

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE APPLICATION
OF EAST RIVER ELECTRIC POWER
COOPERATIVE, INC. FOR A PERMIT TO
CONSTRUCT A WAPA NORTH BEND TO
PRATT 230-KV TRANSMISSION LINE**

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**EAST RIVER ELECTRIC POWER
COOPERATIVE INC.'S ANSWERS TO
STAFF'S FIRST SET OF DATA
REQUESTS TO EAST RIVER
ELECTRIC POWER
COOPERATIVE, INC.**

EL24-011

East River Electric Power Cooperative, Inc. ("East River") submits the following answers and responses to Staff's First Set of Data Requests to East River:

1-1) Refer to Sections 2.6 and 2.8.3 and Exhibit 4 of the Application. In Section 2.6, East River states "if this facility is not constructed or delayed, Oahe Electric will not be able to support projected load growth." In Section 2.8.3, East River characterizes Oahe Electric's load growth as "imminent forecasted load growth." In Exhibit 4, East River states "due to the residential and irrigation load growth and concerns with the load-serving capability Oahe's system, Oahe requested an additional substation in the southeast part of Hughes County, SD with an in-service date of summer of 2023."

- a) Please explain what is driving the residential and irrigation load growth in Oahe Electric's service territory.

*East River Response by Mark Hoffman, Chief Operations Officer:
Oahe Electric has seen growth over the past ten years with irrigation loads, new housing along highways 34 and 1804 along with technology growth.*

- b) Are there specific new large irrigation customers looking to connect to Oahe Electric's system? If yes, please explain.

*East River Response by Mark Hoffman, Chief Operations Officer:
The Crow Creek Tribe plans to restart their irrigation program and expand the program on their land.*

c) Please explain why the new substation was delayed from 2023 to 2024.

East River Response by Mark Hoffman, Chief Operations Officer:

Due to other project priorities requested by Oahe Electric it was decided to delay the Lake Sharpe substation to complete the other substation projects for growth. The other projects included a new substation in the Cow Creek area and expansion of another substation west of Onida.

1-2) Refer to Exhibit 1 of the Application. Please verify the accuracy of the substation labels in the Township, Range, and Section call-out, and resubmit if necessary.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
See revised Exhibit 1 for map showing the location of the substation using the Township, Range, and Section call-out.*

1-3) Refer to Section 2.7 of the Application and ARSD 20:10:22:11. Please provide “[...] a map showing prominent features such as cities, lakes and rivers; and maps showing cemeteries, places of historical significance, transportation facilities, or other public facilities adjacent to or abutting the plant or transmission site.” If none of the features listed above are adjacent to or abutting the transmission site, please indicate as such.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
There are no significant features immediately adjacent to the project. The Missouri River is approximately 7.5 miles south, the City of Stephan, SD is approximately 9 miles southeast of the project, as shown below. There is an old schoolhouse site located approximately 1 mile south of the project as can be seen on pg. 74 of 140 in Exhibit 5/5A. The schoolhouse is not considered a historically significant archeological site.*



- 1-4) Refer to Section 2.9 of the Application. When does East River expect to receive approval from the Rural Utilities Service for the project?

East River Response by Jonathan Aus, Engineering & Planning Services Manager: Pratt Substation received approval from the Rural Utility Service on 5/6/24. WAPA North Bend to Pratt 230 kV line received approval from the Rural Utility Service on 5/1/24. Both approvals can be found in Exhibit 12.

- 1-5) Refer to Section 2.9 of the Application and ARSD 20:10:22:13. Please provide an “[...] identification of irreversible changes which are anticipated to remain beyond the operating lifetime of the facility.” If no irreversible changes are identified, please indicate as such.

East River Response by Jonathan Aus, Engineering & Planning Services Manager: No irreversible changes anticipated. Site could be restored to pre-existing condition.

- 1-6) Refer to Section 2.10.1 of the Application. The Applicant states “the Project will not involve any new roads, grading, filling, or other changes to the topography or regional landforms.” Will the substation require any roads, grading or land disturbance? If yes, please explain the construction activities that will occur and quantify the impacted area.

East River Response by Mark Hoffman, Chief Operations Officer:

Local site grading will occur on the East River property to develop the substation pad. An access driveway will be developed for substation egress/ingress, but no new roads will be developed. The topography of the substation pad and access driveway will be the only impacted area. Grading work will tie in with existing topography as to not impede drainage or impact regional landforms.

- 1-7) Refer to Section 2.10.2 and Exhibit 6/6A of the Application. Please submit a topographic map of appropriate scale so the project site can be easily viewed. Please see link for an example of an appropriate scale:
<https://puc.sd.gov/commission/dockets/electric/2024/EL24-015/A4a.pdf>.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
See Attached Exhibits 13-15 for more easily viewed maps of the project area.*

- 1-8) Refer to Section 2.10.3 of the Application and ARSD 20:10:22:14(3). Please provide a map of the bedrock and surficial geology of the project area that uses the topographic map as a base, with sufficient cross sections to depict the major subsurface variations. (See ARSD 20:10:22:14(3)).

*East River Response by Mark Hoffman, Chief Operations Officer:
See attached Exhibit 16. Please refer to the geotechnical report performed by GeoTek in Exhibit 16. The report on pages 28-31 has four different boring logs to 31 feet along with a full report on the results of the field and laboratory tests as well as earthwork and foundation recommendations for design and construction.*

- 1-9) Refer to Section 2.10.4 of the Application and ARSD 20:10:22:14(4). Please confirm that there are no economic deposits of any of the substances listed in ARSD 20:10:22:14(4), including sand and gravel, scoria, and industrial and ceramic quality clay.

*East River Response by Mark Hoffman, Chief Operations Officer:
Please refer to the geotechnical report performed by GeoTek in Exhibit 16.*

- 1-10) Refer to Section 2.10.6 of the Application and ARSD 20:10:22:14(6). The Applicant states “it is not anticipated that the construction of this transmission line or substation will cause erosion or sedimentation problems during the construction or in the future.” Please explain how grading for construction of the substation will not result in the potential for erosion to occur.

East River Response by Mark Hoffman, Chief Operations Officer:

See attached Exhibits 17 and 18. Due to best practices during grading activity, it is not anticipated that any sustained or damaging erosion will occur. The site is relatively flat, native grasses will be left outside of grading extents to help mitigate runoff, and sediment erosion control measures will be placed at the boundary of the site to eliminate any erosion/runoff issues. East River has completed an Erosion Control plan shown in Exhibit 17 and a storm water pollution prevention plan shown in Exhibit 18 which both illustrate steps taken to limit erosion and sedimentation problems.

- 1-11) Refer to Section 2.10.6 of the Application. Will the Project require a Stormwater Pollution Prevention Plan (SWPPP) from DANR? If a SWPPP is not required, please explain what best management practices will be used to control erosion during construction pursuant to ARSD 20:10:22:14(6).

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
Yes, the SWPPP was submitted for Pratt Substation to DANR on 6/19/24, see Exhibit 18 for a copy of the plan. See Exhibit 19 for notice of intent application.*

- 1-12) Refer to Section 2.10.7 of the Application. Please explain how East River will identify any potential difficulties due to seismic activities, subsidence, and slope instability in order to mitigate those difficulties through proper design and construction.

*East River Response by Mark Hoffman, Chief Operations Officer:
Please refer to the geotechnical report performed by GeoTek in Exhibit 16. The exploration is performed on property with a formal written report performed by registered professional engineer, which evaluates sub-surface soil conditions and recommends structural design criteria assumptions of soil. A registered professional engineer then performs design calculations for facilities to interface with existing soil conditions.*

Further, when will East River know if there any geotechnical difficulties that need to be accounted for in Project design and construction?

*East River Response by Mark Hoffman, Chief Operations Officer:
Please refer to the geotechnical report performed by GeoTek in Exhibit 16 which does not indicate any geotechnical difficulties if their design recommendations are followed.*

- 1-13) Refer to Section 2.10.8 of the Application. What methodology did East River use to determine no geological constraints exist within the Project footprint?

East River Response by Mark Hoffman, Chief Operations Officer:

Please refer to the geotechnical report performed by GeoTek in Exhibit 16.

- 1-14) Refer to Section 2.11.1 of the Application. Please explain how drainage patterns before and after construction are displayed on Exhibits 6 and 6A.

East River Response by Mark Hoffman, Chief Operations Officer:

See attached Exhibit 20. Please refer to the grading plan set designed by DGR Engineering in Exhibit 20. The existing draining path drains to the northeastern side of the substation property along with towards the road ditch where it flows north. The proposed drainage of the substation will have a crown in the center of the pad which will sheet flow to the north and to the south. From the pad it will follow the existing drainage to the northeastern side of the property or to the road ditch and flow north. A culvert will be placed below the access driveway to allow the road ditch to flow as it does today.

- 1-15) Refer to Section 2.11.1 of the Application. In Section 2.11.1, the Applicant states since “this Project does not involve any new roads, grading, filling, deforestation, or significant vegetation removal, there will be no changes to the current drainage patterns.” Does the construction of the new substation involve grading and filling? If yes, how does that impact drainage patterns?

East River Response by Mark Hoffman, Chief Operations Officer:

Yes, there is substation site grading. The site grading plan is designed to tie into existing topography and designed to maintain pre-existing drainage on and around the site. Any sheet flow of water from the substation pad is directed towards the natural drainage of the existing topography.

- 1-16) ARSD 20:10:22:16 states, in part, “The applicant shall provide [...] an analysis of the impact of construction and operation of the proposed facility on the terrestrial biotic environment, including breeding times and places [...]”. Does East River have any planned measures to ameliorate negative impacts to grassland nesting birds during the breeding season? Please explain.

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

Per our RUS environmental review, we do not anticipate any grassland nesting impact. Grading and transmission line construction is planned to take place in the fall after the July 10th Administrative Rule 70:04:06:06 mowing regulation at the cessation of grassland nesting bird breeding season.

- 1-17) Refer to Section 2.12.1 of the Application. The Applicant states “the USFWS conditionally concurred with the conclusion that the described project will not adversely affect the whooping crane. The Cooperative will take note of and adhere to the conditional concurrence.” Please identify what actions East River needs to take to comply with USFWS’s conditional concurrence.

East River Response by Jonathan Aus, Engineering & Planning Services Manager: East River shall use their standard Avian Protection Plan to mitigate impact to the whooping crane. See the answer to question 1-18-a for additional information.

- 1-18) Refer to the USFWS’s conditional concurrence letter in Exhibits 5 and 5A of the Application.
- a) For mitigating impacts to whooping cranes, will East River conduct a habitat assessment and mark the transmission lines if needed? Please explain.

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

See attached Exhibit 21. East River adopted revised Engineering Design Standards on December 4, 2019. On pages A-3 and A-4 it describes the avian marking requirements developed, utilizing the Avian Power Line Interaction Committee suggested practices for Avian Protection on Power Lines, for areas within the SUFWS identified Whooping Crane Corridor and outside of the USFWS identified Whooping Crane Corridor. The Engineering Design Standards can be found in Exhibit 21. The corridor is based on the 2008 USFWS United States Central Flyway Whooping Crane Migration Corridor map as found in Exhibit 22. See attached Exhibit 22.

- b) Will East River follow the *Suggested Practices for Avian Protection on Power Lines – The State of the Art in 2006* and *Reducing Avian Collisions with Power Lines, the State of the art in 2012*? Please explain.

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

East River adopted an Avian Protection Plan on October 11, 2010, and further revised on May 20, 2011. The Avian Protection Plan references the Avian Protection on Power Lines – The State of the Art in 2006 and Mitigating Bird Collisions with Power Lines: The State of the Art in 1994. The plan can be found in Exhibit 23. See attached Exhibit 23.

- c) What is the current status of the tricolored bat and did East River need to re-initiate consultation with USFWS for that species? (See Appendix 5A, pg. 86 of 149).

East River Response by Jonathan Aus, Engineering & Planning Services

Manager:

Tricolored bats are no longer on our project endangered species list per our latest consultation with USFWS consultation report ran on 7.10.24. See attached Exhibit 24 for updated USFW endangered species letter for this project area.

- d) What is the current status of the Northern Long-eared bat and did East River need to re-initiate consultation with USFWS for that species? (See Appendix 5A, pg. 86 of 149).

East River Response by Jonathan Aus, Engineering & Planning Services

Manager:

Northern Long-eared Bat status has been added as Endangered species to our new determination report ran on 7.10.24. Based on our latest attached F&WS determination letter, our IPAC submission and standing analysis our project has reached the determination of "No Effect" on the northern long-eared bat. This means we have determined that our proposed action of constructing our transmission line and substation will have no effect on the endangered northern long-eared bat and therefore no consultation with the U. S. Fish and Wildlife Service is required. See exhibit 24 for updated report and letter.

- e) Please provide East River's plans to address USFW's comments regarding the Monarch Butterfly, including any plans for a habitat assessment. (Appendix 5A, pg. 86 of 149).

East River Response by Jonathan Aus, Engineering & Planning Services

Manager:

The transmission line and substation will be constructed on existing cattle pasture ground. This ground along with the road right of way that will be crossed has historically been treated by chemicals that prohibit the growth of milkweed. ERE and associated contractors will proactively manage construction of this project from May through October if milkweed plants are determined to occur in our construction area. If the USFWS makes the determination of Monarch Butterflies being endangered, we will inspect the site for the over 30 species of milkweed plants that die off annually and minimize disturbance of these plants.

- 1-19) Refer to Section 2.12.2 of the Application. Will the entire impacted area (i.e. 4.5 acres) be re-vegetated? Or, will there be permanent impacts as well? Please explain.

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

The substation pad is permanently graded with gravel, otherwise the remainder of the East River parcel will be re-vegetated using a maintenance friendly turf mix. See excerpt below for grading specifications of site seeding material to be used on the project.

TS-9 SEEDING:

A. GENERAL: Seeding operations shall be undertaken only after the seeded areas will not be disturbed by other Contractor operations, but no later than 14 days after final grade is reached. Areas to be seeded include: 1) Excavation and embankment slopes outside the gravel-surfaced area of the substation site, 2) Disturbed areas, except those to receive gravel surfacing, 3) Disposal areas, 4) Drainage ditches, and 5) Borrow areas (not included in quantities).

B. MATERIAL:

1. Fertilizer: Commercial type with 50% of the elements derived from organic sources and containing, by weight, not less than minimum guaranteed analysis of 18-46-0 or 11-52-0 or as approved by the Engineer. Apply fertilizer at a rate of 100 pounds per acre

2. Seed: (Min. of 85% PLS)

Millborn Seeds - Fairground Turf Mix (or approved equal)	
Composition: (Common Name)	# per Acre
Fairway Crested Wheatgrass (20%)	17.5
Creeping Red Fescue (20%)	17.5
Fine-Leaf Perennial Ryegrass (20%)	17.5
Kentucky Bluegrass (25%)	22
Tall Fescue (15%)	13
TOTAL	87.5

3. Mulching Material: Dry hay or straw free from noxious weeds or foreign matter detrimental to plant life. Apply uniformly at a rate of 4,000 pounds per acre.

4. Stabilization Material: Type 2 erosion control blanket as defined by the SDDOT (see SDDOT approved product list). Composed of process degradable 100% excelsior fibers (preferred) or 100% straw with regular to rapidly degrading, synthetic or natural fiber netting on both sides to form a continuous matrix. Functional Longevity of 6-12 months. Install according to manufacturer's recommendation.

5. Water: Free of matter harmful to plant growth.

1-20) Refer to Section 2.13 of the Application. The Applicant states that "the Project does not require any new roads, grading, filling, or other changes to the existing terrain that could cause erosion or sedimentation problems or would change any existing draining patterns." Does the construction of the new substation involve grading and filling? If

yes, how does that impact the assertion cited above regarding the effect on aquatic ecosystems?

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

Yes, there is grading required for the substation pad. No wetlands, streams or rivers have been deemed impacted by this project. Drainage patterns are not changing and there are no categorized waters of the United States located within our area of interest. “Six water feature categories have been excluded from the “waters of the United States” definition in the regulatory text (CFR 328.3 & 51 FR 41217, November 13, 1986). One exempted feature category is ditches (including roadside ditches) excavated wholly in and draining only dry land. An approach would be constructed within an artificially created ditch wetland, which is spatially isolated and has no continuous surface connection to any natural wetland. Therefore, the project would not directly affect aquatic ecosystems, and surface disturbance would be minimal to the point that the potential for indirect impacts on aquatic ecosystems is marginal at most and, if indirect effects occurred, they would be insignificant and temporary. Placing fill in the ditch wetland would not be subject to Section 404 of the Clean Water Act, but if it were – the impact would be authorized under Nationwide Permit 57.”

- 1-21) Refer to Section 2.14.1 of the Application and ARSD 20:10:22:18(1). Please provide a map to meet the requirements of ARSD 20:10:22:18(1). A map produced from the USGS’s National Land Cover Database would suffice: [National Land Cover Database | U.S. Geological Survey \(usgs.gov\)](https://www.usgs.gov/national-land-cover-database). However, East River will need to reconcile the classification system in the administrative rule with the classification system used by the USGS.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
See attached Exhibit 25 for land use map. This project is all within “Pastureland and Rangeland” type land per 20:10:22:18 1.*

- 1-22) Refer to Section 2.14.4 of the Application. Please provide the distance from the proposed substation to the nearest rural residence in order to demonstrate the Project will not cause adverse noise impacts.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
The nearest residences range from approximately 1.7 to 3.8 miles from the Project location – see map below. The substation power transformer is specified to operate at no greater than 70dB max. At well over a mile to the nearest residence, the project will not cause adverse noise impacts.*



1-23) Refer to Sections 2.13 and 2.16 of the Application. In Section 2.13, the Applicant states “the Project does not directly change or impact any natural wetlands, streams, or rivers.” In Section 2.16 of the Application, the Applicant states that the “Project will comply with all applicable federal, state, and local rules and regulations required for alteration of wetlands, streams, or rivers resulting from the Project.”

a) How far is the closest wetlands, streams, or rivers from Project?

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

See attached Exhibit 26 for distances from wetlands.

b) If the project does not directly change or impact any natural wetlands, streams, or rivers, why would it be necessary to comply with rules and regulations required for alteration of wetlands, streams, or rivers resulting from the Project?

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

As part of the RUS approval process, a wetland impact evaluation occurs. General permitting is required per RUS when applicable. As mentioned prior an approach would be constructed within an artificially created ditch wetland,

which is spatially isolated and has no continuous surface connection to any natural wetland. Construction of the project would have minimal surface disturbance, if indirect effects occurred, they would be insignificant and temporary. Placing fill in the ditch wetland would not be subject to Section 404 of the Clean Water Act, but if it were – the impact would be authorized under Nationwide Permit 57.”

- 1-24) Refer to Section 2.16 of the Application. Please identify all state and federal water quality regulations the Project will need to comply with. Further, please identify if the facility will be required to have a Spill Prevention Control and Countermeasure (SPCC) plan.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
There are no additional state or federal water quality regulations that East River is aware of. The site will be enrolled in the company-wide SPCC plan. See attached exhibit 27 for SPCC certification and attached exhibit 28 for SPCC site plan, showing direction of watershed.*

- 1-25) Refer to Section 2.17 of the Application. Please identify all state and federal air quality regulations the Project will need to comply with.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
No impact per BER, see page 142 of Exhibit 5A, for impact map.*

- 1-26) Refer to Section 2.18 of the Application. The Applicant states “the Pratt 230-69 kV substation project will start construction fall of 2024.” When does the Applicant request a decision from the Commission on this docket?

*East River Response by Mark Hoffman, Chief Operations Officer:
East River requests a decision from the Commission on or before October 9th, 2024.*

- 1-27) Refer to Section 2.19.2 of the Application and ARSD 20:10:22:23. Provide a current forecast of the immediate and long-range impact of property and other taxes of the affected taxing jurisdictions.

*East River Response by Mark Hoffman, Chief Operations Officer:
Taxes for the Pratt substation -- East River is purchasing 5.90 acres for the substation site. Based on last year's taxes, East River calculates this to be approximately \$50.00 for 5.9 acres. In consultation with the Hyde County Treasure on July 2, 20224 they are estimating the taxes to be approximately \$117.00. An additional \$73,600 in kWh tax would be paid to the counties on an additional 23,000 MWH of sales per year under SD state statute 10-36-6.*

- 1-28) Refer to Section 2.19.3 of the Application. The Applicant states “should damage occur to crops during construction of this Project, landowners are reimbursed for damages as a normal part of easement costs.” Will the Project impact any landowners that may need to be reimbursed for damages occurred to crops during construction? Please explain.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
No damages are anticipated as no row crops are present in the immediate project area. If damages occur, East River will reimburse and or make right any property damages to adjacent private landowners.*

- 1-29) Pursuant to ARSD 20:10:22:23(6), provide applicant’s plans to coordinate with the local and state office of disaster services in the event of an accidental release of contaminants from the proposed facility.

*East River Response by Mark Hoffman, Chief Operations Officer:
East River will coordinate with the local and state office of disaster services in the event of an accidental release of contaminants from the proposed facility. East River maintains an Emergency Restoration plan. The plan was developed in accordance with the Rural Utility Service Bulletin 1730B-2.*

- 1-30) Please provide a plan or policy statement on decommissioning the transmission line and associated facilities.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
Decommissioning the transmission line and associated facilities would trigger a reclamation effort by East River. In a full reclamation effort, subgrade materials (poles, conduit, grounding, etc.) would be removed as well as above grade equipment and surfacing material. The site would be seeded back with grass.*

- 1-31) Refer to Section 2.20 of the Application and ARSD 20:10:22:24. Provide the following pursuant to administrative rule:

- a) the estimated number of jobs and a description of job classifications, together with the estimated annual employment expenditures of the applicants, contractors, and subcontractors during the construction phase of the application;

*East River Response by Mark Hoffman, Chief Operations Officer:
East River estimates that 55 employees will be used on the completion of the project by East River, our contractors and sub-contractors. It is estimated that over \$2,100,000 in labor dollars will be spent on the completion of the project.*

Job classifications included in the completion of this project would include Craftworkers and Professionals.

- b) plans of the applicant for utilization and training of the available labor force in South Dakota by categories of special skills required; and

East River Response by Mark Hoffman, Chief Operations Officer:

East River will hire contractors and utilize the internal work force that have gone through post high school education and specialized apprenticeship training.

- c) an assessment of the adequacy of local manpower to meet temporary labor requirements during construction of the Project.

East River Response by Mark Hoffman, Chief Operations Officer:

East River will hire contractors to perform the construction of the project. The contractors and subcontractors will evaluate local manpower as able to perform the necessary tasks.

- 1-32) Refer to Section 2.23.5 of the Application. Provide a list of NESC electrical and safety codes that the project will comply with.

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

East River Electric meets or exceeds all applicable sections of the NESC code as shown in the following parts:

- *Part 1: Safety Rules for the Installation and Maintenance of Electric Supply Stations and Equipment*
- *Part 2: Safety Rules for the Installation and Maintenance of Overhead Electric Supply and Communication Lines*
- *Part 4: Work Rules for the Operation of Electric Supply and Communication Lines and Equipment*

- 1-33) Referring to the Pratt Substation Site Plan in Exhibit 11 and the call-out text that states the “existing water line to be rerouted by the owner prior to construction,” please identify who is the “owner” that is obligated to reroute the water line. Further, if the owner is someone other than East River, please explain how they will be compensated for the costs incurred to move the water line for the Project.

East River Response by Jonathan Aus, Engineering & Planning Services Manager:

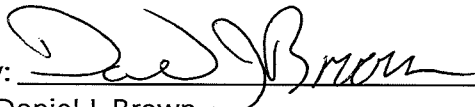
“Owner” refers to East River Electric in the construction prints in Exhibit 11. East River will cover the costs to relocate a private waterline for Lawrence Peterson (previous owner).

- 1-34) Refer to Section 2.24 of the Application. The Applicant states “the Application contains all information necessary for the local review committees to assess the effects of the proposed facilities pursuant to SDCL 49-41B-7 and 49-41B-11.” Pursuant to SDCL 49- 41B-6, please confirm this Project is not subject to a local review committee assessment.

*East River Response by Jonathan Aus, Engineering & Planning Services Manager:
We received conditional use approval from Hyde County. See exhibit 11 for an approved and signed copy of the Hyde County CUP. There are no established townships in this area. There are no further review committee assessments needed.*

Dated this 23rd day July 2024.

East River Electric Power Cooperative, Inc.

By: 
Daniel J. Brown

General Counsel

East River Electric Power Cooperative, Inc.

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April 30, 2024

Bob Sahr, CEO
East River Electric Power Cooperative
PO Box 227
Madison, SD 57042

RE: SD 43 Minnehaha - Amendment #17 to 2023-2026 CWP

Dear Mr. Sahr:

Amendment #17: (Code 805-0006) to construct the WAPA North Bend to Pratt tie at an estimated cost of \$766,000 to the Cooperative's 2023-2026 Construction Work Plan has been reviewed and is hereby approved, **contingent upon a written environmental finding by the Office of Loan Origination and Approval in Washington, DC. No construction should start until such approval is received.**

The amendment is being electronically submitted to the Office of Loan Origination and Approval in Washington for its records and further use.

This approval does not pertain to the use of materials not included in Informational Publication 202-1 List of Materials Acceptable for Use on Systems of RUS Electrification Borrowers. Construction or modification of any facilities included in the CWP is subject to the conditions and requirements of 7 CFR Parts 1700-1799. All construction must conform with provisions of the latest edition of the National Electric Safety Code (NESC) and all local, more stringent codes.

It is the Board's responsibility to determine whether loan funds and/or general funds are available for the proposed construction. Particular reference should be made to 7 CFR 1721.1 requiring RUS approval of the Construction Work Plan or amendments as a condition to loan fund advances.

Please note that this approval hereby amends East River Electric's current RUS loan to include these projects thus making them eligible for funding.

Sincerely,

Thomas Jones
RUS General Field Representative

Amendment to Current Approved
Construction Work Plan

Amendment #17 Borrower Designation South Dakota 43 Minnehaha

Work Plan Period 2023-2024

Change(s) Proposed

Addition to Work Plan

805-0006 WAPA North Bend to Pratt Tie \$766,000

As East River Electric Power Cooperative, Inc. (East River) will utilize the new Rural Utilities Service Construction Work Plan Financing procedure, no reclassification of loan funds will be identified for this Construction Work Plan Amendment.

Reason(s) for Change(s)

WAPA North Bend to Pratt Tie

This new 0.25-mile long 230 kV line will provide a tie line from a new interconnection with WAPA North Bend (loan code 1005-0205) to the new East River Pratt substation (loan code 1005-0204). This project will be built with 795 ACSR to handle proposed and future area loads. The line will be constructed above ground. The line will be constructed with OPGW for the shield wire to improve communications to the area.

The line design has been previously approved by RUS and Cooperative acknowledges 7CFR 1724.51 Design requirements.

East River will attempt to obtain private easements on this project to place the structures 2 feet into private property. In the event an easement is unable to be obtained, the structures will be placed 2 feet into public ROW.

The purpose of the new tie line is to strengthen East River's transmission system in the Hughes and Hyde County areas within Oahe Electric Cooperative and Dakota Energy Cooperative's service territories. This tie would provide for a 230 kV source into the 230-69 kV Pratt substation where the 69 kV will be built for an ultimate ring bus layout. This substation configuration will provide for the ability to tie the Oahe system to the rest of East River's transmission system and an additional source to the area.

This line design has been previously approved by RUS and Cooperative acknowledges 7CFR 1724.51 Design requirements.

Construction Contracting (Per 7CFR 1726): RUS Contract 830 Form will be used if work is performed by outside construction. Contract will not be subject to RUS approval per the dollar threshold of less than 1% of NTP not to exceed \$4,500,000.

Construction Bidding (Per 7CFR 1726): Cooperative will utilize Borrower Responsibility or Formal Competitive Bidding per the dollar threshold of greater of less than 1% of NTP not to exceed \$5,000,000.

Alternatives to this project would be to continue to operate our system as it is today without a new 230 kV source to the Pratt substation.

We feel the proposed project is the best alternative to improve the reliability of service to its members.

The estimated cost is \$766,000

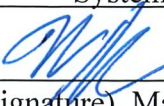
Method of Financing

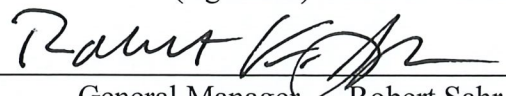
Loan Funds YES
General Funds _____
Contributions in Aid _____

Status of Borrowers Environmental Report Attached

Estimated Cost \$766,000

Engineering Support Attached System map and oneline

Registered Engineer  9754
(as required) (signature) Mark D. Hoffman (P.E. number)

Requested by  Date 12/19/23
General Manager Robert Sahr

*Approved by _____ Date _____
RUS, GFR

Subject to BER approval? Yes X No _____

Status of Construction: Construction on the project will not begin until the approval of this amendment and subsequent BER approval.

USDA Rural Development Environmental Checklist for Categorical Exclusions

Applicant Name: East River Electric Power Cooperative Inc. (SD 43) Project Name: WAPA North Bend to Pratt Tie - Amendment 17

Agency Program: Electric Program

Federal Action: ☒ Loan ☐ Grant ☐ Guarantee ☐ Construction Work Plan or Loan/System Design

General Project Location: Hyde County, SD

Project Description: This new 0.25-mile long 230 kV line will provide a tie line from a new interconnection with WAPA North Bend the new East River Pratt substation (loan code 1005-0204). This project will be built with 795 ACSR to handle proposed and future area loads.

Purpose and Need: The purpose of the new tie line is to strengthen East River™s transmission system in the Hughes and Hyde County areas within Oahe Electric Cooperative and Dakota Energy Cooperative™s service territories.

Level of Review ☐ 1970.53

Determination: ☒ 1970.54

List Appropriate CE(s): (c)(2)(iii)

ER Prepared?

☒ Yes ☐ No

The ER is in EHPD files.

Resource Summary:

Conditions?

Historic Properties: No historic properties affected in accordance with 36 CFR § 800.4(d)(1). ☐

ESA Listed Species and/or Critical Habitat: No Effect ☐

Wetlands Protection: No Wetlands Identified or Present ☐

Floodplains: No Floodplain present ☐

Formally Classified Lands: No Formally Classified Lands Present ☐

Streams, Lakes, and Rivers: No Streams, Lakes or Rivers Identified or Present ☐

Coral Reef/Protected Coastal Habitat: No Coral Reef/Protected Aquatic Habitat Present ☐

Important Farmland: Activity not subject to FPPA ☐

Questions:

Is the proposal located within a Barrier Resources System (CBRA) unit?	☐ Yes ☒ No
Is CZMA consistency concurrence required, and if so, has the concurrence been issued, objected to, or pres	☐ Yes ☒ No
Does the project threaten a violation of local, state, or federal statutory, regulatory, or permitting requirements?	☐ Yes ☒ No
Is the proposal located within EPA designated Non Attainment or Maintenance Areas for Air Quality Criteria Pollutants?	☐ Yes ☒ No
Does the proposal result in the production of unpermitted hazardous materials or waste, or consist of construction of a new RCRA hazardous materials handling facility?	☐ Yes ☒ No
Does the proposal have any Environmental Justice concerns or disproportionately high and adverse human health or environmental effects on minority populations or low-income populations?	☐ Yes ☒ No
Is the proposal controversial for environmental reasons?	☐ Yes ☒ No
Is the proposal controversial for other than environmental reasons?	☐ Yes ☒ No
Is the proposal located in a wellhead-protection area?	☐ Yes ☒ No

USDA Rural Development Environmental Checklist for Categorical Exclusions

Applicant
Name:

East River Electric Power Cooperative Inc. (SD 43)

Project
Name:

WAPA North Bend to Pratt Tie - Amendment 17

Will the project adversely affect a sole source aquifer?

☐ Yes ☒ No

Is the project located within a watershed covered by watershed management plan?

☐ Yes ☒ No

Justification &
Special
Considerations:

Project Conditions to be placed in Loan and Construction Documents:

Applicant is responsible for acquiring the necessary permits for construction and operation of the projects and adhering to all environmental commitments made regarding construction and maintenance of the proposed projects. An inadvertent discovery provision, developed in accordance with 36 CFR § 800.13(b) and (c), will be included as a condition of obligation in order to address any historic properties which might be inadvertently discovered or affected during project construction.

Finding: ☐ 1970.53 w/o conditions ☐ 1970.53 w/ conditions ☒ 1970.54 w/o conditions ☐ 1970.54 w/ conditions

Upon review of the project description, Environmental Report (ER) and all supporting documentation, I find that the proposal meets the criteria established in §1970.54, fiCategorical Exclusions Involving Small-scale Developmentfl and consistent with 40 C.F.R. § 1508.1(d). The proposed activity does not have any extraordinary circumstances, nor will it individually or cumulatively have a significant effect on the human environment; therefore, neither an Environmental Assessment nor an Environmental Impact Statement is required as proposed.

CERTIFICATION

Signature of Preparer

Apr 24, 2024

Date

Nicholas Dawson

Name of Preparer

Environmental Protection Specialist

Preparer Title

Signature of Agency EPS or SEC

May 1, 2024

Date

Robert Deems

Name of Agency EPS or SEC

Branch Chief

Agency EPS or SEC Title

Signature of Agency Approving Official

May 1, 2024

Date

Mark Bartholomew

Name of Agency Approving Official

Supervisory General Field Representative

Agency Approving Official Title

May 1, 2024

Bob Sahr, CEO
East River Electric Power Cooperative
PO Box 227
Madison, SD 57042

RE: SD 43 Minnehaha - Amendment #18 to 2023-2026 CWP

Dear Mr. Sahr:

Amendment #18: (Code 1005-0204) to construct the Pratt Substation at an estimated cost of \$5,600,000 to the Cooperative's 2023-2026 Construction Work Plan has been reviewed and is hereby approved, **contingent upon a written environmental finding by the Office of Loan Origination and Approval in Washington, DC. No construction should start until such approval is received.**

The amendment is being electronically submitted to the Office of Loan Origination and Approval in Washington for its records and further use.

This approval does not pertain to the use of materials not included in Informational Publication 202-1 List of Materials Acceptable for Use on Systems of RUS Electrification Borrowers. Construction or modification of any facilities included in the CWP is subject to the conditions and requirements of 7 CFR Parts 1700-1799. All construction must conform with provisions of the latest edition of the National Electric Safety Code (NESC) and all local, more stringent codes.

It is the Board's responsibility to determine whether loan funds and/or general funds are available for the proposed construction. Particular reference should be made to 7 CFR 1721.1 requiring RUS approval of the Construction Work Plan or amendments as a condition to loan fund advances.

Please note that this approval hereby amends East River Electric's current RUS loan to include these projects thus making them eligible for funding.

Sincerely,

Thomas Jones
RUS General Field Representative

Amendment to Current Approved
Construction Work Plan

Amendment #18 Borrower Designation South Dakota 43 Minnehaha

Work Plan Period 2023-2024

Change(s) Proposed

Addition to Work Plan

1005-0204

Pratt Substation

\$ 5,600,000

As East River Electric Power Cooperative, Inc. (East River) will utilize the new Rural Utilities Service Construction Work Plan Financing procedure, no reclassification of loan funds will be identified for this Construction Work Plan Amendment.

Reason(s) for Change(s)

Pratt Substation

The Pratt Substation is a new facility required to accommodate planned and projected load growth and to mitigate planning criteria violations. Pratt Substation will be a 230-69kV substation constructed at or near the location of WAPA's North Bend Switching Station (loan code 1005-0205).

Station Design: The substation will feature a 230 kV line terminal, a new 230-69 kV transformer and a 69 kV terminal build for a future ring to provide 69 kV sources for member cooperatives Oahe Electric, Central Electric and Dakota Energy. The 230-69 kV transformer will be rated 36/48/60 MVA and include an LTC. The 69kV yard will initially have a terminal for the Pratt to Lake Sharpe tie line (loan code 805-0005) with future network capabilities for additional 69kV lines for the area to provide better protection coordination, reliability and redundancy in transmission service. This substation design has been previously approved by RUS. The Cooperative acknowledges 7CFR 1724.51 design requirements. East River will install equipment necessary for SCADA monitoring and control, communications systems required to provide the necessary communication link to support the substation and equipment necessary to continue our load management system in the area.

Substation Land: East River has acquired a purchase agreement for the property and will own the property where the substation will be located. East River will purchase 5.90 acres of land. The legal description of the substation is: Lot 1 of the Pratt Substation Addition in the Southwest Quarter, Section 15, Township 110 North, Range 73 West of the 5th Principal Meridian, Hyde County, South Dakota. (see attachment)

Construction Contracting (Per 7CFR 1726): RUS Contract 830 Form will be used if work is performed by outside construction. Contract will not be subject to RUS approval per the dollar threshold of less than 1% of NTP not to exceed \$4,500,000.

Construction Bidding (Per 7CFR 1726): Cooperative will utilize Borrower Responsibility or Formal Competitive Bidding per the dollar threshold of greater of less than 1% of NTP not to exceed \$5,000,000.

Cost Estimate:

Switches	130,000
Transformer	2,806,000
Substation	904,000
Breakers	205,000
Relay Panels	135,000
Grading	170,000
SCADA/Communications	250,000
Building	310,000
Land	90,000
Engineering & Contingency	600,000
Total Project	5,600,000

Delivery Point: This substation is a new delivery point for the Cooperatives Transmission System.

Line Modifications:

The project will include new line build in the Pratt to Lake Sharpe tie line (loan code 805-0005) project and the WAPA North Bend to Pratt Tie (loan code 805-0006). The lines will be built with 477 ACSR and 795 ACSR, respectively, to handle proposed and future area loads with OPGW installed as the shield wire. The line will be constructed above ground. The typical structure will be a single wood pole with stand-off insulators. The average height of the poles will be 70 feet and set into the ground 9 feet in a 3 feet diameter hole. Future 69 kV lines built into the substation will be included on separate loan codes in future CWP.

This line design has been previously approved by RUS and Cooperative acknowledges 7CFR1724.51 design requirements.

Alternatives: An alternative is to not construct the substation and to continue to serve the load from existing substations. In doing this we would strain the transmission system and reduce reliability as loads continue to grow in this area and continue with low voltage issues.

The estimated cost is \$5,600,000.

Method of Financing

Loan Funds YES
General Funds _____
Contributions in Aid _____

Status of Borrowers Environmental Report Attached

Estimated Cost \$5,600,000

Engineering Support Attached Station Drawings, Plat, System One-Line

Registered Engineer  9754
(as required) (signature) Mark D. Hoffman (P.E. number)

Requested by  Date 12/19/23
CEO/General Manager Robert Sahr

*Approved by _____ Date _____
RUS, GFR

Subject to BER approval? Yes X No _____

Status of Construction: Construction on the project will not begin until the approval of this amendment
and subsequent BER approval.

USDA Rural Development Environmental Checklist for Categorical Exclusions

Applicant Name: East River Electric Power Cooperative Inc (SD43) Project Name: Pratt Substation-Amendment 18

Agency Program: Electric Program

Federal Action: ☒ Loan ☐ Grant ☐ Guarantee ☐ Construction Work Plan or Loan/System Design

General Project Location: West of the 5th Principal Meridian, Hyde County, South Dakota

Project Description: Pratt Substation will be a new 230-69kV substation. This will feature a new 230 kV line terminal, a new 230-69kV transformer and a 69 kV terminal built for a future ring to provide 69 kV to other member cooperatives.

Purpose and Need: To accommodate planned and projected load growth, as well as to mitigate planning criteria violations.

Level of Review Determination: ☐ 1970.53 ☒ 1970.54 List Appropriate CE(s): 7 CFR 1970.54(c) (1) ER Prepared? ☒ Yes ☐ No

The ER is in EHPD files.

Resource Summary: Conditions?

Historic Properties: No historic properties affected in accordance with 36 CFR § 800.4(d)(1). ☐

ESA Listed Species and/or Critical Habitat: May Affect - Not Likely to Adversely Affect ☒

Wetlands Protection: Wetlands Present - General Permit Required ☒

Floodplains: No Floodplain present ☐

Formally Classified Lands: Formally Classified Lands Present with no Conditions ☒

Streams, Lakes, and Rivers: No Streams, Lakes or Rivers Identified or Present ☐

Coral Reef/Protected Coastal Habitat: No Coral Reef/Protected Aquatic Habitat Present ☐

Important Farmland: Activity not subject to FPPA ☐

Questions:

Is the proposal located within a Coastal Barrier Resources System (CBRS) unit?	☐ Yes ☒ No
Is CZMA consistency concurrence required? ☐ Yes ☒ No If so, has the concurrence been issued or presumed?	☒ Yes ☐ No
Does the project threaten a violation of local, state, or federal statutory, regulatory, or permitting requirements?	☒ Yes ☐ No
Is the proposal located within EPA designated Non Attainment or Maintenance Areas for Air Quality Criteria Pollutants?	☐ Yes ☒ No
Does the proposal result in the production of unpermitted hazardous materials or waste, or consist of construction of a new RCRA hazardous materials handling facility?	☐ Yes ☒ No
Does the proposal have any Environmental Justice concerns or disproportionately high and adverse human health or environmental effects on minority populations or low-income populations?	☐ Yes ☒ No
Is the proposal controversial for environmental reasons?	☐ Yes ☒ No
Is the proposal controversial for other than environmental reasons?	☐ Yes ☒ No
Is the proposal located in a wellhead-protection area?	☐ Yes ☒ No

USDA Rural Development Environmental Checklist for Categorical Exclusions

Applicant Name: East River Electric Power Cooperative Inc (SD43) Project Name: Pratt Substation-Amendment 18

Will the project adversely affect a sole source aquifer? ☐ Yes ☒ No

Is the project located within a watershed covered by watershed management plan? ☐ Yes ☒ No

Justification &
Special
Considerations:

Project Conditions to be placed in Loan and Construction Documents:

Applicant is responsible for acquiring the necessary permits for construction and operation of the projects and adhering to all environmental commitments made regarding construction and maintenance of the proposed projects. An inadvertent discovery provision, developed in accordance with 36 CFR § 800.13(b) and (c), will be included as a condition of obligation in order to address any historic properties which might be inadvertently discovered or affected during project construction.

ESA Listed Species and/or
Critical Habitat Conditions:

Tree clearing restriction from April-October (to avoid impacts to Tricolored Bat, Nothorn Long-Eared Bat, Piping Plover, and Red Rufa Knot). Avoid impacts to water resources (to avoid impacts to Pallid Sturgeon). To avoid impacts to Whooping Cranes: incorporate measures to prevent avian electrocutions, avoid construction disturbance during bird migration in the spring and fall, and leave the area if Whooping Cranes are spotted during construction (return once the birds have left the area on their own).

Wetlands Protection
Conditions:

Minimize disturbance to wetland areas. Poles that do not span wetlands will be augured.

Formally Classified
Lands Conditions:

Project will have no impact to adjacent State-Owned Land. The Project will be contained within Applicant owned land, as well as along an existing public ROW and previously disturbed road ditch.

Finding: ☐ 1970.53 w/o conditions ☐ 1970.53 w/ conditions ☐ 1970.54 w/o conditions ☒ 1970.54 w/ conditions

Upon review of the project description, Environmental Report (ER) and all supporting documentation, I find that the proposal meets the criteria established in §1970.54, fiCategorical Exclusions Involving Small-scale Developmentfl and consistent with 40 C.F.R. § 1508.1(d) provided the applicant complies with the project conditions identified above. With inclusion of the project conditions identified, the proposed activity does not have any extraordinary circumstances, nor will it individually or cumulatively have a significant effect on the human environment; therefore, neither an Environmental Assessment nor an Environmental Impact Statement is required as proposed.

CERTIFICATION

Signature of Preparer

Apr 29, 2024

Date

Arianna Harding

Name of Preparer

Environmental Protection Specialist

Preparer Title

USDA Rural Development Environmental Checklist for Categorical Exclusions

Applicant
Name:

East River Electric Power Cooperative Inc (SD43)

Project
Name:

Pratt Substation-Amendment 18

May 3, 2024

Signature of Agency EPS or SEC

Date

Robert Deems

Name of Agency EPS or SEC

Branch Chief

Agency EPS or SEC Title

May 6, 2024

Signature of Agency Approving Official

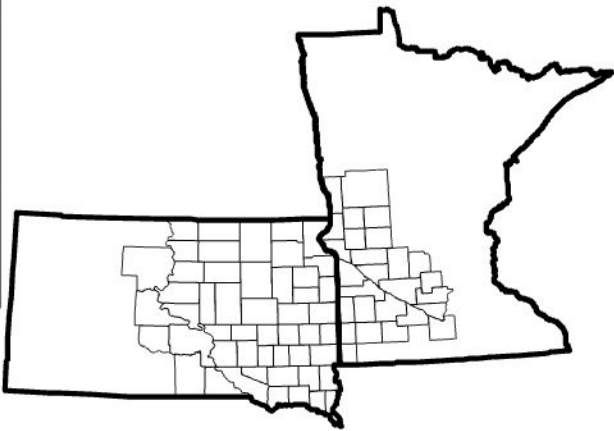
Date

Mark Bartholomew

Name of Agency Approving Official

Supervisory General Field Representative

Agency Approving Official Title

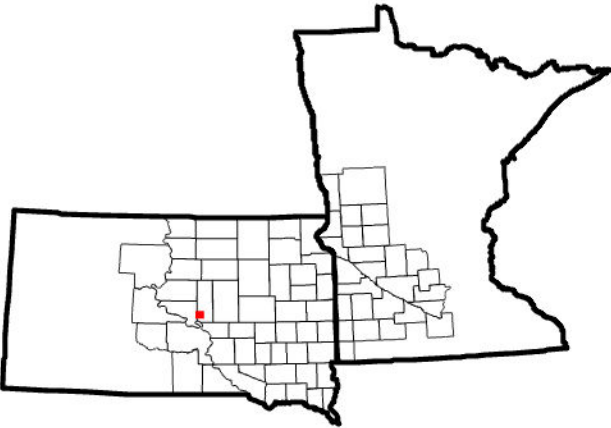
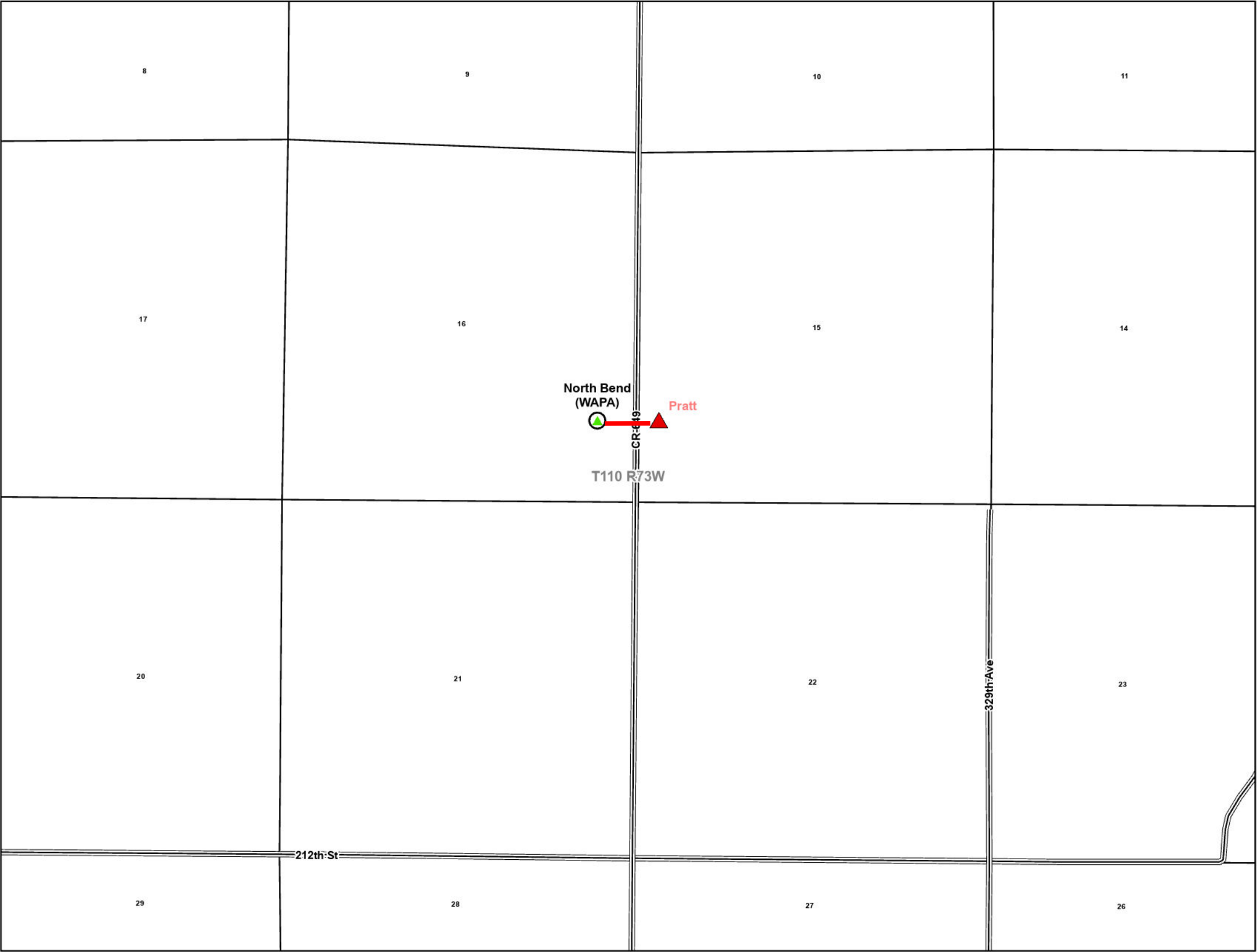


-  East River Substation
-  East River Transmission Line
-  Corridor of work

Design By:	Date:	Rev	Date	Description	Chkd
	6/28/2024				
Drawn By:	Draw Scale:				
MLW	NTS				
Checked By:	Plot Scale:				



WAPA NORTH BEND TO PRATT
HYDE COUNTY, SD
ER PRESENTATION

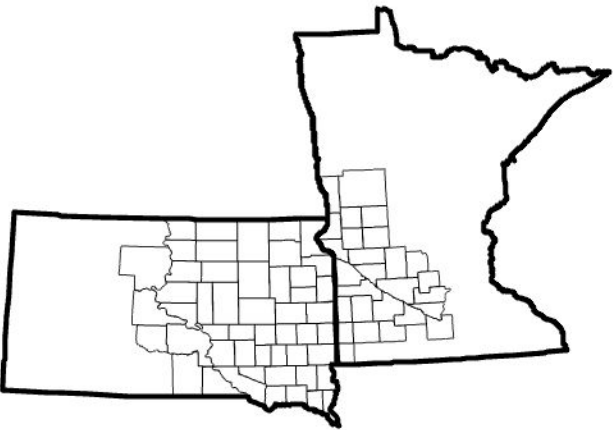
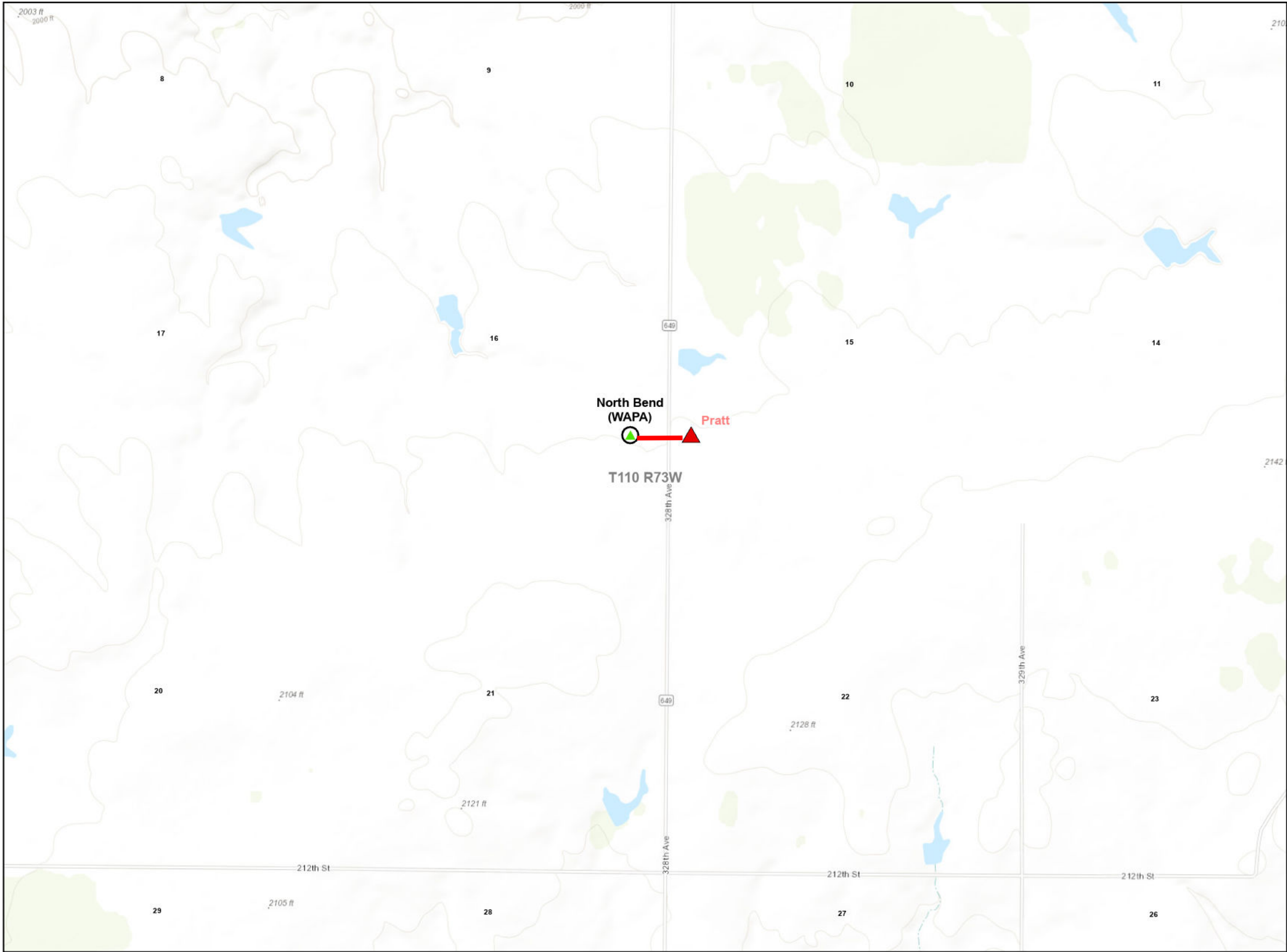


- East River Substation
- East River Transmission Line
- Corridor of work

Design By:	Date:	Rev	Date	Description	Chkd
	6/28/2024				
Drawn By:	Draw Scale:				
MLW	NTS				
Checked By:	Plot Scale:				



WAPA NORTH BEND TO PRATT
HYDE COUNTY, SD
ER PRESENTATION



-  East River Substation
-  East River Transmission Line
-  Corridor of work

Design By:	Date:	Rev	Date	Description	Chkd
	6/28/2024				
Drawn By:	Draw Scale:				
MLW	NTS				
Checked By:	Plot Scale:				



WAPA NORTH BEND TO PRATT
HYDE COUNTY, SD
ER PRESENTATION



**GEOTEK ENGINEERING
& TESTING SERVICES, INC.**

909 East 50th Street North
Sioux Falls, South Dakota 57104
Phone 605-335-5512 Fax 605-335-0773

March 22, 2024

East River Electric Power Cooperative, Inc.
211 S. Harth Avenue
PO Box 227
Madison, South Dakota 57042

Attn: Mitch McNary

Subj: Geotechnical Exploration
Proposed Pratt Substation
East River Electric Power Cooperative, Inc.
County Highway 649
Hyde County, South Dakota
GeoTek #23-1029

This correspondence presents our written report of the geotechnical exploration program for the referenced project. Our work was performed in accordance with your authorization. We are transmitting an electronic copy of our report for your use.

We thank you for the opportunity of providing our services on this project and look forward to continued participation during the design and construction phases. If you have any questions regarding this report, please contact our office at (605) 335-5512.

Respectfully Submitted,
GeoTek Engineering & Testing Services, Inc.

Jared Haskins

Jared Haskins, PE
Geotechnical Manager

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**GEOTECHNICAL EXPLORATION
PROPOSED PRATT SUBSTATION
EAST RIVER ELECTRIC POWER COOPERATIVE, INC.
COUNTY HIGHWAY 649
HYDE COUNTY, SOUTH DAKOTA
GEOTEK #23-1029**

INTRODUCTION

Project Information

This report presents the results of the recent geotechnical exploration program for the proposed Pratt Substation for East River Electric Power Cooperative, Inc. in Hyde County, South Dakota.

Scope of Services

Our work was performed in accordance with the authorization of Mitch McNary with East River Electric Power Cooperative, Inc. The scope of work as presented in this report is limited to the following:

1. To perform 4 standard penetration test (SPT) borings to gather data on the subsurface conditions at the site.
2. To perform laboratory tests that include moisture content, dry density, Atterberg limits (liquid and plastic limits), unconfined compressive strength, pH, sulfate content, chloride content, resistivity, redox potential and sulfide content.
3. To prepare an engineering report that includes the results of the field and laboratory tests as well as our earthwork and foundation recommendations for design and construction.

The scope of our work was intended for geotechnical purposes only. This scope of work did not include determining the presence or extent of environmental contamination at the site or to characterize the site relative to wetlands status.

SITE & SUBSURFACE CONDITIONS

Site Location & Description

The site is located along the east side of County Highway 649 (about 6,700 feet north of 212th Street) in Hyde County, South Dakota. A site location map (Figure 1) is attached showing the location of the site. The town of Highmore is located about 16 miles northeast of the site. The site is currently being used as pastureland. The topography of the site generally slopes downward to the north, east and west from a small mound located near the southwest corner of the site. A grade change of about 9 feet occurs across the site.

Ground Surface Elevations & Test Boring Locations

The ground surface elevations at the test boring locations were estimated from a drawing provided by East River Electric Power Cooperative, Inc. Based on our estimates, the ground surface elevations at the test boring locations were 2,083.5 feet at test boring 1, 2,082.5 feet at test boring 2, 2,081.2 feet at test boring 3 and 2,082.7 feet at test boring 4. A test boring location map (Figure 2) is attached showing the relative location of the test borings.

Subsurface Conditions

Four (4) test borings were performed at the site on July 17, 2023. The subsurface conditions encountered at the test boring locations are illustrated by means of the boring logs included in Appendix A.

The subsurface profile at the test boring locations consisted of the following soil types: topsoil materials, fine alluvium soils and glacial till soils. The topsoil materials were encountered at all of the test borings and extended to a depth of 1 foot. The fine alluvium soils were encountered beneath the topsoil materials at test borings 1 and 2 and extended to depths of 3 feet (test boring 2) and 4 ½ feet (test boring 1). The glacial till soils were encountered beneath the topsoil materials and fine alluvium soils and extended to the termination depth of the test borings.

The consistency or relative density of the soils is indicated by the standard penetration resistance (“N”) values as shown on the boring logs. A description of the soil consistency or relative

density based on the “N” values can be found on the attached Soil Boring Symbols and Descriptive Terminology data sheet.

We wish to point out that the subsurface conditions at other times and locations at the site may differ from those found at our test boring locations. If different conditions are encountered during construction, then it is important that you contact us so that our recommendations can be reviewed.

Soil Types

Topsoil Materials

The topsoil materials consisted of fat clay (CH). The moisture condition of the topsoil materials was dry.

Fine Alluvium Soils

Fine alluvium soils are soils with more than 50 percent by weight passing the #200 sieve that have been deposited by moving water. The fine alluvium soils consisted of fat clay (CH). “N” values of 25 and 32 (consistency of stiff and hard) were measured within the fine alluvium soils. The moisture condition of the fine alluvium soils was dry.

Glacial Till Soils

Glacial till soils are soils with more than 50 percent by weight passing the #200 sieve that have been deposited and consolidated by a glacier. The glacial till soils consisted of fat clay with sand (CH). “N” values within the glacial till soils ranged from 11 to 41 (consistency of stiff, very stiff and hard). The moisture condition of the glacial till soils was dry and moist.

Water Levels

Measurements to record the groundwater levels were made at the test boring locations. The time and level of the groundwater readings are recorded on the boring logs. Groundwater was measured at depths of 26 feet and 28 feet at test borings 1 and 2. Groundwater did not enter the boreholes at the other test borings at the time of our measurements.

The water levels indicated on the boring logs may or may not be an accurate indication of the depth or lack of subsurface groundwater. A long period of time is generally required for subsurface water to stabilize in the low permeable soils encountered at the test boring locations. Long term groundwater monitoring was not included in our work scope.

ENGINEERING REVIEW & RECOMMENDATIONS

Project Design Data

We understand that the project will consist of constructing the Pratt Substation for East River Electric Power Cooperative, Inc. in Hyde County, South Dakota. The project will likely include the following: a control building, a transformer, circuit breakers and dead-end structures. The control building will likely have a footprint area of approximately 750 square feet. We understand that the control building will be supported by perimeter footings resting below frost depth. We assume that the control building will be heated during the winter months. The finished floor elevation of the control building is expected to be near elevation 2,083 feet (with a bottom-of-footing elevation likely near 2,079 feet). Based on the existing grades within the footprint of the control building, filling of about 1 foot will be needed to achieve the finished floor elevation. Light foundation loads are anticipated for the control building. We understand that the transformer, circuit breakers, dead-end structures and miscellaneous pieces of equipment will be supported by drilled pier foundations (pier supported slabs). We understand that the finished grade of the substation will range from 2,082 feet (north and south edges of the substation) to 2,083 feet (center of the substation). Based on the existing grades within the footprint of the substation, cutting of 1 foot to filling of 4 feet will be needed to achieve the finished grade of the substation. No retaining walls are expected for the project. We expect that any ground grid will be installed approximately 18 inches below the finished grade.

The information/assumptions detailed in the project design data section are important factors in our review and recommendations. If there are any corrections or additions to the information detailed in this section, then it is important that you contact us so that we can review our recommendations with regards to the revised plans.

Substation Area & Gravel Surfaced Areas

Site Preparation

We recommend that the site preparation for the substation area and gravel surfaced areas consist of removing the vegetation and topsoil materials. Based on the test borings, a removal depth of 1 foot should be expected. Observations should be made at the exposed subgrade to determine if any unstable areas are present. Unstable areas may require further excavation. Once the subgrade is approved, we recommend placing and compacting general structural fill up to the design elevations.

Stripping/Removals & Soil Disturbance

Conventional scrapers can typically be utilized for soils having low to moderate moisture contents levels; however, if soils with high moisture content levels are encountered, then low-ground-pressure construction equipment should be used. If any soils become disturbed during construction, then the disturbed soils may need to be removed.

Control Building

Discussion

Test boring 4 was performed at the location of the control building. The subsurface conditions encountered at test boring 4 consisted of 1 foot of topsoil materials over glacial till soils. It is our opinion that the glacial till soils have adequate strength to support the footings and floor slab of the control building. However, the glacial till soils consisted of fat clay with sand (CH). In our opinion, the fat clay with sand (CH) has a high potential for expansion. Typically, a 3-foot buffer of low-expansive soil (lean clay (CL)) or non-expansive soil (granular material) is needed beneath footings and floor slabs to minimize the swelling effects of this type of expansive soil in this area of South Dakota. Therefore, an overexcavation will be needed beneath the footings and floor slab of the control building.

Site Preparation – Footing Areas

The site preparation in the footing areas of the control building should consist of removing the topsoil materials in order to expose the glacial till soils. Following the removals, we recommend that an overexcavation be performed to a minimum depth of 3 feet below the bottom-of-footing elevation. The overexcavated areas should be backfilled with a minimum of 3 feet of granular structural fill.

Site Preparation – Floor Slab Areas

The site preparation in the floor slab areas of the control building should consist of removing the topsoil materials in order to expose the glacial till soils. Following the removals, we recommend that an overexcavation be performed to a minimum depth of 3 feet below the bottom-of-slab elevation. The overexcavated areas should be backfilled with a minimum of 3 feet of granular structural fill. We recommend that the final 6 inches of granular structural fill beneath the floor slab consist of select granular fill.

Reduction in Granular Material Thickness

A reduction in the thickness of the granular material beneath the footings and floor slab could be considered; however, it should be known that the risk for upward movement becomes greater as the thickness of the granular material beneath the footings and floor slab becomes thinner.

Excavation & Soil Disturbance

All excavations for the control building should be performed with a track backhoe with a smooth edge bucket. The subgrade within the footprint of the control building should not be exposed to heavy construction traffic from rubber tire vehicles.

Water & Saturated Soils

If water or saturated soils are encountered at the bottom of an excavation, then we recommend placing a layer (6 inches to 12 inches) of drainage rock at the bottom of the excavation prior to the placement of the granular structural fill. This section only pertains to the control building.

Laterally Oversized Excavations

The bottom of the excavations should be laterally oversized at least 1 foot outside the edges of the footings.

Foundation Loads & Settlement

If our recommendations are followed during site preparations, then it is our opinion that the footings of the control building can be sized for a net allowable soil bearing pressure of up to 3,000 pounds per square foot (psf). With the expected loads, net allowable soil bearing pressure and our site preparation recommendations, total settlement of the footings should be less than 1 inch and differential settlement should be less than ½ inch over 50 feet.

Soil Modulus of Subgrade Reaction

If our recommendations are followed during site preparations, then it is our opinion that the floor slab of the control building can be designed using a soil modulus of subgrade reaction (k value) of 150 psi/inch.

Coefficient of Friction

It is our opinion that a friction factor of 0.45 can be used between the granular material and the bottom of the concrete. The friction value is considered an ultimate value. We recommend applying a theoretical safety factor of at least 2.0.

Sloped Excavations, Collection Area & Drain Tile

As previously stated, an overexcavation is recommended beneath the footings and floor slab of the control building. To provide drainage beneath the control building, the overexcavated areas should be sloped to a collection area so that any water that accumulates in the granular material can be pumped or daylighted to a suitable outfall. Drain tile should also be included to facilitate drainage. The drain tile should be installed at the bottom of the excavation (bottom of the granular material) and along the edges of the excavation (not directly below the footings or adjacent to the footings). In order to prevent clogging of the drain tile, a screen should be placed

at the end of the drain tile if it is daylighted. The drain tile could potentially daylight out to the northeast corner of the substation.

Dewatering

Dewatering will likely not be needed during construction of the control building. However, if dewatering is needed, then the contractor should provide appropriate dewatering methods and equipment. In areas where clay soils are encountered, it will likely be possible to remove and control water entering the excavations using normal sump pumping techniques. If waterbearing sand soils are encountered, then an extensive dewatering system will likely be needed.

Frost Protection – Footings

We recommend that all footings be placed at a sufficient depth for frost protection. The perimeter footings for heated buildings should be placed such that the bottom of the footing is a minimum of 4 feet below the finished exterior grade. Interior footings in heated buildings can be placed beneath the floor slab. Footings for unheated areas and canopies, or footings that are not protected from frost during freezing temperatures, should be placed such that the bottom of the footing is a minimum of 5 feet below the finished exterior grade.

Flowable Fill Alternative

In our opinion, a flowable fill material could be used in lieu of the granular structural fill beneath the footings and floor slab of the control building. However, the layer of granular structural fill beneath the footings and floor slab is better suited to minimize the swelling effects of the fat clay with sand (CH).

Alternative Foundation – Drilled Pier Foundations

It is our opinion that drilled piers could be used to support the control building. In our opinion, the drilled piers would help counteract the potential swelling effects of the fat clay with sand (CH). A structural slab and void space would be needed with the drilled piers. It is our opinion that the drilled pier foundations could be designed using the design parameters shown in Figure 3

in the Appendix. The drilled piers should have a minimum length of 12 feet. The overexcavation and drainage system would not be needed if drilled piers are used.

Material Types & Compaction Levels

General Structural Fill – The general structural fill should consist of a non-organic clay. Scrutiny on the material’s moisture content should be made prior to the acceptance and use. The clay material should be placed in maximum 1-foot lifts. Organic materials should not be used as general structural fill. The on-site glacial till soils could be used as general structural fill. Some moisture adjustment (wetting or drying) may be needed with the on-site glacial till soils. In areas where water or saturated soils are encountered, the lift thickness could be increased to 18 inches.

Granular Structural Fill – The granular structural fill should consist of a pit-run or processed sand or gravel having a maximum particle size of 3 inches with less than 15 percent by weight passing the #200 sieve. The granular structural fill should be placed in lifts of up to 1 foot in thickness.

Drainage Rock – The drainage rock should be crushed, washed and meet the gradation specifications shown in Table 1.

Table 1. Drainage Rock Gradation Specifications

Sieve Size	Percent Passing
1 1/2-inch	100
1-inch	70 – 90
3/4-inch	25 – 50
3/8-inch	0 – 5

Select Granular Fill – The select granular fill should consist of a medium to coarse grained, free-draining sand or rock having a maximum particle size of 1 inch with less than 5 percent by weight passing the #200 sieve. The select granular fill should be placed in lifts of up to 1 foot in thickness.

Exterior Foundation Wall Backfill – Due to the presence of fat clay with sand (CH), we recommend that clay soils be used (minimize water infiltration). Debris, organic material, or

over-sized material should not be used as backfill. The exterior backfill should be placed in lifts of up to 1 foot in thickness. The majority of the on-site soils can be used as foundation backfill.

Non-Frost Susceptible Drainage Fill – If needed, the non-frost susceptible drainage fill should have a maximum particle size of 1 inch, less than 40 percent by weight passing the #40 sieve and less than 5 percent by weight passing the #200 sieve. The non-frost susceptible drainage fill should be placed in lifts of up to 1 foot in thickness.

Gravel Surfacing Material – We recommend that the gravel surfacing materials meet the South Dakota Department of the Transportation specifications as found in the Standard Specifications for Roads and Bridge Manual, 2004 (Section 882), which also includes the requirement for the plasticity index (4-12). The plasticity index requirements are important in order for the gravel surfacing material to shed water.

Aggregate Base Course Material – If needed, we recommend that the aggregate base course materials meet the requirements of Sections 260 and 882 of the SDDOT Standard Specifications.

Recommended Compaction Levels – The recommended compaction levels listed in Table 2 are based on a material's maximum dry density value, as determined by a standard Proctor (ASTM: D698) test.

Table 2. Recommended Compaction Levels

Placement Location	Compaction Specifications
Substation Area	95%
Below Footings & Foundations	97%
Below Floor Slabs	97%
Foundation Backfill	95%
Gravel Surfacing Materials	97%
Aggregate Base Course	97%
Non-Structural Areas	90%

Notes: Compaction specifications are not applicable with the drainage rock.

Recommended Moisture Levels – The moisture content of the clay backfill materials should be maintained within a range of plus 2 percent to minus 2 percent of the materials' optimum moisture content. The optimum moisture content should be determined using a standard Proctor

(ASTM: D698) test. The moisture content of the granular backfill materials should be maintained at a level that will be conducive for vibratory compaction.

Shrinkage Factor

In our opinion, a shrinkage factor of 15 percent could be used for the on-site fine alluvium soils and glacial till soils.

Drilled Pier Foundations

It is our opinion that the drilled pier foundations can be designed using the design parameters shown in Figure 3 in the Appendix. We used a factor of safety of 2.0 for the side resistance and 3.0 for the end bearing. The design parameters shown in Figure 3 are based on a groundwater level of 10 feet. We would like to point out that this does not mean that groundwater was encountered at a depth of 10 feet; it is to account for future fluctuations in the groundwater level. Figure 3 does not include values for the general structural fill. Settlement of the drilled pier foundations should be less than 1 inch.

The side resistance for drilled piers in compression should be excluded for the upper 5 feet and for 1 pier diameter above the bottom of the drilled pier. Please refer to Figure 4 that shows the exclusion zone for side resistance. For frost protection purposes, we recommend that sonotubes be used, as necessary. Side resistance should also not be used in areas where sonotubes are present.

Temporary casing may be needed to secure caving soils and seal off groundwater. Removal of large diameter casing introduces the risk of creating voids in the shaft. Extreme care should be taken during casing removal to maintain a positive head of concrete above the bottom of the casing at all times.

Water may enter the drilled pier excavations due to subsurface water, precipitation or surface run off. A sump pump or series of pumps may be needed for water control within the drilled pier excavations. Concrete placed under water should be pumped or placed with a tremie pipe. The discharge pipe should be maintained below the surface of the concrete at all times.

We recommend that the drilled piers be constructed in accordance with Section 336 of the American Concrete Institute. The success of the drilled pier installation will likely be dependent upon the qualifications of the drilled pier contractor and experience with similar subsurface conditions.

It is our opinion that the general structural fill, fine alluvium soils and glacial till soils have a moderate frost susceptibility. We understand that void forms will not be present beneath the slabs that are supported by drilled pier foundations (pier supported slabs). The pier supported slabs are potentially subject to both cosmetic and structural damage caused by frost heaving. We anticipate the heave for the general structural fill, fine alluvium soils and glacial till soils to potentially be on the order of 0.2 inch for each foot of frost penetration within the soil, which would translate to about 1 inch of total movement. Based on limited literature review, the frost heaving could exert a pressure of 10 pounds per square inch (psi) to 20 psi beneath the slabs. However, significantly higher pressures have been seen with other soil types. The pier supported slabs should be designed to accommodate the potential frost movements. Additional length of the drilled piers may be needed to counteract the pressure from the frost heaving.

Seismic Site Classification

Based on the 2021 International Building Code (IBC), it is our opinion that the site, as a whole, corresponds to a Site Class D (stiff soil). Also, the ground acceleration values are as follows: $S_s = 0.131$ g, $S_1 = 0.034$ g, $S_{MS} = 0.210$ g, $S_{M1} = 0.081$ g, $S_{DS} = 0.140$ g, $S_{D1} = 0.054$ g. Therefore, the seismic design category is "A". The ground acceleration values are based on the ASCE 7-16 (referenced standard for 2021 IBC) with Risk Category I. If needed, we can provide ground acceleration values for a different design code.

Drainage

Proper drainage should be maintained during and after construction. The general site grading should direct surface run-off waters away from the excavations. Water which accumulates in the excavations should be removed in a timely manner.

Corrosive Potential of the Soils

Soil samples were collected from test borings 1, 2 and 4 were submitted for pH, sulfate content, chloride content, resistivity, redox potential and sulfide content testing. The results of the pH, resistivity, redox potential and sulfide content testing are shown in Table 3 and the results of the chloride content and sulfate content testing are shown in Table 5.

Table 3. pH, Resistivity, Redox Potential & Sulfide Content Results

Test Boring	Depth (ft)	Soil Classification	pH	Resistivity (ohm-cm)	Redox Potential (mV)	Sulfide (mg/kg)
1	1 to 4 ½	CH (Fine Alluvium)	8.1	375	148	ND
2	3 to 8 ½	CH (Glacial Till)	8.4	590	136	ND
4	9 ½ to 19	CH (Glacial Till)	8.0	335	150	0.1

Notes: The resistivity values are minimum values (saturated condition). ND – not detected.

Using the Ductile Iron Pipe Research Association's (DIPRA) 10-point system and the lab results shown in Table 3, we evaluated the corrosive potential of the tested soils. The 10-point system is based on resistivity, pH, redox potential, sulfides and moisture. An explanation of the point system is shown on Figure 5. The results of the evaluation are shown in Table 4. According to DIPRA, a value of 10 or more indicates that the soil is corrosive to underground piping and metals, while a value below 10 indicates that the soil is not corrosive to underground piping and metals. Based on Table 4, the glacial till soils tested are considered corrosive. In our opinion, protective measures should be taken.

Table 4. Results of DIPRA 10-Point System Evaluation

Test Boring	Depth (ft)	Soil Classification	Total Value	Result
1	1 to 4 ½	CH (Fine Alluvium)	11	Corrosive
2	3 to 8 ½	CH (Glacial Till)	11	Corrosive
4	9 ½ to 19	CH (Glacial Till)	14.5	Corrosive

Note: A "fair drainage, generally moist" was used for the moisture condition (1 point).

Table 5. Sulfate & Chloride Content Test Results

Test Boring	Depth (ft)	Soil Classification	Sulfate (mg/kg)	Chloride (mg/kg)
1	1 to 4 ½	CH (Fine Alluvium)	3,005	32
2	3 to 8 ½	CH (Glacial Till)	1,346	81
4	9 ½ to 19	CH (Glacial Till)	5,664	51

As shown in Table 5, the sulfate contents were 1,346 mg/kg, 3,005 mg/kg and 5,664 mg/kg. Generally, the sulfate attack on concrete is considered mild if the sulfate content is below 150 mg/kg, moderate if the sulfate content is between 150 mg/kg and 1,500 mg/kg and severe if the sulfate content is above 1,500 mg/kg. Based on the test results, the potential sulfate attack on the concrete will be moderate to severe. Therefore, we recommend using Type V cement or a concrete mix with a higher fly ash content (20 percent to 30 percent of type F fly ash) for severe sulfate attack. It should be known that high sulfate levels can also accelerate corrosion of metals in direct contact with soil (coatings for metals should be considered). Regarding the chloride content levels, levels below 250 mg/kg are considered mildly corrosive.

CONSTRUCTION CONSIDERATIONS

Groundwater & Surface Water

Water may enter the excavations due to subsurface water, precipitation or surface run off. Any water that accumulates in the bottom of the excavations should be immediately removed and surface drainage away from the excavations should be provided during construction.

Disturbance of Soils

The soils encountered at the test boring locations are susceptible to disturbance and can experience strength loss caused by construction traffic and/or additional moisture. Precautions will be required during earthwork activities in order to reduce the risk of soil disturbance.

Cold Weather Precautions

If site preparation and construction is anticipated during cold weather, then we recommend all foundations, slabs and other improvements that may be affected by frost movements be insulated from frost penetration during freezing temperatures. If filling is performed during freezing temperatures, then all frozen soils, snow and ice should be removed from the areas to be filled prior to placing the new fill. The new fill should not be allowed to freeze during transit, placement and compaction. Concrete should not be placed on frozen subgrades. The subgrade soils will likely require reworking and recompacting due to the loss of density caused by the freeze/thaw process.

Excavation Sideslopes

The excavations must comply with the requirements of OSHA 29 CFR, Part 1926, Subpart P, “Excavations and Trenches”. This document states that the excavation safety is the responsibility of the contractor. Reference to this OSHA requirement should be included in the project specifications.

Observations & Testing

This report was prepared using a limited amount of information for the project and a number of assumptions were necessary to help us develop our conclusions and recommendations. It is recommended that our firm be retained to review the geotechnical aspects of the final design plans and specifications to check that our recommendations have been properly incorporated into the design documents.

The recommendations submitted in this report have been made based on the subsurface conditions encountered at the test boring locations. It is possible that there are subsurface conditions at the site that are different from those represented by the test borings. As a result, on-site observation during construction is considered integral to the successful implementation of the recommendations. We believe that qualified field personnel need to be on-site at the following times to observe the site conditions and effectiveness of the construction.

Excavation

We recommend that a geotechnical engineer or geotechnical engineering technician working under the direct supervision of a geotechnical engineer observe all excavations for foundations, slabs and pavements. These observations are recommended to determine if the exposed soils are similar to those encountered at the test boring locations, if unsuitable soils have been adequately removed and if the exposed soils are suitable for support of the proposed construction. These observations should be performed prior to placement of fill or foundations.

Testing

After the subgrade is observed by a geotechnical engineer/technician and approved, we recommend a representative number of compaction tests be taken during the placement of the fill and backfill. The tests should be performed to determine if the required compaction has been achieved. As a general guideline, we recommend at least 1 test be taken for every 2,000 square feet of structural fill placed in building and paved areas, at least 1 test for every 75 feet to 100 feet in trench fill, and for every 2-foot thickness of fill or backfill placed. The actual number of tests should be left to the discretion of the geotechnical engineer. Samples of proposed fill and backfill materials should be submitted to our laboratory for testing to determine their compliance with our recommendations and project specifications.

After a drilled pier excavation is observed by a geotechnical engineer/technician and approved, we recommend that the steel reinforcing be observed for compliance with the plans and applicable standards. We recommend the placement of fresh concrete placed in the drilled pier excavation be observed and tested in accordance with ACI Standards.

SUBSURFACE EXPLORATION PROCEDURES

Test Borings

We performed 4 SPT borings on July 17, 2023 with a truck rig equipped with hollow-stem auger. Soil sampling was performed in accordance with the procedures described in ASTM:D1586. Using this procedure, a 2-inch O.D. split barrel sampler is driven into the soil by a 140-pound

weight falling 30 inches. After an initial set of 6 inches, the number of blows required to drive the sampler an additional 12 inches is known as the penetration resistance, or “N” value. The “N” value is an index of the relative density of cohesionless soils and the consistency of cohesive soils. In addition, thin walled tube samples were obtained according to ASTM:D1587, where indicated by the appropriate symbol on the boring logs.

The test borings were backfilled with on-site materials and some settlement of these materials can be expected to occur. Final closure of the holes is the responsibility of the client or property owner.

The soil samples collected from the test boring locations will be retained in our office for a period of 6 months after the date of this report and will then be discarded unless we are notified otherwise.

Soil Classification

As the samples were obtained in the field, they were visually and manually classified by the crew chief according to ASTM:D2488. Representative portions of all samples were then sealed and returned to the laboratory for further examination and for verification of the field classification. In addition, select samples were then submitted to a program of laboratory tests. Where laboratory classification tests (sieve analysis and Atterberg limits) have been performed, classifications according to ASTM:D2487 are possible. Logs of the test borings indicating the depth and identification of the various strata, the “N” value, the laboratory test data, water level information and pertinent information regarding the method of maintaining and advancing the drill holes are also attached in Appendix A. Charts illustrating the soil classification procedures, the descriptive terminology and the symbols used on the boring logs are also attached in Appendix A.

Water Level Measurements

The water levels indicated on the boring logs may or may not be an accurate indication of the depth or lack of subsurface groundwater. Subsurface groundwater levels should be expected to fluctuate seasonally and yearly from the groundwater readings recorded at the test boring

locations. Fluctuations occur due to varying seasonal and yearly rainfall amounts and snowmelt, as well as other factors. It is possible that the subsurface groundwater levels during or after construction could be significantly different than the time the test borings were performed.

Laboratory Tests

Laboratory tests were performed on select samples to aid in determining the index and strength properties of the soils. The index tests consisted of moisture content, dry density, Atterberg limits (liquid and plastic limits), pH, sulfate content, chloride content, resistivity, redox potential and sulfide content. The strength tests consisted of unconfined compressive strength. The laboratory tests were performed in accordance with the appropriate ASTM procedures. The results of the laboratory tests are shown on the boring logs opposite the samples upon which the tests were performed or on the attached data sheets.

LIMITATIONS

The recommendations and professional opinions submitted in this report were based upon the data obtained through the sampling and testing program at the test boring locations. We wish to point out that because no exploration program can totally reveal the exact subsurface conditions for the entire site, conditions between test borings and between samples and at other times may differ from those described in our report. Our exploration program identified subsurface conditions only at those points where samples were retrieved or where water was observed. It is not standard engineering practice to continuously retrieve samples for the full depth of the borings. Therefore, strata boundaries and thicknesses must be inferred to some extent. Additionally, some soils layers present in the ground may not be observed between sampling intervals. If the subsurface conditions encountered at the time of construction differ from those represented by our test borings, it is necessary to contact us so that our recommendations can be reviewed. The variations may result in altering our conclusions or recommendations regarding site preparation or construction procedures, thus, potentially affecting construction costs.

This report is for the exclusive use of the addressee and its representatives for use in design of the proposed project described herein and preparation of construction documents. Without

written approval, we assume no responsibility to other parties regarding this report. Our conclusions, opinions and recommendations may not be appropriate for other parties or projects.

STANDARD OF CARE

The recommendations submitted in this report represent our professional opinions. Our services for your project were performed in a manner consistent with that level of care and skill ordinarily exercised by members of the engineering profession currently practicing at this time and area.

This report was prepared by:
GeoTek Engineering & Testing Services, Inc.


Jared Haskins, PE
Geotechnical Manager



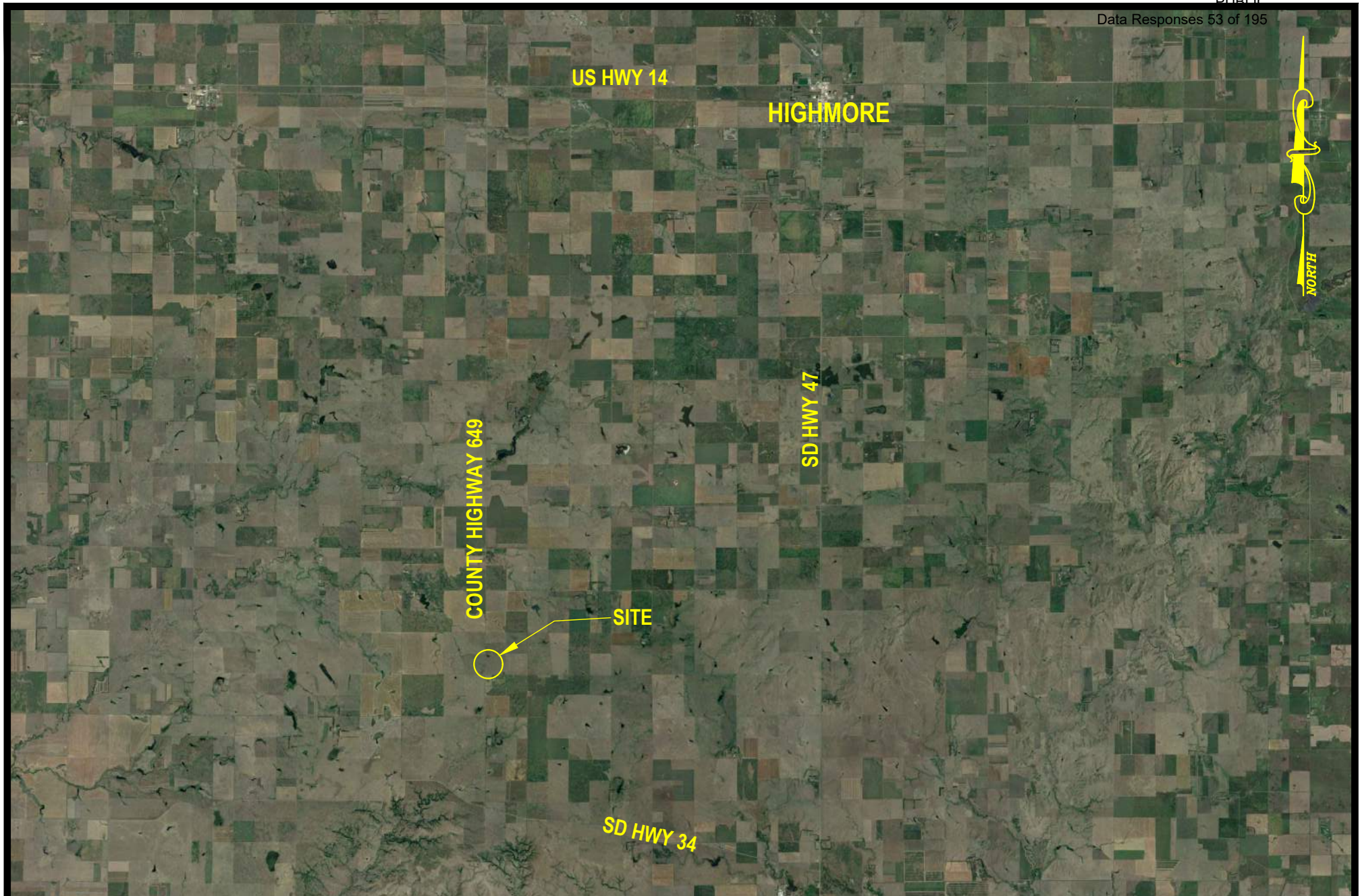


FIGURE 1
SITE LOCATION MAP
PROPOSED PRATT SUBSTATION
EAST RIVER ELECTRIC POWER COOPERATIVE
COUNTY HIGHWAY 649
HYDE COUNTY, SD

ACAD/GEOTEK/JARED/23-1029

PROJECT#: 23-1029

DRAWN BY: PRH



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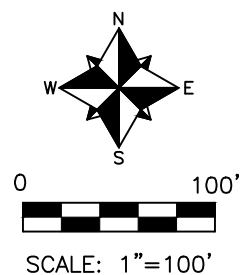


Figure 2

PUBLIC
Data Responses 54 of 195

AREA MAP

SECTION 15, T110N, R73W 5TH P.M.
HYDE COUNTY, SD

210TH STREET (UNIMPROVED)

328TH AVENUE (UNIMPROVED)

15

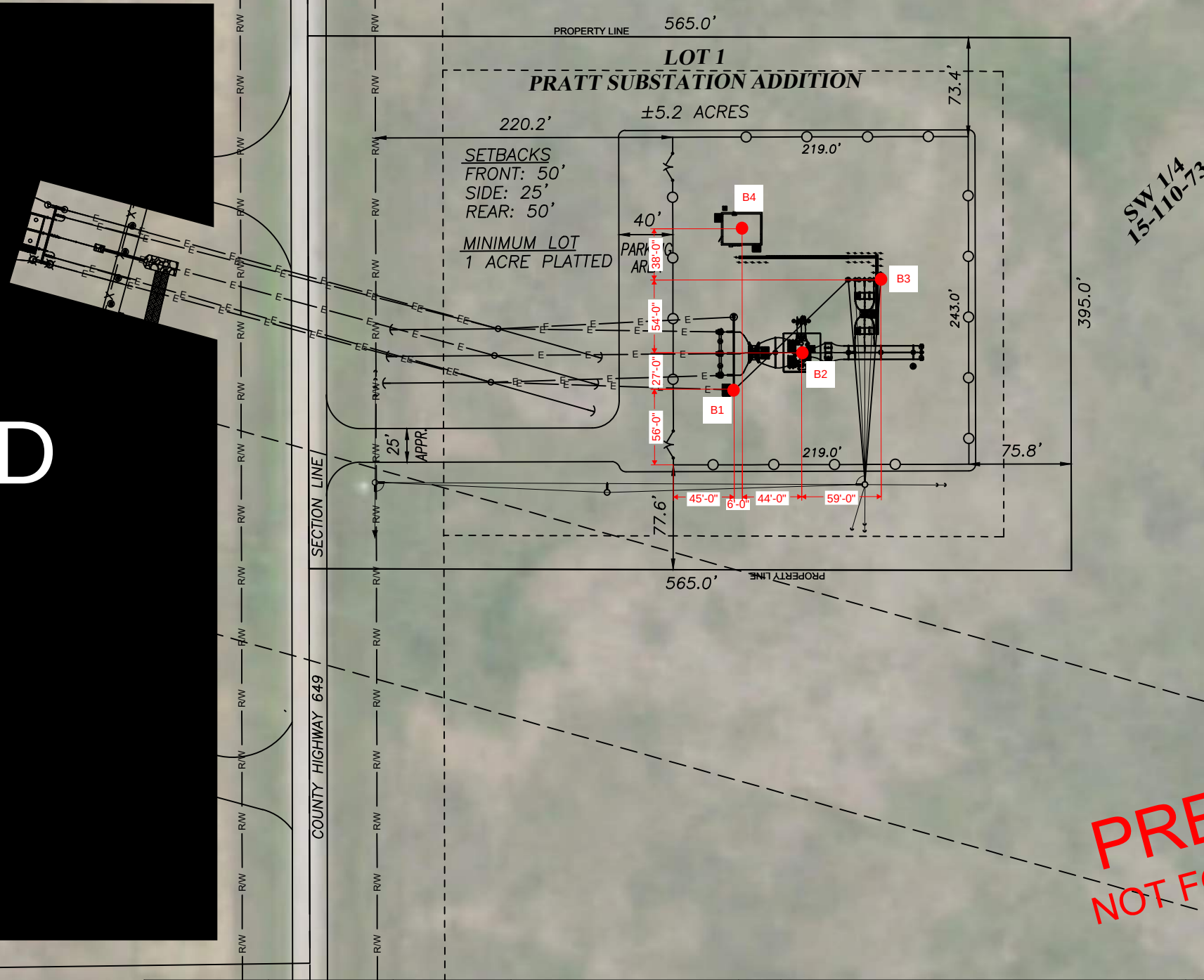
329TH AVENUE (UNIMPROVED)

211TH STREET (UNIMPROVED)

SITE

SW 1/4 15-110-73

REDACTED



PRELIMINARY
NOT FOR CONSTRUCTION
06/29/2023

DESIGNED BY:	DATE:	REV	DATE	DESCRIPTION	CHKD
TJR	03/21/23				
DRAWN BY:	DRAWING SCALE:				
PSL	1:100				
CHECKED BY:	PLOT SCALE:				
	1:1				



PCP FILE:	SHEET:	DRAWING NO.:
MONOCHROME.CTB	1 OF 1	PRTSB01

PRATT SUBSTATION
SITE LAYOUT
HYDE COUNTY
SOUTH DAKOTA

FIGURE 3. DRILLED PIER DESIGN DATA SHEET

Test Boring	Depth Below Finished Grade, ft	Soil Type	Effective Unit Weight, pcf*	Cohesion, psf	Friction Angle, degrees	Allowable Skin Friction, psf**	Allowable End Bearing, psf***	Lateral Soil Modulus, K, pci	Strain @ 50%, E50	Relative Density, D _R , %
1	1-4.5	Clay (Fine Alluvium)	132	2500	---	690	7500	850	0.006	---
1	4.5-10	Clay (Glacial Till)	130	3500	---	930	10500	1100	0.005	---
1	10-31	Clay (Glacial Till)	68	3500	---	930	10500	1100	0.005	---
2	1-3	Clay (Fine Alluvium)	124	2500	---	690	7500	850	0.006	---
2	3-10	Clay (Glacial Till)	126	3500	---	930	10500	1100	0.005	---
2	10-31	Clay (Glacial Till)	64	3500	---	930	10500	1100	0.005	---
3	1-10	Clay (Glacial Till)	125	3500	---	930	10500	1100	0.005	---
3	10-31	Clay (Glacial Till)	63	3500	---	930	10500	1100	0.005	---
4	1-10	Clay (Glacial Till)	124	3500	---	930	10500	1100	0.005	---
4	10-31	Clay (Glacial Till)	62	3500	---	930	10500	1100	0.005	---

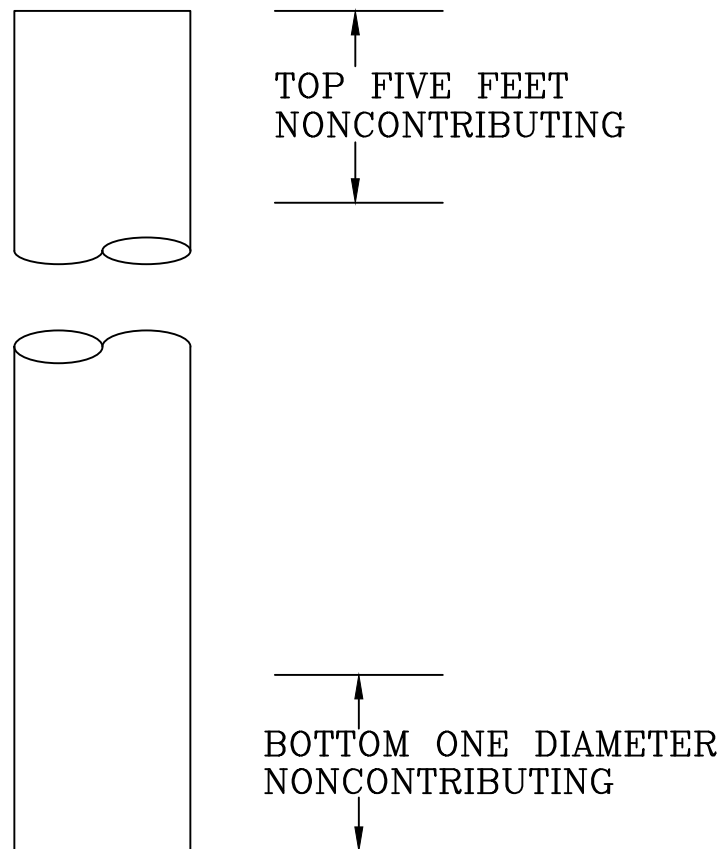
Allowable values for side resistance include a factor of safety of 2.0 and allowable values for end-bearing include a factor of safety of 3.0. Figure 3 does not include values for the general structural fill.

*Based on a groundwater level of approximately 10 feet (from existing grades).

**The exclusion or “non-contributing” zones for drilled piers in compression consist of the top 5 feet of the drilled pier and 1 drilled pier diameter above the base of the drilled pier. See Figure 4.

***Assumes that the drilled pier extends a minimum of 1 diameter into the bearing stratum. Also, the allowable end bearing should be computed by using a weighted average over a distance of 2 diameters below the tip of the drilled pier.

FIGURE 4 EXCLUSION ZONES FOR COMPUTATION OF SIDE RESISTANCE FOR DRILLED PIERS IN COHESIVE SOILS.



STRAIGHT FOUNDATION

FIGURE 4
EXCLUSION ZONE
PROPOSED PRATT SUBSTATION
EAST RIVER ELECTRIC POWER COOPERATIVE
COUNTY HIGHWAY 649
HYDE COUNTY, SD

ACAD/GEOTEK/JARED/23-1029

PROJECT#: 23-1029

DRAWN BY: PRH



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16 AWWA C105/A21.5-10

Table A.1 Soil-test evaluation

Soil Characteristics Based on Samples Taken Down to Pipe Depth		
/ Resistivity—ohm-cm (based on water-saturated soil box):		Points*
	<1,500	10
	≥1,500–1,800	8
	>1,800–2,100	5
	>2,100–2,500	2
	>2,500–3,000	1
	>3,000	0
/ pH:		
	0–2	5
	2–4	3
	4–6.5	0
	6.5–7.5	0†
	7.5–8.5	0
	>8.5	3
Redox potential:		
	> +100 mV	0
	+50 to +100 mV	3.5
	0 to +50 mV	4
	Negative	5
/ Sulfides:		
	Positive	3.5
	Trace	2
	Negative	0
/ Moisture:		
	Poor drainage, continuously wet	2
	Fair drainage, generally moist	1
	Good drainage, generally dry	0

*Ten points or greater indicates that soil is corrosive to ductile-iron pipe; protection is needed. Refer to paragraph A.3 for a description of Uniquely Severe Environments and additional considerations.

†If sulfides are present and low (<100 mV) or negative redox-potential results are obtained, add three points for this range.

GEOTEK # 23-1029						BORING NO. 1 (1 of 1)					
PROJECT Proposed Pratt Substation, East River Electric Power Cooperative, Inc., County Highway 649, Hyde County, SD											
DEPTH in FEET	DESCRIPTION OF MATERIAL	GEOLOGIC ORIGIN	N	WL	SAMPLE		LABORATORY TESTS				
					NO.	TYPE	WC	D	LL	PL	QU
1 <											



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Data Responses 59 of 195
GEOTECHNICAL TEST BORING LOG

GEOTEK # 23-1029						BORING NO. 2 (1 of 1)					
PROJECT Proposed Pratt Substation, East River Electric Power Cooperative, Inc., County Highway 649, Hyde County, SD											
DEPTH in FEET	DESCRIPTION OF MATERIAL	GEOLOGIC ORIGIN	N	WL	SAMPLE		LABORATORY TESTS				
					NO.	TYPE	WC	D	LL	PL	QU
	↓ SURFACE ELEVATION <u>2082.5 ft</u>										
1	FAT CLAY: dark brown, dry, (CH)	TOPSOIL			1	HSA					
3	FAT CLAY: brown, dry, very stiff, (CH)	FINE ALLUVIUM	25		2	SPT	14	109			
	FAT CLAY WITH SAND: a little gravel, brown and dark brown, moist, very stiff to hard, (CH)	GLACIAL TILL	25		3	SPT	21	105			
			30		4	SPT					
			21		5	SPT	26	100			7900
			23		6	SPT					
			31		7	SPT					
			32		8	SPT					
			37		9	SPT	25	101			7200
			42		10	SPT					
31	Bottom of borehole at 31 feet.										
WATER LEVEL MEASUREMENTS						START <u>7-17-23</u> COMPLETE <u>7-17-23 10:46 am</u>					
DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	WATER LEVEL	METHOD					
7-17-23	10:50 am	31	--	29	26	3.25" ID Hollow Stem Auger					
--	--	--	--	--	--						
--	--	--	--	--	--						
--	--	--	--	--	--	CREW CHIEF Mike Wagner					

GEOTECHNICAL TEST BORING 23-1029.GPJ GEOTEKENG.GDT 8/16/23



**GEOTEK ENGINEERING
& TESTING SERVICES, INC.**
909 E 50th St N, Sioux Falls, SD
57104
605-335-5512 Fax

PUBLIC
Data Responses 60 of 195

GEOTECHNICAL TEST BORING LOG

GEOTEK # 23-1029						BORING NO. 3 (1 of 1)					
PROJECT Proposed Pratt Substation, East River Electric Power Cooperative, Inc., County Highway 649, Hyde County, SD											
DEPTH in FEET	DESCRIPTION OF MATERIAL	GEOLOGIC ORIGIN	N	WL	SAMPLE		LABORATORY TESTS				
					NO.	TYPE	WC	D	LL	PL	QU
	↓ SURFACE ELEVATION <u>2081.2 ft</u>										
1	FAT CLAY: very dark brown, dry, (CH)	TOPSOIL			1	HSA					
	FAT CLAY WITH SAND: a little gravel, brown and dark brown, moist, very stiff, (CH)	GLACIAL TILL	16		2	SPT	16	102			
			23		3	SPT	21	102	75	23	
			23		4	SPT					
9½	FAT CLAY WITH SAND: a little gravel, brown and gray, moist, very stiff, (CH)	GLACIAL TILL	29		5	SPT	19	102			8500
12	FAT CLAY WITH SAND: a little gravel, brown and dark brown, moist, very stiff to hard, (CH)	GLACIAL TILL	29		6	SPT					
			31		7	SPT	23	108			
			34		8	SPT					
			28		9	SPT					
			33		10	SPT					
31	Bottom of borehole at 31 feet.										
WATER LEVEL MEASUREMENTS						START <u>7-17-23</u> COMPLETE <u>7-17-23 11:49 am</u>					
DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	WATER LEVEL	METHOD					
7-17-23	11:54 am	31	--	29	none	3.25" ID Hollow Stem Auger					
--	--	--	--	--	--						
--	--	--	--	--	--						
--	--	--	--	--	--	CREW CHIEF Mike Wagner					

GEOTECHNICAL TEST BORING 23-1029.GPJ GEOTEKENG.GDT 8/16/23



**GEOTEK ENGINEERING
& TESTING SERVICES, INC.**
909 E 50th St N, Sioux Falls, SD
57104
605-335-5512 Fax

PUBLIC
Data Responses 61 of 195
GEOTECHNICAL TEST BORING LOG

GEOTEK # 23-1029						BORING NO. 4 (1 of 1)					
PROJECT Proposed Pratt Substation, East River Electric Power Cooperative, Inc., County Highway 649, Hyde County, SD											
DEPTH in FEET	DESCRIPTION OF MATERIAL ↓ SURFACE ELEVATION <u>2082.7 ft</u>	GEOLOGIC ORIGIN	N	WL	SAMPLE		LABORATORY TESTS				
					NO.	TYPE	WC	D	LL	PL	QU
1	FAT CLAY: very dark brown, dry, (CH)	TOPSOIL			1	HSA					
	FAT CLAY WITH SAND: a little gravel, brown and dark brown, dry to moist, stiff to very stiff, (CH)	GLACIAL TILL	11		2	SPT	9				
			23		3	SPT	19	101			8100
			26		4	SPT					
			18		5	SPT	25	97			9200
			20		6	SPT					
			18		7	SPT					
19½	FAT CLAY WITH SAND: a little gravel, grayish brown, moist, very stiff, (CH)	GLACIAL TILL	21		8	SPT					
24½	FAT CLAY WITH SAND: a little gravel, brown and dark brown, moist, very stiff to hard, (CH)	GLACIAL TILL	18		9	SPT	26	101			
31	Bottom of borehole at 31 feet.		32		10	SPT					
WATER LEVEL MEASUREMENTS						START <u>7-17-23</u> COMPLETE <u>7-17-23 1:02 pm</u>					
DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	WATER LEVEL	METHOD					
7-13-23	1:02 pm	31	--	29	none	3.25" ID Hollow Stem Auger					
--	--	--	--	--	--						
--	--	--	--	--	--						
--	--	--	--	--	--	CREW CHIEF Mike Wagner					

GEOTECHNICAL TEST BORING 23-1029.GPJ GEOTEKENG.GDT 8/16/23

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
		HIGHLY ORGANIC SOILS			PT

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

BORING LOG SYMBOLS AND DESCRIPTIVE TERMINOLOGY**SYMBOLS FOR DRILLING AND SAMPLING**

<u>Symbol</u>	<u>Definition</u>
Bag	Bag sample
CS	Continuous split-spoon sampling
DM	Drilling mud
FA	Flight auger; number indicates outside diameter in inches
HA	Hand auger; number indicates outside diameter in inches
HSA	Hollow stem auger; number indicates inside diameter in inches
LS	Liner sample; number indicates outside diameter of liner sample
N	Standard penetration resistance (N-value) in blows per foot
NMR	No water level measurement recorded, primarily due to presence of drilling fluid
NSR	No sample retrieved; classification is based on action of drilling equipment and/or material noted in drilling fluid or on sampling bit
SH	Shelby tube sample; 3-inch outside diameter
SPT	Standard penetration test (N-value) using standard split-spoon sampler
SS	Split-spoon sample; 2-inch outside diameter unless otherwise noted
WL	Water level directly measured in boring
▼	Water level symbol

SYMBOLS FOR LABORATORY TESTS

<u>Symbol</u>	<u>Definition</u>
WC	Water content, percent of dry weight; ASTM:D2216
D	Dry density, pounds per cubic foot
LL	Liquid limit; ASTM:D4318
PL	Plastic limit; ASTM:D4318
QU	Unconfined compressive strength, pounds per square foot; ASTM:D2166

DENSITY/CONSISTENCY TERMINOLOGY

<u>Density</u>		<u>Consistency</u>
<u>Term</u>	<u>N-Value</u>	<u>Term</u>
Very Loose	0-4	Soft
Loose	5-8	Firm
Medium Dense	9-15	Stiff
Dense	16-30	Very Stiff
Very Dense	Over 30	Hard

PARTICLE SIZES

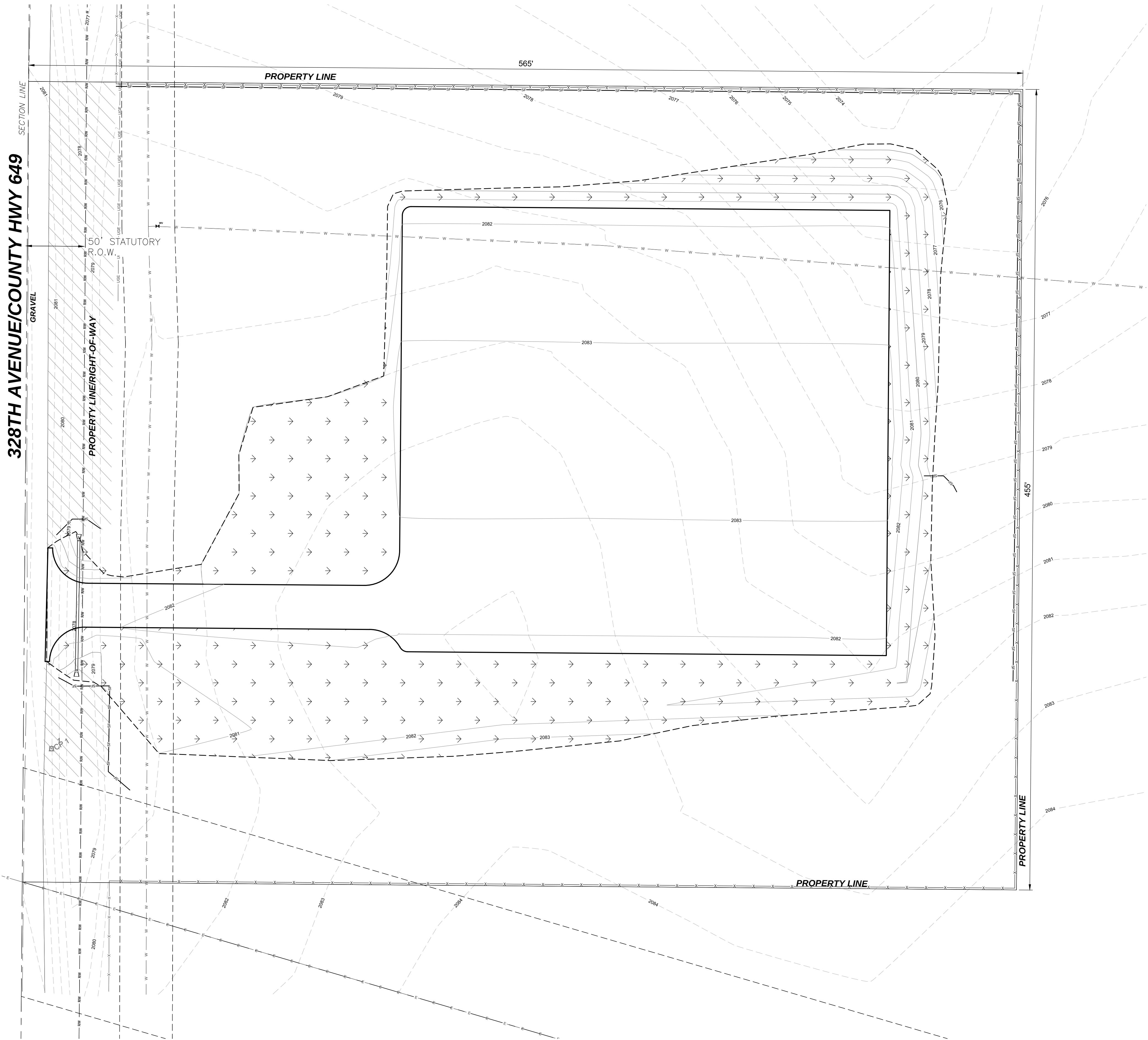
<u>Term</u>	<u>Particle Size</u>
Boulder	Over 12"
Cobble	3" – 12"
Gravel	#4 – 3"
Coarse Sand	#10 – #4
Medium Sand	#40 – #10
Fine Sand	#200 – #40
Silt and Clay	passes #200 sieve

DESCRIPTIVE TERMINOLOGY

<u>Term</u>	<u>Definition</u>
Dry	Absence of moisture, powdery
Frozen	Frozen soil
Moist	Damp, below saturation
Waterbearing	Pervious soil below water
Wet	Saturated, above liquid limit
Lamination	Up to ½" thick stratum
Layer	½" to 6" thick stratum
Lens	½" to 6" discontinuous stratum

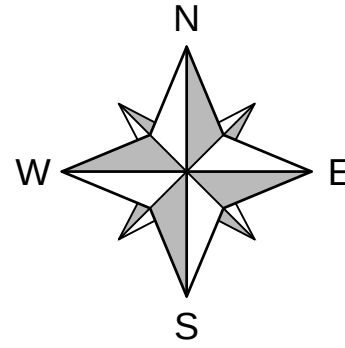
GRAVEL PERCENTAGES

<u>Term</u>	<u>Range</u>
A trace of gravel	2-4%
A little gravel	5-15%
With gravel	16-50%



LEGEND

- SILT FENCE
- VEGETATIVE BUFFER - MINIMIZE DISTURBANCE
- SEED, FERTILIZE AND MULCH



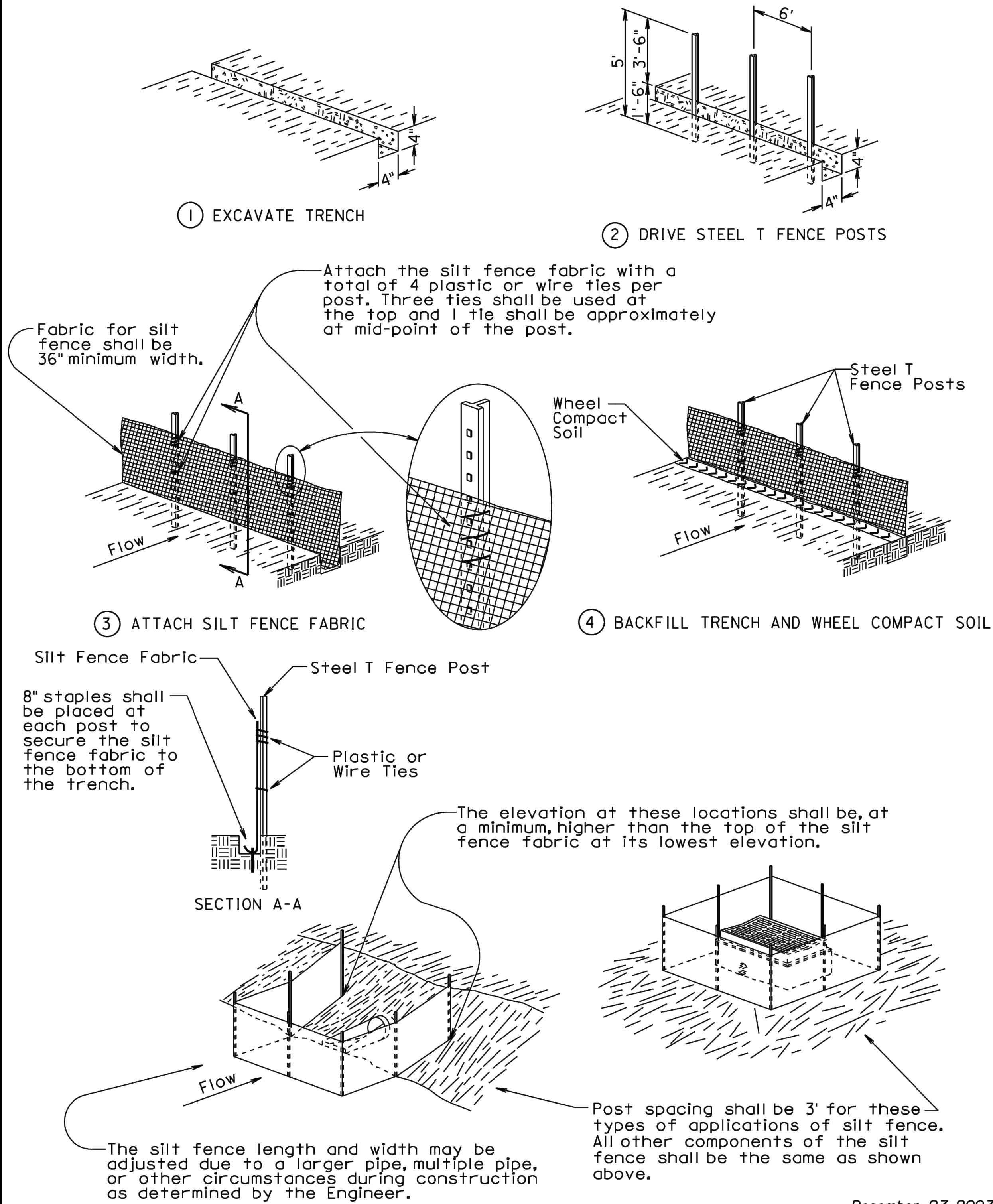
NOTES:

- PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN.
- FLOW CONTROL SEDIMENT CONTROL WATTLES AND INLET PROTECTION SHALL BE INSTALLED AS SOON AS POSSIBLE.
- ALL STREETS (PAVED) ADJACENT TO SITE SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
- AFTER CONSTRUCTION BEGINS, SOIL SURFACE STABILIZATION SHALL BE APPLIED WITHIN 14 DAYS TO ALL DISTURBED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR PERIODS LONGER THAN AN ADDITIONAL 21 CALENDAR DAYS. WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE, PERMANENT OR TEMPORARY SOIL SURFACE STABILIZATION SHALL BE APPLIED TO DISTURBED AREAS AND SOIL STOCKPILES.
- ALTERNATE AND/OR ADDITIONAL EROSION CONTROL MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION TO ENSURE THAT SEDIMENT DOES NOT LEAVE THE SITE OR HAVE A NEGATIVE IMPACT ON ADJACENT PROPERTIES. ALL COSTS ASSOCIATED WITH ADDITIONAL EROSION CONTROL WILL BE DETERMINED BY UNIT PRICE BIDS PREVIOUSLY APPROVED.

MAXIMUM TIME LIMITS OF LAND EXPOSURE FOR SELECTION OF EROSION CONTROLS

EROSION CONTROL METHOD	MAXIMUM ALLOWABLE PERIOD OF EXPOSURE (MONTHS)
SURFACE ROUGHENING (TRACKING)	1
MULCHING	4
TEMPORARY REVEGETATION	6 TO 12
PERMENANT REVEGETATION	24 OR MORE
SOIL STOCKPILE REVEGETATION	2
EARLY APPLICATION OF BASE COARSE	1

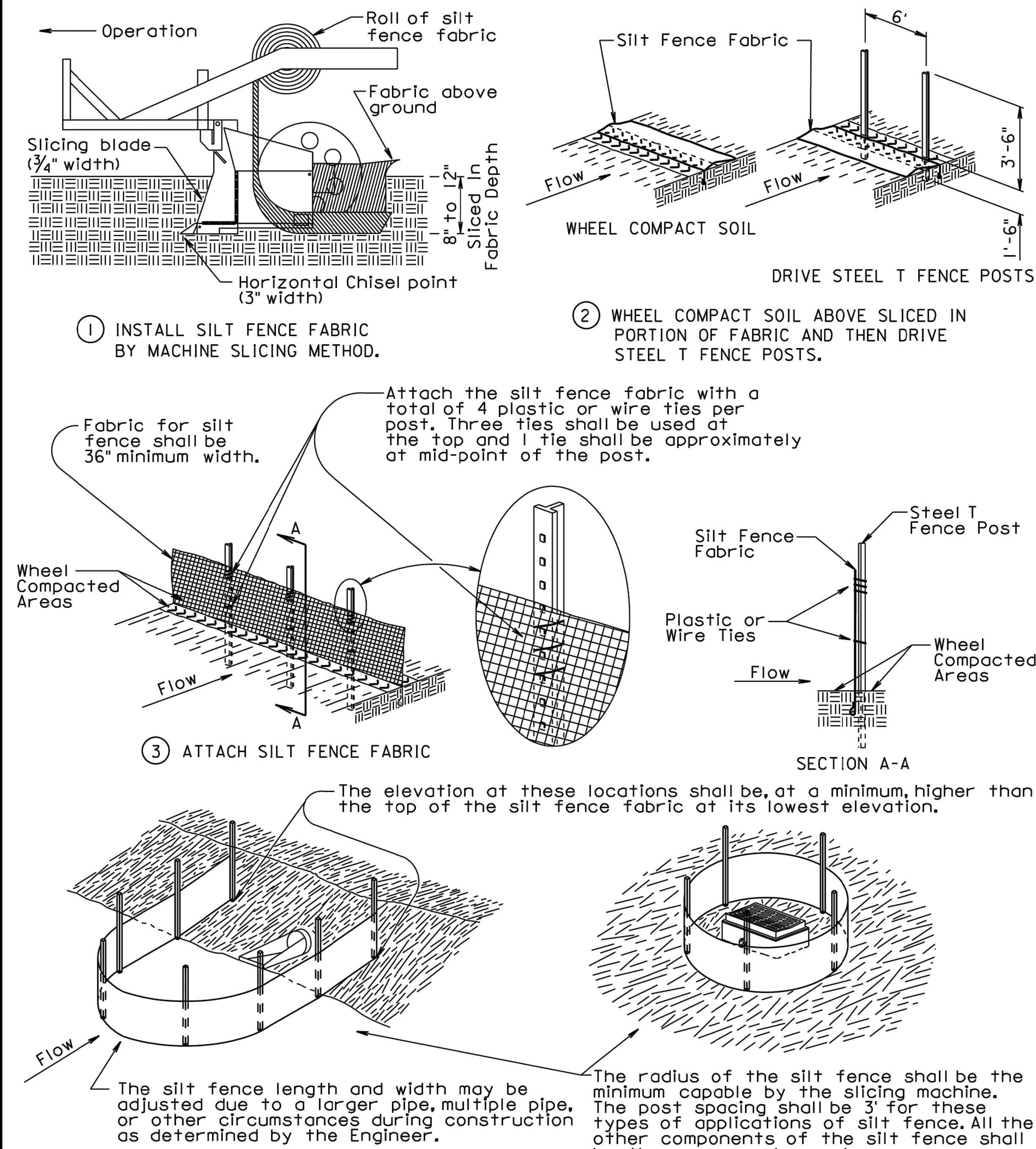
MANUAL HIGH FLOW SILT FENCE INSTALLATION



December 23, 2003

Published Date: 3rd Qtr. 2018	S D D O T	HIGH FLOW SILT FENCE	PLATE NUMBER
			734.05
			Sheet 1 of 2

MACHINE SLICED HIGH FLOW SILT FENCE INSTALLATION



GENERAL NOTE:

If a trench can not be dug or the silt fence fabric can not be sliced in due to the type of earthen material (such as rock), then a row of 30 to 40 pound sandbags butted end to end shall be provided on top of the extra length of silt fence fabric to prevent underflow.

December 23, 2003

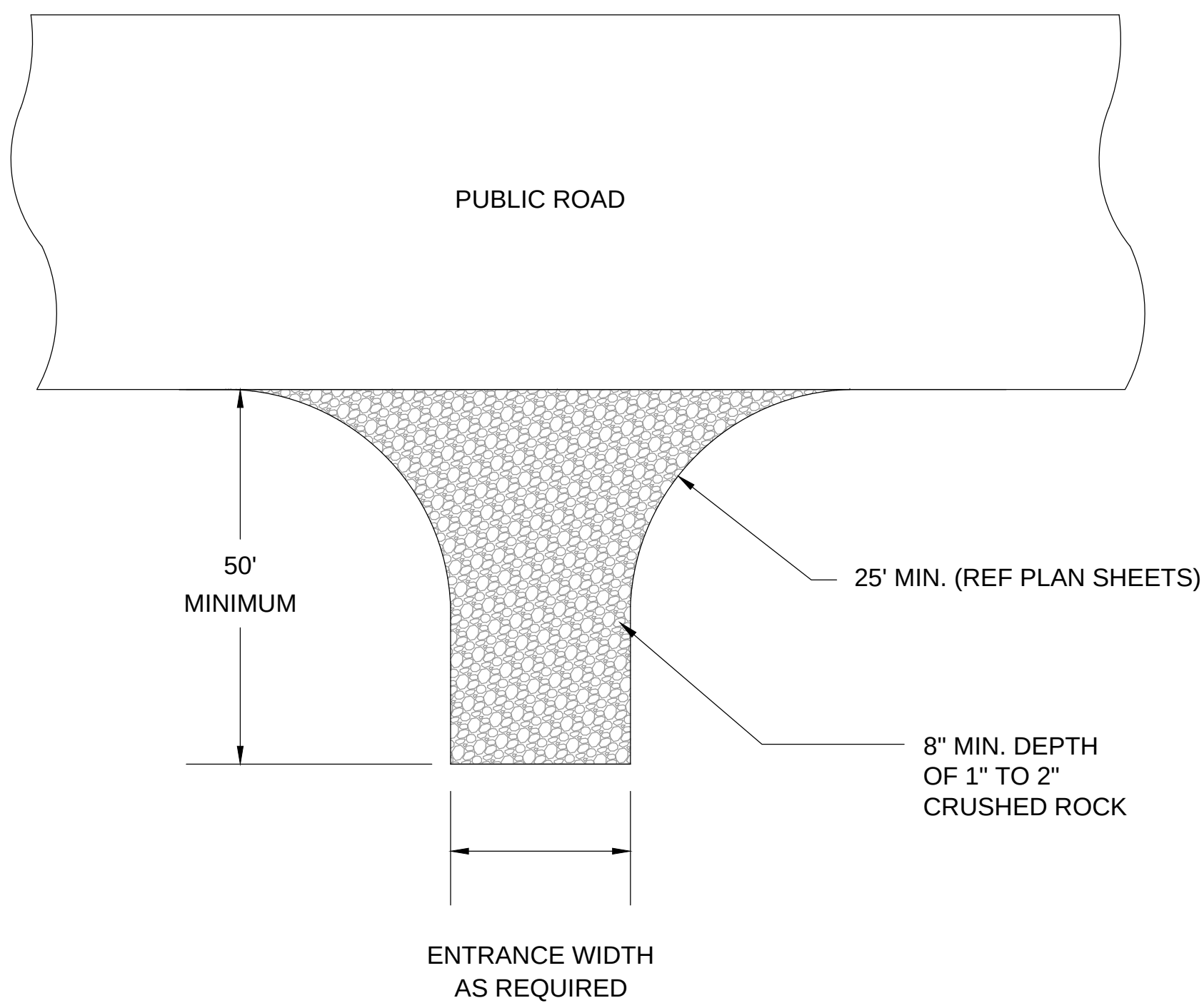
Published Date: 3rd Qtr. 2018	S D D O T	HIGH FLOW SILT FENCE	PLATE NUMBER
			734.05
			Sheet 2 of 2



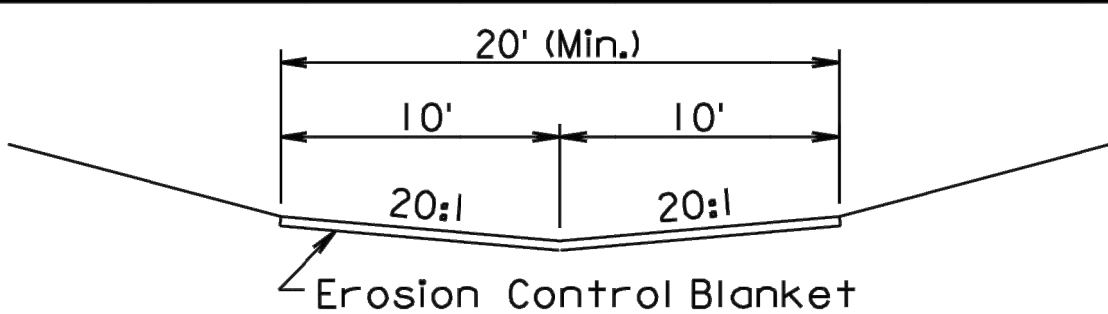
REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV
PCP FILE		SHEET	DWG
1 OF 1		1 OF 1	NO.
ERTYPLT.CTB		PRTSG01	



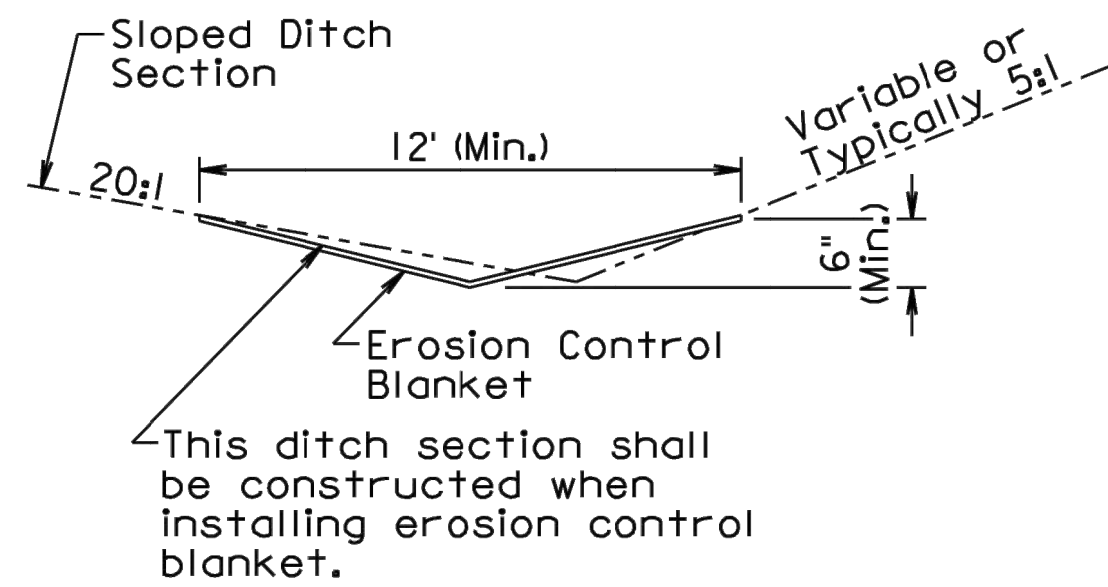
PRATT SUBSTATION
GRADING DETAILS



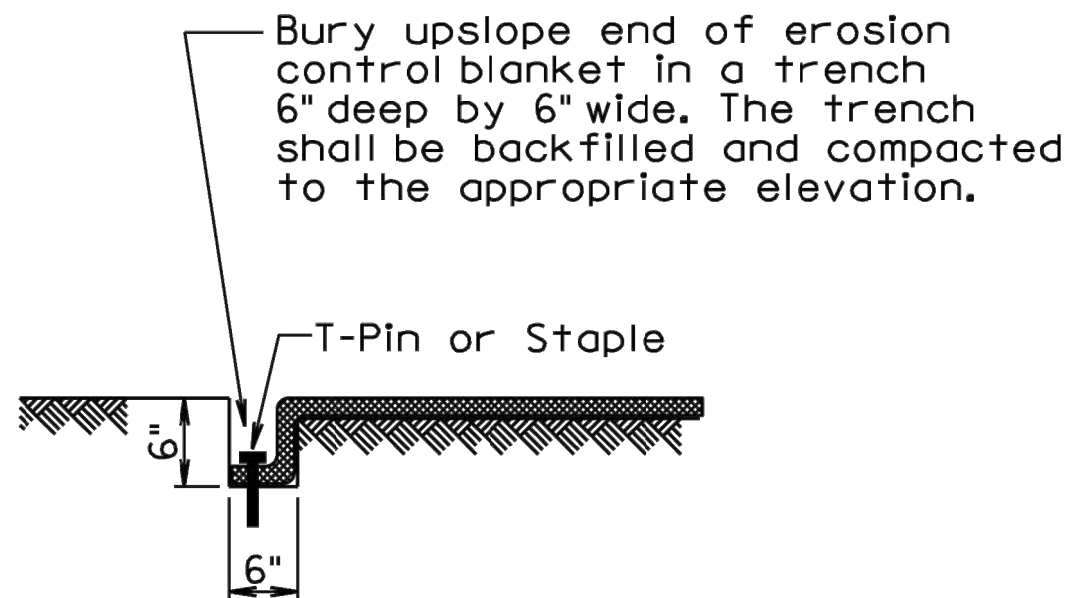
TRACKING CONTROL



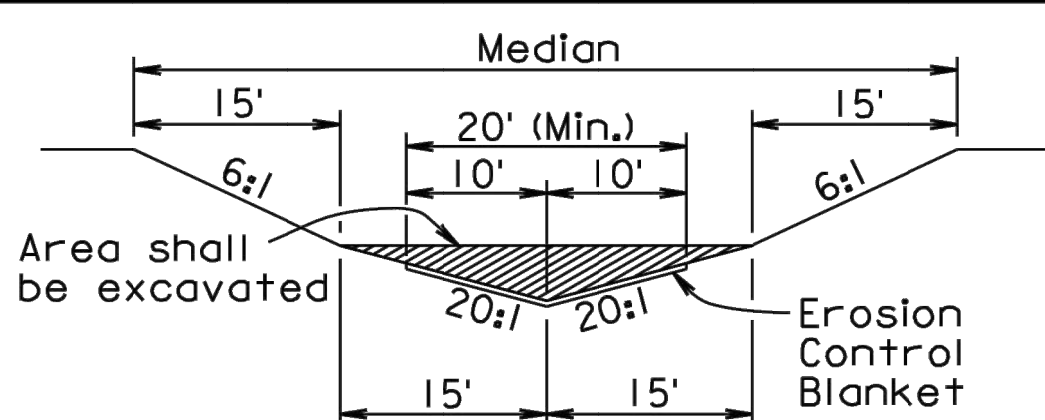
STANDARD DITCH SECTION



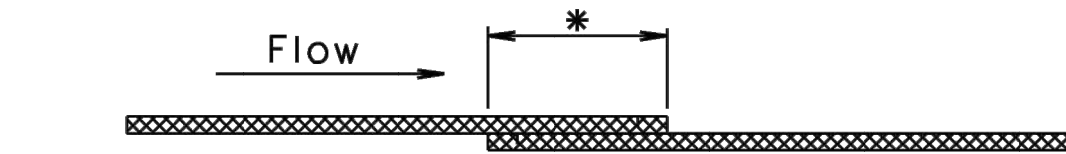
SLOPED DITCH SECTION



TRENCH DETAIL

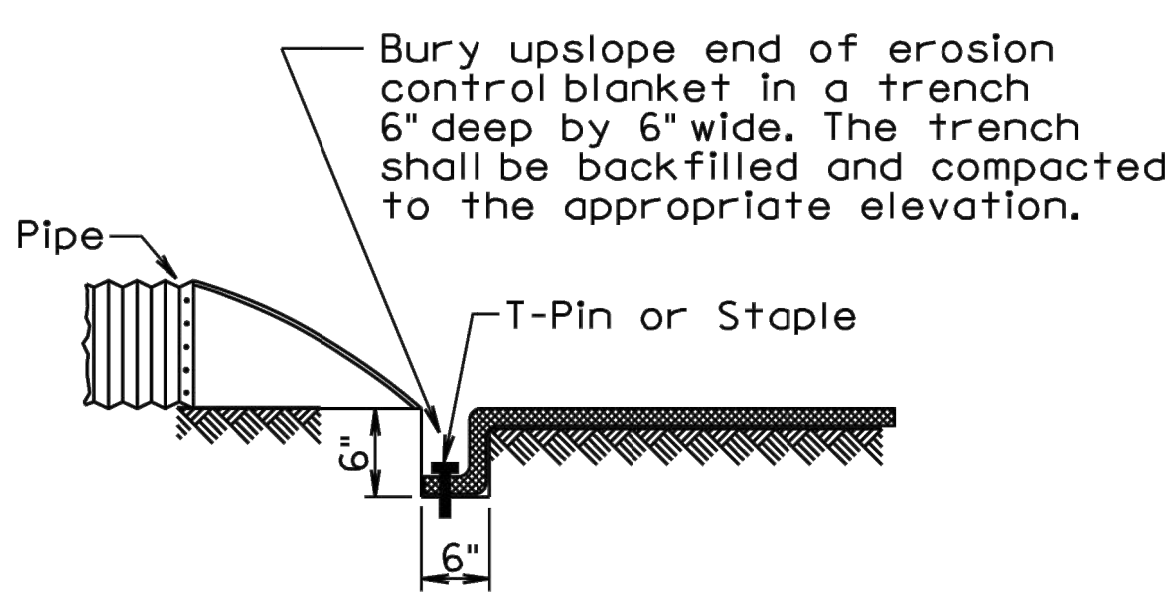


MEDIAN SECTION



- * Use a 4" (Min.) overlap wherever two widths of erosion control blanket are applied side by side.
- * Use a 6" (Min.) overlap wherever one roll of erosion control blanket ends and another begins.

OVERLAP DETAIL



PIPE END DETAIL

GENERAL NOTES:

Prior to placement of the erosion control blanket, the areas shall be properly prepared, shaped, seeded, and fertilized.

Erosion control blanket shall be unrolled in the direction of the flow of water when placed in ditches and on slopes. The upslope end of the erosion control blanket shall be buried in a trench 6" wide by 6" deep. There shall be at least a 6" overlap wherever one roll of erosion control blanket ends and another begins, with the upslope erosion control blanket placed on top of the downslope erosion control blanket.

The erosion control blanket shall be pinned to the ground according to the manufacturer's installation recommendations.

After the placement of the erosion control blanket, the Contractor shall fine grade along all edges of the blanket to maintain a uniform slope adjacent to the blanket and level any low spots which might prevent uniform and unrestricted flow of side drainage directly onto the erosion control blanket.

All ditch sections shall be shaped when installing the erosion control blanket. All costs for shaping the ditches shall be incidental to the contract unit price per foot for "Shaping for Erosion Control Blanket".

December 23, 2004

Published Date: 3rd Qtr. 2018

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EROSION CONTROL BLANKET

PLATE NUMBER
734.01

Sheet 1 of 1



REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV

PCP FILE	SHEET	DWG
ERTYPLT.CTB	1 OF 1	NO.



PRTS03

PRATT SUBSTATION
GRADING DETAILS



Stormwater Pollution Prevention Plan

For:

Pratt Substation Grading

Pratt Substation in Lot 1 of Pratt Substation Addition in the Southwest Quarter of Section 15,
Township 110 North, Range 73 West of the 5th Principal Meridian, Hyde County, South Dakota.

Contractor:

TBD

SWPPP Contact(s):

East River Electric Power Cooperative, Inc.

Mitch McNary
PO Box 227
221 S. Harth Avenue
Madison, SD 57042
(605) 256-8036
mmcnary@eastriver.coop

SWPPP Preparation Date:

June 18, 2024

Estimated Project Dates:

Project Start Date: July 15, 2024

Project Completion Date: May 29, 2025

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Appendix E – Corrective Action Log
Appendix F – SWPPP Amendment Log
Appendix G – Inspection and Maintenance Report
Appendix H – Subcontractor Certifications/Agreements

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: <u>Pratt Substation Grading</u>		
Project Street/Location: <u>TBD 328th Ave (≈1.25 mi N of 212th St & 328 Ave)</u>		
City: <u>Holabird</u>	State: <u>SD</u>	ZIP Code: <u>57540</u>
County or Similar Subdivision: <u>Hyde County</u>		
Latitude/Longitude		
Latitude:	Longitude:	
<u>44°19'37.56" N</u>	<u>99°36'9.85" W</u>	
Method for determining latitude/longitude:		
☐ USGS topographic map (specify scale: _____)	☐ EPA Web site	☐ GPS
☒ Other (please specify): <u>Google Earth</u>		
Is the project located in Indian country? ☐ Yes ☒ No		
If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." _____		
Is this project considered a federal facility? ☐ Yes ☒ No		
NPDES project or permit tracking number*: <u>SDR10P59C</u>		
<i>*(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate National Pollutant Discharge Elimination System (NPDES) construction general permit.)</i>		

1.2 Contact Information/Responsible Parties

Contractor(s):	
Company or Organization Name: TBD	
Name: TBD	
Address: TBD	Phone: TBD
City, State, Zip Code: TBD	Fax/Email: TBD
area of control (if more than one operator at site): General Contractor for grading plan	

Owner/Engineer Contact:	
East River Electric Power Cooperative	
Mitch McNary	Phone : (605) 256-8030
PO Box 227, 221 S. Harth Avenue	Fax: (605) 256-8054
Madison, SD 57042	Email: mmcenary@eastriver.coop

SWPPP Contact(s):	
East River Electric Power Cooperative	
Mitch McNary	Phone: (605) 256-8030
PO Box 227, 221 S. Harth Avenue	Fax: (605) 256-8054
Madison, SD 57042	Email: mmcenary@eastriver.coop

This SWPPP was Prepared by:	
DGR Engineering	
Dan Van Schepen	Phone: (712) 472-2531
PO Box 511, 1302 S. Union Street	Fax: (712) 472-2710
Rock Rapids, IA 51246	Email: dan.vanschepen@dgr.com

Emergency 24-Hour Contact:	
East River Electric Power Cooperative	
East River Electric Dispatch	
PO Box 227, 221 S. Harth Avenue	
Madison, SD 57042	
(605) 256-8260	

1.3 *Nature and Sequence of Construction Activity*

Describe the general scope of the work for the project, major phases of construction, etc:	
This project consists of grading to expand the existing East River Electric substation pad.	
What is the function of the construction activity?	
☐ Residential ☐ Commercial ☐ Industrial ☐ Road Construction ☒ Utility	
☐ Other (please specify):	
Estimated Project Start Date:	7/15/2024
Estimated Project Completion Date:	5/29/2025

1.4 *Soils, Slopes, Vegetation, and Current Drainage Patterns*

Soil type(s):
12" of topsoil with underlying loam. NRCS soils maps indicates the soil type as Raber-Cavo complex 0 to 2% slopes.
Slopes (describe current slopes and note any changes due to grading or fill activities):
Current slopes are toward the north at an average slope of 2.0% respectively. The pad will be built with a 1.5% crown with 5:1 or flatter side slopes. The driveway will be built with 1.5% crown and a 0.6% downward slope to the road. The driveway will have 5:1 or flatter side slopes.
Drainage Patterns (describe current drainage patterns and note any changes dues to grading or fill activities):
Current drainage patterns are to the north at 2.0 percent. Proposed drainage patterns will follow this same drainage pattern.
Vegetation:
The site is currently grassland. The proposed site will be 67.6% vegetated. All areas will be reseeded with the exception of the graveled/rocked areas and foundations.

1.5 Construction Site Estimates

The following are estimates of the construction site.	
Total project area:	5.1 acres
Construction site area to be disturbed:	2.6 acres
Percentage impervious area before construction:	0.2 %
Runoff coefficient before construction:	0.3
Percentage impervious area after construction:	32.4 %
Runoff coefficient after construction	0.45

1.6 Receiving Waters

Description of receiving waters:
Natural drainage channel, eventually to the Missouri River.
Description of storm sewer systems:
NA
Description of impaired waters or waters subject to TMDLs:
NA
Other:

1.7 Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:

Earthfill material, gravel and topsoil.

Petroleum products and trash

1.8 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?

☐ Yes ☒ No

Describe how this determination was made:

Through 7 CFR Part 1974, Environmental Policies and Procedures of Rural Development.

If yes, describe or refer to documentation that determines the likelihood of an impact on identified species and/or habitat and the steps taken to address that impact. (Note, if species are on or near your project site, EPA strongly recommends that the site operator work closely with the appropriate field office of the U.S. Fish and Wildlife Service or National Marine Fisheries Service. For concerns related to state or tribal listing of species, please contact a state or tribal official.)

If yes, describe the species and/or critical habitat:

1.9 Historic Preservation

Are there any historic sites on or near the construction site?

☐ Yes ☒ No

Describe how this determination was made:

Through 7 CFR Part 1974, Environmental Policies and Procedures of Rural Development.

If yes, describe or refer to documentation that determines the likelihood of an impact on this historic site and the steps taken to address that impact.

1.10 Applicable Federal, Tribal, State or Local Programs

NA

1.11 Maps

The maps are located within Appendix A & B.

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

2.1 *Minimize Disturbed Area and Protect Natural Features and Soil*

This project includes a grading project for a substation site. The site will be cleared, stripped, placement of embankment material, and then graded. After grading operations occurs the site will be graveled, top soiled and seeded.

Topsoil will be stripped from the site and salvaged in a stockpile onsite until the end of the grading operations. After the grading operations the areas to be seeded will be topsoiled and shaped. Any remaining topsoil will be removed from the site by the contractor.

2.2 *Control Stormwater Flowing onto and through the Project*

The site has been designed in a way to utilize the natural drainage onsite. Any drainage that has been blocked by the substation pad has a culvert placed within the drainage way to maintain the drainage path.

2.3 *Stabilize Soils*

BMP Description: Seeding, Fertilizing and Mulching

☒ <i>Permanent</i> ☐ <i>Temporary</i>	
<i>Installation Schedule:</i>	After the completion of the grading and surfacing of the project.
<i>Maintenance and Inspection:</i>	Monthly after the site has been seeded and mulched. Any spots that are washed out or fail to germinate will be reseeded during the next seeding timeframe.
<i>Responsible Staff:</i>	East River Electric

2.4 *Protect Slopes*

BMP Description: Seeding, Fertilizing and Mulching for slopes of 4:1 or less

☒ <i>Permanent</i> ☐ <i>Temporary</i>	
<i>Installation Schedule:</i>	After the completion of the grading and surfacing of the project.
<i>Maintenance and Inspection:</i>	Monthly after the site has been seeded and mulched. Any spots that are washed out or fail to germinate will be reseeded during the next seeding timeframe.
<i>Responsible Staff:</i>	East River Electric

2.5 Protect Storm Drain Inlets

BMP Description: Silt Fence

<i>Installation Schedule:</i>	During grading prior to final surfacing
<i>Maintenance and Inspection:</i>	During project and monthly there after
<i>Responsible Staff:</i>	Contractor during operations / East River Electric thereafter

2.6 Establish Perimeter Controls and Sediment Barriers

BMP Description: Erosion Control Wattles / Silt Fence

<i>Installation Schedule:</i>	Prior to any earthmoving activities
<i>Maintenance and Inspection:</i>	Weekly inspection or within 24 hours of 0.5” or greater precipitation. Monthly inspections following final seeding and mulching.
<i>Responsible Staff:</i>	Contractor during operations / East River Electric after seeding operations

2.7 Retain Sediment On-Site

BMP Description: Erosion Control Wattles / Silt Fence

<i>Installation Schedule:</i>	Prior to any earthmoving activities
<i>Maintenance and Inspection:</i>	Weekly inspection or within 24 hours of 0.5” or greater precipitation. Monthly inspections following final seeding and mulching.
<i>Responsible Staff:</i>	Contractor during operations / East River Electric after seeding operations

2.8 Establish Stabilized Construction Exits

BMP Description: Vehicle Tracking Control

Installation Schedule:	During grading operations. Control shall conduct embankment activities to utilize one construction entrance and shall utilize tracking control techniques.
Maintenance and Inspection:	Weekly inspection or within 24 hours of 0.5" or greater precipitation.
Responsible Staff:	Contractor

2.9 Final Stabilization

BMP Description: Seeding, Fertilizing and Mulching

☒ Permanent ☐ Temporary	
Installation Schedule:	After the completion of the grading and surfacing of the project.
Maintenance and Inspection:	Monthly after the site has been seeded and mulched. Any spots that are washed out or fail to germinate will be reseeded during the next seeding timeframe.
Responsible Staff:	Contractor during warranty period / East River Electric there after

- A. Final stabilization will be achieved with a uniform perennial vegetative cover with a density of 70% of the native background vegetation.
- B. After the site has achieved the criteria for final stabilization all temporary synthetic and structural erosion prevention and sediment control BMP's shall be removed.
- C. The notice of termination (NOT) shall be submitted within 30 days after the site has achieved final stabilization.

2.10 Construction Changes

When changes are made to the construction project that will require alterations in the temporary erosion controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The Engineer will modify the SWPPP plan and drawings to reflect the needed changes. Copies of forms and the SWPPP will be retained in a designated place for review over the course of the project.

SECTION 3: GOOD HOUSEKEEPING BMPS

3.1 *Material Handling and Waste Management*

A. Housekeeping

1. Only needed products will be stored on-site by the contractor.
2. Except for bulk materials the contractor will store all materials under cover and in appropriate containers.
3. Products must be stored in original containers and labeled.
4. Material mixing will be conducted in accordance with the manufacturer's recommendations.
5. When possible, all products will be completely used before properly disposing of the container off site.
6. The manufacturer's directions for disposal of materials and containers will be followed.
7. The contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
8. Dust generated will be controlled in an environmentally safe manner.
9. Vegetation areas not essential to the construction project will be preserved and maintained as noted on the plans.

B. Hazardous Materials

1. Products will be kept in original containers unless the container is not resealable.
2. Original labels and material safety data sheets will be retained in a safe place to relay important product information.
3. If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
4. Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.

5. Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any storm water system or storm water treatment system.
6. Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, and mixer washout waters will be collected on site and managed to prevent contamination of storm water runoff.

3.2 *Establish Proper Building Material Staging Areas*

- A. All equipment and supplies shall be staged onsite within the silt fence boundary.
- B. All material shall be stockpiled onsite within the silt fence boundary.

3.3 *Product Specific Practices*

A. Petroleum Products

1. All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.
2. Vehicle fueling operations shall occur in a way to reduce the chance of leakage.

B. Fertilizers

1. Fertilizers will be applied only in the amounts specified by the Project Specifications. Once applied, fertilizers will be worked into the soil to limit the exposure to storm water. Fertilizers will be stored in an enclosed area. The contents of partially used fertilizer bags will be transferred to sealable containers to avoid spills.

C. Paints

1. All containers will be tightly sealed and stored when not required for use. The excess will be disposed of according to the manufacturer's instructions and any applicable state and local regulations.

D. Concrete Trucks

1. Contractors will provide designated truck washout areas on the site. These areas must be self-contained and not connected to any storm water outlet of

the site. Upon completion of construction washout areas will be properly stabilized.

E. Vehicle Washing

2. Contractors will provide designated truck washout areas on the site. These areas must be self contained and not connected to any storm water outlet of the site. Upon completion of construction washout areas will be properly stabilized.

3.4 Spill Control Practices

In addition to the previous housekeeping and management practices, the following practices will be followed for spill prevention and cleanup if needed.

- A. For all hazardous materials stored on site, the manufacturer's recommended methods for spill clean up will be clearly posted. Site personnel will be made aware of the procedures and the locations of the information and cleanup supplies.
- B. Appropriate cleanup materials and equipment will be maintained by the contractor in the materials storage area on-site. As appropriate, equipment and materials may include items such as brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for clean up purposes.
- C. All spills will be cleaned immediately after discovery and the materials disposed of properly.
- D. The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- E. After a spill a report will be prepared describing the spill, what caused it, and the cleanup measures taken. The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, as well as clean up instructions in the event of reoccurrences.
- F. The contractor's site superintendent, responsible for day-to-day operations, will be the spill prevention and cleanup coordinator. The contractor is responsible for ensuring that the site superintendent has had appropriate training for hazardous materials handling, spill management, and cleanup.

3.5 Spill Response

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens storm water or surface water at the site, the spill response procedures outlined below must be implemented in a timely manner to prevent the release of pollutants.

- A. The contractor's site superintendent will be notified immediately when a spill or the threat of a spill is observed. The superintendent will assess the situation and determine the appropriate response.
- B. If spills represent an imminent threat of escaping erosion and sediment controls and entering receiving waters, personnel will be directed to respond immediately to contain the release and notify the superintendent after the situation has been stabilized.
- C. Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the contractor at the site.
- D. If oil sheen is observed on surface water (e.g. settling ponds, detention ponds, swales), action will be taken immediately to remove the material causing the sheen. The contractor will use appropriate materials to contain and absorb the spill. The source of the oil sheen will also be identified and removed or repaired as necessary to prevent further releases.
- E. If a spill occurs the superintendent or the superintendent's designee will be responsible for completing the spill reporting form and for reporting the spill to SD DENR.
- F. Personnel with primary responsibility for spill response and clean up will receive training by the contractor's site superintendent or designee. The training must include identifying the location of the spill kits and other spill response equipment and the use of spill response materials.
- G. Spill response equipment will be inspected and maintained as necessary to replace any materials used in spill response activities.

3.6 *Spill Notification*

In the event of a spill, the contractor's site superintendent will make the appropriate notification(s), consistent with the following procedures:

- A. A reportable spill is a quantity of 25 gallons or more or any spill of oil which: 1) violates water quality standards, 2) produces a "sheen" on a surface water, or 3) causes a sludge or emulsion must be reported immediately to the National Response Center at (800) 424-8802.
- B. Any spill of oil or hazardous substance to waters of the state must be reported immediately by telephone to the SD DENR at (605) 773-3296 or afterhours at (605) 773-3231.

3.7 *Allowable Non-Stormwater Discharge Management*

List of Allowable Non-Stormwater Discharges:

- 1. Waters used for compaction of embankment and gravel.
- 2. Waters used for control dust.
- 3. Waters used for washing of vehicles where detergents are not used.

SECTION 4: MAINTENANCE AND INSPECTION

4.1 *Inspections*

A. Inspection Responsibility

- i. The contractor's site superintendent is responsible for inspections. Maintenance and repair activities are the responsibility of the contractor. The Contractor will complete the inspection and maintenance reports and distribute copies per the distribution instructions on the form.

B. Inspection Practices

1. Inspections will be conducted at least one time per week and within 24 hours after a storm event of 0.50 inches or greater.
2. Silt fence will be inspected for depth of sediment and for tears in order to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches $\frac{1}{3}$ of the height of the silt fence.
3. Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure's capacity, and at the conclusion of the construction.
4. Check dams will be inspected for stability. Sediment will be removed when depth reaches $\frac{1}{2}$ the height of the dam.
5. All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
6. Inspection and maintenance reports will be prepared on the attached form in Appendix G of this SWPPP, for each site inspection. This form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.

C. Maintenance Practices

1. All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report.

4.2 Responsibility Schedule

The Contractor shall adhere to the South Dakota Department of Environment & Natural Resources requirements for controlling erosion and sedimentation from construction areas. The contractor will be required to follow the Erosion Control Plan shown in the drawings and this Construction Stormwater Pollution Prevention Plan (SWPPP), throughout the construction project. After the completion of the project and acceptance of the project by the owner the owner will carry on the requirements of the SWPPP and Erosion Control Plan. At that point of time the contractor will be removed of the requirements from the contractor. All language referring to the contractor in this SWPPP will then refer to the owner and or SWPPP Contact as the contractor. The owner will accept full responsibility of the inspection, maintenance and record keeping until the project has meets its requirements and a notice of termination has been accepted by the South Dakota Department of Environment and Natural Resources.

4.3 Delegation of Authority

Duly Authorized Representative(s) or Position(s):	
Company or Organization Name: TBD	
Name: TBD	
Address: TBD	
City, State, Zip Code: TBD	
Telephone Number: TBD	
Fax/Email: TBD	
area of control (if more than one operator at site): General Contractor for grading plan	
Owners/Engineers Duly Authorized Representative(s) or Position(s):	
East River Electric Power Cooperative	
Name: Mitch McNary	Phone: (605) 256-8030
Address: PO Box 227, 211 S. Harth Avenue	Fax: (605) 256-8054 fax
City, State, Zip Code: Madison, SD 57042	Email: mmcenary@eastriver.coop

4.4 Corrective Action Log

A corrective action log shall be kept and attached to this SWPPP in Appendix E.

SECTION 5: RECORDKEEPING & TRAINING

5.1 *Records Retention*

- A. An inspection and maintenance log, along with a copy of the SWPPP and any changes, shall be kept on site at all times during construction. The inspection and maintenance log shall be maintained until the Notice of Termination has been submitted. Records shall be retained for a minimum period of at least 3 years after the permit is terminated.

Date(s) when major grading activities occur:
Date(s) when construction activities temporarily or permanently cease on a portion of the site:
Date(s) when an area is either temporarily or permanently stabilized:
Date(s) when Notice of Termination was submitted and accepted:

5.2 *Log of Changes to the SWPPP*

See Appendix F

5.3 *Training*

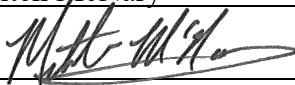
- A. East River's Personnel
1. Responsible personnel have attended and are certified in Erosion and Sediment Control by the South Dakota Department of Transportation.
- B. Contractor's Personnel
1. The contractor shall be responsible for training of their onsite personnel.

SECTION 6: CERTIFICATION AND NOTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Mitch McNary Title: Project Engineer

Signature:  Date: 6/18/24

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

Appendix A – General Location Map

Appendix B – Construction Plans/Site Maps

Appendix C – Construction General Permit

Appendix D – NOI and Acknowledgement Letter from SD DENR

Appendix E – Corrective Action Log

Appendix F – SWPPP Amendment Log

Appendix G – Inspection and Maintenance Report

Appendix H – Subcontractor Certifications/Agreements

Appendix I – Additional Information (i.e., 7 CFR 1794)

Appendix A

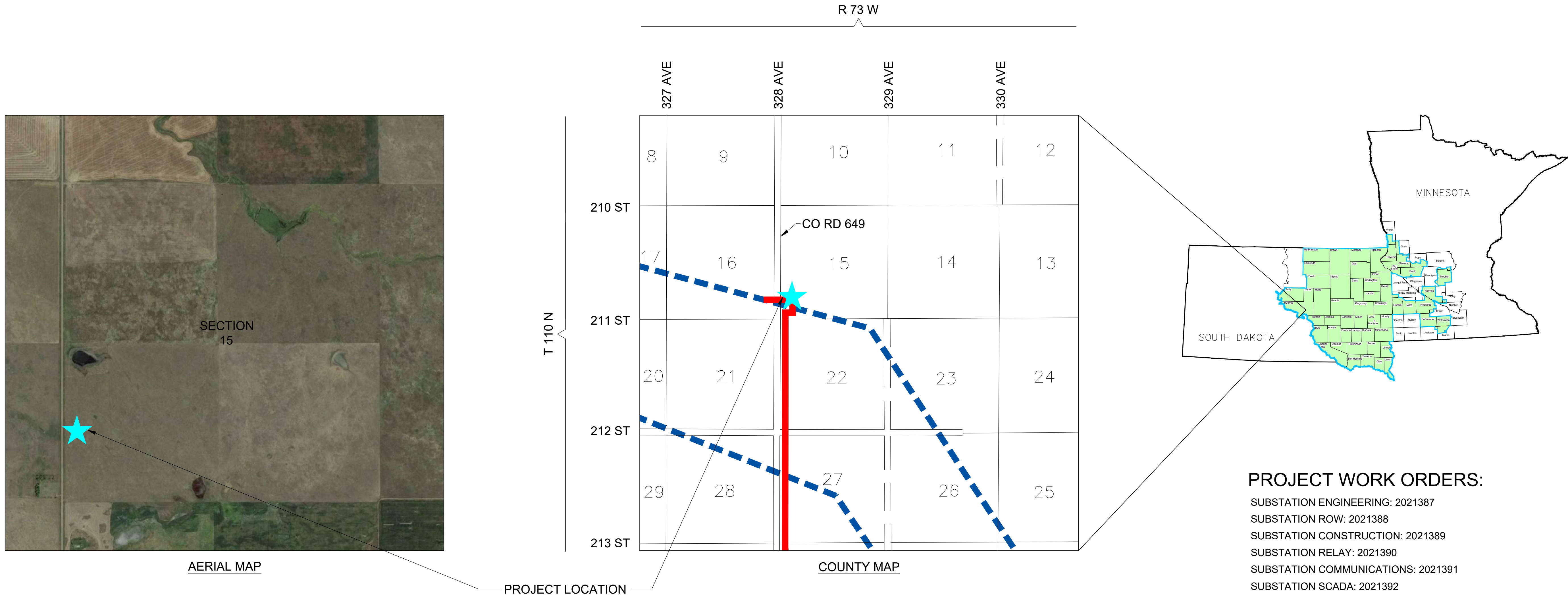
General Location Map

PRATT SUBSTATION

EAST RIVER ELECTRIC POWER COOPERATIVE, INC.

MADISON, SOUTH DAKOTA

2023



PROJECT WORK ORDERS:

- SUBSTATION ENGINEERING: 2021387
- SUBSTATION ROW: 2021388
- SUBSTATION CONSTRUCTION: 2021389
- SUBSTATION RELAY: 2021390
- SUBSTATION COMMUNICATIONS: 2021391
- SUBSTATION SCADA: 2021392
- SUBSTATION TRANSFORMER: 2021393

ADDRESS:

TBD 328TH AVENUE
HOLABIRD, SD 57540

LEGAL DESCRIPTION OF PROPERTY:

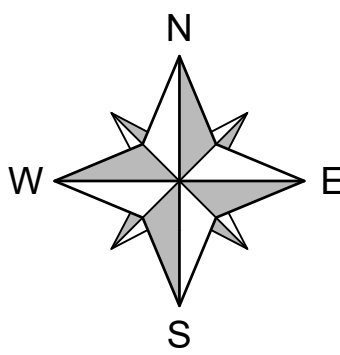
Lot 1 of Pratt Substation Addition in the SW1/4 of Section 15,
Township 110 North, Range 73 West of the 5th Principal Meridian,
Hyde County, South Dakota.

GEOGRAPHIC COORDINATES:

Latitude: 44° 19' 37.56" N
Longitude: 99° 36' 9.85" W

DIRECTIONS:

From Stephan at the intersection of South Dakota Highway 34 and
South Dakota Highway 47, go West 8 miles and North 3.5 miles.



LEGEND

- EAST RIVER LINE - PROPOSED
- - - WAPA LINE - EXISTING

HYDE COUNTY, SD

REVIEW SET 3
NOT FOR CONSTRUCTION
12/01/2023



REV	DATE	DESCRIPTION	CHKD



PCP FILE:	SHEET:	DWG:
ERTYPLT.CTB	1 OF 1	NO.

PRATT SUBSTATION
COVER SHEET

Appendix B

Construction Plans/Site Maps

GENERAL CONSTRUCTION NOTES:

STORM WATER DISCHARGE PERMIT:
GRADING OPERATIONS ON THIS PROJECT WILL DISTURB MORE THAN ONE ACRE OF LAND. THEREFORE, COVERAGE UNDER THE "GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES" MUST BE OBTAINED FROM THE SOUTH DAKOTA DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES PRIOR TO INITIATING ANY LAND DISTURBING ACTIVITIES. THESE PLANS DO NOT MEET ALL OF THE REQUIREMENTS FOR THE STORM WATER POLLUTION PREVENTION PLAN REQUIRED UNDER THE PERMIT. THE OWNER WILL FILE THE NECESSARY STORMWATER PERMITS AND PAY ANY NECESSARY FEES.

STORM WATER POLLUTION PREVENTION PLAN:
THE CONTRACTOR WILL BE REQUIRED TO FOLLOW THE EROSION CONTROL PLAN WITHIN THIS PLAN SET AND THE STORM WATER POLLUTION PREVENTION PLAN THAT WILL BE PROVIDED PRIOR TO THE START OF CONSTRUCTION.

AREA:
APPROXIMATELY 2.6 ACRES WILL BE DISTURBED DURING CONSTRUCTION ACTIVITIES.

SEDIMENT CONTROL MEASURES:
SEDIMENT CONTROL MEASURES WILL CONSIST OF SILT FENCE AND VEHICLE TRACKING CONTROL.

PHYSICAL CONSTRUCTION SEQUENCE SCHEDULE:
1. INSTALL SEDIMENT CONTROL MEASURES
2. PERFORM SITE GRADING
3. INSTALL TOPSOIL OVER ALL LANDSCAPING AREAS
4. INSTALL PERMANENT STABILIZATION AND LANDSCAPING
5. REMOVE SEDIMENT CONTROL AFTER FINAL STABILIZATION

PERMANENT STABILIZATION MEASURES:
PERMANENT LANDSCAPING INCLUDING SHAPING AND SEEDING WILL BE INSTALLED BY THE CONTRACTOR UPON COMPLETION OF THE CONSTRUCTION ACTIVITIES.

EROSION CONTROL MAINTENANCE:
INSPECTION OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE SCHEDULED WEEKLY AND FOLLOWING ANY STORM EVENT OF 0.5 INCHES OR GREATER. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. INSPECTION AND MAINTENANCE PROCEDURES WILL CONTINUE UNTIL ALL DISTURBED AREAS HAVE REACHED FINAL STABILIZATION.

STREETS ADJACENT TO THE SITE SHALL BE CLEANED AT THE END OF EACH WORKING DAY TO REMOVE SEDIMENT BUILDUP FROM CONSTRUCTION ACTIVITIES.

VEHICLE TRACKING & DUST CONTROL:
THE CONTRACTOR SHALL MAKE EVERY EFFORT TO CONTROL VEHICLE TRACKING ON ADJACENT ROADS AND HIGHWAYS AND FUGITIVE DUST EMISSIONS CAUSED BY CONSTRUCTION ACTIVITIES ON AND OFF THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE VEHICLE TRACKING CONTROL MEASURES AS SHOWN IN THE PLANS, DETAILS, AND/OR SPECIFICATIONS AND UTILIZE BEST PRACTICAL METHODS FOR TEMPORARY DUST CONTROL. THE VEHICLE TRACKING & DUST CONTROL SHALL BE CONSIDERED INCIDENTAL TO THE GRADING PROJECT AND NO ADDITIONAL PAYMENT WILL BE MADE.

TOPSOIL PLACEMENT:
SALVAGED TOPSOIL SHALL BE PLACED TO A DEPTH OF 12" OVER ALL LANDSCAPED AREAS. THE ENTIRE LANDSCAPED AREA SHALL BE FINE GRADED BY CONTRACTOR IN PREPARATION FOR SEEDING OPERATIONS. THE SURFACE AREA SHALL BE SMOOTH, UNIFORM, AND FREE FROM STONES, ROOTS AND OTHER UNDESIRABLE MATERIAL.

EXISTING FACILITIES:
THE CONTRACTOR SHALL PROTECT EXISTING ADJACENT ROAD SURFACING AND PRESERVE ALL EXISTING FEATURES THAT ARE NOT TO BE REMOVED OR DISTURBED.

TRAFFIC CONTROL:
THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL ALONG THE PROJECT ROADWAY AND BORROW AREA. THE CONTRACTOR SHALL FOLLOW MUTCD OR SD DOT RECOMMENDATIONS FOR TRAFFIC CONTROL REQUIREMENTS. THE CONTRACTOR SHALL SUBMIT A PLAN TO BE APPROVED BY THE OWNER PRIOR TO OR AT THE PRE-CONSTRUCTION MEETING. TRAFFIC CONTROL WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL PAYMENT WILL BE MADE FOR IT.

PERIMETER LIVESTOCK FENCE:
THE CONTRACTOR IS RESPONSIBLE FOR NOT DISTURBING THE EXISTING FENCING OUTSIDE THE PROJECT AREA, REMOVING FENCING WITHIN THE PROJECT AREA AND INSTALLING NEW FENCING 1' INSIDE THE PROPERTY LINES AS ILLUSTRATED. CONTRACTOR SHALL MATCH THE DESIGN AND SPACING OF THE EXISTING FENCING, AT A MINIMUM MEETING THE REQUIREMENTS OF SD DOT STANDARD SPECIFICATIONS, 920.1, TYPE 2. CROSS BRACING SHALL BE PROVIDED EACH WAY OF ALL FENCE CORNERS, SEE DETAIL.

BENCHMARK:
SHALL REMAIN IN PLACE, UNDISTURBED THROUGHOUT CONSTRUCTION.

LEGEND:

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EXISTING FENCE

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EAST RIVER POWER POLE & ANCHOR

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FOREIGN POWER POLE & ANCHOR

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EF

EXISTING EDGE OF FIELD

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EXISTING ROAD SIGN (DO NOT DISTURB)

Item No.	Item Description	See Notes	Unit	Total Quantity
1	Mobilization		LS	1
2	Common Excavation (EV)	(P)	CY	1810
3	Common Borrow (CV)	(P)	CY	5860
4	Topsoil (EV)	(P) (2)	CY	4530
5	Gravel Surfacing	(3)	TON	4060
6	18" CMP Road Culvert		L.F.	74
7	Sloped Culvert Apron		EA	2
8	Silt Fence		L.F.	965
9	Seeding, Fertilizing and Mulching		AC	1.2
10	Remove Cattle Fencing		L.F.	453
11	Perimeter Cattle Fencing		L.F.	1483

Notes:
(P) Denotes Item Paid for as Plan Quantity
(EV) Excavated Volume
(CV) Compacted Volume
(1) To be used as Designated by the Engineer
(2) Topsoil Depth Estimated to be 12", see soils report for details. Topsoil to be used onsite- 1370 CY, For disposal- 3160 CY
(3) Scale Tickets Required Unless Otherwise Approved by Engineer

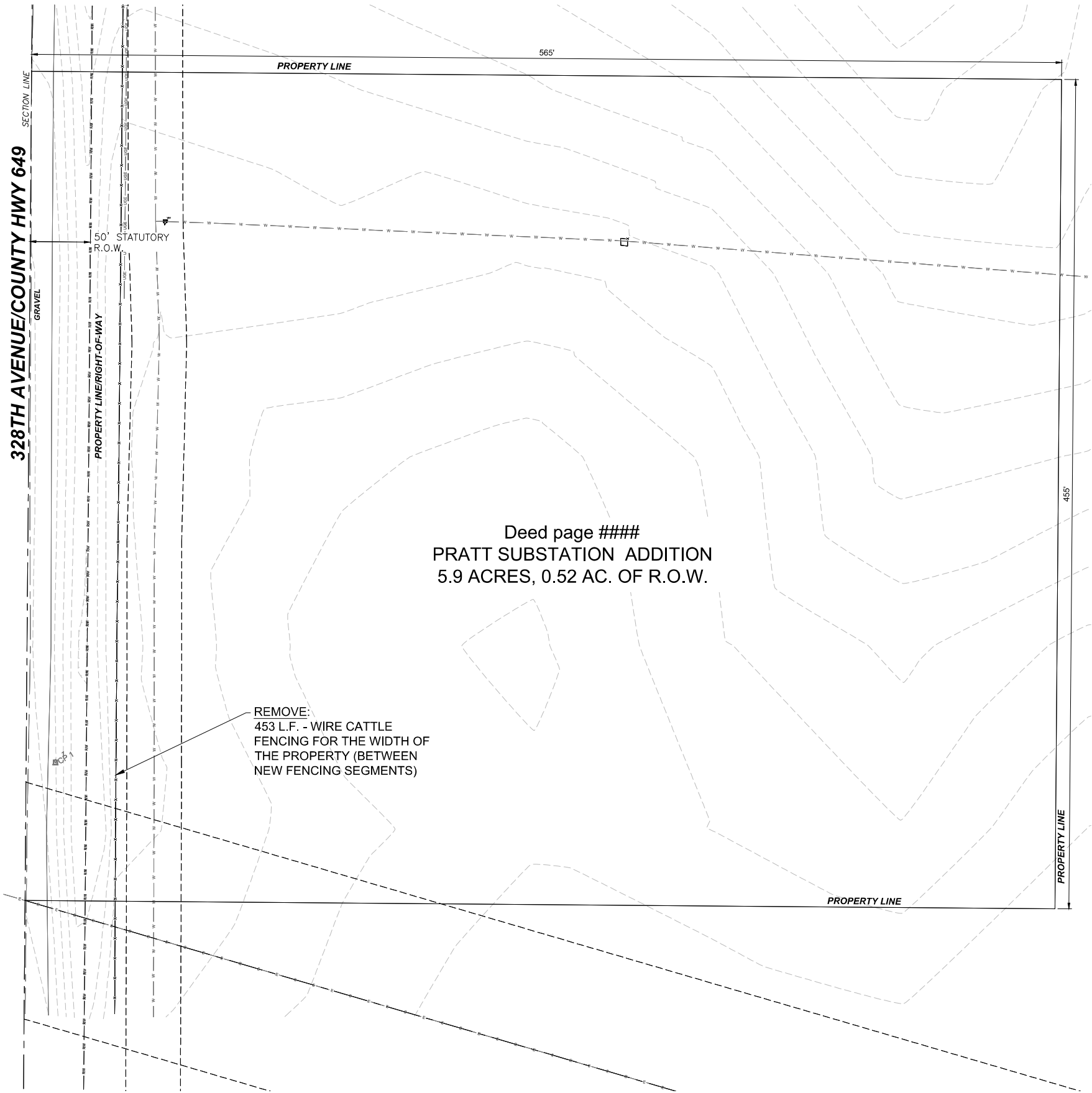
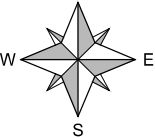
NOTICE TO CONTRACTOR:

ALL QUANTITIES ARE APPROXIMATE AND WERE DETERMINED FROM THE BEST AVAILABLE DATA. IT IS ASSUMED AND AGREED UPON THAT THE CONTRACTOR HAS VISITED THE SITE TO CONFIRM OR COME TO THEIR OWN CONCLUSION REGARDING ALL CONDITIONS, MATERIALS, QUANTITIES, ETC. THAT MAY AFFECT PROJECT COST AND HAS REFLECTED SUCH INFORMATION IN THEIR SUBMITTED BID. ALL ITEMS WILL BE PAID AS PER PLAN QUANTITY UNLESS OTHERWISE NOTED.

REV	DATE	DESCRIPTION	CHKD	DCP FILE	SHEET	DATE	NO.	PROJECT
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV	ERTYPLT.CTB	1 OF 1	2024	92	PR TSA01

PRATT SUBSTATION
GRADING NOTES AND QUANTITIES

Plot Date: January 9, 2024 Plot Time: 10:11:16 AM Plot Name: P:\0401\BIDDING\Grading\PRATT.dwg Layout: 201 By: Dan Van Schepel



REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV



PROJECT NO. 431602	PCP FILE	SHEET: 1 OF 1	DWG NO. PRTSB01
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PRATT SUBSTATION
EXISTING SITE

LEGEND:

- EMBANKMENT SHOULDER
- GRADING LIMITS
- PROPOSED CULVERT
- PROPOSED CATTLE FENCING

FURNISH AND INSTALL:
SUITABLE FILL MATERIAL - AS REQUIRED
GRAVEL SURFACE - AS REQUIRED

FURNISH AND INSTALL:
1483 L.F. - 4-WIRE CATTLE
FENCING BEFORE BEGINNING
CONSTRUCTION. MATCH DESIGN
AND SPACING OF EXISTING
FENCELINE EACH WAY. CORNERS
SHALL BE CROSS BRACED AS
DETAILED.

PROPOSED SUBSTATION
PAD WITH PARKING AREA

FURNISH AND INSTALL:
74 L.F. - 18" DIA. CMP CULVERT
2 - 18" DIA. SLOPED END SECTION

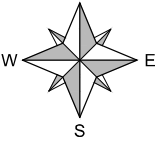


REV	DATE	DESCRIPTION	CHKD



PCP FILE	SHEET	DWG	NO.
ERTYPLT.CTB	1 OF 1	NO.	PRTSC01

PRATT SUBSTATION
SITE LAYOUT



LEGEND:

- 1800 CONTOUR
- 1600 EXISTING CONTOUR
- GRADING LIMITS

NOTE:
CONTOURS REFLECT 8" FINAL GRAVEL SURFACE
(REFERENCE GRADING TYPICAL SECTIONS).

ADDITIONAL 4" OF HIGH RESISTIVITY ROCK (NOT
DEPICTED IN SURFACE CONTOURS) TO BE
COMPLETED BY THE SUBSTATION CONTRACTOR
AND ARE NOT REFLECTED IN THE GRADING
CONTRACT QUANTITIES. SUBSTATION ROCK WILL
EXTEND AND BE TAPERED 5' PAST FENCE AND
SWING OF GATES.

328TH AVENUE/COUNTY HWY 649

SECTION LINE

GRAVEL

PROPERTY LINE/RIGHT-OF-WAY

50' STATUTORY
R.O.W.

101
EL: 2079.81
PROPERTY CORNER

102
EL: 2075.04
PROPERTY CORNER

204
EL: 2081.85

201
EL: 2081.93
FENCE CORNER POST

202
EL: 2081.93
FENCE CORNER POST

213
EL: 2083.75

214
EL: 2083.75

211
EL: 2081.30

209
EL: 2081.50

205
EL: 2082.71

207
EL: 2082.51

208
EL: 2082.14

200
EL: 2081.93
FENCE CORNER POST

203
EL: 2081.93
FENCE CORNER POST

210
EL: 2081.87

212
EL: 2081.74

206
EL: 2081.85

100
EL: 2081.04
PROPERTY CORNER

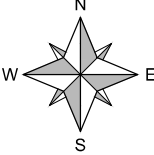
103
EL: 2083.99
PROPERTY CORNER



REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV

PROJECT NO. 431602	PCP FILE	SHEET: 1 OF 1	DWG NO. PRTSD01
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PRATT SUBSTATION
GRADING PLAN



LEGEND

- SILT FENCE
- VEGETATIVE BUFFER - MINIMIZE DISTURBANCE
- SEED, FERTILIZE AND MULCH

NOTES:

- PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN.
- FLOW CONTROL SEDIMENT CONTROL WATTLES AND INLET PROTECTION SHALL BE INSTALLED AS SOON AS POSSIBLE.
- ALL STREETS (PAVED) ADJACENT TO SITE SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
- AFTER CONSTRUCTION BEGINS, SOIL SURFACE STABILIZATION SHALL BE APPLIED WITHIN 14 DAYS TO ALL DISTURBED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR PERIODS LONGER THAN AN ADDITIONAL 21 CALENDAR DAYS. WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE, PERMANENT OR TEMPORARY SOIL SURFACE STABILIZATION SHALL BE APPLIED TO DISTURBED AREAS AND SOIL STOCKPILES.
- ALTERNATE AND/OR ADDITIONAL EROSION CONTROL MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION TO ENSURE THAT SEDIMENT DOES NOT LEAVE THE SITE OR HAVE A NEGATIVE IMPACT ON ADJACENT PROPERTIES. ALL COSTS ASSOCIATED WITH ADDITIONAL EROSION CONTROL WILL BE DETERMINED BY UNIT PRICE BIDS PREVIOUSLY APPROVED.

MAXIMUM TIME LIMITS OF LAND EXPOSURE FOR SELECTION OF EROSION CONTROLS

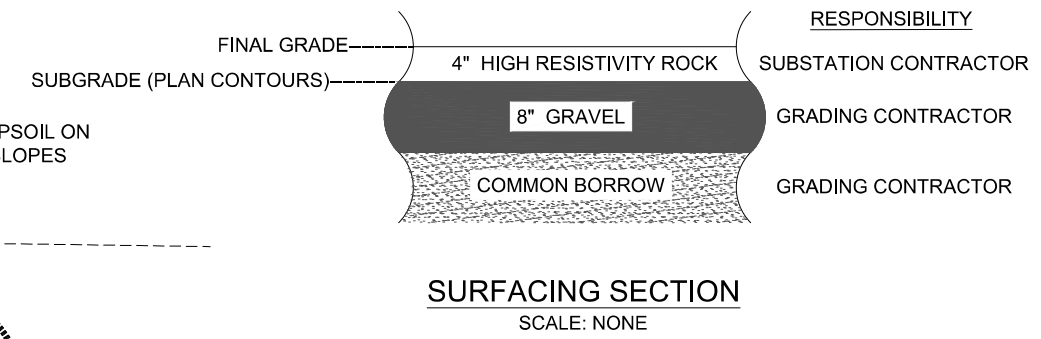
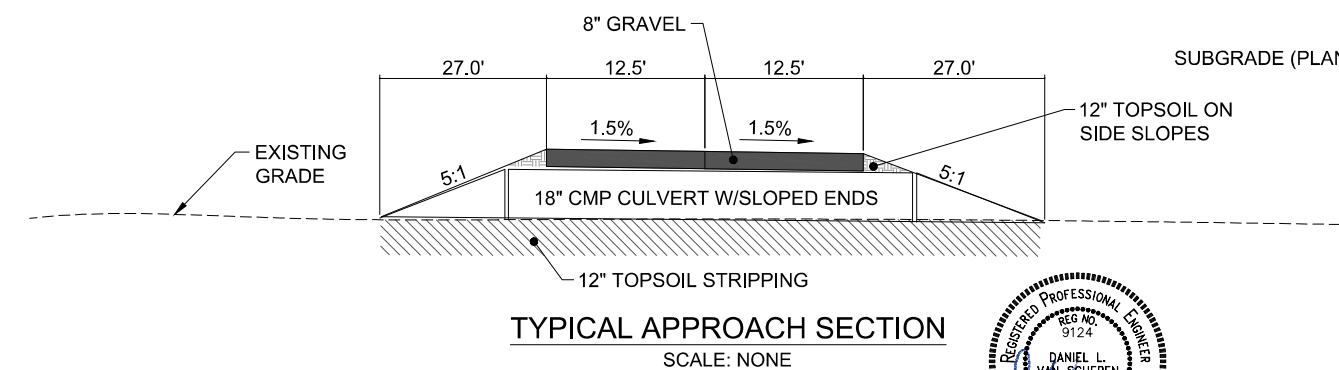
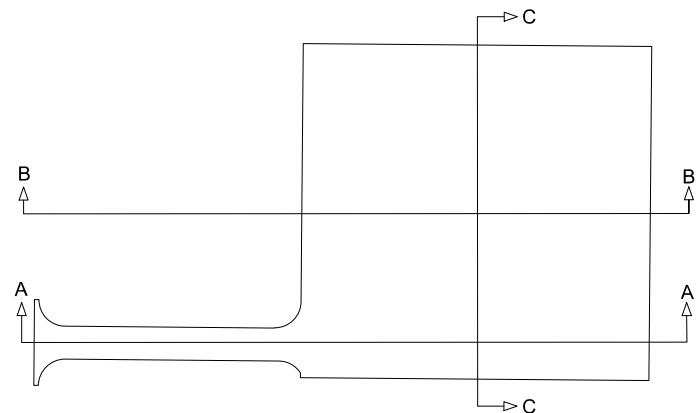
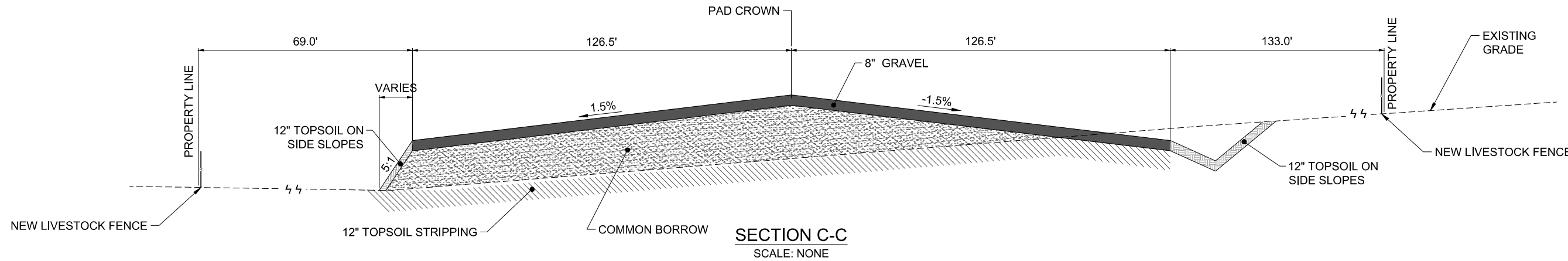
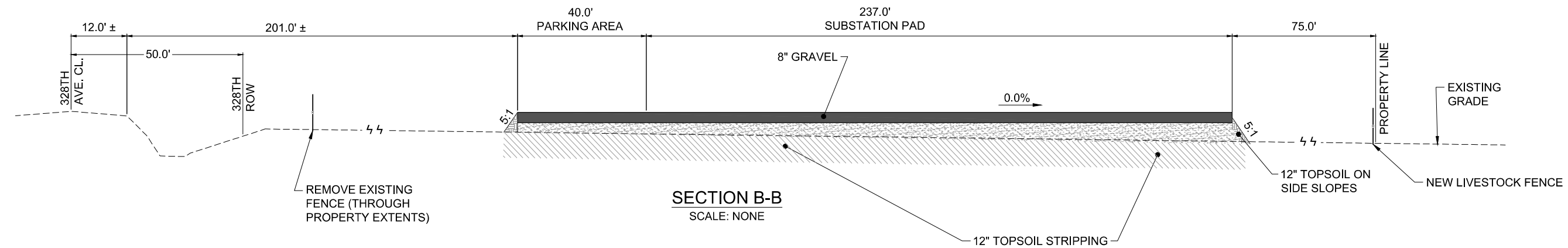
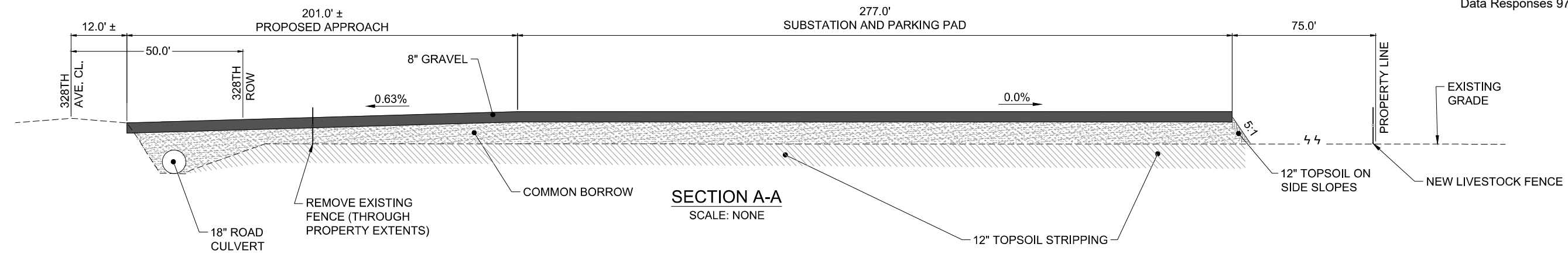
EROSION CONTROL METHOD	MAXIMUM ALLOWABLE PERIOD OF EXPOSURE (MONTHS)
SURFACE ROUGHENING (TRACKING)	1
MULCHING	4
TEMPORARY REVEGETATION	6 TO 12
PERMENANT REVEGETATION	24 OR MORE
SOIL STOCKPILE REVEGETATION	2
EARLY APPLICATION OF BASE COARSE	1



REV	DATE	DESCRIPTION	CHKD
0	1/8/2024	SUBSTATION CONSTRUCTION - IFC	DLV



PRATT SUBSTATION
EROSION CONTROL



REV	DATE	DESCRIPTION	CHKD
0	1/8/2024	SUBSTATION CONSTRUCTION - IFC	DLV

PCP FILE	SHEET	DWG NO.
ERTYPLT.CTB	1 OF 1	PRTSF01

PRATT SUBSTATION
GRADING SECTIONS

MANUAL HIGH FLOW SILT FENCE INSTALLATION

1 EXCAVATE TRENCH

2 DRIVE STEEL T FENCE POSTS

Attach the silt fence fabric with a total of 4 plastic or wire ties per post. Three ties shall be used at the top and 1 tie shall be approximately at mid-point of the post.

Fabric for silt fence shall be 36" minimum width.

3 ATTACH SILT FENCE FABRIC

4 BACKFILL TRENCH AND WHEEL COMPACT SOIL

8" staples shall be placed at each post to secure the silt fence fabric to the bottom of the trench.

SECTION A-A

The elevation at these locations shall be, at a minimum, higher than the top of the silt fence fabric at its lowest elevation.

Flow

Post spacing shall be 3' for these types of applications of silt fence. All other components of the silt fence shall be the same as shown above.

The silt fence length and width may be adjusted due to a larger pipe, multiple pipe, or other circumstances during construction as determined by the Engineer.

December 23, 2003

Published Date: 3rd Qtr. 2018	S D D O T	HIGH FLOW SILT FENCE	PLATE NUMBER 734.05
			Sheet 1 of 2

MACHINE SLICED HIGH FLOW SILT FENCE INSTALLATION

1 INSTALL SILT FENCE FABRIC BY MACHINE SLICING METHOD.

2 WHEEL COMPACT SOIL ABOVE SLICED IN PORTION OF FABRIC AND THEN DRIVE STEEL T FENCE POSTS.

3 ATTACH SILT FENCE FABRIC

Attach the silt fence fabric with a total of 4 plastic or wire ties per post. Three ties shall be used at the top and 1 tie shall be approximately at mid-point of the post.

Fabric for silt fence shall be 36" minimum width.

SECTION A-A

The elevation at these locations shall be, at a minimum, higher than the top of the silt fence fabric at its lowest elevation.

Flow

The silt fence length and width may be adjusted due to a larger pipe, multiple pipe, or other circumstances during construction as determined by the Engineer.

The radius of the silt fence shall be the minimum capable by the slicing machine. The post spacing shall be 3' for these types of applications of silt fence. All the other components of the silt fence shall be the same as shown above.

GENERAL NOTE:

If a trench can not be dug or the silt fence fabric can not be sliced in due to the type of earthen material (such as rock), then a row of 30 to 40 pound sandbags butted end to end shall be provided on top of the extra length of silt fence fabric to prevent underflow.

December 23, 2003

Published Date: 3rd Qtr. 2018	S D D O T	HIGH FLOW SILT FENCE	PLATE NUMBER 734.05
			Sheet 2 of 2

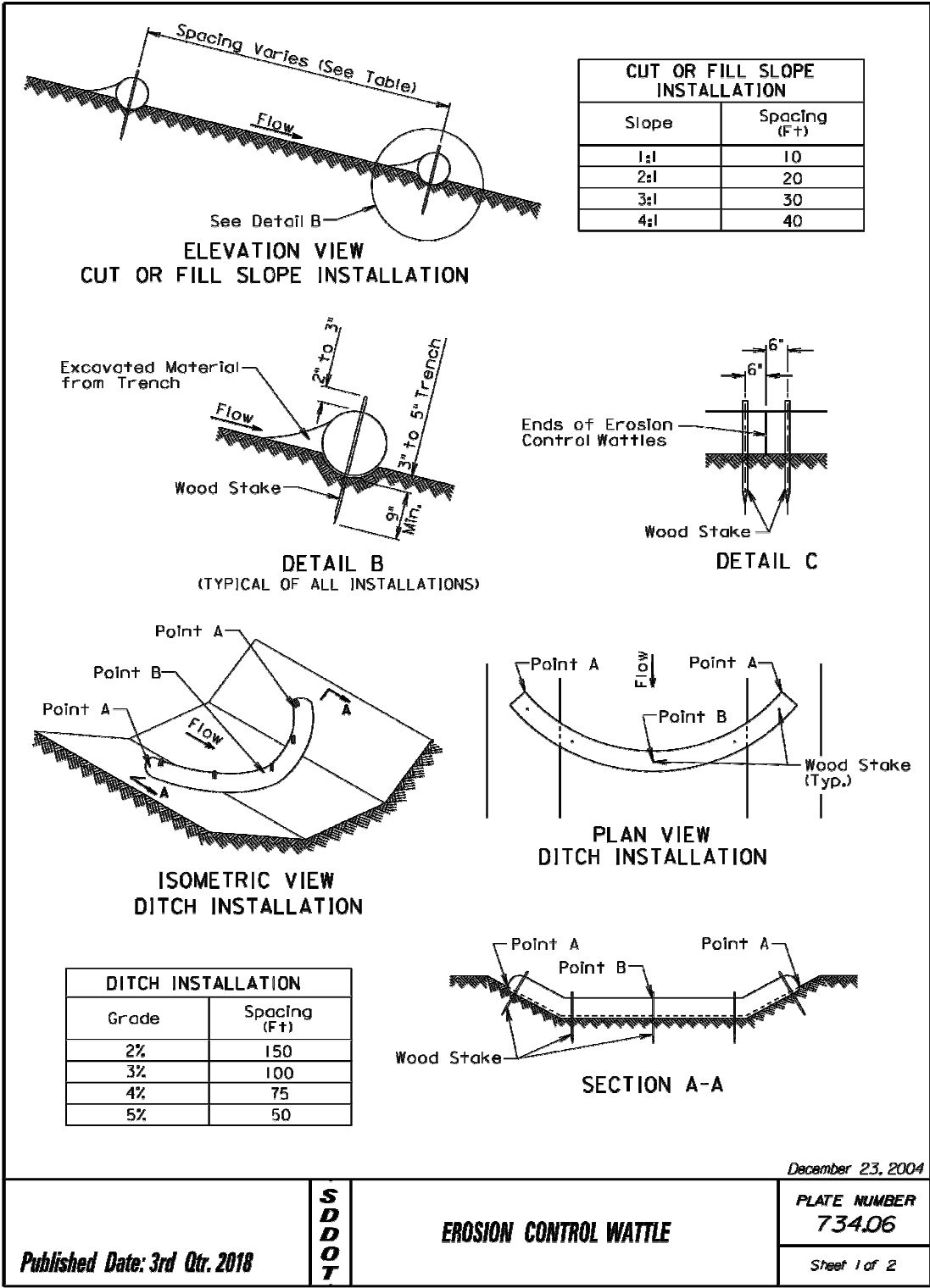


REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV



PROJECT NO. 43162
SHEET: 1 OF 1
DWG NO. PRTSG01

PRATT SUBSTATION
GRADING DETAILS



GENERAL NOTES:

At cut or fill slope installations, wattles shall be installed along the contour and perpendicular to the water flow.

At ditch installations, point A must be higher than point B to ensure that water flows over the wattle and not around the ends.

The Contractor shall dig a 3" to 5" trench, install the wattle tightly in the trench so that daylight can not be seen under the wattle, and then compact the soil excavated from the trench against the wattle on the uphill side. See Detail B.

The stakes shall be 1"x2" or 2"x2" wood stakes, however, other types of stakes such as rebar may be used only if approved by the Engineer. The stakes shall be placed 6" from the ends of the wattles and the spacing of the stakes along the wattles shall be 3' to 4'.

Where installing running lengths of wattles, the Contractor shall butt the second wattle tightly against the first and shall not overlap the ends. See Detail C.

The Contractor and Engineer shall inspect the erosion control wattles once every week and within 24 hours after every rainfall event greater than 1/2". The Contractor shall remove, dispose, or reshape the accumulated sediment when necessary as determined by the Engineer.

Sediment removal, disposal, or necessary shaping shall be as directed by the Engineer. All costs for removing accumulated sediment, disposal of sediment, and necessary shaping shall be incidental to the contract unit price per cubic yard for "Remove Sediment".

All costs for furnishing and installing the erosion control wattles including labor, equipment, and materials shall be incidental to the contract unit price per foot for the corresponding erosion control wattle bid item.

All costs for removing the erosion control wattle from the project including labor, equipment, and materials shall be incidental to the contract unit price per foot for "Remove Erosion Control Wattle".

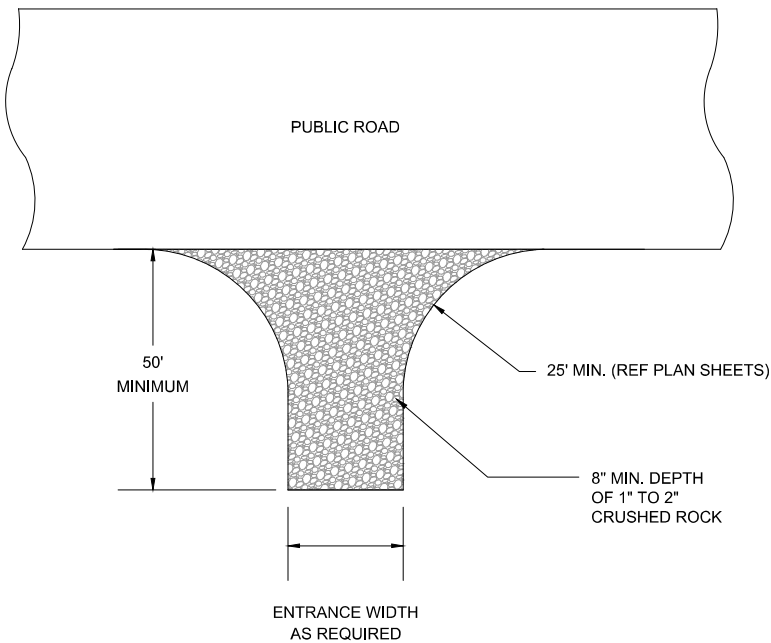


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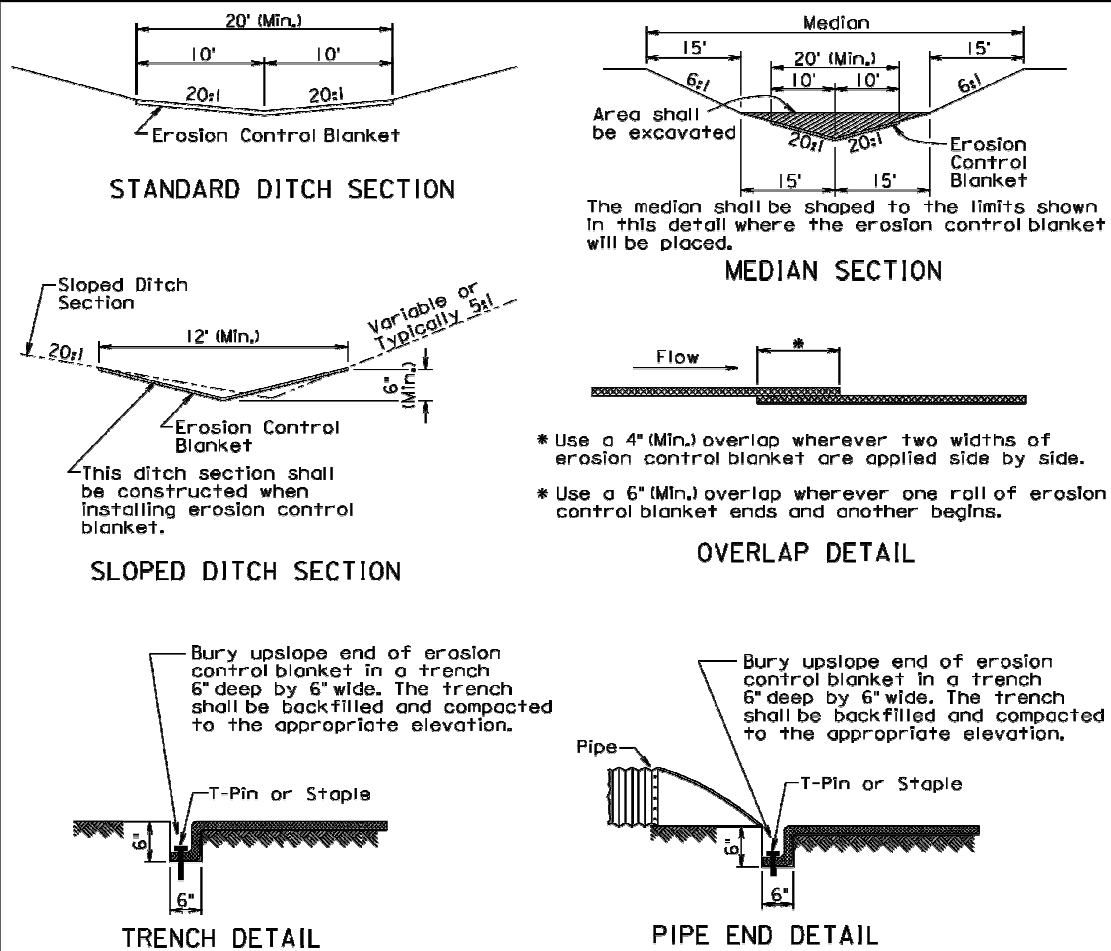


PRATT SUBSTATION
GRADING DETAILS

PROJECT NO. 43162
SHEET: 1 OF 1
DWG NO. PRTSG02



TRACKING CONTROL



GENERAL NOTES:

Prior to placement of the erosion control blanket, the areas shall be properly prepared, shaped, seeded, and fertilized.

Erosion control blanket shall be unrolled in the direction of the flow of water when placed in ditches and on slopes. The upslope end of the erosion control blanket shall be buried in a trench 6" wide by 6" deep. There shall be at least a 6" overlap wherever one roll of erosion control blanket ends and another begins, with the upslope erosion control blanket placed on top of the downslope erosion control blanket.

The erosion control blanket shall be pinned to the ground according to the manufacturer's installation recommendations.

After the placement of the erosion control blanket, the Contractor shall fine grade along all edges of the blanket to maintain a uniform slope adjacent to the blanket and level any low spots which might prevent uniform and unrestricted flow of side drainage directly onto the erosion control blanket.

All ditch sections shall be shaped when installing the erosion control blanket. All costs for shaping the ditches shall be incidental to the contract unit price per foot for "Shaping for Erosion Control Blanket".

December 23, 2004

Published Date: 3rd Qtr. 2018	S D D T	EROSION CONTROL BLANKET	PLATE NUMBER
			734.01
			Sheet 1 of 1

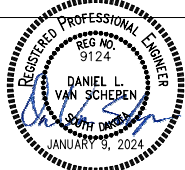
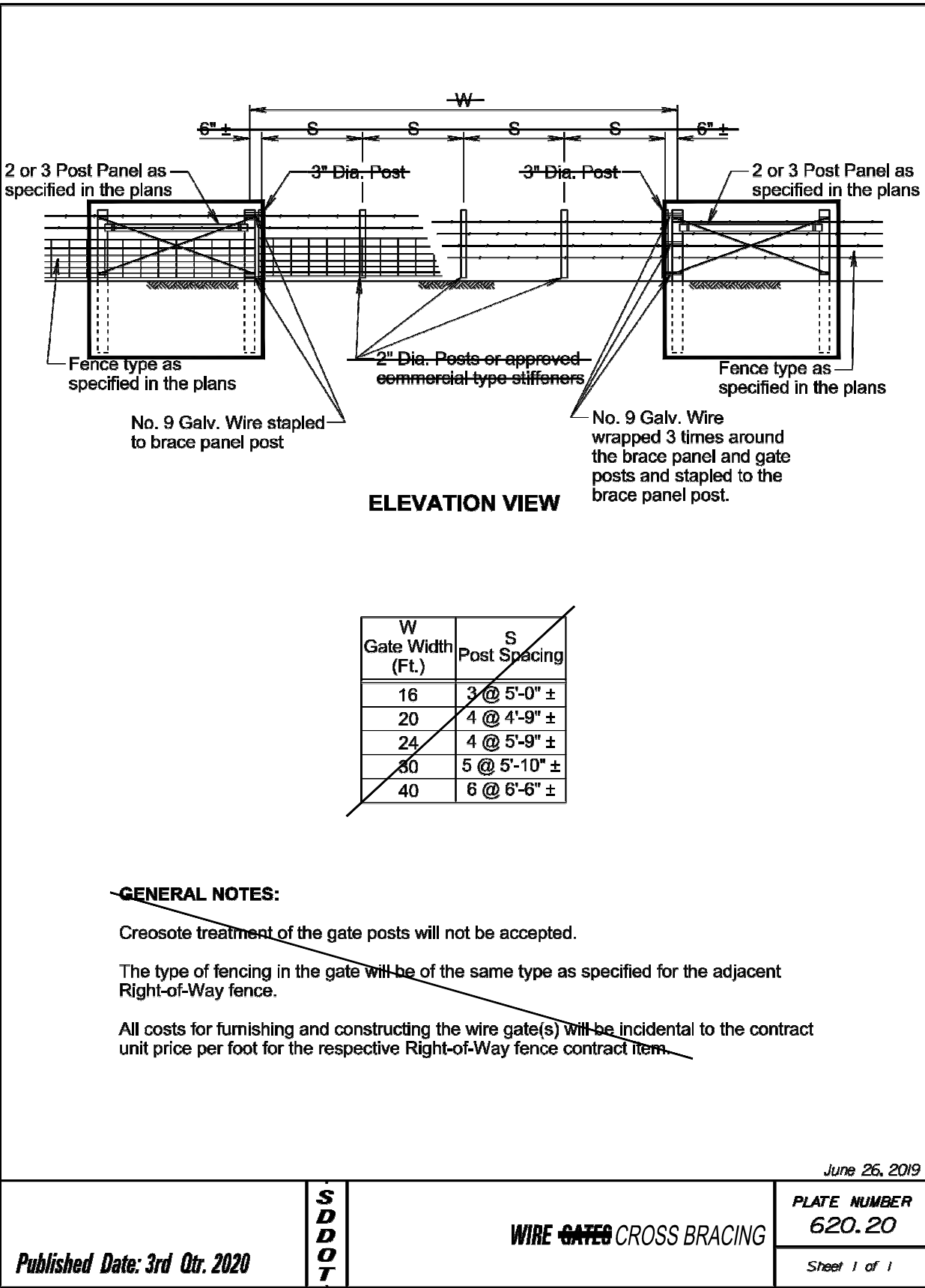
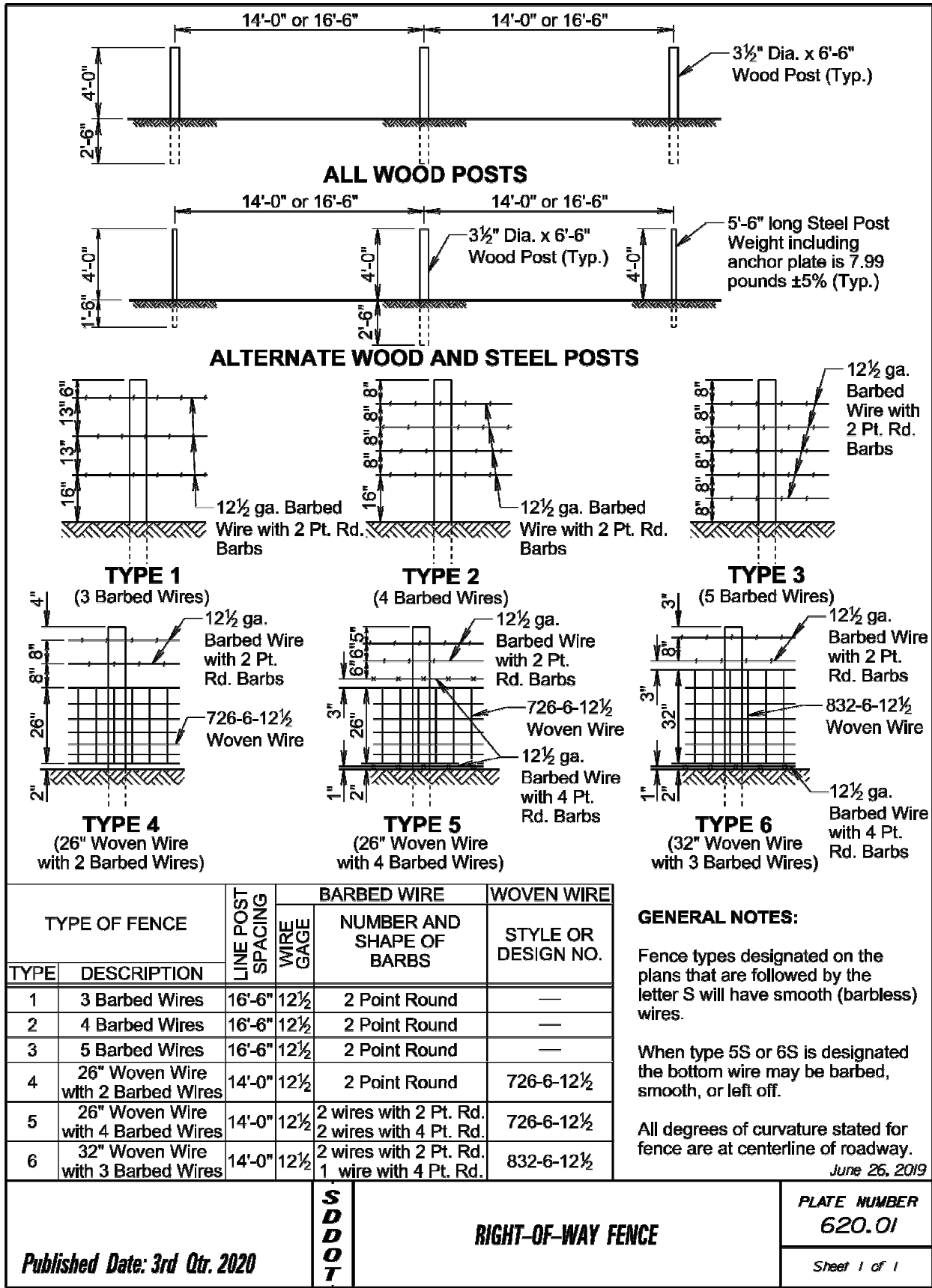


REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - FIC	DLV



PROJECT NO.	431602
DATE	1/9/2024
FILE	ERTYPLT.CTB
SHEET	1 OF 1
NO.	PRTSG03

PRATT SUBSTATION
GRADING DETAILS



REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - F.C.	DLV



DCP FILE	SHEET	DWG NO.
ERTYPLT.CTB	1 OF 1	PRTSG04

PRATT SUBSTATION
GRADING DETAILS

Appendix C
Construction General Permit
(Available Upon Request)

Appendix D
NOI and Acknowledgement Letter
from SD DENR



DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES
JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
darr.sd.gov

NOTICE OF INTENT to Obtain Coverage Under the Surface Water Discharge General Permit
for Storm Water Discharges Associated with Construction Activities

Data Responses 104 of 195

Permit Information

Master Permit Number: SDR100000NPDES ID: SDR10P59C

Eligibility Information

Select the state/territory to which your project/site is discharging: SDIs your project/site located on federally recognized Indian Country lands? NoDoes your project have any discharges identified in Section 2.3 - Discharges Not Authorized under the General Permit Authorizing Stormwater Discharges Associated with Construction Activities? No

Owner and Operator Information

Project Owner Information

Project Owner Company Name: East River Electric

Project Owner Point of Contact Information

First Name Middle Initial Last Name: Mitchel McNaryTitle: Project EngineerPhone: 605-256-8030 Ext.: Email: mmcnary@eastriver.coop

Project Owner Mailing Address

Address Line 1: 211 South Harth AveAddress Line 2: City: MadisonZIP/Postal Code: 57042State/Province: SDCountry: USOwnership Type: Private

Operator (On-Site Contact) Information

Is the Operator (On-Site Contact) Information the same as the Owner Information? Yes

Engineering/Consulting Firm Contact Information

First Name Middle Initial Last Name: Dan Van SchepenEmail: dan.vanschepen@dgr.com

NOI Preparer Information

☐ This NOI is being prepared by someone other than the certifier.

Project/Site Information

Project/Site Name: Pratt Substation Grading

Project/Site Address

Project Address or Intersection Location: TBD 328th Ave (≈1.25 mi N of 212th St & 328 Ave)City: HolabirdState: SDZIP/Postal Code: 57540County: Hyde

Latitude/Longitude for the Project/Site

Coordinate System: Degrees Minutes SecondsLatitude/Longitude: 44° 19' 37.56"N, 99° 36' 9.8496"W

Other Project Information

Project Start Date: 07/15/2024Estimated Final Stabilization Date: 07/15/2025Estimated Area of Total Disturbance: 2.6

Please include a brief description of the construction project:

This project includes a grading project for construction of an electrical substation. This site will be cleared, stripped, cut, filled, and graded. After grading operations, the site will be graveled, topsoiled, and seeded.

SWPPP Information

Has the SWPPP been prepared in advance of filing this NOI as required? [Yes](#)

Project Discharge Information

Will the project/site discharge into a Municipal Separate Storm Sewer System (MS4)? [No](#)

➤ Please list the nearest receiving water that could potentially receive stormwater discharges from this project/site (i.e. streams, wetlands, tributaries, storm sewers, rivers, lakes, ditches, natural vegetation area):

Natural drainage channel, eventually to the Missouri River.

Temporary Discharge Activities

Are there any temporary discharge activities for this project/site? [No](#)

Historic Preservation Information

Will this project encroach, damage, or destroy one of the historic sites identified at the following websites:
National Historic Landmarks (<https://www.nps.gov/subjects/nationalhistoriclandmarks/list-of-nhls-by-state.htm>)
National Register of Historic Places (<https://history.sd.gov/Preservation/nationalregisterofhistoricplaces.aspx>)
[No](#)

Certification of Applicant

Use the space below to attach the final signed and notarized Certification of Applicant form (<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWaterConstruction.aspx>):

Name	Uploaded Date	Size
 Pratt Substation - Certification of Applicant Form.pdf (attachment/1871259)	06/19/2024	6.65 MB

Notes and Additional Information

Do you have any notes or additional information for your project/site? [No](#)

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action.

Certified By: Mitchel McNary

Certifier Title: Project Engineer

Certifier Email: mmcnary@eastriver.coop

Certified On: 06/19/2024 5:47 PM ET

STATE OF SOUTH DAKOTA
BEFORE THE SECRETARY OF
THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

IN THE MATTER OF THE
APPLICATION OF

East River Electric Power Cooperative, Inc.

STATE OF South Dakota

COUNTY OF Lake

CERTIFICATION OF
APPLICANT

I, Mitchel McNary, the applicant in the above matter after being duly sworn upon oath hereby certify the following information in regard to this application:

I have read and understand South Dakota Codified Law Section 1-41-20 which provides:

"The secretary may reject an application for any permit filed pursuant to Titles 34A or 45, including any application by any concentrated swine feeding operation for authorization to operate under a general permit, upon making a specific finding that:

(1) The applicant is unsuited or unqualified to perform the obligations of a permit holder based upon a finding that the applicant, any officer, director, partner, or resident general manager of the facility for which application has been made:

- (a) Has intentionally misrepresented a material fact in applying for a permit;*
- (b) Has been convicted of a felony or other crime involving moral turpitude;*
- (c) Has habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage;*
- (d) Has had any permit revoked under the environmental laws of any state or the United States; or*
- (e) Has otherwise demonstrated through clear and convincing evidence of previous actions that the applicant lacks the necessary good character and competency to reliably carry out the obligations imposed by law upon the permit holder; or*

(2) The application substantially duplicates an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Nothing in this subdivision may be construed to prohibit an applicant from submitting a new application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.

All applications filed pursuant to Titles 34A and 45 shall include a certification, sworn to under oath and signed by the applicant, that he is not disqualified by reason of this section from obtaining a permit. In the absence of evidence to the contrary, that certification shall constitute a prima facie showing of the suitability and qualification of the applicant. If at any point in the application review, recommendation or hearing process, the secretary finds the applicant has intentionally made any material misrepresentation of fact in regard to this certification,

consideration of the application may be suspended and the application may be rejected as provided for under this section.

Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26."

I certify pursuant to 1-41-20, that as an applicant, officer, director, partner, or resident general manager of the activity or facility for which the application has been made that I; a) have not intentionally misrepresented a material fact in applying for a permit; b) have not been convicted of a felony or other crime of moral turpitude; c) have not habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage; (d) have not had any permit revoked under the environmental laws of any state or the United States; or e) have not otherwise demonstrated through clear and convincing evidence of previous actions that I lack the necessary good character and competency to reliably carry out the obligations imposed by law upon me. I also certify that this application does not substantially duplicate an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Further;

"I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct."

Dated this 19 day of June, 2024.

Mitchel McNary
Applicant (print)

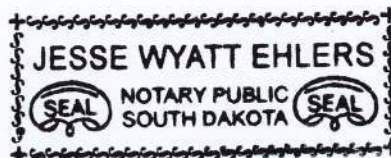
[Signature]
Applicant (signature)

Subscribed and sworn before me this 19th day of June, 2024.

[Signature]
Notary Public (signature)

My commission expires: Oct, 21st, 2028

(SEAL)



**PLEASE ATTACH ANY ADDITIONAL INFORMATION NECESSARY TO DISCLOSE
ALL FACTS AND DOCUMENTS PERTAINING TO
SDCL 1-41-20 (1) (a) THROUGH (e).
ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT
AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION**

Appendix E

Corrective Action Log

Corrective Action Log

Project Name: Pratt Substation Grading
SWPPP Contact: Mitch McNary

[illegible]

Appendix F

SWPPP Amendment Log

SWPPP Amendment Log

Project Name: Pratt Substation Grading
SWPPP Contact: Mitch McNary

[illegible]

Appendix G

Inspection and Maintenance Report

Inspection and Maintenance Report

Completed weekly and within 24 hr of 0.5" or greater precipitation.

[illegible]

Appendix H

Subcontractor Certifications Form

Appendix I

Additional Certifications



Permit Information

Master Permit Number: SDR100000

NPDES ID: SDR10P59C

Eligibility Information

Select the state/territory to which your project/site is discharging: SD

Is your project/site located on federally recognized Indian Country lands? No

Does your project have any discharges identified in Section 2.3 - Discharges Not Authorized under the General Permit Authorizing Stormwater Discharges Associated with Construction Activities? No

Owner and Operator Information

Project Owner Information

Project Owner Company Name: East River Electric

Project Owner Point of Contact Information

First Name Middle Initial Last Name: Mitchel McNary

Title: Project Engineer

Phone: 605-256-8030 Ext.:

Email: mmcnary@eastriver.coop

Project Owner Mailing Address

Address Line 1: 211 South Harth Ave

Address Line 2:

City: Madison

ZIP/Postal Code: 57042

State/Province: SD

Country: US

Ownership Type: Private

Operator (On-Site Contact) Information

Is the Operator (On-Site Contact) Information the same as the Owner Information? Yes

Engineering/Consulting Firm Contact Information

First Name Middle Initial Last Name: Dan Van Schepen

Email: dan.vanschepen@dgr.com

NOI Preparer Information

☐ This NOI is being prepared by someone other than the certifier.

Project/Site Information

Project/Site Name: Pratt Substation Grading

Project/Site Address

Project Address or Intersection Location: TBD 328th Ave (≈1.25 mi N of 212th St & 328 Ave)

City: Holabird

State: SD

ZIP/Postal Code: 57540

County: Hyde

Latitude/Longitude for the Project/Site

Coordinate System: Degrees Minutes Seconds

Latitude/Longitude: 44° 19' 37.56"N, 99° 36' 9.8496"W

Other Project Information

Project Start Date: 07/15/2024

Estimated Final Stabilization Date: 07/15/2025

Estimated Area of Total Disturbance: 2.6

Please include a brief description of the construction project:

This project includes a grading project for construction of an electrical substation. This site will be cleared, stripped, cut, filled, and graded. After grading operations, the site will be graveled, topsoiled, and seeded.

SWPPP Information

Has the SWPPP been prepared in advance of filing this NOI as required? [Yes](#)

Project Discharge Information

Will the project/site discharge into a Municipal Separate Storm Sewer System (MS4)? [No](#)

➤ Please list the nearest receiving water that could potentially receive stormwater discharges from this project/site (i.e. streams, wetlands, tributaries, storm sewers, rivers, lakes, ditches, natural vegetation area):

Natural drainage channel, eventually to the Missouri River.

Temporary Discharge Activities

Are there any temporary discharge activities for this project/site? [No](#)

Historic Preservation Information

Will this project encroach, damage, or destroy one of the historic sites identified at the following websites:
National Historic Landmarks (<https://www.nps.gov/subjects/nationalhistoriclandmarks/list-of-nhls-by-state.htm>)
National Register of Historic Places (<https://history.sd.gov/Preservation/nationalregisterofhistoricplaces.aspx>)
[No](#)

Certification of Applicant

Use the space below to attach the final signed and notarized Certification of Applicant form (<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWaterConstruction.aspx>):

Name	Uploaded Date	Size
 Pratt Substation - Certification of Applicant Form.pdf (attachment/1871259)	06/19/2024	6.65 MB

Notes and Additional Information

Do you have any notes or additional information for your project/site? [No](#)

Certification Information

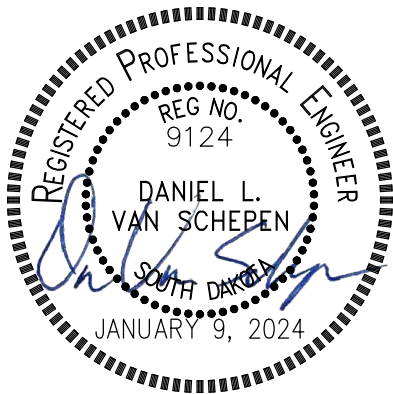
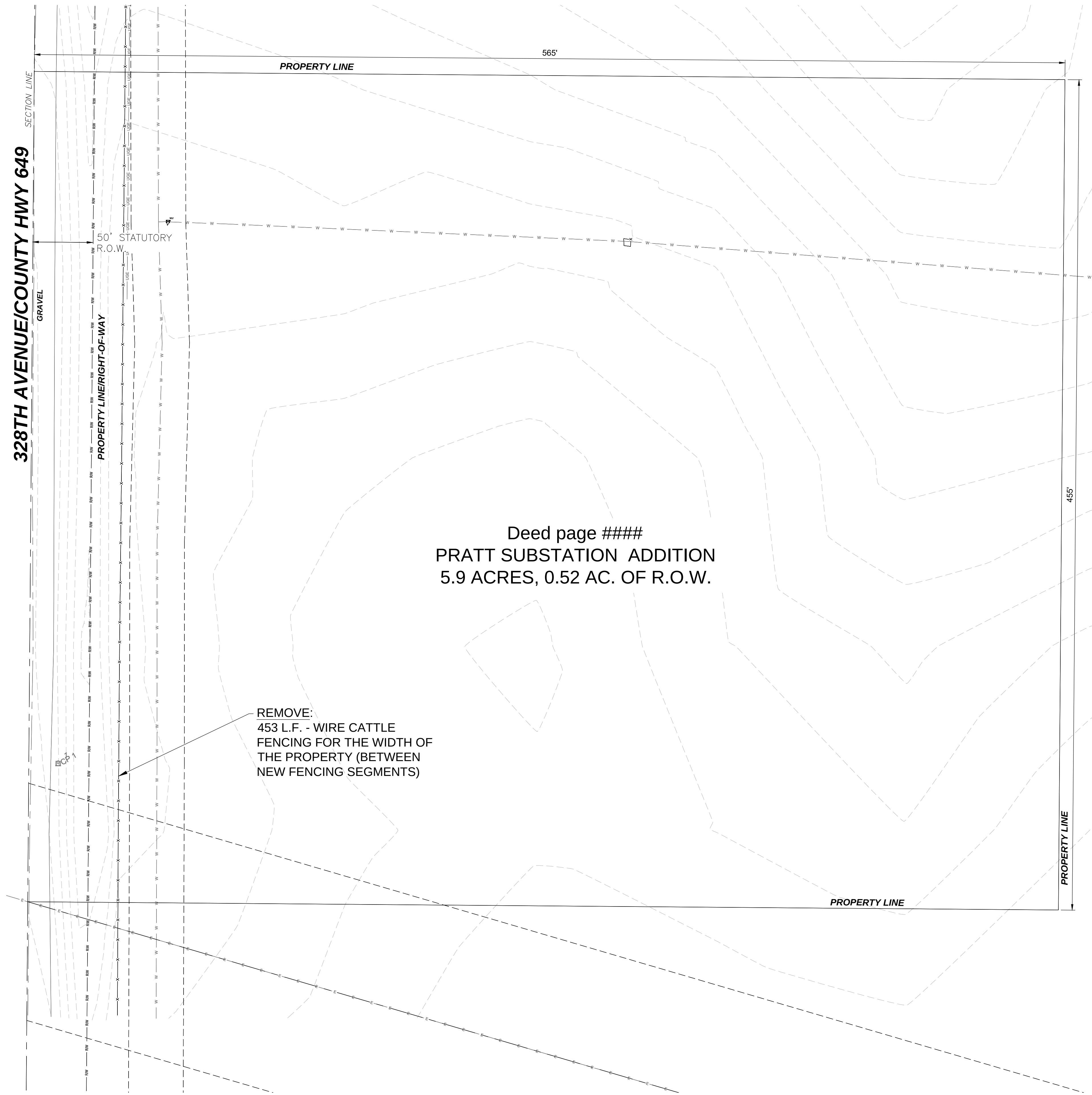
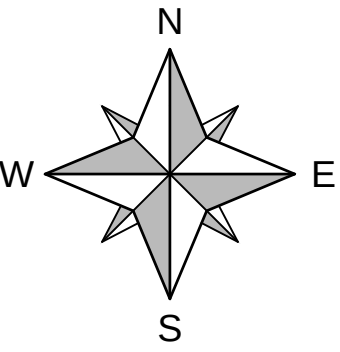
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action.

Certified By: Mitchel McNary

Certifier Title: Project Engineer

Certifier Email: mmcnary@eastriver.coop

Certified On: 06/19/2024 5:47 PM ET

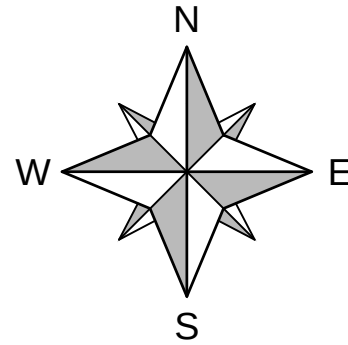


REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV

PCP FILE:	SHEET:	DWG:
ERTYPLT.CTB	1 OF 1	PRTSB01



PRATT SUBSTATION
EXISTING SITE



LEGEND:

- EMBANKMENT SHOULDER
- GRADING LIMITS
- PROPOSED CULVERT
- PROPOSED CATTLE FENCING

FURNISH AND INSTALL:
SUITABLE FILL MATERIAL - AS REQUIRED
GRAVEL SURFACE - AS REQUIRED

FURNISH AND INSTALL:
1483 L.F. - 4-WIRE CATTLE
FENCING BEFORE BEGINNING
CONSTRUCTION. MATCH DESIGN
AND SPACING OF EXISTING
FENCELINE EACH WAY. CORNERS
SHALL BE CROSS BRACED AS
DETAILED.

PROPOSED SUBSTATION
PAD WITH PARKING AREA

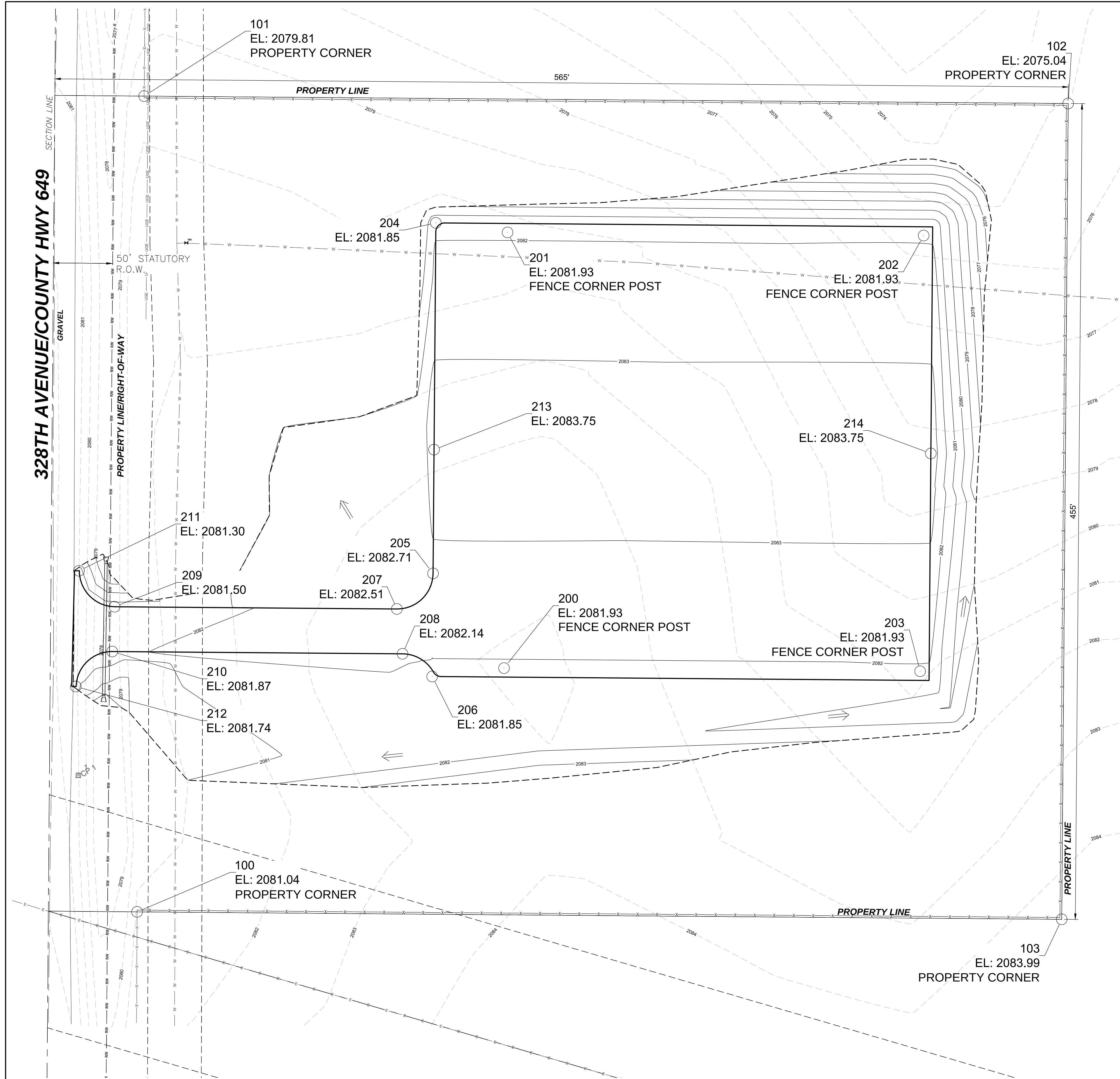
FURNISH AND INSTALL:
74 L.F. - 18" DIA. CMP CULVERT
2 - 18" DIA. SLOPED END SECTION



REV	DATE	DESCRIPTION	CHKD

PCP FILE:		SHEET:		DWG NO.:	
PROJECT NO. 431002		1 OF 1		PRTSC01	

PRATT SUBSTATION
SITE LAYOUT



LEGEND:

- 1800 CONTOUR
- 1600 EXISTING CONTOUR
- GRADING LIMITS

NOTE:
CONTOURS REFLECT 8" FINAL GRAVEL SURFACE
(REFERENCE GRADING TYPICAL SECTIONS).

ADDITIONAL 4" OF HIGH RESISTIVITY ROCK (NOT
DEPICTED IN SURFACE CONTOURS) TO BE
COMPLETED BY THE SUBSTATION CONTRACTOR
AND ARE NOT REFLECTED IN THE GRADING
CONTRACT QUANTITIES. SUBSTATION ROCK WILL
EXTEND AND BE TAPERED 5' PAST FENCE AND
SWING OF GATES.

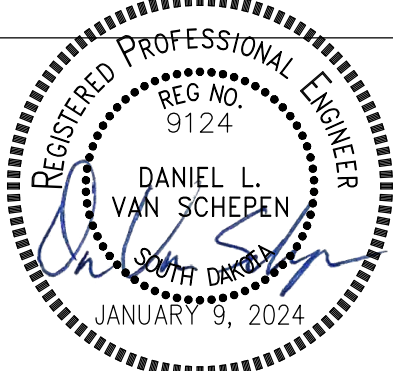
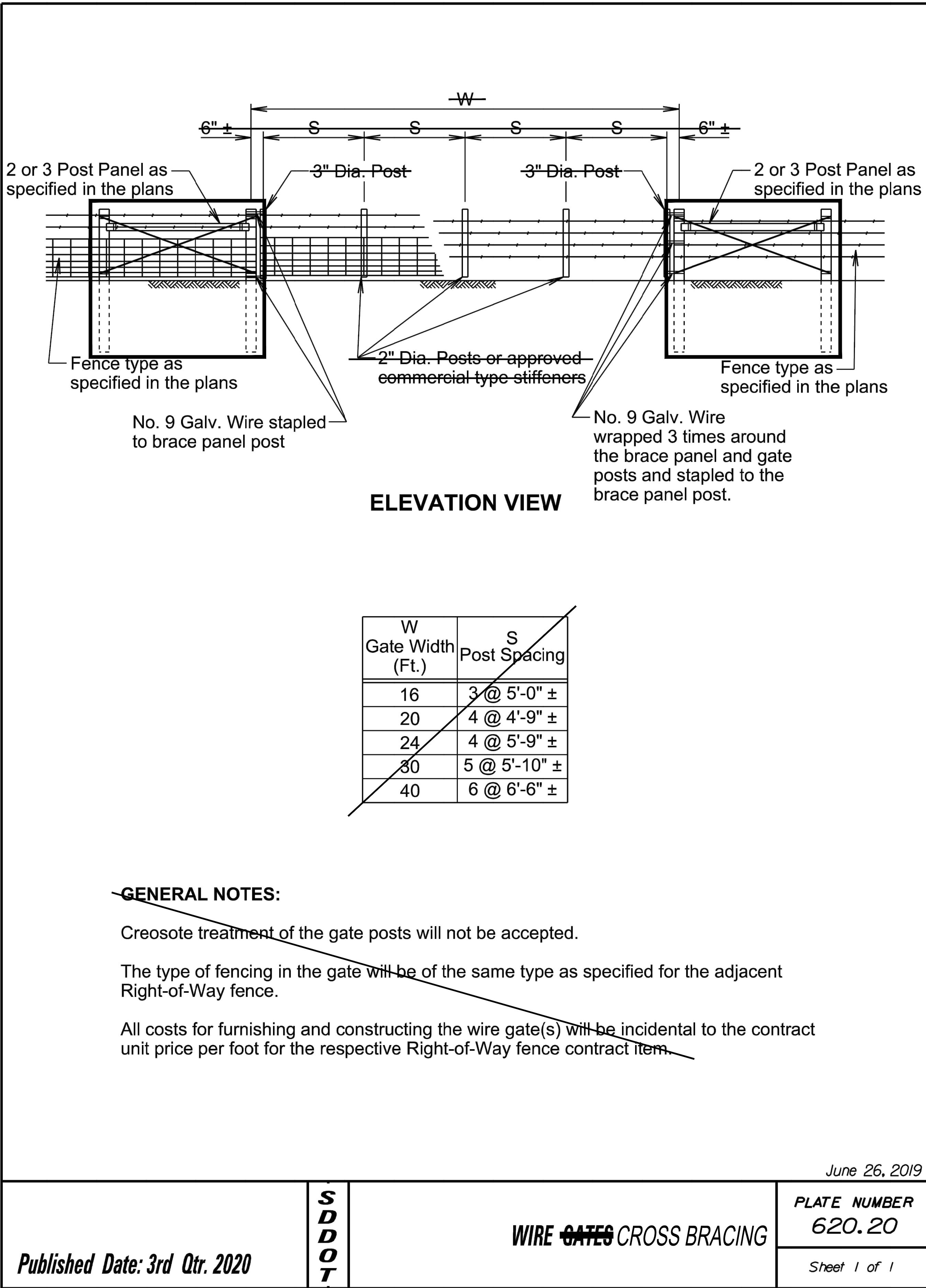
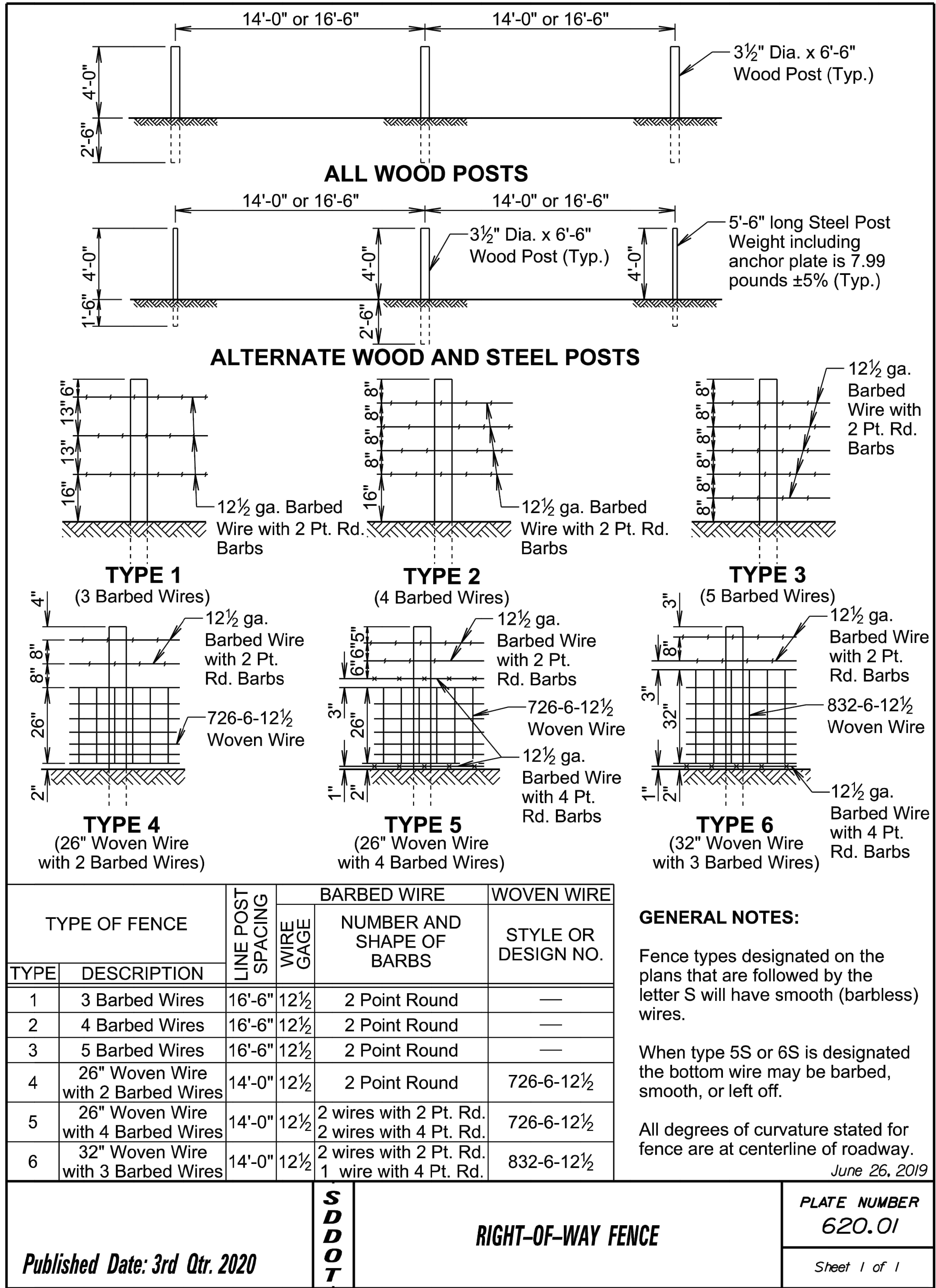


REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV

PCP FILE:	SHEET:	DWG:
ERTYPLT.CTB	1 OF 1	PRTS01

PRATT SUBSTATION
GRADING PLAN

PRATT SUBSTATION
GRADING SECTIONS



REV	DATE	DESCRIPTION	CHKD
0	1/9/2024	SUBSTATION CONSTRUCTION - IFC	DLV

PCP FILE	SHEET	DWG
ERTYPLT.CTB	1 OF 1	PRTS04



PRATT SUBSTATION
GRADING DETAILS



Engineering Design Standards December 4, 2019

East River Electric Power Cooperative, Inc. (East River) will utilize these Engineering Design Standards (Design Standards) for the design and construction of its electrical facilities and other associated facilities. These Design Standards shall be utilized for new construction, repairs, and rebuilds as practical. There may be specific conditions, situations, or locations, where it may not be possible or practical to follow these Design Standards and a different site specific design is required. These Design Standards may be modified and revised by East River as required.

A. General Design Standards

1. East River shall design its electrical and other associated facilities to meet or exceed the National Electrical Safety Code (NESC) codes and standards.
2. East River shall design its electrical and other associated facilities to meet or exceed the Rural Utilities System's (RUS) codes and standards.

B. Line Design Standards

1. All new 34.5kV and 41.6kV lines shall be designed to 69kV specifications.
2. All replacement line construction with conductor smaller than 477 ACSR shall be constructed using class 1 poles as a minimum. All replacement line construction with conductor 477 ACSR or larger and all new line shall be constructed using class H1 poles as a minimum.
3. Poles shall be set at a minimum depth of 6' or 10% of the pole length plus 2', whichever depth is greater.
4. When replacing a pole, should an equal class pole not be available in stock or access to an equal class pole would delay timely reconstruction of the line, a higher class pole shall be utilized.
5. East River shall use poles a minimum of five feet taller with a static bracket when replacing a pole that is constructed with a bayonet, as East River no longer utilizes a bayonet in its line Design Standards.

6. Existing structures with 10' crossarms shall be rebuilt with 14' crossarms, unless obstructions or clearances do not allow for the longer crossarms.
7. When replacing poles, the existing structure assembly should be analyzed to determine if a different structure assembly is more appropriate to improve operation of the line, such as providing greater conductor separation. The following assemblies shall be replaced:
 - a. TS-1 or TS-1MB structure replaced with a TS-12A structure;
 - b. TSZ-1 or TSZ-31 structure replaced with a TP-Y1-F structure where practical;
 - c. TSZ-1-115A, TSZ-1-115B, TSZ-1-115C, or TSZ-31-115C structure replaced with a TP-Y1-F-115 structure where practical.
8. When replacing poles on an existing line section where AGS units are not currently installed, existing conductor clamps shall be replaced with AGS units.
9. All new lines and pole replacements shall utilize copper grounds where necessary.
10. Anodes shall be installed within 1320' of each anchor location to aid in protecting the anchors from corrosion.
11. East River shall install storm structures on tangent line sections greater than 3 miles in length. Storm structures shall be installed no closer than every 1.5 miles and no further apart than every 3 miles.
12. All new construction or major line section replacements shall be constructed with a minimum of 4/0 ACSR or equivalent conductor.
13. All new lines that have the potential to be looped shall be designed with minimum of 477 ACSR or equivalent conductor.
14. When rebuilding line segments with T-2 conductor, the conductor shall be eliminated and non T-2 conductor of equal or greater capacity shall be utilized.
15. When rebuilding line segments that do not have shield wire, shield wire shall be utilized in the new design where practical.
16. All gang operated air break (GOAB) switches shall be installed on engineered laminated wood poles.

- a. In the case of temporary emergency repairs, GOAB switches may be installed on round poles.
- 17. All new switch installations shall utilize load break bottles unless existing conditions do not allow.
- 18. Overhead Distribution Electric Line Crossings
 - a. Below 46 kV
 - 1. Crossing within 100 feet of an East River structure
 - a. East River requires a minimum of 8' when the highest distribution line conductor is in uplift condition and East River's lowest conductor is at maximum sag (212°F curve).
 - 2. Crossing beyond 100 feet of an East River structure
 - a. East River requires a minimum of 10' when the highest distribution line conductor is in uplift condition and East River's lowest conductor is at maximum sag (212°F curve).
 - 3. East River will review crossings that do not meet this Design Standard to determine if a deviation is acceptable.
 - b. 46 kV and above
 - 1. East River will review all overhead electric line (above 46kV) to determine adequate clearance needed between line sections.
- 19. Joint Use Structures
 - a. Below 25kV
 - 1. 3-Phase Distribution Underbuild
 - a. A crossarm shall be mounted a minimum of 10 feet below the lowest point of East River's assembly.
 - b. All distribution conductors, including the neutral conductor, shall be mounted on the crossarm.
 - c. The crossarm shall be a minimum of 14 feet in length.

2. 1-Phase Distribution Underbuild
 - a. A crossarm shall be mounted a minimum of 10 feet below the lowest point of East River's assembly.
 - b. All distribution conductors including the neutral conductor will be placed on the crossarm.
 - c. The crossarm will be a minimum of 10 feet in length.
- b. 25 kV and above
 1. East River shall work with the electric utility to determine a structure configuration both entities are in agreeance and within code compliance.

Appendix A

Line Design Criteria

Line design criteria shall be considered the preferred standard for new line construction. There may be specific conditions, situations, or locations, where it may not be possible or practical to follow these criteria.

1. Structures:
 - a. Pole Material
 - i. Tangents
 1. Douglas Fir
 2. Ductile Iron
 - ii. Non-tangents
 1. Laminated Wood
 - b. Pole Class
 - i. Class H1 minimum
 - c. Typical Tangent Structures
 - i. TP-Y1-F-115
 - ii. TP-Y1-G-115
 - d. Typical Running Angle Structures
 - i. TS-4D-115
 - ii. TS-4DC-115
 - e. Typical Dead-end Structures
 - i. TS-5D-115
 - f. Typical Pole Phase Spacing
 - i. 9 ft
 - g. Typical Ruling Span
 - i. 300 ft
2. Pole Grounds
 - a. Wood Poles
 - i. TM-9 Assembly
 - b. Ductile Iron Poles
 - i. Ductile iron poles shall have a factory installed ground plate

3. Wire Tensions

a. Tensions set for the NESC Heavy District Loading

	Tension (lbs)	3/8" EHSS	1/2" EHSS	OPGW
477 ACSR "Hawk"	5000	2750	4240	4206
795 ACSR "Drake"	7232	2850	4240	4206

4. Loading

a. NESC Heavy District Loading (Rule 250B)

b. NESC Concurrent Ice and Wind (Rule 250D)

i. Lines north of US Hwy 212

1. Radial Ice = 1.25 in

2. Wind = 60 mph (9.216 psf)

ii. Lines south of US Hwy 212

1. Radial Ice = 1.00 in

2. Wind = 60 mph (9.216 psf)

c. Extreme Ice Loading

i. Lines north of US Hwy 212

1. Radial Ice = 1.5 in

ii. Lines south of US Hwy 212

1. Radial Ice = 1.25 in

5. Clearances

a. Minimum Vertical Clearances – Clearances below the line are determined using the line being designed shown at 212°F. Clearances above the designed line are determined using the line shown in Uplift.

i. Ground – 26 ft

ii. Roads – 30 ft

iii. Highway – 35 ft

iv. Approaches – 30 ft

v. Interstate – 40 ft

vi. Irrigation Pivots – 15 ft

vii. Line Crossings – 8 ft

- b. Minimum Horizontal Clearances
 - i. Approaches – 40 ft to the structure
 - ii. Irrigation Pivots – 15 ft to the conductor
 - iii. Underground Electric Boxes – 6 ft to the structure
 - c. Irrigation Pivots
 - i. East River will place poles so that the mid-span will be perpendicular to the apex of the irrigation pivot arc. Poles either side of the arc apex will typically be placed in the road ROW, framed as TP-Y1-G-115 structures facing the road.
6. Line Switches
- a. Gang operated air break (GOAB) switches shall be installed on engineered laminated wood poles.
 - b. All switches shall be unitized if possible.
 - c. Switch Spacing
 - i. 69 kV
 - 1. 3-way phase-over-phase switches – 12 ft/10 ft/10 ft
 - 2. 1-way phase-over-phase switches – 12 ft/10 ft/10 ft
 - 3. 1-way staggered switches – 12 ft/ 5 ft/ 5 ft
 - ii. 115 kV
 - 1. 3-way phase-over-phase switches – 20 ft/18 ft/18 ft
 - 2. 1-way phase-over-phase switches – 20 ft/18 ft/18 ft
 - 3. 1-way staggered switches – 18 ft/9 ft/9 ft
7. Overhead Optical Ground Wire
- a. OPGW reel lengths shall not exceed 19,500 ft
8. Line Marking
- a. Avian Markings – developed utilizing Avian Power Line Interaction Committee (APLIC) Suggested Practices for Avian Protection on Power Lines
 - i. Within the United States Fish and Wildlife Service identified Whooping Crane Corridor
 - 1. East River shall develop map of line route showing wetlands greater than two acres in size within $\frac{1}{4}$ mile either side of the proposed transmission line alignment. Wetlands shall be identified by those designated in the United States Fish and Wildlife Service GIS system.

2. East River shall develop 330' buffers around each wetland area within this ½ mile corridor.
 3. East River shall mark line spans within those 330' buffers per TM-53.
 4. East River shall mark additional lines as needed per incidents or field observations.
- ii. Outside of the United States Fish and Wildlife Service identified Whooping Crane Corridor
 1. East River shall mark line spans crossing open water bodies per TM-53.
- b. Line Crossings – where East River crosses under another transmission line, drawing TM-49 shall be used.



United States Central Flyway Whooping Crane Migration Corridor *

Within Whooping Crane Corridor:

- 330' buffer around any wetland >2 acres within 1/4 mile of our line

Outside Whooping Crane Corridor:

- Just need over open water



* Corridor analysis excluded significant outliers and TX panhandle sightings





EAST RIVER ELECTRIC POWER COOPERATIVE, INC.

MADISON, SOUTH DAKOTA

AVIAN PROTECTION PLAN (APP)

A copy of the APP Plan is located at the East River Electric Headquarters Building, Area Maintenance Centers, and is available on the East River Electric computer system for viewing at anytime.

**October 11, 2010
Revised: May 20, 2011**



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INTRODUCTION

Scope:

East River Electric Power Cooperative, Inc. (East River) has prepared this Avian Protection Plan (APP) in order to protect migratory birds by reducing the risks of birds interacting with the transmission lines and other utility facilities. By implementing the APP, East River will improve the electrical reliability to its customers and decrease the risk of avian mortality.

Board Resolution:

The obligation of East River is to provide reliable and affordable service to its members. The guidelines outlined in this APP will serve both purposes and will be implemented into East River operations. The East River Board of Directors approved this APP with Board Resolution number 102010-2 on October 7, 2010.

Background:

East River is a wholesale electric power supply cooperative serving 24 rural electric cooperatives and one municipally-owned electric system, which in turn serve more than 92,000 homes and businesses and about 250,000 consumers. Our 40,000 square mile service area covers the rural areas of 41 counties in eastern South Dakota and 22 counties in western Minnesota, as shown in Figure 1. This area consists mostly of open grassland and agricultural fields with some wetlands, riparian forests, and shrublands.



Figure 1: East River service area

Birds sometimes use power facilities as nesting sites and as perches. Birds using power facilities are at a risk of electrocution because of two factors: environmental factors and inadequate clearance. Environmental factors such as topography, vegetation, available prey, and behavioral or biological factors influence the bird's use of power poles. Inadequate clearance between energized components and grounded hardware can provide two points of contact for birds. Electrocution can occur when a bird completes an electric circuit by simultaneously contacting two energized parts or an energized part and a grounded part. Nests on power poles also present a risk in the fact that falling limbs and nest pieces may complete a circuit, ignite, fall to the ground, and potentially cause a wildfire. Another harmful potential interaction between birds and power lines is collision. Factors that increase the risk of collision are bird size, bird age, bird behavior, weather conditions, and visibility. Many of the birds that collide with power lines are larger water-associated birds, such as herons, egrets or pelicans.

Due to the above risks of birds interacting with utility facilities, the U.S. Fish and Wildlife Service (USFWS) in conjunction with the Avian Power Line Interaction Committee (APLIC) suggest that all electric utilities adopt an APP. APLIC has published a set of APP Guidelines which this APP will follow.

Bird Protection Laws:

Most birds killed by contacting power lines are protected by the Migratory Bird Treaty Act (MBTA). The MBTA protects all native migratory birds, including shorebirds, ducks, geese, eagles, hawks, crows, and songbirds. The MBTA does not provide for any permits for incidental take, where protected birds are accidentally killed in otherwise legal activities. Take is defined as "pursuing, shooting, shooting at, poisoning, wounding, killing, capturing, trapping, collecting, molesting, and disturbing." A list of migratory bird species protected under the MBTA appears in Title 50 of the Code of Federal Regulations part 10.13 (50 CFR 10.13)

The Bald and Golden Eagle Protection Act further protects bald and golden eagles. This law mostly deals with the sale and possession of eagle parts, but also prohibits take. In the event of a collision or electrocution, a permit can be issued to allow collection of the eagle or its parts for religious or scientific purposes.

Many species are also protected by the federal Endangered Species Act (ESA). The ESA requires the USFWS to maintain lists of threatened and endangered species. Section 9 of the ESA prohibits the take of listed species. Section 10 of the ESA, however allows for the issuance of an incidental take permit with approval of a habitat conservation plan.

Birds and their nests are also protected by state laws. Minnesota and South Dakota state agencies may issue permits for nest removal or relocation or for incidental take in the event of a collision or electrocution.

Violations of these laws can and have resulted in fines of \$5,000 - \$250,000 and 6-24 month prison sentences.

PURPOSE

This APP will serve many purposes:

Outage Reduction: Preventative actions outlined in the APP will reduce the number of outages caused by birds interacting with powerlines and utility facilities.

Environmental Stewardship: By implementing an APP meeting APP Guidelines of APLIC, East River will reduce the risk of bird mortality through interaction with its facilities.

Public Relations: Power outages are unpopular with customers, especially if they are known to be caused by bird mortalities.

Risk Reduction: Animal-caused power outages can result in fires that may destroy habitat or property. The guidelines outlined in the APP will reduce the risk of bird collisions, electrocutions, and nest management.

Cost Reduction: Reduction of the number of outages caused by birds will result in lower delivery costs. Costs associated with repair and emergency work orders will also be reduced as a result of the APP.

AVIAN PROTECTION PLAN

Construction Design Standards:

East River's transmission infrastructure meets or exceeds the APLIC Suggested Practices for Avian Protection on Power Lines. The suggested practices are based on the body measurements of eagles: 60" horizontal clearance and 48" vertical clearance between potential points of contact (energized-to-energized or energized-to-grounded). There is increased risk of electrocution on poles that do not meet these recommendations. Typical drawings of East River's transmission infrastructure can be found in Appendix A which meet or exceed the recommended requirements.

Incident Response:

Nest Management:

In the absence of other suitable nest sites, birds sometimes use utility facilities as nesting sites. Utility facilities include power poles, substations, communication towers, and other equipment within the utilities system. Most of the time these nests pose limited risk to the bird, environment (wildfire), or equipment. Large nests, however, do pose a severe risk. State and federal laws prohibit nest removal when the nests are occupied by birds, eggs, or young. According to the APP guidelines, the breeding season varies by location and species, but for most of the North American migratory birds the breeding season falls between February 1 and August 31.

According to the Migratory Bird Permit Memorandum, in Appendix D, the MBTA does not prohibit the destruction of the migratory nest, provided that no possession occurs during the destruction, the nest is not occupied by birds, eggs, or young, or if it is not a nest of a threatened bird, endangered bird, bald eagle or golden eagle. However, if an occupied nest or a nest of a threatened, endangered, bald or golden eagle is causing a public safety risk, the nest can be removed after consulting with the appropriate state or federal agency (MNDNR, SDGFP, or USFWS) and after receiving the appropriate permit to do so. Refer to the nest management flow chart in Appendix B for additional information.

Collisions/Electrocutions:

Bird fatalities or injuries sometimes occur as a result of interaction with power lines and other utility facilities. Upon discovery of an alive, but injured bird, the nearest rehabilitation facility (see Contact List in Appendix C) should be contacted for immediate transport after consulting with the appropriate state or federal agency and after receiving the appropriate permit to do so. Consult with the regulatory agencies or the rehabilitation facility for handling and care of the bird prior to transport.

However, birds most often die after the interaction with power lines as a result of collision or electrocution. Upon discovery of such a bird, it **should not** be removed from the area and a Bird Mortality Report should be completed with as much detail as possible along with pictures, if possible. The MBTA makes it illegal for anyone to possess or transport the migratory bird. If possession or transportation is required, such as for an eagle, banded or marked bird, contact the appropriate state or federal agency for the necessary permits. For additional information in response to a bird mortality, refer to the bird mortality flow chart in Appendix B.

Contact List:

A list of contacts within East River as well as state and federal agencies are provided in Appendix C to aid in incident response and permit acquisition. State and Federal agencies were contacted during the development of this plan and were made aware of the development of the plan and initial contacts were made for future interaction as needed.

Unprotected Species:

The following species, as shown in Figures 2-5, are introduced and not protected by any state or federal laws and thus do not need to be reported: house sparrow, rock dove (feral pigeon), European starling, monk parakeet, and non-migratory upland game birds.



Figures 2-5: From left to right, house sparrow, rock dove, European starling, monk parakeet

Avian Reporting System:

USFWS Reporting Program:

The USFWS Reporting Program is a web-based reporting database where utilities can enter fatality reports. The database can then be used to view all reports or summaries by year, location, bird species, or a number of other factors. The system also allows the user to track the progress of retrofit actions if determined to be necessary. East River's policy will be to report to the program once a year.

Field Forms:

East River will use the following field forms: Bird Mortality Report and Bird Nest Form to document incidences. The Bird Mortality Reports will then be entered into the USFWS Reporting Program website on an annual basis. The two types of field forms can be found in Appendix D.

Mortality Reduction Policy:

In order to reduce bird mortality, East River will attempt to be both proactive and reactive in its practices. For new construction, East River, when possible, will attempt to avoid areas where high risk of bird fatality is imminent, such as across wetlands. East River will also evaluate its Bird Mortality Reports and determine on a case by case basis whether or not retrofitting is necessary. Past retrofit practices include installation of marker balls and bird diverters.

Training:

All appropriate East River personnel will be properly trained on avian issues on an annual basis. This training will encompass the reasons, need, and method by which employees should report an avian mortality, follow nest management protocols, dispose of carcasses, analyze possible mitigation areas, and comply with applicable regulations, including the consequences of non-compliance.

Updates:

This plan will be updated as necessary to comply with any additions or revisions to the bird protection laws which may affect the plan. In addition the plan will be monitored for its effectiveness in serving the purpose of the plan and if needed will be updated to better meet the defined purpose of the plan.

REFERENCES

Avian Power Line Interaction Committee (APLIC). 1994. *Mitigating Bird Collisions with Power Lines: The State of the Art in 1994*. Edison Electric Institute. Washington, D.C.

Avian Power Line Interaction Committee (APLIC) and United State Fish and Wildlife Service (USWS). 2005, April. *Avian Protection Plan Guidelines*. Online. Retrieved from <http://www.aplic.org/resources.htm>.

APLIC. 2006. *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*. Edison Electric Institute, APLIC, and the California Energy Commission. Edison Electric Institute. Washington, D.C.

Contact Classic Collection of North American Birds Ltd. *Birds of North America*. (2010, August 10). Retrieved from: <http://www.birds-of-north-america.net/index.html>

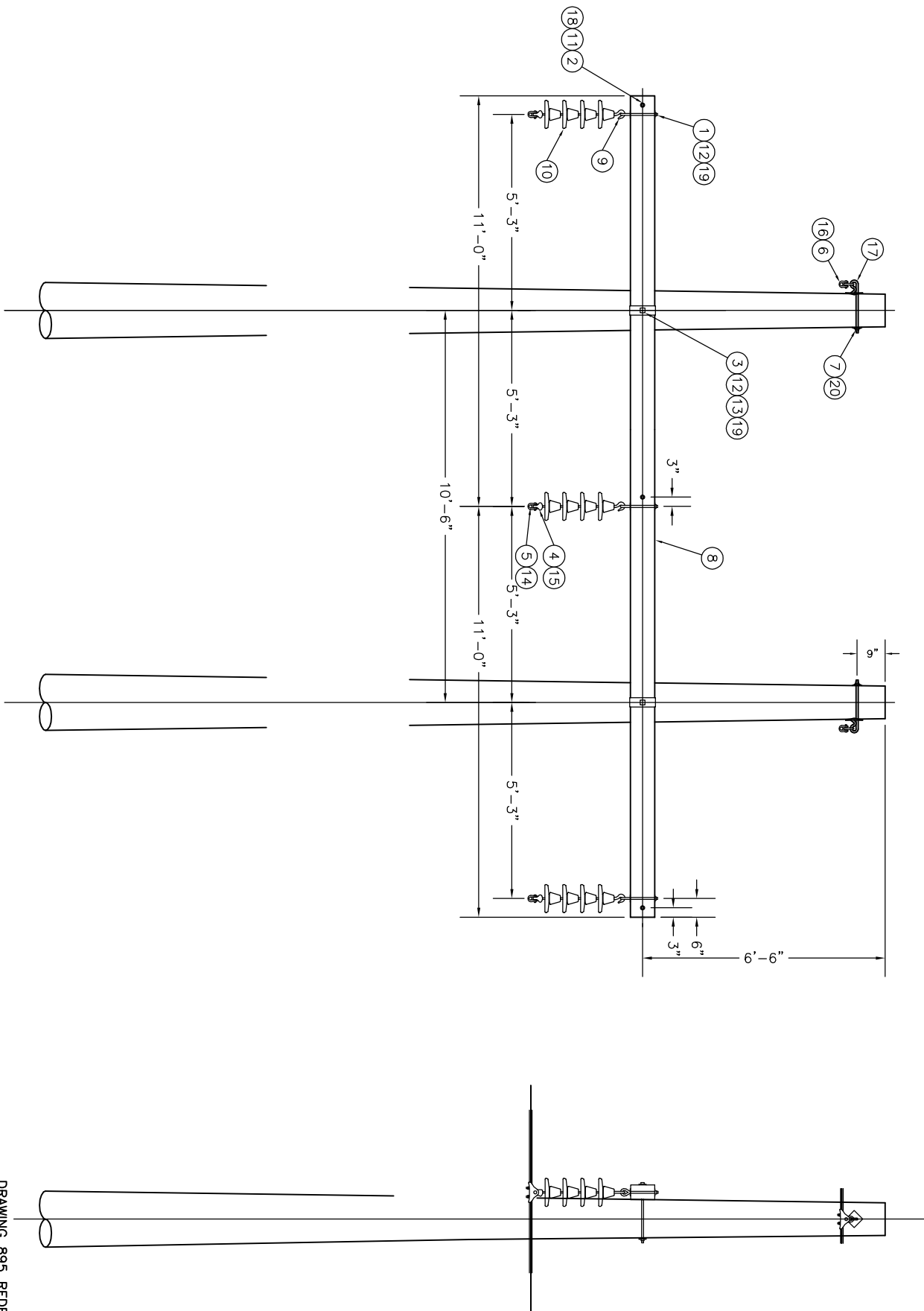
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Florida Wildlife Extension. *Non-Native Plants and Animals in Florida*. (2010, August 10). Retrieved from http://www.wec.ufl.edu/extension/landscaping/non_native.php.

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United State Fish and Wildlife Service. *Migratory Birds*. Retrieved from: <http://www.fws.gov/migratorybirds/dmbmdbhc.html>

Appendix A – Typical Drawings



DRAWING 895 REDRAWN ON CAD



TH-1G

DATE		REVISION		BY	
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M.W.					
TH-1G					
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P.O. SCALE 1"=24'					

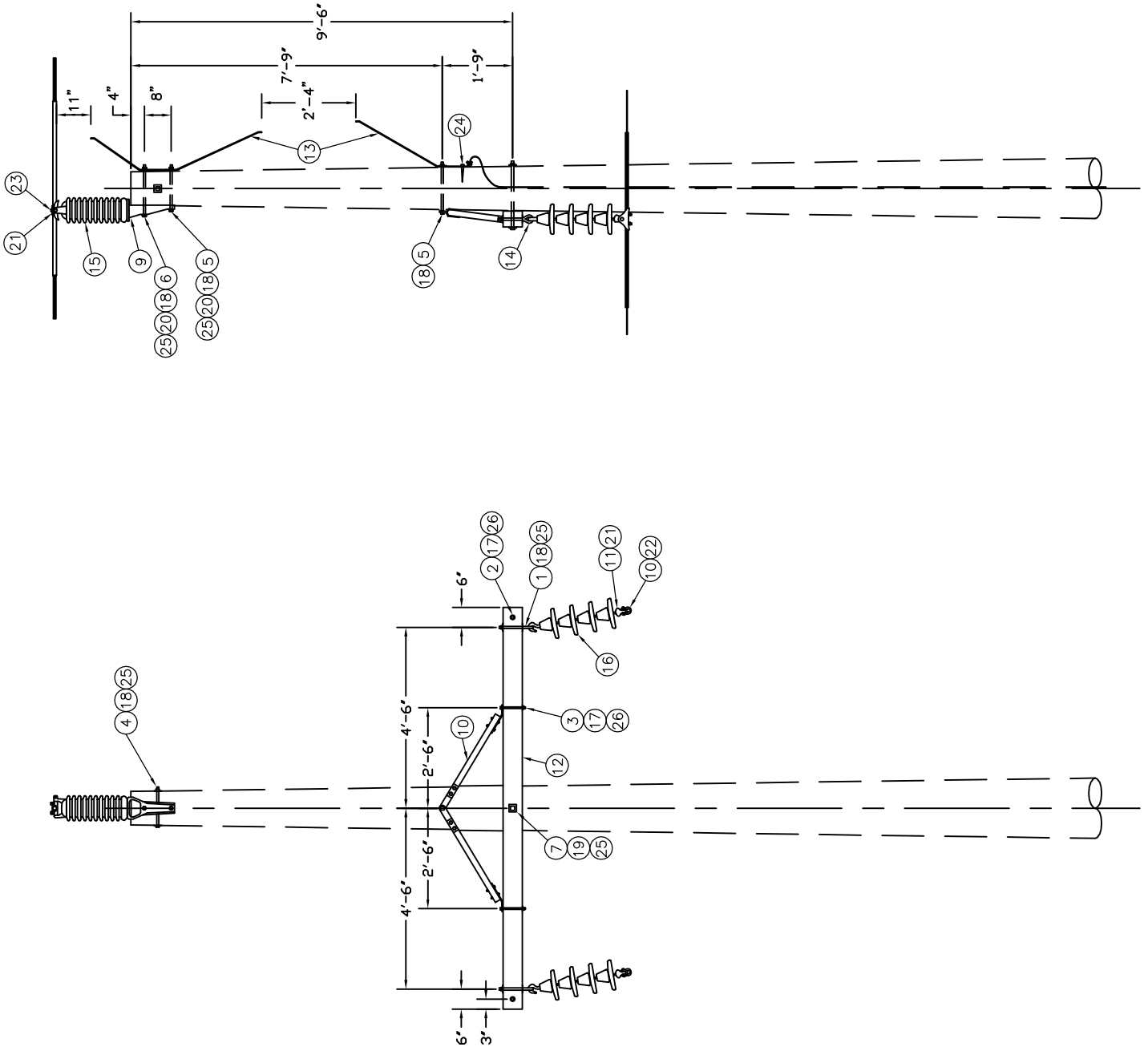
ER 897 REDRAWN



TSP-1

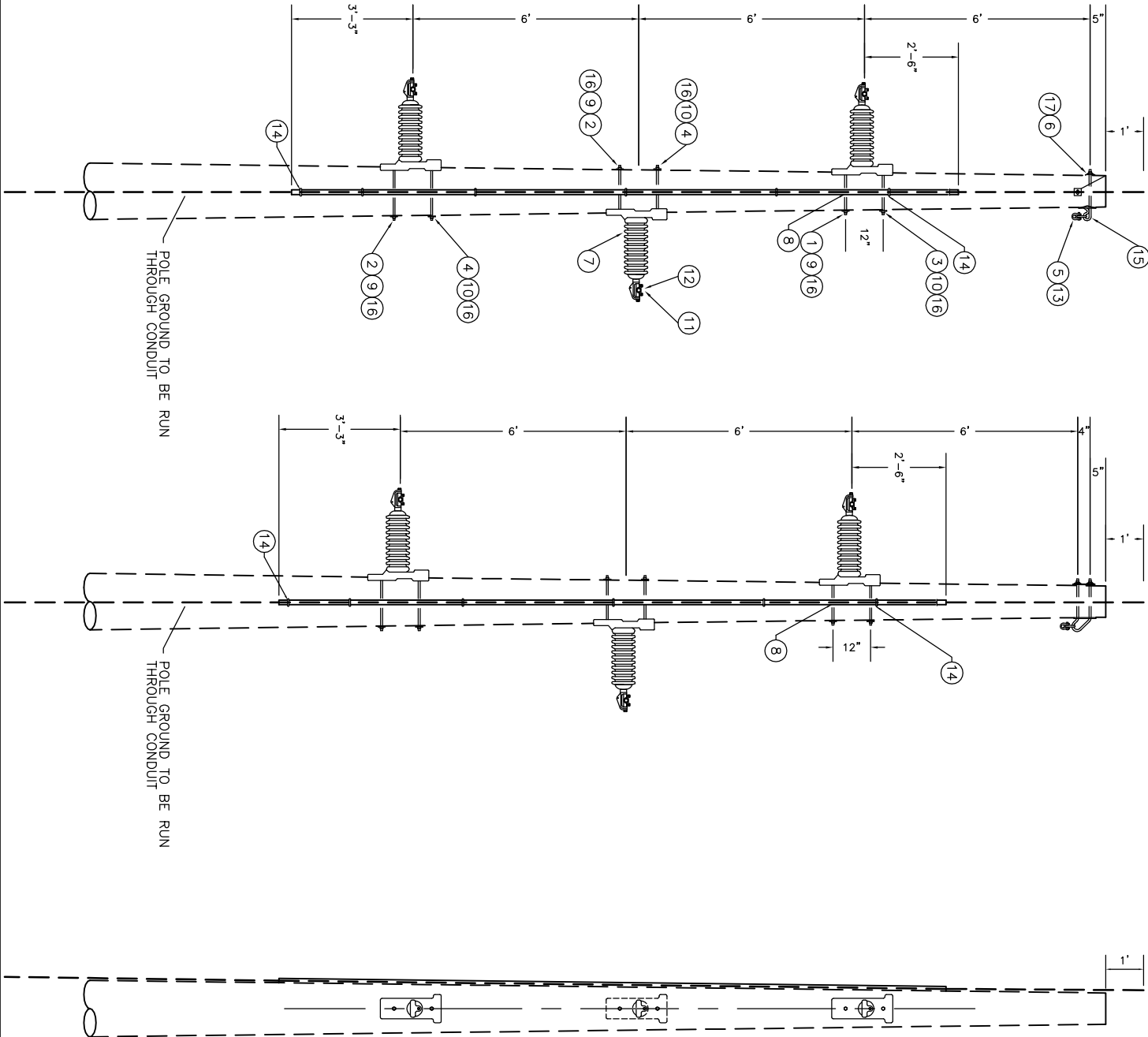
DATE	REVISION	BY

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SHEET					
OF					
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ONE BOLT STATIC BRACKET

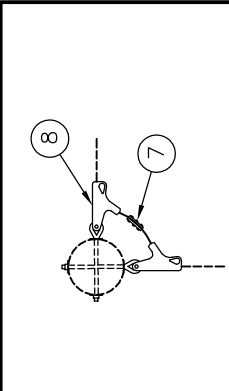
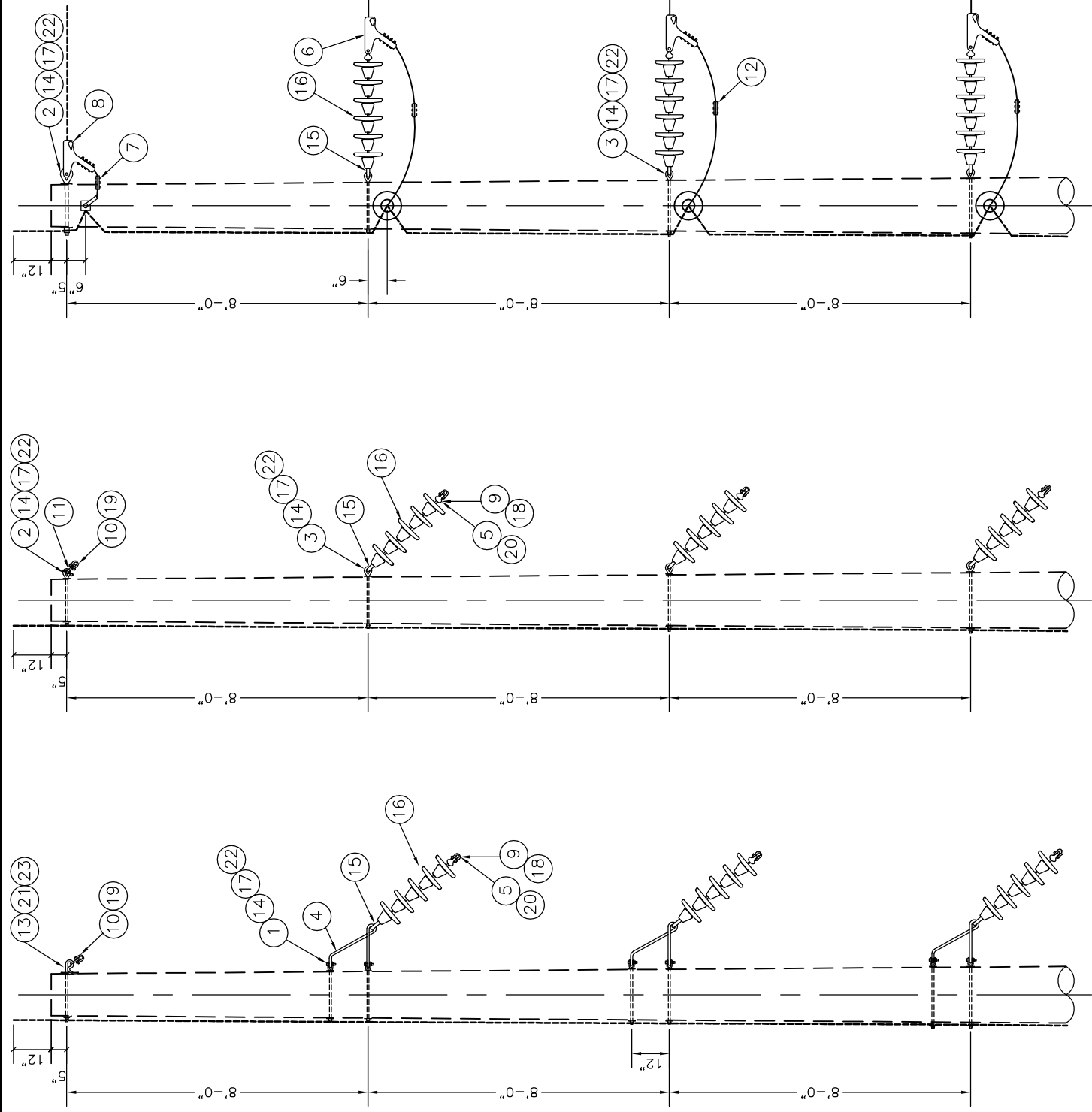
TWO BOLT STATIC BRACKET



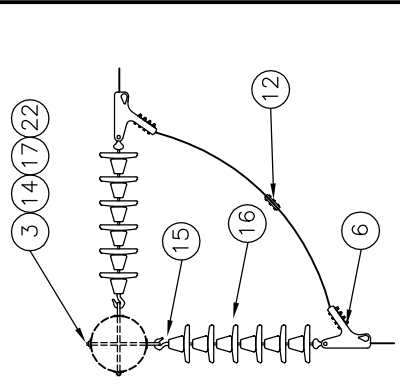
NOTES:

1. STAPLE AT LEAST EVERY 3'. LEAVE CONDUIT SLIGHTLY LOOSE TO ALLOW CONDUIT TO EXPAND.
2. DRIVE STAPLE HALFWAY IN JUST BELOW AND ABOVE CONDUIT TO PREVENT CONDUIT FROM SLIDING.
3. CONDUIT LENGTH MAY VARY BASED ON INSULATOR SPACING.
4. SEE STAKING SHEET OR PROFILES FOR INSULATOR SPACINGS.

DATE	6-8-98	DATE	6-8-98
REVISED	TP-Y1-F	REVISED	TP-Y1-F
EAST RIVER ELECTRIC POWER COOPERATIVE MADISON, SOUTH DAKOTA		EAST RIVER ELECTRIC POWER COOPERATIVE MADISON, SOUTH DAKOTA	
TP-Y1-F (6' SPACING)		TP-Y1-F (6' SPACING)	
SHEET 1 OF 24		SHEET 1 OF 24	



PLAN TS-5GR SHIELD WIRE



PLAN TS-5GR CONDUCTOR

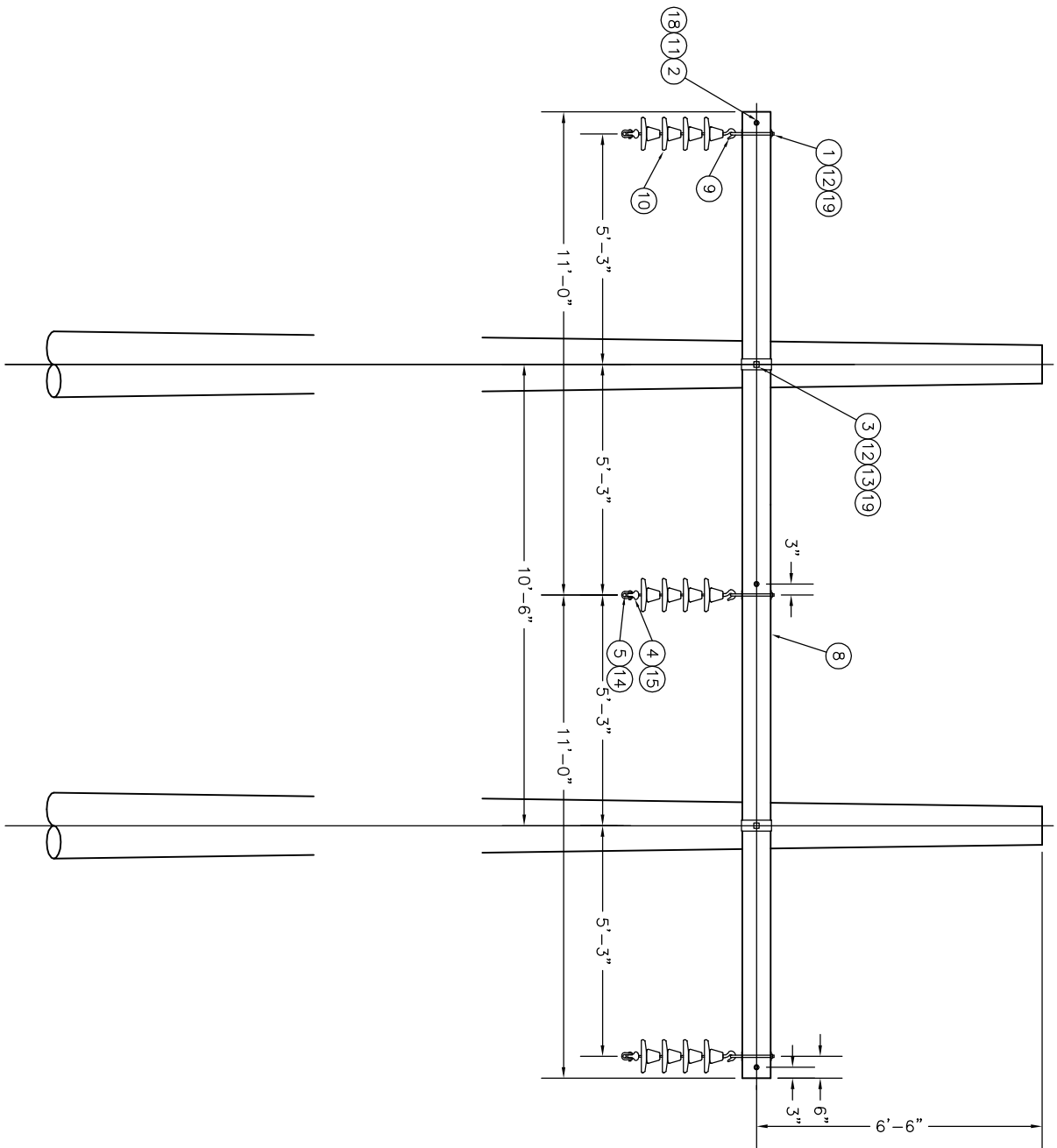
NOTE:

USE AGS UNITS ON ALL ANGLES UNDER 30°. USE SUSPENSION CLAMP AND ARMOR ROD UNLESS OTHERWISE NOTED.

Data Response
REPLACES ER DRAWING 924

A Touchstone Energy Cooperative

		PUBLIC OF 4
TS-3GR TS-4GR TS-5GR		DATE: 1-11-01 E.R. CO. DWR. NO.: W.D. NO.: D.W. BY: D.A.F. P.C.P. FILE:
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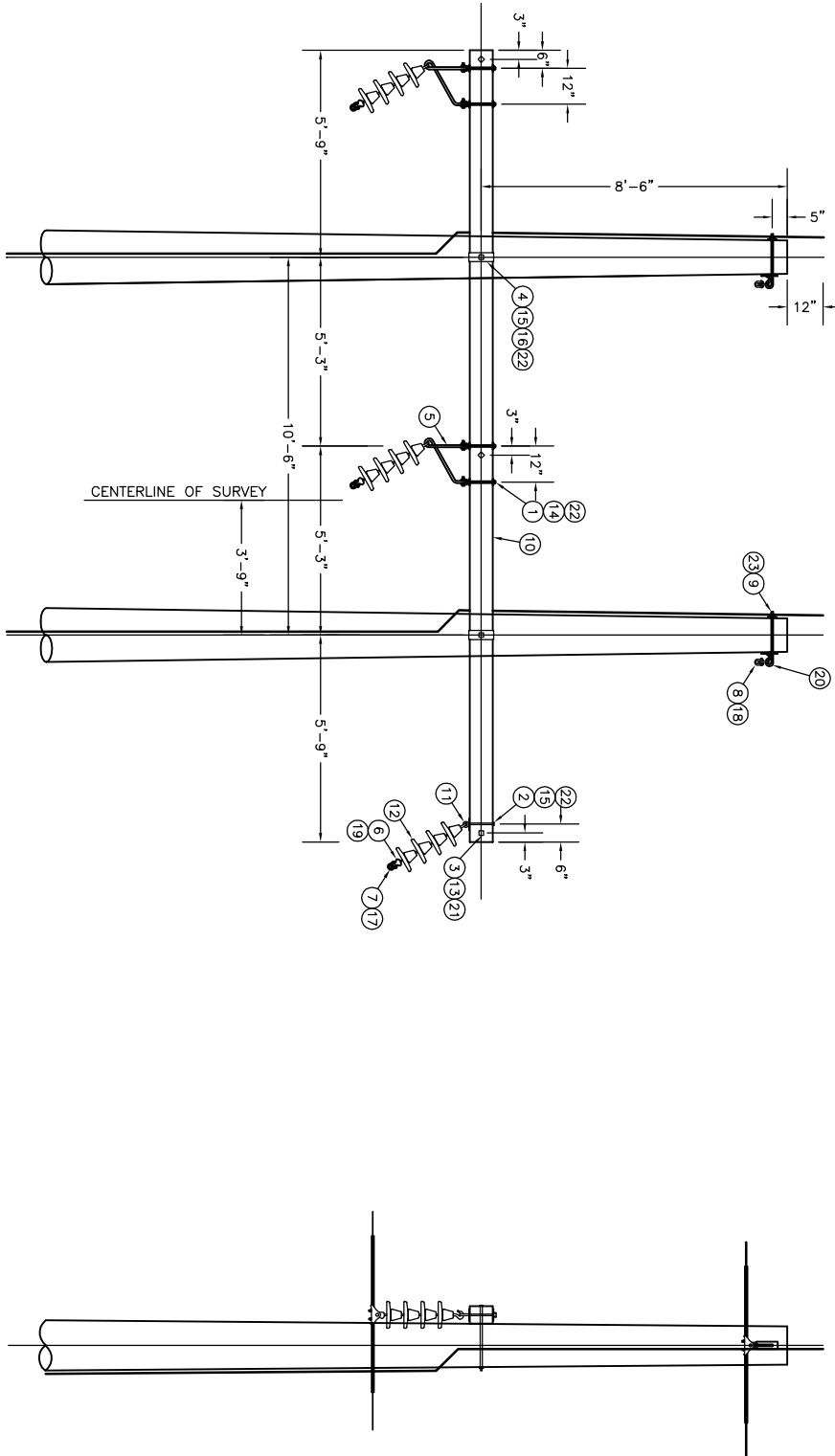


DRAWING 3245 REDRAWN ON CAD



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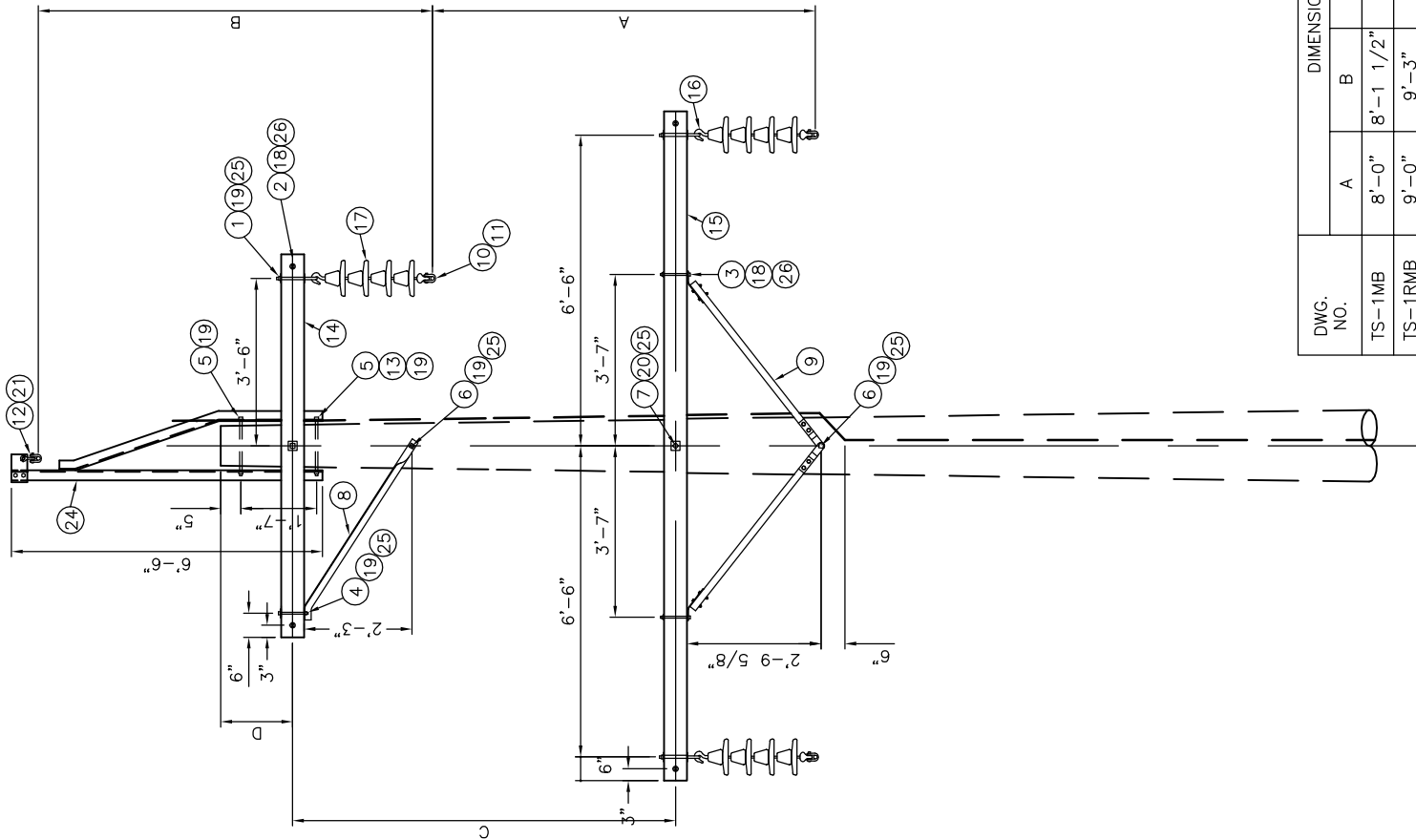


DRAWING 3579 REDRAWN ON CAD



TH-6

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SCALE 3/8"=1'-0"	SCALE 3/8"=1'-0"	SCALE 3/8"=1'-0"
SHEET 1 OF 1	SHEET 1 OF 1	SHEET 1 OF 1
DATE 8-12-08	DATE 8-12-08	DATE 8-12-08
TH-6	TH-6	TH-6
SCALE 3/8"=1'-0"	SCALE 3/8"=1'-0"	SCALE 3/8"=1'-0"
SHEET 1 OF 1	SHEET 1 OF 1	SHEET 1 OF 1



DWG. NO.	DIMENSIONS			
	A	B	C	D
TS-1MB	8'-0"	8'-1 1/2"	8'-0"	1'-6"
TS-1RMB	9'-0"	9'-3"	9'-0"	2'-6"

Data Response

ER 3039 REDRAWN

A Touchstone Energy Cooperative

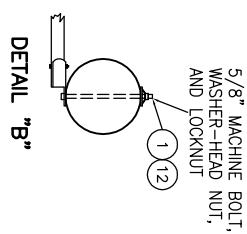
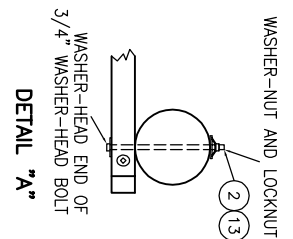
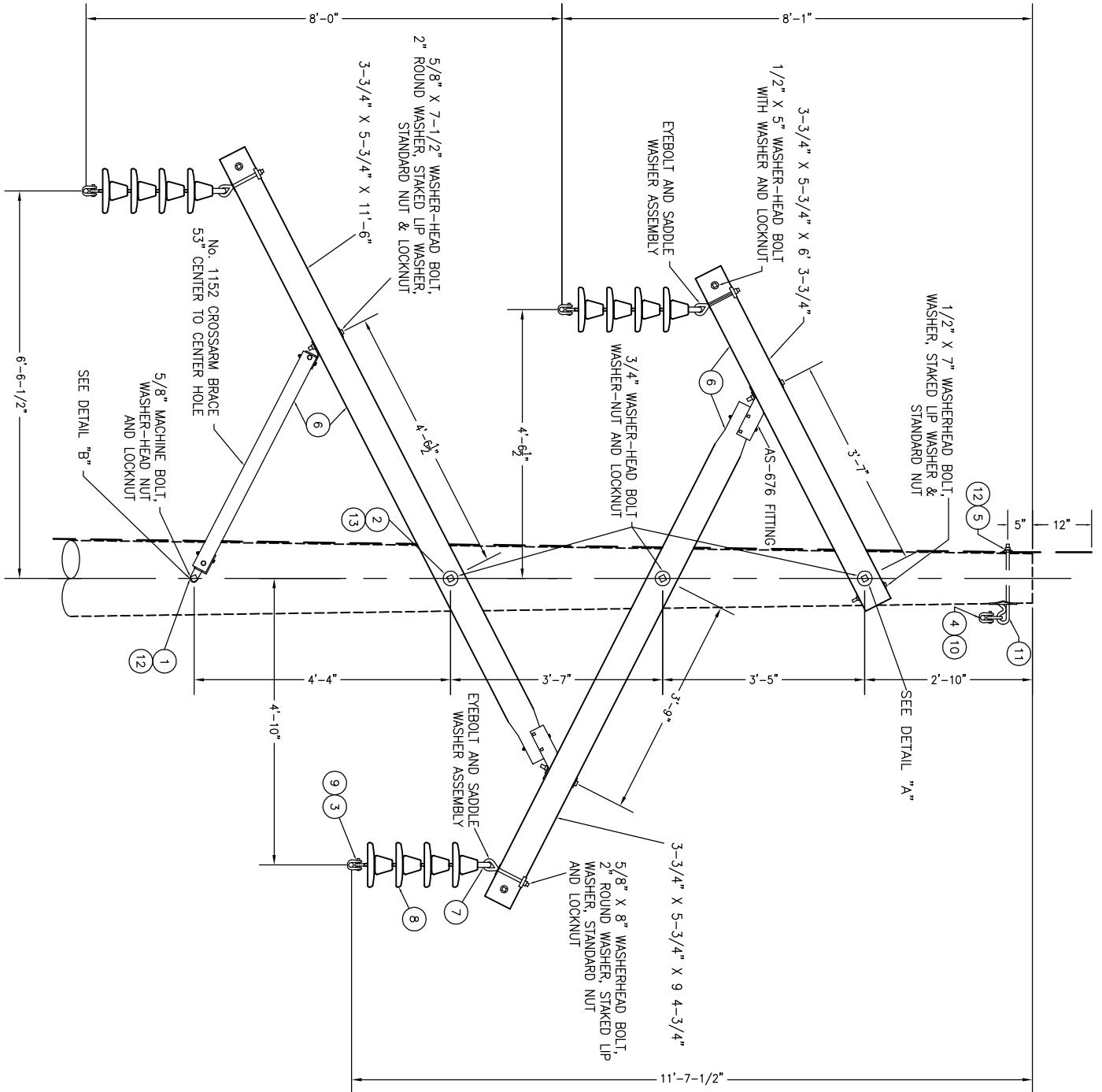


TS-1MB & TS-1RMB

PUBLIC 162 of 198

DATE	REVISION	BY

DATE 05-14-07	E.R. CAD DWG. NO.	SCALE 1/2" = 1'-0"
DWG. NO.	TS-1MB, 1RMB	SHEET OF
DRAWN BY M.L.W.	PCP FILE	PAGE SCALE 1 = 1

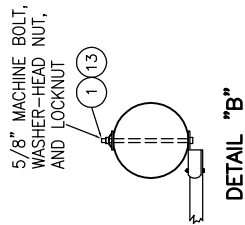
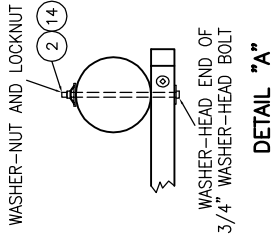
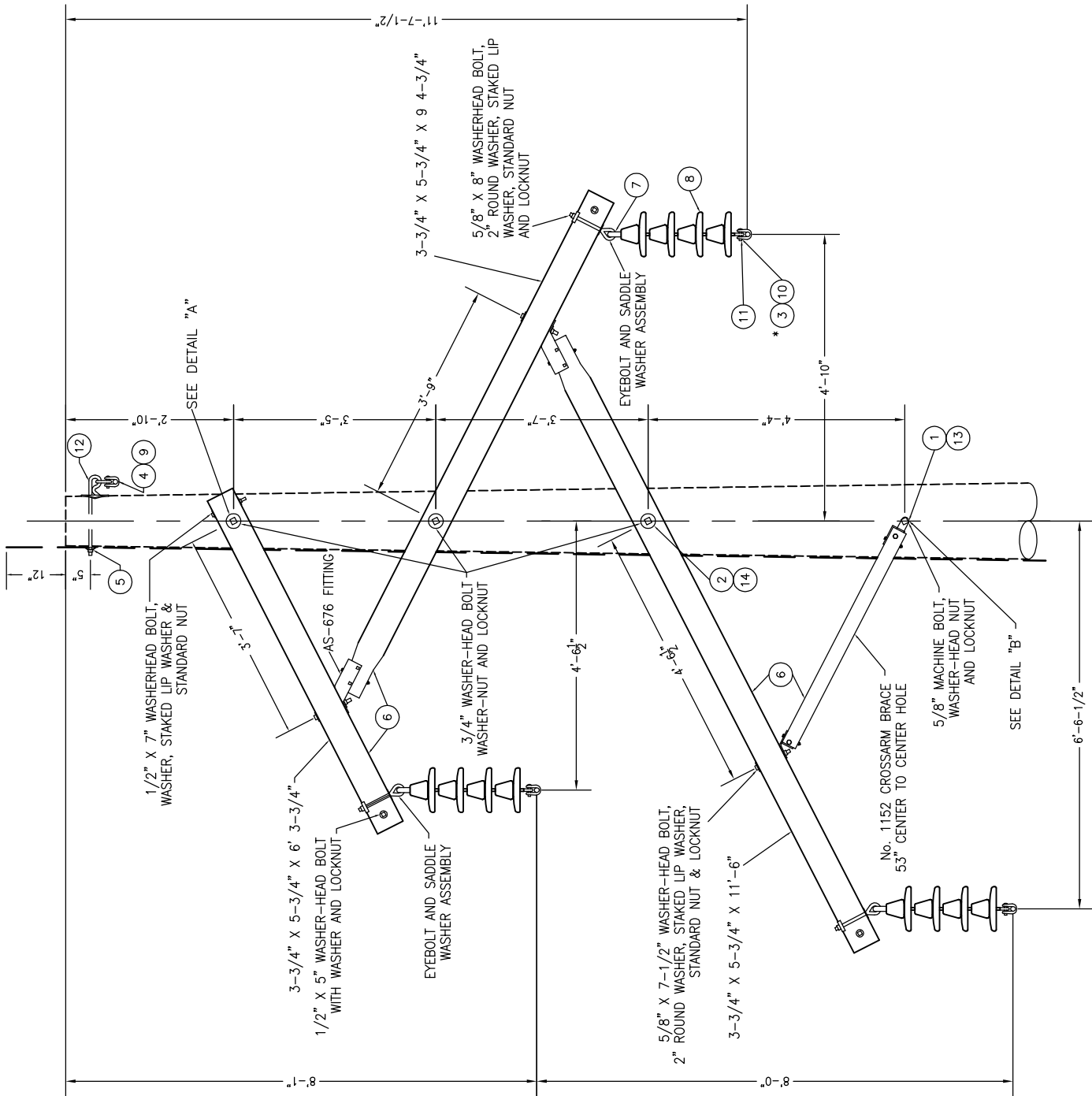


CAD DRAWING REPLACES DWG. 3192



TSZ-31

DATE	REVISION	BY
DATE 11-1-07		
W.D. NO.	TSZ-31	
DWG. BY	M.W.	DWG. FOR
DATE 11-1-07	SCALE 3/4"=1'-0"	SHEET 1 OF 16
W.D. NO.	TSZ-31	POD SCALE 1"=16'



Data Responses

CAD DRAWING REPLACES DWG. 3029

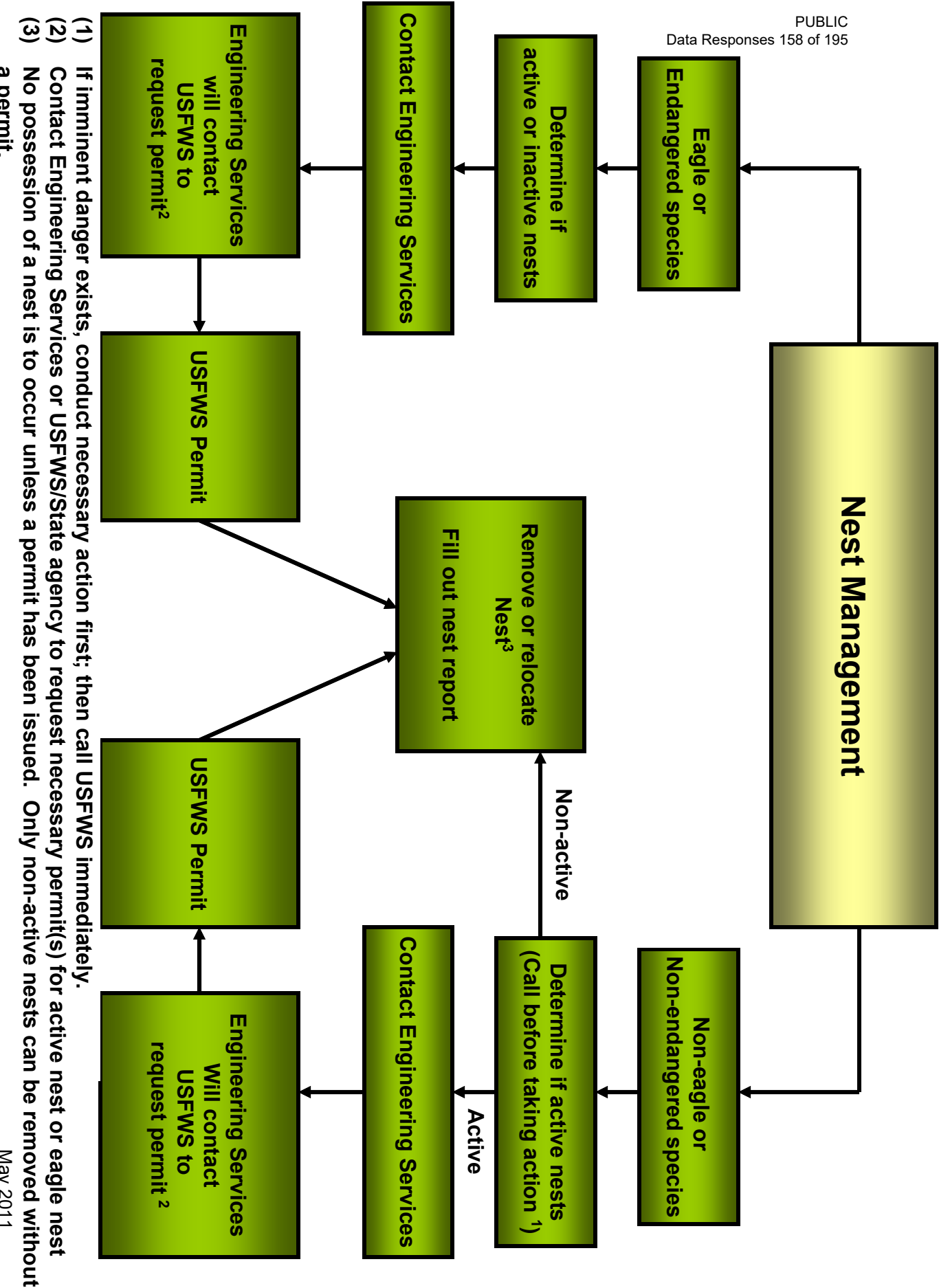
EAST RIVER
ELECTRIC POWER COOPERATIVE
UNION, SOUTH CAROLINA

TSZ-1

DATE: 3-3-97 E.R. CAD DWG. NO.: TSZ-1 SCALE: 3/4"=1'-0" SHEET OF 4
W.D. NO.: D.A.F. DWG. BY: DATE SCALE: 1"=16'

DATE	REVISION	BY

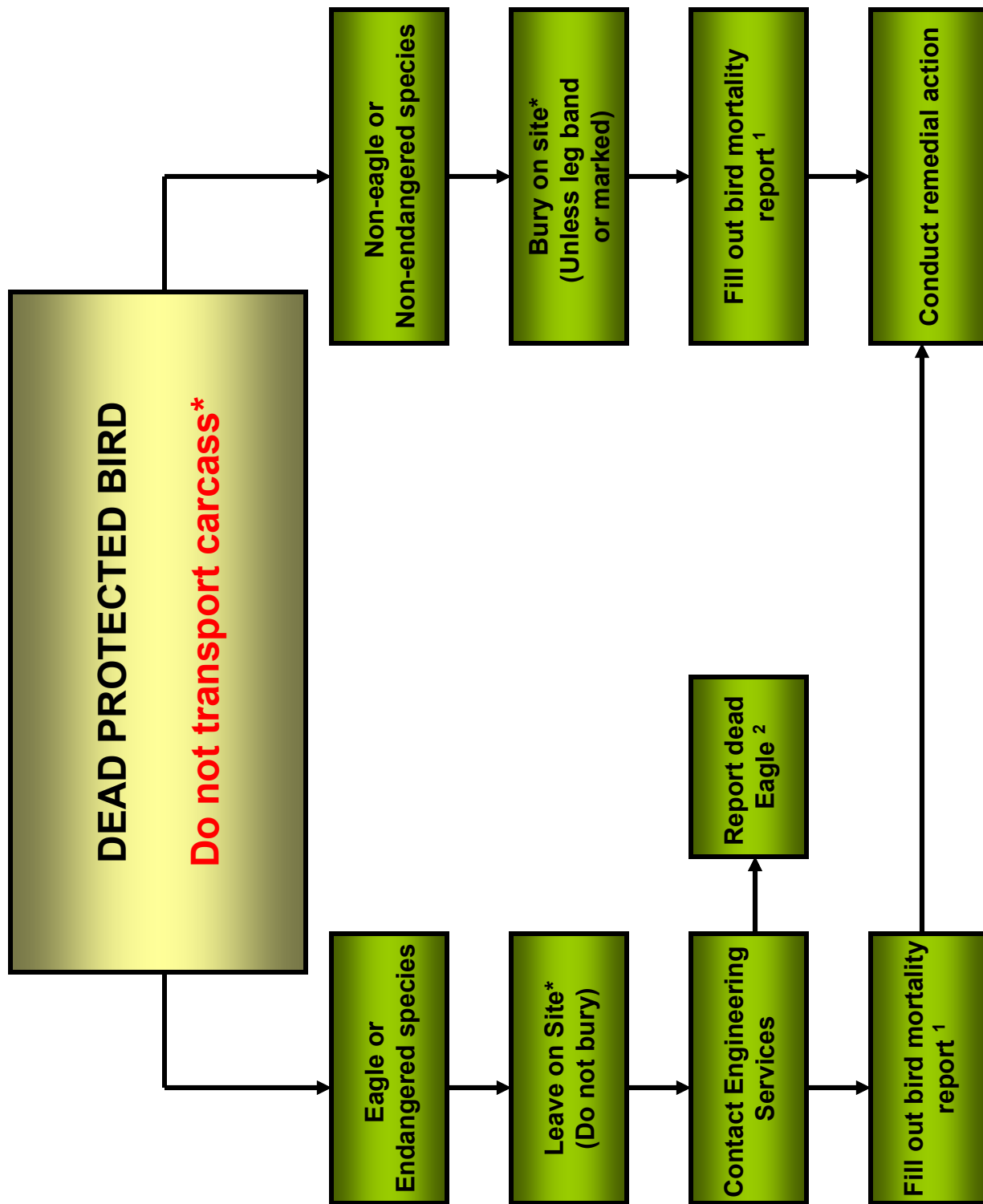
Appendix B – Flow Charts



(1) If imminent danger exists, conduct necessary action first; then call USFWS immediately.

(2) Contact Engineering Services or USFWS/State agency to request necessary permit(s) for active nest or eagle nest

(3) No possession of a nest is to occur unless a permit has been issued. Only non-active nests can be removed without a permit.



(1) Bird mortality report is entered in East River's Bird Mortality Tracking System

(2) Contact Engineering Services or USFWS if eagle or banded bird is found. Injured birds should be reported to Engineering Services or the local fish and game office.

* Individual utility permits may contain different conditions regarding transport or salvage.

Appendix C – Contact List

Contact List

East River Contacts			
Name	Title	Telephone	Address
Jordan Brown	Design Engineer East River Electric	(605) 256-8231	PO Box 227 Madison, SD 57042
Matthew Mohr	Engineering Manager East River Electric	(605) 256-8241	PO Box 227 Madison, SD 57042
Wade Bialas	Transmission Maintenance Superintendent East River Electric	(605) 256-8249	PO Box 227 Madison, SD 57042

Agency Contacts			
Agency / Organization	Agency Contact	Telephone	Address
United States Fish & Wildlife Service (USFWS)	Larry A. Harrison (Permit Chief) Region 3	(612) 713-5489 larry_harrison@fws.gov	5600 American Blvd West Suite 990 Bloomington, MN 55437-1458
United States Fish & Wildlife Service (USFWS)	Brad Merrill Mortality South Dakota - Region 6	(605) 745-5076 - Office (605) 280-1712 - Cell Brad_Merrill@fws.gov	2500 Minnekahta Ave Hot Springs, SD 57747
United States Fish & Wildlife Service (USFWS)	Charlene (Charlie) Bessken Permits South Dakota - Region 6	(605) 224-8693 ext. 231 southdakotafieldoffice@fws.gov charlene_bessken@fws.gov	420 S. Garfield Avenue Suite 400 Pierre, SD 57501
South Dakota Game Fish & Parks (SDGFP)		(605) 223-7660 Wildinfo@state.sd.us	20641 SD Highway 1806 Fort Pierre, SD 57532
Minnesota Department of Natural Resources (MNDNR)	Bridget Henning-Randa	(651) 259-5073 Bridget.Henning-Randa@state.mn.us	500 Lafayette Rd., Box 25 St. Paul, MN 55155
Rehabilitation Facility	Contact state agency for additional information on locating a facility.		

Appendix D – Field Forms

Bird Nest Form

Section-Tap or Substation: _____

Pole Identification No. or
Equipment: _____

Maintenance Center Service Area: _____

Street Address or Intersection: _____

City/County/State: _____

Finder's name: _____

Finder's Phone: _____

Nest (circle one):
Active Inactive

Date Found: _____

Nest Location:
Utility Pole Substation Other

Nest Condition: _____

Description of Terrain and Vegetation Area (e.g. near agriculture area, dense city area, residential housing, wetland, shelterbelt, etc.):

Live Species Observed:
Species _____ Number _____

History of nesting on this section/tap:

Pole Condition (circle all that apply):
Broken insulator Broken crossarm Leaking transformer Broken / burned / leaning pole Broken guywire

Comments/Recommendations:

Report Filled Out By: _____ Date: _____

Please attach picture of bird or nest if possible

Submitted To: _____ Engineering Services Date: _____

Reviewed By: _____ Date: _____

Bird Mortality Report

PUBLIC
Data Responses 167 of 195

Section-Tap or Substation: _____
Pole Identification No. or Equipment: _____
Maintenance Center Service Area: _____
Street Address or Intersection: _____
City/County/State: _____
Finder's name: _____
Finder's Phone: _____

Bird Mortality (Circle One):

Eagle	Crow / magpie /	Hawk / falcon /	Unknown
Small bird	raven	osprey	Species
	Waterfowl	Owl	

Bird Count: _____

Date Found: _____

Weather Conditions (e.g. rainy and cold, sunny and warm, windy, etc.):

Description of Terrain and Vegetation Area (e.g. near agriculture area, dense city area, residential housing, wetland, shelterbelt, etc.) :

Sign of Death (circle one):

Collision	Electrocution	Shot	Unknown
-----------	---------------	------	---------

Evidence of death:

Burnt feathers	Burnt talons	Burnt bill	Exit wound	Broken neck
Broken wing	No Visual	Other: _____		

Status of carcass/remains:

Buried	Collected	Left-on-site
--------	-----------	--------------

Live Species Observed:

Species	Number
---------	--------

Pole Condition (circle all that apply):

Broken insulator	Broken crossarm	Leaking transformer	Broken / burned / leaning pole	Broken guywire
------------------	-----------------	---------------------	--------------------------------	----------------

Comments/Recommendations:

Report Filled Out By: _____ Date: _____

Please attach picture of bird or nest if possible

Submitted To: _____ Engineering Services Date: _____

Reviewed By: _____ Date: _____

Appendix D – Board Resolution

EAST RIVER ELECTRIC POWER COOPERATIVE, INC.

DATE OF MEETING: October 7-8, 2010

TYPE OF MEETING (Check One):

- X 1. Regular Board of Directors
 2. Special Board of Directors
 3. Annual Meeting of Members
 4. Special Meeting of Members

RESOLUTION NO. 102010-2

SUBJECT: EAST RIVER AVIAN PROTECTION PLAN

WHEREAS, the United States Fish and Wildlife Service in conjunction with the Avian Power Line Interaction Committee (APLIC), of which RUS and NRECA are members, recommend that electric utilities have an Avian Protection Plan in place in order to protect migratory birds by reducing the risks of birds interacting with electric lines and other electric facilities; and

WHEREAS, East River Electric Power Cooperative, Inc. (East River) has developed an Avian Protection Plan to assist East River and its employees in reducing the risk of bird mortality associated with East River's facilities, identifying and retrofitting or modifying facilities that cause or can cause migratory bird deaths, and documenting bird deaths and associated actions; and

WHEREAS, reducing bird deaths and contacts with East River's electric facilities will also reduce electric system outages and equipment damage and will improve the reliability of the electric system and reduce costs; and

WHEREAS, the Avian Protection Plan will also be used by East River and its employees to ensure that East River follows the applicable laws, regulations, and permits pertaining to the protection of migratory birds and the handling of any migratory bird deaths or contacts related to East River's facilities;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of East River hereby approves East River's Avian Protection Plan.

Motion carried unanimously.

Appendix F – Migratory Bird Permit Memorandum



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, Washington, D C 20240

MBPM-2
Date: APR 15, 2003

MIGRATORY BIRD PERMIT MEMORANDUM

SUBJECT: Nest Destruction

PURPOSE: The purpose of the memorandum is to clarify the application of the Migratory Bird Treaty Act (MBTA) to migratory bird nest destruction, and to provide guidance for advising the public regarding this issue.

POLICY: The MBTA does not contain any prohibition that applies to the destruction of a migratory bird nest alone (without birds or eggs), provided that no possession occurs during the destruction. To minimize MBTA violations, Service employees should make every effort to inform the public of how to minimize the risk of taking migratory bird species whose nesting behaviors make it difficult to determine occupancy status or continuing nest dependency.

The MBTA specifically protects migratory bird nests from *possession, sale, purchase, barter, transport, import, and export, and take*. The other prohibitions of the MBTA – *capture, pursue, hunt, and kill* – are inapplicable to nests. The regulatory definition of *take*, as defined by 50 CFR 10.12, *means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue hunt, shoot, wound, kill, trap, capture, or collect*. Only *collect* applies to nests.

While it is illegal to collect, possess, and by any means transfer possession of any migratory bird nest, the MBTA does not contain any prohibition that applies to the destruction of a bird nest alone (without birds or eggs), provided that no possession occurs during the destruction. The MBTA does not authorize the Service to issue permits in situations in which the prohibitions of the Act do not apply, such as the destruction of unoccupied nests. (Some unoccupied nests are legally protected by statutes other than the MBTA, including nests of threatened and endangered migratory bird species and bald and golden eagles, within certain parameters.)

However, the public should be made aware that, while destruction of a nest by itself is not prohibited under the MBTA, nest destruction that results in the unpermitted take of migratory birds or their eggs, is illegal and fully prosecutable under the MBTA.

Due to the biological and behavioral characteristics of some migratory bird species, destruction of their nests entails an elevated degree of risk of violating the MBTA. For example, colonial nesting birds are highly vulnerable to disturbance; the destruction of unoccupied nests during or near the nesting season could result in a significant level of take. Another example involves

ground nesting species such as burrowing owls and bank swallows, which nest in cavities in the ground, making it difficult to detect whether or not their nests are occupied by eggs or nestlings or are otherwise still essential to the survival of the juvenile birds. The Service should make every effort to raise public awareness regarding the possible presence of birds and the risk of violating the MBTA, the Endangered Species Act (ESA), and the Bald and Golden Eagle Protection Act (BGEPA), and should inform the public of factors that will help minimize the likelihood that take would occur should nests be destroyed (i.e., when active nesting season normally occurs).

The Service should also take care to discern that persons who request MBTA permits for nest destruction are not targeting nests of endangered or threatened species or bald or golden eagles, so that the public can be made aware of the prohibitions of the ESA and the BGEPA against nest destruction.

In situations where it is necessary (i.e., for public safety) to remove (destroy) a nest that is occupied by eggs or nestlings or is otherwise still essential to the survival of a juvenile bird, and a permit is available pursuant to 50 CFR parts 13 and 21, the Service may issue a permit to take individual birds.



Director



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Dakota Ecological Services Field Office
420 South Garfield Avenue, Suite 400
Pierre, SD 57501-5408
Phone: (605) 224-8693 Fax: (605) 224-1416



In Reply Refer To:
Project code: 2023-0036990
Project Name: WAPA North Bend to Pratt Tie

07/10/2024 18:29:38 UTC

Federal Nexus: yes
Federal Action Agency (if applicable): Rural Utilities Service

Subject: Record of project representative's no effect determination for 'WAPA North Bend to Pratt Tie'

Dear Jennifer Buchholtz:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on July 10, 2024, for 'WAPA North Bend to Pratt Tie' (here forward, Project). This project has been assigned Project Code 2023-0036990 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed

action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate
- Pallid Sturgeon *Scaphirhynchus albus* Endangered
- Piping Plover *Charadrius melodus* Threatened
- Rufa Red Knot *Calidris canutus rufa* Threatened
- Whooping Crane *Grus americana* Endangered

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of “No Effect” on the northern long-eared bat. If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the South Dakota Ecological Services Field Office and reference Project Code 2023-0036990 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

WAPA North Bend to Pratt Tie

2. Description

The following description was provided for the project 'WAPA North Bend to Pratt Tie':

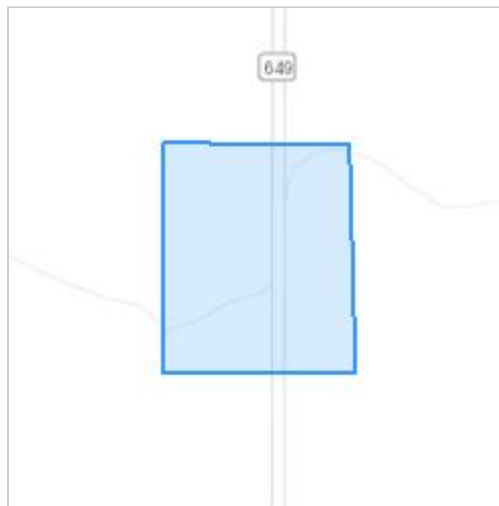
This new 0.25-mile long 230 kV line will provide a tie line from a new interconnection with WAPA North Bend (loan code 1005-0205) to the new East River Pratt substation (loan code 1005-0204). This project will be built with 795 ACSR to handle proposed and future area loads. The line will be constructed above ground. The line will be constructed with OPGW for the shield wire to improve communications to the area.

The line design has been previously approved by RUS and Cooperative acknowledges 7CFR 1724.51 Design requirements.

East River will attempt to obtain private easements on this project to place the structures 2' into private property. In the event an easement is unable to be obtained, the structures will be placed 2' into public ROW.

The purpose of the new tie line is to strengthen East River's transmission system in the Hughes and Hyde County areas within Oahe Electric Cooperative and Dakota Energy Cooperative's service territories. This tie would provide for a 230 kV source into the 230-69 kV Pratt substation where the 69 kV will be built for an ultimate ring bus layout. This substation configuration will provide for the ability to tie the Oahe system to the rest of East River's transmission system and an additional source to the area.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.32695885,-99.60361883405608,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (*Myotis septentrionalis*). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. The action area does not overlap with an area for which U.S. Fish and Wildlife Service currently has data to support the presumption that the northern long-eared bat is present. Are you aware of other data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed NLEB acoustic detections. Data on captures, roost tree use, and acoustic detections should post-date the year when white-nose syndrome was detected in the relevant state. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

No

3. Does any component of the action involve construction or operation of wind turbines?

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

4. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

5. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

6. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

No

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

8. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

9. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the [effects of any activities](#) that would not occur but for the proposed action.

If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of [Effects of the Action](#) can be found here: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

10. [Semantic] Is the action area located within 0.5 miles of a known northern long-eared bat hibernaculum?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

11. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

No

12. Does the action area contain or occur within 0.5 miles of (1) talus or (2) anthropogenic or naturally formed rock crevices in rocky outcrops, rock faces or cliffs?

No

13. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?

(If unsure, answer "Yes.")

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags ≥ 3 inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

PROJECT QUESTIONNAIRE

Will all project activities be completed by November 30, 2024?

No

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jennifer Buchholtz
Address: PO Box 227
City: Madison
State: SD
Zip: 57042
Email: jbuchholtz@eastriver.coop
Phone: 6052564536

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Rural Utilities Service



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Dakota Ecological Services Field Office
420 South Garfield Avenue, Suite 400
Pierre, SD 57501-5408
Phone: (605) 224-8693 Fax: (605) 224-1416



In Reply Refer To:

07/10/2024 18:23:57 UTC

Project Code: 2023-0036990

Project Name: WAPA North Bend to Pratt Tie

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Dakota Ecological Services Field Office

420 South Garfield Avenue, Suite 400

Pierre, SD 57501-5408

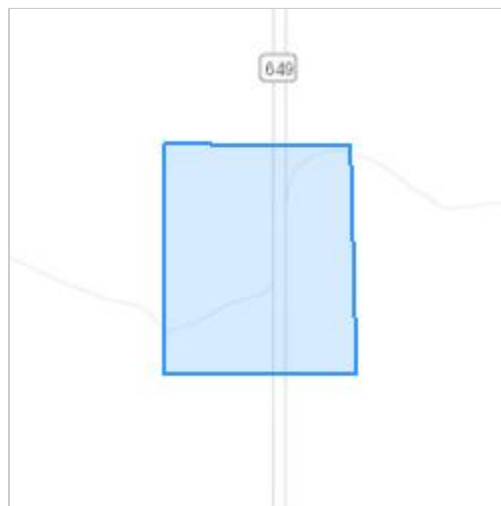
(605) 224-8693

PROJECT SUMMARY

Project Code: 2023-0036990
Project Name: WAPA North Bend to Pratt Tie
Project Type: Transmission Line - New Constr - Above Ground
Project Description: This new 0.25-mile long 230 kV line will provide a tie line from a new interconnection with WAPA North Bend (loan code 1005-0205) to the new East River Pratt substation (loan code 1005-0204). This project will be built with 795 ACSR to handle proposed and future area loads. The line will be constructed above ground. The line will be constructed with OPGW for the shield wire to improve communications to the area. The line design has been previously approved by RUS and Cooperative acknowledges 7CFR 1724.51 Design requirements. East River will attempt to obtain private easements on this project to place the structures 2' into private property. In the event an easement is unable to be obtained, the structures will be placed 2' into public ROW. The purpose of the new tie line is to strengthen East River's transmission system in the Hughes and Hyde County areas within Oahe Electric Cooperative and Dakota Energy Cooperative's service territories. This tie would provide for a 230 kV source into the 230-69 kV Pratt substation where the 69 kV will be built for an ultimate ring bus layout. This substation configuration will provide for the ability to tie the Oahe system to the rest of East River's transmission system and an additional source to the area.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.32695885,-99.60361883405608,14z>



Counties: Hyde County, South Dakota

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: This species only needs to be considered if the project includes wind turbine operations. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Rufa Red Knot <i>Calidris canutus rufa</i> There is proposed critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane <i>Grus americana</i> Population: Wherever found, except where listed as an experimental population There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

FISHES

NAME	STATUS
Pallid Sturgeon <i>Scaphirhynchus albus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7162	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

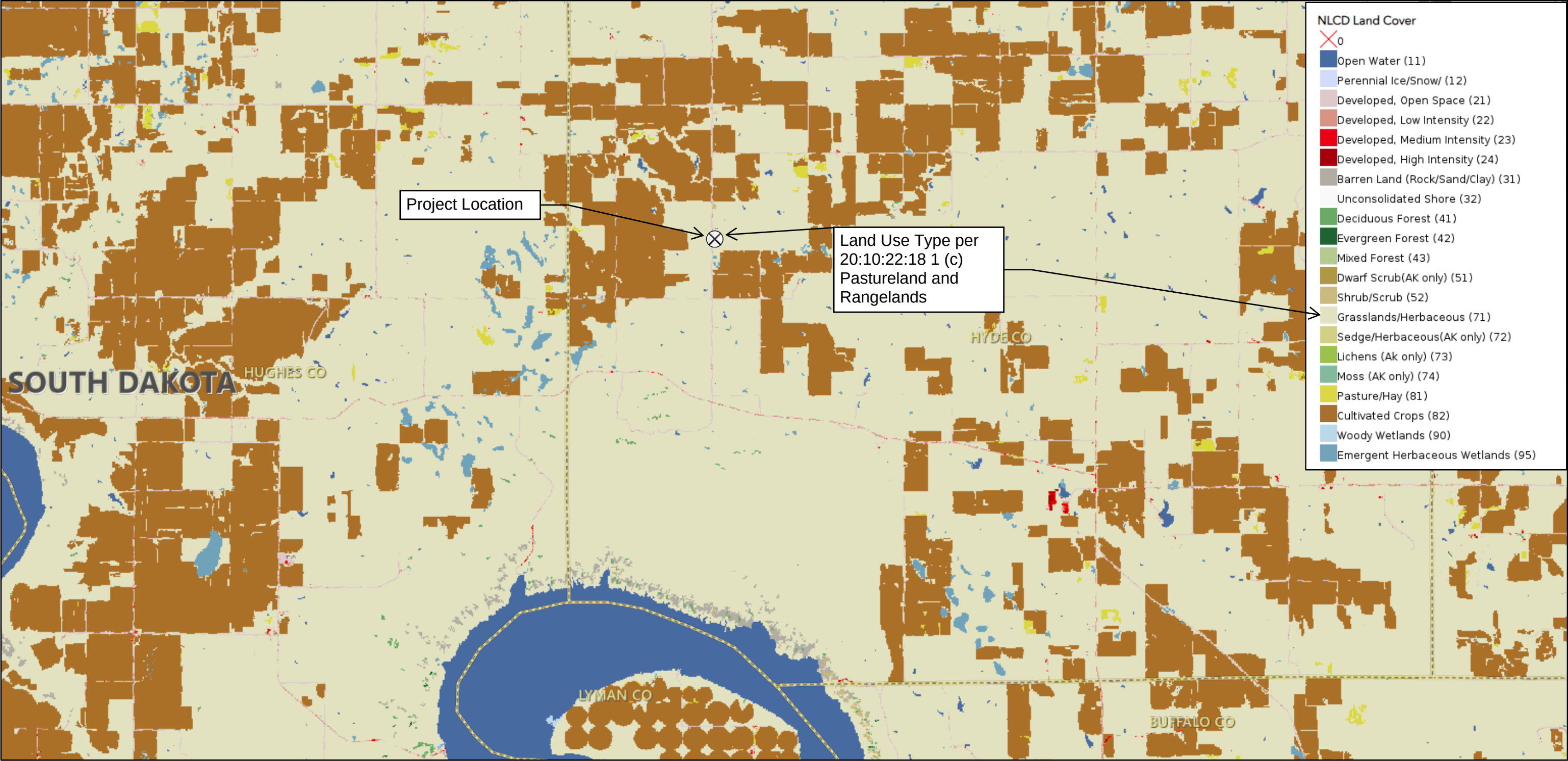
IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jennifer Buchholtz
Address: PO Box 227
City: Madison
State: SD
Zip: 57042
Email: jbuchholtz@eastriver.coop
Phone: 6052564536

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Rural Utilities Service

LAND USE MAP

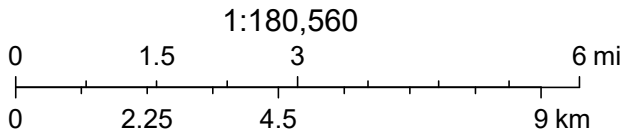


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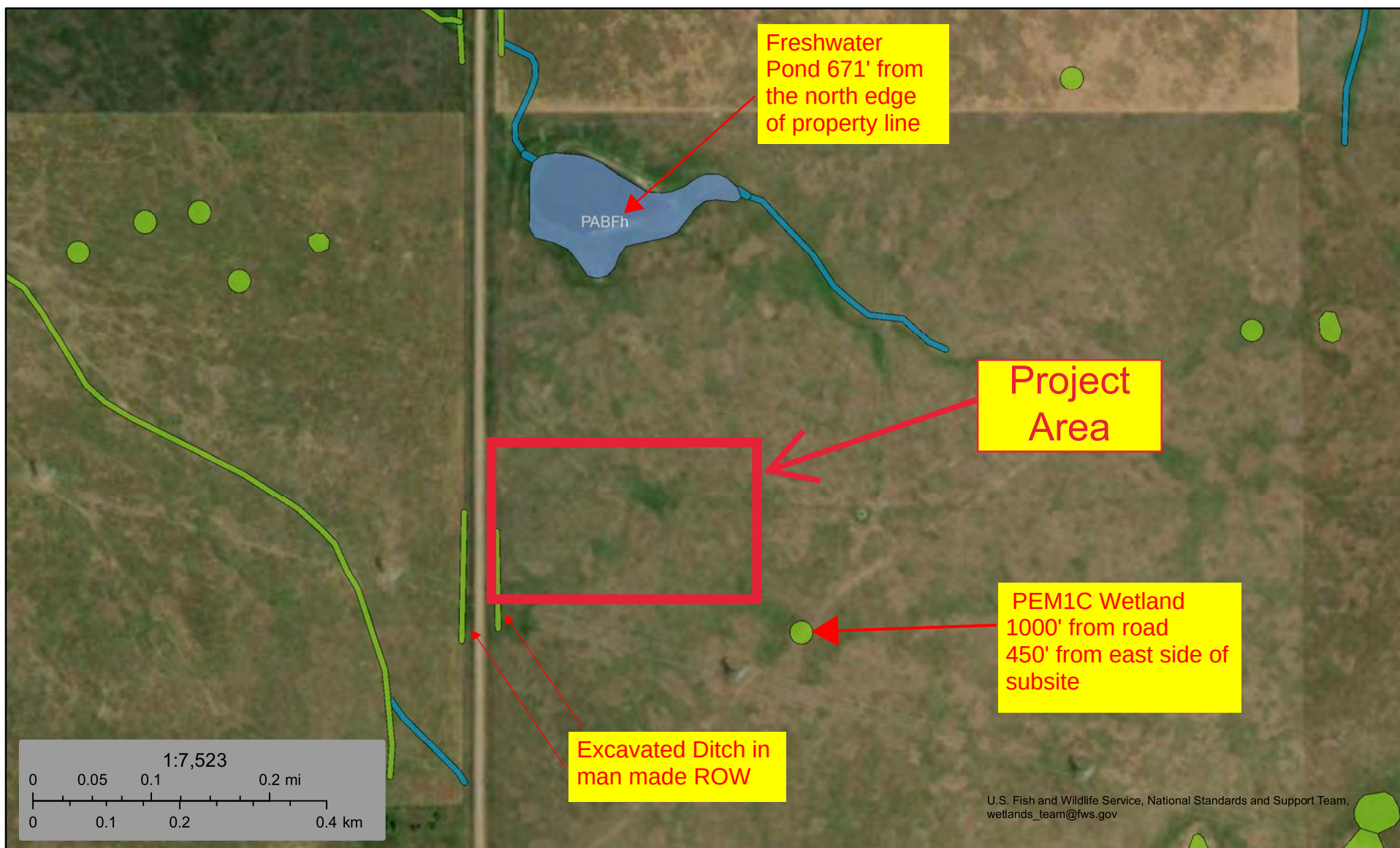
⊗ Project Location

County or Equivalent
State or Territory Large-Scale

NLCD_2016_Land_Cover_L48



USGS The National Map: National Boundaries Dataset. Data Refreshed July, 2024., USDA, USGS The National Map: Orthoimagery. Data refreshed June, 2024.



August 21, 2023

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

SPCC Plan

CERTIFICATION

Mark Hoffman, certify that the following is accurate:

1. I am familiar with the applicable requirements of 40 CFR part 112
2. I have myself or other East River personnel on my behalf have visited and examined the facility
3. This Plan was prepared in accordance with accepted and sound industry practices and standards
4. Procedures for required inspections and testing have been established in accordance with industry inspection and testing standards or recommended practices.
5. I will fully implement the Plan
6. This facility meets the following qualification criteria (under §112.3(g)(1)):
 - a) The aggregate aboveground oil storage capacity of the facility is 10,000 U.S. gallons or less.
 - b) The facility has had no single discharge as described in §112.1(b) exceeding 1,000 U.S. gallons and no two discharges as described in §112.1(b) each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan self-certification date, or since becoming subject to 40 CFR part 112 if the facility has been in operation for less than three years (not including oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war or terrorism); and
 - c) There is no individual oil storage container at the facility with an aboveground capacity greater than 5,000 U.S. gallons.
7. This plan does not deviate from any requirement of 40 CFR part 112 as allowed by §112.9(a)(2) (environment equivalence) and §112.7(d) (impracticability of secondary containment).
8. This Plan and individual(s) responsible for implementing this Plan have the full approval of management and I have committed the necessary resources to fully implement this Plan.

I also understand my other obligations relating to the storage of oil at this facility, including, among others:

1. To report an oil discharge to navigable waters or adjoining shorelines to the appropriate authorities. Notification information is included in this Plan.
2. To review and amend this Plan whenever there is a material change at the facility that affects the potential for an oil discharge, and at least once every five years. Reviews and amendments shall be recorded in this plan.
3. Optional use of a contingency plan. A contingency plan:
 - a. May be used in lieu of secondary containment for qualified oil-filled operational equipment, in accordance with the requirements under §112.7(k), and
 - b. Must include an established and documented inspection or monitoring program
 - c. An oil spill contingency plan following the provision of 40 CFR part 109; and a written commitment of manpower, equipment and materials to expeditiously remove any quantity of oil discharged that may be harmful. If applicable, a copy of the contingency plan and any additional documentation will be included with this plan.

By completing this plan, I certify that I have satisfied the requirement to prepare and implement a Plan under §112.3 and all of the requirements under §112.6(a). I certify that the information contained in this Plan is true.

Signature: _____ Title: _____

Name: _____ Date: _____

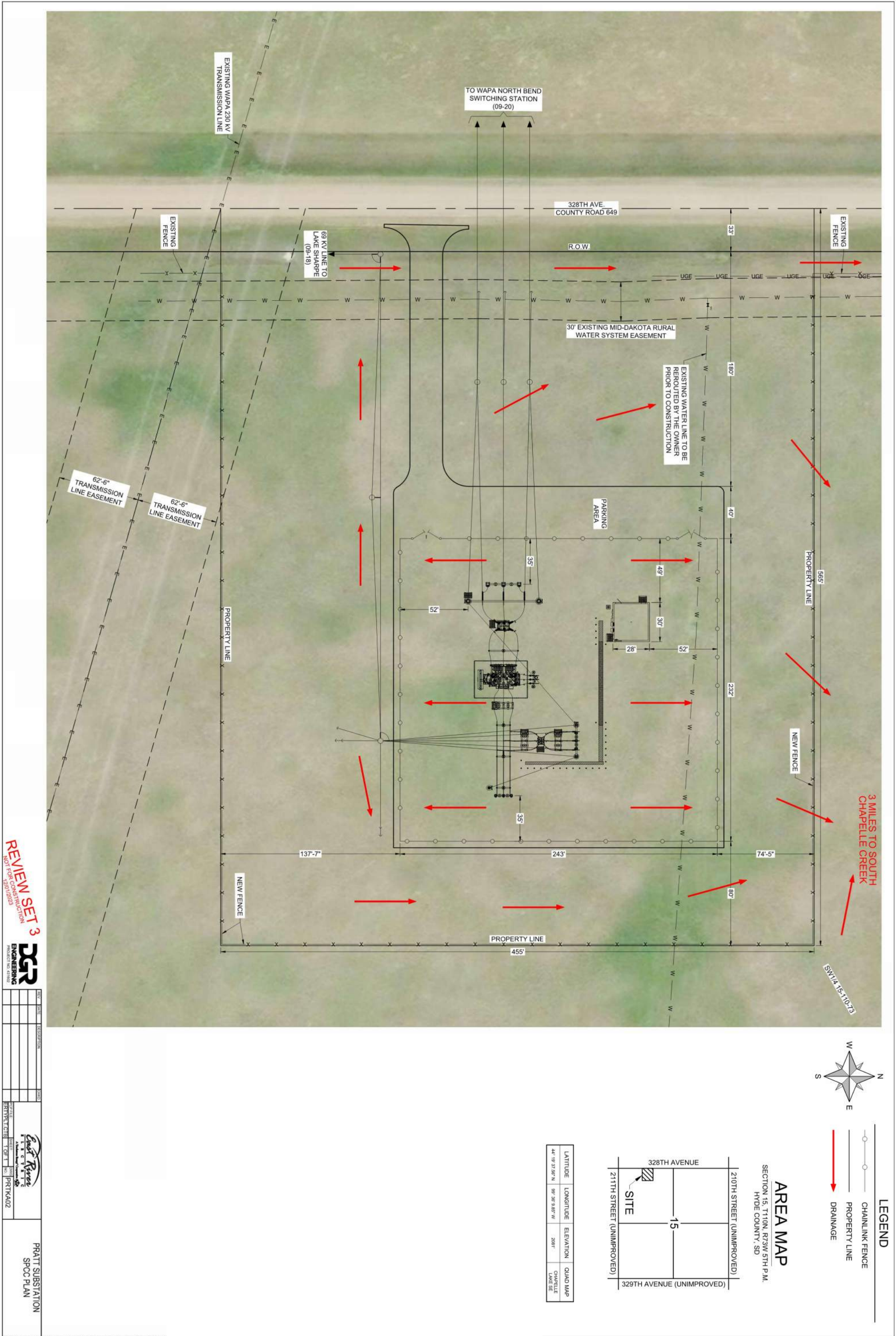
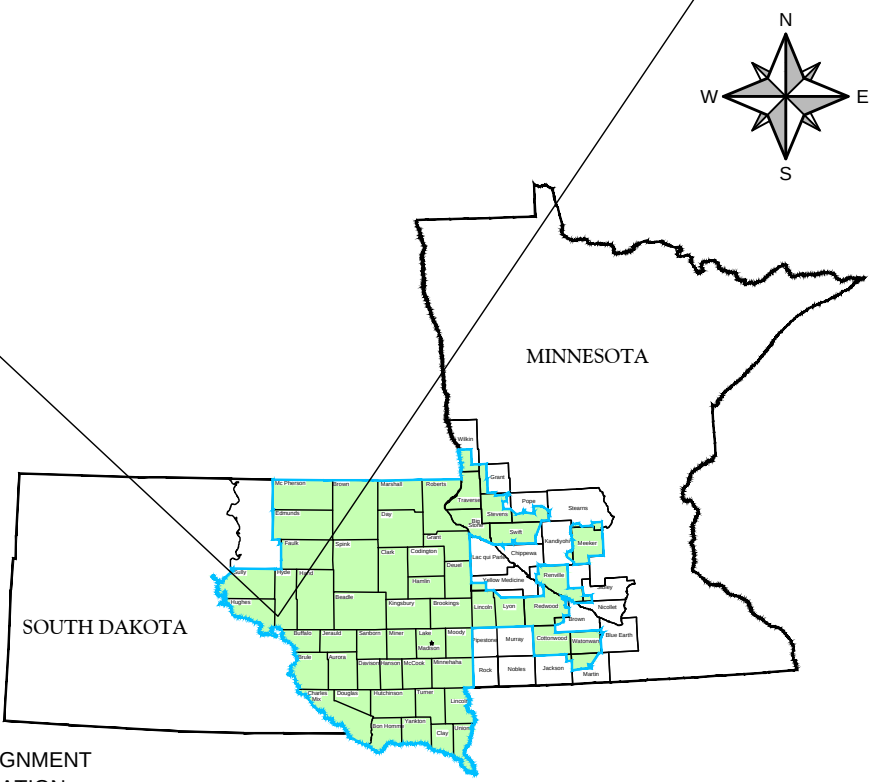
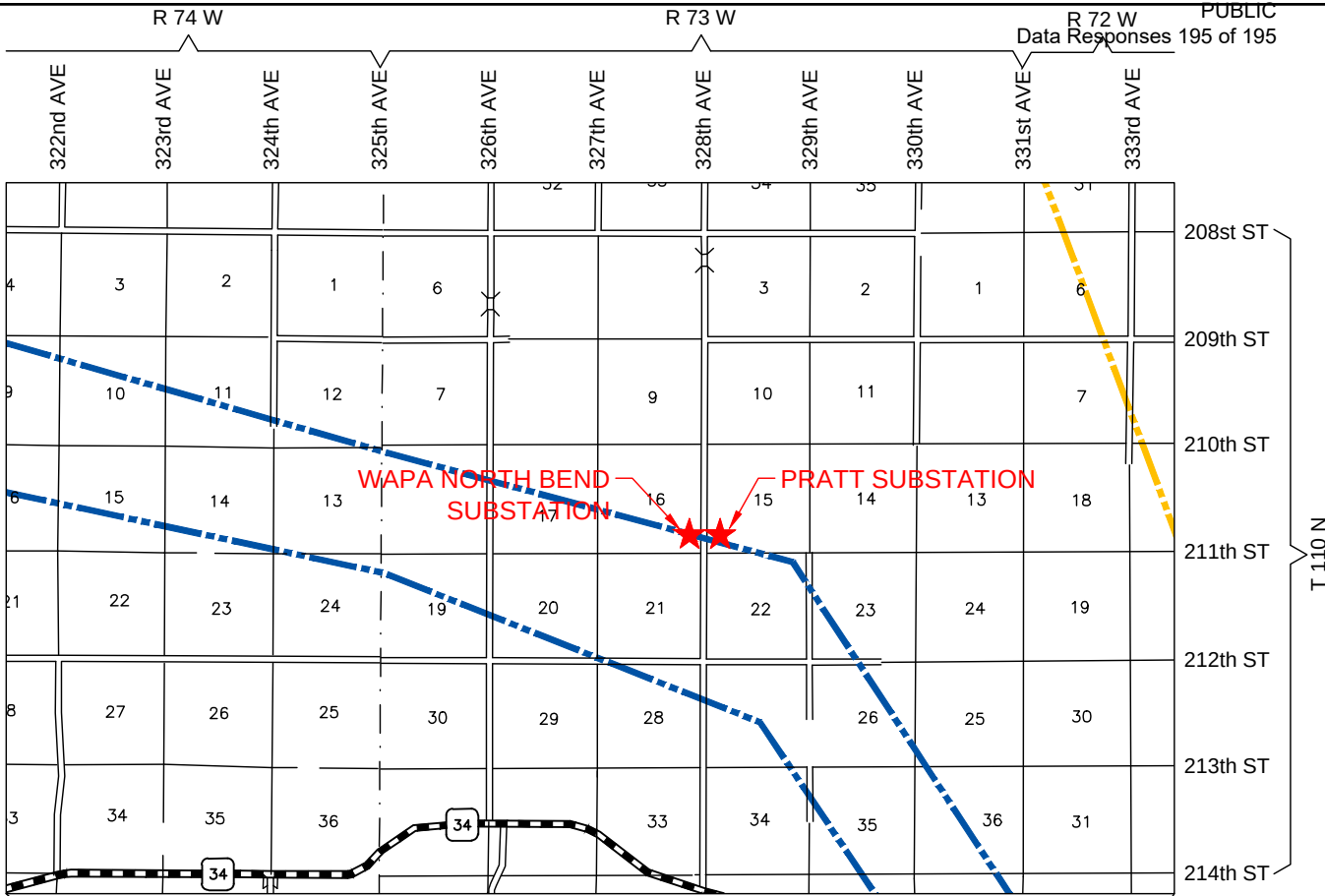
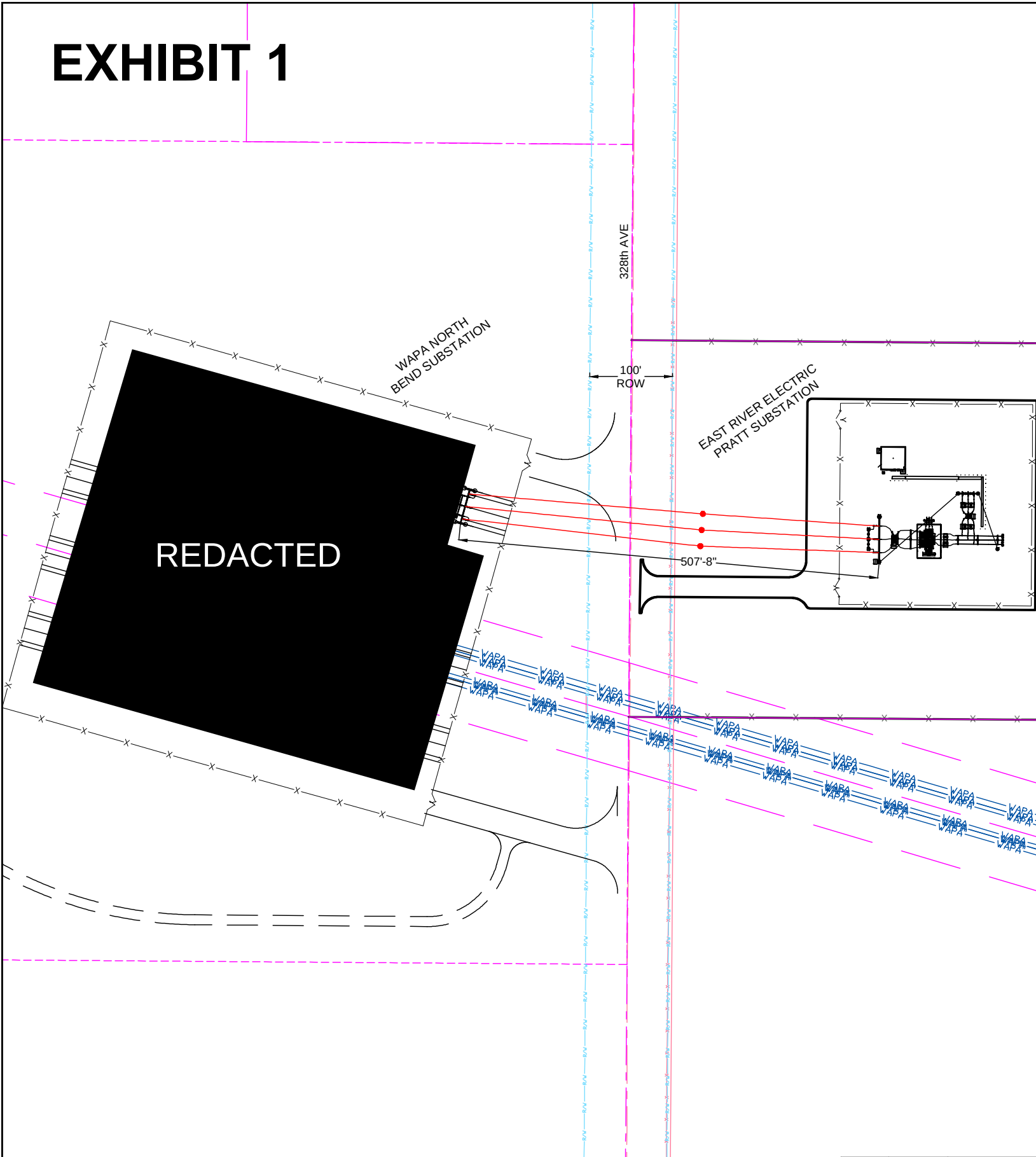


EXHIBIT 1



- PROPOSED EAST RIVER T-LINE ALIGNMENT
- PROPOSED EAST RIVER POLE LOCATION
- EXISTING WAPA LINE

REV	DATE	DESCRIPTION	CHKD
2	7/18/2024	PUC DATA REQUEST	MLW
1	2/19/2024	PROPOSED LAYOUT	MLW



East River
ELECTRIC
A Tractatus Energy Cooperative Member

PCP FILE: ERTYPLT.CTB

SHEET: OF

DWG NO.: PR0920Z01

WAPA NORTH BEND
TO PRATT SUBSTATION

HYDE COUNTY, SD