



Planning & Engineering
Office of Project Development
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Pierre, South Dakota 57501-2586
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dot.sd.gov

January 10, 2025

ADDENDUM NO. 1

RE: Item #4, January 22, 2025 Letting - NH 0083(88)40, PCN 074F, Mellette County - Replace Pipe & Drainage Improvements

TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

SPECIAL PROVISIONS: NO CHANGE

SDEBS BID PROPOSAL: *The electronic bid proposal for this contract has been revised to include the changes associated with this addendum. Bidders must log in to the SDEBS to retrieve and incorporate these changes into their bid.*

Bid Items were added:

Bid Item 720E1010 "PVC Coated Bank and Channel Protection Gabion"

Bid Items were removed:

Bid Item 720E1015 "Bank and Channel Protection Gabion"

PLANS: Please destroy sheets 2, 8, 9, 10, and 24 and replace with the enclosed sheets, dated 1/9/25.

Sheet 2: Bid Item 720E1010 "PVC Coated Bank and Channel Protection Gabion" was added and Bid Item 720E1015 "Bank and Channel Protection Gabion" was removed.

Sheet 8: MYCORRHIZAL INOCULUM note was revised.

Sheet 9: FERTILIZING note was revised.

Sheet 10: ARTICULATED CONCRETE MATTRESS note was revised.

Sheet 24: Revised Note for Twin Pipe Outlet Bank and Channel Protection Gabions to Twin Outlet PVC Coated Bank and Channel Protection Gabions and Revised Note for "6+29 (dr196) Install Class C Riprap" to "6+29 (dr196) 25' L and 30' R to 6+98 (dr196) 25' L and 30' R Install Class C Riprap.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Jason Humphrey, Pierre Region Engineer
Doug Sherman, Winner Area Engineer

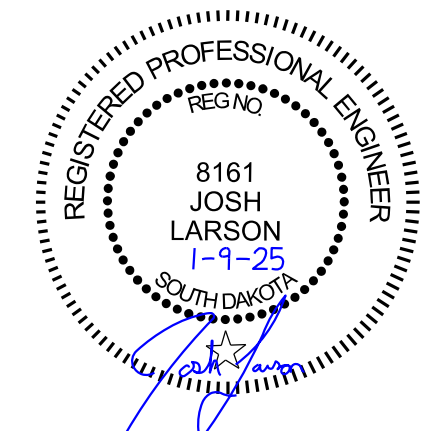
ESTIMATE OF QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0083(88)40	2	45

Plotting Date: 1/19/2022 Rev 1/9/2025 JDL

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3210	Construction Staking	0.220	Mile
009E3301	Engineer Directed Surveying/Staking	40.0	Hour
110E0135	Remove Delineator	2	Each
110E0600	Remove Fence	247	Ft
110E1010	Remove Asphalt Concrete Pavement	467.0	SqYd
110E1700	Remove Silt Fence	107	Ft
120E0010	Unclassified Excavation	6,220	CuYd
120E6100	Water for Embankment	55.0	MGal
230E0100	Remove and Replace Topsoil	Lump Sum	LS
250E0020	Incidental Work, Grading	Lump Sum	LS
260E1010	Base Course	332.0	Ton
320E1200	Asphalt Concrete Composite	155.1	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	0.1	Mile
421E0100	Pipe Culvert Undercut	226	CuYd
450E3082	72" RCP Arch Class 2, Furnish	212	Ft
450E3090	72" RCP Arch, Install	212	Ft
450E4532	72" RCP Arch Flared End, Furnish	4	Each
450E4533	72" RCP Arch Flared End, Install	4	Each
464E0100	Controlled Density Fill	38.0	CuYd
620E0020	Type 2 Right-of-Way Fence	120	Ft
620E0040	Type 4 Right-of-Way Fence	127	Ft
620E0510	Type 1 Temporary Fence	247	Ft
620E1020	2 Post Panel	8	Each
632E2520	Type 2 Object Marker	4	Each
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	200	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	38	Ft
634E0010	Flagging	100.0	Hour
634E0110	Traffic Control Signs	195.4	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	2	Each
634E0600	4" Temporary Pavement Marking Tape Type I	2,400	Ft
634E0640	Temporary Pavement Marking	48	Ft
700E0310	Class C Riprap	598.0	Ton
720E1010	PVC Coated Bank and Channel Protection Gabion	21.5	CuYd
730E0210	Type F Permanent Seed Mixture	50	Lb
731E0200	Fertilizing	1.37	Ton
732E0100	Mulching	4.7	Ton
734E0103	Type 3 Erosion Control Blanket	900	SqYd
734E0140	Erosion Bale	66	Each
734E0510	Shaping for Erosion Control Blanket	242	Ft
734E0602	Low Flow Silt Fence	87	Ft
734E0604	High Flow Silt Fence	342	Ft

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
734E0610	Mucking Silt Fence	30	CuYd
734E0620	Repair Silt Fence	107	Ft
831E0110	Type B Drainage Fabric	567	SqYd
900E5147	Articulated Concrete Mattress	208.5	SqYd



SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

GRIND RUMBLE STRIPS IN ASPHALT CONCRETE

Asphalt Concrete Rumble Strips will be constructed on the shoulders. Rumble Strips will be paid for at the contract unit price per mile for GRIND 12" RUMBLE STRIP OR STRIPE IN ASPHALT CONCRETE. It is estimated that 0.1 miles of asphalt concrete rumble strips will be required.

Rumble Strip installation will be completed prior to application of the Flush Seal and Permanent Pavement Markings. In the event the Flush Seal is eliminated from the contract, the Contractor will still be required to apply a Flush Seal to the newly installed 12" Rumble Strips at a width of 1.5' and at the rate of 0.05 gallons per square yard. No adjustment in payment will be made and SS-1h or CSS-1h Asphalt for Flush Seal will be paid at the contract unit price per ton.

TYPE 2 OBJECT MARKERS

The Contractor is required to remove Type 2 Object Markers prior to the work and install new Type 2 Object Markers after the work for all the pipe ends, as detailed in the plans. Cost for Type 2 object marker and post removal will be incidental to the contract unit price per each for Remove Delineator.

Type 2 Object Markers and posts will be furnished and installed by the Contractor at the locations shown in the Table for Mainline Culvert Work.

TEMPORARY FENCE

The Contractor will verify the location of the temporary fence with the landowner prior to installation of the fence.

BRACE PANELS FOR ROW FENCE

The E-Z Brace or an approved equal may be utilized as an alternate horizontal brace in the brace panels if approved by the Engineer. The E-Z Brace will be attached to each wood post utilizing two 5/16" x 3" lag screws. Holes of appropriate diameter, based on wood post condition, will be drilled before placement of lag screws. The following are contacts regarding the E-Z Brace:

Roger Papka
E-Z Brace
1160 Karen St.
Watertown, SD 57201

605-881-6142

Dennis Mack
E-Z Brace
108 18th St. NE
Watertown, SD 57201
605-881-4990

TABLE OF FENCE QUANTITIES

Station	ROW Fence Type 2 (Ft)	ROW Fence Type 4 (Ft)	Fence Panels 2 Post (Each)	Type 1 Temp Fence (Ft)	Fence Remove (Ft)
2+59 R (dr196)	2+59 L (dr196)	120	4	120	120
5+53 L (dr196)	5+58 R (dr196)		4	127	127
Total:		120	127	8	247

REMOVE AND REPLACE TOPSOIL

The Contractor will be required to remove and salvage 4 inches of the existing topsoil. Topsoil will be salvaged and stockpiled prior to constructing the following: pipe replacement and drainage ditch area(s). Limits of this work, depth of salvage, and stockpile location will be directed by the Engineer. Following completion of construction, topsoil will be spread evenly over the disturbed areas.

The estimated amount of topsoil to be removed and replaced is 985 CuYd.

All costs associated with removing and replacing the topsoil along areas will be incidental to the contract lump sum price for "Remove and Replace Topsoil".

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0083(88)40	8	45

Plotting Date: 1/19/2022 Rev 1/9/2025 JDL

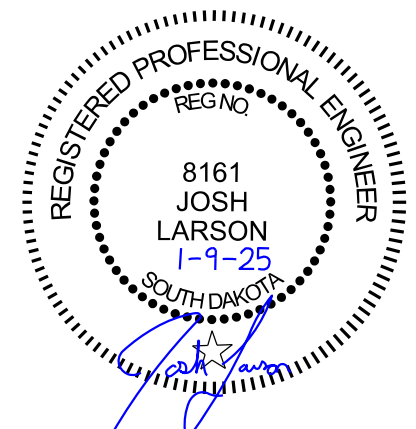
MYCORRHIZAL INOCULUM

Mycorrhizal inoculum will consist of mycorrhizal fungi spores and mycorrhizal fungi-infected root fragments in a solid carrier. The carrier may include organic materials, calcinated clay, or other materials consistent with application and good plant growth. The supplier will provide certification of the fungal species claimed and the live propagule count. The inoculum will include a minimum 25% the fungal species *Rhizophagus intraradices*. The remaining 75% may include other endomycorrhizal fungal species.

All seed will be inoculated by the seed supplier with a minimum of 100,000 live propagules of mycorrhizal fungi per acre. All costs of inoculating the seed will be incidental to the contract unit price per pound for the corresponding permanent seed mixture.

The Mycorrhizal Inoculum provided will be from the approved product list. The approved product list may be viewed at the following internet site:

<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>



FERTILIZING

The Contractor will apply an all-natural slow release fertilizer prior to seeding or placing sod. The all-natural fertilizer will have a minimum guaranteed analysis of 4-4-4 and be USDA Certified BioBased. It should provide a minimum of 4% (N) nitrogen with a minimum water insoluble nitrogen (WIN) fraction of 2.07%, a minimum of 4% (P2O5) available phosphate, a minimum of 4% (K2O) soluble potash, and a maximum carbon to nitrogen ratio (C:N ratio) of 5:1. The all-natural fertilizer will be free of weed-seed and pathogens accomplished through thermophilic composting, and not mechanical or chemical sterilization, to assure presence of beneficial soil microbiology. The fertilizer will have a near neutral pH, a low salt index, a low biological oxygen demand, contain organic humic and fulvic acids, and have high aerobic organism counts. The fertilizer will also be stable, free of bad odors, and be unattractive as a food source for animals. It should also be in a granular form that is easily spread.

The Fertilizer provided will be from the approved product list. The approved product list may be viewed at the following internet site:

<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>

PERMANENT SEEDING

The areas to be seeded consist of all newly graded areas within the project limits except for the top of roadways and temporary easements under cultivation.

Type F Permanent Seed Mixture will consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Arriba, Flintlock, Rodan, Rosana, Walsh	7
Green Needlegrass	Lodorm, AC Mallard Ecovar	4
Sideoats Grama	Butte, Pierre	3
Blue Grama	Bad River	2
Oats or Spring Wheat:		10
April through May;		
Winter Wheat: August		
through November		
Total:		26

The areas to be seeded with Type F Permanent Seed Mixture and mulched are estimated at 1.83 acres.

MULCHING (GRASS HAY OR STRAW)

An additional 1 tons of Grass Hay or Straw Mulch has been added to the Estimate of Quantities for temporary erosion control on areas determined by the Engineer during construction.

If the Contractor uses a no-till drill, mulch may be applied prior to seeding and the mulch can then be punched into the soil by the no-till drill. If the Contractor uses this process, the no-till drill seeding will be completed immediately following the mulch application and the mulch will be punched into the soil at a 3-inch depth.

LOW FLOW SILT FENCE

The low flow silt fence fabric provided will be from the approved product list. The approved product list for low flow silt fence may be viewed at the following internet site:

<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>

Low flow silt fence will be placed at the locations noted in the table and at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction. Refer to Standard Plate 734.04 for details.

TABLE OF LOW FLOW SILT FENCE

Station	Location	Quantity (Ft)
7+07 to 7+07 (dr196)	At Grading Limits	87
Total:		87

HIGH FLOW SILT FENCE

The high flow silt fence fabric provided will be from the approved product list. The approved product list for high flow silt fence may be viewed at the following internet site:

<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>

High flow silt fence will be placed at the locations noted in the table and at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction. Refer to Standard Plate 734.05 for details.

TABLE OF HIGH FLOW SILT FENCE

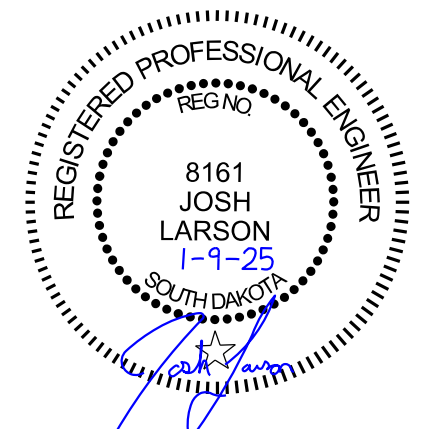
Station	L/R	Location	Quantity (Ft)
US HWY 83			
194+40 to 197+40	L	Just Inside Easement	300
196+06	L	At Inlet End of Pipe	42
Total:			342

EROSION BALES

Erosion bales for restraining the flow of water and sediment will be placed at the locations noted in the table and at locations determined by the Engineer during construction. Refer to Standard Plate 734.02 for details.

TABLE OF EROSION BALES

Station	Location	Quantity (Each)
2+65 (dr196) to 5+65	Ditch Channel	66
Total:		66



EROSION CONTROL BLANKET

Erosion control blanket will be installed at the locations noted in the plans and at locations determined by the Engineer during construction.

The erosion control blanket provided will be from the approved product list. The approved product list for erosion control blanket may be viewed at the following internet site:

<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>

An additional 200 SqYd of Type 3 Erosion Control Blanket has been added to the Estimate of Quantities for temporary erosion control.

TABLE OF EROSION CONTROL BLANKET

Station	L/R	Location	Type	Quantity (SqYd)
US HWY 83				
191+86 to 197+44	L	Ditch Channel	3	700
Temporary Erosion Control			3	200
Total Type 3 Erosion Control Blanket:				900

SHAPING FOR EROSION CONTROL BLANKET

The ditches will be shaped for the erosion control blanket as specified on Standard Plate 734.01.

ARTICULATED CONCRETE MATTRESS

Articulated concrete mattress will be installed at locations noted in the table and at locations determined by the Engineer during construction.

Installation of the articulated concrete mattress will be in accordance with the manufacturer's installation instructions.

All costs for furnishing and installing the articulated concrete mattress including hauling, materials, equipment, labor, and incidentals necessary will be paid for at the contract unit price per square yard for "Articulated Concrete Mattress".

The Articulated Concrete Mattress provided will be from the approved product list. The approved product list may be viewed at the following internet site:

<http://apps.sd.gov/HC60ApprovedProducts/main.aspx>

TABLE OF ARTICULATED CONCRETE MATTRESS

Station	Location	Quantity (SqYd)
5+25 (dr196) to 5+50	Stream Crossing	208.5
Total:		208.5

TABLE OF PVC COATED BANK AND CHANNEL PROTECTION GABIONS AND DRAINAGE FABRIC

Station	L/R	PVC Coated Bank and Channel Protection Gabion (CuYd)	Type B Drainage Fabric (SqYd)
196+06	R	21.5	57
Totals:		21.5	57

TABLE OF RIPRAP AND DRAINAGE FABRIC

Station	Class C Riprap (Ton)	Type B Drainage Fabric (SqYd)
6+29 (dr196) to 6+989	598	510
Totals:		598 510

PAVEMENT MARKING PAINT

All materials will be applied as per the manufacturer's recommendations.

The permanent pavement markings will match the existing passing zone markings.

The application of permanent pavement marking will begin no sooner than 7 calendar days following completion of the fog or flush seal. Application of permanent pavement marking will be completed within 14 calendar days following completion of the final surfacing.

HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

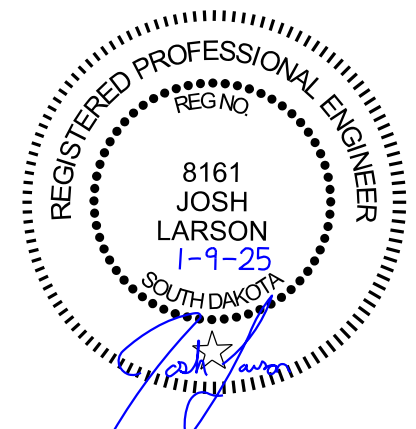
All materials will be applied as per manufacturer's recommendations. High build waterborne pavement marking paint will conform to the supplemental specifications for Section 980.1 B.

Reflective media will consist of glass beads. Reflective media will require a Certificate of Compliance for Certification for each source and lot. Acceptance sampling will not be required.

RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

Solid 4" line = 22.5 Gals/Mile
Dashed 4" line = 6.2 Gal/Mile
Glass Beads = 8 Lbs/Gal.

All cost for materials, labor and equipment necessary to furnish and install the pavement markings will be incidental to the contract unit price for the respective High Build Waterborne Pavement Marking Paint items.



189+16 R
Retain Entrance

193+98 L
Eliminate Ditch Block

196+00
Take out 72" - 78" CMP
& 2 End Sections
(Incidental Work, Grading)

196+06 - 58' L to 63' R (417 ac)
Install 72" - 106" Twin Arch RCP
& 4 Flared Ends
(Spaced 11.2' C-C)
(Controlled Density Fill - 38 CY)

196+06 R
Install Twin Pipe Outlet PVC Coated
Bank and Channel Protection
Gabions (21.5 CuYd) and Type B
Drainage Fabric (57 SqYd)

STATE OF SOUTH DAKOTA	PROJECT NH 0083(88)40	SHEET 24	TOTAL SHEETS 45
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199+92 L
Retain Entrance

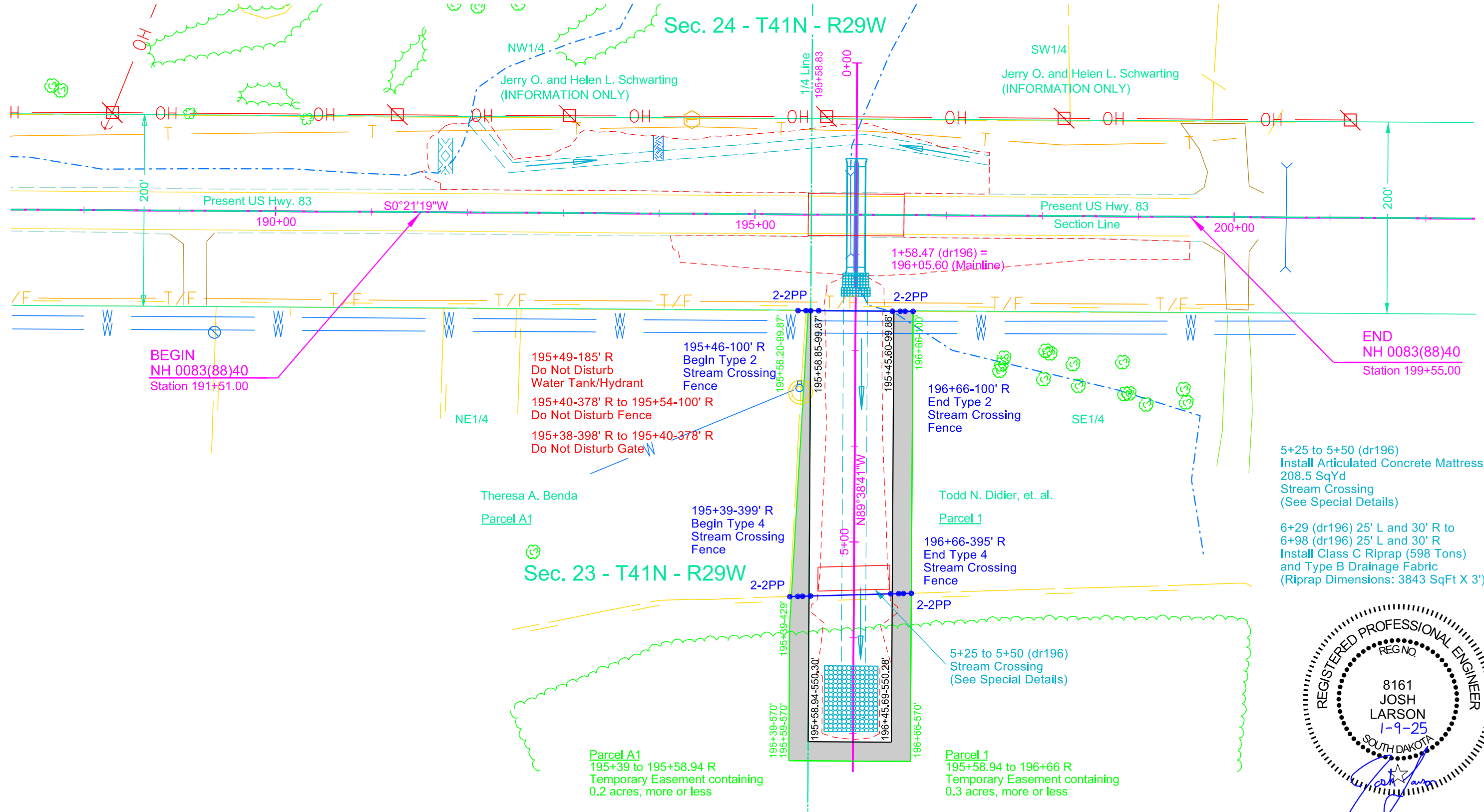
200+03 R
Retain Entrance

200+54
Retain 24"-100' CMP
& 2 Flared End Sections



Sec. 24 - T41N - R29W

Sec. 23 - T41N - R29W

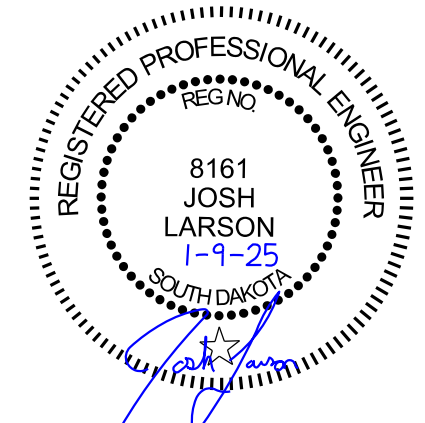


BEGIN
NH 0083(88)40
Station 191+51.00

END
NH 0083(88)40
Station 199+55.00

5+25 to 5+50 (dr196)
Install Articulated Concrete Mattress
208.5 SqYd
Stream Crossing
(See Special Details)

6+29 (dr196) 25' L and 30' R to
6+98 (dr196) 25' L and 30' R
Install Class C Riprap (598 Tons)
and Type B Drainage Fabric
(Riprap Dimensions: 3843 SqFt X 3')



Parcel A1
195+39 to 195+58.94 R
Temporary Easement containing
0.2 acres, more or less

Parcel 1
195+58.94 to 196+66 R
Temporary Easement containing
0.3 acres, more or less