



REQUEST FOR QUOTATION

PROJECT: P21-004 Cottonwood Ranch Broad Scale Recharge Fence Project
LOCATION: Cottonwood Ranch Complex
NEAR: Elm Creek, Nebraska
REQUEST DATE: March 5, 2021
MANDATORY
SITE SHOWING: **March 12, 2021– 3:00 pm central time**
CLOSING DATE: March 26, 2021 – 5:00 pm central time
CONTACT: Tim R. Tunnell, Senior Land Manager
Headwaters Corporation
4111 4th Ave, Suite 6
Kearney, NE 68845
tunnelt@headwaterscorp.com

The undersigned acknowledges receipt of the following plans and specifications:

- # 1 (___) Construction Specifications
- # 2 (___) Material Specifications
- # 3 (___) Sheet 1 – Cover
- # 4 (___) Sheet 2 – Fence Removal Layout
- # 5 (___) Sheet 3 – Fence Construction Layout
- # 6 (___) Sheet 4 – Gate Installation Layout
- # 7 (___) Sheet 5 – Barbed Wire Fence Details

The undersigned, having examined the drawings and investigated the local conditions affecting the project work, hereby proposes to perform the project in accordance with the contract documents for the following rates:

THIS QUOTE SUBMITTED ON DATE: _____

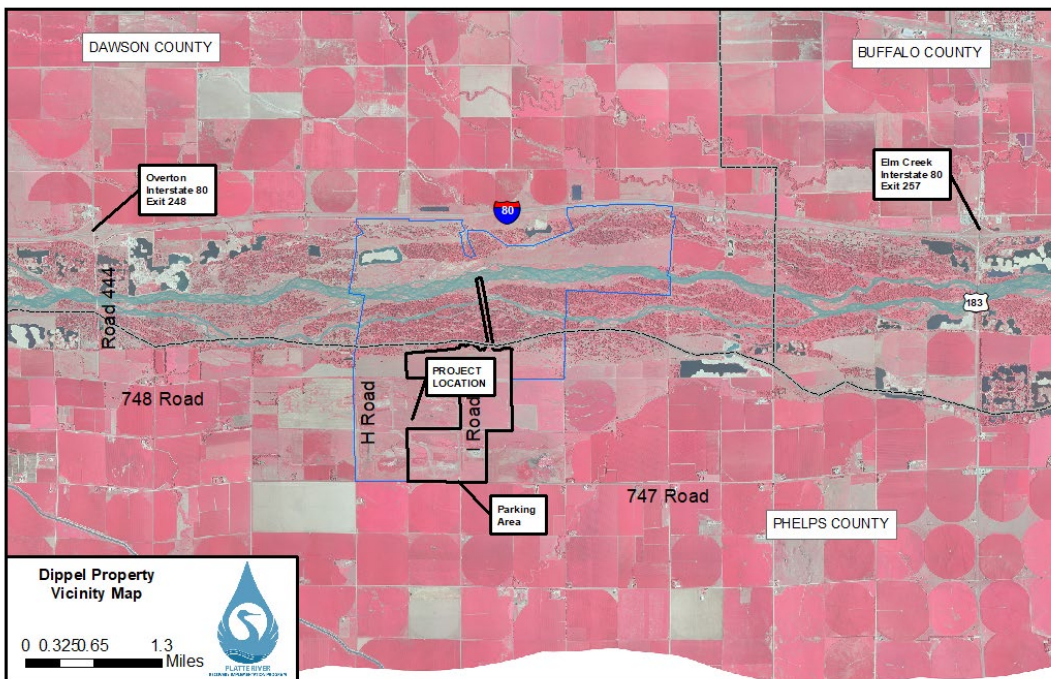
Directions to **MANDATORY**

Pre-Bid Meeting

Date and Time: Friday, March 12, 2021 at 3:00 PM CT

Location: Cottonwood Ranch Broad Scale Recharge Fence Project

Map: .



From I-80 Exit 248 (Overton):

Travel 1.4 mile south on Road 444, turn east onto 748 Road travel 2.5 miles to H Road, turn south and travel 1 mile to 747 road, and turn east and travel 1 mile to parking area.

From I-80 Exit 257 (Elm Creek):

Travel 2.2 miles south on Highway 183, turn west onto 747 Road and travel 5 miles to parking area.

The Contractor is required to submit quotes for all work Items below.

OPTION 1: Salvage Used Fence for Interior Fence Construction

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
001	Mobilization and Demobilization	LS	1	\$ N/A	\$
002	Fence Removal/ Salvage for reuse	LF	17,173	\$	\$
003	Fence Construction w/ Salvaged Material	LF	16,800	\$	\$
004	Fence Construction w/ New Material	LF	21,763	\$	\$
005	Wire Gate Construction & Installation	EA	6	\$	\$
006	Metal Tube Gate & Installation (16 foot)	EA	11	\$	\$
007	Metal Tube Gate & Installation (4 foot)	EA	1	\$	\$
TOTAL					\$

TOTAL QUOTE PRICE _____

_____ dollars (\$))

WORK COMPLETION DATE: _____

OPTION 2: New Material for Interior Fence Construction

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
001	Mobilization and Demobilization	LS	1	\$ <u>N/A</u>	\$ _____
002	Fence Removal	LF	17,173	\$ _____	\$ _____
003	Fence Construction w/ New Material	LF	38,563	\$ _____	\$ _____
004	Wire Gate Construction & Installation	EA	6	\$ _____	\$ _____
005	Metal Tube Gate & Installation (16 foot)	EA	11	\$ _____	\$ _____
006	Metal Tube Gate & Installation (4 foot)	EA	1	\$ _____	\$ _____
				TOTAL	\$ _____

TOTAL QUOTE PRICE _____

_____ dollars (\$ _____)

WORK COMPLETION DATE: _____

**THIS QUOTE SUBMITTED BY:
An Individual**

Name (typed or printed): _____

By: _____ (SEAL)
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner - attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature - attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(CORPORATE SEAL)

Attest: _____
(Signature of Corporate Secretary)

CONTACT INFORMATION:

Bidder's Business Address: _____

Phone: _____ Facsimile: _____



PROJECT SPECIFICATIONS

PART 01 GENERAL

1.1 SUMMARY

1.1.1 Description of Work: Furnish equipment, transportation, labor, supervision, supplies, and materials, to install 4-wire barbed wire fence in accordance to specifications on Sheet 5 and in accordance to the Specifications and Material Specifications for the project.

1.1.2 Location: Work under this Contract is located in Phelps County, Nebraska. The work site is located southwest of the city of Elm Creek on the Platte River. Sheet 1 identifies the project location.

1.1.3 Schedule of Work: The performance period of this Contract shall be from date of award through **May 1, 2021 or as negotiated with successful bidder.**

1.2 LIABILITY/INSURANCE

1.2.1 The successful bidder agrees to carry appropriate Workers' Compensation, hazard and liability insurance coverage during the term of this contract. The successful bidder shall furnish the Program satisfactory proof of coverage of the applicable insurance required. Upon request from the Program, the Contractor shall have the Program and Nebraska Community Foundation named as an additional insured on the Contractor's policy and provide the Program with evidence that the appropriate insurance coverage is in effect. Any bidder being self-insured must submit complete documentation that shows the company has sufficient insurance coverage to cover the terms and conditions of the contract.

1.3 QUALITY ASSURANCE

1.3.1 Code and Standards: The work shall comply with the specification as written, and with codes and standards applicable to this type of work. This Contract may incorporate the use of specialized equipment to perform the required end product, with the same force and effect as if they were given in full text.

1.4 PROJECT/SITE CONDITIONS

1.4.1 Access to the Work: Public roads and unpaved access road on the property. All of work takes place within the floodplain of the Platte River.



CONSTRUCTION AND MATERIAL SPECIFICATIONS

for

P21-004 Cottonwood Ranch Broad Scale Recharge Fence Project

The work to be performed under these specifications consists of:

Activities in this project include removing approximately 17,173 LF four-wire livestock fence, constructing 38,563 LF of four-wire livestock fence, installation of 6 wire gates, installation of 11- 16-LF metal tube gates and installation of 1- 4-LF metal tube gate.

The proposed work is in parts of Sec 16 T8-N R 19-W, approximately 6 miles from Elm Creek, Nebraska.

These specifications are a part of the construction plans. The work shall be performed in accordance with the drawings and specifications unless otherwise approved, in writing, by the Program’s Project Engineer. For items of work requiring Program inspection and/or approval, it is the responsibility of the contractor to keep the Project Engineer informed on the status of the work so that timely inspection may be provided. Work performed without the Program being provided the opportunity for inspection may not be accepted. All work on the project will conform to the title drawings and the following applicable specifications are marked in Column No. 1.

COL. #1	SPEC. NO.	SPECIFICATION TITLE
X	CS-01	Mobilization and Demobilization
X	CS-92	Field Fence
X	MS-585	Wood Preservatives and Treatment
X	MS-591	Field Fencing Material
X	N/A	Whooping Crane Incidental Take Avoidance Procedures



CONSTRUCTION SPECIFICATION CS-01

MOBILIZATION AND DEMOBILIZATION

1. Description.

The work shall consist of the mobilization and demobilization of the Contractor's forces and the equipment necessary for performing the work described in the Request for Quote and detailed in the Construction Plan Sheets.

2. Equipment & Materials.

2.1 Mobilization shall include all activities and costs for transportation of personnel, equipment and supplies/materials to the site, establishment of offices, buildings and other necessary facilities for the Contractor's operations at the site.

2.2 Demobilization shall include all activities and costs for transportation of personnel, equipment and any excess supplies/materials, including the disassembly, removal and site cleanup of any offices, buildings or other facilities assembled on the site by the Contractor.

2.3 The Contractor shall be responsible for all required permits for transportation of the Contractor's equipment. All equipment and materials shall be mobilized and demobilized in accordance with all local, state and federal laws related to transportation and safety.

2.4 Upon completion of the work, the Contractor shall restore all access areas to the same condition as prior to the start of the work.

2.5 The Contractor is responsible for security of the Contractor's equipment while on site.

3. Measurement and Method of Payment

3.1 Payment of the lump sum price for mobilization and demobilization shall be made after the work is completed, after presentation of invoices by the Contractor.

3.2 Payment will not be made under this item for the purchase costs of materials having a residual value, the purchase costs of materials to be incorporated in the project, or the purchase costs of operating supplies.

Construction Specification 92—Field Fence

1. Scope

The work shall consist of furnishing and installing field fence, including gates and fittings.

2. Material

Material for field fence shall conform to the requirements of Material Specification 591. All wooden posts shall be of the same species, when available.

Unless otherwise specified, surfacing, cutting, and boring of preservative treated wooden posts and braces shall be completed before treatment. If field cutting or field repair of treated material is approved, all cuts and abrasions shall be carefully trimmed and coated with copper naphthenate preservative containing a minimum of 2.0 percent copper metal. The treatment preservative shall be applied according to the product label. Any excess preservative not absorbed by the wood member shall be cleaned from the surface prior to the use of the member. Bored holes for connectors or bolts may be treated by pumping coal-tar roofing cement meeting ASTM D5643 into the holes using a caulk gun or similar device. After assembly, any unfilled holes shall be plugged with tightly fitting wooden plugs that have been treated with preservative as specified.

3. Setting posts

Concrete or wood posts shall be set in holes and backfilled with earth except where otherwise specified. Wood posts may be driven when approved by the engineer. Steel posts shall be driven unless otherwise specified.

Holes for installing fence posts shall be at least 6 inches larger than the diameter or side dimension of the posts.

Earth backfill around posts shall be thoroughly tamped in layers not thicker than 4 inches and shall completely fill the posthole up to the ground surface. Concrete backfill around posts shall be rodded into place in layers not thicker than 12 inches and shall completely fill the posthole to the surface of the ground. Backfill, either earth or concrete, shall be crowned-up around posts at the ground surface.

No stress shall be applied to posts set in concrete for a period of not less than 24 hours following the development of a firm set of the concrete.

4. Corner assembly

Unless otherwise specified in section, corner assemblies shall be installed at all points where the fence alignment changes 15 degrees or more.

5. End panels

End panels shall be built at gates and fence ends.

6. Pull post assembly

Pull post assembly (bracing within a section of straight fence) shall be installed at the following locations:

- a. In straight fence sections, at intervals not to exceed 660 feet.
- b. At any point where the vertical angle described by two adjacent reaches of wire is upward and exceeds 10 degrees (unless otherwise specified).
- c. At the beginning and end of each curved fence section.

7. Attaching fencing to posts

The fencing shall be stretched and attached to posts as follows:

- a. The fencing wire or netting shall be placed on the side of the post opposite the area being protected except for installation along curved sections.
- b. The fencing wire or netting shall be placed on the outside for installation along curved sections.
- c. The fencing wire or netting shall be fastened to each end post, corner post, and pull post by wrapping each horizontal strand around the post and tying it back on itself with not less than three tightly wound wraps.
- d. The fencing wire or netting shall be fastened to wooden line posts by means of steel staples. Woven-wire fencing shall be attached at alternate horizontal strands. Each strand of barbed wire shall be attached to each post. Steel staples shall be driven diagonally with the grain of wood and at a slight downward angle and shall not be driven so tightly as to bind the wire against the post.
- e. The fencing wire or netting shall be fastened to steel or concrete line posts with either two turns of 14 gauge galvanized steel or iron wire or in accordance with recommendations provided by the post's manufacturer.
- f. Wire shall be spliced by means of a Western Union splice or by suitable splice sleeves applied with a tool designed for that purpose. The Western Union splice shall have no less than eight wraps of each end about the other. All wraps shall be tightly wound and closely spaced. Splices made with splice sleeves shall have a tensile strength no less than 80 percent of the strength of the wire being spliced.

8. Stays

Stays shall be attached to the fencing at the spacing as shown on the drawings to ensure maintenance of the proper spacing of the fence wire strands.

9. Crossings at depressions and watercourses

Where fencing is installed parallel to the ground surface, the line posts subject to upward pull shall be anchored.

- a. If the fence wire or netting is installed parallel to the ground surface, the line posts subject to uplift shall be anchored by means of extra embedment or by special anchors as detailed on the drawings.
- b. If the fence wire is installed with the top wire straight and parallel to the ground surface on either side of the depression, extra length posts shall be used to allow normal post embedment. Unless otherwise specified, excess space between the bottom of the fence and the ground shall be closed with extra strands of barbed wire or with netting.

10. Measurement and payment

Method 1—The length of each type and kind of fence is measured to the nearest foot along the profile of the fence, including gate openings. Payment for each type and kind of fence is made at the contract unit price for that type and kind of fence. Such payment constitutes full compensation for completion of the work, including fabricating and installing gates.

Method 2—The length of each type and kind of fence is measured to the nearest foot along the profile of the fence, excluding gate openings. Payment is made at the contract unit price for the specified height of fence. The number of each size and type of gate installed is determined. Payment is made at the contract unit price for that type and size of gate. Such payment constitutes full compensation for all labor, material, equipment, and all other items necessary and incidental to the completion of the work.

All methods—The following provisions apply to all methods of measurement and payment. Compensation for any item of work described in the contract, but not listed in the bid schedule, is included in the payment for the item of work to which it is made subsidiary.

11. Items of work and construction details

Material Specification 591—Field Fencing Material

1. Scope

This specification provides the minimum quality requirements for the material used in the construction of field fences.

2. Wire gauge

When the size of steel wire is designated by gage number, the diameter must be as defined for U.S. Steel Wire Gauge.

3. Fencing

Fencing material must conform to the requirements of ASTM A121 for barbed wire, ASTM A16 for woven wire, ASTM A390 for poultry fence or netting, and ASTM A854 for high-tensile wire. Barbed wire and woven wire must be class-3 zinc coated as specified in ASTM A641 unless otherwise specified. High-tensile wire must have type-I zinc coating unless otherwise specified.

4. Stays, fasteners, and tension wire

Stays and fasteners must conform to the requirements of the specified ASTM for the fencing material. Tension wires must have a tensile strength not less than 58,000 pounds per square inch. Stays, fasteners, and tension wire must have class-3 zinc coating as specified in ASTM A641 unless otherwise specified.

5. Wood fence posts and braces

Unless otherwise specified, wood posts must be naturally rot resistant, preservative-treated, or other wood of equal life and strength. At least half the diameter or diagonal dimension of naturally rot resistant posts must be in heartwood. Provide new wood posts that are sound, free from decay with all limbs trimmed substantially flush with the body. All posts must be substantially straight throughout their full length.

Make tops convex rounded or inclined. Provide posts free of ring shake, season cracks more than ¼-inch wide, splits in the end, and unsound knots. Pine must be pressure treated in conformance with Material Specification 585, Wood Preservatives and Treatment. Wood braces must be of wood material equal to or better than construction grade Douglas fir. Wood braces must be pressure treated in conformance with Material Specification 585.

6. Steel fence posts and braces

Steel fence posts must conform to the requirements of ASTM A702. Posts with punched tabs for fastening the wires must not be installed. Bracing pipes must conform to the requirements of ASTM A53 except that the A53 requirements for hydrostatic test will not apply.

7. Concrete fence posts

Concrete fence posts must be manufactured to the specified requirements of size, shape, and strength.

8. Panel gates

Panel gates must be the specified types, sizes, and quality and include the necessary fittings required for installation. Gates must be of rigid construction free from sag or twist. The fittings must consist of not less than two hinges and one latch or galvanized chain for fastening. Latches must be of such design that a padlock may be used for locking. All fittings must be of equal or greater quality than the gate manufacturer's standard.

9. Wire gates

Wire gates must be the type shown on the drawings, constructed in accordance with specifications, at the locations, and to the dimensions shown on the drawings. The material must conform to the kinds, grades, and sizes specified for new fence, and must include the necessary fittings and stays.

10. Staples

Staples required to secure the fence wire to wood posts must be 9-gauge galvanized wire with a minimum length of 1.5 inches for soft woods and a minimum length of 1 inch for close-grain hardwoods.

11. Galvanizing

All iron and steel fencing material, except as otherwise specified, must be zinc coated by the hot dip process meeting the requirements of Material Specification 582. Clips, bolts, and other small hardware must be protected by hot-dipped galvanizing, electro-deposited zinc, or cadmium coating.

Material Specification 585—Wood Preservatives and Treatment

1. Scope

This specification covers the quality of wood preservatives, treatment processes, quality of treated material, and marking related to preservative treatment. Included are requirements for fasteners, connectors, and any other metal that will be in contact with preservative treated wood.

2. Treatment processes

Treatment processes may use any combination of atmospheric pressure, pressurized air, or vacuum and pressure that will achieve the desired results without damaging the wood.

3. Preservatives

The wood must be treated with the specified type of preservative. **PRRIP requires creosote type preservative.**

4. Quality of treated material

Treated lumber, timber, piles, poles, or posts must be free from heat checks, water bursts, excessive checking, chafing damage, or from any other damage or defects that would impair their usefulness or durability for the purpose intended. The use of s-irons is not permitted. Holes bored for tests must be filled with tight fitting, treated wood plugs.

5. Marking

Each treated wood item delivered to the job site must be identified with a label, brand, or stamp that lists the product name or logo, treatment company name and location, names of the preservative components, treatment end use category, minimum retention, and the applicable AWPATreatment standard or the number of the evaluation report from an evaluation service recognized by the International Code Council at <http://www.iccsafe.org>.

6. Fasteners and Connectors

All fasteners, connectors, and any other metal contacting preservative treated wood must be hot-dip galvanized or stainless steel. Unless otherwise specified, all fasteners, connectors, and any other metal contacting ammoniacal copper zinc arsenate (AVZA), alkali copper quaternary (ACQ), micronized copper quaternary (MCQ) copper azole (CA) or micronized copper azole (MCA) treated wood must be stainless steel. Galvanizing for fasteners must conform to ASTM A153. Galvanizing for connectors made from steel sheet must conform to ASTM A653, Class G185. Galvanizing for all other metal in contact with preservative treated wood must conform to ASTM A123. Stainless steel must be AISI Type 304 or 316.



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Whooping Crane Incidental Take Avoidance Procedures

1. Between the dates of March 6 and April 29, or October 9 and November 15, the CONTRACTOR will not begin work within 0.25 miles of the Platte River channel until one of the following requirements has been met each day: 1) The CONTRACTOR observes the airplane conducting whooping crane surveys during their daily flights over the work area without circling back to verify a whooping crane sighting; 2) it is at least one (1) hour after sunrise and the CONTRACTOR has visually confirmed there are no whooping cranes or large white birds in the work area; or 3) the Executive Director's Office (EDO) has confirmed the lack of whooping cranes in the work area. If the CONTRACTOR has any suspicion or question as to whether or not a whooping crane is present in the area, they will not start work until confirmation is made by the EDO or the bird(s) are observed leaving on their own accord by the CONTRACTOR who has reported the observation to the EDO and has been granted permission to begin work. *The CONTRACTOR will contact the EDO immediately by telephone any time they suspect they may have observed a whooping crane; no other contacts will be made until approved by the EDO.* The primary and secondary EDO points of contact for potential whooping crane sightings are:

PRIMARY CONTACT

Dr. Malinda Henry
Mobile: (308) 237-5728
Office: (308) 237-5728
henrym@headwaterscorp.com

SECONDARY CONTACT

Jason Farnsworth
Mobile: (308) 991-7602
Office: (308) 237-5728
farnsworthj@headwaterscorp.com

2. The PROGRAM conducts daily whooping crane surveys by flying an airplane up the river at an elevation of 750 ft. starting one-half (1/2) hour before sunrise when conditions allow. When the plane observes a white object they circle around to determine what it is. If a whooping crane is observed, they notify the EDO in order for the EDO to obtain a confirmation of the sighting from the ground. If the plane flies over the work area without circling, then there likely are not any whooping cranes in the area; however, the CONTRACTOR must visually confirm there are no whooping cranes or large white birds in the work area prior to beginning work each day. The EDO will contact the CONTRACTOR immediately by telephone if a potential whooping crane is identified within the area they are conducting work.
3. If the CONTRACTOR observes a whooping crane or what they suspect might be a whooping crane, the field crew must leave the area immediately, notify the EDO, and not return until permission has been granted by the EDO.
4. Between the dates of March 6 and April 29, or October 9 and November 15, the CONTRACTOR will end all activities within 0.25 miles of a Platte River channel two hours prior to sunset unless otherwise approved by the EDO. All equipment used by the CONTRACTOR will be parked and stored at least 0.25 miles from the nearest Platte River channel and behind a tree line when available.

ITEM	DESCRIPTION	UNITS	PRELIM QUANTS	FINAL QUANTS
001	MOBILIZATION	LS	1	
002	FENCE REMOVAL	LF	17,173	
003	FENCE CONSTRUCTION	LF	38,563	
004	16 Ft. WIRE GATE INSTALLATION	EA	6	
005	16 Ft. METAL GATE INSTALLATION	EA	11	
006	4 Ft. METAL GATE INSTALLATION	EA	1	

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Cottonwood Ranch Broad-Scale Recharge
Fence Replacement/ Repair Project
IN PHELPS COUNTY, NE

SPECIFICATIONS

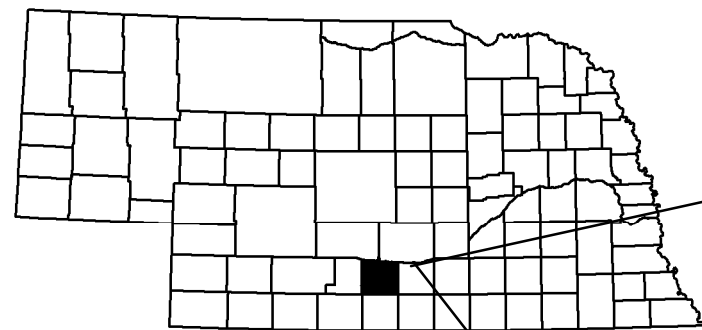
CS-01 MOBILIZATION AND DEMOBILIZATION
CS-92 FIELD FENCE

MATERIAL SPECIFICATIONS

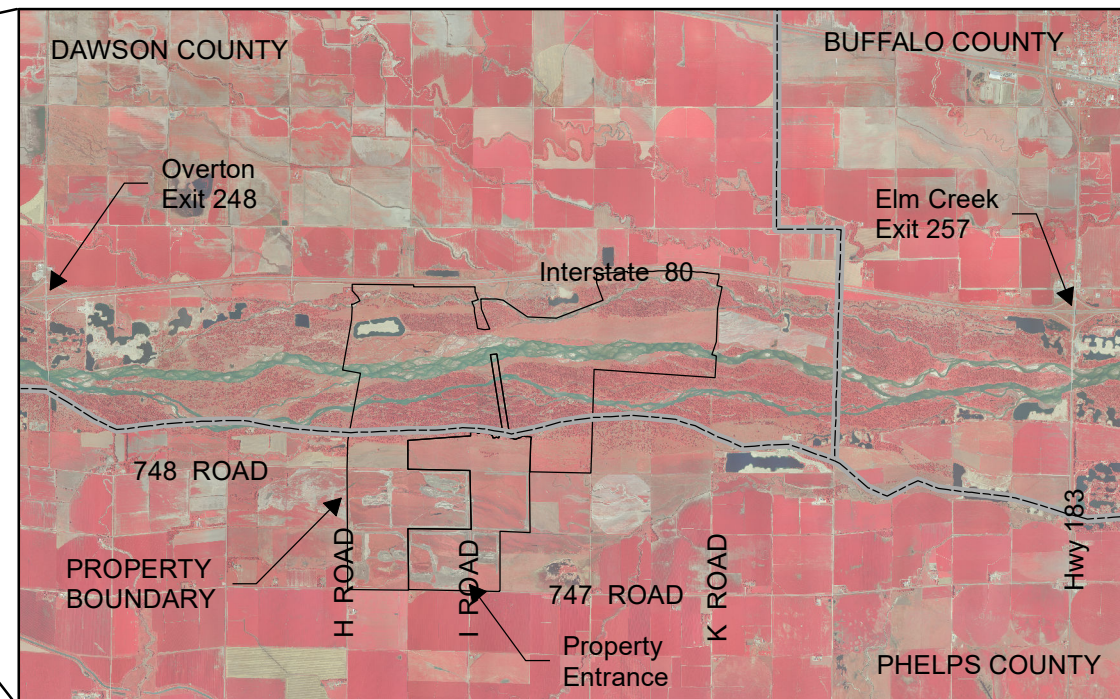
MS-591 FIELD FENCING MATERIAL
MS-585 WOOD PRESERVATIVES AND TREATMENT

INDEX

- 1 COVER SHEET
- 2 FENCE REMOVAL LAYOUT
- 3 FENCE CONSTRUCTION LAYOUT
- 4 GATE INSTALLATION LAYOUT
- 5 FENCE DETAILS



PROJECT LOCATION



CAUTION

The Platte River Recovery Implementation Program will not be responsible for, or liable for, unauthorized changes to, or uses of these plans. All changes to the plans must be in writing and must be approved by the Program.



PROJECT NO. P21-004

CWR BSR Project Fence Replacement/ Repair Project

COVER SHEET

SHEET NO:

1 of 5

DATE:

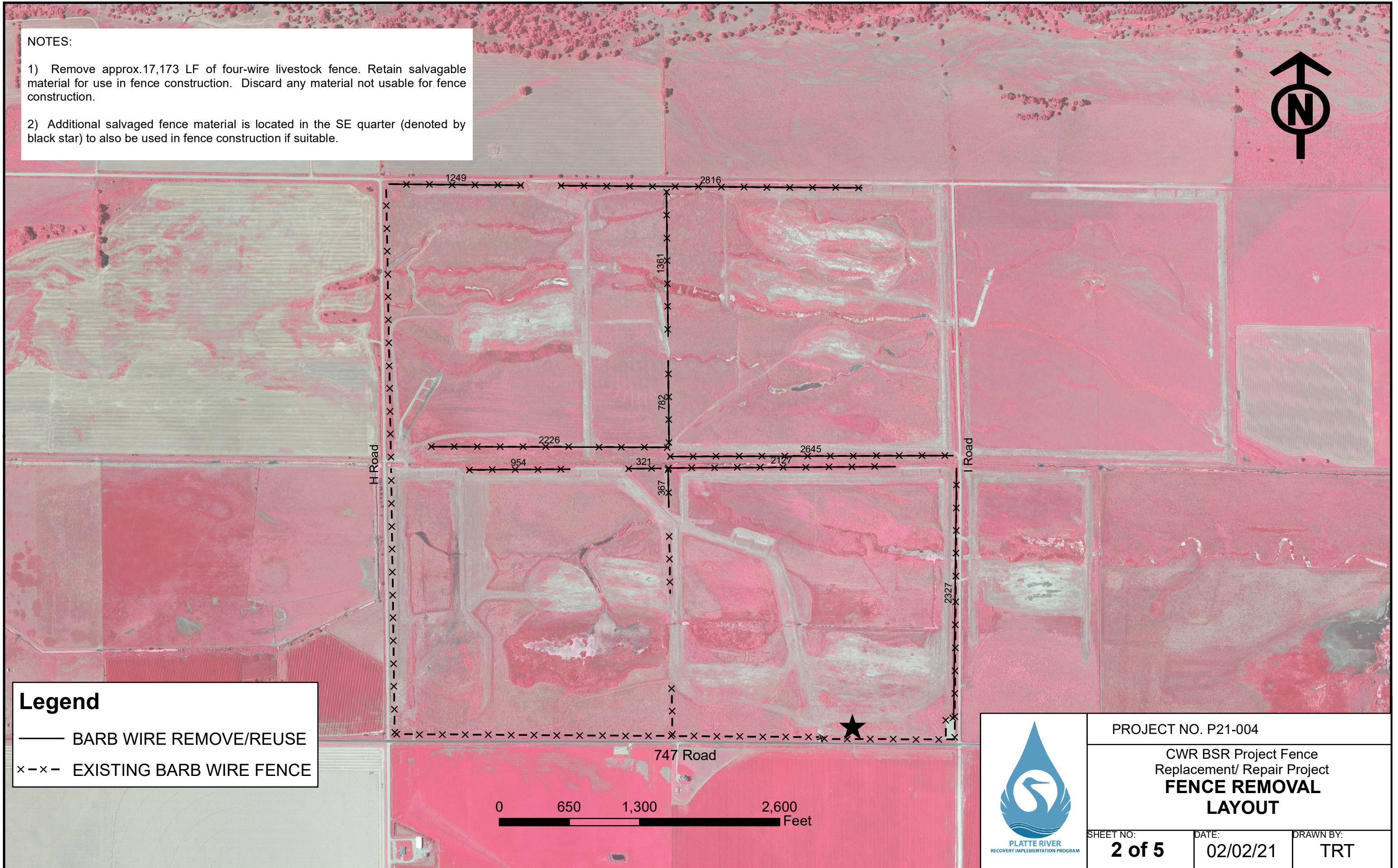
02/02/21

DRAWN BY:

TRT

NOTES:

- 1) Remove approx. 17,173 LF of four-wire livestock fence. Retain salvagable material for use in fence construction. Discard any material not usable for fence construction.
- 2) Additional salvaged fence material is located in the SE quarter (denoted by black star) to also be used in fence construction if suitable.



Legend

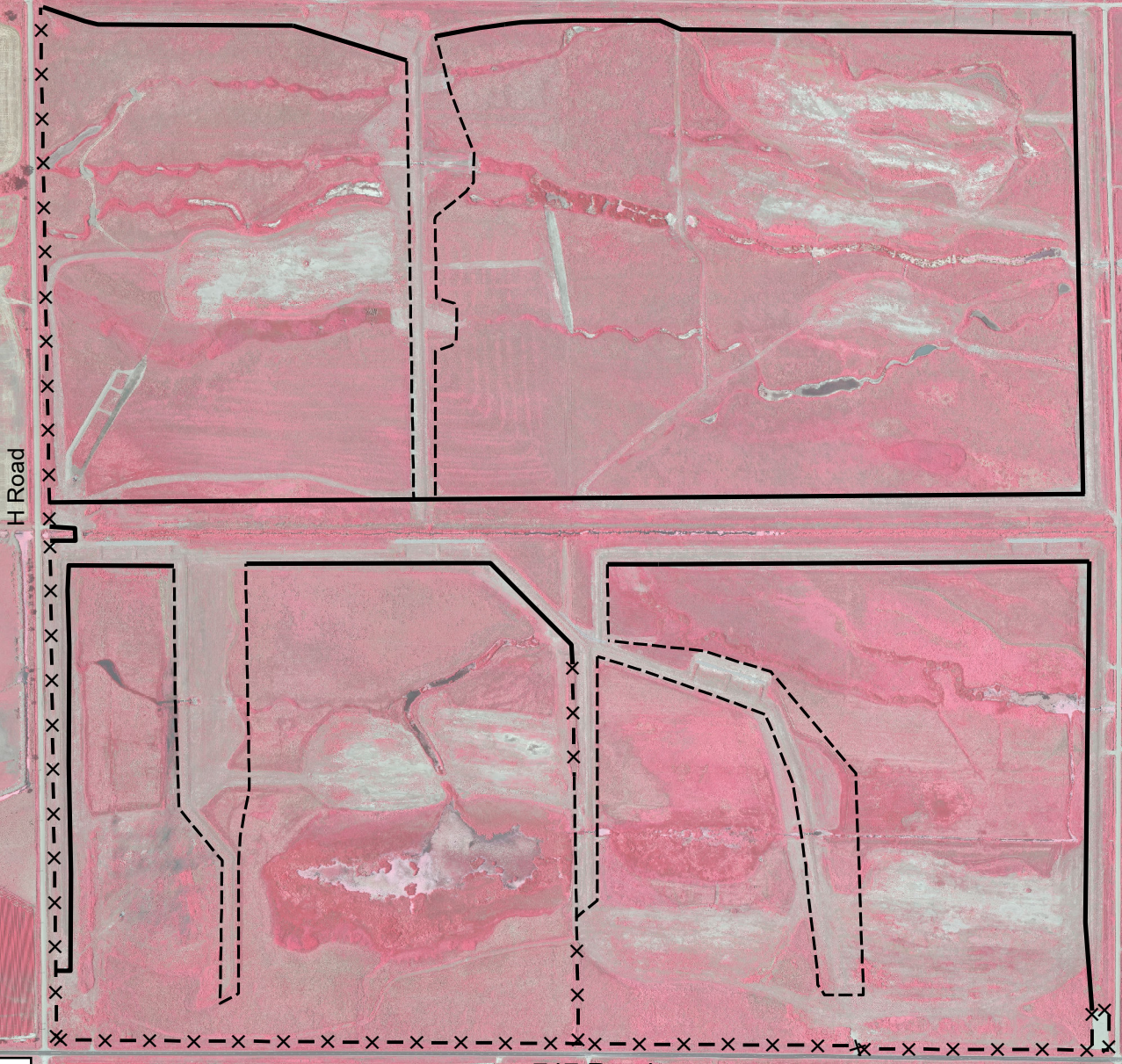
- BARB WIRE REMOVE/REUSE
- x-x-x EXISTING BARB WIRE FENCE



PROJECT NO. P21-004		
CWR BSR Project Fence Replacement/ Repair Project		
FENCE REMOVAL LAYOUT		
SHEET NO: 2 of 5	DATE: 02/02/21	DRAWN BY: TRT

NOTES:

- 1) Project engineer will flag fence alignment and gate locations prior to construction of new livestock fence
- 2) Construct approx. 21,763 LF of four-wire livestock fence with new material. See sheet 4 for details.
- 3) Construct approx. 16,800 LF of four-wire livestock fence with used/ salvaged material. See sheet 4 for details.
- 4) It is the contractor's responsibility to call the "Diggers Hotline" number to verify any conflicting utilities prior to beginning any work.



Legend

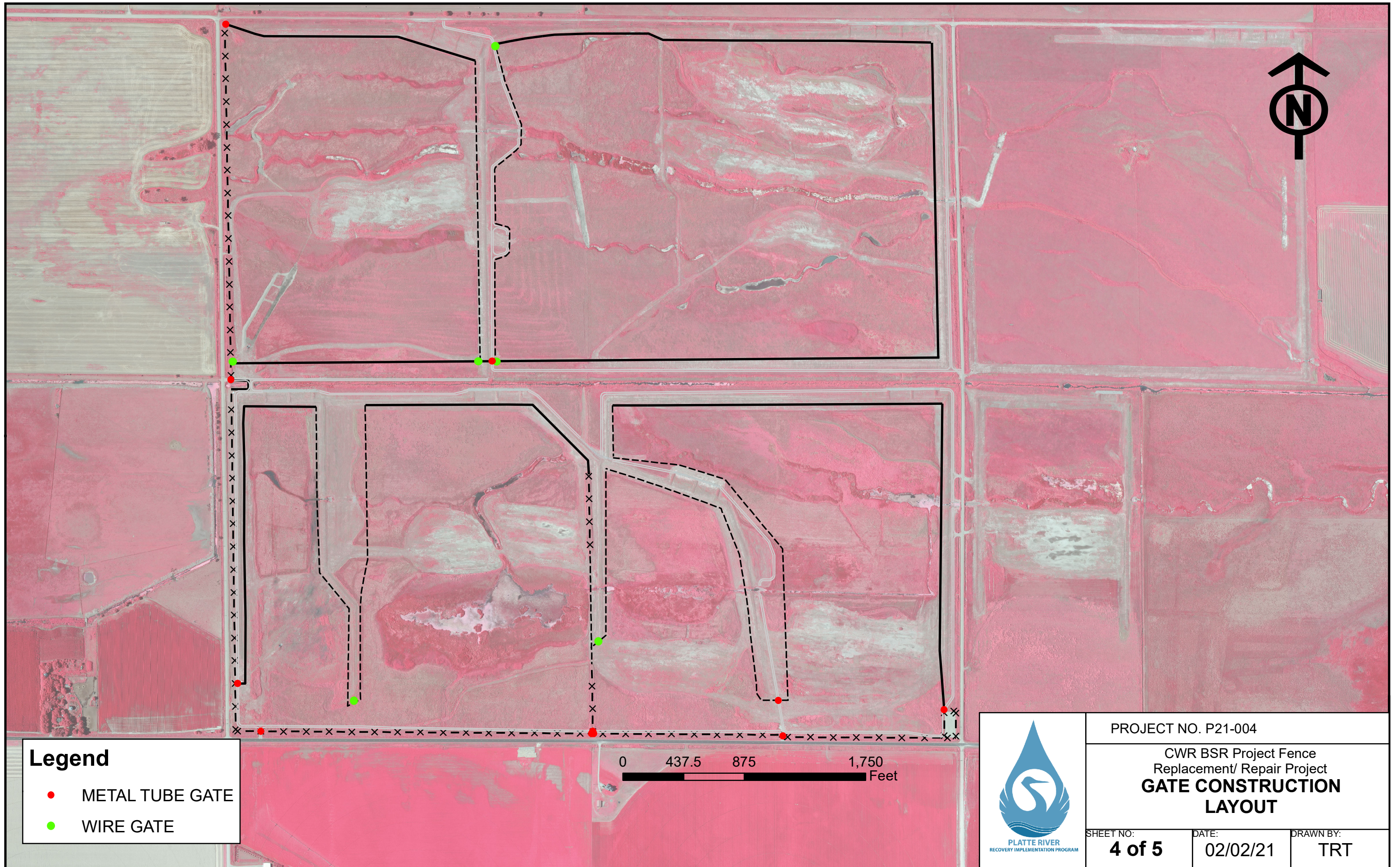
- x-x-x EXISTING FENCE
- FENCE CONSTRUCTION NEW MATERIAL-21,763 lf
- FENCE CONSTRUCTION USED MATERIAL- 16,800 lf



PROJECT NO. P21-004

CWR BSR Project Fence Replacement/ Repair Project
FENCE CONSTRUCTION LAYOUT

SHEET NO: 3 of 5	DATE: 02/02/21	DRAWN BY: TRT
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Legend

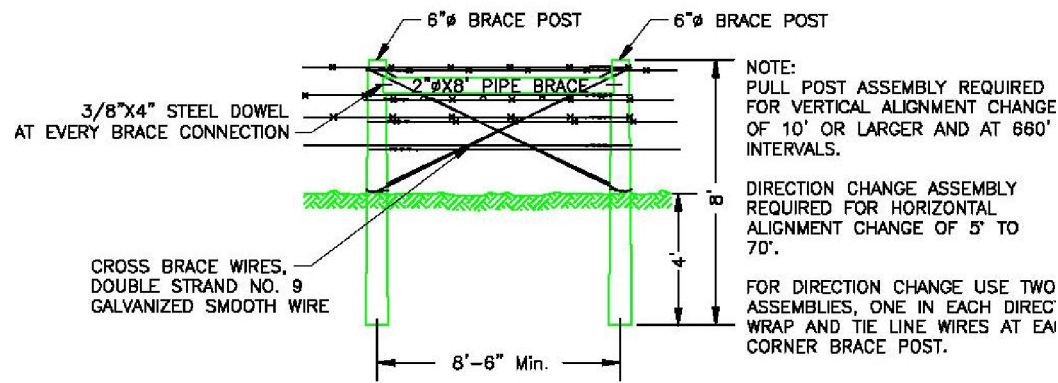
- METAL TUBE GATE
- WIRE GATE



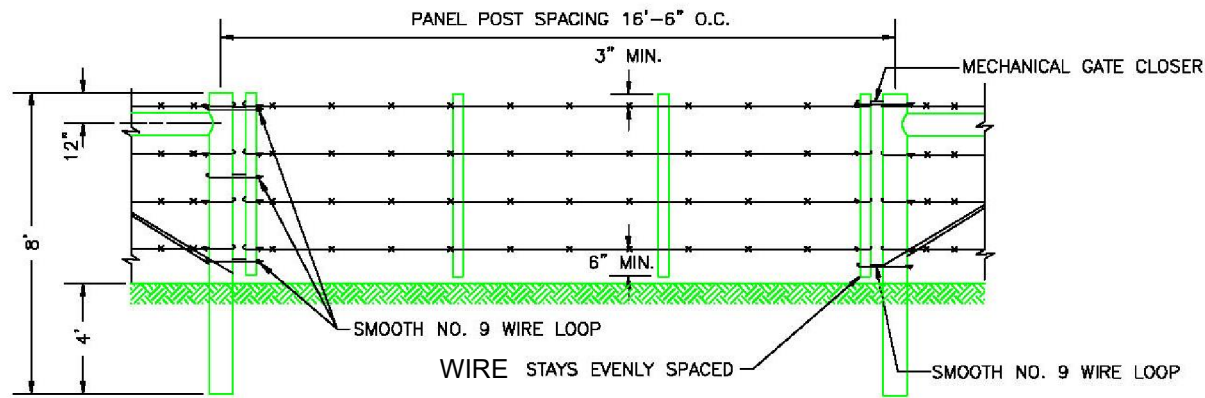
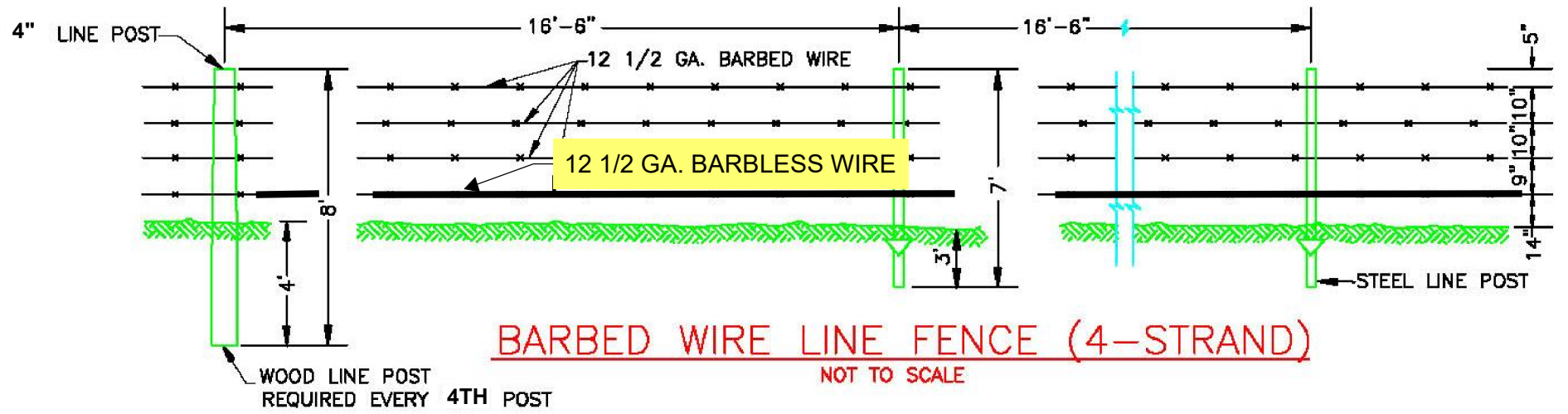
PROJECT NO. P21-004

CWR BSR Project Fence
Replacement/ Repair Project
**GATE CONSTRUCTION
LAYOUT**

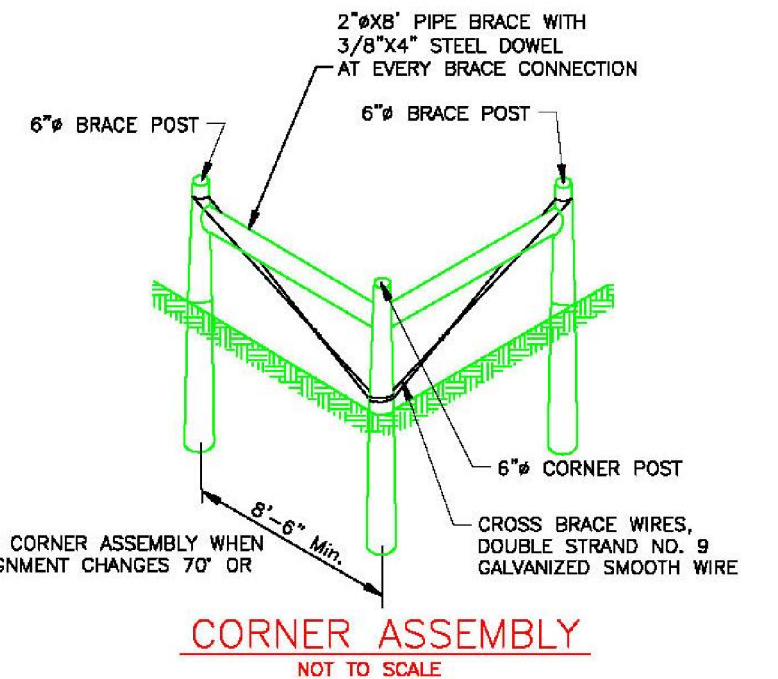
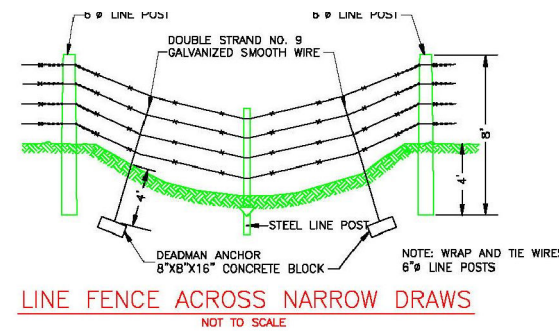
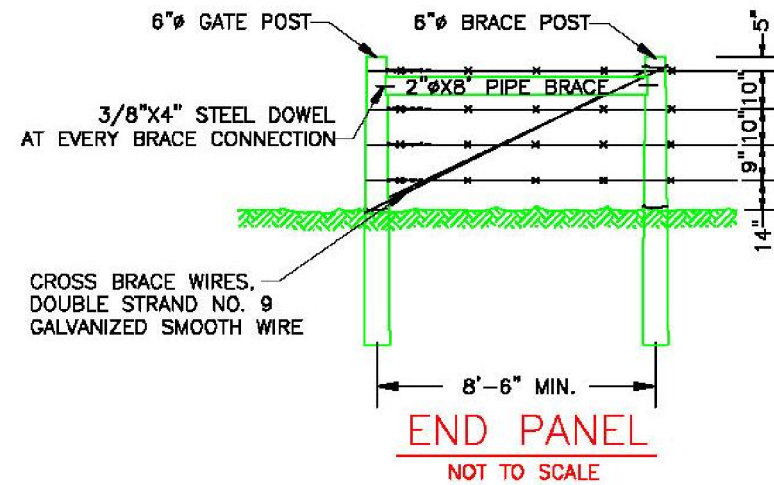
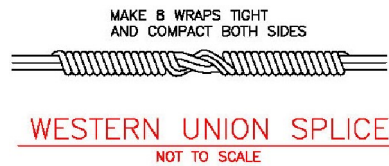
SHEET NO: 4 of 5	DATE: 02/02/21	DRAWN BY: TRT
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PULL POST AND DIRECTION CHANGE ASSEMBLY
NOT TO SCALE



WIRE GATE
NOT TO SCALE



NOTES:

1. NOTCH GATE POSTS, BRACE POSTS, AND CORNER POSTS 1" FOR THE HORIZONTAL 2" DIAMETER BY 8' STEEL POST.
2. FASTEN EACH HORIZONTAL BRACE WITH 3/8" x 4" STEEL DOWEL, 2" INTO THE POST.
3. STAPLE NO. 9 CROSS-BRACE WIRES TO QUARTER POINTS OF POSTS.
4. BARBED WIRE TO CONSIST OF TWO STRAND 12 1/2 GAUGE GALVANIZED WIRE WITH Z-POINT 14 GAUGE BARBS SPACE ON ABOUT 4" CENTERS. WIRE SHOULD BE RED-BRAND BARBED WIRE OR EQUIVALENT. WIRE SHOULD NEVER BE KINKED OR NICKED.
5. ALL STEEL LINE POSTS SHALL BE TEE TYPE, WITH TRIANGULAR SHAPED GROUND PRESSURE PLATE. POSTS SHALL BE PAINTED IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS. FASTEN BARBED WIRE TO LINE POSTS WITH STANDARD CLAMPS.
6. ALL CORNER, GATE POSTS, AND PULL POSTS SHALL BE WOOD AND TREATED IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS.
7. STAPLES TO BE NO. 9 GAUGE, 1 1/2" LONG (1" LONG FOR HARDWOODS). AT CORNER AND GATE POSTS STAPLE EACH WIRE AT QUARTER POINTS OF POSTS. AT BRACE POSTS DOUBLE STAPLE EACH WIRE. DRIVE STAPLES DIAGONAL TO WOOD GRAIN AND AT A SLIGHT DOWNWARD ANGLE. WIRE SHALL BE WRAPPED AROUND EACH GATE POST, BRACE POST, AND CORNER POST TWICE AND TIED BACK ONTO ITSELF WITH AT LEAST 3 TIGHTLY WOUND WRAPS.
8. POSTS SHALL BE SET VERTICALLY AND IN ALIGNMENT PER PLANS.
9. WHEN WIRE SPLICE IS REQUIRED USE "WESTERN UNION SPLICE".
10. BACKFILL SHALL BE TAMPED IN LAYERS LESS THAN 4", FILL HOLE TO GROUND LEVEL, EARTH FILL SHALL BE CROWNED AROUND POST.



PROJECT NO. P21-004

CWR BSR Project Fence
Replacement/ Repair Project
FENCE DETAILS

SHEET NO:

5 of 5

DATE:

02/23/21

DRAWN BY:

TRT