

February 5, 2025

ADDENDUM NO. 2

RE: Item #1, February 19, 2025 Letting - IM-B-CR 2292(101)3, PCN 05HN, Minnehaha County - Grading, PCC Surfacing, Structures (10x4 RCBC extension, 163' Temporary Bridge, (2) 400' Steel Girder, (2) 12x8 CIP RCBC), Retaining Walls, Curb & Gutter, Storm Sewer, Signals, Lighting

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: Please remove the Index of Special Provisions and replace with attached Index of Special Provisions revised 2/4/25.

Please remove the "Special Provision for Contract Time", dated 1/24/25 and replace with the "Special Provision for Contract Time", dated 2/3/25.

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.*

Quantities for Bid Items were changed:

Bid Item 380E6000 "Dowel Bar" changed from 91,133 to 91,406 Each

PLANS: Please destroy sheets A4, E42, E81, E98, E99, F2, F5, F22, F23, F24, F30, F32, F33, and F34, and replace with the enclosed sheets, dated 1/21/25, 1/31/25 and 2/3/25.

Sheets A4 & F2: Quantities for Bid Item 380E6000 "Dowel Bar" changed from 91,133 to 91,406 Each.

Sheets E42 & E98: GIRDER ERECTION ELEVATIONS AND SLOPES table was revised.

Sheet E99: TABLE OF SLAB FORM ELEVATIONS AND CALCULATIONS was revised.

Sheet E81: GIRDER PREPURCHASE note was revised.

Sheet F5: TABLE OF DOWEL BARS was revised.

Sheet F22: "Begin 20' Transverse Joint Spacing" changed to "Begin 15' Transverse Joint Spacing".

Sheets F23, F24, F30, F32-F34: PCC PAVEMENT JOINT LAYOUT was revised.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Travis Dressen, Mitchell Region Engineer
Harry Johnston, Sioux Falls Area Engineer

REV 2/4/25

INDEX OF SPECIAL PROVISIONS

PROJECT NUMBER(S): IM-B-CR 2292(101)3 PCN: 05HN

TYPE OF WORK: GRADING, PCC SURFACING, STRUCTURES (10X4 RCBC EXTENSION, 163' TEMPORARY BRIDGE, (2) 400' STEEL GIRDER, (2) 12X8 CIP RCBC), RETAINING WALLS, CURB & GUTTER, STORM SEWER, SIGNALS, LIGHTING

COUNTY: MINNEHAHA

The following clauses have been prepared subsequent to the Standard Specifications for Roads and Bridges and refer only to the above described improvement, for which the following Proposal is made.

The Contractor's attention is directed to the need for securing from the Department of Environment & Natural Resources, Foss Building, Pierre, South Dakota, permission to remove water from public sources (lakes, rivers, streams, etc.). The Contractor should make his request as early as possible after receiving his contract, and insofar as possible at least 30 days prior to the date that the water is to be used.

Sara Garbe is the official in charge of the Sioux Falls Career Center for Minnehaha County.

THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:

Special Provision for Contract Time, dated 2/3/25.

Special Provision for Subletting of Contract, dated 1/27/25.

Special Provision for Prosecution and Progress, dated 1/21/21.

Special Provision for Cooperation by Contractor and Department, dated 8/17/17.

Special Provision for Traffic Control Supervisor, dated 1/13/25.

Special Provision for On-The-Job Training Program, dated 3/10/16.

Special Provision Regarding Combination Bids, dated 1/15/25.

Special Provision Regarding Restricted Work at Drainage Crossings or Wetlands, dated 1/15/25.

Special Provision for PI PCC Pavement Smoothness with 0.2" Blanking Band, dated 11/30/18.

Special provision for Adaptive Traffic Signal Control System.

Special Provision for ATC Traffic Signal Control Cabinet.

Special provision for Traffic Signal Heads (LED Modules).

Special Provision for Traffic Signal Poles.

Special Provision for Optical Activated Emergency Vehicle Pre-Emption System.

Special Provision for Drilled Shaft Construction, dated 1/13/25.

Special Provision for IRI PCC Pavement Smoothness, dated 10/1/18.

Special Provision for Mechanically Stabilized Earth (Large Panel) Walls, dated 1/13/25.

Special Provision for Stainless reinforcing Steel, dated 1/13/25.

Special Provision for Contractor Furnished Mix Design for PCC Pavement, dated 8/30/18.

Special Provision for Concrete Penetrating Sealer, dated 7/30/24.

Special Provision for Contractor Staking with Machine Control Grading Option, dated 1/13/25.

List of Utilities.

Special Provision for Steel Beam Guardrail AASHTO M 180 Designation, date 10/8/24.

Special Provision for Acknowledgment and Certification Regarding Article 3, Section 12 of the South Dakota Constitution, dated 8/24/23.

Special Provision for Buy America, dated 5/1/24.

Special Provision for Liability Insurance, dated 4/21/22.

Special Provision for Responsibility for Damage Claims, dated 4/21/22.

Special Provision for Restriction of Boycott of Israel, dated 1/31/20.

Special Provision for Contractor Administered Preconstruction Meeting, dated 12/18/19.

Fuel Adjustment Affidavit, DOT form 208 dated 7/15.

Standard Title VI Assurance, dated 3/1/16.

Special Provision For Disadvantaged Business Enterprise, dated 2/9/24.

Special Provision For EEO Affirmative Action Requirements on Federal and Federal-Aid Construction Contracts, dated 2/5/24.

Special Provision For Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. October 23, 2023), dated 10/18/23.

Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. 10/23/23).

Special Provision Regarding Minimum Wage on Federal-Aid Projects, dated 10/24/19.

Wage and Hour Division US Department of Labor Washington DC. - US Dept. of Labor Decision Number SD20230032, dated 3/10/23.

Special Provision for Supplemental Specifications to 2015 Standard Specifications for Roads and Bridges, dated 9/7/22.

Special Provision for Price Schedule for Miscellaneous Items, dated 12/6/23.

Special Provision Regarding Storm Water Discharge, dated 5/8/18.
General Permit for Storm Water Discharges Associated with Construction
Activities, dated 4/1/18

[https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWater
Construction.aspx](https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWaterConstruction.aspx)

**STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION
FOR
CONTRACT TIME**

PROJECT IM-B-CR 2292(101)3; PCN 05HN

MINNEHAHA COUNTY

FEBRUARY 3, 2025

April 7, 2025 Work Restriction

No work that impedes traffic will be allowed on the project prior to April 7, 2025 unless approved by the Engineer.

August 15, 2025 Interim Completion Requirement

The Contractor will not close Cliff Ave prior to May 26, 2025 due to the school season. The Contractor will complete all work required to open Cliff Ave from 38th St to the south returns of 41st St on completed surfacing in a minimum of one lane in each direction by August 15, 2025.

The Contractor may close 41st St anytime. The Contractor will complete all work required to open 41st St to traffic on completed surfacing by the August 15, 2025 interim completion date.

The Contractor will complete Lincoln High School parking lot improvements and parking lot access by August 15, 2025 with all accesses to the parking lot open.

If the Contractor does not complete the work required by the interim completion requirement, the Department will make a disincentive assessment in the amount of \$2000 per calendar day. A contract item for incentive/disincentive pay is included in the bid schedule for the Department's use in assessing disincentive. The Department will use a negative quantity of days for assessing disincentives. The Department will count calendar days in accordance with Section 8.6 B.

Cliff Ave Night Closure

The Contractor may close Cliff Ave from 8 PM to 6 AM as approved by the Engineer for bridge work (removals, setting girders, canopy, falsework removal) in both 2025 and 2026.

If the Contractor does not open Cliff Ave to a minimum of one lane in each direction to unimpeded traffic outside the hours specified, the Department will make a disincentive assessment amounting to \$500 per hour.

Cliff Avenue Sanitary Work

Any time after May 25, 2026, the Contractor may close Cliff Ave south of the interstate bridge for a maximum of 7 calendar days for sanitary work at Sta. 313+50 to Sta. 315+65 on the Cliff Ave alignment.

The Department will begin counting calendar days when the Contractor closes Cliff Avenue to through traffic. The Department will continue to count calendar days until the Contractor completes the work and the Contractor opens one lane in each direction and traffic can move unimpeded on Cliff Avenue. The Department will count calendar days in accordance with Section 8.6 B.

If the Contractor does not complete the work within the calendar day completion requirement, the Department will make a disincentive assessment amounting to \$1000 per calendar day. A contract item for incentive/disincentive pay is included in the bid schedule for the Department's use in assessing disincentives. The Department will use a negative quantity of days for assessing disincentives.

Ramp Closures

Ramp A may be closed during 2025 construction.

Ramps B & C may be closed during 2026 construction.

Ramp D may be closed during 2025 construction.

Corresponding ramps at Exits 3 & 4 cannot be closed at the same time throughout the project.

November 21, 2025 Interim Completion Requirements

The Contractor will complete all work on Interstate 229, Ramp A, Ramp D, Cliff Ave, Minnesota Ave, and 41st St. to have all lanes open to traffic by the November 21, 2025 interim completion date. Prior to opening the 41st St and Cliff Ave intersection to traffic from all directions, either permanent or temporary traffic signals must be in place.

If the Contractor does not complete the work by the interim completion requirement, the Department will make a disincentive assessment in the amount of \$1000 per calendar day. A contract item for incentive/disincentive pay is included in the bid schedule for the Department's use in assessing disincentive. The Department will use a negative quantity of days for assessing disincentives. The Department will count calendar days in accordance with Section 8.6 B.

April 6, 2026 Work Restriction

No work will be allowed that impedes traffic in 2026 prior to April 6, 2026 unless approved by the Engineer.

Substantial Completion

The Contractor will substantially complete the project by the November 20, 2026 substantial completion date.

The Department will consider the work substantially complete when all lanes are opened to unimpeded traffic and all work is completed except the following:

Permanent pavement markings, landscaping, topsoil, seeding, mulching, permanent erosion control measures, and final cleanup.

The Engineer, in the Engineer's sole discretion, will determine when the project is substantially complete.

Following the substantial completion of the project, the Department will allow single lane closures on Cliff Avenue and Minnesota Avenue for the completion of the remaining items of work (including, but not limited to, permanent pavement markings, landscaping, topsoil, seeding, mulching, permanent erosion control measures, and final cleanup). The Department will allow single lane closures only when the Contractor is actively performing work on Cliff Avenue and Minnesota Avenue.

Exit 3 Requirements

The Contractor can close the driving or passing lane of I-229 for work at Exit 3 only between the hours of 8:30 AM and 4 PM.

The Contractor may close Ramp C at Exit 3 for a maximum of 14 total calendar days. The calendar days may be non-consecutive.

The Department will count a calendar day any calendar day when the Contractor closes the ramp. The Department will continue to count calendar days until the Contractor completes the work and the Contractor opens all lanes and traffic can move unimpeded on Ramp C. The Department will count calendar days in accordance with Section 8.6 B.

If the Contractor does not complete the work within the calendar day completion requirement, the Department will make a disincentive assessment amounting to \$2000 per calendar day. A contract item for incentive/disincentive pay is included in the bid schedule for the Department's use in assessing disincentives. The Department will use a negative quantity of days for assessing disincentives.

Exit 4 Night Work Requirement

The Contractor may reduce I-229 to one lane between the hours of 8 PM and 6 AM for pavement markings and setting concrete barriers at Exit 4.

If the Contractor does not open I-229 to unimpeded traffic outside the hours specified, the Department will make a disincentive assessment amounting to \$500 per hour.

Field Work Completion

The Contractor will complete the project by the June 11, 2027 field work completion date.

Failure to Complete on Time

The Contractor will substantially complete the project prior to the substantial completion requirement. If the Contractor does not complete the work by the substantial completion requirement, the Department will assess liquidated damages in accordance with Section 8.8. The Department will assess liquidated damages for each working day the work (project) is late until the Contractor substantially completes the work.

In the event the Contractor does not substantially complete the work on time, the Department will count working days in accordance with Section 8.6 C.

The Contractor will complete all work on the project prior to the field work completion requirement. If the Contractor does not complete all work by the field work completion requirement, the Department will assess liquidated damages in accordance with Section 8.8. The Department will assess liquidated damages for each working day the work (project) is late until the Contractor completes all field work.

In the event the Contractor does not complete all field work on time, the Department will count working days in accordance with Section 8.6 C.

Expected Adverse Weather Days

The Department has provided Attachment 1 for information purposes only as a guide to bidders. Table 1 depicts the typical number of adverse weather days expected for any given month, based on historical records. The Department will consider this project a grading project in Zone 6.

The Department will consider expected adverse weather days cumulative in nature over the time period when the Contractor is actively pursuing completion of the work. The Department will not consider adverse weather days during an extended period of time when the Contractor is not pursuing completion of the work. When considering a time extension for calendar day count completion, interim completion, substantial completion, or field work completion of the project, the Engineer will compare the total number of

expected adverse weather days against the total number of actual adverse weather days for the time period during which the work was being completed.

* * * * *

ATTACHMENT 1

Figure A - Expected Adverse Weather Days for South Dakota

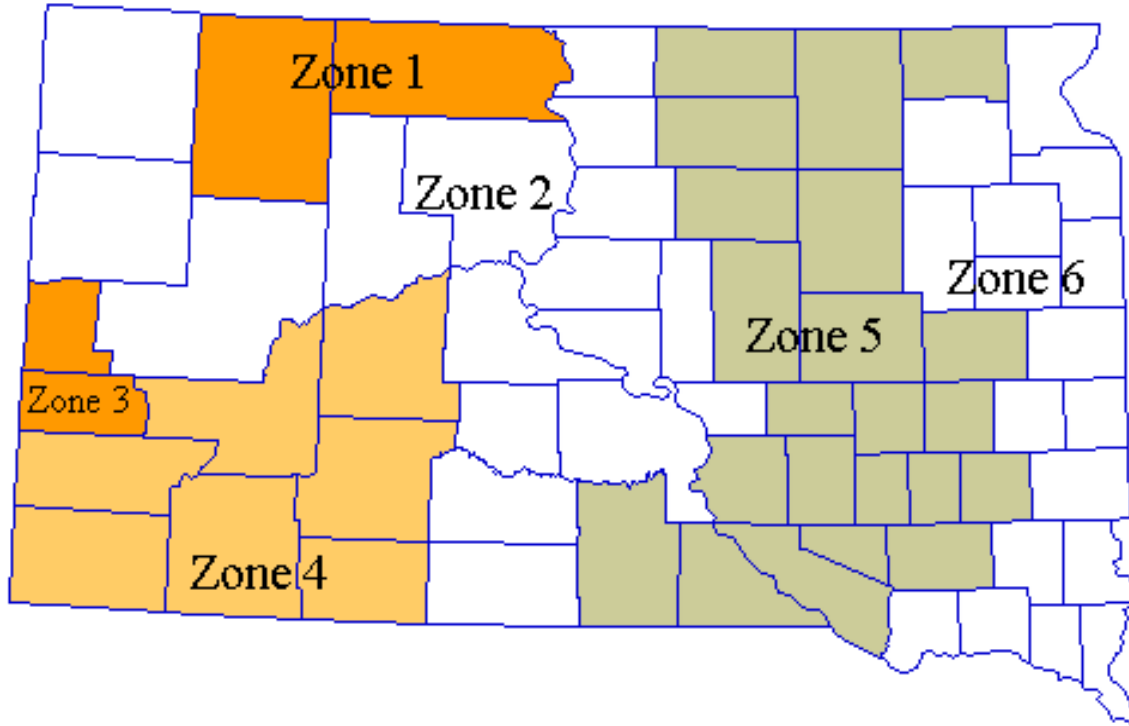


Table 1 - Expected Adverse Weather Days for South Dakota

	Grading Projects						Surfacing and Structural Projects					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Jan	18	18	16	16	22	24	18	18	15	16	21	23
Feb	19	18	12	14	19	21	19	18	12	14	19	21
Mar	12	10	9	8	11	13	12	10	9	8	10	12
Apr	6	5	8	5	6	6	5	4	6	4	4	4
May	6	6	8	6	6	6	5	5	6	4	4	5
Jun	7	6	7	6	7	8	5	5	5	4	5	6
Jul	5	5	6	5	6	7	4	4	5	3	4	5
Aug	4	4	5	4	5	6	3	3	4	3	4	4
Sep	3	3	4	3	4	5	2	2	3	2	3	4
Oct	4	3	5	3	4	4	3	3	4	2	3	3
Nov	11	9	8	7	10	12	11	9	8	7	10	11
Dec	21	19	15	14	20	22	21	19	15	14	20	22

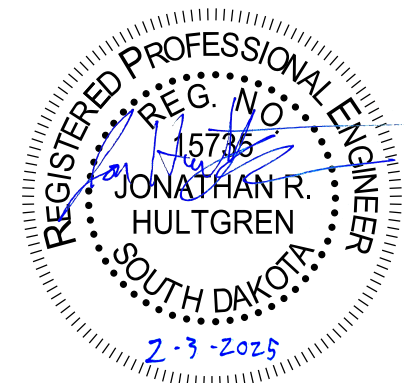
NOTE: Includes Holidays and Weekends.

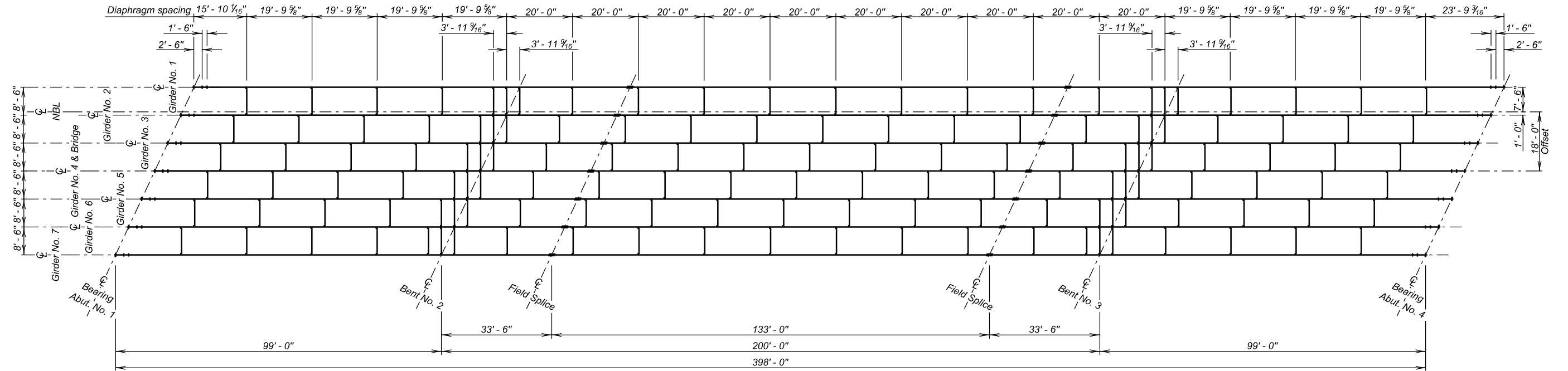
Section F – Surfacing

Section H – Landscaping

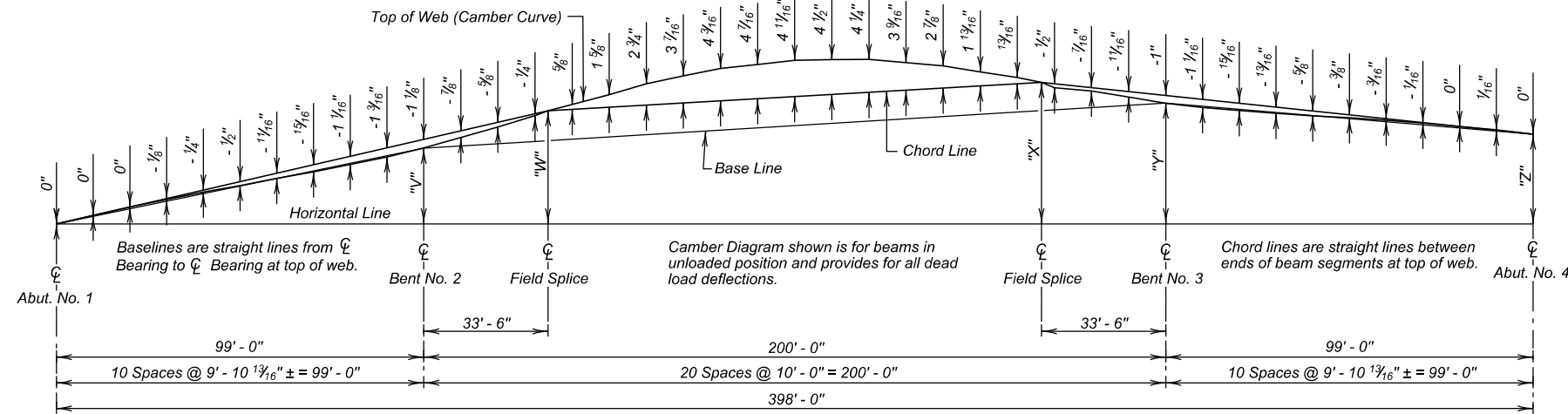
BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6200	Water for Granular Material	666.9	MGal
120E9000	Pit Run	1,202.3	Ton
260E1010	Base Course	13,119.8	Ton
260E2010	Gravel Cushion	41,250.0	Ton
320E1200	Asphalt Concrete Composite	8,129.3	Ton
320E5020	Saw Joint in Asphalt Concrete	175	Ft
380E0060	8.5" Nonreinforced PCC Pavement	7,080.9	SqYd
380E0100	10.5" Nonreinforced PCC Pavement	32,434.2	SqYd
380E0150	13" Nonreinforced PCC Pavement	57,137.3	SqYd
380E3040	8" PCC Driveway Pavement	405.8	SqYd
380E3042	8" Fast Track Concrete Driveway Pavement	101.4	SqYd
380E6000	Dowel Bar	91,406	Each
380E6110	Insert Steel Bar in PCC Pavement	207	Each
380E6450	Saw Joint in PCC Pavement	2,647.3	Ft
410E2600	Membrane Sealant Expansion Joint	224.0	Ft
831E0210	Non-woven Separator Fabric	1,674	SqYd

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6300	Water for Vegetation	22.0	MGal
230E0020	Contractor Furnished Topsoil	2,178	CuYd
380E0200	Colored Nonreinforced PCC Pavement	1,614.0	SqYd
380E2566	6" Barrier Type Colored Median PCC Pavement	1,756.0	SqYd
530E0490	Boulder Retaining Wall	587	SqFt
680E0206	6" Perforated PVC Drain Pipe with Sleeve	576	Ft
680E0226	6" PVC Outlet Pipe	263	Ft
680E2500	Porous Backfill	121.0	Ton
731E0100	Fertilizing	600	Lb
734E2022	Bridge Berm Slope Protection, Quarried Aggregate	1,076.0	SqYd
735E1000	Shrub, Furnish and Plant	257	Each
735E1360	6' Coniferous Evergreen, Furnish and Plant	21	Each
735E2220	2" Caliper Deciduous Tree, Furnish and Plant	48	Each
735E2225	2.5" Caliper Deciduous Tree, Furnish and Plant	94	Each
735E5010	1 Gallon Ornamental Grass, Furnish and Plant	741	Each
831E0100	Type A Drainage Fabric	1,076	SqYd
900E5150	Landscape Edging	240	Ft
900E5151	Ornamental Landscaping Boulders	33	Each
900E5152	Weed Barrier Fabric	1,088	SqYd
900E5157	4" Depth Shredded Bark Mulch	1,830.0	SqYd
900E5163	Ornamental Landscape Feature	4	Each
900E5430	Irrigation System	Lump Sum	LS





FRAMING DIAGRAM



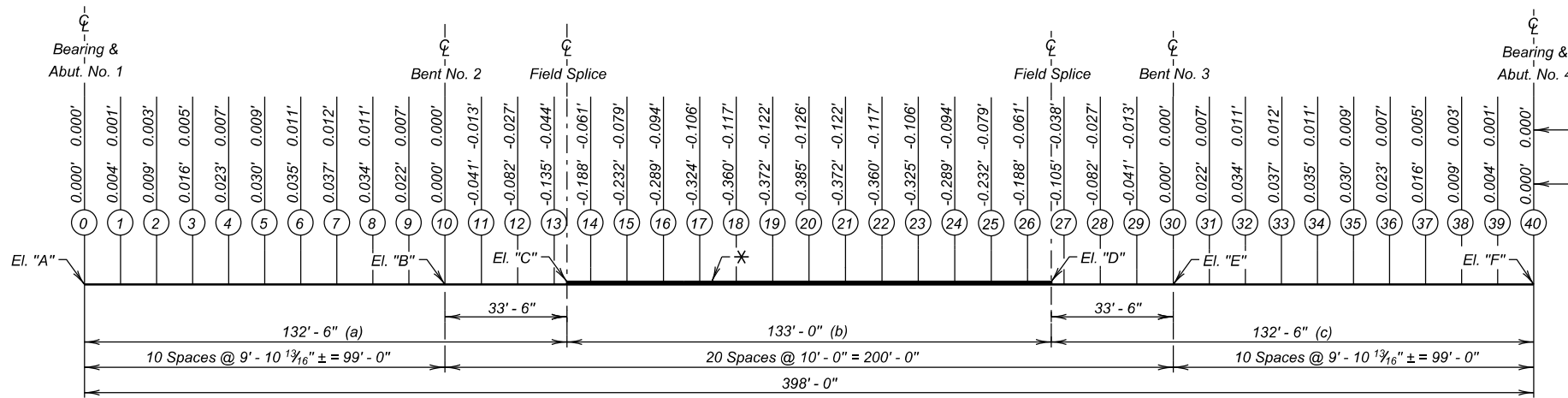
CAMBER CUTTING DIAGRAM
 (Cut camber into webs of all girders as shown)

ϕ NOTE:

These elevations and slopes occur at a time after girder erection is completed but prior to any placement of concrete. Slopes shown are an imaginary straight line between points at beam ends and are (+) towards increasing stations.

Girder No.	"V"	"W"	"X"	"Y"	"Z"
1	0.770'	1.159'	1.403'	1.163'	0.783'
2	0.789'	1.189'	1.453'	1.221'	0.860'
3	0.800'	1.200'	1.485'	1.255'	0.905'
4	0.816'	1.220'	1.525'	1.302'	0.967'
5	0.831'	1.241'	1.566'	1.348'	1.028'
6	0.846'	1.261'	1.607'	1.394'	1.089'
7	0.861'	1.281'	1.648'	1.440'	1.151'

Girder No.	ELEVATIONS (Top of Girder)						SLOPES (%)		
	"A"	"B"	"C"	"D"	"E"	"F"	a	b	c
1	1426.378	1427.179	1427.200	1427.481	1427.572	1427.160	0.602	0.197	-0.209
2	1426.584	1427.404	1427.437	1427.738	1427.836	1427.443	0.617	0.212	-0.193
3	1426.809	1427.641	1427.673	1427.995	1428.096	1427.715	0.633	0.228	-0.178
4	1427.024	1427.871	1427.908	1428.251	1428.357	1427.991	0.648	0.243	-0.162
5	1427.239	1428.101	1428.143	1428.506	1428.618	1428.267	0.663	0.258	-0.147
6	1427.453	1428.330	1428.377	1428.761	1428.878	1428.542	0.679	0.274	-0.132
7	1427.666	1428.559	1428.611	1429.015	1429.137	1428.816	0.694	0.289	-0.116



GIRDER ERECTION DIAGRAM

NOTE:
 This sheet is to be used in conjunction with SLAB FORM ELEVATIONS sheet.

FRAMING DIAGRAM, CAMBER & ERECTION DATA FOR NORTHBOUND LANES

400' - 9 1/8" STEEL GIRDER BRIDGE
 56' - 0" ROADWAY OVER CLIFF AVE. STA. 206 + 47.35 TO 210 + 48.11 STR. NO. 50-210-230
 25° LHF SKEW SEC. 28-T101N-R49W IM-B-CR 2292(101)3 HL-93

MINNEHAHA COUNTY
 S. D. DEPT. OF TRANSPORTATION

OCTOBER 2023 21 OF 41

DESIGNED BY CHM MINN05HN	CK. DES. BY CL 05HNGA21	DRAFTED BY BT	<i>Steve A. Johnson</i> BRIDGE ENGINEER
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STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	IM-B-CR 2292(101)3	E81	E146

APPROACH SLAB UNDERDRAIN SYSTEM

1. An underdrain system will be placed underneath the sleeper slabs and behind the abutments as shown in the plans in accordance with Section 435 of the Construction Specifications.
2. The 4-inch diameter Perforated PVC Drain Pipe will be PS 46 Solvent Weld PVC pipe conforming ASTM F758 or SDR 35 Solvent Weld PVC Pipe conforming to ASTM D3034 with perforations in accordance with ASTM F758. The 4" Dia. PVC Outlet Pipe will be Schedule 40 PVC Pipe conforming to ASTM D1785 designated as PVC 1120, PVC 1220, or PVC 2120. Pipe sections will be connected using a PVC Solvent Cement conforming to ASTM D2564. The Drain Sleeve shall conform to ASTM D6707.
3. The 5-inch diameter schedule 40 steel pipe will conform to ASTM A-53 and F1083
4. Care will be taken to ensure that the 4-inch diameter Perforated PVC Drain Pipe and the 4-inch diameter PVC Outlet Pipe are not damaged during construction. Sufficient cover material will be placed over the pipes before compaction equipment is allowed over the underdrain system. Any damaged pipes will be replaced by the Contractor at no additional cost to the Department.
5. All labor, tools, equipment, and any incidentals necessary for the Installation of 4-inch diameter Perforated PVC Drain Pipe, 4-inch diameter PVC Outlet Pipe, 5" diameter schedule 40 steel pipe, SDR Solvent Weld PVC Coupling, and PVC Cement will be incidental to the contract unit price per foot for 4" Underdrain Pipe.

QUARRIED AGGREGATE SLOPE PROTECTION

1. This work will consist of paving the bridge berm slopes with crushed aggregate slope protection for control and prevention of berm erosion.
2. The aggregate used in the crushed aggregate slope protection will be composed of durable fragments of quarried quartzite or an approved alternative. The material will be pink in color and well graded with 90 to 100% passing a 6-inch sieve and 0 to 10% passing a 2-inch sieve.
3. The Type A Drainage Fabric will be non-woven.
4. The surface upon which the slope protection is to be placed will be smooth, uniform, and free from foreign material. The top surface of the slope protection will conform to the dimensions, elevations, and slopes shown in the plans.
5. The crushed aggregate will be shaped and compacted to provide a stable, smooth, and uniform surface.
6. Payment for crushed aggregate slope protection will be at the contract unit price per square yard for Bridge Berm Slope Protection, Crushed Aggregate and will include furnishing all materials, labor, and equipment necessary or incidental to the satisfactory completion of this work. Payment will be for plans quantity.

AS - BUILT ELEVATION SURVEY

The Contractor will be responsible for producing an as-built elevation survey soon after construction is completed but before the bridge is opened to traffic. The Contractor will be responsible for recording the as-built elevation shown in the plans. The completed table will be given to the Engineer and copies forwarded to the Office of Bridge Design and the Region Bridge Maintenance Engineer. The elevations will be based on the National Geodetic Survey (NGS) North American Vertical Datum of 1988 (NAVD88). The Engineer will provide the Contractor with a description, elevation, and location of the nearest benchmark that has a NAVD88 established elevation for the Contractor's use. The benchmark shown in the plans has not been tied to the NAVD88. The Contractor will be responsible for establishing a NAVD88 elevation for the benchmark provided in the plans. All cost associated with obtaining the NAVD88 elevations at the locations shown in the table and for the benchmark shown in the plans, including all equipment, labor, and any incidentals required will be incidental to the contractor lump sum price for Bridge Elevation Survey.


GIRDER PREPURCHASE

1. The steel girders, diaphragms, bearings, shear studs, and associated hardware have been prepurchased by the Department of Transportation through a separate contract. All prepurchased materials are scheduled to be fabricated and available for delivery on or before August 15, 2025. The Contractor will be responsible for notifying both the Engineer and the Department's Structural Steel Fabricator (Veritas Steel LLC, Ph. 715-835-2800) of the date when the Contractor is ready to take delivery of the prepurchased materials. Upon this notice, the Department's Structural Steel Fabricator will have 7 calendar days to deliver the materials to the project site. The Contractor will be responsible for unloading the materials delivered.
2. If the pre-purchased materials need to be stored on the project site prior to erection, the Contractor will be responsible for storing the materials satisfactory to the Engineer in a safe location and in a manner that maintains the integrity and condition of the materials delivered. Any damage to the prepurchased items after delivery will be the Contractor's responsibility and will be replaced or repaired to the satisfaction of the Engineer.
3. If the Contractor is not ready to take delivery of the prepurchased materials on the project site by September 12, 2025, the Contractor will need to coordinate with the fabricator to make extended storage arrangements or supply an alternate site to store the prepurchased materials. The Contractor will be responsible for unloading the materials delivered to the alternate site and will also be responsible for all work associated with transporting the materials to the project site at a later date. Any damage to the prepurchased items after delivery to the alternate site will be the Contractor's responsibility and will be replaced or repaired to the satisfaction of the Engineer.
4. The cost of the materials for tax purposes is \$2,178,000.00. The Contractor is responsible for paying State use tax, applicable City use tax and excise tax on these materials.
5. All costs associated with the aforementioned work will be incidental to the Lump Sum price bid for the Structural steel, Install contract item.

**NOTES (CONTINUED)
 FOR
 SOUTHBOUND LANES
 FOR**

400' - 9 1/8" STEEL GIRDER BRIDGE

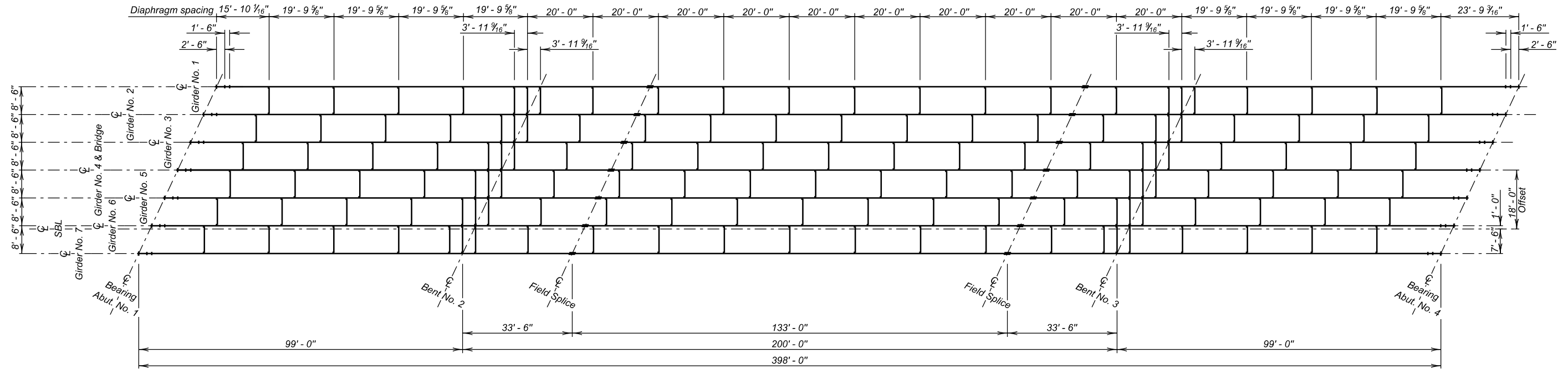
STR. NO. 50-211-230
 OCTOBER 2023

DESIGNED BY CHM MINN05HN	CK. DES. BY CL 05HNG805	DRAFTED BY BT	 BRIDGE ENGINEER
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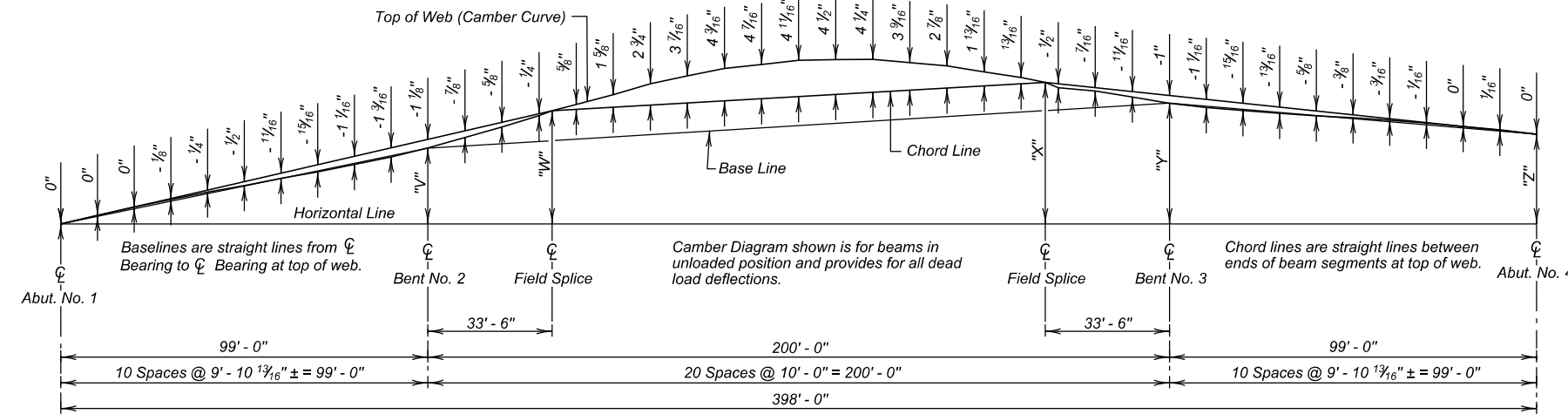
NOTE:
GIRDERS AND ASSOCIATED HARDWARE
WILL BE FURNISHED BY THE STATE.

Revised January 21, 2025 CHM/CL
Revised January 31, 2025 CHM/CL

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	IM-B-CR 2292(101)3	E98	E146



FRAMING DIAGRAM

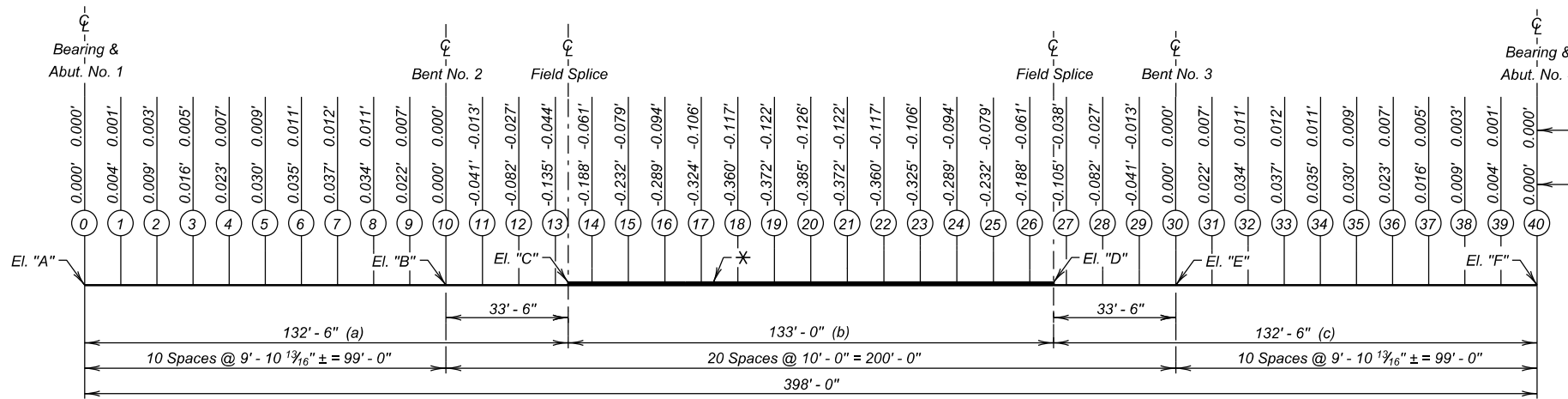


CAMBER CUTTING DIAGRAM
(Cut camber into webs of all girders as shown)

ϕ NOTE:
These elevations and slopes occur at a time after girder erection is completed but prior to any placement of concrete. Slopes shown are an imaginary straight line between points at beam ends and are (+) towards increasing stations.

Girder No.	"V"	"W"	"X"	"Y"	"Z"
1	0.542'	0.851'	0.776'	0.442'	-0.200'
2	0.558'	0.872'	0.809'	0.489'	-0.137'
3	0.574'	0.893'	0.851'	0.537'	-0.074'
4	0.589'	0.914'	0.893'	0.584'	-0.010'
5	0.605'	0.935'	0.935'	0.631'	0.053'
6	0.621'	0.956'	0.977'	0.679'	0.116'
7	0.636'	0.977'	1.019'	0.726'	0.179'

Girder No.	ELEVATIONS (Top of Girder)						SLOPES (%)		
	"A"	"B"	"C"	"D"	"E"	"F"	a	b	c
1	1426.170	1426.743	1426.684	1426.637	1426.643	1425.970	0.365	-0.036	-0.480
2	1426.395	1426.984	1426.930	1426.904	1426.915	1426.258	0.381	-0.020	-0.464
3	1426.619	1427.224	1427.176	1427.171	1427.187	1426.546	0.396	-0.004	-0.448
4	1426.843	1427.463	1427.421	1427.437	1427.458	1426.833	0.412	0.012	-0.432
5	1427.066	1427.702	1427.665	1427.702	1427.729	1427.119	0.428	0.028	-0.416
6	1427.289	1427.941	1427.908	1427.967	1427.999	1427.405	0.444	0.044	-0.401
7	1427.511	1428.178	1428.151	1428.231	1428.268	1427.690	0.460	0.060	-0.385



GIRDER ERECTION DIAGRAM

FRAMING DIAGRAM, CAMBER & ERECTION DATA FOR SOUTHBOUND LANES

400' - 9 1/8" STEEL GIRDER BRIDGE
56' - 0" ROADWAY OVER CLIFF AVE. 25° LHF SKEW
STA. 207 + 15.13 TO 211 + 15.89 SEC. 28-T101N-R49W
STR. NO. 50-211-230 IM-B-CR 2292(101)3
HL-93

MINNEHAHA COUNTY
S. D. DEPT. OF TRANSPORTATION

OCTOBER 2023 22 OF 42

ϕ NOTE:
This sheet is to be used in conjunction with SLAB FORM ELEVATIONS sheet.

DESIGNED BY CHM MINN05HN	CK. DES. BY CL 05HNGB22	DRAFTED BY BT	<i>Steve A. Johnson</i> BRIDGE ENGINEER
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SECTION F ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6200	Water for Granular Material	666.9	MGal
120E9000	Pit Run	1,202.3	Ton
260E1010	Base Course	13,119.8	Ton
260E2010	Gravel Cushion	41,250.0	Ton
320E1200	Asphalt Concrete Composite	8,129.3	Ton
320E5020	Saw Joint in Asphalt Concrete	175	Ft
380E0060	8.5" Nonreinforced PCC Pavement	7,080.9	SqYd
380E0100	10.5" Nonreinforced PCC Pavement	32,434.2	SqYd
380E0150	13" Nonreinforced PCC Pavement	57,137.3	SqYd
380E3040	8" PCC Driveway Pavement	405.8	SqYd
380E3042	8" Fast Track Concrete Driveway Pavement	101.4	SqYd
380E6000	Dowel Bar	91,406	Each
380E6110	Insert Steel Bar in PCC Pavement	207	Each
380E6450	Saw Joint in PCC Pavement	2,647.3	Ft
410E2600	Membrane Sealant Expansion Joint	224.0	Ft
831E0210	Non-woven Separator Fabric	1,674	SqYd

SECTION F ESTIMATE OF QUANTITIES (Exit 3 Crossover)

(Included in overall estimate of quantities table above, for information only)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
120E6200	Water for Granular Material	158.9	MGal
120E9000	Pit Run	1,202.3	Ton
260E1010	Base Course	12,041.4	Ton
320E1200	Asphalt Concrete Composite	7,333.0	Ton
380E6450	Saw Joint in PCC Pavement	2,248.3	Ft
831E0210	Non-woven Separator Fabric	1,674	SqYd

CONTROL OF ACCESS

If the Contractor's operations would require access to the interstate ROW in any location not currently designated as public access, prior approval must be obtained from the Department. All requests will be reviewed based on safety and construction sequencing. A Contractor will not assume that all requests will be granted.

The Contractor will be responsible for all safety control and signing measures.

Anytime Contractor operations have ceased for the day, any entrances approved in a control of access area will be closed by the Contractor.

The request for access will be provided in writing to the Engineer two weeks in advance of any proposed break in control of access.

BUSINESS ENTRANCE CLOSURES

It is anticipated that there may be 3 intersecting streets, and 9 driveways that will require a blackout to maintain access. The business entrances designated by the Engineer will not be closed for more than 24 consecutive hours with no alternate entrance into the business. The Contractor may use Fast Track Concrete, paving during nonbusiness hours, or any option approved by the Engineer to achieve this requirement.

SURFACING THICKNESS DIMENSIONS

The plans shown spread rates will be applied even though the thickness may vary from that shown in the plans.

At those locations where material must be placed to achieve a required elevation, the depth/quantity may be varied to achieve the required elevation.

UNCLASSIFIED EXCAVATION (Exit 3 Crossover)

See Section B for total quantity and payment of Unclassified Excavation, Removed Asphalt Mix Material, Removed Granular Material, and Waste Material. See typical sections for locations of these materials.

The Removed Granular Material and Waste Material quantities of the Unclassified Excavation quantity will be as noted in the following table. These Unclassified Excavation quantities will not be measured for payment and the basis of payment will be plans quantity.

The Unclassified Excavation waste material will be used as directed by the Engineer. It may be used as Contractor Furnished Borrow for inslope flattening and widening. The Contractor will ensure no asphalt concrete material will be used for inslope flattening and widening.

TABLE OF UNCLASSIFIED EXCAVATION (Exit 3 Crossover)

Location	Alignment	Station	Granular Material Removal	Waste Material
			CuYd	CuYd
Widening (Outside)	I-229 NB	STA 124+34 to STA 140+59		496.5
Widening (Inside)	I-229 NB	STA 157+61 to STA 175+00	219.4	531.4
Diversion (West)	NB Diversion	STA 5140+59 to STA 5152+75	146.9	282.6
Diversion (East)	NB Diversion	STA 5153+50 to STA 5160+62		224.9
Ramp C	Ramp C	STA 30+00 to STA 36+25	328.8	136.5
Median Crossover	I-229 NB	STA 125+00 to STA 130+57		1980.4
Total =			695.1	3652.3



REMOVE ASPHALT CONCRETE PAVEMENT

The Los Angeles Abrasion Loss value on the aggregate used for the in-place asphalt concrete is unknown.

An estimated 1,955 Cubic Yards of the in-place asphalt concrete surfacing will be removed from the existing roadways according to the in-place surfacing typical sections and wasted as directed by the Engineer. Care will be taken not to waste the in-place granular material.

The quantity of removed asphalt material is estimated from the in-place surfacing typical sections. This estimated quantity is not included in the unclassified excavation quantities.

PREPARATION FOR PARKING LOT & DRIVEWAY PAVEMENTS

The foundation will be excavated, shaped, and compacted to a firm, uniform bearing surface. Unsuitable foundation material will be removed and replaced as directed by the Engineer. The foundation will be thoroughly moistened immediately prior to placing the PCC Pavement. Moisture will be applied without forming pools of water.

Granular material will be placed to the depth specified and satisfactorily compacted.

Payment for any foundation preparation will be incidental to the contract unit price of the surfacing material.

RECYCLED CONCRETE AGGREGATE (RCA)

PCC pavement removed from within the project limits will be crushed to a minus 2.5-inch size to be used as Recycled Concrete Aggregate (RCA). All in-place rebar will be separated and removed from the RCA.

All costs to remove the existing PCC pavement will be incidental to the contract unit price per square yard for "Remove Concrete Pavement".

The Contractor will dispose of the material (including existing rebar) not utilized on the project at a site approved by the Engineer.

Payment for crushing the PCC pavement, and incorporating it into the Processed Subgrade Topping, will be incidental to the contract unit price per cubic yard for "Processed Subgrade Topping".

Exit 3 Crossover

All in-place rebar will be separated and removed from the RCA.

There is an estimated 1400 ton of PCC Pavement for the Exit 3 Crossover that can be crushed and reused. This quantity is based on a unit weight of 118 lbs. per cubic foot for the recycled concrete aggregate.

The Contractor will dispose of the material (including existing rebar) not utilized on the project at a site approved by the Engineer.

Payment for the recycled concrete aggregate will be at the contract unit price per unit per ton for the granular material that it is replacing.

TABLE OF DOWEL BARS (CONTINUED)

Location	Dowel Bar (Size 1 1/2") Each	Dowel Bar (Size 1 1/4") Each
Ramp A		
Sta. 10+00.0 to Sta. 11+96.4	338	---
Sta. 11+96.4 to Sta. 14+00.0	492	---
Sta. 14+00.0 to Sta. 15+19.7	202	---
Sta. 15+19.7 to Sta. 25+29.8	1,668	---
Ramp E		
Sta. 5+00.0 to Sta. 6+09.0	195	---
Ramp B		
Sta. 30+00.0 to Sta. 33+38.4	425	---
Sta. 33+38.4 to Sta. 44+21.6	1,785	---
Ramp F		
Sta. 15+00.0 to Sta. 17+73.2	358	---
Ramp C		
Sta. 51+97.4 to Sta. 61+11.5	1,481	---
Sta. 61+11.5 to Sta. 62+31.5	241	---
Sta. 62+31.5 to Sta. 64+40.1	720	---
Sta. 64+40.1 to Sta. 67+16.7	513	---
Ramp G		
Sta. 25+00.0 to Sta. 26+77.2	391	---
Ramp D		
Sta. 70+00.0 to Sta. 83+45.3	2,725	---
Sta. 83+45.3 to Sta. 85+96.2	396	---
Ramp H		
Sta. 35+00.0 to Sta. 37+74.8	355	---
41st Street		
Sta. 21+13.2 to Sta. 21+82.1	---	203
Sta. 21+82.1 to Sta. 22+97.9	---	238
Sta. 22+97.9 to Sta. 32+41.9	---	2,070
Sta. 32+41.9 to Sta. 33+31.9	---	231
Sta. 33+31.9 to Sta. 34+57.1	---	528
Sta. 34+57.1 to Sta. 37+31.0	---	1,365
Park Entrance		
Sta. 0+10.8 to Sta. 0+53.4	---	127
Subtotal	12,285	4,762
Total	86,644	4,762

TABLE OF 13" NONREINFORCED PCC PAVEMENT

Station	Station	13" Nonreinforced PCC Pavement (SqYd)	*Gravel Cushion (Tons)	Water (MGal)
NB I-229				
178+00	to 191+23	7,054.1	2,792	33.5
191+23	to 196+24	2,267.6	849	10.2
196+24	to 206+05	3,923.4	2,014	24.2
210+73	to 219+45	3,519.0	1,809	21.7
219+45	to 221+75	1,051.8	392	4.7
221+75	to 245+04	11,047.5	4,996	60.0
SB I-229				
178+12	to 193+77	8,351.9	3,544	42.5
193+77	to 196+31	1,145.4	429	5.1
196+31	to 206+90	4,236.6	2,182	26.2
211+58	to 221+49	3,926.0	2,035	24.4
221+49	to 225+09	1,605.7	604	7.2
225+09	to 244+58	9,008.3	4,098	49.2
Total		57,137.3	25,744	308.9

* Includes gravel cushion under adjacent curb and gutter

TABLE OF 8.5" NONREINFORCED PCC PAVEMENT

Station	Station	8.5" Nonreinforced PCC Pavement (SqYd)	*Gravel Cushion (Tons)	Water (MGal)
41st Street				
21+13.2	to 32+41.9	3,889.9	1,394	16.7
32+41.9	to 37+36.8	2,974.4	949	11.4
Park Entrance				
0+10.7	to 0+68.4	216.6	78	0.9
Total		7,080.9	2,421	29.1

* Includes gravel cushion under adjacent curb and gutter

TABLE OF 8" DRIVEWAY PCC PAVEMENT

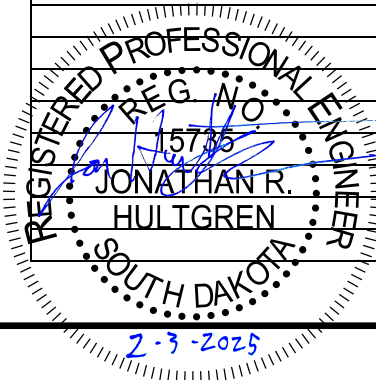
Station	Station	8" Driveway PCC Pavement (SqYd)	*Gravel Cushion (Tons)	Water (MGal)
Driveways - 9 Each				
		507.2	165	2.0
Total		507.2	165	2.0
20% Fast Track Concrete		101.4		
80% Non-Fast Track Concrete		405.8		

* Includes gravel cushion under adjacent curb and gutter

TABLE OF 10.5" NONREINFORCED PCC PAVEMENT

Station	Station	10.5" Nonreinforced PCC Pavement (SqYd)	*Gravel Cushion (Tons)	Water (MGal)
Ramp A				
10+00.0	to 12+71.9	733.1	264	3.2
12+71.9	to 13+99.7	517.4	179	2.1
13+99.7	to 15+19.7	340.0	140	1.7
15+19.7	to 25+43.7	1,673.1	974	11.7
Ramp E				
5+00.0	to 6+54.5	335.4	124	1.5
Ramp B				
30+00.0	to 32+30.4	387.0	169	2.0
32+30.4	to 33+38.4	250.7	128	1.5
33+38.4	to 44+21.6	1,738.7	1,082	13.0
Ramp F				
15+00.0	to 16+38.6	298.8	114	1.4
16+38.6	to 17+73.2	244.7	135	1.6
Ramp C				
50+00.0	to 61+11.5	1,826.1	1,039	12.5
61+11.5	to 62+31.5	420.0	161	1.9
62+31.5	to 64+40.1	1,112.9	361	4.3
64+40.1	to 67+16.7	791.1	291	3.5
Ramp G				
25+00.0	to 26+77.1	675.0	226	2.7
Ramp D				
70+00.0	to 82+51.1	2,745.0	1,431	17.2
82+51.1	to 83+52.5	336.4	150	1.8
83+52.5	to 85+96.2	705.0	254	3.0
Ramp H				
35+00.0	to 36+21.8	164.2	106	1.3
36+21.8	to 37+74.8	314.8	123	1.5
Cliff Avenue				
105+40.8	to 109+34.6	2,445.8	774	9.3
109+34.6	to 114+42.7	2,485.5	821	9.9
109+34.6	to 114+36.4	1,305.9	517	6.2
114+36.4	to 116+24.3	1,584.2	459	5.5
116+24.3	to 121+87.2	2,569.6	863	10.4
116+24.3	to 121+91.2	2,189.8	761	9.1
121+91.2	to 123+18.3	1,263.3	354	4.2
123+18.3	to 124+98.3	1,432.7	435	5.2
124+98.3	to 126+01.9	734.3	227	2.7
126+01.9	to 127+35.4	813.7	258	3.1
Total		32,434.2	12,920	155.0

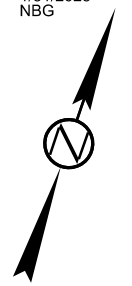
* Includes gravel cushion under adjacent curb and gutter



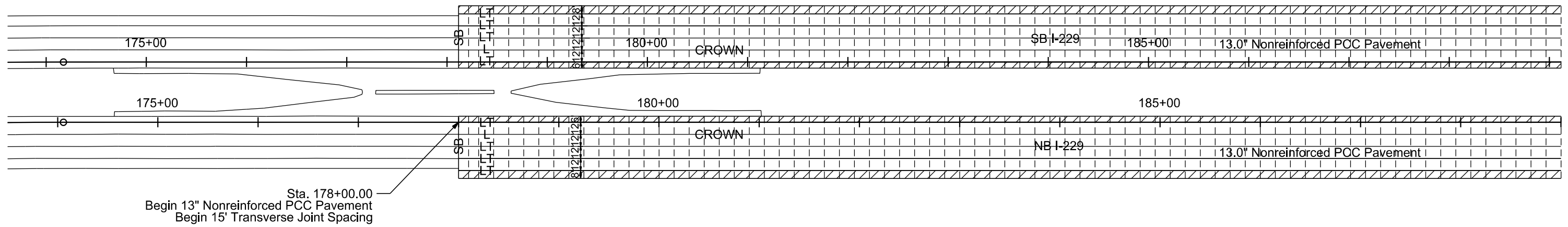
PCC PAVEMENT JOINT LAYOUT

I-229

STATE OF SOUTH DAKOTA	PROJECT IM-B-CR 2292(101)3	SHEET F22	TOTAL SHEETS F64
Plotting Date:	1/31/2025	Revised Date: Initials:	1/31/2025 NBG



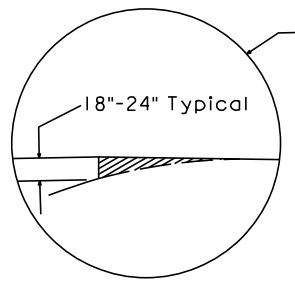
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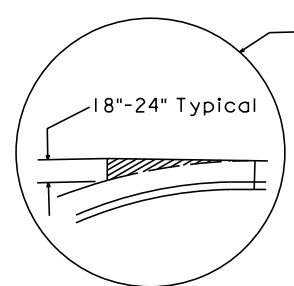
LEGEND:

- Longitudinal Joint Without Tie Bars (Construction or Sawed) ——— L ——— L ———
- Longitudinal Joint With Tie Bars (Construction or Sawed) ——— LT ——— LT ———
- Transverse Contraction Joint - - - - -
- Steel Bar Installation in Longitudinal or Transverse Joint ——— SB ——— SB ———
- Areas to be poured monolithically with adjacent slab ⊕ (See Detail A)
- Areas to be poured monolithically with adjacent curb and gutter ⊕ (See Detail B)

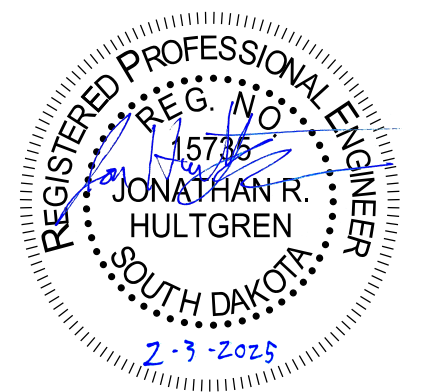
Transverse contraction joints within these areas will not have dowel bar assemblies. All other transverse contraction joints will have dowel bar assemblies.



DETAIL A



DETAIL B



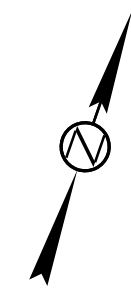
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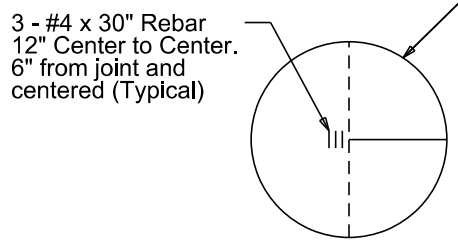
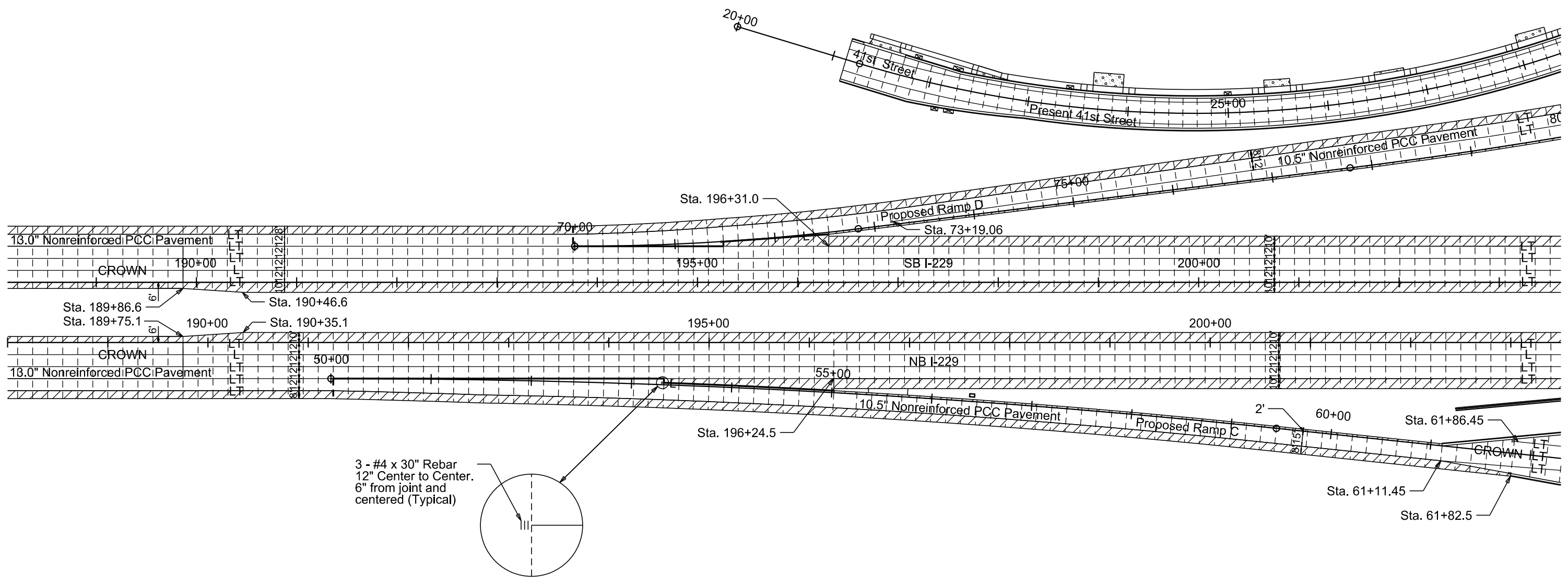
PCC PAVEMENT JOINT LAYOUT

I-229 & RAMPS C/D

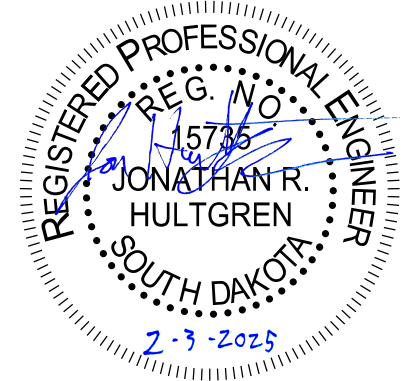
STATE OF SOUTH DAKOTA	PROJECT IM-B-CR 2292(101)3	SHEET F23	TOTAL SHEETS F64
Plotting Date: 1/31/2025		Revised Date: 1/31/2025 Initials: NBG	



- 6" PCC Driveway Pavement
- Joint Line Between the mainline 13" & all ramps 10.5" Nonreinforced PCC Pavement



Transverse contraction joints within these areas will not have dowel bar assemblies. All other transverse contraction joints will have dowel bar assemblies.



Plot Scale - 1:100

Plotted From - engiersvik

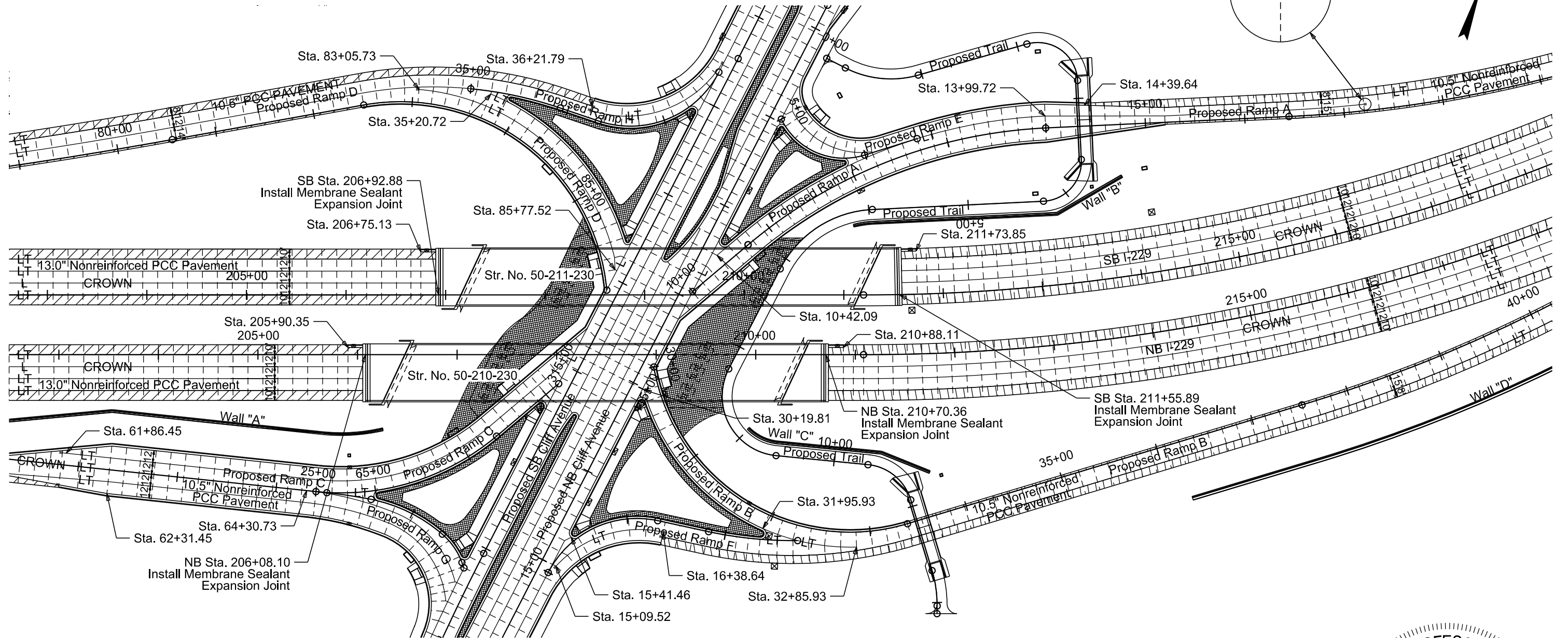
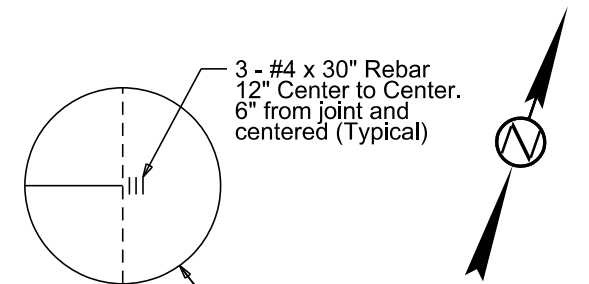
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PCC PAVEMENT JOINT LAYOUT

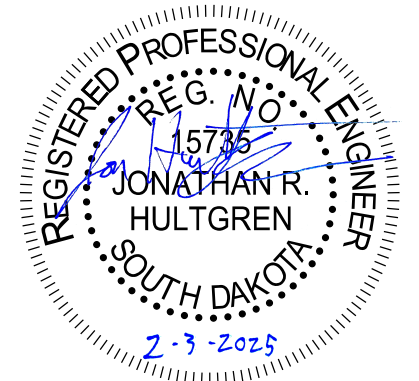
I-229 & RAMPS

STATE OF SOUTH DAKOTA	PROJECT IM-B-CR 2292(101)3	SHEET F24	TOTAL SHEETS F64
Plotting Date:	1/31/2025	Revised Date:	1/31/2025
		Initials:	NBG

Median / Island Landscaping
(See Section H for Details)



Transverse contraction joints within these areas will not have dowel bar assemblies. All other transverse contraction joints will have dowel bar assemblies.



Plot Scale - 1:100

Plotted From - engiersvik

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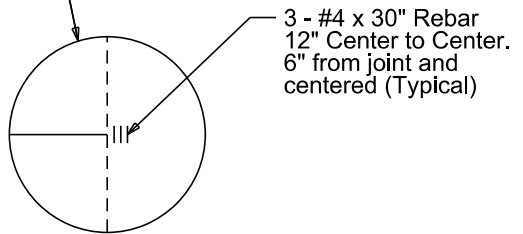
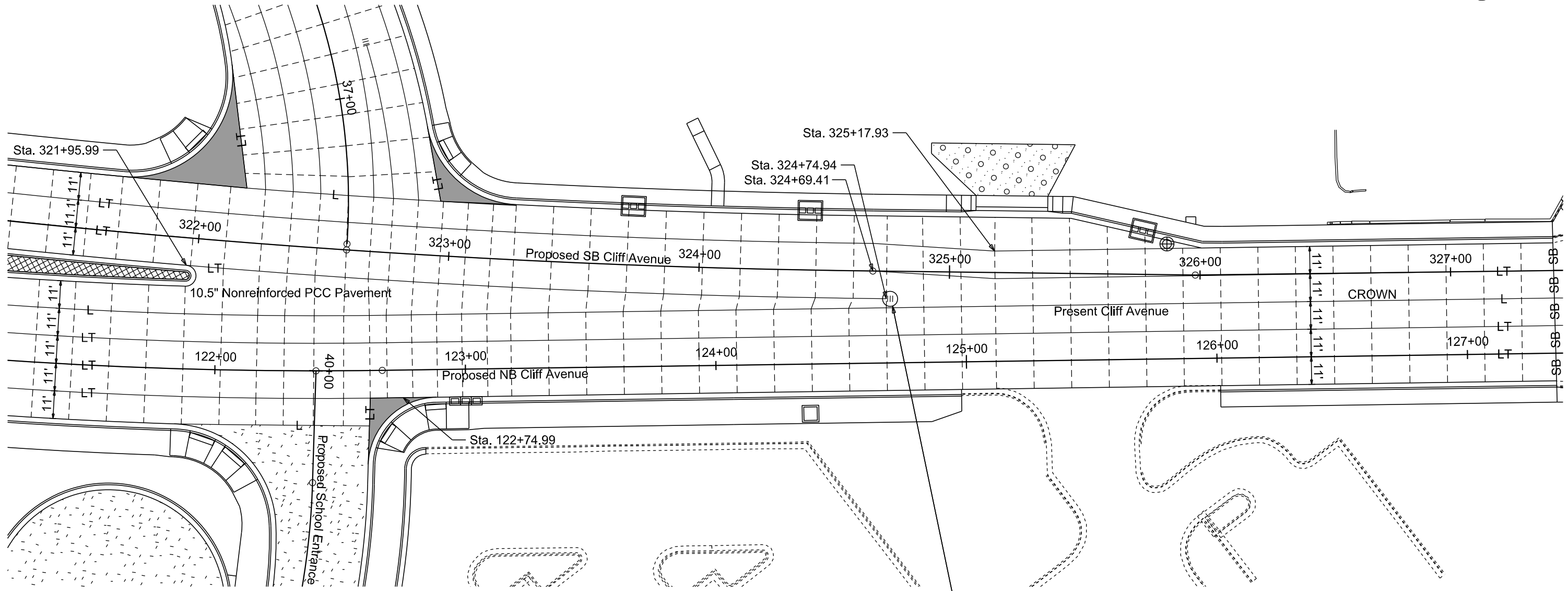
PCC PAVEMENT JOINT LAYOUT

CLIFF AVENUE

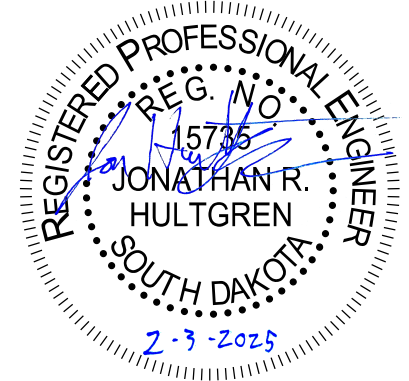
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Plotting Date: 1/31/2025		Revised Date: 1/31/2025	
		Initials: NBG	



Plot Scale - 1"=40'



- 8" PCC Driveway Pavement
- Median / Island Landscaping
(See Section H for Details)
- Reinforced Fillet Area
(See Section B for Details)
- Roadway Asphalt Concrete, Composite



Plotted From - ngiersvik

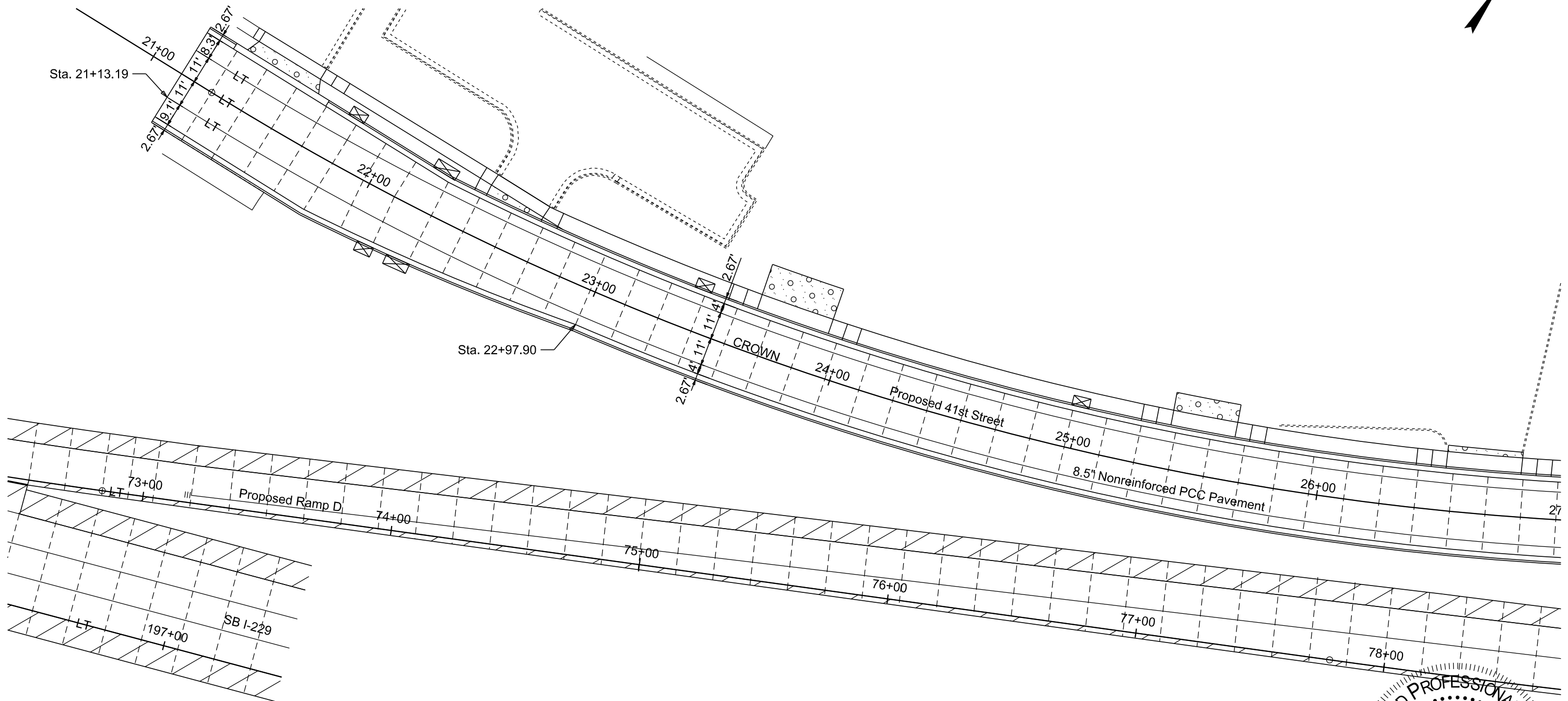
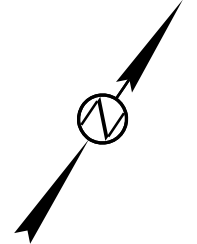
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PCC PAVEMENT JOINT LAYOUT

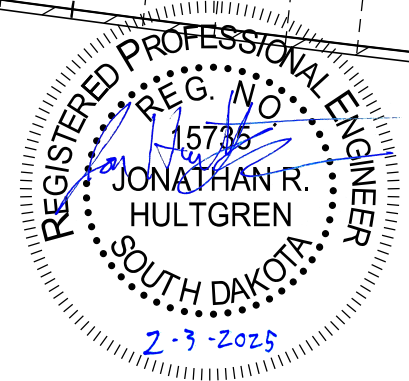
41ST STREET

STATE OF SOUTH DAKOTA	PROJECT IM-B-CR 2292(101)3	SHEET F32	TOTAL SHEETS F64
Plotting Date:	1/31/2025	Revised Date: Initials:	1/31/2025 NBG

8" PCC Driveway Pavement



Transverse contraction joints within these areas will not have dowel bar assemblies. All other transverse contraction joints will have dowel bar assemblies.

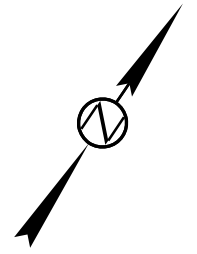


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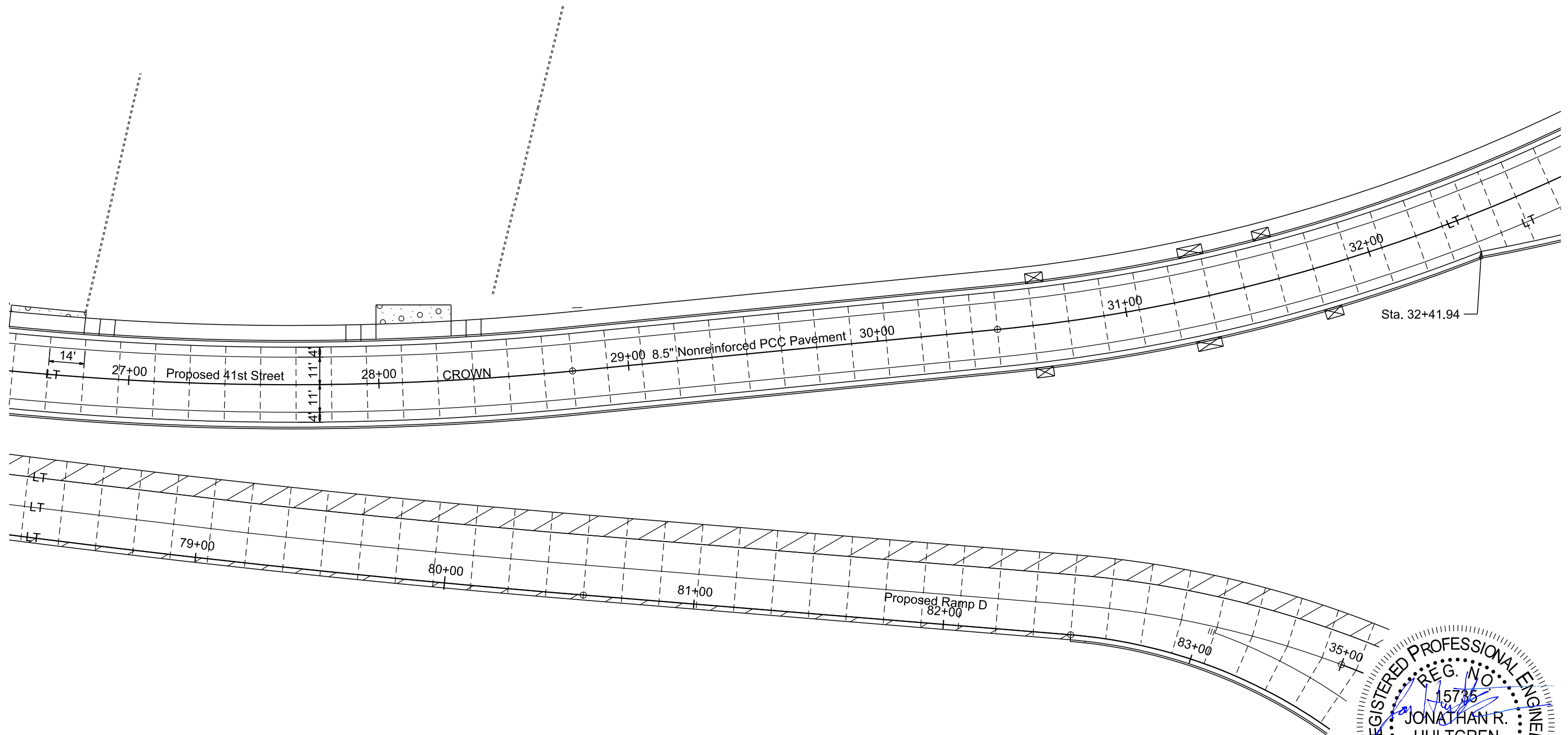
PCC PAVEMENT JOINT LAYOUT

41ST STREET

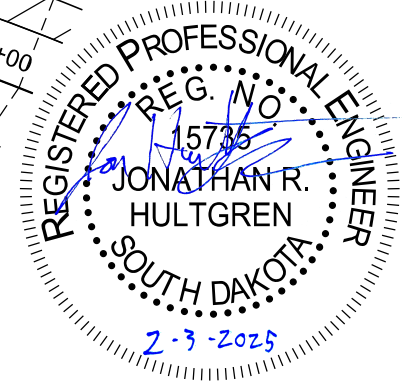
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Plotting Date: 1/31/2025		Revised Date: 1/31/2025 Initials: NBG	



Plot Scale - 1"=40'



Transverse contraction joints within these areas will not have dowel bar assemblies. All other transverse contraction joints will have dowel bar assemblies.



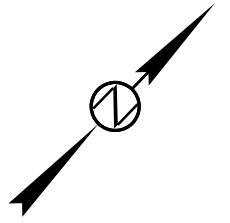
Plotted From - engiersvik

File - ...105HN_PCC Layouts.dgn

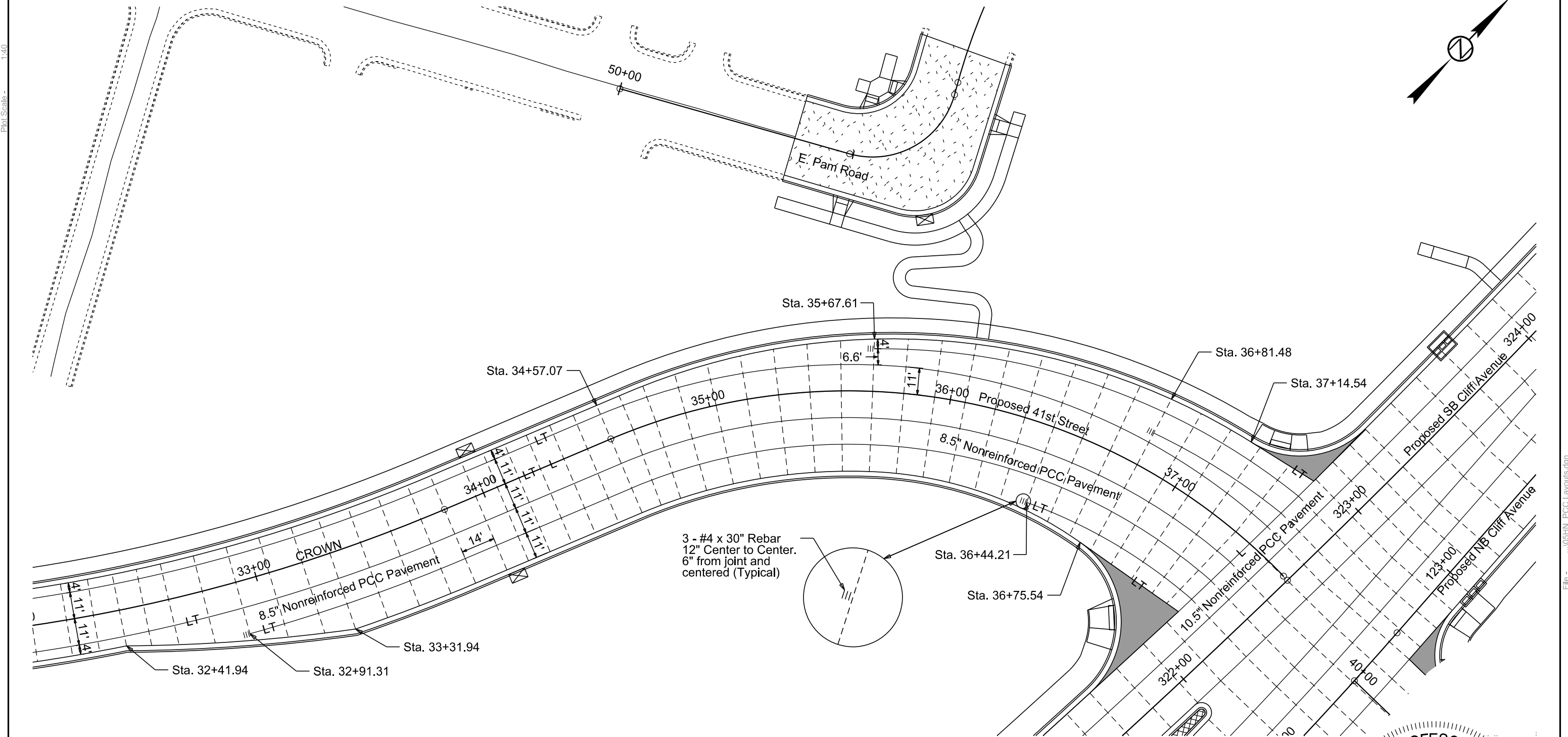
PCC PAVEMENT JOINT LAYOUT

41ST STREET

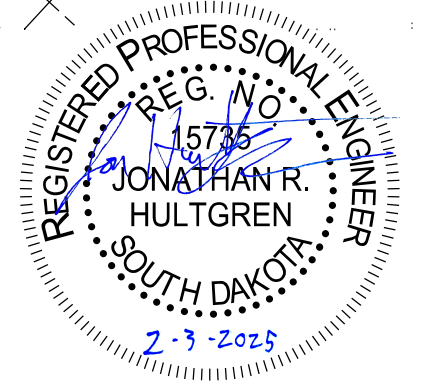
STATE OF SOUTH DAKOTA	PROJECT IM-B-CR 2292(101)3	SHEET F34	TOTAL SHEETS F64
Plotting Date:	1/31/2025	Revised Date:	1/31/2025
		Initials:	NBG



Plot Scale - 1"=40'



- Median / Island Landscaping
(See Section H for Details)
- Reinforced Fillet Area
(See Section B for Details)
- Roadway Asphalt Concrete, Composite



Plotted From: engiersvik

File: ...1055HN_PCC Layouts.dgn