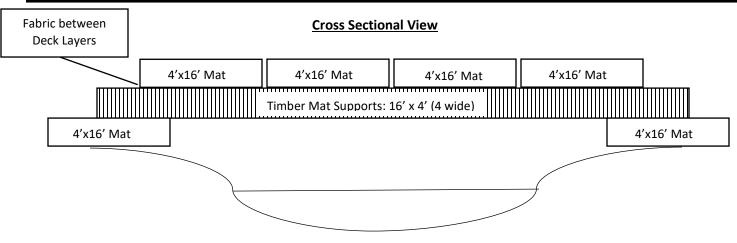
Height of Bank = 3'

Segment: E2 Waterway: S-R24

Nearest Structure: 147365

### **Plan View**





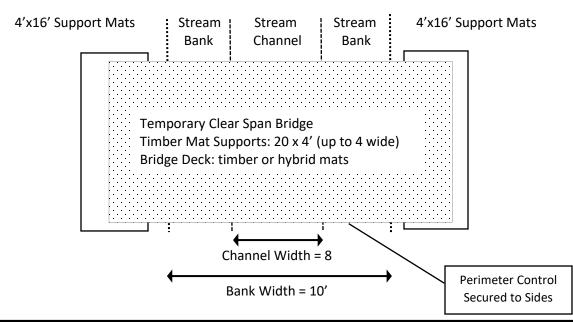
Depth of Water = 0-6" Height of Bank = 1'

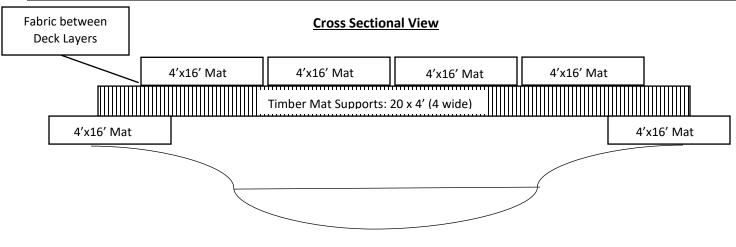
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

Segment: E2 Waterway: S-R25

**Nearest Structure**: 147366

### **Plan View**





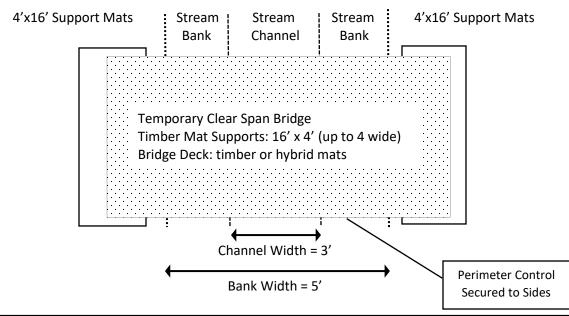
Depth of Water = 6" Height of Bank = 2'

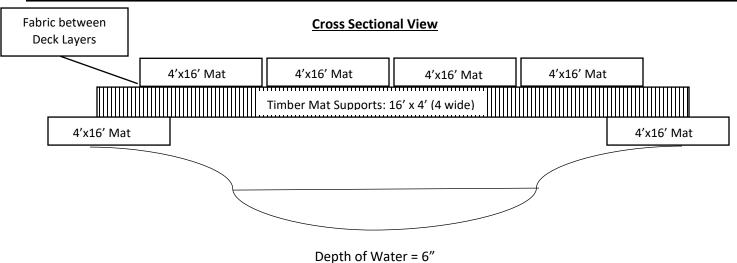
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

Segment: E2 Waterway: S-R26

Nearest Structure: 147367

### **Plan View**





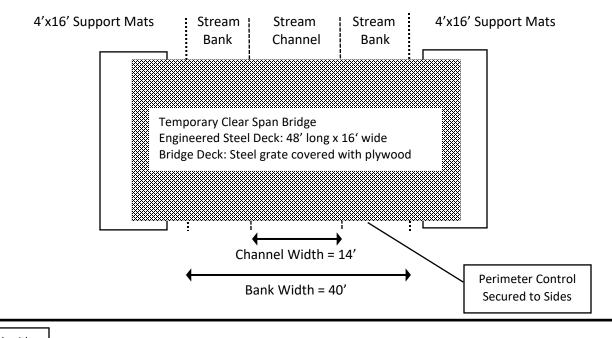
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

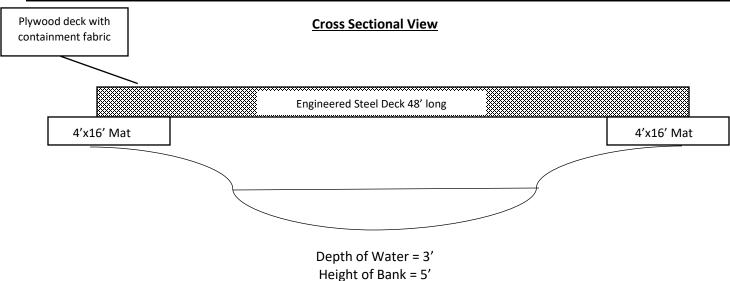
Height of Bank = 1'

Segment: E2 Waterway: S-R28

**Nearest Structure**: 147383

### Plan View



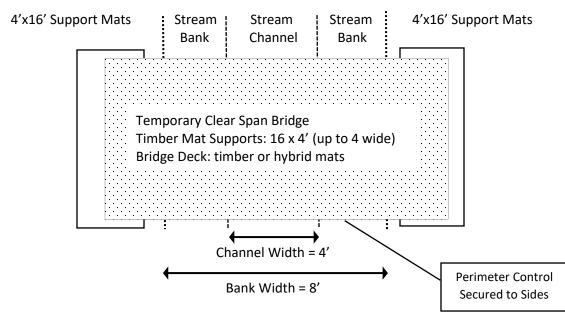


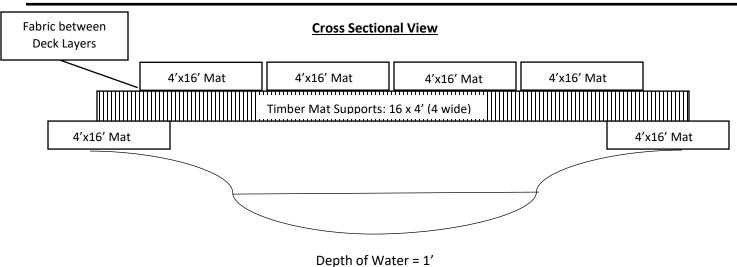
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Plywood deck and geotextile fabric installed on top of steel grate. Sediment logs placed along the sides for perimeter control.

Segment: E2 Waterway: S-R29

Nearest Structure: 147385

### **Plan View**





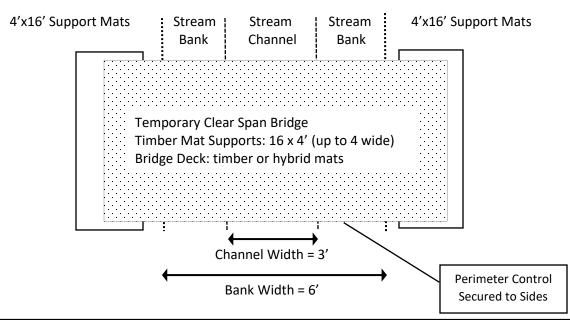
- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

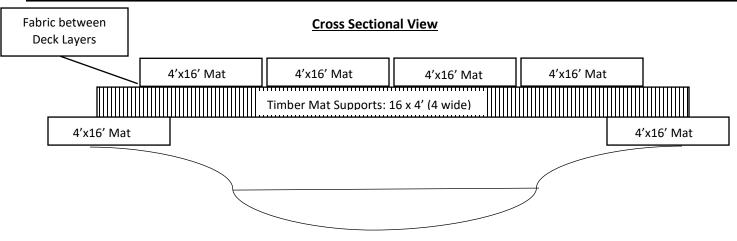
Height of Bank = 3'

Segment: E2 Waterway: S-R33

**Nearest Structure**: 147398

### **Plan View**





Depth of Water = 0-6" Height of Bank = 1'

- Drawings are not to scale
- TCSB will be secured to a fixed anchor
- Sediment Controls: Perimeter control (silt fence or sediment logs) along the sides; geotextile filter fabric between the deck layers.

### Segment E2 - Waterway Photos



063\_S-R02\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-16\_view\_E



064\_S-R03a\_Channel on north side of road\_view NW



063\_S-R02\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-16\_view\_N



064\_S-R03a\_Road surface at culverted crossing



064\_S-R03a\_Shallow channel on north side of road\_view\_SE



069\_S-R06\_Approach slope is moderate\_2020-06-15\_view\_NE





070\_S-R06\_Approach slope is moderate\_2020-06-15\_view\_S



071\_S-R07\_Approach slope is steep to moderate\_2020-06-12\_view\_S



082\_S-R11\_Approach slope is moderate; riparian vegetation associated with S-W05-r\_2020-06-09\_view\_N



071\_S-R07\_Approach slope is steep to moderate\_2020-06-12\_view\_SW









090\_S-R15\_Riparian vegetation dominated by burdock, box elder shrubs, other upland species\_2020-06-08\_view\_W

090\_S-R15\_Riparian vegetation dominated by burdock, box elder shrubs, other upland species\_2020-06-08\_view\_N



093\_S-R16\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-08\_view\_Ground



095\_S-R17\_Approach slope is moderate\_2020-06-08\_view\_E

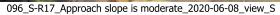


094\_S-R16\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-08\_view\_S



095\_S-R17\_Approach slope is moderate\_2020-06-08\_view\_N







101\_S-R18\_Waterway bisected by Bringham Road\_2020-06-08\_view\_SE



101\_S-R18\_Waterway bisected by Bringham Road\_2020-06-08\_view\_Ground



102\_S-R18\_Waterway transitions to narrow drainage\_2020-06-04\_view\_E







103\_S-R19\_Approach slope is moderate\_2020-06-04\_view\_W



103\_S-R19\_Approach slope is moderate\_2020-06-04\_view\_S



105\_S-R20\_Williams-Barneveld Creek; associated with S-W10-r\_2020-06-04\_view\_N



105\_S-R20\_Williams-Barneveld Creek; associated with S-W10-r\_2020-06-04\_view\_NW



106\_S-R20\_Williams-Barneveld Creek; associated with S-W10-r\_2020-06-04\_view\_S



105\_S-R20\_Williams-Barneveld Creek; associated with S-W10-r\_2020-06-04\_view\_SW



108\_S-R22\_Approach slope is moderate; riparian vegetation associated with S-W12-r\_2020-06-04\_view\_E



108\_S-R22\_Approach slope is moderate; riparian vegetation associated with S-W12-r\_2020-06-04\_view\_N



111\_S-R23\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_E



108\_S-R22\_Approach slope is moderate; riparian vegetation associated with S-W12-r\_2020-06-04\_view\_S



111\_S-R23\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_N



111\_S-R23\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_S



115\_S-R24\_Approach slope is moderate; associated with S-W13-r\_2020-06-04\_view\_E



112\_S-R23\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_S



115\_S-R24\_Approach slope is moderate; associated with S-W13-r\_2020-06-04\_view\_S



116\_S-R25\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_N



116\_S-R25\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_W



116\_S-R25\_Gordon Creek; approach slope is moderate\_2020-06-04\_view\_S



117\_S-R26\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-04\_view\_E



117\_S-R26\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-04\_view\_N



127\_S-R28\_West Branch Sugar River; approach slope is moderate\_2020-06-08\_view\_S



118\_S-R26\_Approach slope is moderate; riparian vegetation dominated by RCG\_2020-06-04\_view\_S



129\_S-R28\_West Branch Sugar River; approach slope is moderate\_2020-06-08\_view\_S



129\_S-R28\_West Branch Sugar River; approach slope is moderate\_2020-06-08\_view\_SE



140\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_NW



130\_S-R29\_Approach slope is steep; flows into S-R28\_2020-06-08\_view\_S



140\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_SE



141\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_NW



141\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_SW



141\_S-R33\_Fryes Feeder; vegetation dominated by smooth brome and burdock\_2020-06-02\_view\_SE

# Attachment N1

# **Revegetation and Monitoring Plan**



# REVEGETATION AND MONITORING PLAN

This Revegetation and Monitoring Plan (the Plan) has been developed in accordance with the Wisconsin Department of Natural Resources (WDNR) Utility Permit (IP-SC-2019-25-03588) and the Public Service Commission (PSC) Order (Docket # 5-CE-146) for the Cardinal-Hickory Creek 345kV Transmission Line Project (the Project). The Plan applies to construction Segments E1, E2, and E3 where ATC is the Construction Manager, and is divided into three sections. The first section of the Plan provides guidance for the revegetation of the Project area following construction. The second section provides recommended protocols for monitoring of higher quality upland areas, wetlands, and waterways post-construction, and provides performance standards for impacted wetlands and waterways that shall be achieved by the end of the monitoring period. The final section provides a description of the reporting for the post-construction monitoring period.

# **REVEGETATION PLAN**

The purpose of this Revegetation Plan is to guide the restoration of plant communities disturbed by project activities to obtain revegetation compliance, support native plant communities where practical, and minimize erosion.

### **Erosion Control**

The Project Erosion Control Plan (ECP) will be developed in accordance with the Wisconsin Pollution Discharge Elimination System (WPDES) General Permit and adhered to throughout the Project to manage erosion and storm water runoff, and to facilitate stabilization efforts upon completion of construction. Throughout the project, Environmental Monitors (EM) will conduct erosion control inspections to oversee compliance with the construction and erosion control plans and permit specifications. The EM will conduct inspections until disturbed areas are stabilized, will document the need for corrective action, and will work with the construction contractor to develop adaptive strategies on a case-by-case basis to minimize impacts to natural areas.

As specified in the ECP, temporary erosion control will be installed on an as-needed basis prior to ground disturbance and will be removed as necessary (e.g. silt fence) following site stabilization. Timber matting may be used for access routes and equipment staging in areas with soils susceptible to rutting at the time of construction.

### **Management of Woody Debris**

In areas requiring clearing of trees and shrubs, woody material may be chipped and left in place such that it does not exceed an approximate depth of two inches. Wood chip depth greater than two inches will be considered restrictive to natural revegetation and unsuitable for establishment of the temporary cover crop or permanent seed mixes and therefore must be removed.

# **Seed Installation**

Post-construction seed installation will be limited to areas where soil disturbance has taken place. For example, areas where access is limited or other protective measures have been implemented will be assessed upon completion of work. These areas may not require supplemental seeding if overall ground/soil disturbance is minimal. Site conditions at the time of Project activities will influence the restoration needs for each area. The decision to install a temporary cover crop and/or permanent seed mixes will be a field decision made by the EM, based on items such as level of disturbance and erosion potential. The Project seed mixes are included in Appendix A.



Seed installation will comply with WDNR Conservation Practice Standard 1059, Seeding for Construction Site Erosion Control. Installation methods may include hand broadcasting, drilling, hydroseeding, or other appropriate methods. Where native seed is specified by the EM, it shall be installed by a contractor experienced in native seed installation with installation overseen by the EM. Native seed shall be obtained from a reputable native plant nursery. All seed shall be free of noxious weeds.

In general, upland areas that are graded or cleared of woody vegetation will be seeded following construction. For wetland areas, open water communities will not be seeded and shallow marsh communities will only be seeded where there is no standing water at the time of seed installation. The remaining upland and wetland areas are anticipated to revegetate naturally. Additionally, permanent seed will not be installed within agricultural areas that may be impacted by the Project, unless requested by the landowner.

Timing for native seed installation shall also be taken into consideration, particularly in areas where the area of disturbance is large or within a higher quality natural plant community. Native seed establishment is most successful when seed is installed during the spring and fall seasons. The spring season begins as soon as the ground is snow free until approximately June 15<sup>th</sup>. The dormant fall season begins around November 1<sup>st</sup> until snow cover. If construction is completed outside of the desired native seeding windows and it is determined that permanent native seeding shall wait until the appropriate time, a temporary cover crop shall be installed as soon as feasible.

Provided below are the general guidelines for use of cover crop and/or permanent seed mixes on the Project:

# **Cover Crop**

A temporary cover crop (Appendix A) may be installed over disturbed soils following completion of construction activities. The decision to install a cover crop will be made on a case-by-case basis and will be based on level of disturbance, available seed bank, and landscape features. Soils disturbed by Project construction activities in areas with steep slopes and along waterways will generally warrant the installation of a temporary cover crop, at a minimum.

Species used for temporary cover within uplands during spring and summer months shall generally consist of a combination of weed-free common oats and annual rye at appropriate rates. Weed-free common oats shall be installed for temporary cover within wetland areas during the spring or summer months. If temporary seeding is required in late summer or fall, winter wheat shall be installed within wetlands and uplands at an appropriate rate. Seeding rates will vary depending on whether the temporary cover crop is being installed with a permanent seed mix or is stand-alone. Temporary cover crop rates are included at the bottom of each permanent seed mix provided in Appendix A.

### Permanent Seed Mixes

Permanent seed mixes may be installed following completion of construction activities based on the nature of the plant community disturbed, level of disturbance/site conditions post-construction, and the ability for the area to revegetate naturally. The decision to install a particular permanent seed mix will be a field decision by the EM. Project seed mixes have been developed to include species similar to the surrounding landscape, to establish quickly and develop vegetative cover, and to meet regulatory requirements. Four permanent seed mixes identified for use on the ATC managed portion of the Project include a Pasture Mix, Hybrid Stabilization Mix, Prairie Mix, and Wetland Mix.



The Hybrid Stabilization Mix, Prairie Mix, and Wetland Mix have been designed to include a variety of grasses and forbs to meet the use of native seed and pollinator enhanced seed mix requirements of PSC Order numbers 30, 31, and 33, detailed below:

- 30. The applicants shall implement pollinator-enhanced seed mixes in grassland areas to the greatest extent practicable. The applicants shall work with WDNR and Commission staff when determining where and when to use these seed mixes, and the contents of the mixes
- 31. In upland areas that are not agricultural crops, or road ROW, the applicants shall use a seed mix comprised of native grasses and forbs to minimize the spread of non-native plants and maintain species diversity. Pollinator-enhanced seed mixes shall be considered in these areas. The applicants shall work with WDNR and Commission staff when determining where and when to use these seed mixes, and the contents of the mixes.
- 33. The applicants shall revegetate ROW with appropriate seed mixes, include native species to the greatest extent practicable, and select plant species with season-long sources of pollen and/or nectar to ROWs for declining pollinator species.

Additionally, the Prairie Mix and Wetland Mix meet the criteria of the U.S. Department of Agriculture (USDA) Conservation Reserve Program (CRP) Conservation Practice 42 (CP-42) Pollinator Habitat. CP-42 requires nine species of pollinator-friendly wildflowers with at least three species blooming in the following periods: April-June 15, June 15-July, and August-October. Grass is not required, but if it is included, it must be native to the area. The Hybrid Stabilization Mix is a cross between the Pasture and Prairie Mixes. While it does not meet the CP-42 criteria, it does provide flowering species across the three blooming periods noted in CP-42, while also including species that will establish quickly and with good coverage.

The Hybrid Stabilization and Prairie seed mixes are intended to be installed within grassland areas identified as higher quality within the CPCN application for the Project, areas of community conversion (i.e. clearing of forest or shrub communities), or areas falling within the Rusty Patched Bumble Bee (RPBB) High Potential Zone (HPZ) that have been identified as suitable RPBB habitat in consultation with the U.S. Fish and Wildlife Service (UWFWS).

Converted areas (e.g. prior forested or shrub communities requiring permanent woody vegetation removal by the Project) will be seeded with one of the three permanent upland seed mixes to allow for revegetation of the herbaceous layer following clearing and disturbance. Forested communities, including wooded streambanks, with a previously dense tree or shrub cover will require quick native species revegetation where the loss of canopy may increase the potential for erosion or invasive species establishment.

Project seed mixes are discussed in more detail below and can be found in Appendix A. Species substitutions and rate adjustments to the seed mixes may be made on a case-by-case basis.

### Pasture Mix

The Pasture Mix consists of non-native grasses that will provide stabilization and forage for livestock in areas that are located along highway rights-of-way (ROW), existing pastures where native species are lacking and non-native cool season grasses are dominant, disturbed farm field edges, and highly degraded forested areas. Areas disturbed during construction along the Project that are not specified in Appendix B will receive this seed mix unless determined otherwise by the EM/ATC.



### Hybrid Stabilization Mix

The Hybrid Stabilization Seed Mix contains a combination of native and non-native species that are anticipated to provide stabilization faster than the Prairie Mix but will also provide species diversity and nectar resources to benefit pollinators. This mix is modeled after Minnesota Department of Transportation mixes and contains both native prairie grasses and forbs, as well as a few non-native pasture grasses (smooth brome, perennial rye, and Timothy) and non-native forbs that establish quickly and provide nectar for pollinators (red clover and alsike clover). The short-lived perennials in the mix (slender wheat grass, Canada wild rye, and Timothy) and intended to be replaced by longer-lived perennials such as big bluestem and switchgrass over time.

The Hybrid Stabilization Mix is proposed primarily in grassland areas containing few native flowering forbs, areas of cleared upland forest with low cover of invasive species, and/or communities identified as suitable RPBB habitat. Due to the presence of existing invasive species and lack of native species diversity, none of the RPBB habitat areas have been identified as high quality natural areas and the Hybrid Stabilization Mix is proposed for use in RPBB habitat areas requiring seed.

#### Prairie Mix

The Prairie Seed Mix is designed for upland areas and contains prairie species that are native to Dane and/or lowa County, Wisconsin. This mix has high rates of native grasses to provide stabilization to disturbed soils while also meeting pollinator-friendly habitat criteria of having at least two native bunch grasses and a minimum of three forbs species that bloom during each of the three blooming periods (spring, summer, and fall). This mix is proposed in areas of existing prairie/prairie remnants and high quality upland forests.

#### Wetland Seed Mix

Areas of significant disturbance within wetlands not dominated by invasive species prior to construction will be seeded with the Wetland Seed Mix. The Wetland Seed Mix consists of native species and is intended for wetland areas with seasonally inundated to seasonally saturated soils. This mix meets pollinator-friendly habitat criteria of having at least two native bunch grasses (and sedges) and a minimum of three forbs species that bloom during each of the three blooming periods (spring, summer, and fall). Wetland areas where construction matting is used may not warrant permanent seeding if there is no significant soil disturbance and the area is expected to regenerate naturally following removal of matting. Refer to Wetland Restoration and Revegetation Plan section regarding permanent seed installation within wetlands.

Appendix B lists specific areas along the Project that have been identified as areas that may receive pollinator enhanced native seed mixes.

### Wetland Restoration and Revegetation Plan

Wetland community characteristics within the Project are presented in the CMP Section E, Attachment E1 for Segments E1, E2, and E3 where ATC is the Construction Manager. The characterizations are based on field observations from 2017 and 2020. Wetland communities present within the Project include wet meadow, hardwood swamp, sedge meadow, shallow marsh, shrub-carr, and farmed wetland. Most wetland communities are degraded to a certain degree with typically one or more invasive species present. There are no large or extensive wetland complexes crossed by the Project. Construction within wetlands shall comply with the segment-specific Erosion Control Plans (ECP). A summary of wetland restoration and revegetation guidelines for the Project 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. As
  needed, weed-free common oats shall be installed for temporary cover within wetland areas
  during the spring or summer months. If temporary seeding is required in late summer or fall,
  winter wheat shall be installed within wetlands and uplands at an appropriate rate.
- Farmed wetlands will not be re-seeded due to current land use.
- The Wetland Mix may be installed within disturbed wetland areas that have a native component but are not high quality wetlands.

The following guidelines will be applied to determine the need for native seed installation within wetlands:

- High quality herbaceous wetland areas (less than 10% cover of invasive species) will not be seeded with a permanent seed mix because regeneration from the seedbank is anticipated to occur and introducing species that are not present within that community is not desired.
- Degraded herbaceous wetlands (i.e. those with greater than 50% cover of invasives), particularly reed canary grass dominated wet meadows, will not be seeded due to the likelihood of recolonization by invasives following site stabilization.
- The decision to seed converted wooded wetland areas will be based on herbaceous vegetative cover prior to clearing. Areas with sparse herbaceous cover or lacking cover by species able to tolerate full sun conditions will be seeded to minimize invasive species establishment.

### Other / Miscellaneous

- Cover such as straw mulch or other weed-free methods 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.
- Soil erosion and sedimentation control measures installed will be maintained until the disturbed areas are permanently stabilized.



### MONITORING PLAN

The purpose of the Monitoring Plan is to guide post-construction monitoring following the completion of the erosion control inspections by the EM.

## **Upland Monitoring**

Monitoring within upland plant communities will be limited to the areas identified to receive either the Hybrid Stabilization Mix or the Prairie Mix (Appendix B) and will begin the first growing season following completion of construction within a given segment. These areas will be monitored for three growing seasons, as required by PSC Order Point #20, for the presence of new or spreading invasive species that may be attributable to project activity and to document revegetation efforts. Upland areas that were significantly disturbed or degraded by invasive species prior to construction (e.g., much of the roadside ROW) will not require monitoring beyond the requirements contained within NR216.

Monitoring will consist of a meander survey to document plant communities. Dominant species within each community, the presence and extent of invasive species, and overall vegetative cover will be documented. General topography and miscellaneous observations will also be noted. Representative photos will be taken at established pre-construction photo points, as well as photos of areas that may require corrective action.

For this Plan, invasive species are defined as NR40 'restricted' or 'prohibited' species. The cover class descriptions for invasive species used during pre-construction environmental surveys will also be used for post-construction monitoring and consist of: *present* (1-5 plants), *scattered* (2-5% cover), *common* (5-20% cover), *abundant* (20-50% cover), and *dominant* (>50% cover). Increases in invasive species presence and abundance will be documented during post-construction monitoring. Comparisons between invasive species abundance in off-ROW areas immediately adjacent to the corridor will also be used to determine if invasive species have increased within the Project area and may be attributable to the project.

### **Wetland and Waterway Monitoring**

Wetland and waterway monitoring will begin the first growing season following completion of construction within a given segment. Wetlands and waterways disturbed by construction will be monitored annually for five years or until compliance (performance standards met) is achieved and documented per the WDNR Utility Permit. It is anticipated that the majority of wetlands within the Project area will not require five years to reach compliance due to the actions taken to minimize soil disturbance during construction.

Only wetlands and waterways impacted by project activities (e.g. vehicle access, pole placement, matting, tree removal, etc.) will be monitored to determine if revegetation efforts have been successful and to identify issues requiring repair. Farmed wetlands or wetland areas with a recent farming history will not be monitored beyond completion of erosion control monitoring. A list of wetlands and waterways that will be impacted by the project are provided in the CMP.

Monitoring will consist of a meander survey of each wetland to document plant communities. Dominant species within each wetland community and the presence and extent of invasive species will be documented. Vegetative cover will be estimated within the wetland and on streambanks. General topography and miscellaneous observations will also be noted. Representative photos will be taken of each wetland and waterway at established pre-construction photo points, as well as photos of areas requiring corrective action.



# **Wetland and Waterway Performance Standards**

The wetland and waterway performance standards listed below have been extracted from the WDNR Utility Permit, Restoration Conditions 86-89.

- 86. Final site stabilization in wetlands that were non-forested prior to construction and not identified as high quality wetland, and on stream banks, requires re-establishment of vegetation at least 70 percent of the type, density, and distribution of the vegetation that was documented in the area prior to construction. If 70 percent of the type, density, and distribution of the vegetation that was documented in the area prior to construction does not vegetate naturally within 30 days, then an approved comprehensive seed mix and restoration practices must be used to reach the 70 percent cover. All temporary and final stabilization activities shall comply with NR 151.11(8) Wisconsin Administrative Code.
- 87. Final site stabilization in wetlands that were forested prior to construction shall include an approved comprehensive seed mix and must achieve a revegetation density of at least 70 percent cover.
- 88. In wetlands identified as high quality, a cover crop and/or native seed mix shall be used to prevent the establishment of invasive species.
- 89. After the site is 70% stabilized, all temporary erosion control measures must be removed and disposed of properly.

# **REPORTING**

A restoration monitoring report will be provided to WDNR annually through the duration of the performance period in accordance with Post-Construction Monitoring Conditions #93 and 94 of the WDNR Utility Permit, with submittal by December 31<sup>st</sup> of each year. Per Condition #95, the report shall include:

- Photographs of existing site conditions at wetlands and waterways before construction, taken from established photo points;
- Photographs of site conditions at waterways and wetlands after construction, taken from the same established photo points;
- A wetland and waterway summary table showing the impact that occurred in each wetland and waterway (i.e. TCSB, clearing, matting, structure placement, etc.), wetland type, wetland quality description, and photo number;
- Documentation of post-construction monitoring plan compliance, permit compliance, restoration status, corrective actions taken, and correction actions proposed.

Additionally, the monitoring report will document revegetation status of upland areas requiring restoration seeding, and will detail the results of the invasive species monitoring along the Project. These results will be submitted annually to the PSC for three growing seasons following construction, in accordance with Order Point # 20.c which states:

 The applicants' revegetation plan shall include monitoring of the ROW for the presence of new or spreading invasive species for at least three growing seasons with results submitted to Commission staff annually.

# **Temporary Cover Seed Mix**<sup>1,2,3</sup>

| Scientific Name    | Common Name  | Installation Timing       | Installation Rate w/o Permanent Seed (lbs/acre) |
|--------------------|--------------|---------------------------|---|
| Avena sativa       | Common Oats  | Mid-April-August          | 80.00   |
| Lolium multiflorum | Annual Rye   | Year Round⁴               | 15.00   |
| Triticum aestivum  | Winter Wheat | August-April <sup>5</sup> | 100.00  |

<sup>&</sup>lt;sup>1</sup> Seed mix is designed for 1 acre.

<sup>&</sup>lt;sup>2</sup> Temporary cover rates are stand-alone rates intended for areas where permanent seed is not being installed at the time of seeding. Select appropriate species from table above based on timing of installation. Annual rye will either be installed with common oats or winter wheat.

 $<sup>^{\</sup>rm 3}$  Seed mix is not suitable for areas with standing water.

<sup>&</sup>lt;sup>4</sup> Spring (April - May) and late summer (August-early September) preferred for annual rye, but may be established in summer or a dormant seeding as seed will overwinter.

<sup>&</sup>lt;sup>5</sup> August-September preferred for winter wheat but may be used as dormant seeding as seed will overwinter and germinate in the spring.

# Pasture Mix - 40 lbs/acre

| Scientific Name    | Common Name                   | lbs/ac |
|--------------------|-------------------------------|--------|
| Dactylis glomerata | Orchard Grass                 | 14.00  |
| Festuca sp.        | Tall Fescue – Endophyte Free  | 14.00  |
| Festulolium sp.    | x Festulolium                 | 4.00   |
| Lolium sp.         | Tetraploid Perennial Ryegrass | 4.00   |
| Lolium sp.         | Intermediate Ryegrass         | 4.00   |
|                    | Total                         | 40.00  |

# Temporary Cover with Timing<sup>1,2</sup>

|                    |              |                           | Installation Rate w/ Permanent Seed |  |
|--------------------|--------------|---------------------------|-------------------------------------|--|
| Scientific Name    | Common Name  | Installation Timing       | lbs/ac                              |  |
| Avena sativa       | Common Oats  | Mid-April-August          | 35.00                               |  |
| Lolium multiflorum | Annual Rye   | Year Round <sup>3</sup>   | 5.00                                |  |
| Triticum aestivum  | Winter Wheat | August-April <sup>4</sup> | 45.00                               |  |

<sup>&</sup>lt;sup>1</sup> Seed mix is designed for 1 acre.

<sup>&</sup>lt;sup>2</sup> Install temporary cover with permanent seed mix. Select appropriate species from table above based on timing of installation. Annual rye will either be installed with common oats or winter wheat.

<sup>&</sup>lt;sup>3</sup> Spring (April - May) and late summer (August-early September) preferred for annual rye, but may be established in summer or a dormant seeding as seed will overwinter.

<sup>&</sup>lt;sup>4</sup> August-September preferred for winter wheat but may be used as dormant seeding as seed will overwinter and germinate in the spring.

# Hybrid Stabilization Mix<sup>1,2,3</sup>

| Scientific Name                 | Common Name                           |       | oz/acre | lbs/acre |
|---------------------------------|---------------------------------------|-------|---------|----------|
| Grasses                         | ·                                     |       |         |          |
| Andropogon gerardii             | Big Bluestem                          |       | 24.00   | 1.50     |
| Bromus inermis 4                | Smooth Brome                          |       | 18.00   | 1.13     |
| Elymus canadensis               | Canada Wild Rye                       |       | 36.00   | 2.25     |
| Elymus trachycaulus             | Slender Wheat Grass                   |       | 36.00   | 2.25     |
| Lolium perenne <sup>4</sup>     | Perennial Rye                         |       | 160.00  | 10.00    |
| Panicum virgatum                | Switch Grass                          |       | 12.00   | 0.75     |
| Phleum pratense 4               | Timothy                               |       | 16.00   | 1.00     |
| Forbs                           |                                       |       |         |          |
| Asclepias syriaca               | Common Milkweed                       |       | 2.00    | 0.13     |
| Chamaecrista fasciculata        | Partridge Pea                         |       | 4.00    | 0.25     |
| Heliopsis helianthoides         | False Sunflower                       |       | 3.00    | 0.19     |
| Monarda fistulosa               | Wild Bergamot                         |       | 0.50    | 0.03     |
| Rudbeckia hirta                 | Black-eyed Susan                      |       | 3.00    | 0.19     |
| Solidago nemoralis              | Old Field Goldenrod                   |       | 0.50    | 0.03     |
| Tradescantia ohiensis           | Ohio Spiderwort                       |       | 0.50    | 0.03     |
| Trifolium hybridum <sup>4</sup> | Alsike Clover                         |       | 32.00   | 2.00     |
| Trifolium pratense ⁴            | Red Clover                            |       | 80.00   | 5.00     |
|                                 | · · · · · · · · · · · · · · · · · · · | Total | 427.50  | 26.72    |

<sup>&</sup>lt;sup>1</sup>Species information regarding blooming period and mature height were obtained from the Prairie Moon Nursery 2020 Cultural Guide and the Illinois Wildflowers webpage (http://www.illinoiswildflowers.info/index.htm).

Spring Bloomers (April-May)

Summer Bloomers (June-August)

Fall Bloomers (September-October)

# Temporary Cover with Timing 1,2

| Scientific Name    | Common Name  | Installation Timing       | Installation Rate w/ Perm |        |
|--------------------|--------------|---------------------------|---------------------------|--------|
| Scientific Name    | Common Name  | installation filling      | oz/ac                     | lbs/ac |
| Avena sativa       | Common Oats  | Mid-April-August          | 560.00                    | 35.00  |
| Lolium multiflorum | Annual Rye   | Year Round <sup>3</sup>   | 112.00                    | 7.00   |
| Triticum aestivum  | Winter Wheat | August-April <sup>4</sup> | 720.00                    | 45.00  |

<sup>&</sup>lt;sup>1</sup> Seed mix is designed for 1 acre.

<sup>&</sup>lt;sup>2</sup>Seed mix is designed for 1.0 acre. This seed mix should be installed with an appropriate temporary cover crop / nurse crop based on timing of installation.

<sup>&</sup>lt;sup>3</sup>Seed Mix is designed for upland areas and consists of a mix of native and non-native species that provide quick establishment and stabilization. The seed mix contains pollinator-friendly forbs but does not meet the CRP CP42 Pollinator Habitat Criteria due to the presence of non-native species and less than three early blooming forbs.

<sup>&</sup>lt;sup>4</sup>Indicates a species non-native to Wisconsin.

<sup>&</sup>lt;sup>2</sup> Install temporary cover with permanent seed mix. Select appropriate species from table above based on timing of installation. Annual rye will either be installed with common oats or winte wheat.

<sup>&</sup>lt;sup>3</sup> Spring (April - May) and late summer (August-early September) preferred for annual rye, but may be established in summer or a dormant seeding as seed will overwinter.

<sup>&</sup>lt;sup>4</sup> August-September preferred for winter wheat but may be used as dormant seeding as seed will overwinter and germinate in the spring.

# Prairie Mix<sup>1,2,3</sup>

| Scientific Name          | Common Name           |      | oz/acre | lbs/acre |
|--------------------------|-----------------------|------|---------|----------|
| Grasses                  |                       |      |         |          |
| Andropogon gerardii      | Big Bluestem          |      | 24.00   | 1.50     |
| Bouteloua curtipendula   | Side oats Grama       |      | 18.00   | 1.13     |
| Elymus canadensis        | Canada Wild Rye       |      | 36.00   | 2.25     |
| Elymus trachycaulus      | Slender Wheat Grass   |      | 36.00   | 2.25     |
| Panicum virgatum         | Switch Grass          |      | 12.00   | 0.75     |
| Schizachyrium scoparium  | Little Bluestem       |      | 32.00   | 2.00     |
| Sorghastrum nutans       | Indian Grass          |      | 16.00   | 1.00     |
| Sedges & Rushes          |                       |      |         | •        |
| Carex molesta            | Field Oval Sedge      |      | 2.00    | 0.13     |
| Forbs                    |                       |      |         | •        |
| Asclepias syriaca        | Common Milkweed       |      | 2.00    | 0.13     |
| Chamaecrista fasciculata | Partridge Pea         |      | 4.00    | 0.25     |
| Dalea purpurea           | Purple Prairie Clover |      | 2.00    | 0.13     |
| Heliopsis helianthoides  | False Sunflower       |      | 3.00    | 0.19     |
| Heuchera richardsonii    | Prairie Alumroot      |      | 0.10    | 0.01     |
| Monarda fistulosa        | Wild Bergamot         |      | 1.00    | 0.06     |
| Penstemon digitalis      | Foxglove Beardtongue  |      | 1.00    | 0.06     |
| Ratibida pinnata         | Yellow Coneflower     |      | 1.00    | 0.06     |
| Rudbeckia hirta          | Black-eyed Susan      |      | 3.00    | 0.19     |
| Solidago nemoralis       | Old Field Goldenrod   |      | 0.60    | 0.04     |
| Symphyotrichum laeve     | Smooth Blue Aster     |      | 0.75    | 0.05     |
| Tradescantia ohiensis    | Ohio Spiderwort       |      | 1.50    | 0.09     |
| Zizia aurea              | Golden Alexanders     |      | 1.00    | 0.06     |
|                          | Т                     | otal | 196.95  | 12.31    |

<sup>&</sup>lt;sup>1</sup> Species information regarding blooming period and mature height were obtained from the Prairie Moon Nursery 2020 Cultural Guide and the Illinois Wildflowers webpage (http://www.illinoiswildflowers.info/index.htm).

Spring Bloomers (April-May)

Summer Bloomers (June-August)

Fall Bloomers (September-October)

# Temporary Cover with Timing<sup>1,2</sup>

| Scientific Name    | Common Name  | Installation Timing Installation Rate w |        | / Permanent Seed |
|--------------------|--------------|---|--------|------------------|
| Scientific Name    | Common Name  | installation filling                    | oz/ac  | lbs/ac           |
| Avena sativa       | Common Oats  | Mid-April-August                        | 560.00 | 35.00            |
| Lolium multiflorum | Annual Rye   | Year Round <sup>3</sup>                 | 80.00  | 5.00             |
| Triticum aestivum  | Winter Wheat | August-April <sup>4</sup>               | 720.00 | 45.00            |

<sup>&</sup>lt;sup>1</sup> Seed mix is designed for 1 acre.

<sup>&</sup>lt;sup>2</sup> Seed mix is designed for 1.0 acre. This seed mix should be installed with an appropriate temporary cover crop based on timing of installation.

<sup>&</sup>lt;sup>3</sup> Seed Mix is designed for upland areas, consists of species native to Dane and/or Iowa Counties, WI, and meet pollinator criteria of having at least two native bunch grasses and a minimum of three species blooming during each of the three blooming periods (spring, summer, and fall).

<sup>&</sup>lt;sup>2</sup> Install temporary cover with permanent seed mix. Select appropriate species from table above based on timing of installation. Annual rye will either be installed with common oats or winte wheat.

<sup>&</sup>lt;sup>3</sup> Spring (April - May) and late summer (August-early September) preferred for annual rye, but may be established in summer or a dormant seeding as seed will overwinter.

<sup>&</sup>lt;sup>4</sup> August-September preferred for winter wheat but may be used as dormant seeding as seed will overwinter and germinate in the spring.

# Wetland Mix<sup>1,2,3</sup>

| Scientific Name                | Common Name              | oz/acre | lbs/acre |
|--------------------------------|--------------------------|---------|----------|
| Grasses                        |                          |         |          |
| Calamagrostis canadensis       | Blue Joint Grass         | 1.00    | 0.06     |
| Elymus virginicus              | Virginia Wild Rye        | 16.00   | 1.00     |
| Glyceria striata               | Fowl Manna Grass         | 2.00    | 0.13     |
| Panicum virgatum               | Switch Grass             | 6.00    | 0.38     |
| Sedges & Rushes                |                          |         |          |
| Carex scoparia                 | Lance-fruited Oval Sedge | 1.50    | 0.09     |
| Carex stipata                  | Common Fox Sedge         | 2.00    | 0.13     |
| Carex vulpinoidea              | Brown Fox Sedge          | 3.00    | 0.19     |
| Juncus effusus                 | Common Rush              | 0.50    | 0.03     |
| Scirpus atrovirens             | Dark-green Bulrush       | 1.00    | 0.06     |
| Scirpus cyperinus              | Wool Grass               | 0.50    | 0.03     |
| Schoenoplectus tabernaemontani | Softstem Bulrush         | 1.00    | 0.06     |
| Forbs                          |                          |         |          |
| Alisma subcordatum             | American Water Plantain  | 2.00    | 0.13     |
| Anemone canadensis             | Canada Anemone           | 1.00    | 0.06     |
| Asclepias incarnata            | Swamp Milkweed           | 2.00    | 0.13     |
| Bidens cernua                  | Nodding Bur Marigold     | 1.00    | 0.06     |
| Epilobium coloratum            | Cinnamon Willow Herb     | 0.20    | 0.01     |
| Eupatorium perfoliatum         | Boneset                  | 1.00    | 0.06     |
| Euthamia graminifolia          | Grass-leaved Goldenrod   | 0.50    | 0.03     |
| Helenium autumnale             | Sneezeweed               | 1.00    | 0.06     |
| Lobelia siphilitica            | Great Blue Lobelia       | 0.20    | 0.01     |
| Ranunculus sceleratus          | Annual Buttercup         | 0.50    | 0.03     |
| Symphyotrichum lanceolatum     | Panicled Aster           | 0.50    | 0.03     |
| Symphyotrichum novae-angliae   | New England Aster        | 0.50    | 0.03     |
| Verbena hastata                | Blue Vervain             | 3.00    | 0.19     |
| Zizia aurea                    | Golden Alexanders        | 1.50    | 0.09     |
|                                | Total                    | 49.40   | 3.09     |

<sup>&</sup>lt;sup>1</sup>Species information regarding blooming period and mature height were obtained from the Prairie Moon Nursery 2020 Cultural Guide and the Illinois Wildflowers webpage (http://www.illinoiswildflowers.info/index.htm).

Spring Bloomers (April-May)

Summer Bloomers (June-August)

Fall Bloomers (September-October)

# Temporary Cover with Timing<sup>1,2</sup>

| Scientific Name    | Common Name  | Installation Timing       | Installation Rate w/ Permanent Seed |        |  |
|--------------------|--------------|---------------------------|-------------------------------------|--------|--|
| Scientific Name    | Common Name  | installation filling      | oz/ac                               | lbs/ac |  |
| Avena sativa       | Common Oats  | Mid-April-August          | 400.00                              | 25.00  |  |
| Lolium multiflorum | Annual Rye   | Year Round <sup>3</sup>   | 80.00                               | 5.00   |  |
| Triticum aestivum  | Winter Wheat | August-April <sup>4</sup> | 400.00                              | 25.00  |  |

<sup>&</sup>lt;sup>1</sup> Seed mix is designed for 1 acre.

 $<sup>^2</sup>$ Seed mix is designed for 1.0 acre. This seed mix should be installed with an appropriate temporary cover crop / nurse crop based on timing of installation.

<sup>&</sup>lt;sup>3</sup>Wetland Seed Mix is intended for weltand or wetland perimeter areas with shallow seasonal inundation to seasonal saturation. It should not be applied over standing water.

<sup>&</sup>lt;sup>2</sup> Install temporary cover with permanent seed mix. Select appropriate species from table above based on timing of installation. Annual rye will either be installed with common oats or winte wheat.

<sup>&</sup>lt;sup>3</sup> Spring (April - May) and late summer (August-early September) preferred for annual rye, but may be established in summer or a dormant seeding as seed will overwinter.

<sup>&</sup>lt;sup>4</sup> August-September preferred for winter wheat but may be used as dormant seeding as seed will overwinter and germinate in the spring.

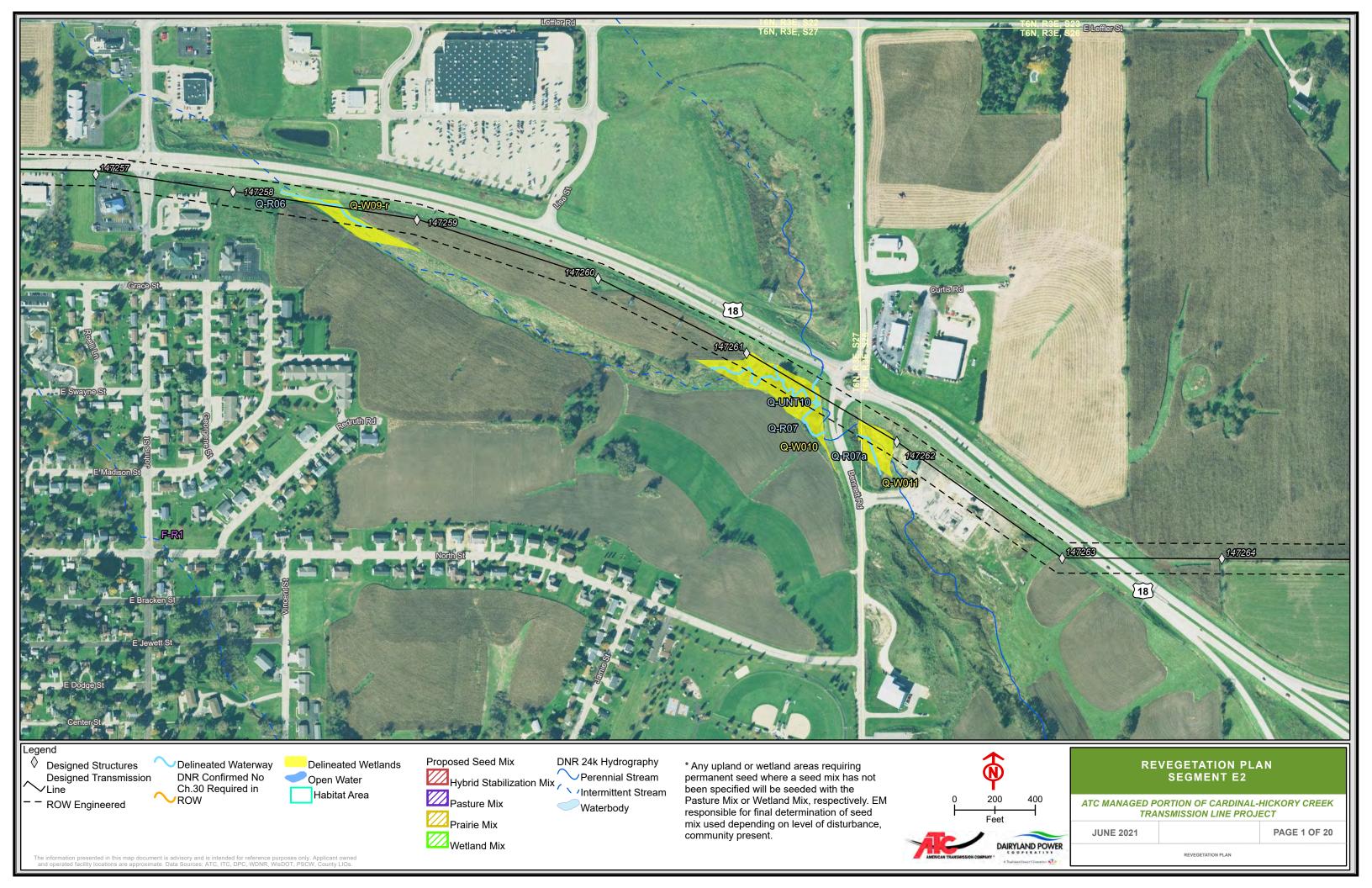
#### CHC Segment E2. Areas of Proposed Pollinator Enhanced or Wetland Seed Mixes, Community Conversion, or that Require Additional Consultation<sup>1</sup>

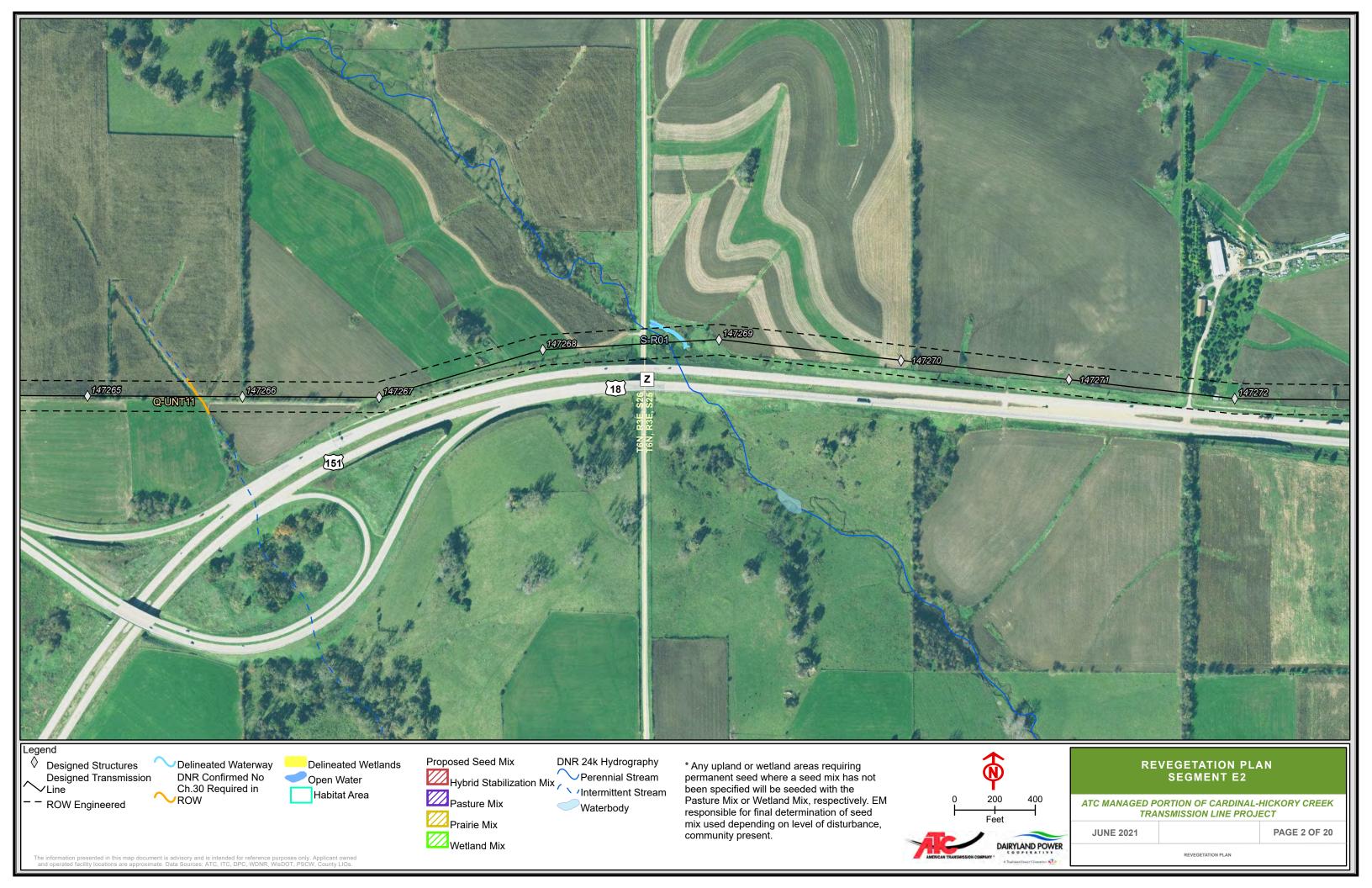
| 0  | 04                              | Habitat Francisco II | Dec Construction Field Constitues  | In 1 10 100 2  | loog Parks   | I=   |
|----|---------------------------------|----------------------|--|--|--|--|
| E2 | Structure Span<br>147275-147276 | S-W01                | D Pre-Construction Field Conditions Sedge meadow adjacent to waterway dominated by sedge species, orange jewelweed, spike rush, bulrush.   | Project Seed Mix <sup>2</sup> Wetland Mix            | Justification Higher quality wetland dominated by native species.  | Field Instruction <sup>3</sup> Seeding of wetland at discretion of EM based on level of disturbance. |
| E2 | 147285-147286                   | n/a                  | Grassland area dominated by Solomon's seal, smooth brome, Canada goldenrod, bee balm, common milkweed, Kentucky bluegrass, wild parsnip, crown vetch. Wooded portion includes bur oak, black oak, white ash, shagbark hickory over hog peanut, cow parsnip, wild geranium, Solomon's seal, woodland sunflower, garlic mustard. | Hybrid Stabilization Mix                             | ROW is adjacent to Military Ridge State Trail. Variety of<br>natives present.  |  |
| E2 | 147306-147307                   | S-F1                 | Closed canopy composed of large saw-sized black<br>walnut, white oak, bur oak, cottonwood, green ash,<br>and black herry. Shrub layer composed of box elder<br>saplings, invasive bush honeysuckle and multiflora<br>rose.   | Hybrid Stabilization Mix                             | Forest clearing/community conversion.  |  |
| E2 | 147307                          | S-F2                 | Closed canopy mesic forest composed of large saw-<br>sized American elm, green ash, quaking aspen, red<br>oak, and black cherry. Shrub layer composed of<br>blackberry, wild currant, box elder, and multiflora rose.<br>Herbaccous layer includes garlic mustard, white avens,<br>jack in the pulpit, and Virginia creeper.   | Hybrid Stabilization Mix                             | Forest clearing/community conversion.  |  |
| E2 | 147307-147308                   | S-F3                 | Closed canopy consisting of large saw-sized bur oak, black cherry, quaking aspen, black walnut. Shrub layer composed of common buckthom, red maple, American hazelnut, invasive bush honeysuckle. Herbaceous layer includes Virginia creeper, Solomon's seal, grapevine, invasive bush honeysuckle, purple Joe Pye weed.       | Hybrid Stabilization Mix                             | Forest clearing/community conversion.  |  |
| E2 | 147308-147309                   | S-G13                | Grassy meadow dominated by smooth brome, orchard grass, and Kentucky bluegrass, with forbs including Oueen Anne's lace, stinging nettle, cathip, red clover, and wild parsnip. Shrub layer composed of smooth sumac, brambles, prickly ash, box elder, invasive bush honeysuckle, multiflora rose, and gray dogwood.           | Hybrid Stabilization Mix                             | Glade Mallow (SC plant) identified during 2020 field surveys within S-C14 and at edge of S-F4. WDNR recommends avoiding known plant locations. Add glade mallow to seed mix in this location if known locations cannot be avoided. | Add glade mallow to seed mix in this location if<br>known locations cannot be avoided.               |
| E2 | 147308-147309                   | S-F4                 | Closed canopy consisting of saw-sized basswood, bur oak, red oak, black cherry, and box elder. Shrub layer composed of invasive bush honeysuckle.  | Hybrid Stabilization Mix                             | Glade Mallow (SC plant) Identified during 2020 field surveys within S-C14 and at edge of S-F4. WDNR recommends avoiding known plant locations. Add glade mallow to seed mix in this location if known locations cannot be avoided. | Add glade mallow to seed mix in this location if<br>known locations cannot be avoided.               |
| E2 | 147309                          | S-F5                 | Closed canopy consisting of saw-sized black cherry,<br>red oak, bur oak and quaking aspen. Shrub layer<br>includes invasive bush honeysuckle, common<br>buckthorn. Herbaceous layer composed of woodland<br>sunflower, may apple, Pennsylvania sedge, and white<br>avens.  | Hybrid Stabilization Mix                             | Forest clearing/community conversion.  |  |
| E2 | 147325-147330                   | n/a                  | Active ag field or road ROW dominated by smooth<br>brome with wild parsnip, Canada goldenrod, common<br>milkweed.  | Pasture Mix  | Area within ROW appears to be active agriculture or grass road ROW.  |  |
| E2 | 147343                          | S-F6                 | Closed canopy composed of bur oak, shagbark<br>hickory, black wahut, shrub layer of prickly ash, and<br>herbaceous layer of cool-season grasses.   | Pasture Mix  | Forest clearing/community conversion, but low quality with cool season grasses already dominant in herb layer. Adjacent grassland is dominated by cool season grasses.   |  |
| E2 | 147344                          | S-F7                 | Forested pasture, closed canopy composed of bur<br>oak, box elder, black walnut, shagbark hickory, red<br>oak, black cherry; shrub layer of invasive bush<br>honeysuckle and prickly ash.  | Pasture Mix  | Forest clearing/community conversion, but low quality with<br>invasives dominant in shrub layer. Adjacent grassland is<br>dominated by cool season grasses.  |  |
| E2 | 147348-147349                   | S-G20                | Grassy highway embankment and fallow pasture, dominated by cool season grasses, stinging nettle, Canada thistle, cow parsnip, with shrub layer composed of box elder, while mulberry, invasive bush honeysuckle, American currant.   | Hybrid Stabilization Mix                             | Project ROW adjacent to TNC property identified as<br>Thompson Memorial Prairie SNA. Most of the TNC property<br>appears to be row crops, but S-G20 is adjacent to an<br>uncropped area that may be considered prairie.            |  |
| E2 | 147362-147363                   | S-F8                 | Closed canopy consisting of black walnut, box elder.<br>Herbaceous layer dominated by dame's rocket.   | Pasture Mix  | Forest clearing/community conversion, but low quality with<br>invasives dominant in herb layer. Adjacent grassland is<br>dominated by cool season grasses.   |  |
| E2 | 147365-147366                   | S-F9                 | Mostly closed canopy box elder and black cherry, with<br>thick shrub layer of common buckthorn and invasive<br>bush honeysuckle.   | Pasture Mix  | Forest clearing/community conversion, but low quality with<br>invasives dominant in shrub layer. Adjacent road ROW is<br>dominated by cool season grasses; active ag field to west of<br>feature.                                  |  |
| E2 | 147365-147366                   | S-F10                | Mostly closed canopy box elder and black cherry, with thick shrub layer of common buckthorn and invasive bush honeysuckle.   | Pasture Mix  | Forest clearing/community conversion, but low quality with<br>invasives dominant in shrub layer. Adjacent road ROW is<br>dominated by cool season grasses; active ag field to east of<br>feature.                                  |  |
| E2 | 147383                          | S-F11                | Mostly closed to mostly open canopy of black walnut, with cool-season grasses and dame's rocket in herbaceous layer.   | Pasture Mix  | Forest clearing/community conversion, but low quality with<br>invasives and cool season grasses dominant in herb layer.<br>Adjacent road ROW is dominated by cool season grasses;<br>active ag field to west of feature.           |  |
| E2 | 147384-147385                   | S-F12                | Closed canopy black walnut, box elder, and oaks.   | Pasture Mix  | Forest clearing/community conversion. Adjacent road ROW is dominated by cool season grasses.   |  |
| E2 | 147385                          | S-F13                | Mostly closed canopy, pole-sized black walnut, green ash, and quaking aspen.   | Pasture Mix  | Forest clearing/community conversion. Adjacent road ROW is dominated by cool season grasses; active quarry/gravel operation borders feature to the east.   |  |
| E2 | 147387-147388                   | S-F14                | Mostly open canopy box elder, black walnut, and bur oak.   | Pasture Mix  | Forest clearing/community conversion. Adjacent road ROW is dominated by cool season grasses.   |  |
| E2 | 147388                          | S-F15                | Mostly closed box elder, black cherry and quaking aspen, with shrub layer of invasive bush honeysuckle.  | Pasture Mix  | Forest clearing/community conversion. Low-quality community adjacent to road ROW dominated by cool season grasses.   |  |
| E2 | 147388-147389                   | S-SL1                | Brushy thicket of box elder, common buckthorn, white mulberry, and invasive bush honeysuckle, with coolseason grasses.   | Pasture Mix  | Shrub clearing/community conversion. Low-quality community adjacent to road ROW dominated by cool season grasses.  |  |
| E2 | 147395-147396                   | S-F16                | White pine plantation mixed with box elder.  Uction activities will be seeded with one of the Project seed mixes   | Pasture Mix at the determination of the Project Envi | Forest clearing/community conversion. Adjacent road ROW is dominated by cool season grasses.   |  |

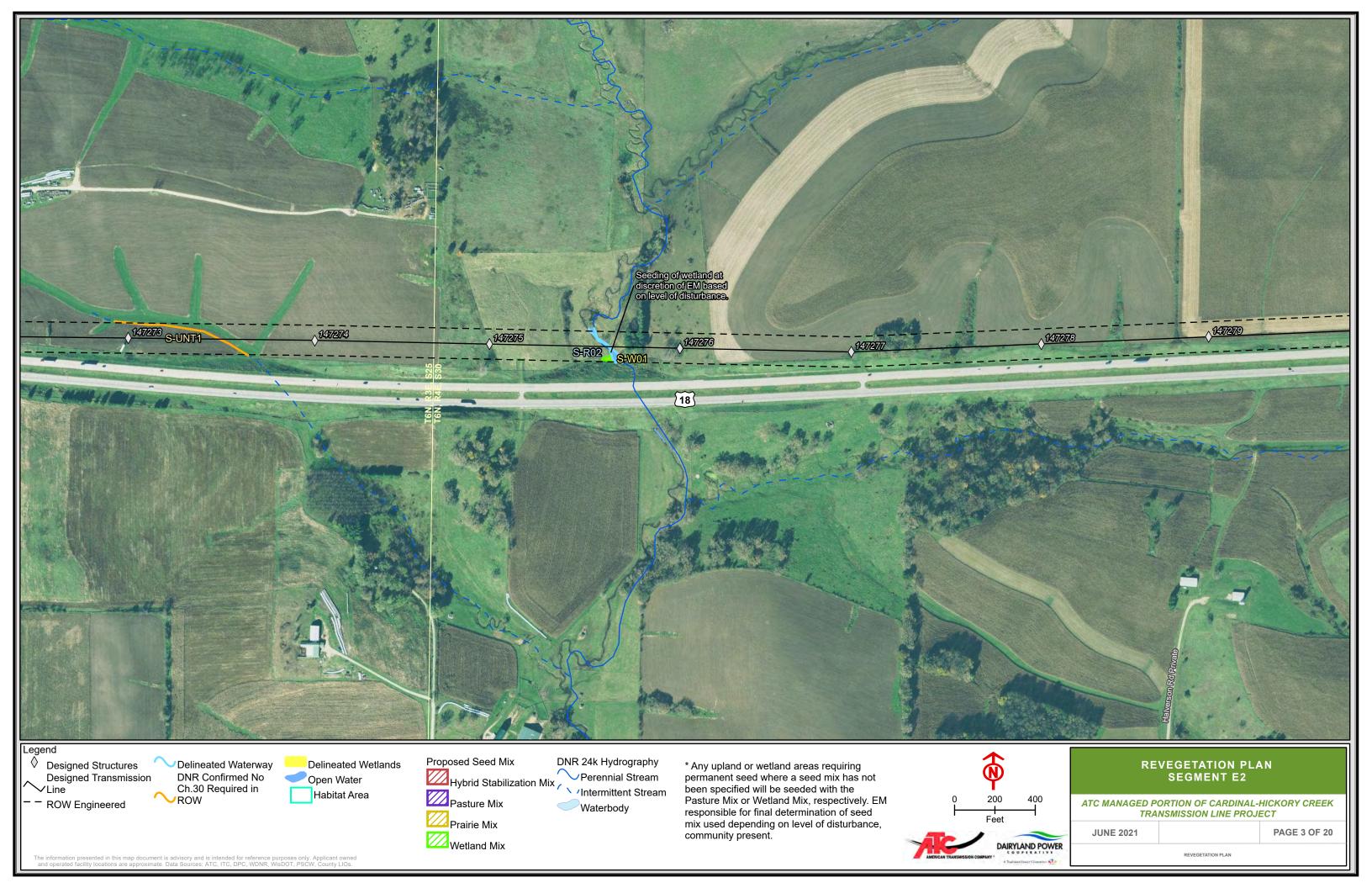
<sup>A reas not specified in this table that are disturbed by construction activities will be seeded with one of the Project seed mixes at the determination of the Project Environmental Monitor

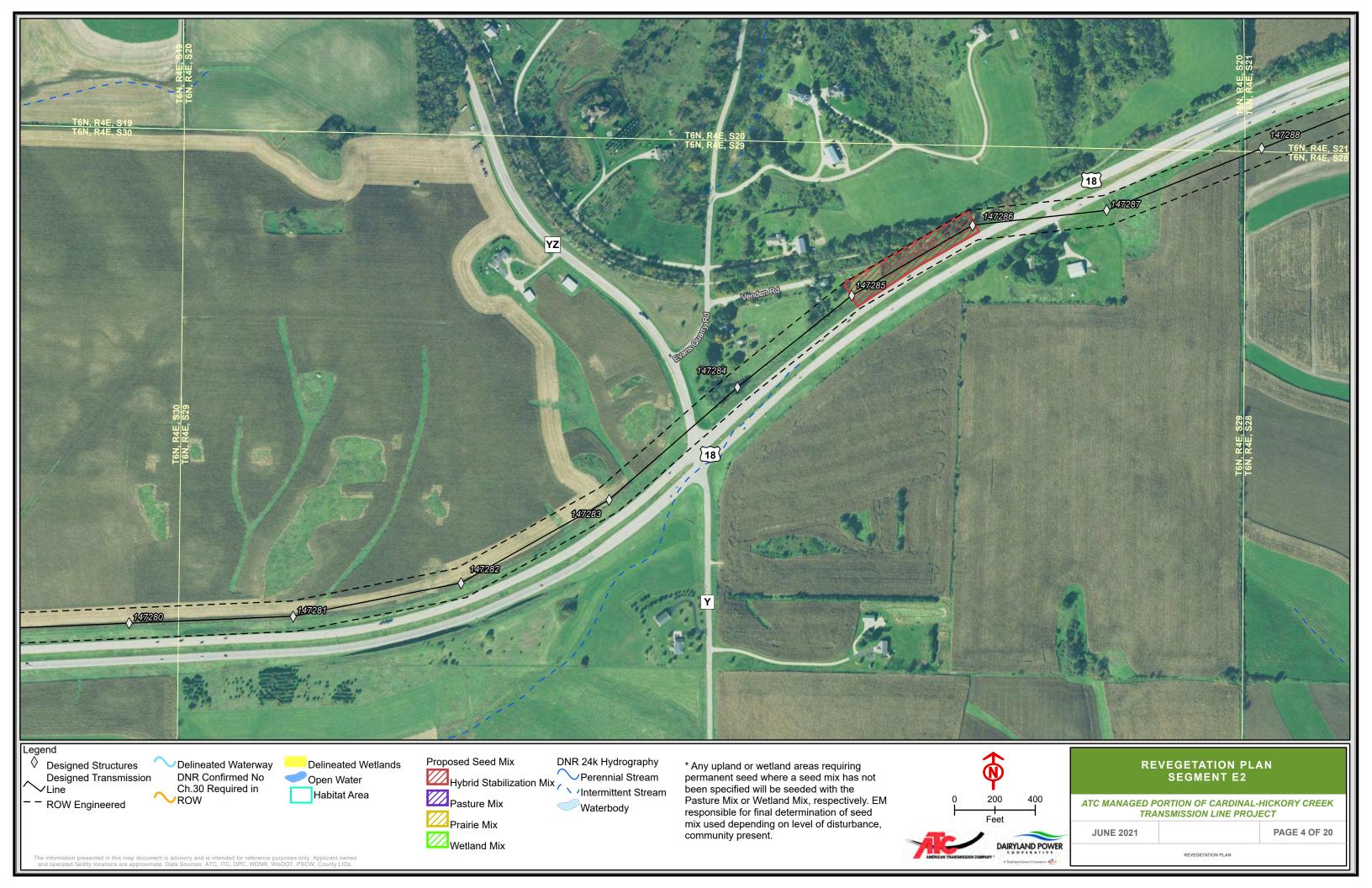
Proposed seed mixes include. Pasture Mix, Hybrid Stabilization Mix, Prairie Mix, Wetland Mix

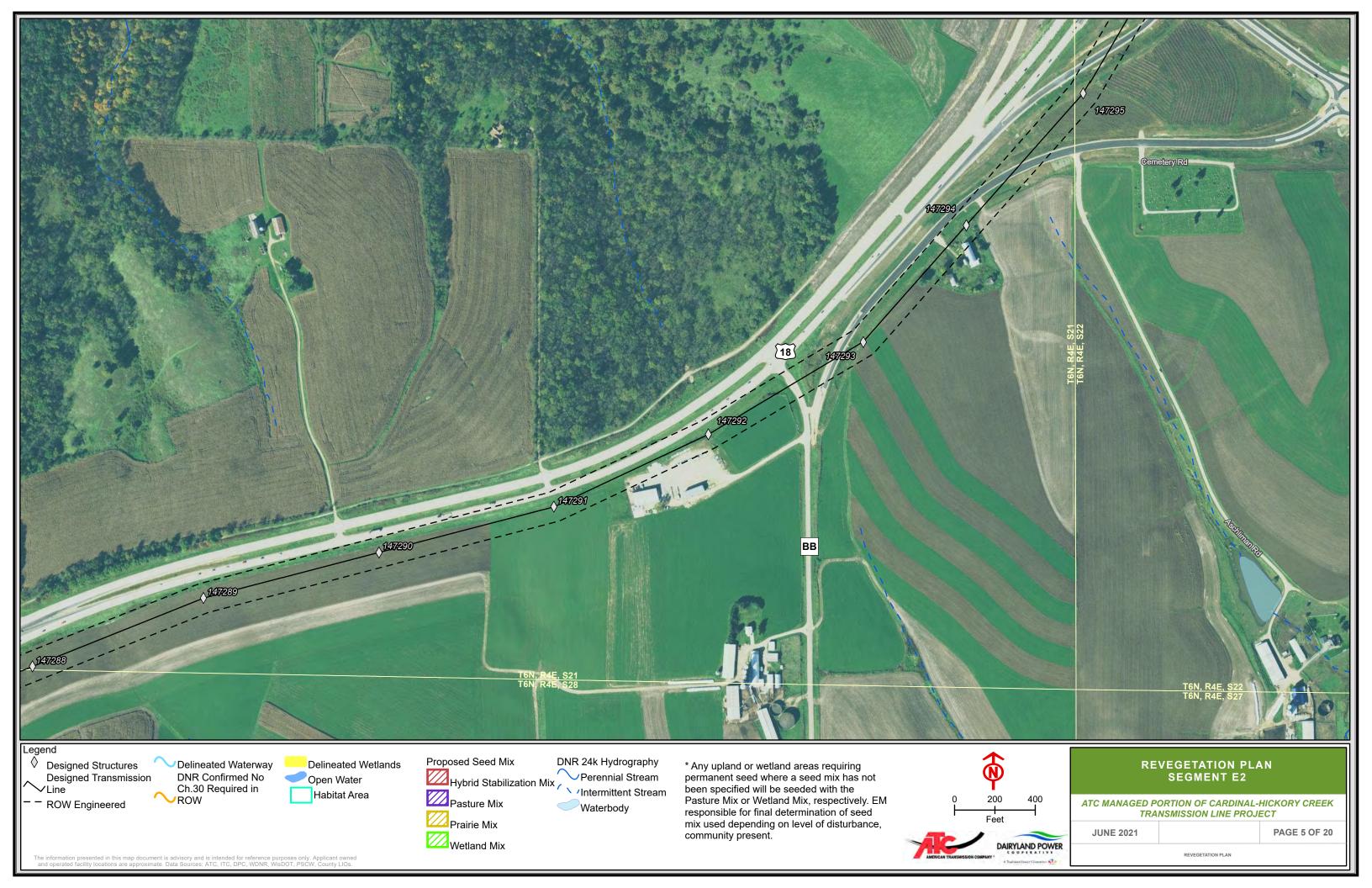
B M responsible for final determination of seed mix used depending on level of disturbance, community present.</sup> 

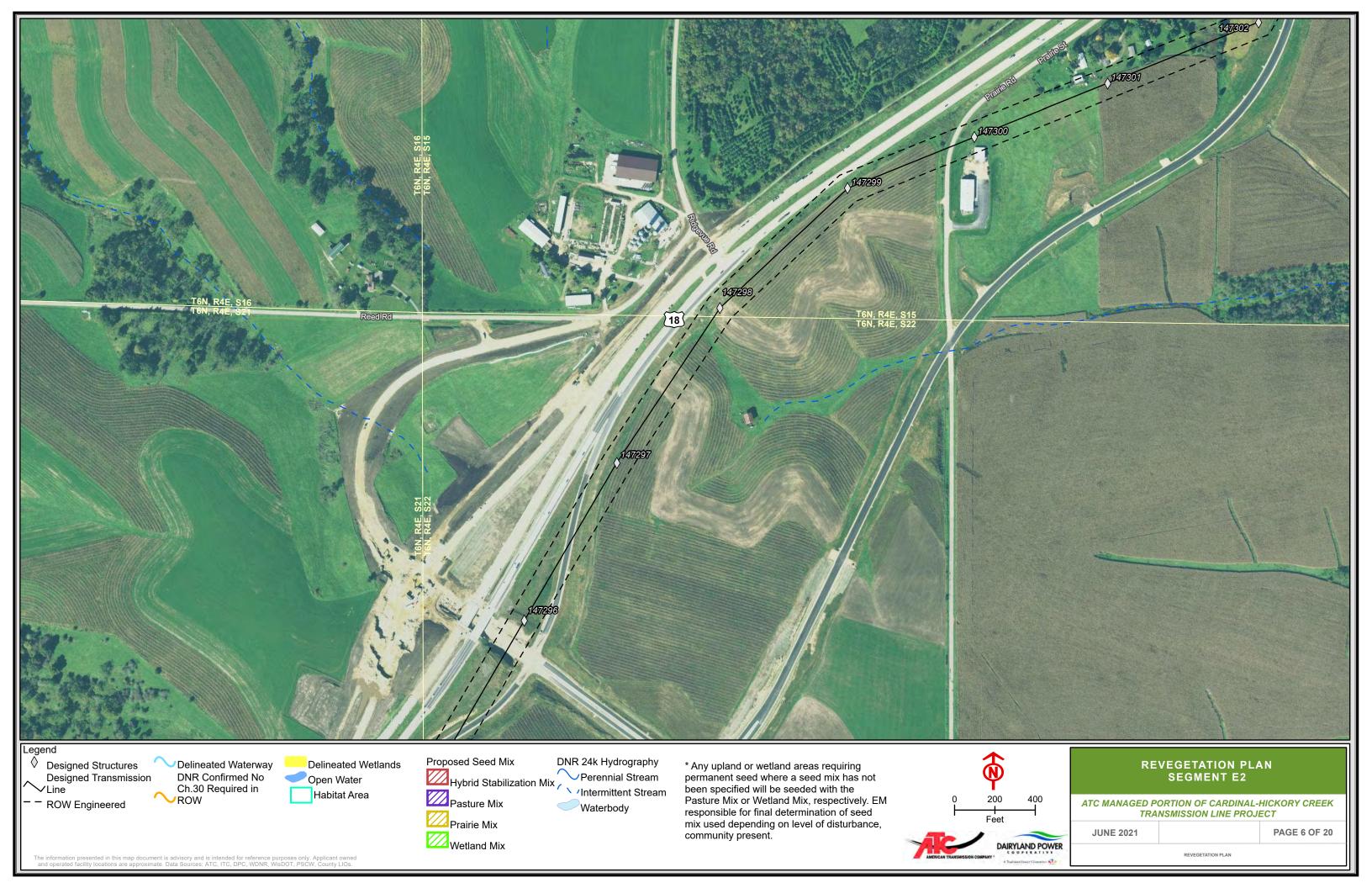


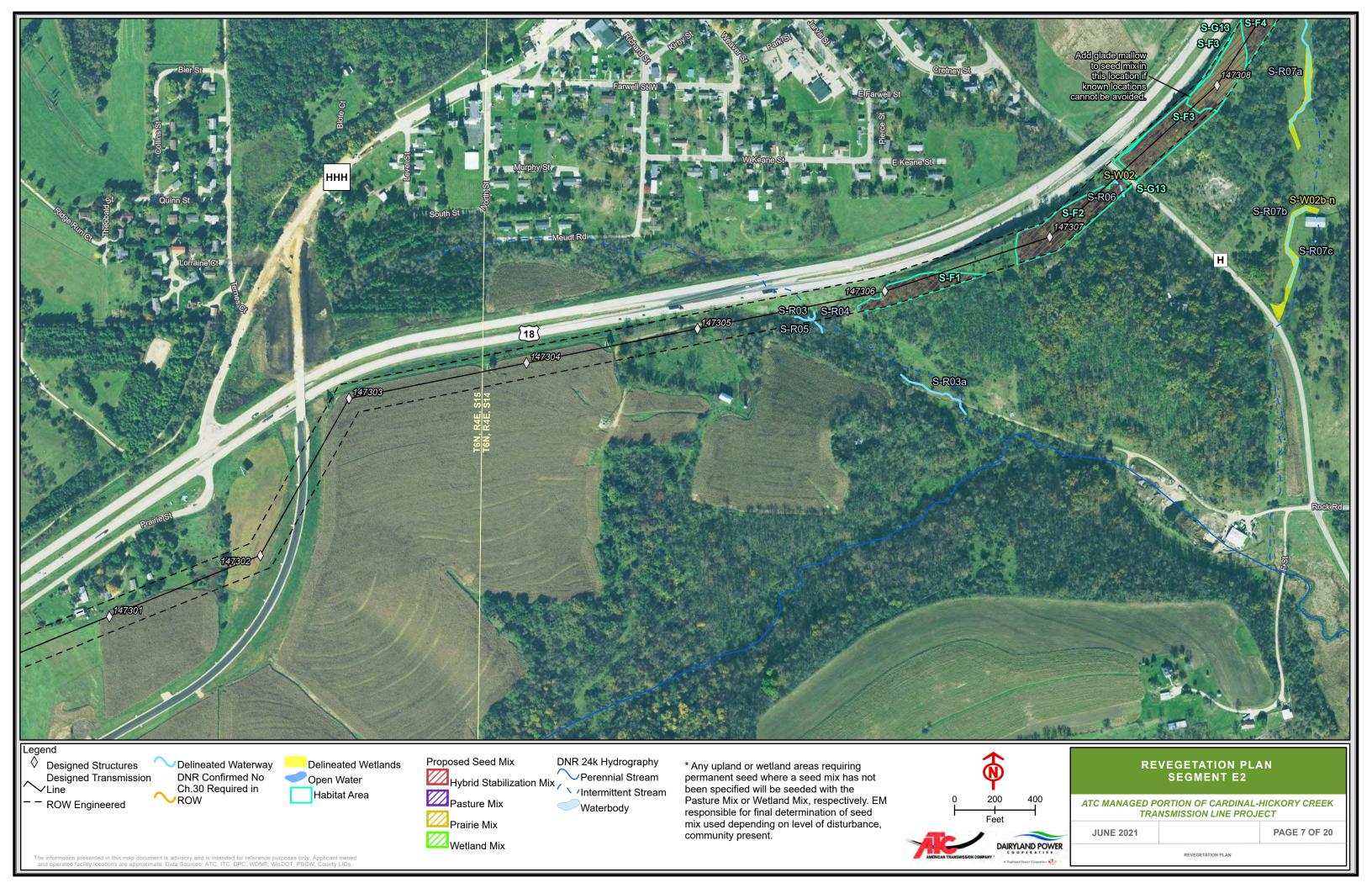


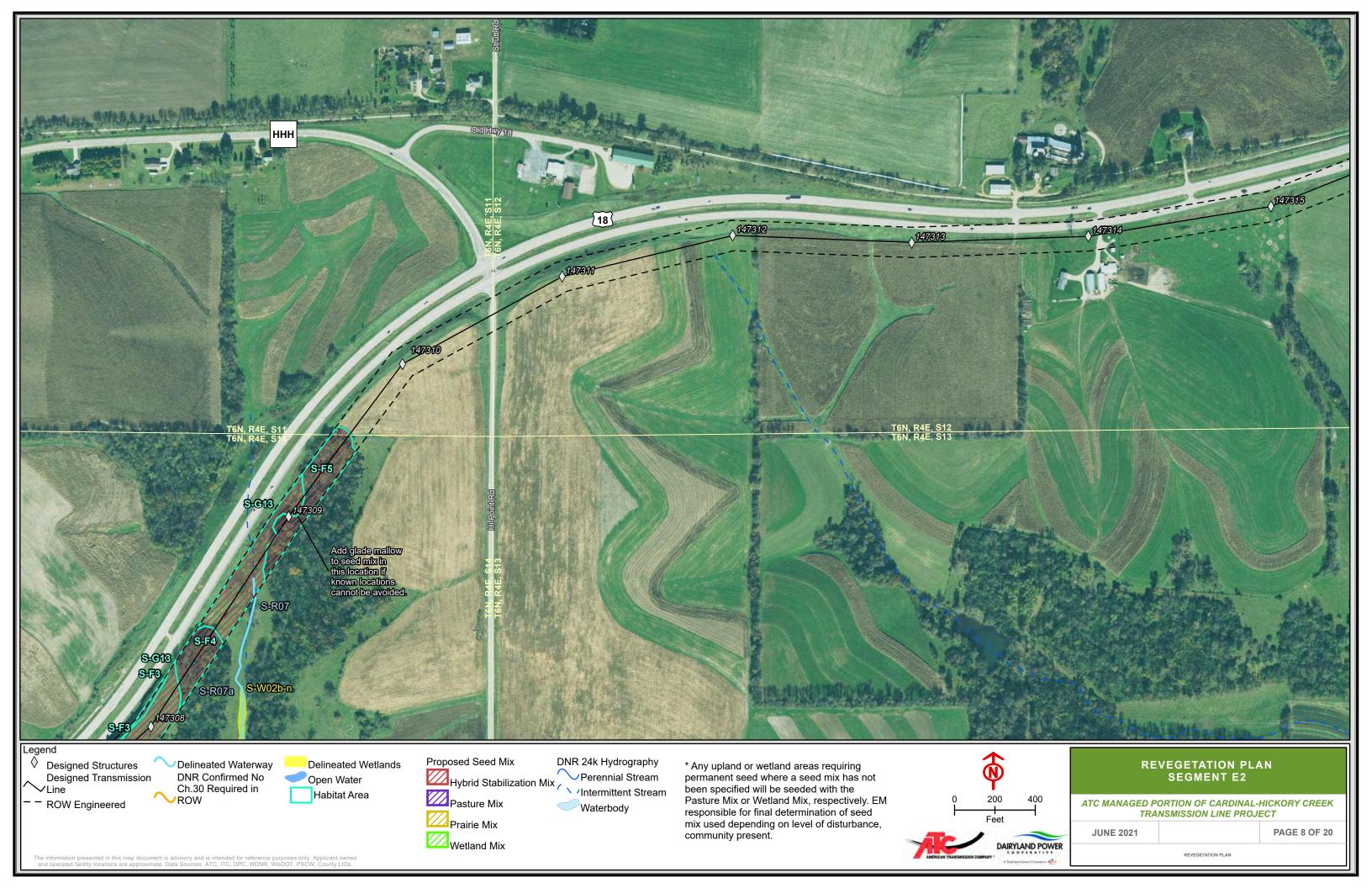


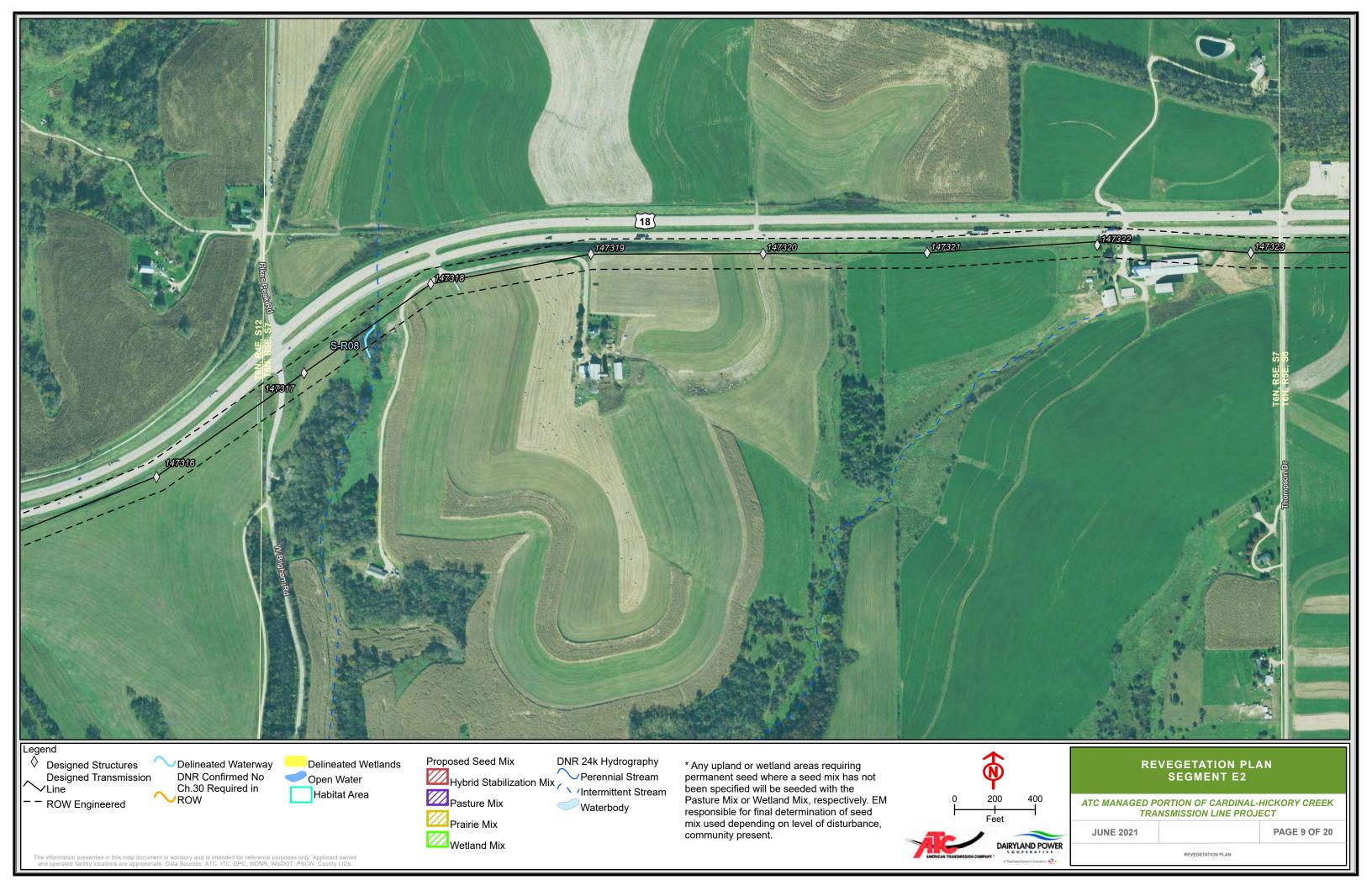


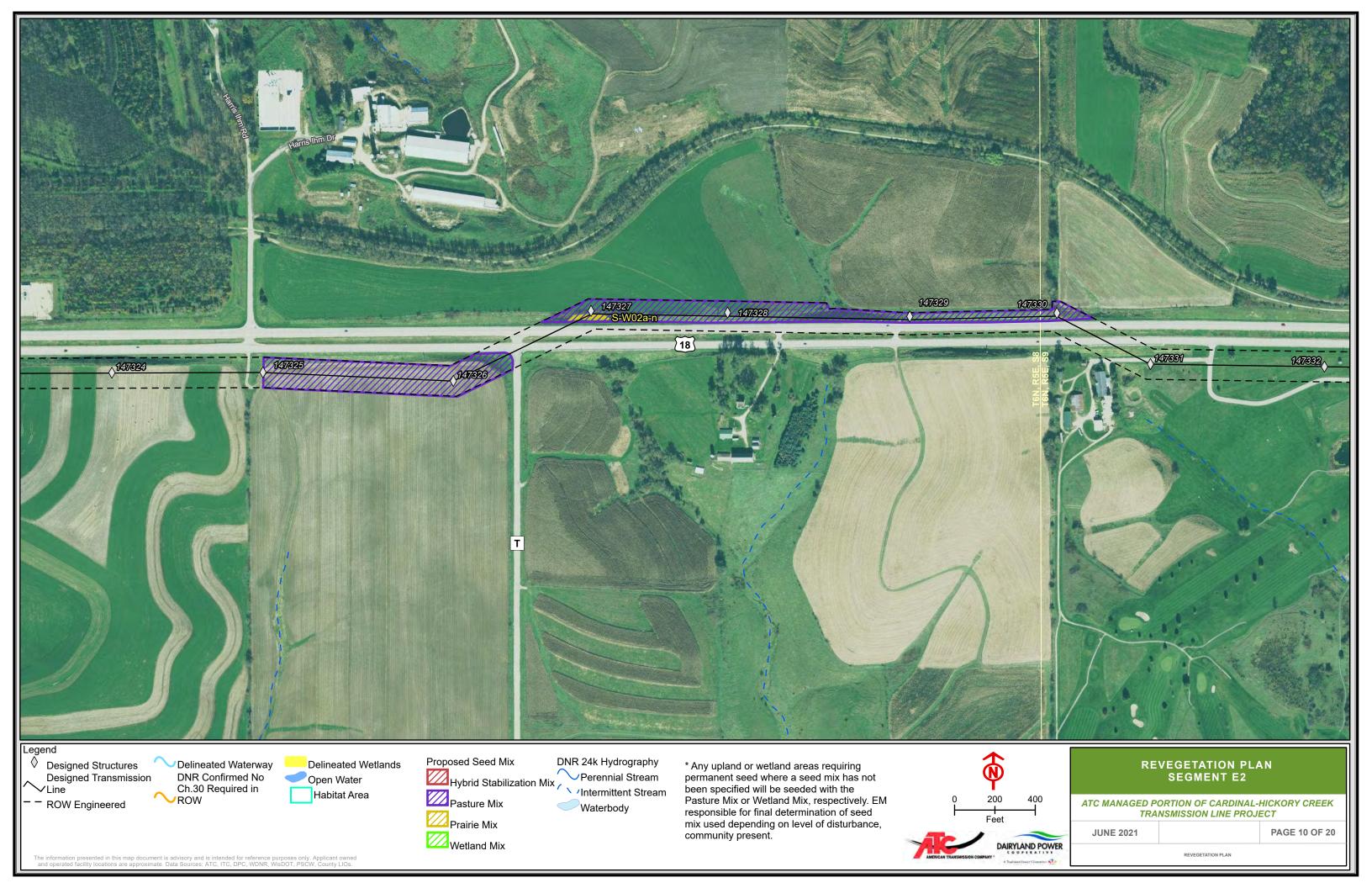


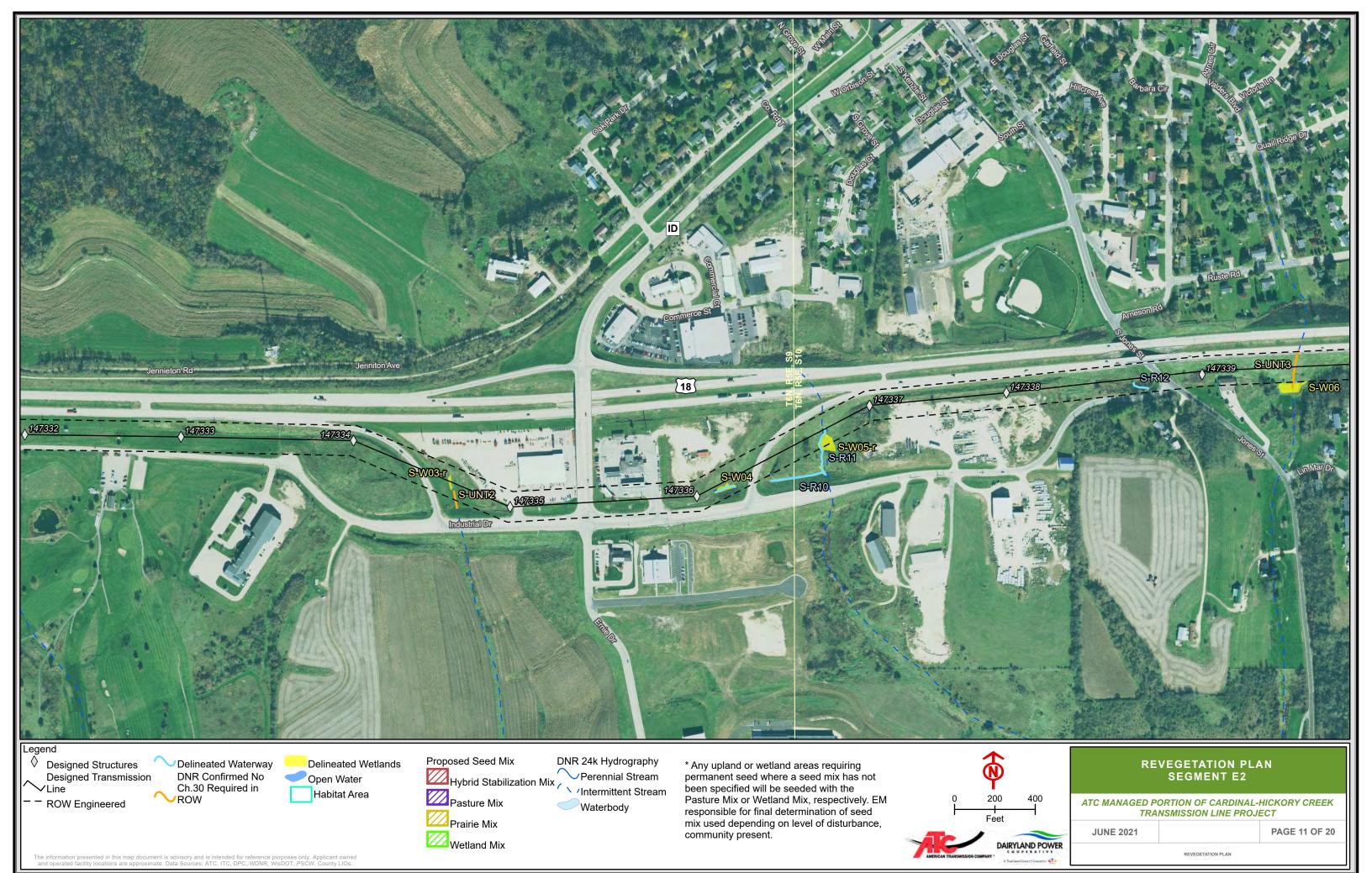


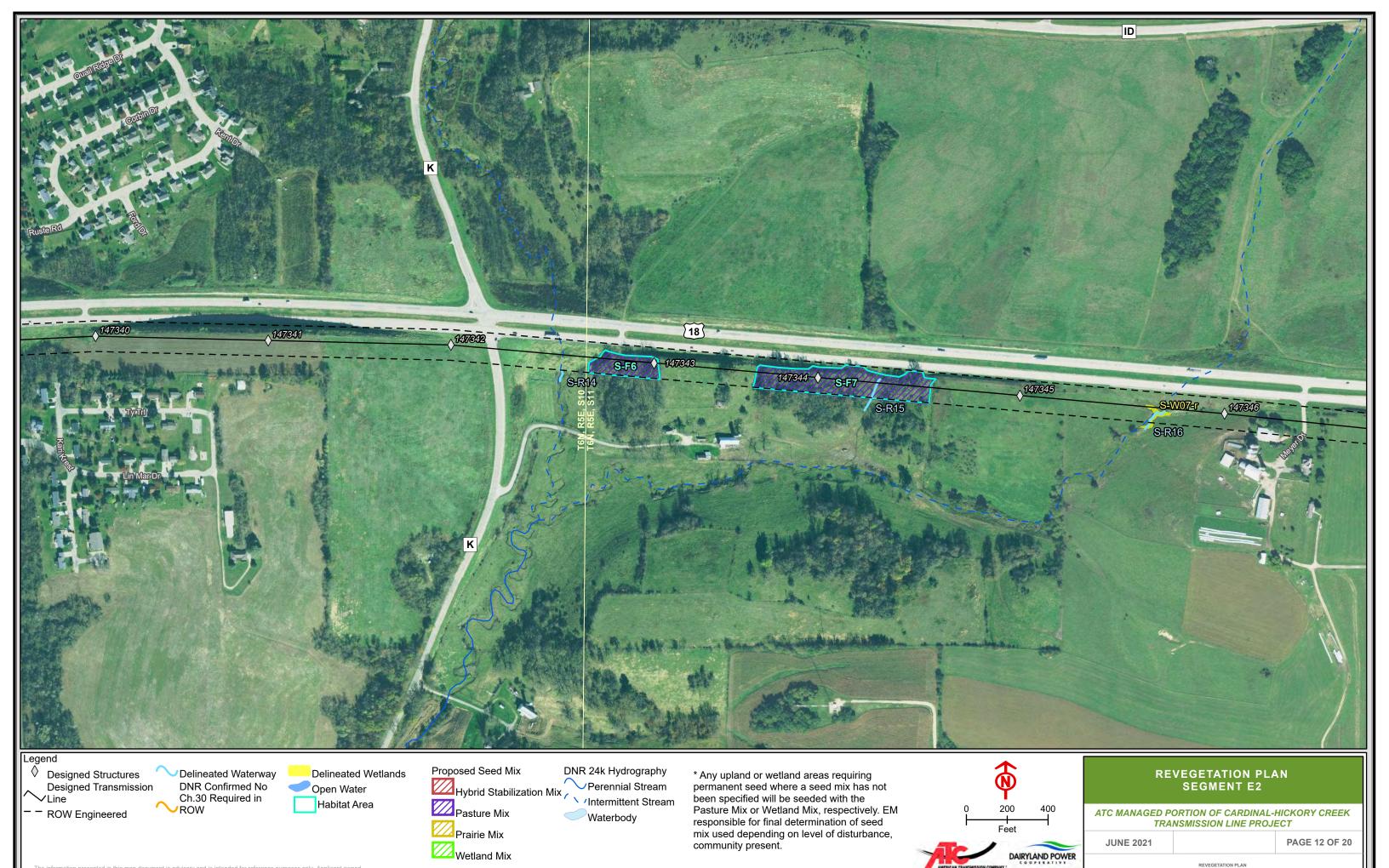




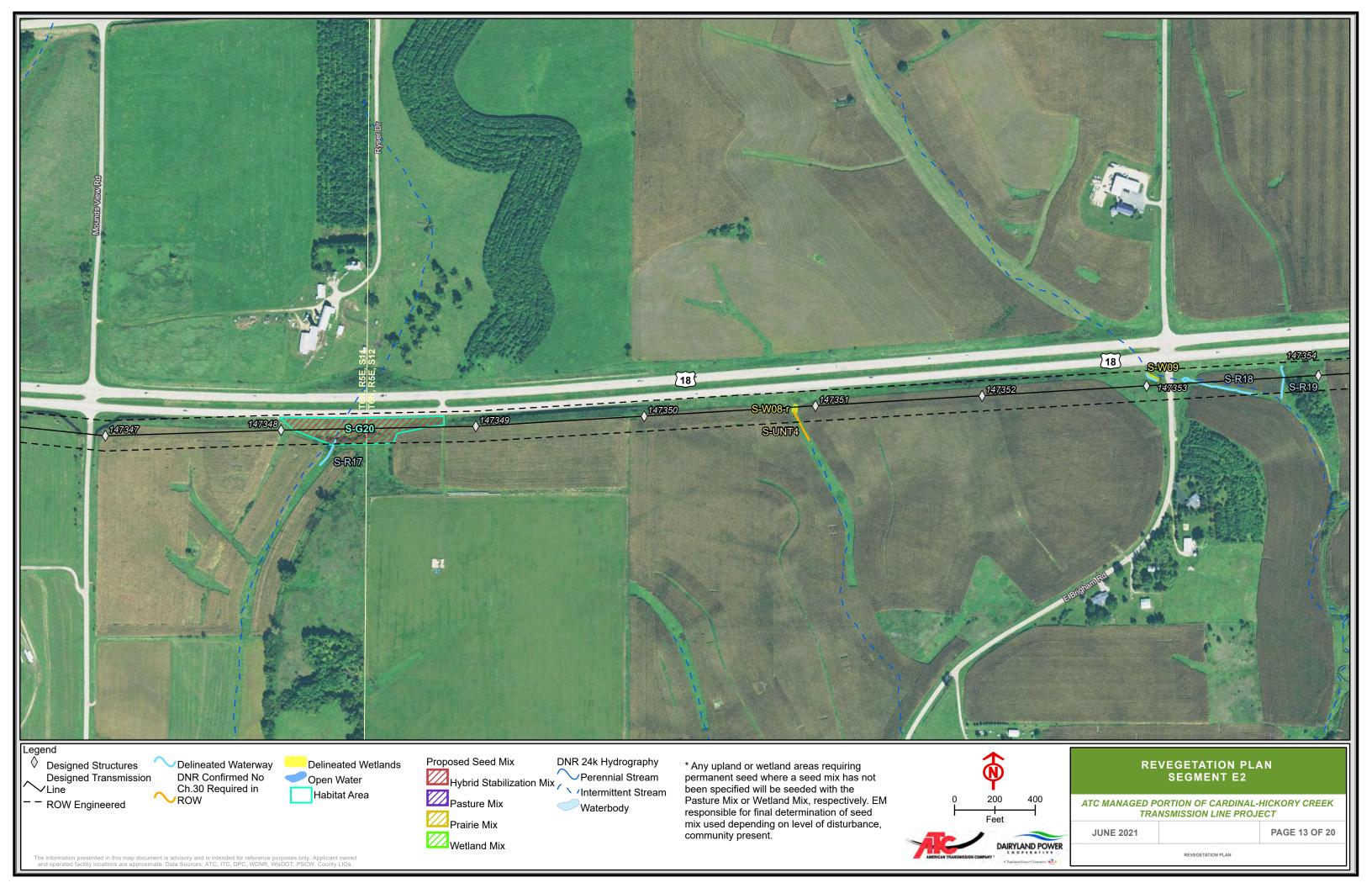


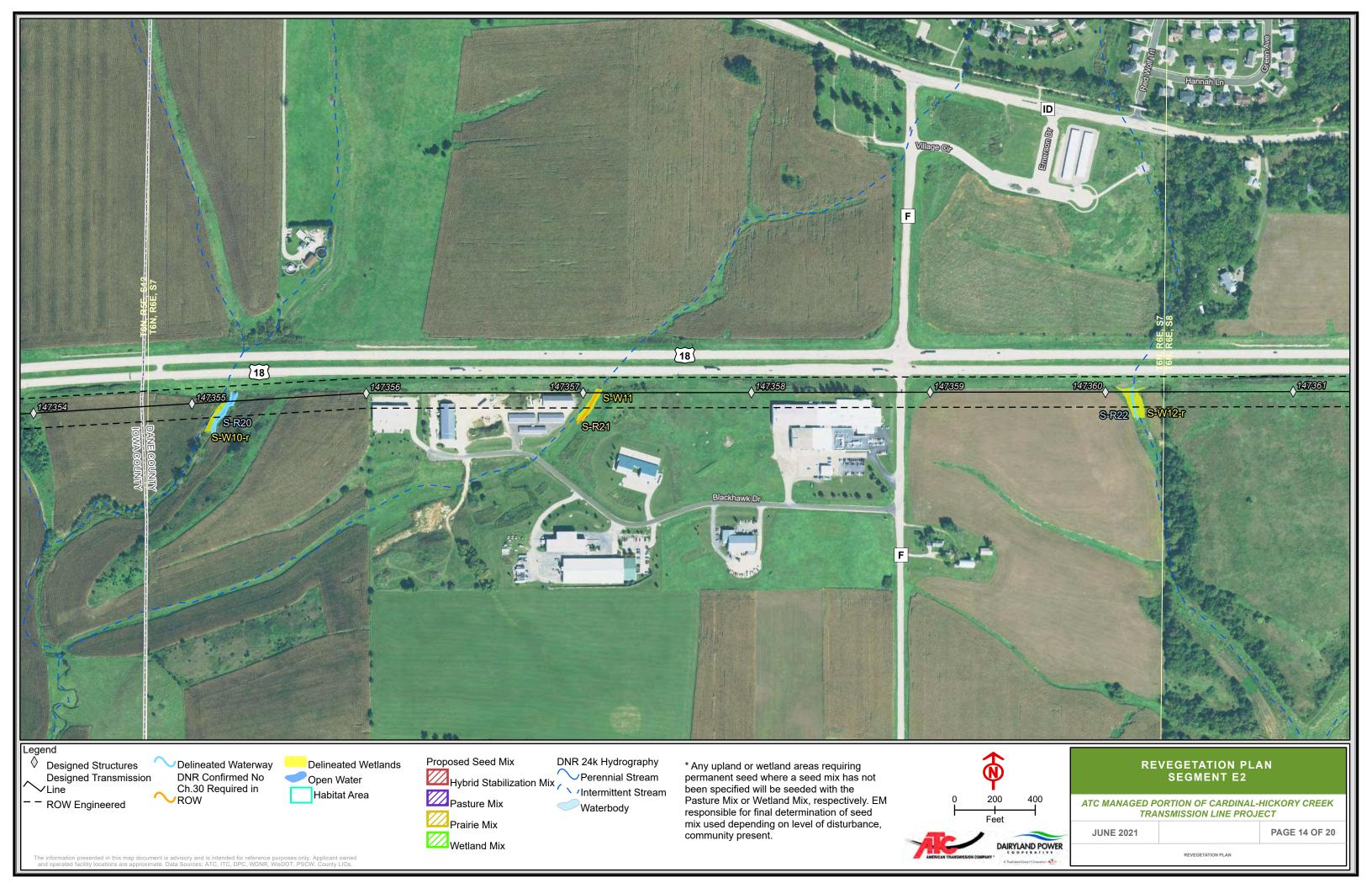


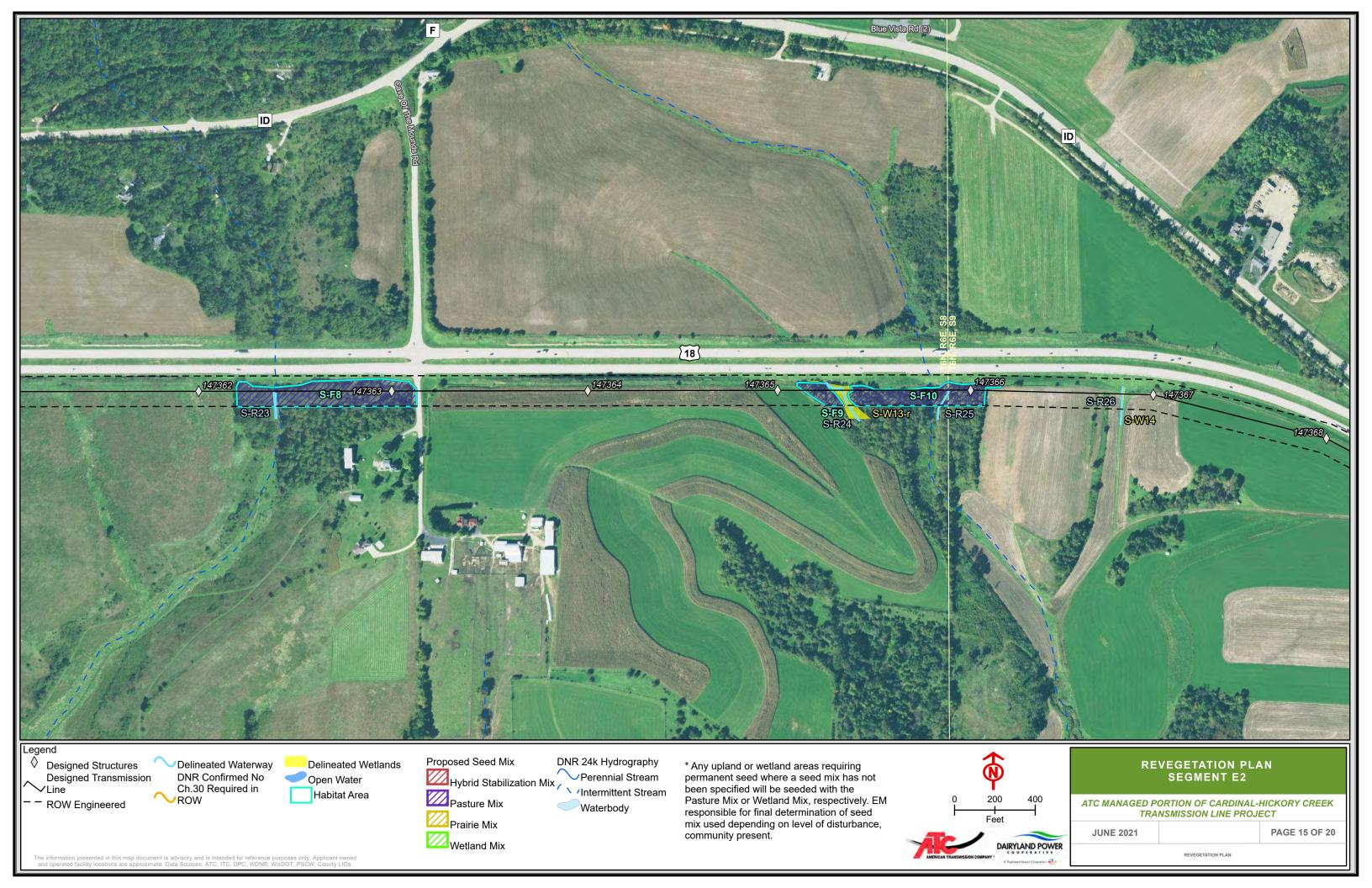


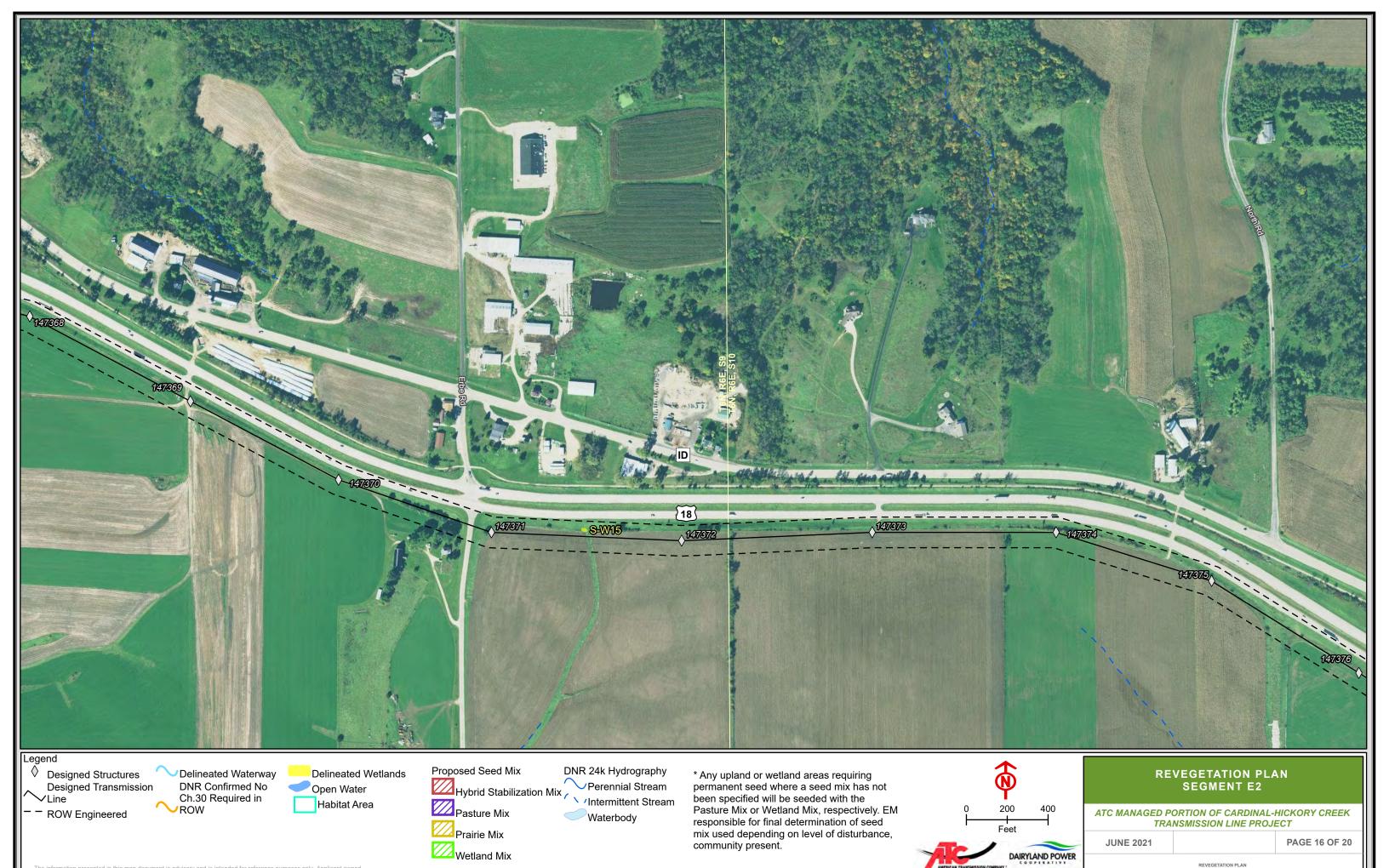


The information presented in this map document is advisory and is intended for reference purposes only. Applicant owned and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs.

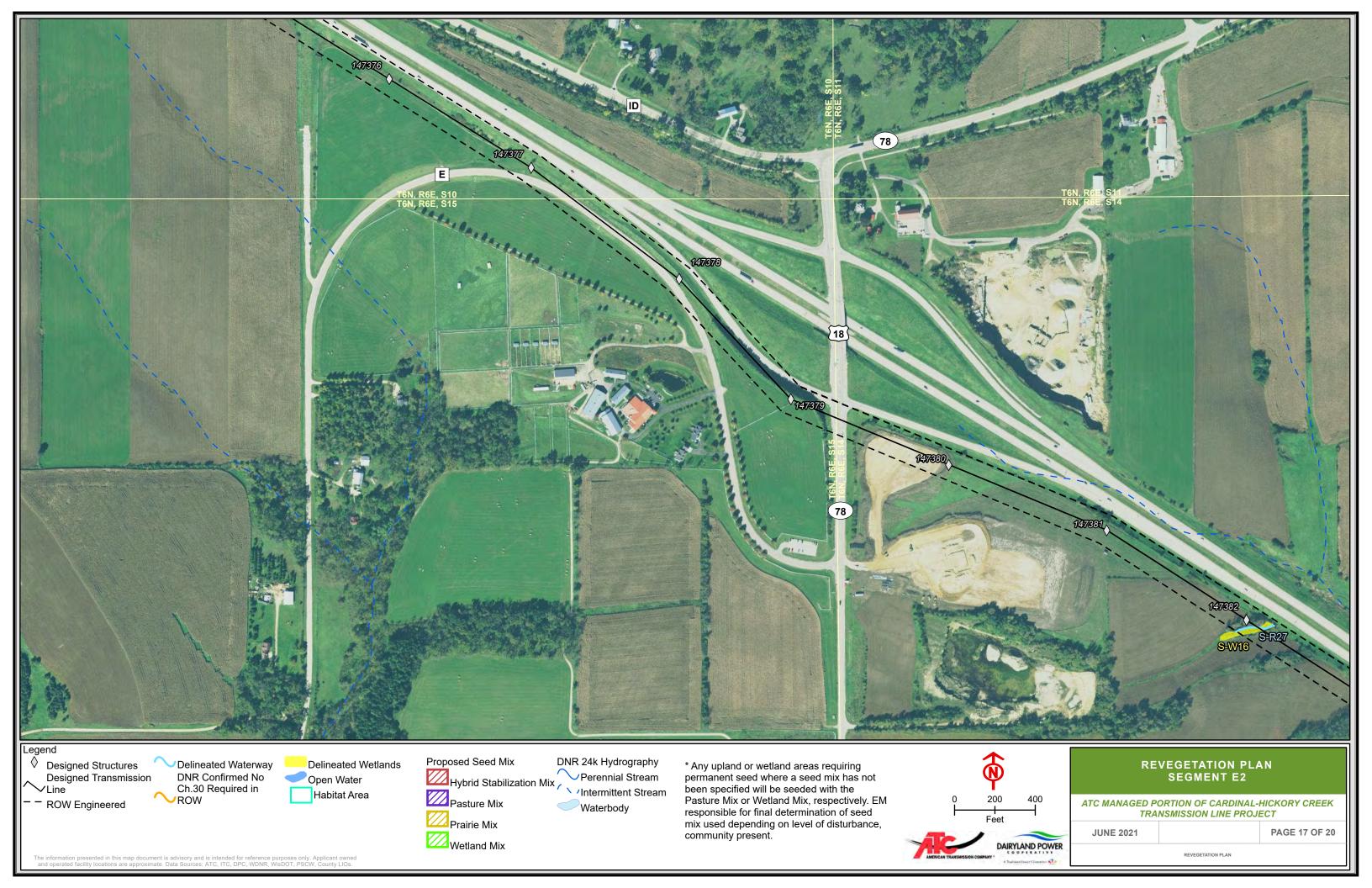


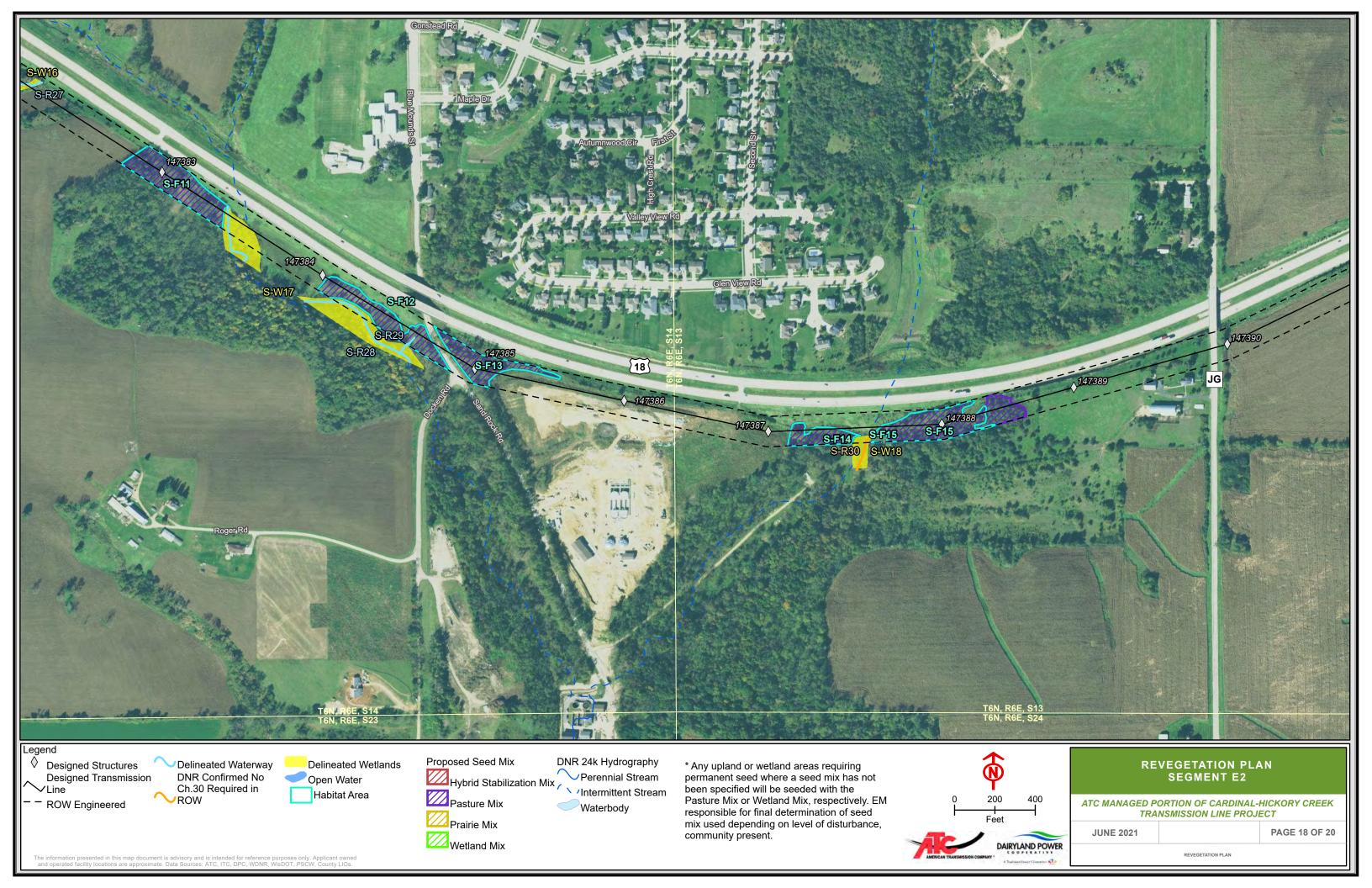


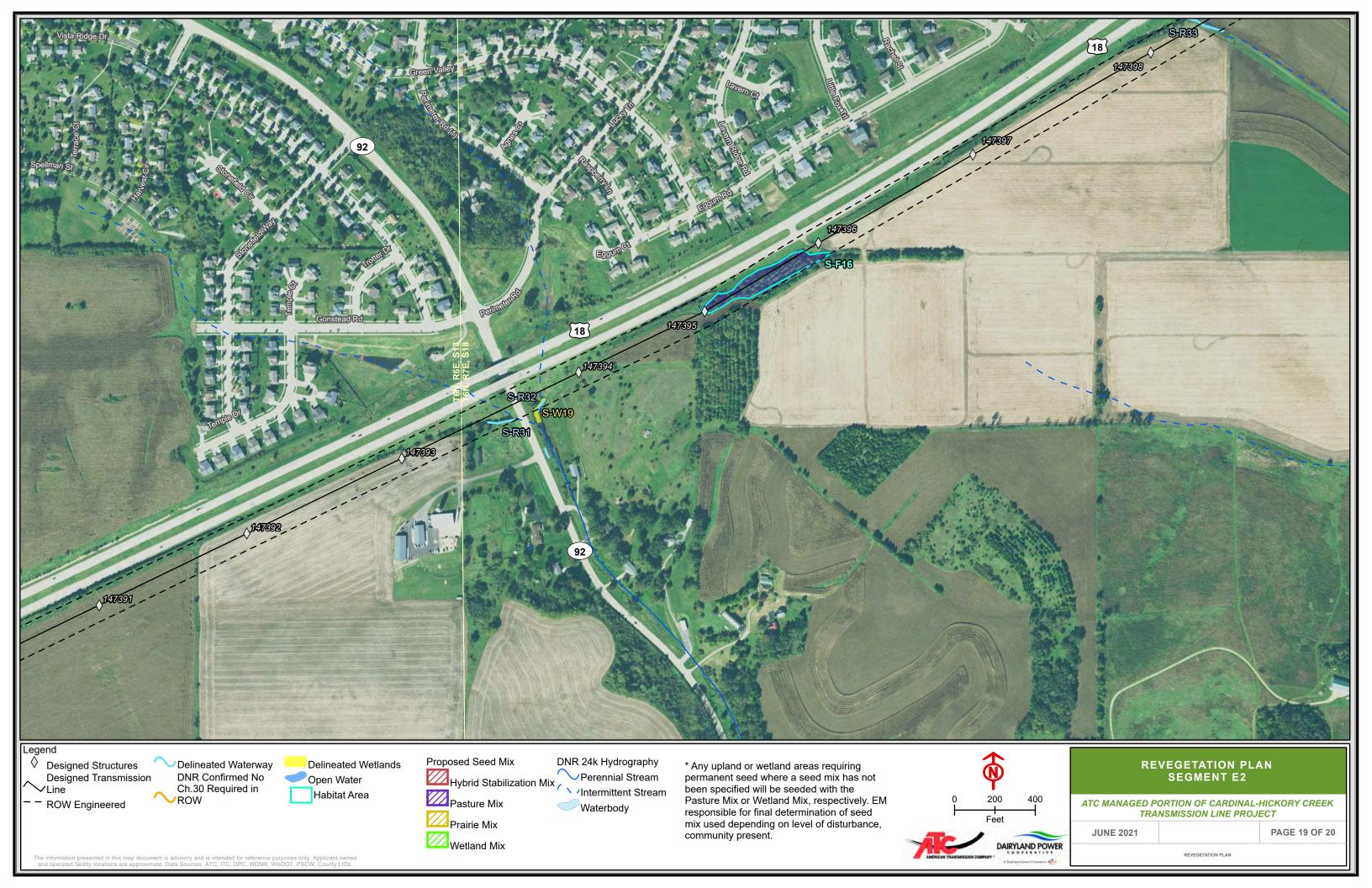


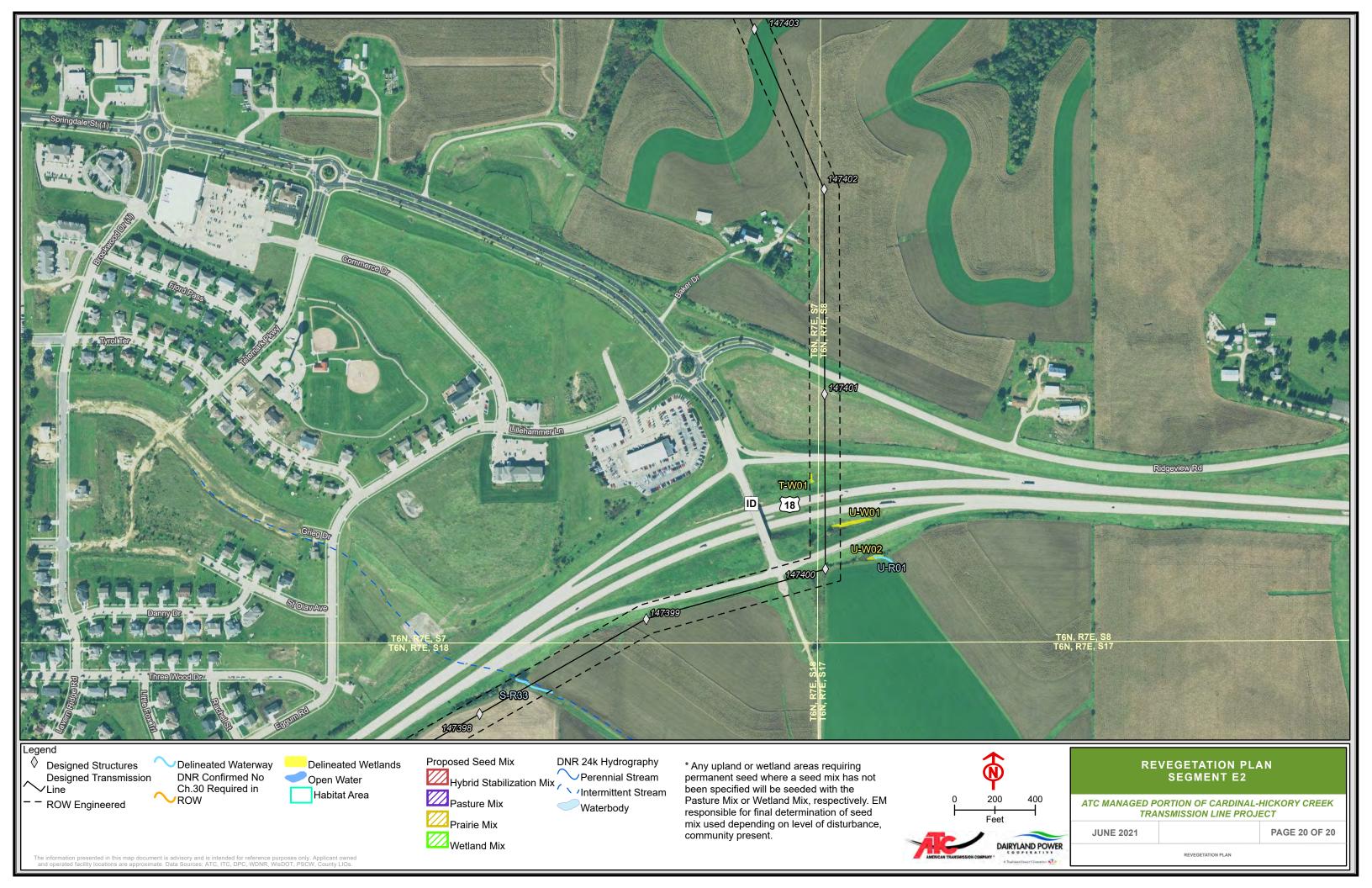


The information presented in this map document is advisory and is intended for reference purposes only. Applicant owned and operated facility locations are approximate. Data Sources: ATC, ITC, DPC, WDNR, WisDOT, PSCW, County LIOs.









# **Attachment P**

# **Structure Removal Process**

# Cardinal-Hickory Creek (ATC) Attachment P1: Existing Structure Removal Procedure

# <u>Upland (non-agricultural areas)</u>

- 1. Wood poles will be completely removed to the extent possible.
- 2. If the old poles cannot be accessed by removal equipment the pole may be cut off at or immediately below the ground level.

### Wetlands

- 1. Old poles can be cut off at ground level or removed, depending on equipment access and condition.
- 2. If poles must be completely removed:
  - a. Segregate topsoil as best as possible and set on a barrier (mats or tarp/fabric)
  - b. Dig out the sub-soil around the pole base and place on a barrier (mats or tarp/fabric)
  - c. Remove the old structure
  - d. Back-fill the old holes with gravel. Fill gravel to approximately 1' below ground level.
  - e. Cover with saved topsoil
  - f. Remove subsoil from the wetland

## Agricultural Areas (non-organic) - Poles must be removed to avoid contact with plows

- 1. Segregate topsoil as best as possible and set aside next to the poles (topsoil placed on topsoil)
- 2. In the event that subsoil is disturbed or removed around the structure, this subsoil should be segregated from topsoil.
  - a. Place disturbed subsoil on a subsoil surface or place it on a barrier (i.e., container, mats or tarp/fabric) to prevent mixing with topsoil.
  - b. Subsoil can be placed in the hole as long as there is 12 inches of topsoil at the top.
- 3. Remove the old structure
- 4. Back-fill the old holes with gravel. Leaving the top 24 inches for sub-soil and topsoil
- 5. Back-fill sub-soil over gravel
- 6. Cover with saved topsoil
- 7. If topsoil was not able to be saved (i.e. frozen conditions or lack of original topsoil), bring in additional topsoil (of equal or better quality) so that depth of topsoil in impact area matches surrounding conditions

### Agricultural Areas (Organic)

Follow same procedure for conventional agricultural fields with the following additions:

- 1. When ordering gravel, specify the gravel is for an organic farm.
- 2. Imported topsoil must be from a certified organic location. If possible, source topsoil and other soil materials from the organic farm where it will be used.

### **Farmed Wetlands**

Follow same procedure for conventional agricultural fields with the following exceptions:

- 1. All stockpiled soil should be placed on a barrier since farmed wetlands are jurisdictional wetlands.
- 2. Topsoil should not be imported without approval from the environmental monitor as imported topsoil can be considered wetland fill.