

PLOT SCALE - 1:10936.8

PLOTTED FROM - TRAB17882

STATE OF SOUTH DAKOTA  
 DEPARTMENT OF TRANSPORTATION  
 PLANS FOR PROPOSED

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	1	15
Plotting Date: 05/30/2024			

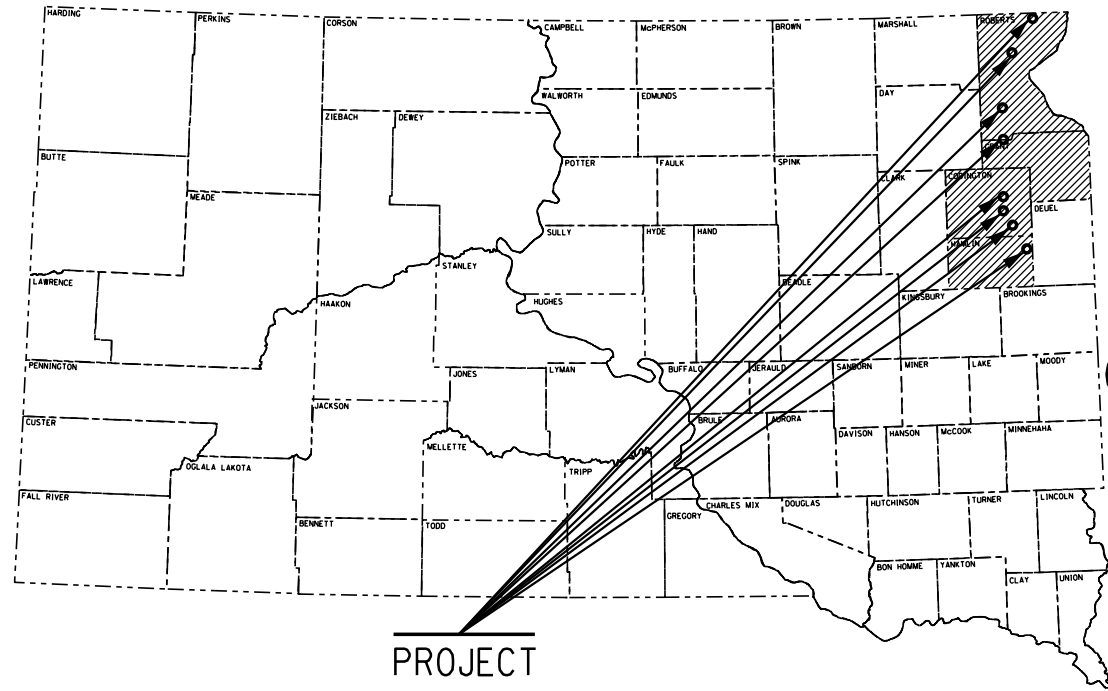
**PROJECT 0009-168**  
**INTERSTATE 29**  
**CODINGTON, GRANT, HAMLIN**  
**& ROBERTS COUNTIES**

BRIDGE DECK GRINDING

PCN i7kx

INDEX OF SHEETS

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- Sheet 2 Layout Map
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- Sheet 6 Plan Notes
- Sheet 7-14 Bridge Layout Sheets
- Sheet 15 Traffic Control Standard Plate



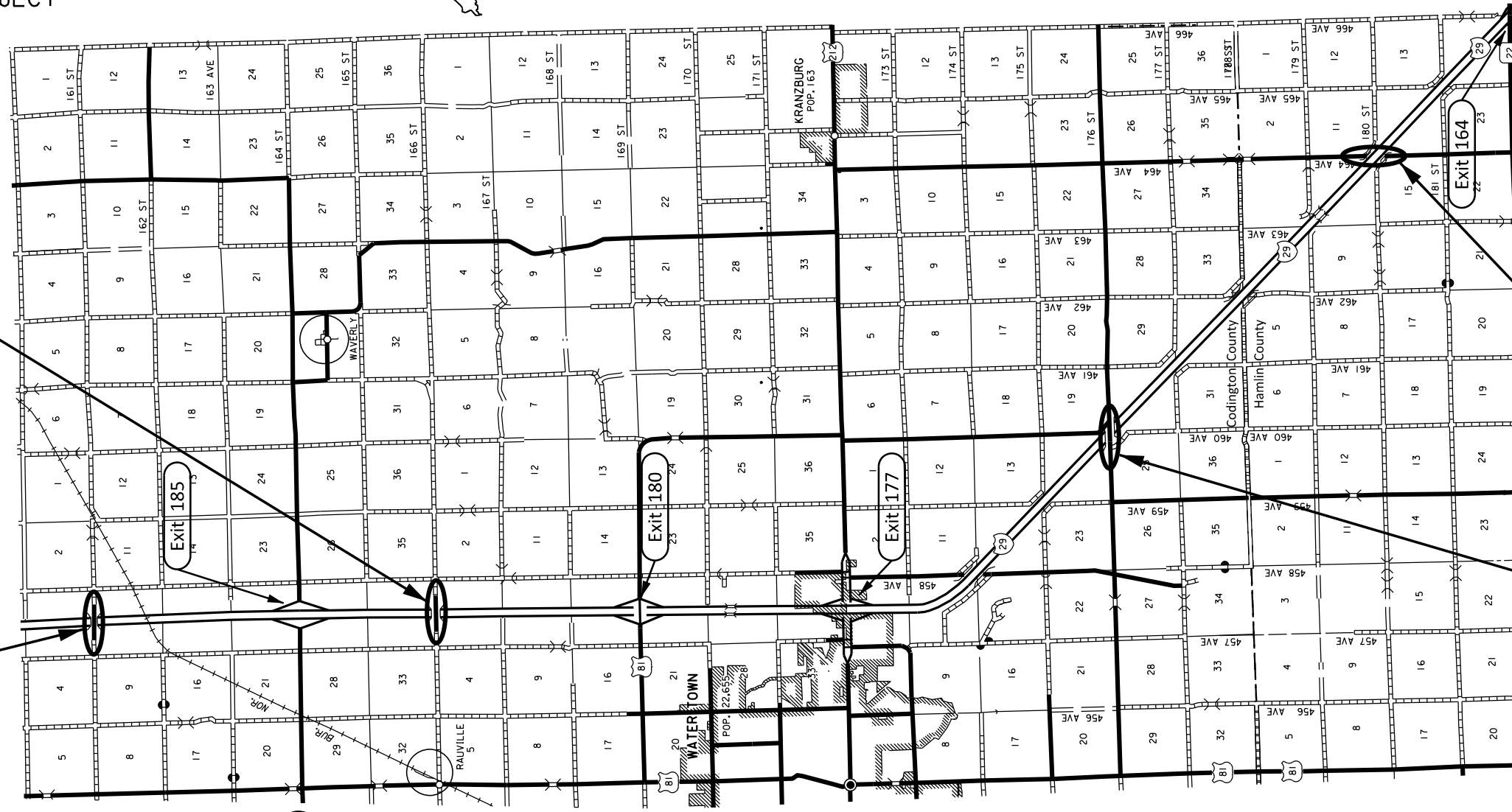
PROJECT

Str. No. 15-215-120  
 MRM 183.94  
 166th St Over I-29

Str. No. 15-215-070  
 MRM 189.00  
 161st St Over I-29

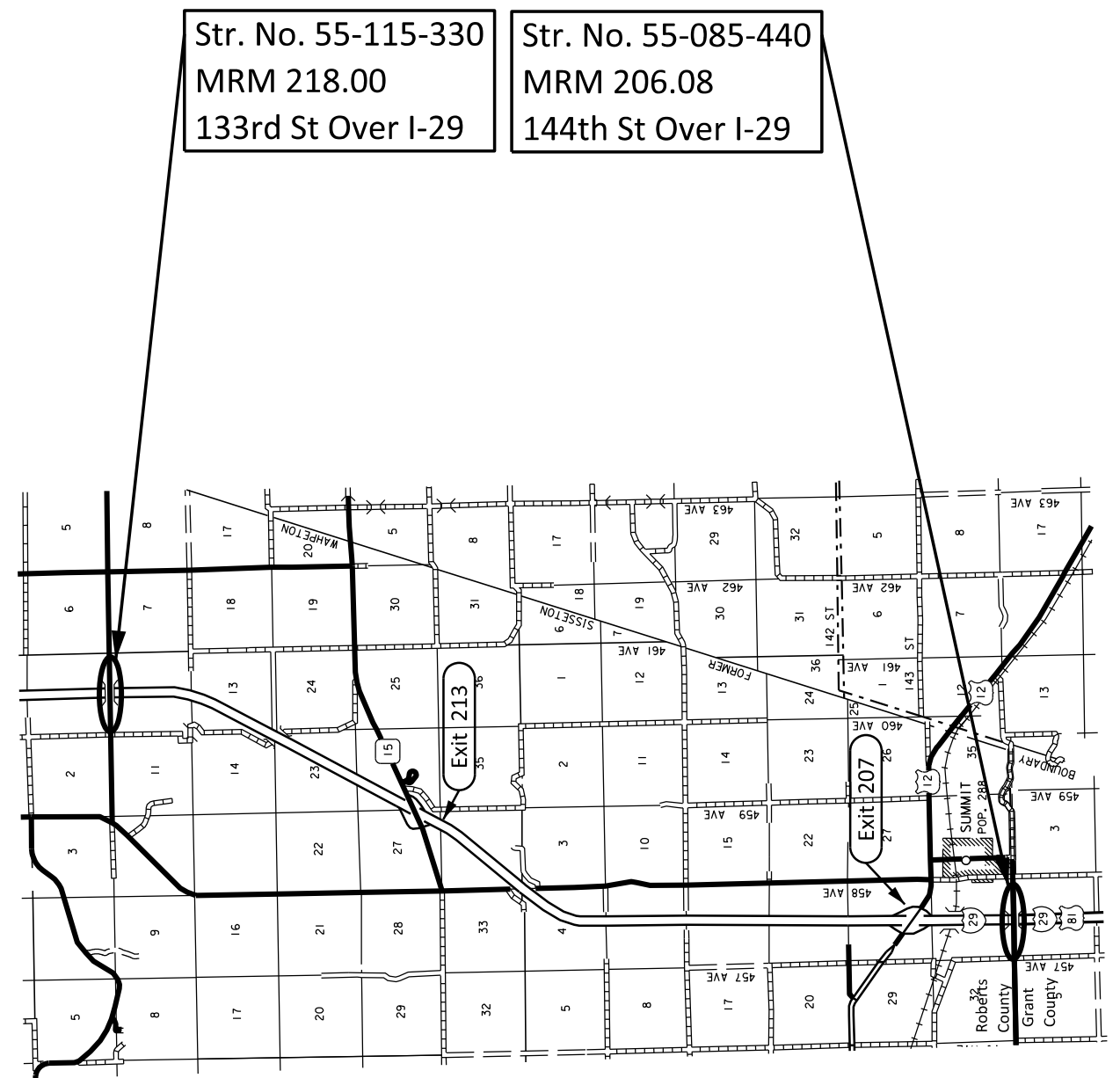
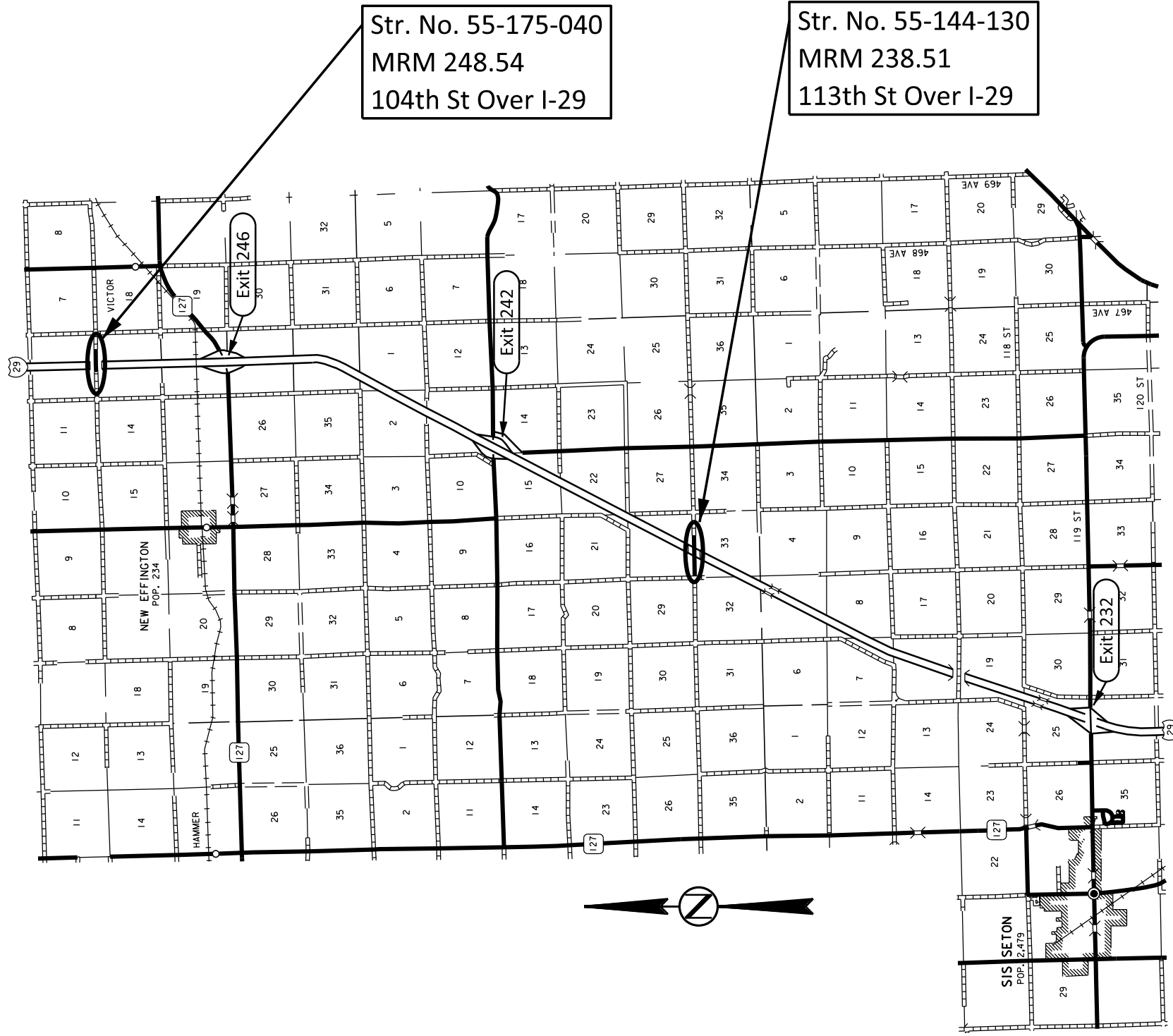
Str. No. 29-280-020  
 MRM 167.40  
 180th St Over I-29

Str. No. 15-240-220  
 MRM 173.02  
 176th St Over I-29



FILE - ... \HAML17KX\17KX TITLE SHEET.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	2	15
Plotting Date: 05/30/2024			



# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	0009-168	3	15

## ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
491E0120	Bridge Deck Grinding	9,483.9	SqYd
633E1220	High Build Waterborne Pavement Marking Paint, 4" White	3,257	Ft
633E1222	High Build Waterborne Pavement Marking Paint, 4" Yellow	1,015	Ft
634E0010	Flagging	160.0	Hour
634E0110	Traffic Control Signs	840.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0310	Temporary Flexible Vertical Markers (Tabs)	1,429	Ft
634E1002	Detour and Restriction Signing	408.0	SqFt

## SPECIFICATIONS

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

## ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf>

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

### COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

#### COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

#### Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

### COMMITMENT B4: BALD EAGLE

Bald eagles are known to occur in this area.

#### Action Taken/Required:

If a nest is observed within one mile of the project site, notify the Project Engineer immediately so that he/she can consult with the Environmental Office for an appropriate course of action.

### COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water ( $\geq 140$  °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

#### Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at: <https://sdleastwanted.sd.gov/maps/default.aspx>

< [South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04](https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04) >

### COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

#### Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

**COMMITMENT H: WASTE DISPOSAL SITE**

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

**Action Taken/Required:**

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".

2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

**COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES**

State Historic Preservation Office (SHPO or THPO) concurrence has not been obtained for this project.

**Action Taken/Required:**

All earth disturbing activities require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 100 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

The Contractor is responsible for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

**TABLE OF QUANTITIES - FOR INFORMATION ONLY**

BID ITEM DESCRIPTION	UNIT	STRUCTURE NUMBER, ROUTE & MRM								Total Quantity
		29-280-020	15-240-220	15-215-120	15-215-070	55-085-440	55-115-330	55-144-130	55-175-040	
		180th Street	176th Street	166th Street	161th Street	144th Street	133rd Street	113th Street	104th Street	
		167.40	173.02	183.94	189.00	206.08	218.00	238.51	248.54	
Bridge Width	Ft	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	
Bridge Length	Ft	425.67	417.67	295.00	296.50	293.00	292.25	354.25	293.00	
<b>Mobilization</b>	LS	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum
Bridge Deck Grinding	SqYd	1513.5	1485.0	1048.9	1054.2	1041.8	1039.1	1259.6	1041.8	9483.9
High Build Waterborne Pavement Marking Paint, 4" White *	Ft	951	935			686	685			3257
High Build Waterborne Pavement Marking Paint, 4" Yellow +	Ft	130	100			100	685			1015
Flagging	Hour	20	20	20	20	20	20	20	20	160
Traffic Control Signs	SqFt	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	840.0
Traffic Control Miscellaneous	LS	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum
Temporary Flexible Vertical Markers (Tabs)	Ft	426	418			293	292			1429
Detour and Restriction Signing	SqFt	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	408.0

\* White quantity has been increased by 100' to allow for painting past the end of the bridge deck.  
 + Str. No. 29-280-020 has CL skips across the bridge deck, and the quantity has been increased by 20'. All other bridges to be painted have double yellow centerline.  
 Double yellow centerline quantity has been increased by 10' to allow for painting past the end of the bridge deck.

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
<b>CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT</b>					<b>105.0</b>

**ITEMIZED LIST FOR DETOUR AND RESTRICTION SIGNING**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R5-5C	NO VEHICLES OVER 14 FT WIDE	2	102" x 36"	25.5	51.0
<b>CONVENTIONAL ROAD DETOUR AND RESTRICTION SIGNING SQFT</b>					<b>51.0</b>

**SEQUENCE OF OPERATIONS**

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work.

The Contractor will provide the Engineer a work schedule and keep the work schedule up to date. The Engineer will be responsible for providing the work schedule to Josh Olson, Region Bridge Engineer, to allow for coordinating the application of a bridge deck sealant following the bridge deck grinding.

**GENERAL TRAFFIC CONTROL**

A minimum roadway width of 14' will be always maintained.

All signing and traffic control devices will be removed from the roadway with the roadway being fully open to unimpeded traffic at the end of the workday.

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

All construction operations will be conducted in the general direction of traffic movement.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

Unless otherwise stated in these plans, work will not be allowed during hours of darkness.

All haul trucks will be equipped with an additional flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights will be incidental to the various related contract items.

Traffic will be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment will be repaired at no expense to the Department.

Construction vehicles will exit or enter the construction work zone at locations identified by the Engineer. At no time will construction vehicles utilize the maintenance crossovers or the Interstate to exit or enter Interstate traffic.

**TRAFFIC CONTROL SIGNS**

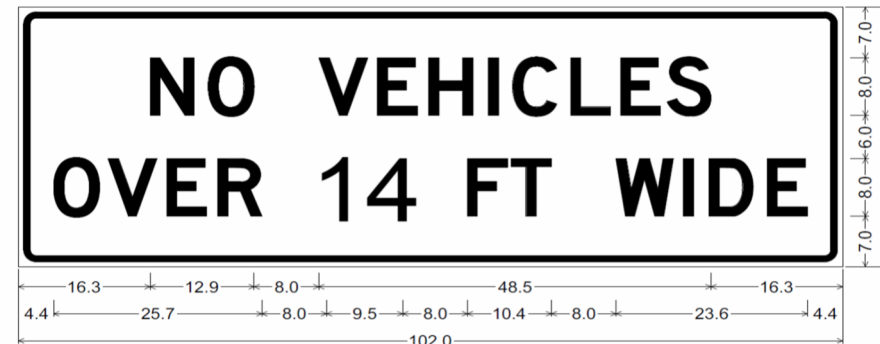
Traffic control signs have been included in a table for each bridge site. Payment will only be for those signs used on each bridge site.

**OVERWIDTH RESTRICTION SIGNING**

The Contractor will furnish and install the overwidth restriction signs as shown in these plans. Signing to be installed will be a "No Vehicle Over 14 Ft Wide". These signs will be installed at a crossroad nearest to the bridge.

Prior to installing the signs, the Contractor will mark the sign locations and review them with the Engineer. Overwidth restriction signs may be installed on portable supports. It will be the responsibility of the Contractor to maintain and reinstall these signs during the project as required by the construction progress. Upon completion of the project, the Contractor will remove the overwidth restriction signs.

All costs for furnishing the signs, posts, and mounting hardware, and for installing, maintaining, covering, and removing the overwidth restriction signs will be incidental to the contract unit price per square foot for "Detour and Restriction Signing".



2.3" Radius, 0.9" Border, 0.6" Indent, Black on White; "NO VEHICLES", D 2K; "OVER 14 FT WIDE", D 2K;

**FLAGGING**

Operations will be conducted so that the traveling public will not have to wait longer than 15 minutes at the flagger station.

It is required that the flaggers be able to communicate with one another. If an emergency vehicle needs to pass through the project, the Contractor will be required to expedite traffic movement. All costs associated with this will be incidental to the contract unit price per hour for "Flagging".

**DETAILS AND DIMENSIONS OF EXISTING BRIDGE**

All details and dimensions of the existing bridge, contained in these plans, are based on the original construction plans and shop plans. It is the Contractor's responsibility to inspect and verify the actual field conditions and any necessary as-built dimensions affecting the satisfactory completion of the work required for this project.

**BRIDGE DECK GRINDING**

Bridge Deck Grinding will be done in accordance with Section 491 of the Specifications. The grinding will remove the epoxy chip seal and pavement markings. The grinding will be done full bridge width and length.

Refer to the bridge layout sheets for the width, length and skew of the bridge decks.

The bridges presently have a 1 coat bridge deck epoxy chip seal.

**PROTECTION OF BRIDGE JOINTS**

It may be necessary to use special methods and equipment to remove material as close as practical to structure appurtenances. Also, the Contractor will mask all expansion joints prior to any removal of material near the joints. The joints will be protected throughout completion of the work. Once the masking has been removed any loose material contained within the joint will be cleaned from the joint. Any damage to the expansion joints along with any existing structure appurtenances will be repaired by the Contractor to the satisfaction of the Engineer at no cost to the Department. All costs related to this work will be incidental to various contract items.

**TEMPORARY PAVEMENT MARKING**

Temporary Flexible Vertical Markers (Tabs) will be used to mark double yellow centerline on Structure Nos. 15-240-220, 55-085-440 and 55-115-330 upon completion of the bridge deck grinding. Centerline will be double yellow lines with tabs spaced at 5' the entire bridge deck length.

Temporary Flexible Vertical Markers (Tabs) will be used to mark centerline yellow skips on Structure No. 29-280-020 upon completion of the bridge deck grinding.

**HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT**

Pavement markings will not be completed until 14 days after the grinding has been completed, to allow time for SDDOT forces to apply a bridge deck sealer.

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.

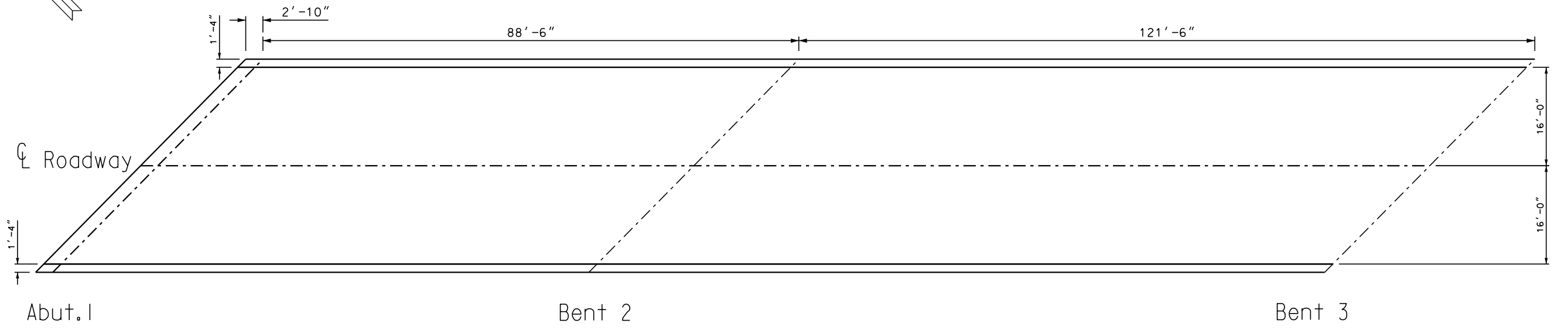
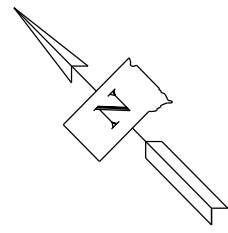
All cost for materials, labor, and equipment necessary to furnish and install the pavement markings will be incidental to the contract unit price for the respective High Build Waterborne Pavement Marking Paint items.



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	7	15
Plotting Date: 05/30/2024			

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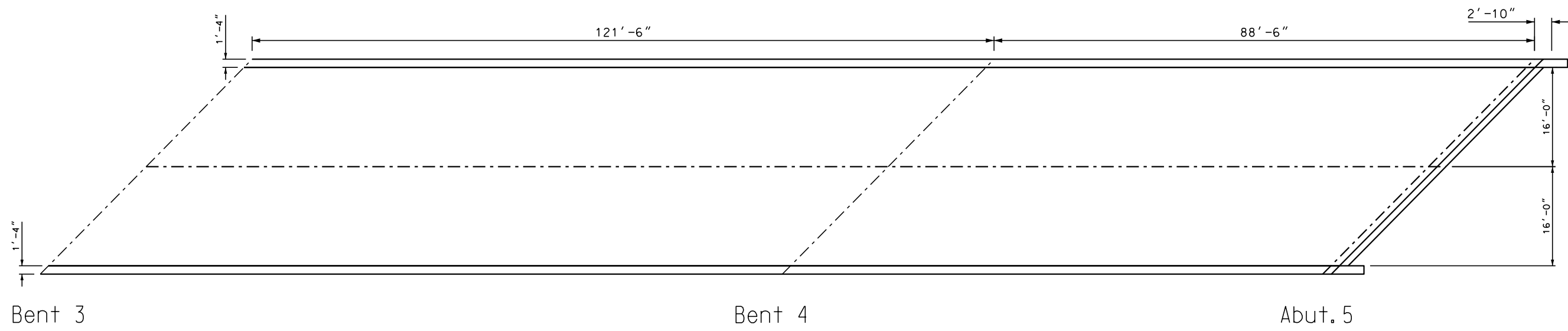
PLOT NAME - 3



Abut. 1

Bent 2

Bent 3



Bent 3

Bent 4

Abut. 5

BRIDGE DECK LAYOUT  
FOR

425'-8" COMP. STEEL GIRDER BRIDGE

32'-0" ROADWAY  
COUNTY ROAD 5 OVER I-29  
STR. NO. 29-280-020

45° LHF SKEW  
I-29 - 167.40  
X271

HAMLIN COUNTY  
S. D. DEPT. OF TRANSPORTATION  
FEBRUARY 2012

1 OF 1

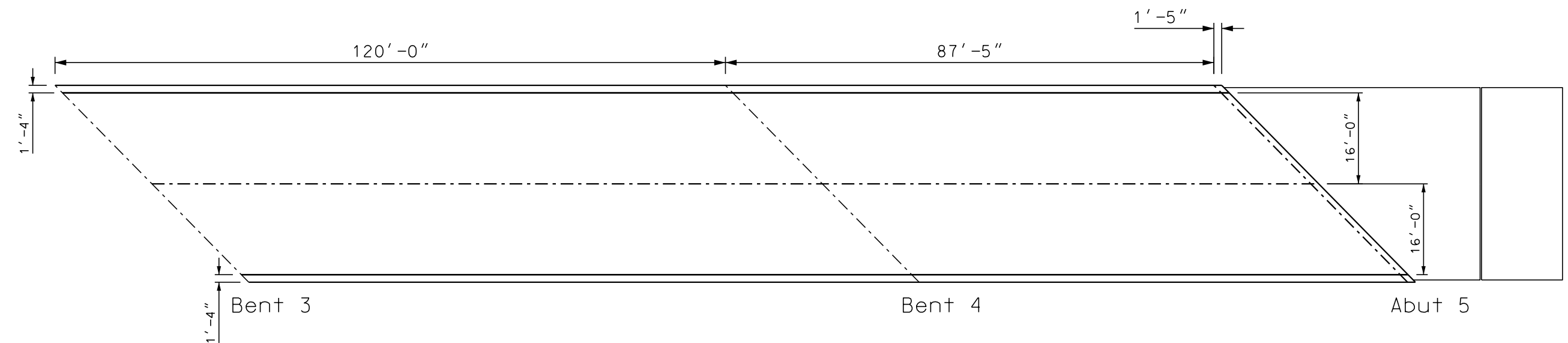
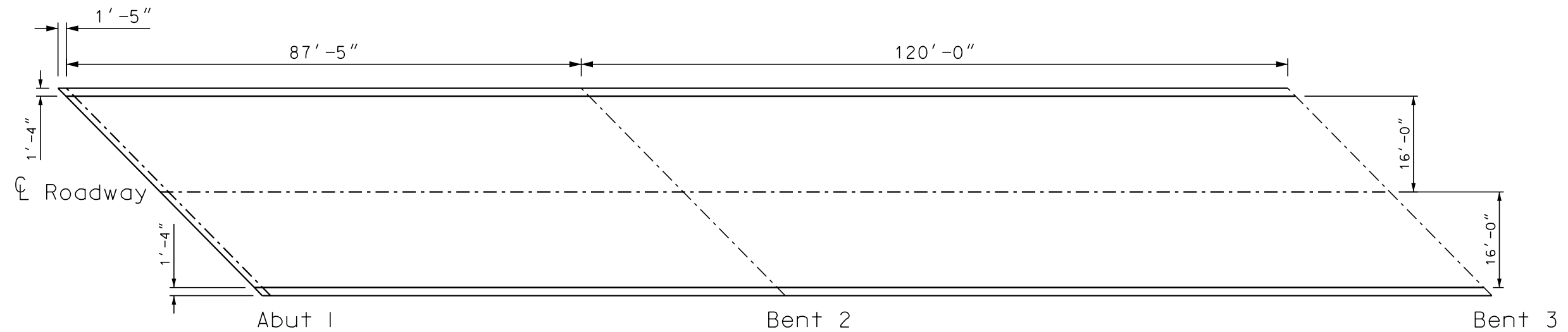
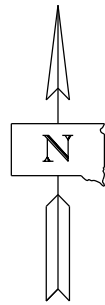
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PLANS BY :  
ABERDEEN REGION BRIDGE OFFICE, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

DESIGNED BY JCO	DRAWN BY JCO	CHECKED BY TWH	APPROVED  BRIDGE ENGINEER
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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	8	15
Plotting Date: 05/30/2024			



BRIDGE DECK LAYOUT  
FOR  
417'-8" COMP. STEEL GIRDER BRIDGE  
32'-0" ROADWAY 45 RHF° SKEW  
COUNTY ROAD 20 OVER I-29 I-29 - 173.02  
STR. NO. 15-240-220 X271

CODINGTON COUNTY  
S. D. DEPT. OF TRANSPORTATION  
JANUARY 2013

1 OF 1

PLANS BY :  
ABERDEEN REGION BRIDGE OFFICE, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

DESIGNED BY JCO	DRAWN BY JCO	CHECKED BY TWH	APPROVED  BRIDGE ENGINEER
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PLOT SCALE - 1:20.6247

PLOTTED FROM - TRAB17882

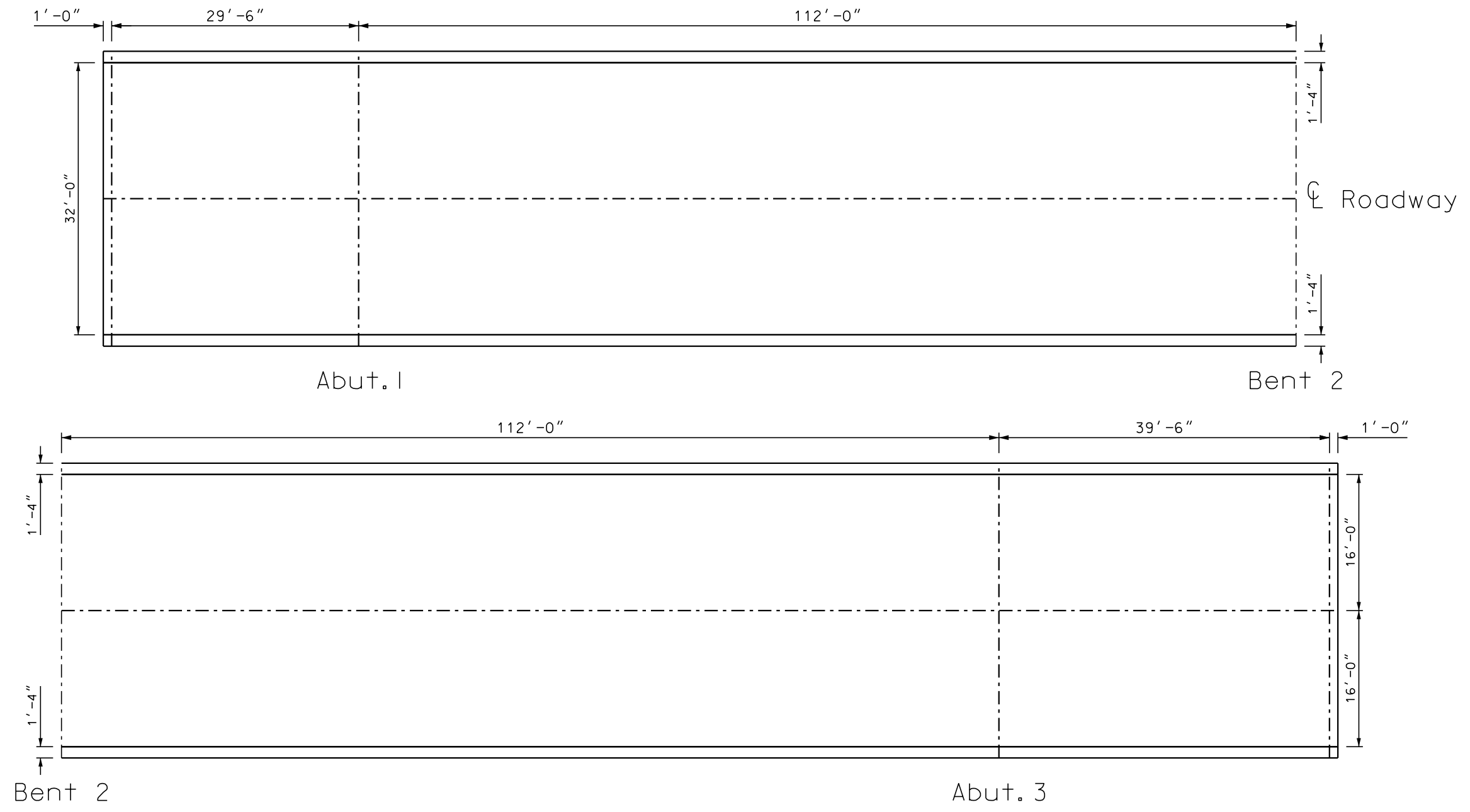
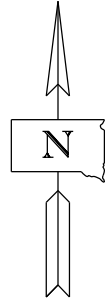
PLOT NAME - 4

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	9	15
Plotting Date: 05/30/2024			

PLOT SCALE - 1:14,4373



PLOT NAME - 5

FILE - ... \PRJ\HAML17KX\15-215-120.DGN

PLOTTED FROM - TRAB17882

BRIDGE DECK LAYOUT  
FOR  
295'-0" COMP. STEEL GIRDER BRIDGE  
32'-0" ROADWAY 0° SKEW  
COUNTY ROAD 8 OVER I-29 I-29 S - 183.94  
STR. NO. 15-215-120 X271

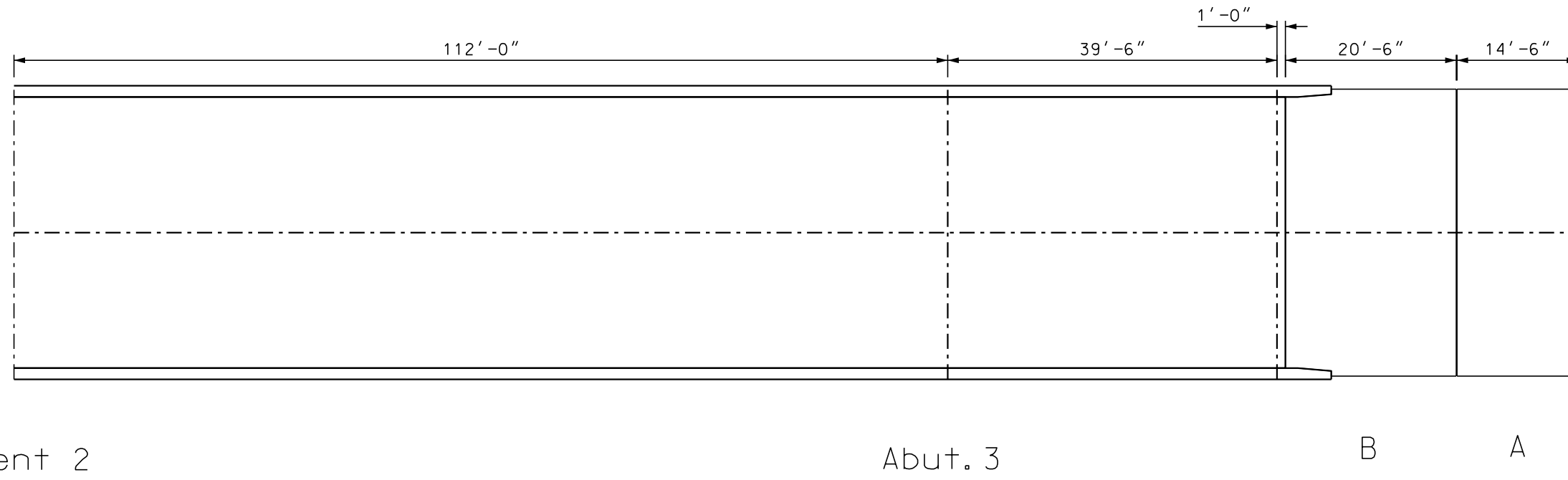
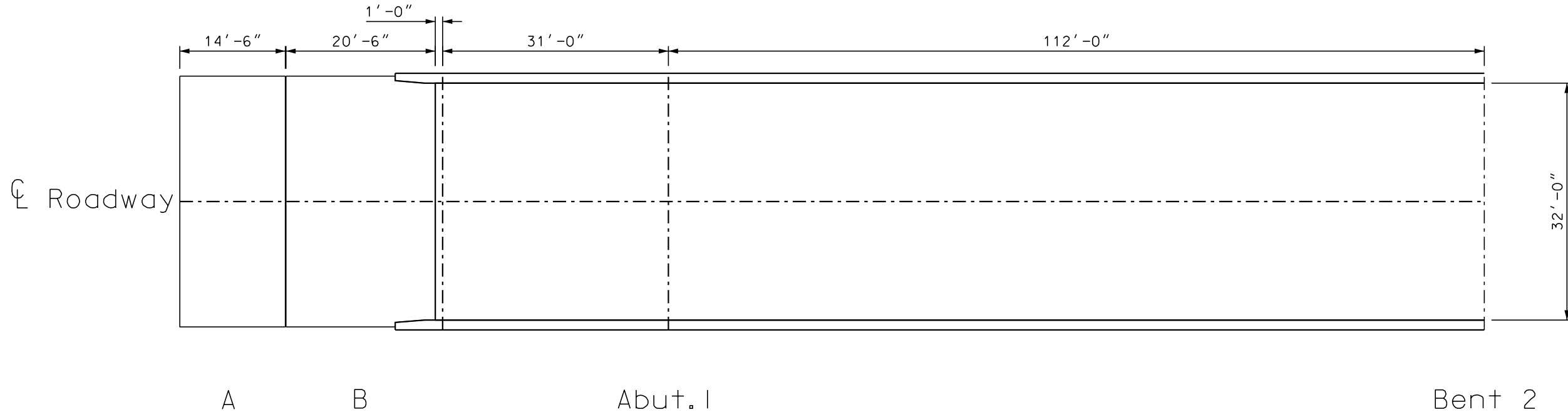
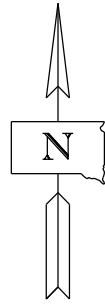
CODINGTON COUNTY  
S. D. DEPT. OF TRANSPORTATION  
JANUARY 2013 (1) OF (1)

PLANS BY :  
ABERDEEN REGION BRIDGE OFFICE, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

DESIGNED BY JCO	DRAWN BY JCO	CHECKED BY TWH	APPROVED  BRIDGE ENGINEER
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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	10	15
Plotting Date: 05/30/2024			

PLOT SCALE - 1:16,4997



PLOT NAME - 6

FILE - ... \PRJ\HAML17KX\15-215-070.DGN

PLOTTED FROM - TRAB17882

BRIDGE DECK LAYOUT  
FOR  
296'-6" COMP. STEEL GIRDER BRIDGE  
32'-0" ROADWAY 0° SKEW  
COUNTY ROAD 4 OVER I-29 I-29 - 188.95  
STR. NO. 15-215-070 X271

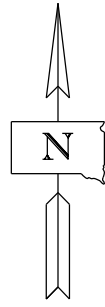
CODINGTON COUNTY  
S. D. DEPT. OF TRANSPORTATION  
MAY 2011 (1) OF (1)

PLANS BY :  
ABERDEEN REGION BRIDGE OFFICE, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

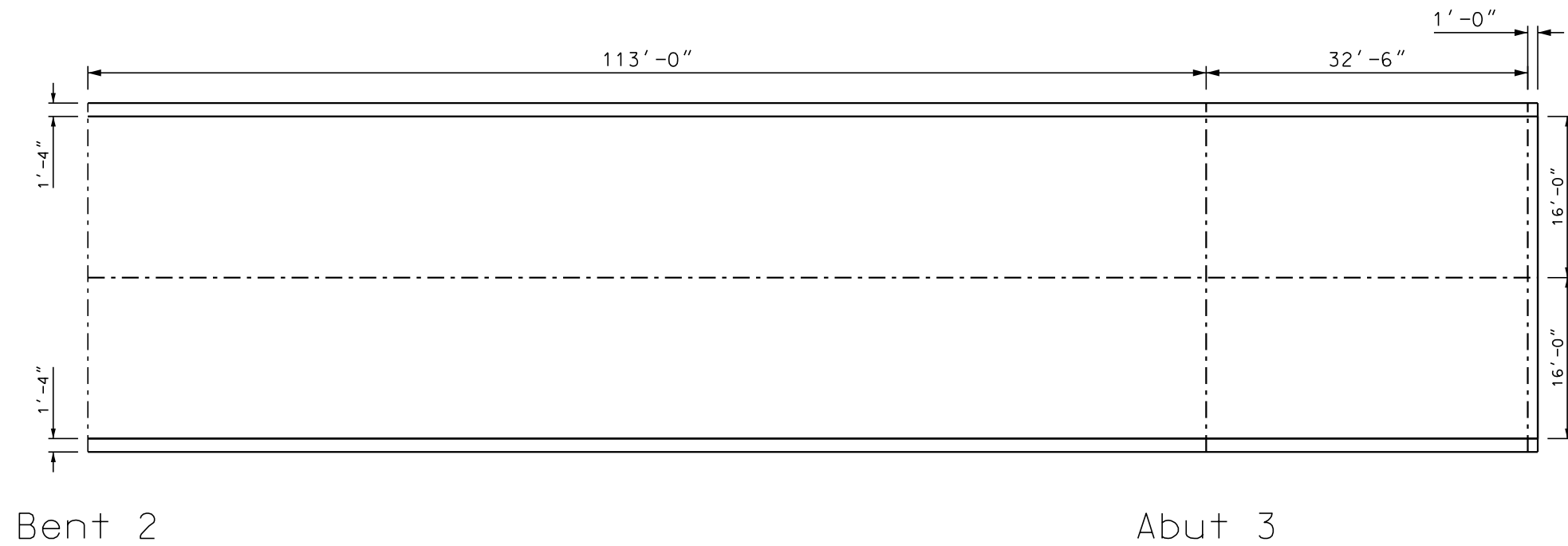
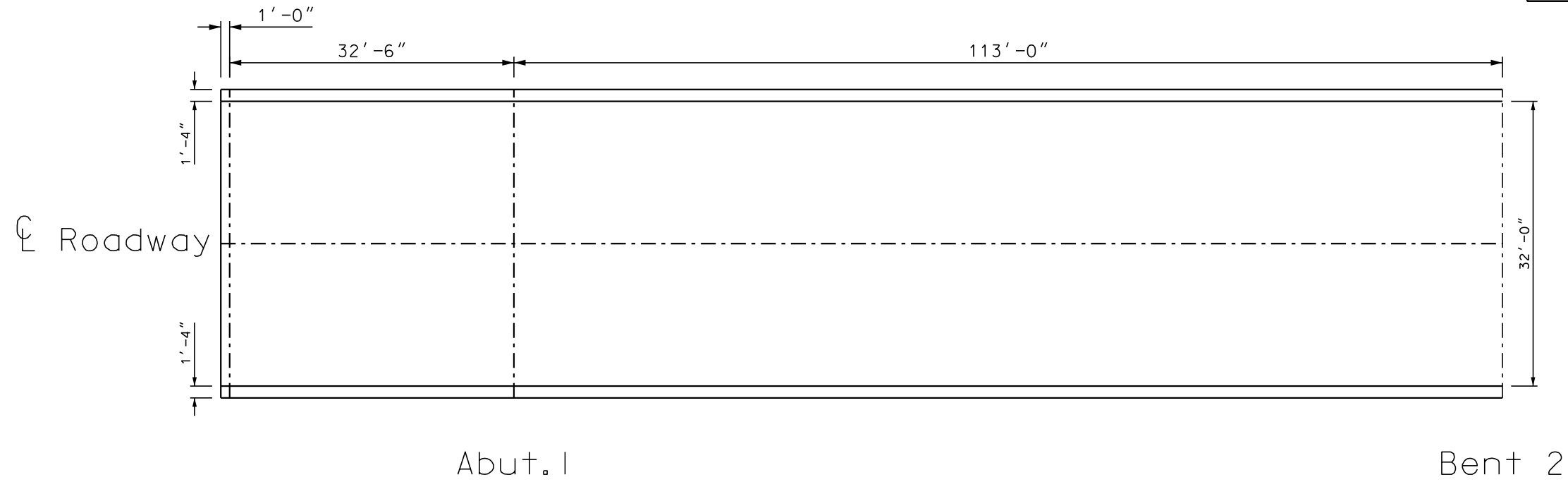
DESIGNED BY JCO	DRAWN BY JCO	CHECKED BY TWH	APPROVED BRIDGE ENGINEER
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PLOT SCALE - 1:15,4685

PLOTTED FROM - TRAB17882



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	11	15
Plotting Date: 05/30/2024			



BRIDGE DECK LAYOUT  
FOR  
293'-0" COMP. STEEL GIRDER BRIDGE  
32'-0" ROADWAY 0° SKEW  
COUNTY ROAD 27 OVER I-29 I-29 - 206.08  
STR. NO. 55-085-440 X271

ROBERTS COUNTY  
S. D. DEPT. OF TRANSPORTATION  
FEBRUARY 2012

1 OF 1

PLANS BY :  
ABERDEEN REGION BRIDGE OFFICE, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

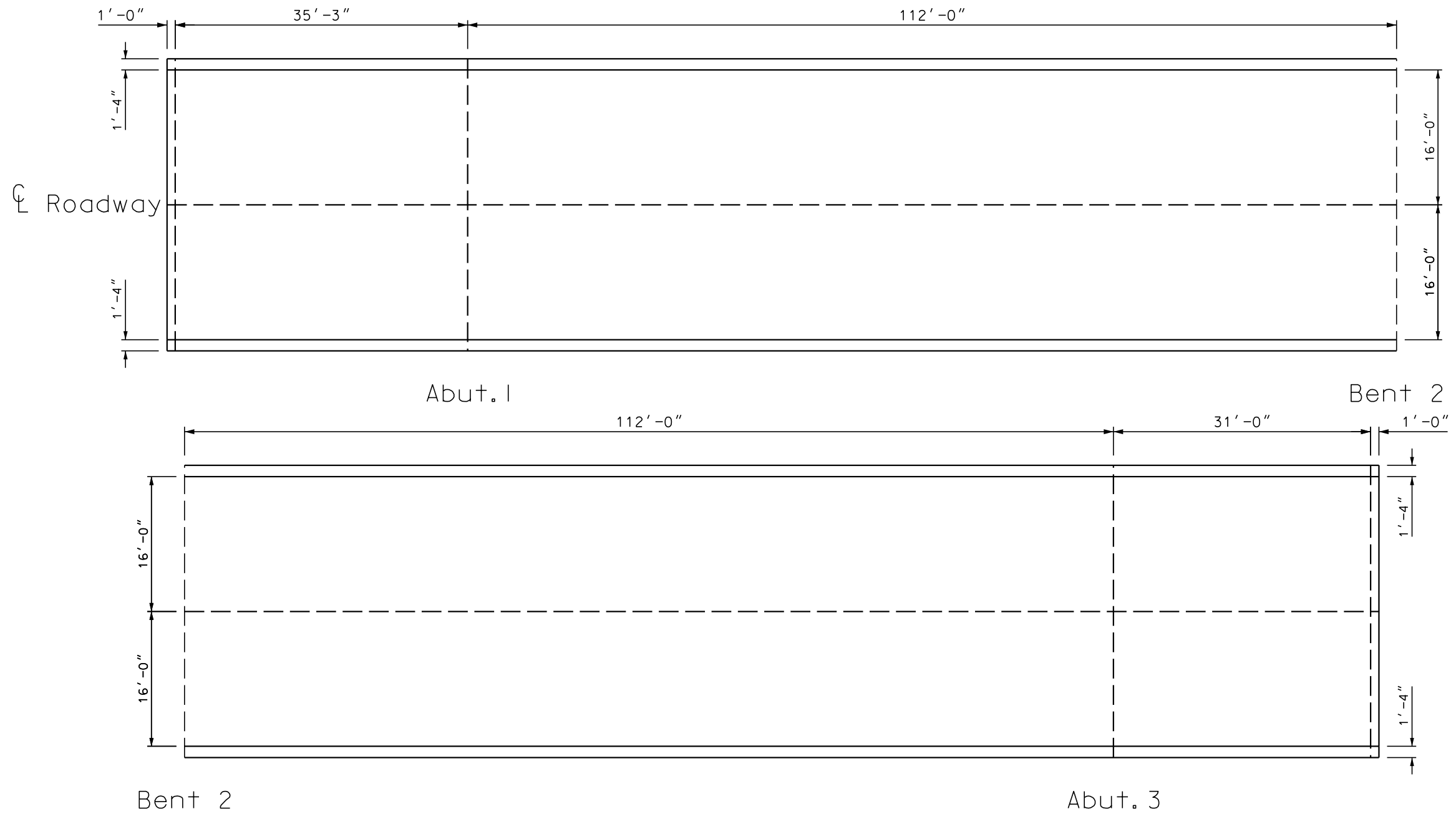
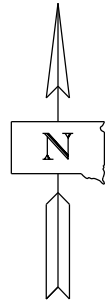
DESIGNED BY JCO	DRAWN BY JCO	CHECKED BY TWH	APPROVED BRIDGE ENGINEER
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PLOT NAME - 7

FILE - ... \PRJ\HAML17KX\55-085-440.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	12	15
Plotting Date: 05/30/2024			

PLOT SCALE - 1:14,4373



PLOT NAME - 8

FILE - ... \PRJ\HAML17KX\55-115-330.DGN

PLOTTED FROM - TRAB17882

BRIDGE DECK LAYOUT  
FOR  
292'-3" COMP. STEEL GIRDER BRIDGE  
32'-0" ROADWAY 0° SKEW  
COUNTY ROAD 9 OVER I-29 I-29 - 218.00  
STR. NO. 55-115-330 X271

ROBERTS COUNTY  
S. D. DEPT. OF TRANSPORTATION  
MARCH 2012

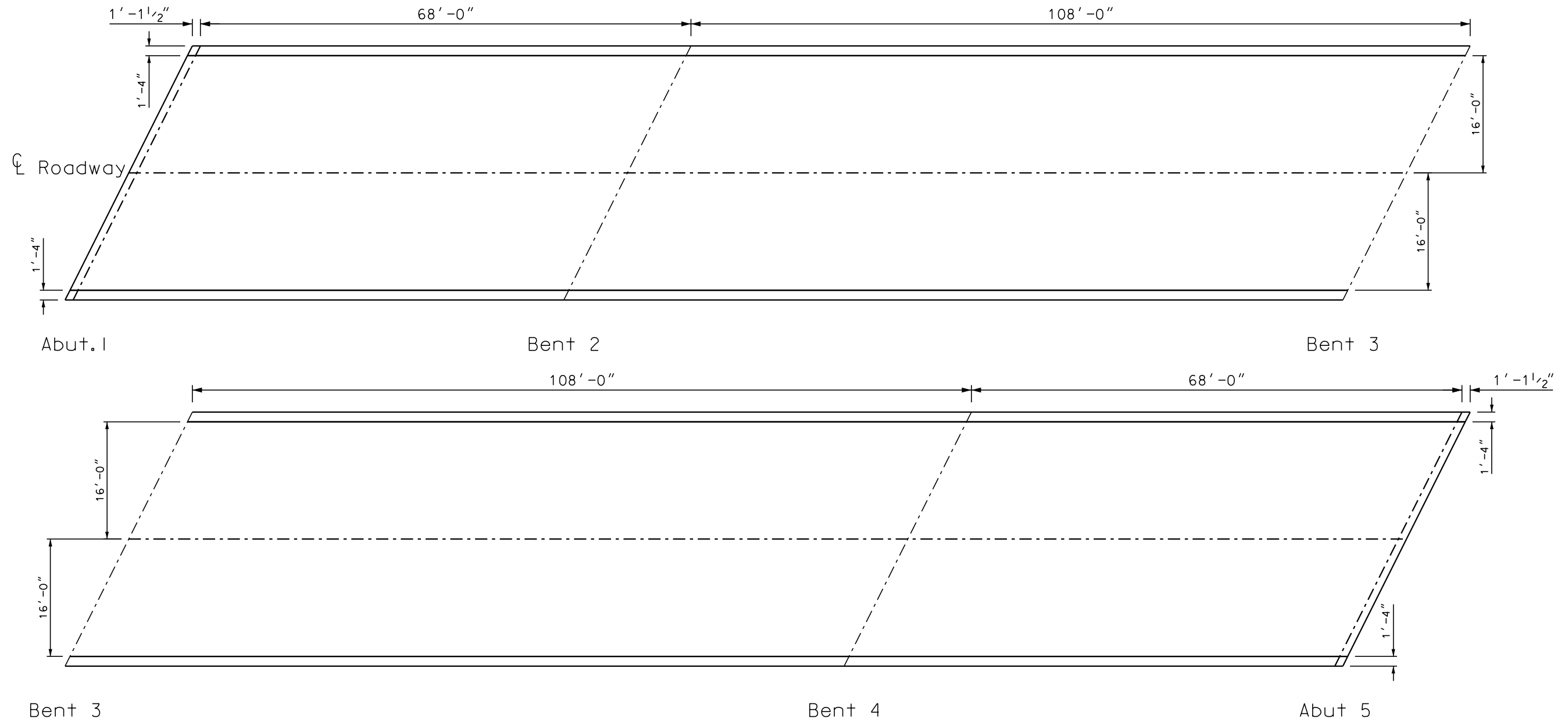
(1) OF (1)

PLANS BY :  
ABERDEEN REGION BRIDGE OFFICE, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

DESIGNED BY JCO	DRAWN BY JCO	CHECKED BY TWH	APPROVED  BRIDGE ENGINEER
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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	13	15
Plotting Date: 05/30/2024			

PLOT SCALE - 1:15,4685



PLOT NAME - 9

FILE - ... \PRJ\HAML17KX\55-144-130.DGN

PLOTTED FROM - TRAB17882

BRIDGE DECK LAYOUT  
FOR  
354'-3" COMP. STEEL GIRDER BRIDGE  
32'-0" ROADWAY 26 58' LHF<sup>o</sup> SKEW  
COUNTY ROAD 12 OVER I-29 I-29 - 238.51  
STR. NO. 55-144-130 X271

ROBERTS COUNTY  
S. D. DEPT. OF TRANSPORTATION  
MARCH 2012

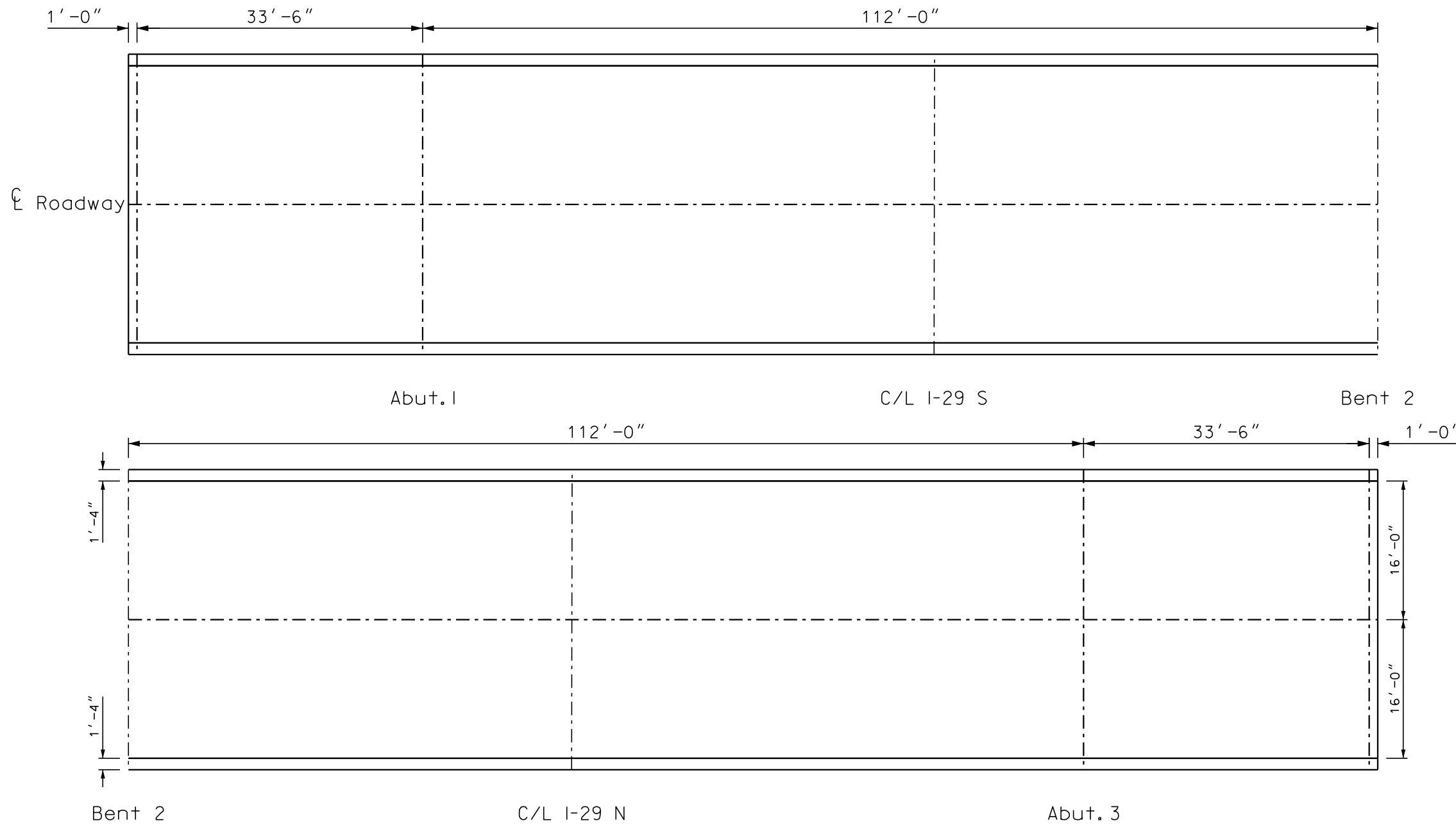
1 OF 1

PLANS BY :  
ABERDEEN REGION BRIDGE OFFICE, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

DESIGNED BY JCO	DRAWN BY JCO	CHECKED BY TWH	APPROVED  BRIDGE ENGINEER
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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	0009-168	14	15
Plotting Date: 05/30/2024			

PLOT SCALE - 1:14,4373



PLOT NAME - 10

FILE - ... \PRJ\HAML17KX\55-175-040.DGN

PLOTTED FROM - TRAB17882

BRIDGE DECK LAYOUT  
FOR  
293'-0" COMP. STEEL GIRDER BRIDGE  
32'-0" ROADWAY 0° SKEW  
TWP RD - 104TH ST OVER I-29 I-29 - 248.38  
STR. NO. 55-175-040 X271

ROBERTS COUNTY  
S. D. DEPT. OF TRANSPORTATION  
MARCH 2012

(1) OF (1)

PLANS BY :  
ABERDEEN REGION BRIDGE OFFICE, SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

DESIGNED BY JCO	DRAWN BY JCO	CHECKED BY TWH	APPROVED _____ BRIDGE ENGINEER
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Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	25
35 - 40	350	25
45	500	25
50	500	50
55	750	50
60 - 65	1000	50

- Flagger
- Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

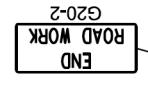
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) will be displayed in advance of the liquid asphalt areas.

Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

The channelizing devices will be drums or 42" cones.

Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.

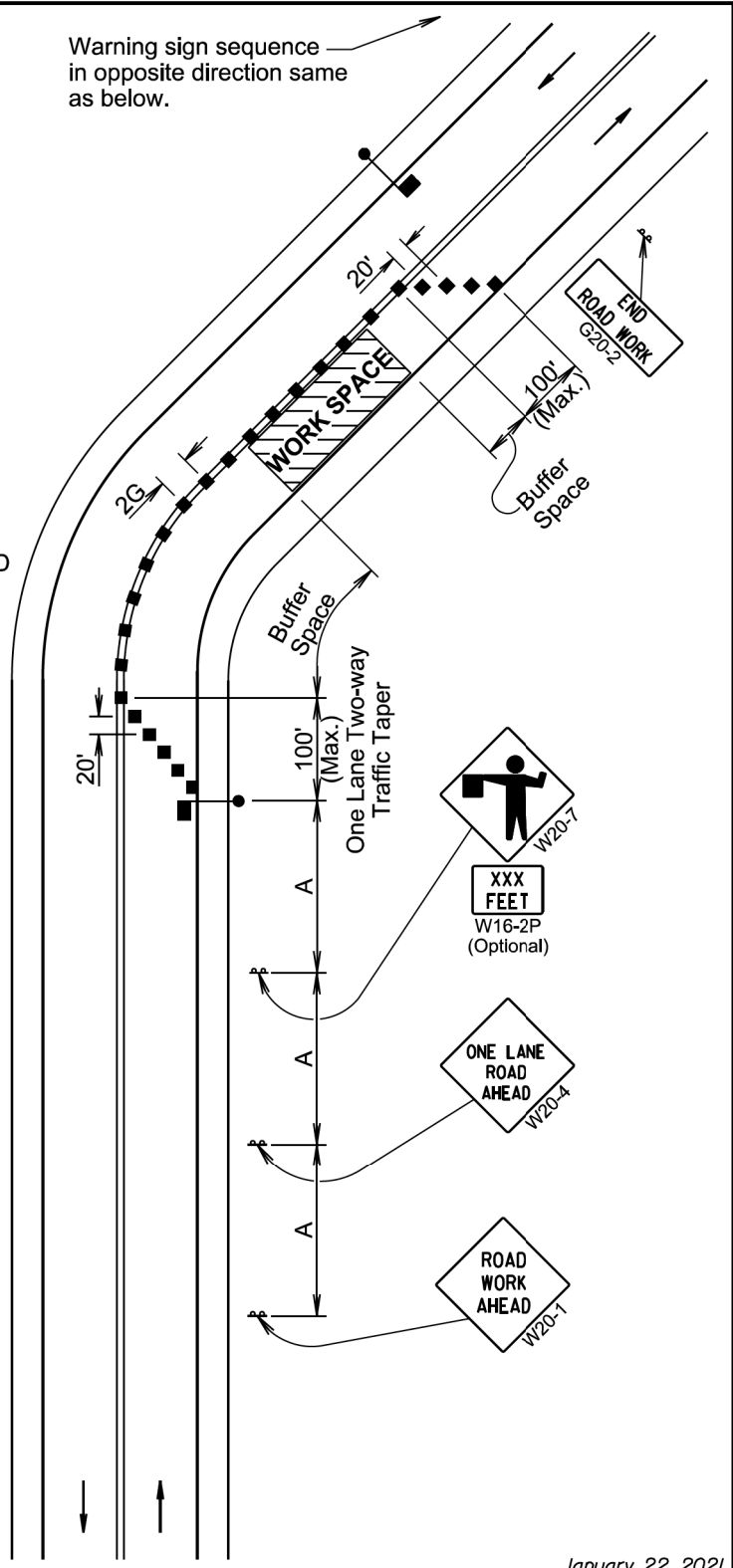


Channelizing devices and flaggers will be used at intersecting roads to control intersecting road traffic as required.

The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

The length of A may be adjusted to fit field conditions.

Warning sign sequence in opposite direction same as below.



January 22, 2021

<b>S D D O T</b>	<b>LANE CLOSURE WITH FLAGGER PROVIDED</b>	PLATE NUMBER <b>634.23</b>
	Published Date: 2025	Sheet 1 of 1