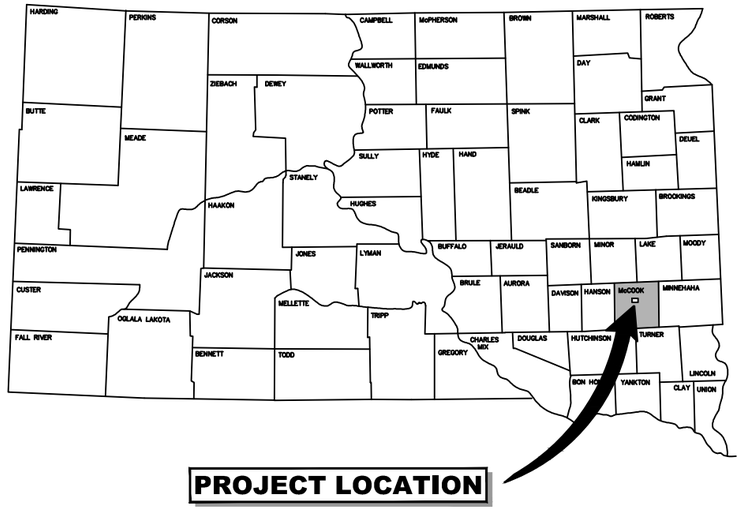
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	1	65

FILE: 672021 – Title Page.dwg
PLOTTING DATE: 2025-03-03 INITIALS: JTM
REVISION DATE: 2025-03-04



STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

FOR BIDDING PURPOSES ONLY

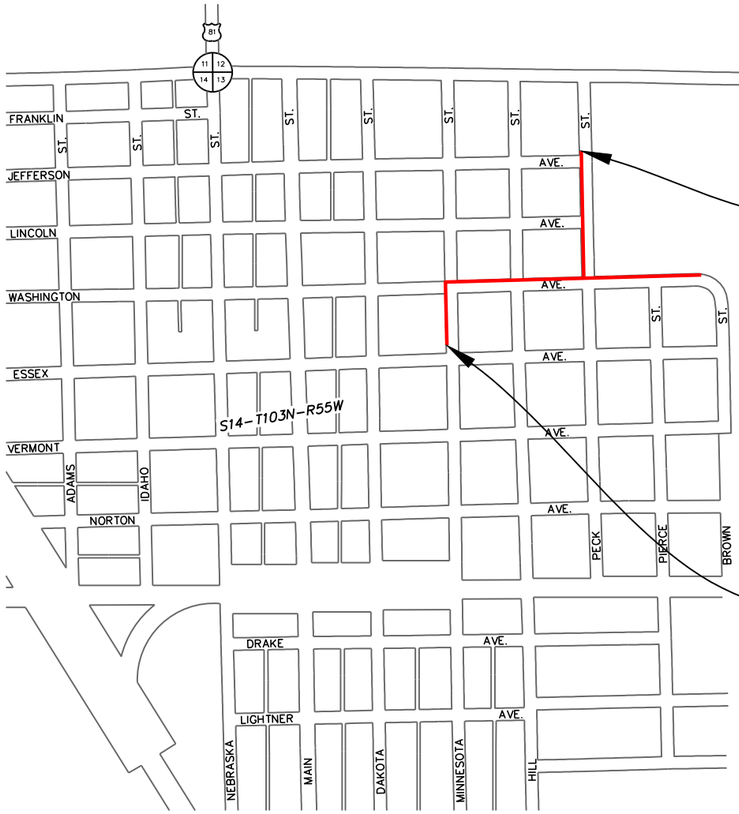
PROJECT P TAPR(51)
MCCOOK COUNTY
CITY OF SALEM
SHARED USE PATH
PCN 08WE

DGR NO. 672021

INDEX OF SHEETS

STORM WATER

MAJOR RECEIVING BODY OF WATER
SNAKE CREEK
AREA DISTURBED: 0.85 ACRES
TOTAL PROJECT AREA: 0.85 ACRES



END PROJECT

PECK STREET STA. 47+97.34
APPROXIMATELY 460' SOUTH AND
1,930' EAST OF THE NORTHWEST
CORNER OF SEC. 13, T103N, R55W,
OF THE 5TH P.M.

BEGIN PROJECT

MINNESOTA STREET STA. 10+63.42
APPROXIMATELY 1,440' SOUTH AND
1,230' EAST OF THE NORTHWEST
CORNER OF SEC. 13, T103N, R55W, OF
THE 5TH P.M.

VICINITY MAP - SALEM, SD

NOTE: FOR SOUTH DAKOTA ONE CALL, THE PROJECT
IS LOCATED IN SECTION 13–T103N–R55W.

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 15287
JACOB T. MORRIS
SOUTH DAKOTA
3/4/2025

I, Jacob T. Morris, hereby certify that these plans were prepared by me, or under my direct supervision and that I am a duly registered professional engineer under the laws of the State of South Dakota.

3/4/2025

Jacob T. Morris | S.D. No. 15287 | Date

ENGINEER/SURVEYOR:

JACOB MORRIS, P.E.
DGR ENGINEERING
1300 S HIGHLINE AVENUE
SIOUX FALLS, SD 57110
EMAIL ADDRESS: jacob.morris@dgr.com
PHONE NUMBER: (605) 339-4157

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July 16, 2025

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	2	65

FILE: 672021 - Estimate of Quantities & Environmental Commitments.doc
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REVISION DATE: 2024-03-04

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0010	Clear and Grub Stump	1	Each
100E0020	Clear and Grub Tree	5	Each
100E0100	Clearing	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	748	Ft
110E0420	Remove Drop Inlet Frame and Grate Assembly	1	Each
110E1010	Remove Asphalt Concrete Pavement	440.0	SqYd
110E1100	Remove Concrete Pavement	107.0	SqYd
110E1130	Remove Concrete Driveway Pavement	354.0	SqYd
110E1140	Remove Concrete Sidewalk	828.0	SqYd
110E7150	Remove Sign for Reset	10	Each
110E7700	Remove Drop Inlet Frame and Grate Assembly for Reset	1	Each
120E0010	Unclassified Excavation	1,070	CuYd
120E6300	Water for Vegetation	70.0	MGal
230E0010	Placing Topsoil	220	CuYd
250E0020	Incidental Work, Grading	Lump Sum	LS
260E1010	Base Course	480.0	Ton
260E2010	Gravel Cushion	480.0	Ton
260E3010	Gravel Surfacing	7.0	Ton
320E1200	Asphalt Concrete Composite	130.0	Ton
380E3020	6" PCC Driveway Pavement	348.0	SqYd
380E4010	6" PCC Fillet Section	114.0	SqYd
451E0522	12" PVC Pipe	12	Ft
451E6075	Adjust Curb Stop Box	3	Each
451E6080	Adjust Water Valve Box	1	Each
462E0100	Class M6 Concrete	0.6	CuYd
480E0100	Reinforcing Steel	16	Lb
632E1320	2.0"x2.0" Perforated Tube Post	119.0	Ft
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	20.0	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	47.8	SqFt
632E3500	Reset Sign	10	Each
633E1130	Epoxy Pavement Marking Paint, 24" White	336	Ft
633E5115	Grooving for Durable Pavement Marking, 24"	336	Ft
634E0110	Traffic Control Signs	213.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	6	Each
650E2100	Special Concrete Curb and Gutter	597	Ft
650E6260	6" Concrete Valley Gutter	76.0	SqYd
651E0040	4" Concrete Sidewalk	573	SqFt
651E0050	5" Concrete Sidewalk	16,257	SqFt
651E0060	6" Concrete Sidewalk	1,097	SqFt
651E7000	Type 1 Detectable Warnings	330	SqFt
670E1200	Type B Frame and Grate	1	Each
670E5202	Special Frame and Grate	1	Each
670E7000	Reset Drop Inlet Frame and Grate Assembly	1	Each
730E0206	Type D Permanent Seed Mixture	70	Lb
731E0100	Fertilizing	69	Lb
732E0200	Fiber Mulching	0.4	Ton
734E0855	Interim Sediment Control at Inlet	5	Each
734E5010	Sweeping	20	Hour
900E0010	Refurbish Single Mailbox	1	Each
900E0012	Refurbish Double Mailbox	1	Each

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 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 (≥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>

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 15287
JACOB T. MORRIS
SOUTH DAKOTA
3/4/2025

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
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COMMITMENT D: WATER QUALITY STANDARDS

COMMITMENT D2: SURFACE WATER DISCHARGE

The DANR General Permit for Temporary Discharge is required for temporary dewatering and discharges to waters of the state. The effluent limit for total suspended solids will be 90 mg/L 30-day average. The effluent limit applies to discharges to all waters of the state except discharges to waters classified as cold water permanent fish life propagation waters according to the ARSD 74:51:01:45. For discharges to waters of the state classified as cold water permanent fish life propagation waters, the effluent limit for total suspended solids will be 53 mg/L daily maximum.

The permittee has the option of completing effluent testing or implementing a pollution prevention plan for compliance with this permit. If the permittee develops a pollution prevention plan instead of total suspended solids sampling, the plan must be developed and implemented prior to discontinuing total suspended solids sampling. Refer to Section 4.0 of the permit. If any pollutants are suspected of being discharged, a sample must be taken for those parameters listed in Section 3.4 of the permit.

Action Taken/Required:

If construction dewatering is required and this project is not required to be covered under a General Permit for Stormwater Discharges Associated with Construction Activities, the Contractor will obtain the General Permit for Temporary Discharge Activities from the DANR Surface Water Program, 605-773-3351.

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_TemporaryDischargeNOI2018Fillable.pdf>

If construction dewatering is required and this project is currently covered under a General Permit for Stormwater Discharges Associated with Construction Activities, the contractor will need to submit the dewatering information to the SDDANR using the following form:

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_AddTempInfoFillable.pdf>

The Contractor will provide a copy of the approved permit or the submitted dewatering information to the Project Engineer prior to proceeding with any dewatering activities. The approved permit or submitted dewatering information must be kept on-site and as part of the project records.

Effluent monitoring, as a result of dewatering activities, will be summarized for each month and recorded on a separate Discharge Monitoring Report (DMR) and submitted to DANR monthly. Additional information can be found at:

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/swdpermitting/Ereporting.aspx>

COMMITMENT E: STORM WATER

Construction activities constitute 1 or more acres of earth disturbance and/or work in a waterway.

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.

The DANR General Permit for Stormwater Discharges Associated with Construction Activities is required for construction activity disturbing one or more acres of earth and work in a waterway. The SDDOT is the owner of this permit and will submit the NOI to DANR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DANR letter of approval is received.

The Contractor must adhere to the "Special Provision Regarding Storm Water Discharges to Waters of the State."

The Contractor will complete the DANR Contractor Certification Form prior to the pre-construction meeting. The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the permit for this project. Work may not begin on this project until this form is signed and submitted to DANR.

The form can be found at:
<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_CGPAppendixCCA2018Fillable.pdf >

The Contractor is advised that permit coverage may also be required for off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

Storm Water Pollution Prevention Plan

The Storm Water Pollution Prevention Plan (SWPPP) will be developed prior to the submittal of the NOI and will be implemented for all construction activities for compliance with the permit. The SWPPP must be kept on-site and updated as site conditions change. Erosion control measures and best management practices will be implemented in accordance with the SWPPP.

The DOT 298 Form will be used for site inspections and to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents and retained for a minimum of three years.

The inspection will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage materials, structural control measures, and locations where vehicles enter or exit the site. These areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP will be observed to ensure that they are operating correctly, and sediment is not tracked off the site.
Information on storm water permits and SWPPPs are available on the following websites:

SDDOT: < https://dot.sd.gov/doing-business/environmental/stormwater >

DANR:<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/default.aspx>

EPA: < https://www.epa.gov/npdes >

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.

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 15287
JACOB T. MORRIS
SOUTH DAKOTA
2/3/2025

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

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COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans 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.

SHPO/THPO review does not relieve the Contractor of the responsibility/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.

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
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JACOB T.
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SOUTH DAKOTA
2/3/2025

GENERAL NOTES AND TABLES

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GENERAL

A staging site will be acquired by the Contractor and will be the Contractor's responsibility.

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 City's intent for sequencing of the work.

PRIVATE SPRINKLER SYSTEM

Private sprinkler systems may be located within the construction limits. The City will notify all property owners about the expected construction and the procedures for preparing their systems for construction. If found, the Contractor will notify the Engineer and take reasonable measures to minimize any damage to the system.

The Contractor will notify and coordinate with the property owner and sprinkler Contractor when the sprinkler system can be restored. This includes, but is not limited to, the Contractor notifying the property owner prior to sidewalk installation so sleeves can be placed at locations determined by the property owner. The system should be restored before seed or sod placement and the Contractor must allow one week for the homeowner's sprinkler Contractor to make final repairs and adjustments. No separate payment will be made for work related to sprinkler system coordination.

GRADE STAKES, BENCHMARKS, AND MONUMENTS

All stakes, stones, and monuments now in place and marking lines and corners of boundaries which are likely to be affected by the work herein provided for will be carefully preserved by the Contractor. In no case will any excavation be made within five feet (5') of any such stake, stone or monument until they have been properly witnessed or otherwise cared for by the Engineer.

All lines, grade stakes, and benchmarks set by the Engineer in connection with the work herein provided for will be carefully preserved by the Contractor and will not be disturbed nor moved from the exact position and elevation as set by the Engineer. No excavated material will be thrown over or against said stakes and, except where necessary to remove the stakes as the work progresses, all stakes will be carefully preserved in the original position and elevation until the work has passed final inspection and been accepted. Stakes, which must be removed as the work progresses will be so removed only upon the order of the Engineer.

GENERAL TRAFFIC CONTROL

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.

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

The Contractor will provide temporary access routes for residences and businesses located in the construction area unless otherwise noted in the plans. Temporary routes and drives will be considered incidental to all items of the project and therefore no separate measurement and payment will be made.

All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

At no time will a vertical drop-off of greater than 3 inches be left overnight adjacent to the traveled way. The Contractor will utilize embankment material to ensure a 3-inch vertical drop-off is not exceeded. The slope of the embankment material will not be steeper than a 4:1 within 30 feet of the traveled way.

PEDESTRIAN TRAFFIC

There are presently no existing through sidewalks on this project to maintain pedestrian traffic during construction activities.

The Contractor must protect and restrict all pedestrians from work areas. Safety fence must be installed around all work areas overnight or as needed at other locations as designated by the Engineer. Payment for all work and associated materials will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

CLEAR AND GRUB TREE:

The unit price payment for "Clear and Grub Tree" will be full compensation for all removal and disposal of trees. The Engineer will establish right-of-way lines and construction lines prior to the start of clearing and grubbing operations.

Some trees may require the Contractor to have the tree topped by a licensed arborist, prior to clearing and grubbing the tree, due to the close proximity of physical features to remain. All costs associated with this work is considered incidental to the contract unit price for "Clear and Grub Tree".

Some trees to be removed are located near driveway pavements, fences or other items not being removed with this project. The Contractor must cut these trees level with the ground and grind the stump 8" below ground line. All costs associated with this work is considered incidental to the contract unit price for "Clear and Grub Tree". Removal of trees are identified on the H sheets. All smaller trees and shrubs (less than six (6) inches in diameter) will be removed and paid under the bid item "Clearing".

Tree trimming, removal, and stump grinding must be performed by a licensed arborist.

Ash wood cannot be transported off the project site between Memorial Day and Labor Day due to the presence of the Emerald Ash Borer in the area. If ash trees to be removed with the project cannot be removed from the project site prior to Memorial Day or cannot wait to be removed from the project site until after Labor Day, the Contractor may still cut down the ash tree(s), but the ash wood must remain on the project site until after Labor Day. All costs associated with the transporting and disposal of ash wood, and/or storing ash wood on the project site until it can be safely transported to a disposal facility, will be incidental to the contract unit price for "Clear and Grub Tree".

TABLE OF CLEAR AND GRUB TREE

Station	L/R	Quantity (Ea)
21+21	5'R	1
23+90	6'R	1
26+51	6'R	1
45+80	5'R	1
46+11	5'R	1
	Total:	5

TABLE OF CLEAR AND GRUB STUMP

Station	L/R	Quantity (Ea)
24+16	5'R	1
	Total:	1

REMOVE SIGN FOR RESET AND RESET SIGN

Signs that are scheduled for reset will be dismantled and reassembled to the extent needed by the Contractor to properly reset the sign. Signs will be handled with care so that the existing signs, posts, and bases are not damaged during the relocation process. The Contractor will replace and pay for any reset signs damaged in their care. The Contractor will remove and dispose of any existing posts for all reset signs that require use of new posts as shown in the Table of Permanent Signing.

All costs for removing, dismantling, and disposing of any existing posts will be incidental to the contract unit price per each for "Remove Sign for Reset". All costs for resetting the existing signs will be incidental to the contract unit price per each for "Reset Sign". All quantities for Remove Sign for Reset and Reset Sign will be per assembly at the contract unit price per each.

TABLE OF REMOVE SIGN FOR RESET

Station	L/R	Sign Type	Quantity (Ea)
13+50	4'R	R2-1, S4-3P	1
13+67	7'L	R1-1	1
21+05	6'L	R5-2	1
21+05	3'R	WASHINGTON AVE., MINNESOTA ST.	1
21+13	7'R	R1-1	1
22+73	4'R	R2-1, S4-2P, S4-3P	1
24+22	6'R	S1-1, W16-9P	1
28+63	4'R	R1-1	1
31+53	5'R	R2-1	1
42+75	4'R	R2-1	1
		Total:	10

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
15287
JACOB T.
MORRIS
SOUTH DAKOTA
2/3/2025

GENERAL NOTES AND TABLES

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TABLE OF RESET SIGN

Station	L/R	Sign Type	Quantity (Ea)
13+41	1'L	R2-1, S4-3P	1
13+64	17'L	R1-1	1
21+03	7'L	WASHINGTON AVE., MINNESOTA ST.	1
21+06	16'L	R5-2	1
21+21	2'L	R1-1	1
22+66	7'R	R2-1, S4-2P, S4-3P	1
24+16	7'R	S1-1, W16-9P	1
28+70	6'R	R1-1	1
31+31	7'R	R2-1	1
42+67	7'R	R2-1	1
		Total:	10

REFURBISH MAILBOXES

The Contractor will reset the existing mailboxes on new posts with the necessary support hardware for single and double mailbox assemblies. The local Postmaster will determine the recommended mounting height of the mailboxes throughout the project. The Contractor will coordinate with the Engineer on the proper postal representative to contact.

All costs for removing existing mailboxes, providing temporary mailboxes, and resetting mailboxes with new posts and necessary support hardware will be incidental to the contract unit price per each for "Refurbish Single Mailbox" and "Refurbish Double Mailbox".

TABLE OF REFURBISH MAILBOX

Station	L/R	Single (Ea)	Double (Ea)
27+56	6'R	1	
47+19	8'R		1
	Total:	1	1

INCIDENTAL WORK, GRADING

The contract lump sum price for "Incidental Work, Grading" will be full compensation for all work listed below. The following is a list of major items of Incidental Work:

A. Driveway and road access is to be maintained by the Contractor for property owners throughout the project along with access for United States Postal Carriers to mailboxes located along the project by utilizing the existing base course at the surface and/or under the existing paved surfaces. Placement and ramping of gravel will be done so that businesses, property owners and postal carriers have access to driveways and mailboxes when the Contractor is not working in the area, during evenings, and on weekends. When authorized by the Engineer, additional gravel used to maintain access through to these locations will be paid for at the contract unit price per ton for "Base Course".
B. Site Cleaning: The Contractor will execute a thorough cleaning prior to substantial completion review by the Engineer. Prior to Final Completion, Contractor will remove and dispose from the project site all construction waste, unused materials, excess soil, and other debris resulting from construction activities. Roadway and sidewalk sweeping may be required daily to keep the project site clean.
C. Salvage materials from landscaped areas within the project limits (rocks, shrubs, etc.) to use in restoration of those areas to preconstruction conditions.
D. The removal and disposal of unmarked or abandoned conduit or pipe required in order to place the proposed utilities and sidewalk at the proper horizontal and vertical locations.
E. Material and labor costs for plugging ends of utilities that are abandoned in place with concrete, grout, caps, or Engineer approved method.
F. Work required for locating, exposing, supporting, protecting, and working around existing utilities (both public and private) when installing the proposed utilities and sidewalk. This includes any additional work for horizontal and/or vertical adjustments for the proposed installations as needed.

PAVEMENT REMOVAL, DISPOSAL, AND SAWCUTTING

The Contractor will exercise particular care to ensure that the adjacent surface is left intact and undamaged when removing the sawed-out portion. Additional sawing required to form neat edges prior to paving will be incidental to the respective removal contract item.

TABLE OF CONCRETE PAVEMENT REMOVAL

Station	to	Station	Quantity (SqYd)
13+60		13+75	9
20+44		20+59	7
28+48		28+58	48
47+88		47+97	43
		Total:	107

TABLE OF CONCRETE DRIVEWAY PAVEMENT REMOVAL

Station	to	Station	Quantity (SqYd)
21+98		22+15	27
22+82		22+97	21
24+25		24+43	32
25+94		26+41	80
26+93		27+39	66
29+49		29+90	75
43+67		43+91	27
47+00		47+19	26
		Total:	354

TABLE OF CONCRETE SIDEWALK REMOVAL

Station	to	Station	Quantity (SqYd)
10+63		13+73	283
20+36		20+57	21
21+00		24+56	198
24+98		27+25	114
27+50		27+54	7
28+51		29+21	43
43+57		44+72	61
45+22		47+19	101
		Total:	828

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2/3/2025

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TABLE OF CONCRETE CURB AND/OR GUTTER REMOVAL

Station	to	Station	Quantity (FT)
11+47		11+63	15
13+54		13+60	6
13+72		13+75	8
20+42		20+59	6
21+00		21+19	39
21+92		22+22	30
22+76		23+03	27
24+18		24+58	50
24+95		25+16	31
25+90		26+46	56
26+86		27+44	58
27+90		28+10	34
28+49		28+71	33
29+42		29+96	53
30+11		30+45	33
31+43		32+21	78
32+61		32+87	26
33+15		33+21	6
43+63		43+95	31
44+60		44+80	28
45+20		45+40	27
46+94		47+20	25
47+37		47+44	12
47+73		47+95	36
	Total:		748

TABLE OF ASPHALT CONCRETE PAVEMENT REMOVAL

Station	to	Station	Quantity (SqYd)
11+47		11+63	4
11+60		12+88	50
13+54		13+77	13
20+42		20+62	11
20+96		21+19	21
21+92		22+22	10
22+76		23+03	8
24+18		24+61	21
24+93		25+16	12
25+90		26+46	16
26+86		27+44	17
27+90		28+13	13
28+43		28+51	41
28+58		28+71	20
29+42		29+96	15
30+11		30+45	10
31+43		32+11	19
43+63		43+95	10
44+60		44+81	12
45+18		45+40	12
46+94		47+44	11
47+73		47+88	42
47+93		48+03	52
		Total:	440

GRADING OPERATIONS

Compaction will be according to the Specified Density Method.

Water for compaction of subgrade and embankments will be provided by the Contractor and used to maintain soil at or near optimum moisture content to obtain required density. Compaction of subgrade and embankments will be governed by the specified density method and must be no less than 95% of Standard proctor density. No separate payment will be made for water used for compaction of subgrade and embankments.

Water for Embankment is estimated at the rate of 10 gallons of water per cubic yard of Embankment minus Waste. The estimated quantity of Water for Embankment is 6.4 MGal. No separate payment will be made for the Water for Embankment and all costs associated will be incidental to the contract until price per cubic yard of “Unclassified Excavation” and “Contractor Furnished Borrow Excavation”.

Temporary fence and/or permanent fence will be placed ahead of the grading operation unless otherwise directed by the Engineer.

PLACING TOPSOIL

Prior to starting construction operations, a sufficient volume of topsoil free from gravel, rocks, and other foreign material and suitable for growing grass, must be removed from the construction limits to cover the disturbed areas and must conform to Section 230.3 of the Specifications.

Topsoil will be placed over all disturbed areas to a depth of 6 inches unless otherwise specified by the Engineer. The placement of the topsoil must be completed within 5 days of final grading. Soil stabilization will be in accordance with the SWPPP.

The size and type of equipment utilized on this portion of the work will be commensurate with the work to be accomplished.

Care will be taken in working around existing utilities, trees, shrubs, and private improvements so to avoid damage.

All costs to place the topsoil will be incidental to the contract unit price per cubic yard for “Placing Topsoil”.

SHRINKAGE FACTOR: Embankment +30%

UNCLASSIFIED EXCAVATION

Excavate the existing subgrade to provide for the required depth of base course and asphalt or concrete surfacing. Earthwork will be performed as shown on appropriate cross sections.

Due to the difficulty in making field measurements on this project and to expedite final payment, the computed quantity of Unclassified Excavation will be the basis of payment for this item. No field measurements will be made for payments except when changes from the plan shown construction limits are ordered by the engineer.

The excess soil resulting from earthwork activities, if any, will become the property of the contractor who will be responsible for its removal from the site.

Unclassified Excavation will include all work associated with subgrade preparation including scarification and recompaction of 8 inches of material below subgrade elevation and achieving subgrade elevation.

PROCEDURES FOR DETERMINING UNCLASSIFIED EXCAVATION QUANTITY

The estimated quantity of Unclassified Excavation is shown in the Table of Unclassified Excavation. The estimated quantity of stripped Topsoil has been added to the Unclassified Excavation quantity. By doing this, the quantity of Topsoil from the cuts will be paid for twice as Unclassified Excavation. This will be full compensation for Excavation, which includes necessary undercutting to provide space for placement of topsoil.

Plans quantity will be the basis of payment for Unclassified Excavation unless Contractor Furnished Topsoil is necessary, as determined by the Engineer. If less topsoil is salvaged than originally anticipated, then the Unclassified Excavation quantity will be adjusted accordingly.

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TABLE OF UNCLASSIFIED EXCAVATION

Excavation	700 CY
Stripping Topsoil	370 CY
Total Unclassified Excavation	1,070 CY
Embankment	50 CY
Shrink (30%)	15 CY
Total Embankment	65 CuYd
Excavation	700 CY
Embankment	65 CY
Waste	635 CY

UTILITIES

Drawing indicates general utility locations only. Neither correctness or completeness of locations are guaranteed.

The Contractor will contact the involved utility companies through South Dakota One Call (1-800-781-7474) prior to starting work. It will be the responsibility of the Contractor to coordinate work with the utility owners to avoid damage to existing facilities.

The Contractor will be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location.

The Contractor will contact each utility owner and confirm the status of all existing and new utility facilities. The utility contact information is provided in the following table.

Utility	Utility Company	Contact Person	Phone
Water	City of Salem	Dustin Weber	(605) 421-0686
Sewer	City of Salem	Dustin Weber	(605) 421-0686
Gas	MidAmerican Energy	Ryan Hendriks	(605) 373-6037
Electrical	Xcel Energy	Robbi Buller	(605) 251-8691
Internet, Phone, Cable TV	Triotel Communications	Justin Norris	(605) 425-2238

Private Utilities–SD One Call – 800-781-7474

Information on Section-Township-Range shown on location map on the Title Sheet.

1. TrioTel Communications
   - Contractor will work around these utilities when possible; however, TrioTel will be moving and/or relocating underground utilities (telephone and fiber) and pedestals when in conflict with the proposed work in this project if they cannot be worked around.

2. Xcel Energy
   - Contractor will work around these utilities when possible; however, Xcel Energy will be moving and/or relocating underground and overhead utilities and structures when in conflict with the proposed work.

CONCRETE PIPE CONNECTIONS

Pipe connections to existing pipes, manholes, junction boxes, and drop inlets will be done by breaking a hole into the existing structure and inserting the pipe. A concrete collar will then be poured around the pipe in the area of the connection.

When it is not possible to use a normal pipe joint (male-female ends), connections to existing pipe will be made by placing a 2' wide by 6" thick M6 concrete collar around the outside of the connection. The concrete collar will be reinforced with 6x6 W2.9 x W2.9 wire mesh.

All costs for constructing the concrete collars including materials and labor will be incidental to the contract unit price per foot for the corresponding pipe contract item.

STORM SEWER

Reinforced concrete pipe may be bell and spigot. The pipe sections will be adjoined such that the ends are fully entered and the inner surfaces are reasonably flush and even.

Lift holes in the reinforced concrete pipe will be plugged with grout.

Watertight joints are required for reinforced concrete pipe, drop inlets, manholes, and junction boxes where storm sewers run parallel to and within 10 feet horizontally from existing or proposed water mains.

Watertight joints are required where reinforced concrete pipes, drop inlets, manholes, or junction boxes cross water mains and are separated a distance of 18 inches or less, above or below, the water main.

If watertight joints are required then the watertight joints will extend for a distance of 10 feet beyond the water main. This measurement will be from the sealed concrete joint to the outer most surface of the water main.

Watertight joint seals will conform to the following requirements:

1. Reinforced Concrete Pipe (Circular): Gasketed pipe will conform to the requirements of ASTM C443 and the gasket will be in conformance with Section 990 of the Specifications. Non-gasketed concrete pipe will be sealed with a mastic joint seal conforming to the requirements of ASTM C990 and encased with a minimum 2-foot wide by 6-inch thick M6 concrete collar reinforced with 6x6 W2.9 x W2.9 wire mesh.

2. Reinforced Concrete Pipe (Arch): Gasketed pipe will conform to the requirements of ASTM C443 and the gasket will be in conformance with Section 990 of the Specifications. Non-gasketed concrete pipe joints will be sealed with a hydrophilic flexible water stop seal and wrapped with a 1-foot wide strip of fabric above the cradle. The fabric will conform to the requirements of Section 831 of the Specifications for Type A Drainage Fabric. The hydrophilic flexible water stop will be from the list below.

3. Drop Inlets, Manholes, and Junction Boxes: Joints will be sealed with one of the following methods:

   A. A flexible strip seal placed in the joints conforming to the requirements of ASTM C990 and the perimeter encased with a minimum 2-foot wide by 6-inch thick M6 concrete collar reinforced with 6x6 W2.9 x W2.9 wire mesh.

   B. A hydrophilic flexible water stop seal placed in the joints and a 1-foot wide strip of fabric wrapped around the perimeter of the pipe. The fabric will conform to the requirements of Section 831 of the Specifications for Type A Drainage Fabric. The hydrophilic flexible water stop will be from the list below.

   C. A self-adhesive external joint seal wrap. The seal wrap will be from the list below.

Approved List of Self-adhesive Joint Wrap:

Product	Manufacturer
Mar Mac Seal Wrap	Mar Mac Construction Products McBee, SC 843-335-5909 www.marmac.com
ConWrap	CS-212 Concrete Sealants, Inc. Tipp City, OH 800-332-7325 http://www.conseal.com

Approved List of Hydrophilic Flexible Water Stop Seal:

Product	Manufacturer
Waterstop RX	Cetco Hoffman Estates, IL 800-527-9948 www.cetco.com
Conseal CS-231	Concrete Sealants, Inc. Tipp City, OH 800-332-7325 http://www.conseal.com

Gaskets and seals (mastic, waterstop, and seal wraps) will be installed in accordance with the Manufacturer's recommendations.

The cost for furnishing and installing all gaskets, mastic joint seal, water stop seal, seal wrap, concrete collars, and for plugging the lift holes will be incidental to the contract unit price per foot for the corresponding pipe contract item.

REINFORCING STEEL

Some field bending and cutting of the reinforcing steel may be required. The minimum lap for spliced bars will be 24 bar diameters. Payment will be based on contract unit price per pound for "Reinforcing Steel" and with no extra payment for field bending and cutting.

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TABLE OF CATCH BASINS AND QUANTITIES

Station	L/R	Size L'xW'xH'	Concrete (CuYd)	Reinforcing Steel (Lb)	Special Frame and Grate
31+40	2'L	2'x2'x3'	0.6	16	Neenah 3402-E
		Total:	0.6	16	1

ADJUST WATER VALVE BOX

The Contractor will adjust water valve boxes to the extent necessary on this project. The top of the water valve box must be set according to the detail in the plans. Adjustment of valve box may consist of shortening or lengthening the box. All valve boxes that are cracked or broken due to the carelessness of the Contractor must be replaced with a new valve box approved by the Engineer at the Contractor's expense. All costs involved in adjusting the water valve boxes will be incidental to the contract unit price per each for "Adjust Water Valve Box". The Engineer may direct adjustment of valve boxes that were not included in these plans. Payment for adjusting valve boxes that were not included in the plans will be at the contract unit price per each for "Adjust Water Valve Box".

TABLE FOR ADJUSTMENT OF WATER VALVES

Station	L/R	Quantity (Each)
28+12	5'R	1
	Total:	1

TABLE FOR ADJUSTMENT CURB STOP BOX

Station	L/R	Quantity (Each)
22+13	3'R	1
26+75	2'R	1
42+63	4'R	1
	Total:	3

SCARIFY AND RECOMPACT SUBGRADE

The depth of scarification of the subgrade will be no less than 6 inches. The subgrade soil will be loosened and manipulated in such a way as to allow the subgrade material to achieve optimum moisture content. After scarification, the Contractor will allow sufficient time for the subgrade material to achieve optimum moisture content prior to recompacting the subgrade. Allowable variance from optimum moisture content will be minus 1% to minus 4%. The subgrade will be recompacted to no less than 95% of maximum dry density and will be firm and unyielding to the satisfaction of the Engineer during a proof roll. After recompaction of the subgrade, the Contractor will shape the subgrade to the cross slopes and elevations specified in the plans and add or remove material as necessary. This work will be considered incidental to the "Unclassified Excavation" bid item.

BASE COURSE

Base course will be placed to a thickness 6 inches below all asphalt surfacing. Water for compaction of the base course is estimated at the rate of 12 gallons of water per ton of base course. The estimated quantity of water is 11 MGal. No separate payment will be made for the water required to compact the base course and all costs associated will be incidental to the contract until price per ton of "Base Course".

WATER FOR COMPACTION

The cost of water for compaction of the granular material will be incidental to the various other contract items. A minimum of 4% moisture will be required at the time of compaction unless otherwise directed by the Engineer.

Water for compaction of earth embankments will be applied at the rate of 10 gallons per cubic yard of Unclassified Excavation. The cost of the water will be incidental to the contract unit price per cubic yard for "Unclassified Excavation".

ASPHALT CONCRETE COMPOSITE

Placement of asphalt concrete will be by self-propelled pavers. Asphalt concrete composite must conform to the SDDOT Specifications for Class G, Asphalt Concrete. The top lift will conform to Class G-2 for the mineral aggregate specifications. All lower lift(s) must conform to Class G-1 for the mineral aggregate specifications unless otherwise noted or by direction of the Engineer. The surface course must not exceed 2" in thickness when laid and compacted.

A maximum of 20% (by weight) of Recycled Asphalt Pavement (RAP) will be allowed in the asphalt concrete composite mix.

RAP stockpiles containing concrete chunks, grass, dirt, wood, metal, coal tar, or other foreign or environmentally restricted materials will not be used. No other recycled material will be allowed.

The asphalt cement used in the mixture will be Performance Graded AASHTO Designation PG58-28. Certificates of compliance will be required on the performance graded asphalt binder. The ratio of added new asphalt binder to total asphalt binder (including binder from RAP) will be 70 percent or greater.

Application of prime or flush seal is not required following asphalt placement.

TABLE OF ASPHALT CONCRETE COMPOSITE

Station	to	Station	Quantity (Ton)
11+47		11+63	3
13+54		13+77	3
20+42		20+62	3
20+96		21+19	5
21+92		22+22	3
22+76		23+03	3
24+18		24+61	5
24+93		25+16	5
25+90		26+46	5
26+86		27+44	5
27+90		28+13	5
28+43		28+71	25
29+42		29+96	5
30+11		30+45	3
31+43		32+11	6
43+63		43+95	3
44+60		44+81	3
45+18		45+40	3
46+94		47+44	5
47+73		47+88	13
47+95		48+03	19
		Total:	130

MISCELLANEOUS CONCRETE

M6 Concrete used in curb and gutters, fillets and valley gutters will have a fly ash content in the cementitious material of 20% to 25%. Fly ash will be class F or C and must meet the requirement of Section 605 of the Specifications. The Contractor may use fly ash on sidewalks and driveways.

CONCRETE CURING

All concrete will be cured in accordance with section 380.3 M.2, except as modified in this note. All concrete will be cured with a white pigmented emulsion compound when cured using the Impervious Membrane Method.

Apply liquid curing compound in a fine spray to form a continuous, uniform solid white opaque coverage (equal to a white sheet of typing paper) on the horizontal surface and vertical edges of pavement, curbs and back of curbs immediately after surface moisture has disappeared, but no later than 30 minutes after finishing. Concrete edges exposed by the removal of forms will also be cured. Apply the curing compound in 2 equal applications, in opposing directions, to ensure a uniform coverage. With the approval of the Engineer, the timing of cure application may be adjusted due to varying weather conditions and concrete mix properties to ensure acceptable macrotexture is achieved.

CONCRETE SIDEWALK

The concrete sidewalk will be constructed in accordance with Section 651.

Due to the extra depth required, the base course material required, as per the typical sections, will be paid for separately at the contract unit price per ton for Gravel Cushion. The base course will meet the requirement of Section 882. Compaction will be in accordance with Section 260.3 B.

Provide a ½ inch Preformed Expansion Joint Filler when sidewalk is adjacent to other concrete and every 150' along the sidewalk. All expansion joints must be flush with adjacent hard surfacing. If deflections greater than ¼" occur across any joint, the panel must be removed and replaced or joint must be ground flush. This will be at the Owner's discretion and at the Contractor's expense.

Four (4) inches of gravel cushion will be placed beneath the sidewalk.

All hard surfacing, with exception to concrete transition areas, must comply with ADA standards. No cross-slope may exceed 2%. No longitudinal slope may exceed 5% unless shown in the plans.

Payment for furnishing and installing the joint filler will be incidental to the contract unit price per square foot for 4", 5", and 6" Concrete Sidewalk.

5" Concrete Sidewalk (Transition) willll be measured and paid for per unit price per square foot for "5" Concrete Sidewalk". As shown in the plans, a 6' wide ADA compliant walking path must be constructed with a concrete transition area connecting to the top of the existing curb. Concrete transitions may require areas that do not comply with ADA standards. Concrete placement that does not comply with ADA standards and regulations is only permitted in transition areas shown on the plans.

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TABLE OF 4" CONCRETE SIDEWALK

Station	to	Station	Quantity (SqFt)
11+15		11+28	175
11+48		11+61	174
21+59		21+64	50
22+31		22+36	55
23+22		23+29	36
24+03		24+11	20
25+59		25+64	31
27+50		27+55	32
		Total:	573

TABLE OF 5" CONCRETE SIDEWALK

Station	to	Station	Quantity (SqFt)
10+63		13+73	1,908
20+36		20+52	97
21+07		24+45	2,049
25+09		27+98	1,731
28+57		30+00	867
30+00		34+64	2,811
42+18		44+72	1,544
45+26		47+81	1,552
		Total:	12,559

TABLE OF 5" CONCRETE SIDEWALK (TRANSITION)

Station	to	Station	Quantity (SqFt)
10+64		11+48	204
11+62		13+57	445
21+16		21+93	176
22+21		22+77	109
23+02		24+19	240
25+14		25+90	167
26+45		26+87	87
27+43		27+93	103
28+69		29+43	182
29+95		30+13	47
30+44		31+44	301
31+58		32+04	146
32+18		32+61	144
32+86		34+43	539
42+23		43+63	329
43+94		44+62	135
45+37		46+94	247
47+43		47+76	97
		Total:	3,698

TABLE OF 6" CONCRETE SIDEWALK

Station	to	Station	Quantity (SqFt)
13+57		13+73	98
20+44		20+57	95
21+01		21+17	121
24+42		24+56	105
24+98		25+15	128
27+92		28+08	122
28+51		28+69	140
44+62		44+77	92
45+22		45+38	78
47+76		47+93	118
		Total:	1,097

SPECIAL CONCRETE CURB & GUTTER

Weakened plane joints must be constructed at 10 foot intervals. The joints must be constructed to a minimum depth of one inch by scoring with a tool, which will leave the corners rounded and provide free movement of concrete at the joint.

New curb and gutter must be the same size and type as the existing curb and gutter. All cost associated with installing the concrete curb and gutter as specified in the detail must be included in the contract unit price per foot for "Special Concrete Curb and Gutter".

New curb and gutter will be tied to the old curb with 2 – 18 inch tie bars. All epoxy and drilling and other costs involved to install the tie bars are incidental to the contract unit price per foot for "Special Concrete Curb and Gutter".

TABLE OF SPECIAL CONCRETE CURB AND GUTTER

Station	to	Station	Quantity (Ft)
11+47		11+63	15
13+54		13+60	6
13+72		13+75	8
20+42		20+45	2
20+57		20+60	4
20+98		21+01	11
21+13		21+19	6
21+92		22+22	30
22+76		23+03	27
24+18		24+43	24
24+55		24+58	5
24+95		24+98	3
25+10		25+16	5
25+90		26+46	56
26+86		27+44	58
27+90		27+95	5
28+07		28+11	6
28+48		28+51	3
28+63		28+71	8
29+42		29+96	53
30+11		30+45	33
31+43		32+21	78
32+61		32+87	26
33+15		33+21	6
43+63		43+95	31
44+60		44+67	7
44+76		44+79	4
45+20		45+23	3
45+32		45+40	7
46+94		47+44	50
47+73		47+80	7
47+92		47+96	10
		Total:	597

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TYPE 1 DETECTABLE WARNINGS

Detectable warnings must be in compliance with the Americans with Disabilities Act regulations.

The detectable warnings will be installed according to the manufacturer's installation instructions.

A concrete thickness equal to the adjacent concrete sidewalk thickness and 2 inches of granular cushion material will be placed below the Type 1 Detectable Warnings. When concrete is placed below the detectable warnings then the concrete thickness will be transitioned at the rate of 1" per foot to match the adjacent concrete sidewalk thickness.

The detectable warnings will be a brick red color for application in concrete curb ramps. Cast iron plates may be a natural patina (weathered steel).

When Type 1 Detectable Warnings are specified, the Contractor will furnish and install only one of the products listed in the Type 1 Detectable Warnings table.

Type 1 Detectable Warnings

Product	Manufacturer
Detectable Warning Plate Cast Iron Plate	Neenah Foundry Company Neenah, WI 800-558-5075 http://www.neenahfoundry.com/
Detectable Warning Plate Cast Iron Plate	Deeter Foundry Lincoln, NE 800-234-7466 http://www.deeter.com/
Detectable Warning Plate Cast Iron Plate(No Coating)	East Jordan Iron Works, Inc. 301 Spring Street East Jordan, MI 49727 800-626-4653 http://www.ejiw.com

TABLE OF TYPE 1 DETECTABLE WARNINGS

Station	L/R	Quantity (SqFt)
11+55	7'R	10
31+51	8'R	10
32+11	8'R	10
	Total:	30

TABLE OF TYPE 1 DETECTABLE WARNINGS (RADIAL)

Station	L/R	Radius (Ft)	Arc Length (Ft)	Quantity (SqFt)
13+68	4'R	12.5	15.8	29
20+53	4'R	12.5	16.3	30
21+05	4'R	12.5	16.8	31
24+51	4'R	12.5	16.7	31
25+03	4'R	12.5	17.6	32
28+03	4'R	12.5	15.9	29
28+56	4'R	12.5	18.8	35
44+73	4'R	10	14.9	27
45+26	4'R	10	13.7	25
47+88	5'R	12.5	16.9	31
			Total:	300

6" PCC FILLET SECTION

Payment for "6" PCC Fillet Section" will be based on plans quantity. If additions or reductions to the area of PCC fillet sections are ordered by the Engineer, payment will be made in accordance with the contract unit price per square yard for "6" PCC Fillet Section"

TABLE OF 6" PCC FILLET SECTION

Station	to	Station	Quantity (SqYd)
13+60		13+75	12
20+44		20+60	12
20+98		21+14	12
24+42		24+59	12
24+95		25+11	12
27+95		28+11	12
28+48		28+64	12
44+66		44+79	9
45+20		45+33	9
47+80		47+96	12
		Total:	114

6" PCC DRIVEWAY PAVEMENT

The concrete for the 6" PCC Driveway Pavement will comply with the requirements of the specifications for Class M6 Concrete, unless otherwise specified in the plans. The mix design can meet either Class M6 Concrete specifications or conform to Section 380.

The surface of the 6" PCC Driveway Pavement will have a maximum 10% slope and the tie-ins will match the existing and/or new adjoining PCC Approach Pavement.

Contraction joints in the 6" PCC Driveway Pavement will be 1½ inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint will be at least ¼ the thickness of the approach pavement.
The curing compound will be applied in two applications to ensure the entire surface is white from any viewing angle.

All costs for furnishing and placing the 6" PCC Driveway Pavement and constructing the expansion and contraction joints including labor, equipment, and materials (including the earthen backfill) will be incidental to the contract unit price per square yard for "6" PCC Driveway Pavement".

Payment for any excavation required for placing the 6" PCC Driveway Pavement and granular material will be incidental to the contract unit price of the surfacing material.

All costs for furnishing and placing the granular material will be incidental to the contract unit price per ton for "Base Course".

Field verification of existing joints may change plan removal of driveway concrete to a more logical location. These changes will be discussed and agreed upon by the Engineer prior to removal.

Preformed Expansion Joint Filler will be placed between "6" PCC Driveway Pavement" and any new or existing concrete sidewalks or concrete driveways.

TABLE OF 6" PCC DRIVEWAY PAVEMENT

Station	to	Station	Quantity (SqYd)
21+92		22+22	27
22+76		23+03	22
24+18		24+43	34
25+90		26+46	74
26+86		27+44	54
29+42		29+96	55
30+12		30+45	10
32+61		32+87	10
43+63		43+95	28
46+94		47+44	34
		Total:	348

TABLE OF 6" PCC VALLEY GUTTER

Station	to	Station	Quantity (SqYd)
28+48		28+56	38
47+88		47+96	38
		Total:	76

NEW PERMANENT SIGNING

All signs will be manufactured in accordance with the sheeting manufacturer's recommendations utilizing a matched component system, including inks, electronic cuttable films, and protective overlay films.

All Flat Aluminum Signs, Nonremovable Copy High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type IV. All Flat Aluminum Signs, Nonremovable Copy Super/Very High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type XI.

All costs associated with furnishing and installing the new permanent signs, and with furnishing and installing stiffeners and hardware will be incidental to the contract unit price per square foot for "Flat Aluminum Sign, Nonremovable Copy High Intensity" or "Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity".

GENERAL NOTES AND TABLES

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	12	65

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DIGITALLY PRINTED SIGNS

Digitally printed signs will be allowed on this project. If the Contractor elects to provide digitally printed signs, such signs will adhere to the following specifications.

PROTECTIVE OVERLAY FILM

Permanent traffic signs printed with digital ink systems will be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlaminate will comply with the retroreflective sheeting manufacturer's recommendations to ensure proper adhesion and transparency and will also meet the reflective film durability as identified in Table 1.

Table 1: Retroreflective Film Minimum Durability Requirements

ASTM D4956 Type	Full Sign Replacement Term (years)	Sheeting Replacement Term (years)
I	0	7
III	7	10
IV	7	10
VIII	7	10
IX	7	12
XI	7	12

FABRICATION

Retroreflective sheeting will be applied to a properly cleaned and prepared aluminum sign blank in accordance with the retroreflective sheeting manufacturer's recommendations. Sign legend will be applied using digital print technologies and systems in accordance with the retroreflective sheeting manufacturer's recommendations and the requirements of these plans.

Finished signs will be free of ragged edges and must be supplied clean and free of scratches, grease, oil, lubricants or other contaminants. Minor blemishes (dirt speck, dust, etc.) may settle on the fresh ink surface or become entrapped between the sheeting surface and transparent overlay film due to static charge within the sign shop environment. Any blemish must be minor and not interfere with the communication of the sign message to the motorist. The blemish must not be visible to the naked eye when viewed from 30 feet or greater.

After application of the retroreflective sheeting, sign blanks will be stacked and packaged face to face, back to back, and protected in accordance with the sheeting manufacturer's recommendations. Finished signs will be securely packaged to prevent damage during transit or storage according to the sheeting manufacturer's recommendations.

TRAFFIC SIGN PERFORMANCE WARRANTY PROVISIONS

Based on the ASTM Type of sheeting specified, traffic control signs will be warranted for the duration shown in Table 1. Full product terms and conditions are as established by each sheeting manufacturer and may contain certain limitations based on sheeting and ink colors, and geographic exposure of the sign. A copy of the warranty document with complete details of terms and conditions will be supplied if requested by the Engineer.

CERTIFIED DIGITAL SIGN FABRICATOR

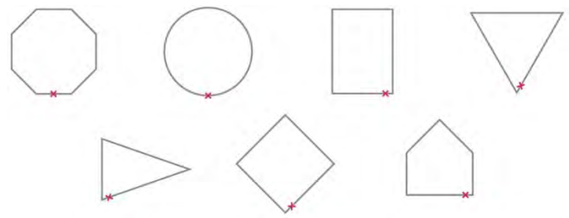
Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

DATE TAGGING SIGNS WITH PERTINENT INFORMATION

All digitally printed signs are required to be date-tagged with the following 2 components:

1. Date tags on the back of signs
   Tags will have the following information and be fabricated with material and printing system that are as durable as the warranted sign.
   - Name of Sign Fabricator
   - Date the sign was fabricated (month and year)
   - Process that was used for sign fabrication (digitally printed)
   - Supplier of sheeting that was used for fabricating the sign.
2. Border date

The month and year (mm/yyyy) of sign fabrication will be printed in the border of the sign in 3/8" sans serif font. Border date will be printed with the same warranted printed system as the sign face. The date should be printed in the locations indicated below.



SQUARE TUBE ANCHOR SLEEVE

The Contractor will furnish and install new 2.5" x 2.5" x 18", 12 Gauge square tube anchor sleeve or equivalent components as approved by the Engineer for 2.0" x 2.0" perforated tube posts. A 2.25" x 2.25" x 4', 12 Gauge perforated tube post will be used as the anchor post for installation with the square tube anchor sleeve.

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GENERAL NOTES AND TABLES

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	P TAPR(51)	13	65

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EPOXY PAVEMENT MARKING PAINT

General: This specification provides for the classification of epoxy pavement marking systems by type. **For this project, Contractor will use Type II.**

Type I: A fast-cure material suitable for line applications but may require coning.

Type II: A slow-cure material suitable for all applications of pavement markings performed under controlled traffic conditions requiring coning.

Certifications: The manufacturer must certify that the components meet the following requirements and must furnish certified test results for each batch. The Contractor must provide the Engineer with a copy of the manufacturer's product data sheet, instructions for surface preparation and material application at least one week before application work begins. Whenever the manufacturer's recommendations are more stringent than these provisions, the manufacturer's recommendations will apply.

Epoxy Material: Furnish a two-component 100 percent solids epoxy material containing no fillers or pigment extenders. Follow the manufacturer's mixing ratio when mixing the two components. Mix the components within plus or minus 2 1/2 percent of the manufacturer's recommended mix ratio. No solvents are to be given off to the environment upon application to a pavement surface. The components, when combined, must not contain or produce volatile solvents. Type II material must be completely free of TMPTA (Tri-Methyol Propane Tri-Acrylate) and other multi-functional monomers. All materials must be free of lead, cadmium, mercury, hexavalent chromium, and other toxic heavy metals as defined by the United States Environmental Protection Agency.

The Resin/Pigment component must meet the following percentages by weight:

Pigment	White	Yellow
TiO2, meeting ASTM D-476, Type II	18–25	12–17
Organic Yellow		7–9
Epoxy Resin	75–82	74–82

Test the epoxy content of the epoxy resin in accordance with ASTM D 1652 and calculate as the Weight per Epoxy Equivalent (WPE) for both white and yellow. Determine the epoxy content on a pigment-free basis. The accepted epoxy content range (WPE) is +50 of the manufacturer's target value.

Ensure the Activator/Curing Agent meets the following requirements:

Test the amine value in accordance with ASTM D 2074. Ensure the total amine value meets the manufacturer's target value with the acceptance range being ±50 of the target value.

a. Color:

White: The color must be within the Chromaticity coordinates listed in Tables 1 and 2 when tested in accordance with ASTM E-1347 or ASTM E-1349

Yellow: The color must be Federal Test Standard Number 595a, Color 13538, or must be within the Chromaticity coordinates listed in Tables 1 and 2 when tested in accordance with ASTM E-1347 or ASTM E-1349.

b. Shelf Life: The individual components must not require mixing prior to use when stored for a period of 12 months or less.

c. Adhesion Capabilities: When the adhesion of the material to Portland cement concrete (the concrete must have a minimum of 300 psi. tensile strength (2,070 kPa)) is tested in accordance with the American Concrete Institute Committee 503 testing procedure, the failure of the system must take place in the concrete. The concrete must be a minimum of 90°F (32°C) when the material is applied, after which the material must be allowed to cure for 72 hours at 73°F ± 5°F (23°C ±2°C).

d. Abrasion Resistance: When the abrasion resistance of the material is tested in accordance with ASTM C 501 with a CS-17 wheel under a load of 1,000 grams for 1,000 cycles, the wear index must be no greater than 82. (The wear index is the weight in milligrams that is abraded from the sample under the test conditions.)

e. Hardness: The Type D durometer hardness of the material must not be less than 75 nor more than 90 when tested in accordance with ASTM D 2240 after the material has cured for 72 hours at 73°F ± 5°F (23°C ±2°C).

f. Tensile Strength: The tensile strength of the material, when tested in accordance with ASTM D 638, must not be less than 6,000 psi. (42 MPa) after 72 hours cure at 73°F ± 5°F (23°C ±2°C).

g. Compressive Strength: The compressive strength of the material, when tested in accordance with ASTM D 695, must not be less than 12,000 psi (83 MPa) after 72 hours cure at 73°F ± 5°F (23°C ±2°C). The rate of compression of these samples must be no more than 1/4 inch (6 mm) per minute.

h. Weather Resistance: Apply the mixed epoxy, both white and yellow, at 15 mils +1 mil thick to 3- x 6-inch (75 mm x 150 mm) aluminum panels. Do not apply beads to the epoxy sample. Expose the cured sample in an Environmental Test Chamber meeting the requirements of ASTM G 53. Conduct the test for 80 hours at 122°F (50°C), alternating four-hour cycles of condensation and ultraviolet light.

TABLE 1

Color	Chromaticity coordinates (corner points)							
	x	Y	x	y	x	y	x	y
White	.355	.355	.305	.305	.285	.325	.335	.375
Yellow	.560	.440	.490	.510	.420	.440	.460	.400

Color	Y values %			
	With Glass Beads		Without Glass Beads	
	Min	Max	Min	Max
White	60	--	70	--
Yellow	30	--	35	--

Table 1: Daytime Color Specification Limits for Pavement Markings Material with CIE 2° Standard Observer and 45/0 (0/45) Geometry and CIE D65 Standard Illuminant

TABLE 2

Color	Chromaticity coordinates (corner points)							
	1		2		3		4	
	x	y	x	y	x	y	x	y
White	.480	.410	.430	.380	.405	.405	.455	.435
Yellow	.575	.425	.508	.415	.473	.453	.510	.490

Table 2: Nighttime Color Specification Limits for Pavement Marking Retroreflective Material With CIE 2° Standard Observer and Observation Angle = 1.05°, Entrance Angle = 88.76° (beta angle 2 and epsilon = 0°) and CIE Standard Illuminant A

TABLE OF EPOXY PAVEMENT MARKING PAINT – 24" WHITE

Station	to	Station	Quantity (Lf)
13+62		14+10	96
20+63		21+14	96
24+60		24+93	48
28+13		28+46	48
44+83		45+16	48
		Total:	336

GROOVING FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

The Contractor will establish a positive means for the removal of the grinding and/or grooving residue. Residue from dry grooving will be vacuumed. Solid residue will be removed from the pavement surfaces before being blown by traffic action or wind. The Contractor will conduct this work to control and minimize airborne dust and similar debris that may become a hazard to motor vehicle operation or nuisance to property owners. Residue from wet grooving will not be permitted to flow across lanes being used by public traffic or into gutter or drainage facilities. Residue, whether in solid or slurry form, will be disposed of in a manner that will prevent it from reaching any waterway in a concentrated state. All costs for removal of grinding and/or grooving residue will be included in the contract unit price per foot for "Grooving for Durable Pavement Marking, 24"" contract item.

Unless otherwise specified in the plans, the Contractor will groove the surface for High Build Waterborne Pavement Marking Paint as specified in these plans and as per the manufacturer's instructions.

The grooving will be completed within the following tolerances:

Description	Specification	Tolerance
Depth of Groove	Marking Thickness[1] + 15 mils	+ 5 mils
Width of Groove	5 to 6 inches	
Length of Skip Lines[2]	10 foot 6 inches	± 3 inch
Tapers at ends of lines	6 to 9 inches	
Between Double Lines	4 inches	± 1/2 inch

1 Marking thickness will include the thickness of marking material and reflective media.

2 Additional length may be required as specified in the plans.

The equipment will be capable of the following:

- Grooving the total width of the groove in one pass or uniform depths with multiple passes.
- Grooving without causing damage to the pavement joints or joint sealant material.
- Provide uniform alignment and depth.
- Moving continuously to permit a mobile traffic work operation.

If damage occurs, including, but not limited to, joints, joint sealant material, and backer rod, the grooving operation will be stopped and modifications will be made to the grooving operation to prevent further damage. The Contractor will be required to use specially prepared circular diamond blade cutting heads to prevent damage at the joints. Damage caused will be repaired or replaced by the Contractor, as directed by the Engineer. No additional payment will be made for the repair work or any reapplication of the pavement marking in the area of the repair.

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NOTE:

THE THICKNESS OF THE CONCRETE TRAIL SHALL BE 6" WHEN THE TRAIL IS INSTALLED IN A DRIVEWAY APPROACH OR CURB RAMP AREA.

TYPICAL SECTIONS

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NOT TO SCALE

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	P TAPR(51)	14	65

FILE: 672021 – Typical Sections.dwg
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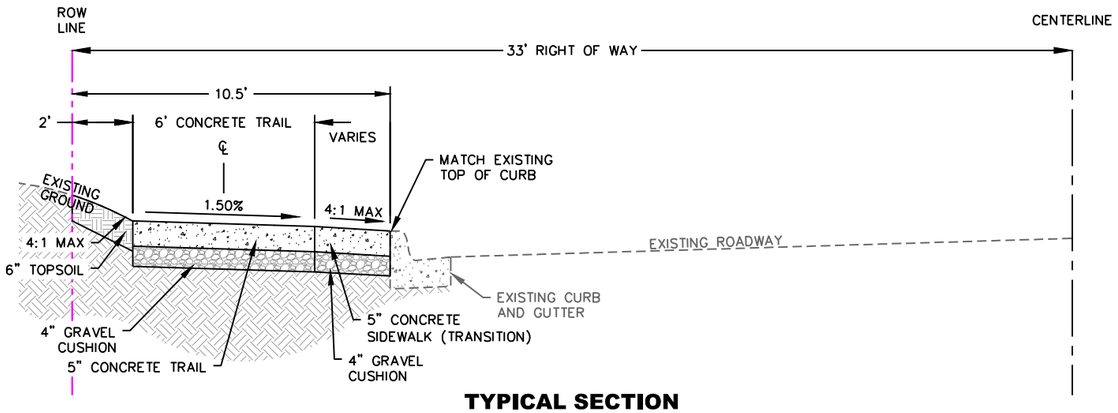
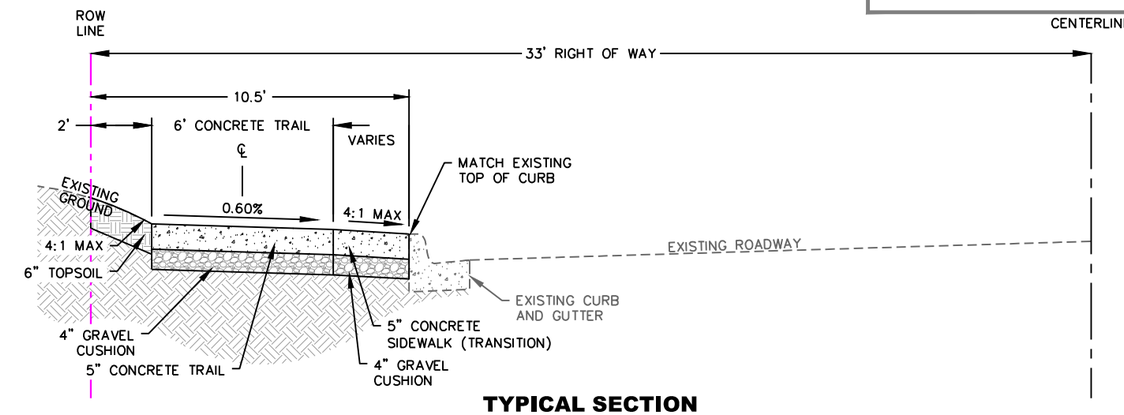


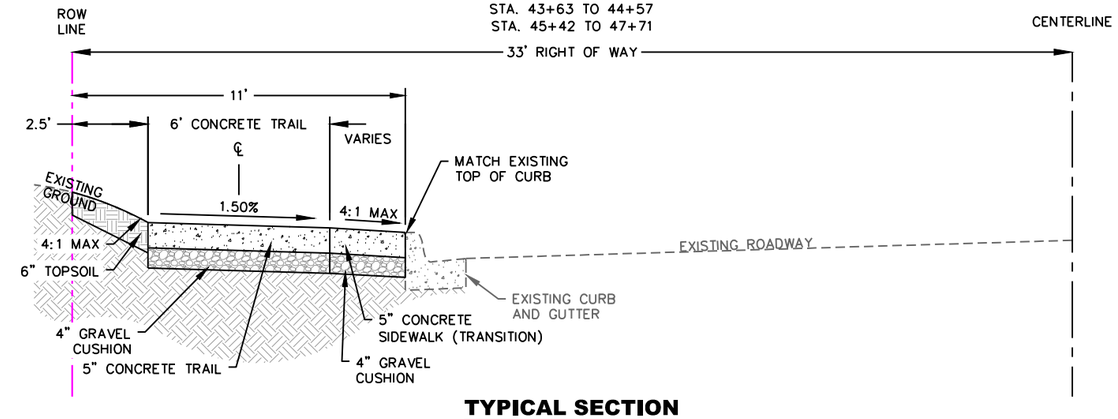
TYPICAL SECTION

STA. 42+28 TO 42+35
STA. 43+63 TO 44+57
STA. 45+42 TO 47+71



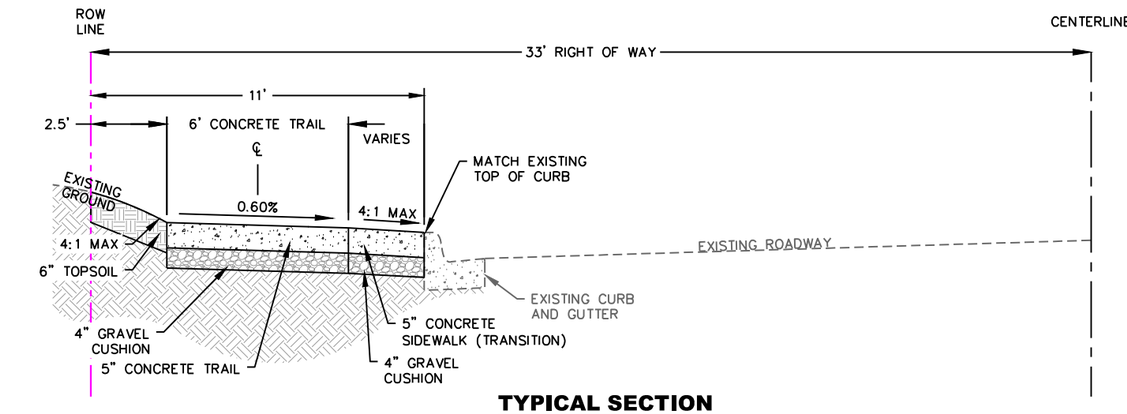
TYPICAL SECTION

STA. 42+50 TO 43+58



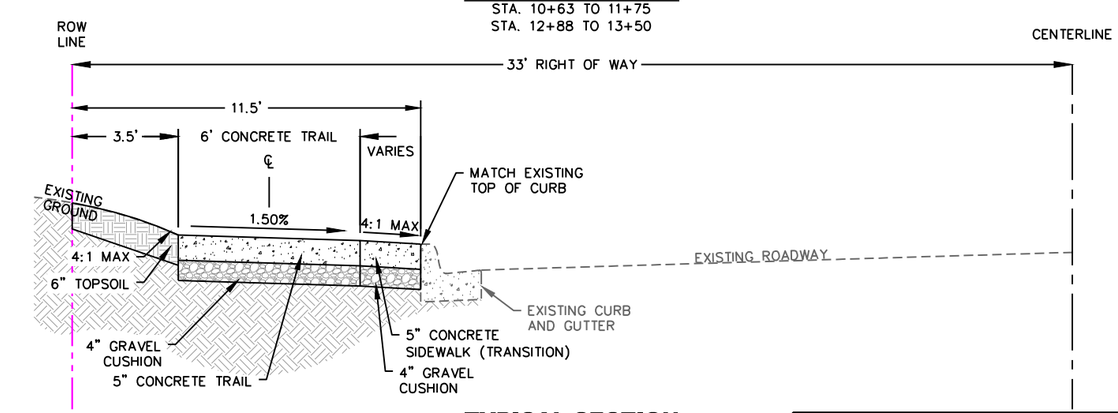
TYPICAL SECTION

STA. 10+63 TO 11+75
STA. 12+88 TO 13+50



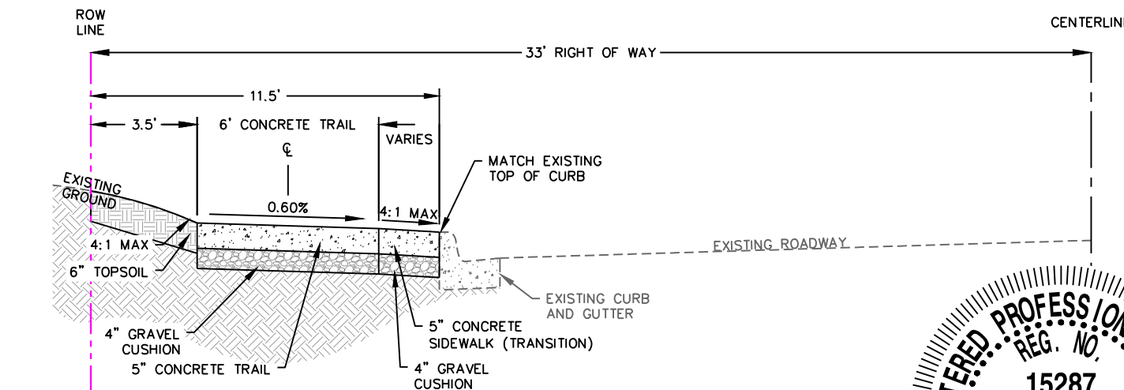
TYPICAL SECTION

STA. 12+00 TO 12+62



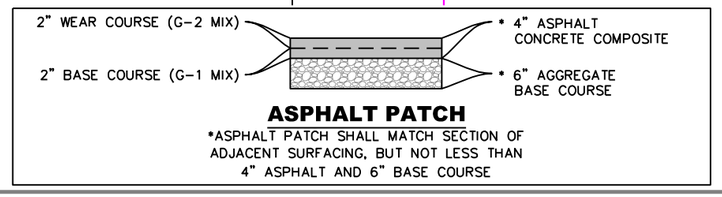
TYPICAL SECTION

STA. 21+26 TO 24+10
STA. 25+24 TO 27+83
STA. 28+78 TO 31+38
STA. 32+00 TO 34+23



TYPICAL SECTION

STA. 31+44 TO 31+90



ASPHALT PATCH

*ASPHALT PATCH SHALL MATCH SECTION OF ADJACENT SURFACING, BUT NOT LESS THAN 4" ASPHALT AND 6" BASE COURSE

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TRAFFIC CONTROL

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	P TAPR(51)	15	65

FILE: 672021 – Traffic Control.dwg
PLOTTING DATE: 2025-02-03 INITIALS: JTM
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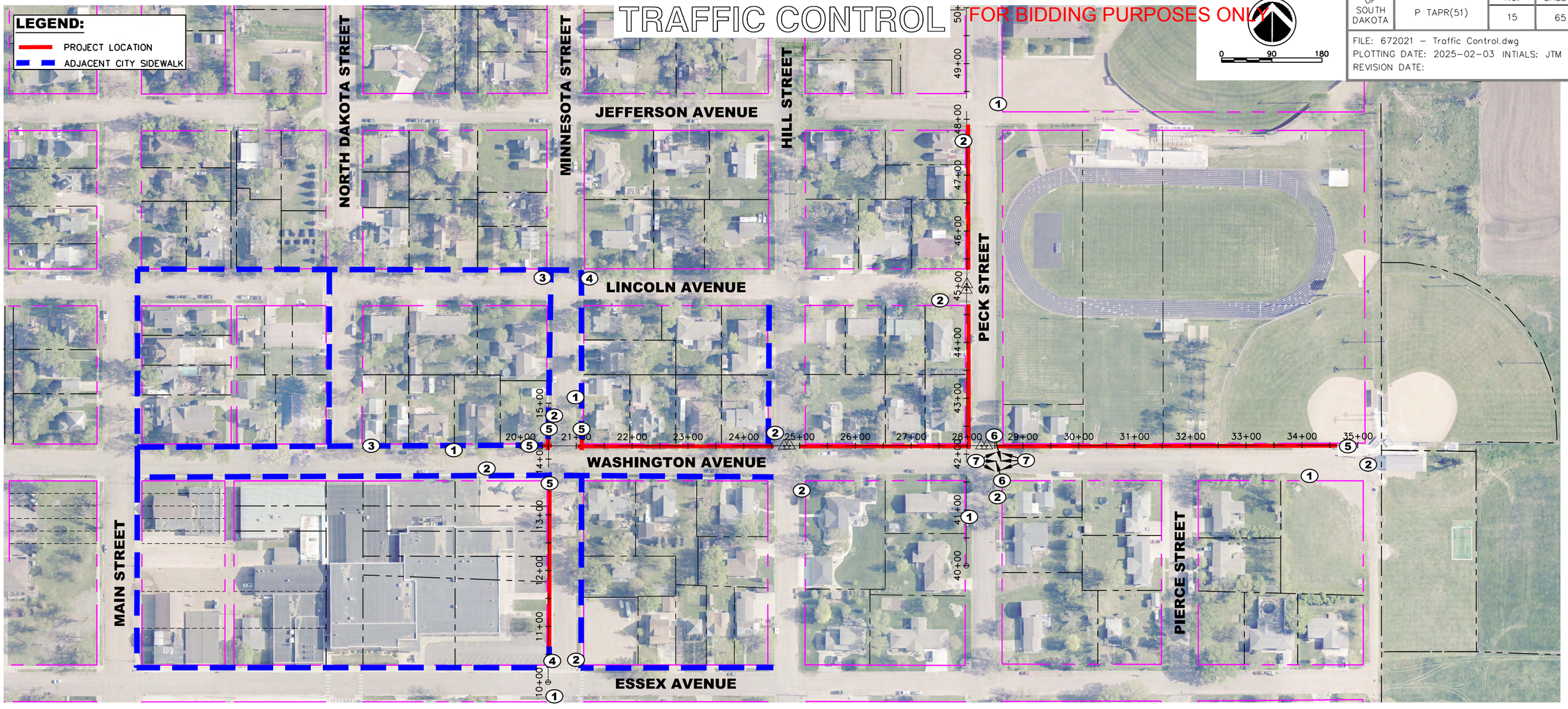


NOTES:

DRIVEWAY, EMERGENCY VEHICLE, AND MAIL DELIVERY ACCESS FOR PROPERTIES ALONG THE PROJECT ARE TO BE MAINTAINED BY THE CONTRACTOR (INCIDENTAL TO PROJECT).

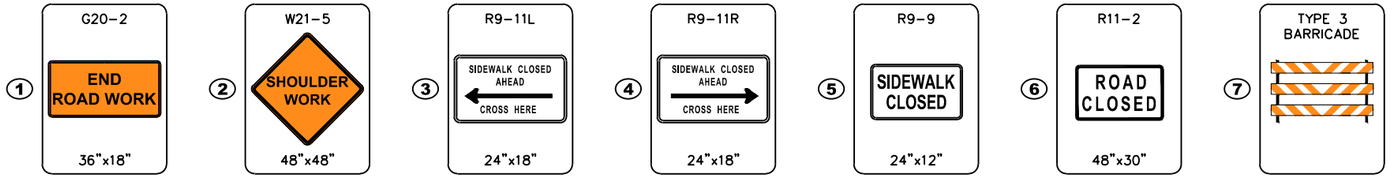
TWO ROAD CLOSED SIGNS (R11-2) AND SIX TYPE 3 BARRICADES ARE INCLUDED IN THE ESTIMATED QUANTITIES FOR ROAD CLOSURE DURING THE CONSTRUCTION OF VALLEY GUTTERS.

THE CONTRACTOR SHALL USE CONES, BARRELS, BARRICADES, ETC. TO CLOSE OFF WORK AREAS AND ENTRANCES AS DIRECTED BY THE ENGINEER (TRAFFIC CONTROL MISC.). AT NO TIME SHALL THE CONTRACTOR BLOCK THE TEMPORARY PEDESTRIAN ACCESS ROUTE.

THE EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE DETERMINED AT THE SITE.

AT NO TIME SHALL THE CONTRACTOR PARK VEHICLES OR EQUIPMENT ON PRIVATE PROPERTY.

AT NO TIME SHALL CONTRACTOR BLOCK ENTRANCES ON THIS PROJECT WITH MATERIAL STOCKPILES.



ITEMIZED LIST FOR TRAFFIC CONTROL					
SIGN CODE	SIGN SIZE	DESCRIPTION	TOTAL SIGNS	SQFT PER SIGN	TOTAL SQFT
G20-2	36" x 18"	END ROAD WORK	6	4.5	27
W21-5	48" x 48"	SHOULDER WORK	9	16	144
R9-11L	24" x 12"	SIDEWALK CLOSED AHEAD, CROSS HERE	2	3	6
R9-11R	24" x 12"	SIDEWALK CLOSED AHEAD, CROSS HERE	2	3	6
R9-9	24" x 12"	SIDEWALK CLOSED	5	2	10
R11-2	48" x 30"	ROAD CLOSED	2	10	20
				TOTAL:	213

SIGN CODE	SIGN SIZE	DESCRIPTION	TOTAL
*****	*****	TYPE III BARRICADE - 8 FT. DOUBLE SIDED	6

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2/3/2025

SWPPP

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	16	65

FILE: 672021 - SWPPP.doc
PLOTTING DATE: 2025-01-2927 INITIALS: JTM
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STORMWATER POLLUTION PREVENTION PLAN CHECKLIST
*(The numbers left of the title headings are **reference numbers** to the GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES (Stormwater Permit))*

5.3 (2): STAFF TRAINING/SWPPP IMPLEMENTATION
To promote stormwater management awareness specific for this project, the Contractor's Erosion Control Supervisor should provide correspondence of how the SWPPP will be implemented. The Contractor's Erosion Control Supervisor is responsible for providing this information at the preconstruction meeting, and subsequently completing an attendance log, which should identify site-specific implementation of the SWPPP and the names of the personnel who attended the preconstruction meeting. Documentation of the preconstruction meeting will be filed with the SWPPP documents.

5.3 (3): DESCRIPTION OF CONSTRUCTION ACTIVITIES

- **5.3 (3a): Project Limits** (See Title Sheet)
- **5.3 (3a): Project Description** (See Title Sheet)
- **5.3 (4): Site Map(s)** (See Title Sheet and Plans)
- **Major Soil Disturbing Activities** (check all that apply)
  - ☐ Clearing and grubbing
  - ☒ Excavation/borrow
  - ☒ Grading and shaping
  - ☒ Filling
  - ☐ Other (describe):
- **5.3 (3b): Total Project Area** Approx. 0.85 acres
- **5.3 (3b): Total Area to be Disturbed** Approx. 0.85 acres
- **5.3 (3c): Maximum Area Disturbed at One Time** Approx. 0.50 acres
- **5.3 (3d): Existing Vegetative Cover (%)** Approx. 50%
- **5.3 (3d): Description of Vegetative Cover** Natural vegetation (grass, trees, shrubs, etc.)
- **5.3 (3e): Soil Properties:** USDA-NRCS Soil Series Classification The site primarily of Clarno series soils. These soils are well drained and are of the Hydrologic Soil Group B. Crossplain series soils are also present on site. These soils are somewhat poorly drianed and are of the Hydrologic Soil Group C/D.
- **5.3 (3f): Name of Receiving Water Body/Bodies** Snake Creek
- **5.3 (3g): Location of Construction Support Activity Areas** N/A

5.3 (3h): ORDER OF CONSTRUCTION ACTIVITIES

- **Special sequencing requirements** (see sheet). N/A

The Contractor will enter the Estimated Start Date.

Description	Estimated Start Date
Install perimeter protection where runoff may exit site.	
Install inlet protection.	
Clearing and grubbing.	
Remove and stockpile topsoil.	
Install perimeter protection around stockpiles.	
Install curb & gutter and concrete & asphalt surfacing.	
Final grading and stabilization of disturbed areas.	
Removal of protection devices.	
Reseed areas disturbed by removal activities.	

5.3 (5): DESCRIPTION AND MAINTENANCE OF CONTROL MEASURES
All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report. Include the technical reasoning for selecting each control. (check all that apply)

Perimeter Controls (See Detail Plan Sheets)

Description	Estimated Start Date
☐ Natural Buffers (within 50 ft of Waters of State)	
☐ Silt Fence	
☐ Erosion Control Wattles	
☐ Temporary Berm / Windrow	
☐ Floating Silt Curtain	
☐ Stabilized Construction Entrances	
☐ Entrance/Exit Equipment Tire Wash	
☐ Other:	

Structural Erosion and Sediment Controls

Description	Estimated Start Date
☐ Silt Fence	
☐ Temporary Berm/Windrow	
☐ Erosion Control Wattles	
☐ Temporary Sediment Barriers	
☐ Erosion Bales	
☐ Temporary Slope Drain	
☐ Turf Reinforcement Mat	
☐ Riprap	
☐ Gabions	
☐ Rock Check Dams	
☐ Sediment Traps/Basins	
☐ Culvert Inlet Protection	
☐ Transition Mats	
☒ Median/Area Drain Inlet Protection	
☒ Curb Inlet Protection	
☐ Interceptor Ditch	
☐ Concrete Washout Facility	
☐ Work Platform	
☐ Temporary Water Barrier	
☐ Temporary Water Crossing	
☐ Permanent Stormwater Ponds	
☐ Permanent Open Vegetated Swales	
☐ Natural Depressions to allow for Infiltration	
☐ Sequential Systems that combine several practices	
☐ Other:	

Dust Controls

Description	Estimated Start Date
☐ Tarps & Wind impervious fabrics	
☐ Watering	
☐ Stockpile location/orientation	
☐ Dust Control Chlorides	
☐ Other	

Dewatering BMPs

Description	Estimated Start Date
☐ Sediment Basins	
☐ Dewatering bags	
☐ Weir tanks	
☐ Temporary Diversion Channel	
☐ Other:	

Stabilization Practices (See Detail Plan Sheets)
(Stabilization measures will begin the following work day whenever earth disturbing activity on any portion of the site has temporarily or permanently ceased. Temporary stabilization will be completed as soon as practicable but no later than 14 days after initiating soil stabilization activities (**3.18**))

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SWPPP

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Description	Estimated Start Date
☐ Vegetation Buffer Strips	
☐ Temporary Seeding (Cover Crop Seeding)	
☒ Permanent Seeding	
☐ Sodding	
☐ Planting (Woody Vegetation for Soil Stabilization)	
☐ Mulching (Grass Hay or Straw)	
☒ Fiber Mulching (Wood Fiber Mulch)	
☐ Soil Stabilizer	
☐ Bonded Fiber Matrix	
☐ Fiber Reinforced Matrix	
☐ Erosion Control Blankets	
☐ Surface Roughening (e.g. tracking)	
☐ Other:	

Wetland Avoidance
Will construction and/or erosion and sediment controls impinge on regulated wetlands? Yes ☐ No ☒ If yes, the structural and erosion and sediment controls have been included in the total project wetland impacts and have been included in the 404 permit process with the USACE.

5.3 (6): PROCEDURES FOR INSPECTIONS

- Inspections will be conducted at least once every 7 days.
- All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report.
- Silt fence will be inspected for depth of sediment and for tears to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches 1/3 of the height of the silt fence.
- Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure's capacity, and at the conclusion of the construction.
- Check dams will be inspected for stability. Sediment will be removed when depth reaches ½ the height of the dam.
- All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
- Inspection and maintenance reports will be prepared on form DOT 298 for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.
- The SDDOT Project Engineer and Contractor's Erosion Control Supervisor are responsible for inspections. Maintenance and repair activities are the responsibility of the Contractor. The SDDOT Project Engineer will complete the inspection and maintenance reports and distribute copies per the distribution instructions on DOT 298.

5.3 (7): POST CONSTRUCTION STORMWATER MANAGEMENT
Stormwater management will be handled by temporary controls outlined in "DESCRIPTION AND MAINTENANCE OF CONTROL MEASURES" above, and any permanent controls needed to meet permanent stormwater management needs in the post construction period will be shown in the plans and noted as permanent.

5.3 (8): POLLUTION PREVENTION PROCEDURES

5.3 (8a): Spill Prevention and Response Procedures

Material Management

- Housekeeping
  - Only needed products will be stored on-site by the Contractor.
  - Except for bulk materials the contractor will store all materials under cover and/or in appropriate containers.
  - Products must be stored in original containers and labeled.
  - Material mixing will be conducted in accordance with the manufacturer's recommendations.
  - When possible, all products will be completely used before properly disposing of the container off-site.
  - The manufacturer's directions for disposal of materials and containers will be followed.
  - The Contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
  - Dust generated will be controlled in an environmentally safe manner.

- Hazardous Materials
  - Products will be kept in original containers unless the container is not resealable and provide secondary containment as applicable.
  - Original labels and material safety data sheets will be retained in a safe place to relay important product information.
  - If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
  - Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
  - Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any stormwater system or stormwater treatment system.
  - Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, residuals from concrete saw cutting (either wet or dry), and mixer washout waters will be collected on site and managed to prevent contamination of stormwater runoff.

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

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

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

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

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5.3 (8b): WASTE MANAGEMENT PROCEDURES

- **Waste Disposal**
  - All liquid waste materials will be collected and stored in approved sealed containers. All trash and construction debris from the site will be deposited in the approved containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal and notices stating proper practices will be posted. The Contractor is responsible for ensuring waste disposal procedures are followed.

- **Hazardous Waste**
  - All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices, and the Contractor will be responsible for seeing that these practices are followed.

- **Sanitary Waste**
  - Portable sanitary facilities will be provided on all construction sites. Sanitary waste will be collected from the portable units which must be secured to prevent tipping and serviced in a timely manner by a licensed waste management Contractor or as required by any local regulations.

5.3 (9): CONSTRUCTION SITE POLLUTANTS

The following materials or substances are expected to be present on the site during the construction period. These materials will be handled as noted under the heading "POLLUTION PREVENTION PROCEDURES" (check all that apply).

- ☒ Concrete and Portland Cement
- ☐ Detergents
- ☒ Paints
- ☒ Metals
- ☒ Bituminous Materials
- ☒ Petroleum Based Products
- ☒ Diesel Exhaust Fluid
- ☒ Cleaning Solvents
- ☒ Wood
- ☒ Cure
- ☐ Texture
- ☒ Chemical Fertilizers
- ☐ Other:

Product Specific Practices

- **Petroleum Products**
  All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.

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

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

- **Concrete Trucks**
  Contractors will wash trucks out at a designated area outside the project site.

5.3 (10): NON-STORMWATER DISCHARGES

The following non-stormwater discharges are anticipated during the course of this project (check all that apply).

- ☐ Discharges from water line flushing.
- ☒ Pavement wash-water, where no spills or leaks of toxic or hazardous materials have occurred.
- ☐ Uncontaminated ground water associated with dewatering activities.

5.3 (11): INFEASIBILITY DOCUMENTATION

If it is determined to be infeasible to comply with any of the requirements of the Stormwater Permit, the infeasibility determination must be thoroughly documented in the SWPPP.

7.0: SPILL NOTIFICATION

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

- A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to SDDANR immediately **if any one of the following** conditions exists:
  - The release or spill threatens or is able to threaten waters of the state (surface water or ground water)
  - The release or spill causes an immediate danger to human health or safety
  - The release or spill exceeds 25 gallons
  - The release or spill causes a sheen on surface water
  - The release or spill of any substance that exceeds the ground water quality standards of ARSD Chapter 74:54:01
  - The release or spill of any substance that exceeds the surface water quality standards of ARSD Chapter 74:51:01
  - The release or spill of any substance that harms or threatens to harm wildlife or aquatic life
  - The release or spill is required to be reported according to Superfund Amendments and Reauthorization Act (SARA) Title III List of Lists, Consolidated List of Chemicals Subject to Reporting Under the Emergency Planning and Community Right to Know Act, US Environmental Protection Agency.

- To report a release or spill, call SDDANR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central Standard Time). To report the release after hours, on weekends or holidays, call South Dakota Emergency Management at 605-773-3231. Reporting the release to SDDANR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, you must also contact local authorities to determine the local reporting requirements for releases. A written report of the unauthorized release of any regulated substance, including quantity discharged, and the location of the discharge will be sent to SDDANR within 14 days of the discharge.

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5.4: SWPPP CERTIFICATIONS

➢ **Certification of Compliance with Federal, State, and Local Regulations**

The Storm Water Pollution Prevention Plan (SWPPP) for this project reflects the requirements of all local municipal jurisdictions for storm water management and sediment and erosion control as established by ordinance, as well as other state and federal requirements for sediment and erosion control plans, permits, notices or documentation as appropriate.

➢ **South Dakota Department of Transportation**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

Authorized Signature (See the General Permit, Section 7.4 (1))

➢ **Prime Contractor**

This section is to be executed by the General Contractor after the award of the contract. This section may be executed any time there is a change in the Prime Contractor of the project.

I certify under penalty of law that this document and all attachments will be revised or maintained under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

Authorized Signature

CONTACT INFORMATION

The following personnel are duly authorized representatives and have signatory authority for modifications made to the SWPPP:

➢ **Contractor Information**:

- Prime Contractor Name: _____
- Contractor Contact Name: _____
- Address: _____
- _____
- City: _____State: _____Zip: _____
- Office Phone: _____Field: _____
- Cell Phone: _____Fax: _____

➢ **Erosion Control Supervisor**

- Name: _____
- Address: _____
- _____
- City: _____State: _____Zip: _____
- Office Phone: _____Field: _____
- Cell Phone: _____Fax: _____

➢ **SDDOT Project Engineer**

- Name: _____
- Business Address: _____
- Job Office Location: _____
- City: _____State: _____Zip: _____
- Office Phone: _____Field: _____
- Cell Phone: _____Fax: _____

➢ **SDDANR Contact Spill Reporting**
- Business Hours Monday-Friday (605) 773-3296
- Nights and Weekends (605) 773-3231

➢ **SDDANR Contact for Hazardous Materials.**
- (605) 773-3153

➢ **National Response Center Hotline**
- (800) 424-8802.

➢ **SDDANR Stormwater Contact Information**
- SDDANR Stormwater (800) 737-8676
- Surface Water Quality Program (605) 773-3351

5.5: REQUIRED SWPPP MODIFICATIONS

➢ **5.5 (1): Conditions Requiring SWPPP Modification**

The SWPPP must be modified, including the site map(s), in response to any of the following conditions:
- When a new operator responsible for implementation of any part the SWPPP begins work on the site.
- When changes to the construction plans, sediment and erosion control measures, or any best management practices on site that are no longer accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered by inspections.
- To reflect areas on the site map where operational control has been transferred (including the date of the transfer) or has been covered under a new permit since initiating coverage under this general permit.
- If inspections by site staff, local officials, SDDANR, or U.S. EPA determine that SWPPP modifications are necessary for compliance with the Stormwater Permit.
- To reflect any revisions to applicable federal, state, or local requirements that affect the control measures implemented at the site.
- If approved by the Secretary, to reflect any changes in chemical water treatment systems or controls, including the use of a different water treatment chemical, age rates, different areas, or methods of application.

➢ **5.5 (2): Deadlines for SWPPP Modification**

Any required revisions to the SWPPP must be completed within 7 calendar days following any of the items listed above.

➢ **5.5 (3): Documentation of Modifications to the Plan**

All SWPPP modification records are required to be maintained showing the dates of when the modification occurred. The records must include the name of the person authorizing each change and a brief summary of all changes.

➢ **5.5 (4): Certification Requirements**

All modifications made to the SWPPP must be signed and certified as required in Section 7.4.

➢ **5.5 (5): Required Notice to Other Operators**

If there are multiple operators at the site, the Contractor's Erosion Control Supervisor must notify each operator that may be impacted by the change to the SWPPP within 24 hours.

When modifications as described above occur, the SWPPP will be modified to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP using the DOT 298 form and drawings on the plan will be modified to reflect the needed changes. Copies of the DOT 298 forms and the SWPPP will be retained on site in a designated place for review throughout the course of the project. A copy of the DOT 298 form will be given to the Contractor Erosion Control Supervisor and a copy will be emailed to the SDDOT Environmental Section in accordance with the DOT 298 Form.

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EROSION CONTROL NOTES

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The Contractor must perform all construction on the project in such a manner to minimize erosion from areas disturbed by excavation, grading, or other activities.

The Contractor must conduct excavation and haul operations in such a manner as to minimize vehicle tracking of mud on to paved street surfaces. Should the Contractor track any mud onto a paved street as part of the operations, the Contractor will be responsible for immediately cleaning the street by street sweeping or other means. The Contractor must work to stabilize disturbed areas as soon as practical.

Erosion and Sediment Control Measures will consist of sediment control at inlets, mulching, and seeding. Additional erosion control may be required as determined by the Engineer.

Seed/Mulch will be placed on all disturbed areas within 14 days of the topsoil being placed and graded.

All paved streets adjacent to the site must be cleaned at the end of each working day if sediment from the disturbed area is tracked on them.

TIME LIMITS FOR EROSION CONTROL METHODS

The maximum time limits of land exposure for the various erosion control methods are summarized below:

Erosion Control Method	Max. Allowable Period of Exposure (Months)
Surface roughening	1
Fiber mulching	12
Temporary revegetation	12 - 24
Permanent revegetation	24 or more
Soil stockpile revegetation	2
Early application of road base	1

No separate payment will be made for erosion control which will be incidental to the other appropriate bid items on the project.

METHODS OF ENSURING SURFACE WATER QUALITY

The Contractor will be responsible to ensure no sediment laden waters leave the project without exposure to an erosion or sediment control device.

The only non-storm water discharge allowed by the General Permit for Storm Water Discharges Associated with Construction Activities is uncontaminated ground water or waters, used as a best management practice, to wash vehicles and control dust. It is the responsibility of the Contractor to obtain a General permit to discharge under the South Dakota Surface Water Discharge System for temporary discharge activities in South Dakota (dewatering permit) for all other non-storm water discharges. All monitoring, testing, and other requirements of the dewatering permit are the responsibility of the Contractor.

Pumping (mechanically discharging) sediment laden water including ponded storm water or contaminated trench dewatering into the storm sewer or off the project site is not covered under the General Permit. It is the responsibility of the Contractor to obtain and comply with a dewatering permit for these activities. The Engineer may notify the SDDENR if the Contractor is observed pumping sediment laden water into the storm sewer or off site. Pumping sediment laden water through inlet protection is not allowed as a BMP.

In lieu of pumping sediment laden water, the following are some methods the Contractor may use to control sediment laden water.

- The best method is for the Contractor to maintain positive drainage during all phases of the project to prevent water from ponding.
- Treat the sediment laden water onsite using filter bags, deflocculating chemicals, sediment basins, or portable containment system.
- Pump or discharge the water to other portions of the site. This is allowed if the waters do not leave the project limits.

No payment will be made to the Contractor to comply with a dewatering permit unless otherwise specified and it will be considered incidental to the various bid items.

MODIFICATIONS OF EROSION AND SEDIMENT CONTROL DEVICES TO PREVENT PROPERTY DAMAGE

The Contractor is responsible to maintain drainage. In the event that an erosion or sediment control device is obstructing drainage and damage to property is possible the Contractor may temporarily modify or remove the device to facilitate drainage. An example is inlet protection in a sump location surrounded by buildings. If a device is removed for this purpose, the Contractor must immediately notify the Engineer to discuss and implement alternatives to comply with the SWPPP and General Permit.

INSTALLATION OF SEDIMENT CONTROL MEASURES

The Contractor will not begin the removal of surfacing or topsoil within the applicable work area until all applicable sediment control measures are placed. Sediment control measures will be installed as necessary as construction progresses and these sediment control devices must be installed within 24 hours at locations identified on the SWPPP.

SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES

This type of sediment control device should be used where there is pavement in the vicinity of the drop inlets and storm water or sediment could possibly enter the frame and grate. Sediment Control at Inlet with Frame and Grate will be installed prior to working in the vicinity of the drop inlets.

The Contractor will be responsible for maintaining and repairing the sediment control devices for the duration of the project for which sediment control measures are required. Maintenance will be scheduled to prevent storm water from backing up into the driving lane.

"Sediment Control at Inlet with Frame and Grate" will be paid for one time at each location, regardless of the number of times the sediment control devices are installed, inspected, cleaned, removed, repaired, or replaced. All costs associated with furnishing, installing, inspecting, maintaining, cleaning, sediment removal, and repairing Sediment Control at Inlet with Frame and Grate will be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".
Sediment collection devices will be:

A sediment control device as shown on Standard Plate 734.10. Filter fabric used for constructing the sediment control at inlets with frames and grates will be the same type of fabric that is used in high flow silt fence from the approved product list. The approved product list may be viewed at the following internet site:

http://sddot.com/business/certification/products/Default.aspx

Accumulated sediment should be removed and disposed of on site. Device should be cleaned or replaced if standing water is evident 48 hours after a rain event. Damaged devices must be repaired.

Inlet sediment control at inlets will be measured per each inlet protected. Additional measurement will not be made when a different type of inlet protection is installed at each location. Also, no additional measurement will be made when the same type of inlet protection is removed and reinstalled at the same location.

Sediment Control at Inlet with Frame and Grate Approved List:

Product	Manufacturer
InfraSafe Debris Collection Device with filter sock	Royal Environmental Systems, Inc. Stacy, MN Phone: 1-800-817-3240 www.royalenterprises.net
Dandy Curb Sack and Dandy Curb Bag for curb inlets. Dandy Bag, Dandy Sack, and Dandy Pop for median drains.	Dandy Products Inc. Dublin, OH Phone: 1-800-591-2284 www.dandyproducts.com
Silt Trapper	Storm Water Solutions Lakeville, MN Phone: 1-952-461-4376 www.silttrapper.com
DIP Basket	Skyview Construction Co., LLC Waubay, SD Phone: 1-605-520-0555 www.skyviewconst.com
FLEXSTORM Inlet Filters	Inlet and Pipe Protection, Inc. Naperville, IL Phone: 1-866-287-8655 www.inletfilters.com
GR-8 Guard or Combo Guard	ERTEC Environmental Systems LLC Alameda, CA Phone: 1-866-521-0724 www.ertecsystems.com
Grate FX, Slammer, or VertiPro	Enviroscape ECM, Ltd. Oakwood, OH Phone: 1-419-594-3210 www.strawblanket.com
BX Inlet Sediment Boxes	BX Civil and Construction Dell Rapids, SD Phone: 1-605-428-5483 bx-cc.com
EZ-Flo and EZ-Catch	Flo-Water, LLC West Des Moines, IA Phone: 1-515-577-6763 www.flo-water.net

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TABLE OF SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES

Station	L/R	Quantity (Each)
24+56	10'L	1
25+07	9'R	1
28+54	23'R	1
31+40	3'L	1
31+40	11'R	1
	Total:	5

CONCRETE WASHOUT AREA

Due to limited space within the project limits, there is no room anticipated for a concrete washout facility on-site. Concrete trucks will need to washout at the concrete plant or at an approved site constructed by the concrete supplier. Contractor may request an area to be used for an on-site concrete washout facility; however, the location must be approved by the City and Engineer prior to constructing.

If an on-site area is approved, the concrete washout area must be kept in a condition to maintain the capacity for all wasted concrete and washout water on the project.

STREET SWEEPING

Vehicle tracking of sediment from the construction site will be minimized. Street sweeping will be used if erosion and sediment control best management practices are not adequate to prevent sediment from being tracked onto the street.

The Contractor will use a pickup broom having integral self-contained storage to clean the roadway. The pickup broom used will be a minimum of 6 feet wide and have working gutter brooms.

All costs for cleaning the roadway or sidewalk with a pickup broom will be incidental to the contract unit price per hour for "Sweeping".

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INSTALLATION OF PERMANENT EROSION CONTROL MEASURES

This work must be done as soon as possible after finish grading and topsoil placement is completed, and if practical, prior to seeding, fertilizing, and mulching of adjacent areas. At a minimum, the work must be completed within the timeframes listed within the Erosion/Sediment Control Notes.

WEED CONTROL

Legumes and noxious weeds must be controlled in all newly seeded and/or sodded areas by hand pulling, mowing, and/or inoculation for the duration of the 45 day maintenance period and until a uniform, perennial vegetative cover with a density of 70% of the native grasses has been established. This requirement applies to the project limits and to all contractor staging areas. If areas are dormant seeded, this requirement will remain in effect until the following spring.

If the Contractor chooses to inoculate weeds, the inoculation must be performed in accordance with the manufacturer's recommendations and all applicable federal, state, and local laws and ordinances. The Contractor is responsible for keeping all required chemical application records, and must provide them to the Engineer upon request. The inoculation product must be approved by the Engineer prior to application.

More than one weed control application may be required depending on site conditions. The amount of weed control required on the project will be at the discretion of the Engineer. A pre-emergent application is recommended.

All materials, equipment, tools, labor and other appurtenances required to control all legumes and noxious weeds throughout the 45 day maintenance period and until a uniform, perennial vegetative cover with a density of 70% of the native grasses has been established will be incidental to the contract unit price per pound for the respective seed mixture.

SEEDBED PREPARATION

The initial preparation of the newly graded area for seeding must consist of removing existing grass, vegetation and turf. Do not mix into topsoil. Loosen soil to a depth of at least 6 inches. Remove all stones, roots, trash and other extraneous matter.
Grade the planting areas to a smooth, uniform surface that is loose and uniformly fine textured. Grade to within +/- 0.5" of the finish elevation. Remove ridges, pulverize soil clods to less than 1" and fill depressions to meet finish grades. The Contractor must use a powered soil conditioner similar to a "Harley Rake" on all areas to be seeded. The Contractor will need prior authorization from the Engineer to commence seeding. Seedbed preparation must be incidental to the contract unit price per pound for the respective seed mixture.

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 20,000 live propagules of mycorrhizal fungi per 1,000 square feet. 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 will be as shown below or an approved equal:

Product	Manufacturer
MycoApply	Mycorrhizal Applications, Inc. Grants Pass, OR Phone: 1-866-476-7800 www.mycorrhizae.com
AM 120 Multi Species Blend	Reforestation Technologies Int. Gilroy, CA Phone: 1-800-784-4769 www.reforest.com
LALRISE Prime and Max WP	Lallemand Specialties Inc. Milwaukee, WI Phone: 1-844-590-7781 www.lallemandplantcare.com

FERTILIZING

A commercial fertilizer with a minimum guaranteed analysis of 13-13-13, 18-46-0, 11-52-0, or an approved alternate fertilizer sold for use as a lawn starter fertilizer must be applied to all areas designated for permanent seeding. The application rate of fertilizer must be 300 pounds per acre.

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.

Lawn and turf seed, such as the Type D Permanent Seed Mixture, will be tested within 12 months prior to planting, exclusive of the calendar month in which the test was completed.

Seeding and fertilizing must comply with sections 730 and 731 of the Specifications except as noted below. Seasonal limitations have been designated below.

When to Plant:
Spring: April – June 15
Fall: August – Early September
Dormant: November – Freeze Up
Specifications:

- Minimum Purity 97% and Minimum Germination 85%
- Maximum Other Crop Content 0.10% and Maximum Weed Content 0.10%
- Components and/or percentages of the above blend may vary

Type D Permanent Seed Mixture will consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/1000 SqFt)
Kentucky Bluegrass	Avalanche, Appalachian, Wildhorse, Blue Bonnet, Action	1.4
Perennial Ryegrass	Turf Type Varieties	1.4
Creeping Red Fescue	Epic, Boreal, Chantilly	1.4
Chewings Fescue	Ambrose, K2, Zodiac, Shadow III	1.4
Alkali Grass	Fults, Fults II, Quill, Salty	1.4
	Total:	7

Seed must be delivered to the project in bags with seed tags attached. The tags will be collected from the bags by the Engineer during seeding. See plan notes on Labeling. Seed must be applied using a press drill or slit seeder in all areas where possible. Hand seeding will be kept to a minimum and only done when site conditions prohibit the use of a drill or slit seeder.

These rates must be doubled if seed is broadcast and must be increased by 50 percent if the seeding is applied through hydraulic seeding. Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1. If hydraulic seeding is used, hydraulic mulching must be done as a separate operation. All seed must be drilled in with an approved drill and incorporated to the top ¼" +/- of topsoil. Small areas not accessible with a drill may be broadcast and dragged or raked in.

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EROSION CONTROL NOTES

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	22	65

FILE: 672021 - Erosion Control Notes.doc
PLOTTING DATE: 2025-01-29 INITIALS: JTM
REVISION DATE:

WATERING FOR VEGETATION

Water for vegetation consists of applying water to seeded areas to enhance germination and/or root growth. When watering, use the following guidelines:

Immediately after seeding:

- Keep the topsoil moist but not excessively wet until the seed has germinated.
- Water a minimum of 3 days a week for 2 weeks preferably watering 2 or 3 times a day in small quantities.
- Use fine spray and low pressure to avoid topsoil wash and to prevent uncovering buried seeds.

After emergence:

- Topsoil will be kept thoroughly moistened by sprinkling, as necessary, for 6 weeks. After the 6-week period, an inspection will be made to determine if grass is established enough to suspend watering. Continue watering until grass has been thoroughly established.
- Never apply water at a rate faster than the topsoil can absorb.
- Water during early morning hours or early evening hours.
- Do not water when rain is forecasted for the area.
- If rainfall occurs, suspend watering according to rainfall amount.

All costs for furnishing and applying the water including hauling, materials, equipment, labor, and incidentals necessary will be incidental to the contract unit price for “Water for Vegetation”

FIBER MULCHING

Fiber mulch will be applied in a separate operation following permanent seeding.

An additional 2% by weight of tackifier will be added to the fiber mulch product selected from the approved product list. If the product selected has guar gum tackifier included, then the additional 2% of tackifier will be guar gum. If the product selected has synthetic tackifier included, then the additional 2% of tackifier will be synthetic.

Fiber mulch will be applied at the rate of 3,000 pounds per acre.

The Contractor will allow the fiber mulch to cure a minimum of 18 hours prior to watering or any storm event to ensure proper cohesion between the soil and fiber particles.

All costs for the additional tackifier added to the fiber mulch including labor, equipment, and materials will be incidental to the contract unit price per ton for “Fiber Mulching”.

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

http://sddot.com/business/certification/products/Default.aspx

REMOVAL OF TEMP. EROSION/SEDIMENT CONTROL DEVICES

The Contractor is responsible to remove all temporary erosion control and sediment control devices when the site reaches final stabilization. The Engineer may order specific temporary erosion control and sediment control devices to remain in place past final stabilization. The Contractor will not be responsible to remove these items.

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EROSION CONTROL

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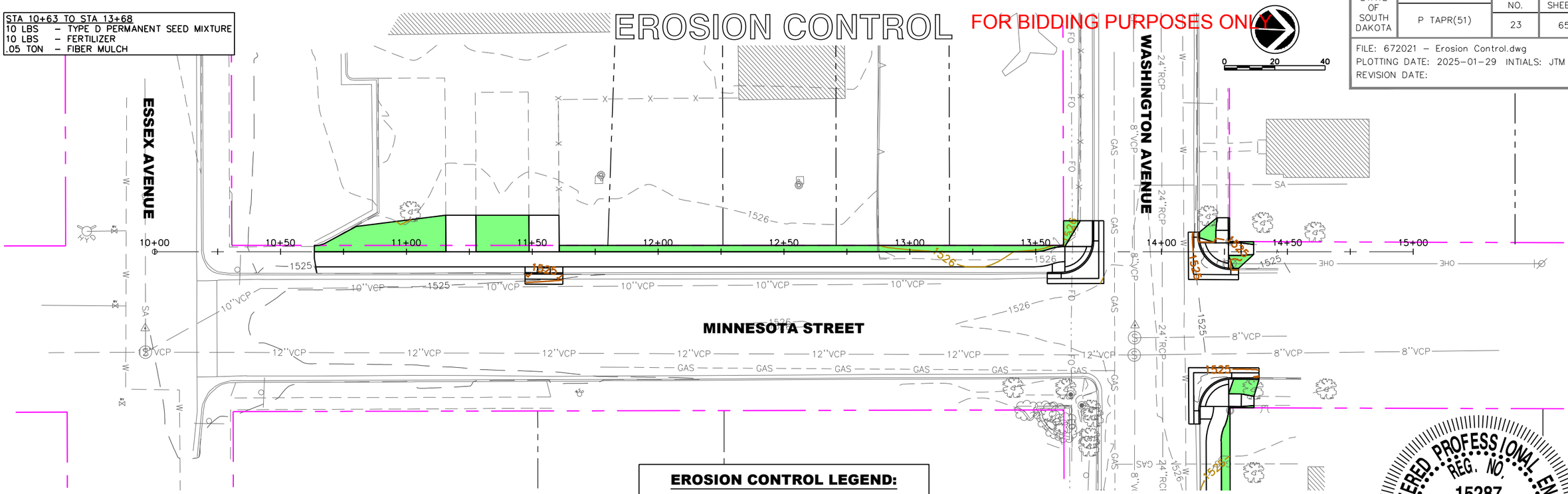
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	23	65

FILE: 672021 – Erosion Control.dwg
PLOTTING DATE: 2025-01-29 INTIALS: JTM
REVISION DATE:

STA 10+63 TO STA 13+68
10 LBS – TYPE D PERMANENT SEED MIXTURE
10 LBS – FERTILIZER
.05 TON – FIBER MULCH



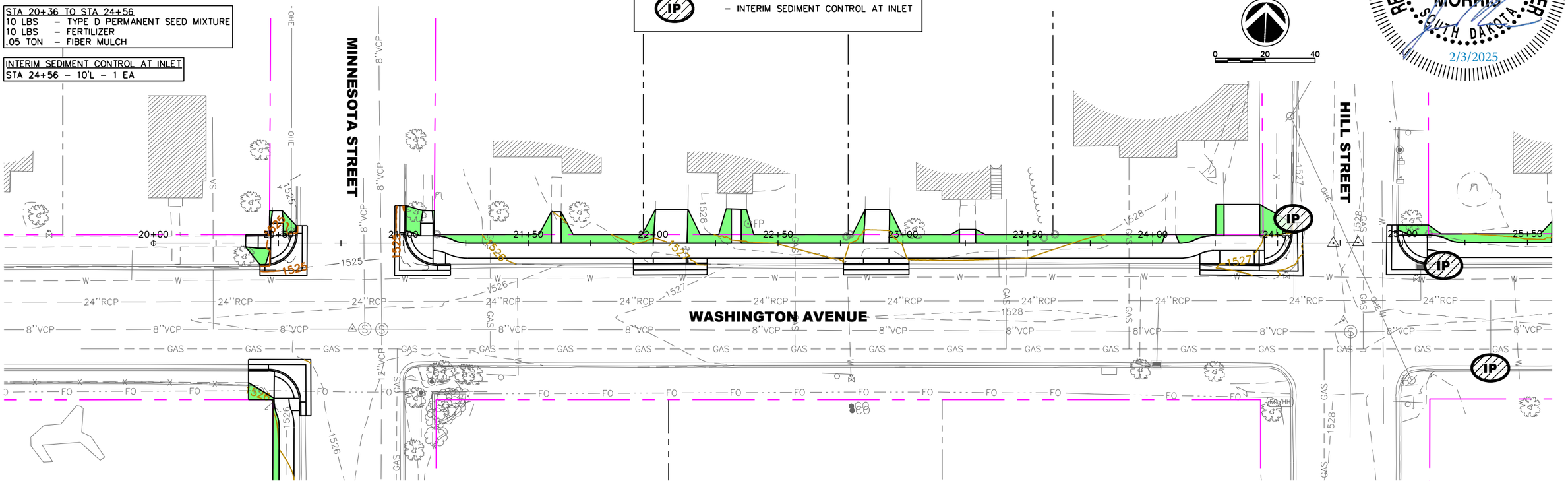
EROSION CONTROL LEGEND:

– TYPE D PERMANENT SEED MIXTURE, FERTILIZER, AND FIBER MULCH

IP – INTERIM SEDIMENT CONTROL AT INLET

STA 20+36 TO STA 24+56
10 LBS – TYPE D PERMANENT SEED MIXTURE
10 LBS – FERTILIZER
.05 TON – FIBER MULCH

INTERIM SEDIMENT CONTROL AT INLET
STA 24+56 – 10'L – 1 EA



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EROSION CONTROL

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	24	65

FILE: 672021 – Erosion Control.dwg
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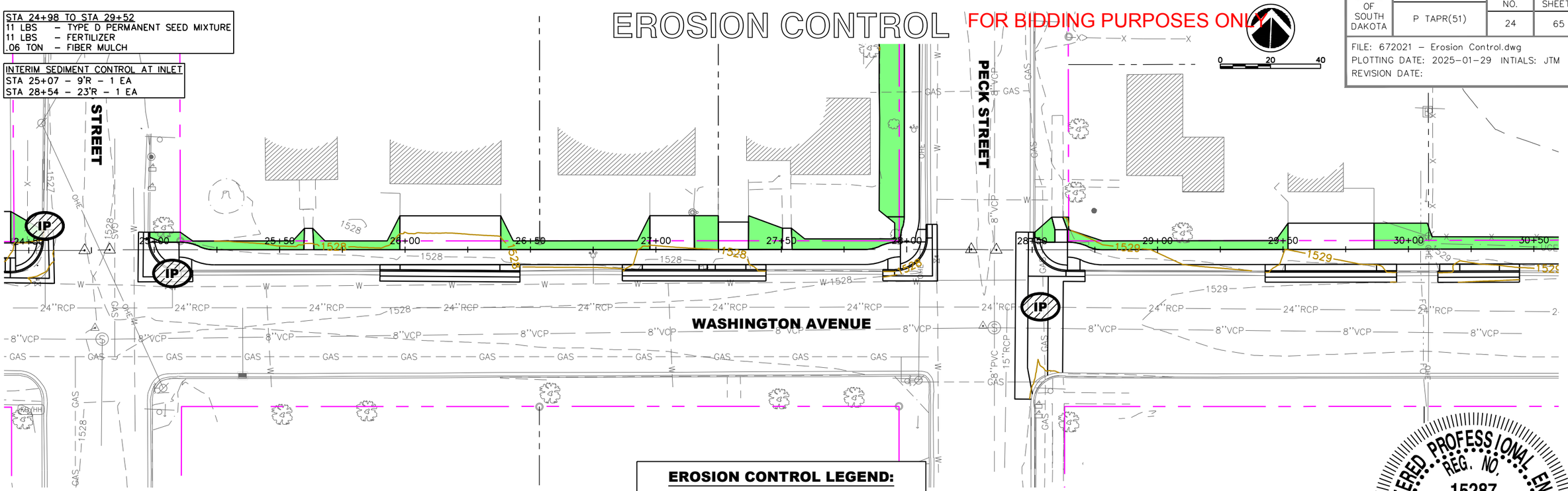
STA 24+98 TO STA 29+52
11 LBS – TYPE D PERMANENT SEED MIXTURE
11 LBS – FERTILIZER
.06 TON – FIBER MULCH

INTERIM SEDIMENT CONTROL AT INLET
STA 25+07 – 9'R – 1 EA
STA 28+54 – 23'R – 1 EA



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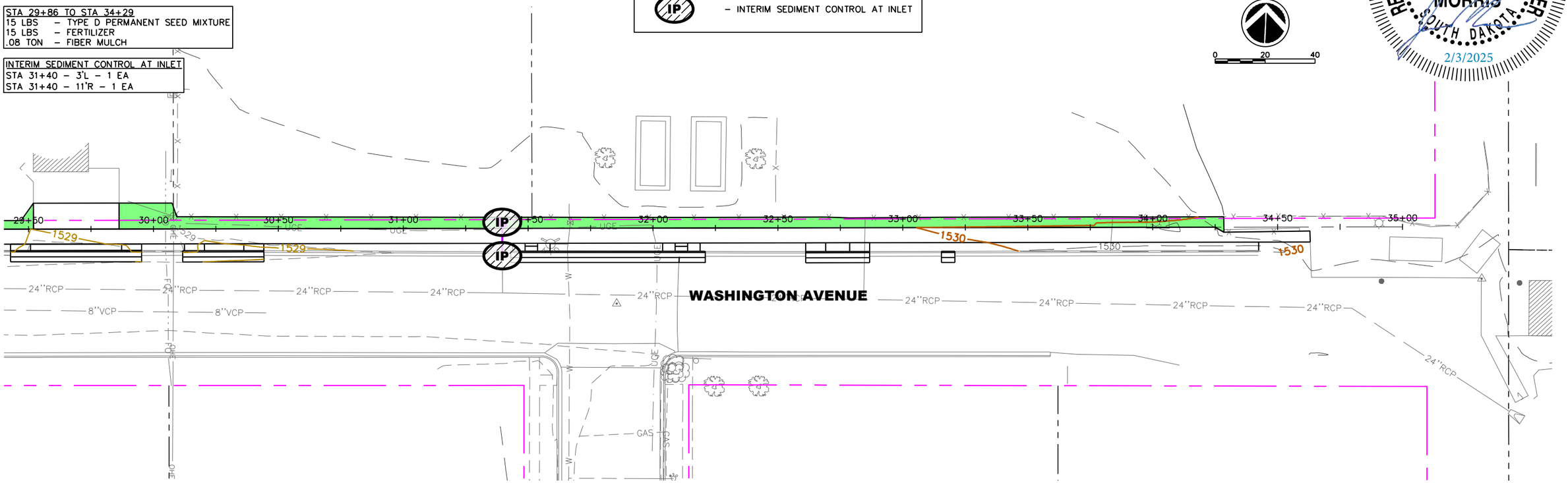
EROSION CONTROL LEGEND:

- TYPE D PERMANENT SEED MIXTURE, FERTILIZER, AND FIBER MULCH
- IP – INTERIM SEDIMENT CONTROL AT INLET

STA 29+86 TO STA 34+29
15 LBS – TYPE D PERMANENT SEED MIXTURE
15 LBS – FERTILIZER
.08 TON – FIBER MULCH

INTERIM SEDIMENT CONTROL AT INLET
STA 31+40 – 3'L – 1 EA
STA 31+40 – 11'R – 1 EA



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EROSION CONTROL

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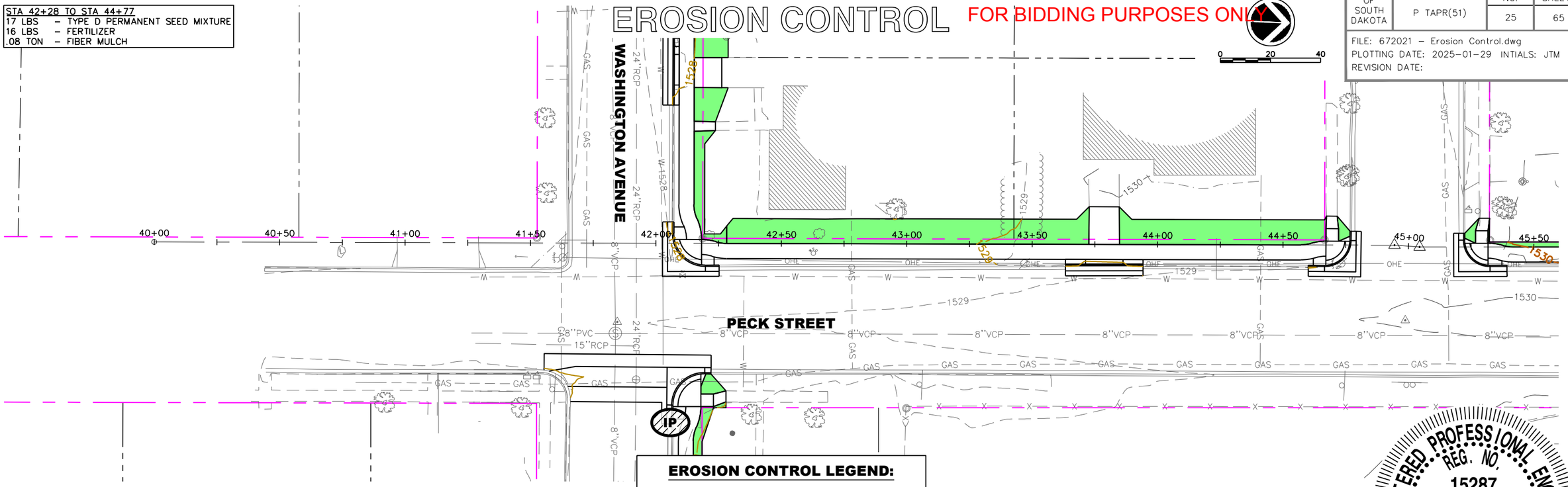
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	25	65

FILE: 672021 – Erosion Control.dwg
PLOTTING DATE: 2025-01-29 INITIALS: JTM
REVISION DATE:

STA 42+28 TO STA 44+77
17 LBS – TYPE D PERMANENT SEED MIXTURE
16 LBS – FERTILIZER
.08 TON – FIBER MULCH



EROSION CONTROL LEGEND:

- TYPE D PERMANENT SEED MIXTURE, FERTILIZER, AND FIBER MULCH
- IP – INTERIM SEDIMENT CONTROL AT INLET

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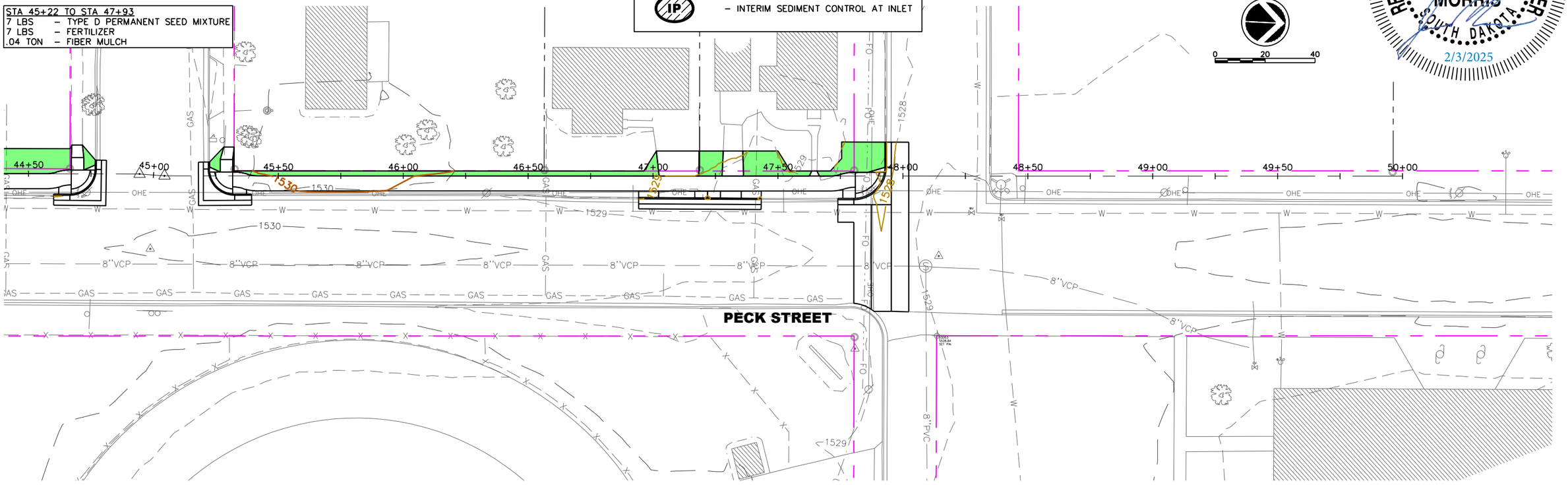
STA 45+22 TO STA 47+93
7 LBS – TYPE D PERMANENT SEED MIXTURE
7 LBS – FERTILIZER
.04 TON – FIBER MULCH



HORIZONTAL ALIGNMENT

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	26	65

FILE: 672021 – Title Page.dwg
PLOTTING DATE: 2025-01-29 INTIALS: JTM
REVISION DATE:

CL Shared Use Path - Minnesota Street					
TYPE	**STATION**	**DISTANCE**	**DIRECTION**	**NORTHING**	**EASTING**
POB	10+00.00			521989.5890'	2747782.6072'
		500.00'	N2°19'00.67"W		
POE	15+00.00			522489.1803'	2747762.3944'

CL Shared Use Path - Washington Avenue					
TYPE	**STATION**	**DISTANCE**	**DIRECTION**	**NORTHING**	**EASTING**
POB	20+00.00			522410.6798'	2747715.1096'
		472.27'	N87°34'25.76"E		
PI	24+72.27			522430.6720'	2748186.9562'
		10.00'	N86°10'44.95"E		
PI	24+82.27			522431.3386'	2748196.9379'
		343.44'	N87°32'53.64"E		
PI	28+25.71			522446.0303'	2748540.0622'
		10.00'	N88°38'01.87"E		
PI	28+35.71			522446.2688'	2748550.0596'
		664.29'	N87°28'28.58"E		
POE	35+00.00			522475.5387'	2749213.7016'

CL Sidewalk - Peck Street					
TYPE	**STATION**	**DISTANCE**	**DIRECTION**	**NORTHING**	**EASTING**
POB	40+00.00			522229.8858'	2748522.3392'
		494.40'	N2°23'38.60"W		
PI	44+94.40			522723.8553'	2748501.6871'
		10.03'	N1°42'43.62"E		
PI	45+04.43			522733.8784'	2748501.9867'
		495.57'	N2°31'17.73"W		
POE	50+00.00			523228.9700'	2748480.1836'

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THE COORDINATES SHOWN ON THIS SHEET ARE BASED ON THE SOUTH DAKOTA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. (NAD 83/11)

CONTROL DATA

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	27	65

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HORIZONTAL AND VERTICAL CONTROL POINTS

POINT	STATION	OFFSET	DESCRIPTION	NORTHING	EASTING	ELEVATION
CP 1	09+96.23	30.45'RT	Control Point	521987.06	2747813.18	1525.01'
CP 2	13+89.42	29.29'RT	Control Point	522379.88	2747796.13	1526.26'
CP 3	16+83.68	30.30'RT	Control Point	522367.02	2747400.36	1525.43'
CP 4	24+75.64	31.01'RT	Control Point	522399.96	2748192.39	1528.05'
CP 5	28+30.95	30.42'RT	Control Point	522415.74	2748546.03	1528.02'
CP 6	31+85.42	30.19'RT	Control Point	522431.52	2748900.75	1529.72'
CP 7	35+31.70	20.82'RT	Control Point	522456.13	2749246.28	1529.63'
CP 8	45+00.89	29.55'RT	Control Point	522729.49	2748531.42	1530.08'
CP 13	47+80.88	69.02'RT	Rebar Control Point	523013.10	2748558.78	1529.37'
CP 9	48+14.37	31.98'RT	Control Point	523044.93	2748520.30	1529.36'
CP 10	52+76.30	33.93'RT	Control Point	523506.50	2748501.93	1530.58'
BM#1	09+72.44	8.27'LT	Top Nut of Fire Hydrant	521961.71	2747775.46	1527.58'
BM#2	20+53.92	2.98'RT	Top Nut of Fire Hydrant	522409.99	2747769.10	1527.87'
BM#3	24+46.96	3.49'RT	Top Nut of Fire Hydrant	522426.11	2748161.82	1530.42'
BM#4	28+04.92	4.56'RT	Top Nut of Fire Hydrant	522440.58	2748519.48	1531.04'
BM#5	31+58.83	5.66'RT	Top Nut of Fire Hydrant	522454.85	2748873.12	1532.00'
BM#6	48+39.27	3.44'RT	Top Nut of Fire Hydrant	523068.55	2748490.70	1532.81'
BM#7	52+35.45	3.48'RT	Top Nut of Fire Hydrant	523464.34	2748473.30	1531.27'

THE ELEVATIONS SHOWN ON THIS SHEET ARE BASED ON NAVD 88.

THE COORDINATES SHOWN ON THIS SHEET ARE BASED ON THE SOUTH DAKOTA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. (NAD 83/11)

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SOUTH DAKOTA
2/3/2025

TABLE OF ROW AND EASEMENTS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	28	68

FILE: 672021 – ROW and Easements.dwg
PLOTTING DATE: 2025-01-30 INTIALS: JTM
REVISION DATE:

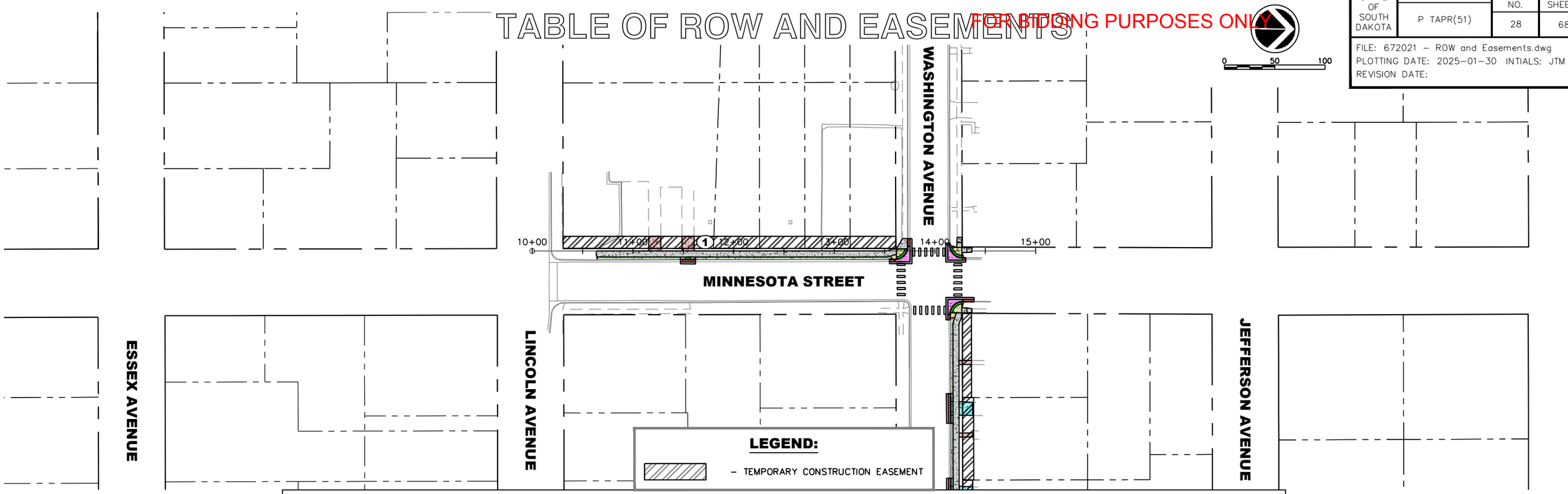
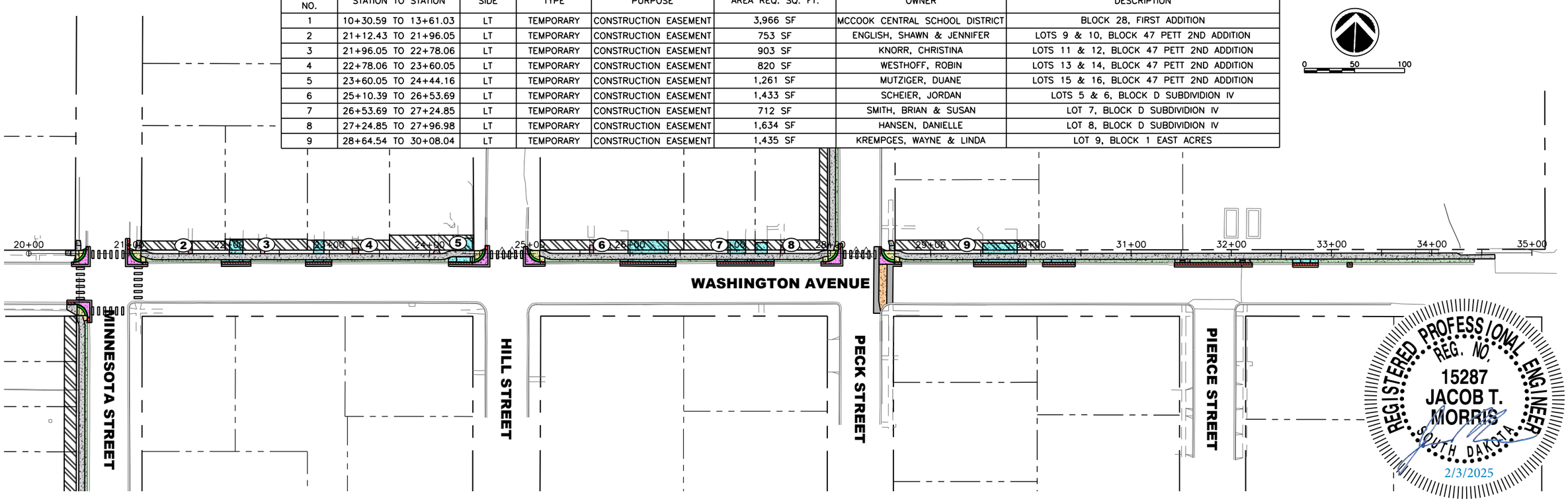


TABLE OF RIGHT OF WAY AND EASEMENTS

PARCEL NO.	STATION TO STATION	SIDE	TYPE	PURPOSE	AREA REQ. SQ. FT.	OWNER	DESCRIPTION
1	10+30.59 TO 13+61.03	LT	TEMPORARY	CONSTRUCTION EASEMENT	3,966 SF	MCCOOK CENTRAL SCHOOL DISTRICT	BLOCK 28, FIRST ADDITION
2	21+12.43 TO 21+96.05	LT	TEMPORARY	CONSTRUCTION EASEMENT	753 SF	ENGLISH, SHAWN & JENNIFER	LOTS 9 & 10, BLOCK 47 PETT 2ND ADDITION
3	21+96.05 TO 22+78.06	LT	TEMPORARY	CONSTRUCTION EASEMENT	903 SF	KNORR, CHRISTINA	LOTS 11 & 12, BLOCK 47 PETT 2ND ADDITION
4	22+78.06 TO 23+60.05	LT	TEMPORARY	CONSTRUCTION EASEMENT	820 SF	WESTHOFF, ROBIN	LOTS 13 & 14, BLOCK 47 PETT 2ND ADDITION
5	23+60.05 TO 24+44.16	LT	TEMPORARY	CONSTRUCTION EASEMENT	1,261 SF	MUTZIGER, DUANE	LOTS 15 & 16, BLOCK 47 PETT 2ND ADDITION
6	25+10.39 TO 26+53.69	LT	TEMPORARY	CONSTRUCTION EASEMENT	1,433 SF	SCHEIER, JORDAN	LOTS 5 & 6, BLOCK D SUBDIVIDION IV
7	26+53.69 TO 27+24.85	LT	TEMPORARY	CONSTRUCTION EASEMENT	712 SF	SMITH, BRIAN & SUSAN	LOT 7, BLOCK D SUBDIVIDION IV
8	27+24.85 TO 27+96.98	LT	TEMPORARY	CONSTRUCTION EASEMENT	1,634 SF	HANSEN, DANIELLE	LOT 8, BLOCK D SUBDIVIDION IV
9	28+64.54 TO 30+08.04	LT	TEMPORARY	CONSTRUCTION EASEMENT	1,435 SF	KREMPGES, WAYNE & LINDA	LOT 9, BLOCK 1 EAST ACRES



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SOUTH DAKOTA
2/3/2025

TABLE OF ROW AND EASEMENTS

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	29	68

FILE: 672021 – ROW and Easements.dwg
PLOTTING DATE: 2025-01-30 INTIALS: JTM
REVISION DATE:

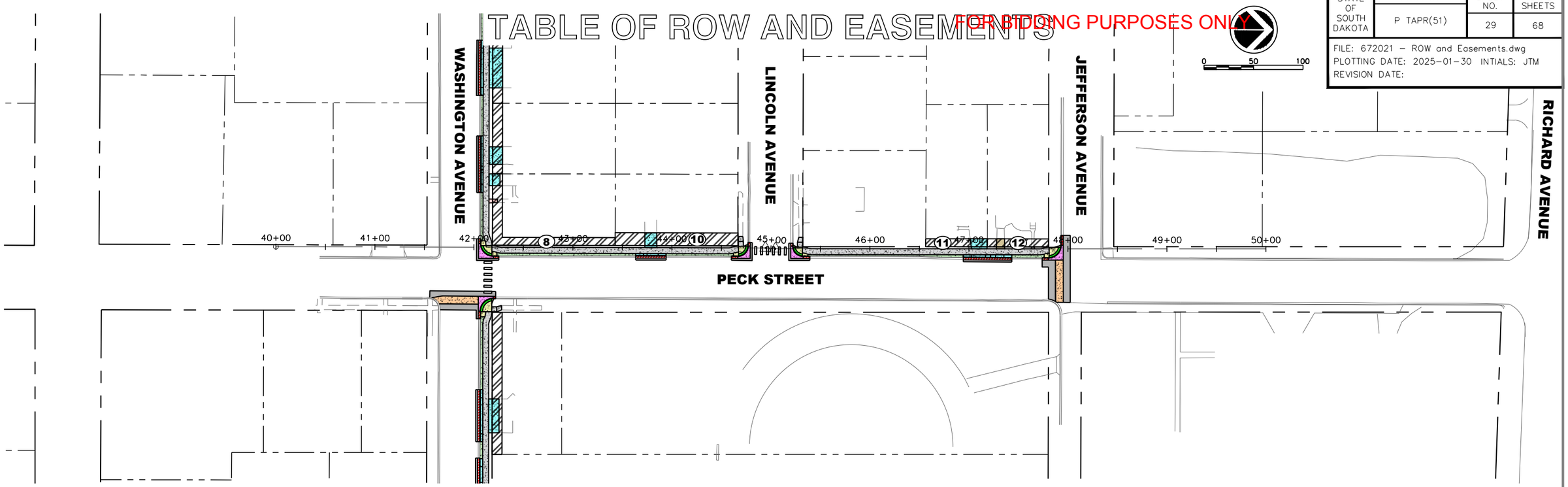

TABLE OF RIGHT OF WAY AND EASEMENTS

PARCEL NO.	STATION TO STATION	SIDE	TYPE	PURPOSE	AREA REQ. SQ. FT.	OWNER	DESCRIPTION
8	42+18.69 TO 43+42.69	LT	TEMPORARY	CONSTRUCTION EASEMENT	1,634 SF	HANSEN, DANIELLE	LOT 8, BLOCK D SUBDIVIDION IV
10	43+42.69 TO 44+66.58	LT	TEMPORARY	CONSTRUCTION EASEMENT	1,611 SF	MCKILLOP, DONA	LOT 1, BLOCK D MISC SUBDIVISION
11	46+56.36 TO 47+18.70	LT	TEMPORARY	CONSTRUCTION EASEMENT	499 SF	MEYER, JESSICA	S1/2 OF LOTS 1 & 2, BLOCK C MISC SUBDIVISION
12	47+18.70 TO 47+80.48	LT	TEMPORARY	CONSTRUCTION EASEMENT	495 SF	REIF, JUDY	N1/2 OF LOTS 1 & 2, BLOCK C MISC SUBDIVISION

LEGEND:

▨ – TEMPORARY CONSTRUCTION EASEMENT

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SOUTH DAKOTA

2/3/2025

LEGEND OF SYMBOLS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	30	65

FILE: 672021 – Title Page.dwg
PLOTTING DATE: 2025-01-29 INITIALS: JTM
REVISION DATE:

1530	PROPOSED MAJOR CONTOUR	T	UNDERGROUND TELEPHONE	FO	FIBER OPTIC PEDESTAL
1531	PROPOSED MINOR CONTOUR	T	TELEPHONE PEDESTAL	FO/VLT	FIBER OPTIC VAULT
1530	EXISTING MAJOR CONTOUR	T/VLT	TELEPHONE VAULT		EASEMENT
1531	EXISTING MINOR CONTOUR	TV	UNDERGROUND TELEVISION		PROPERTY LINE
8"PVC	WATER MAIN, SIZE, AND TYPE	TV	TELEVISION PEDESTAL		RIGHT OF WAY LINE
W	WATER MANHOLE	UGE	UNDERGROUND ELECTRIC		PROPERTY PIN
S	WATER SHUT OFF	OHE	OVERHEAD ELECTRIC		BENCHMARK
WTR/TR	WATER TRACER WIRE PEDESTAL		GUY POLE		CONTROL POINT
WV	WATER VALVE		GUY WIRE	X	FENCE
	FIRE HYDRANT		POWER POLE		FENCE POST
	SPRINKLER HEAD		POWER POLE WITH LIGHT		RETAINING WALL
	CONTROL VALVE		POWER POLE WITH TRANSFORMER		ROOF DRAIN
8"PVC	SANITARY SEWER MAIN, SIZE, AND TYPE		POWER POLE WITH LIGHT AND TRANSFORMER		SIGN
CO	SANITARY SEWER CLEAN OUT		LIGHT POLE		CONIFEROUS TREE
S	SANITARY SEWER MANHOLE		TRAFFIC SIGNAL POLE		DECIDUOUS TREE
12"RCP	STORM SEWER SIZE AND TYPE	E	ELECTRIC BOX		STUMP
D	STORM SEWER MANHOLE	E	ELECTRICAL MANHOLE		TREE LINE
GAS	UNDERGROUND GAS	EM	ELECTRICAL METER	FP	FLAG POLE
GM	GAS METER	E/VLT	ELECTRICAL VAULT		MAILBOX
GV	GAS VALVE		FLOOD LIGHT		BOULDER
PROPANE	PROPANE TANK	FO	FIBER OPTIC		RIP RAP

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PLAN AND PROFILE

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	31	65

FILE: 672021 – Plan and Profile.dwg
PLOTTING DATE: 2025-02-03 INITIALS: JTM
REVISION DATE:

0 20 40

4" CONCRETE SIDEWALK
STA 11+15 TO STA 11+28 – 175 SF
STA 11+48 TO STA 11+61 – 174 SF

5" CONCRETE SIDEWALK
STA 10+63 TO STA 13+73 – 1,908 SF

5" CONCRETE SIDEWALK (TRANSITION)
STA 10+64 TO STA 11+48 – 204 SF
STA 11+62 TO STA 13+57 – 445 SF

6" CONCRETE SIDEWALK
STA 13+57 TO STA 13+73 – 98 SF

6" PCC FILLET SECTION
STA 13+60 TO STA 13+75 – 12 SY

SPECIAL CONCRETE CURB AND GUTTER
STA 11+47 TO STA 11+63 – 15 LF
STA 13+54 TO STA 13+60 – 6 LF
STA 13+72 TO STA 13+75 – 8 LF

ASPHALT CONCRETE COMPOSITE
STA 11+47 TO STA 11+63 – 3 TON
STA 13+54 TO STA 13+77 – 3 TON

TYPE 1 DETECTABLE WARNINGS
STA 11+52 TO STA 11+58 – 10 SF
STA 13+61 TO STA 13+73 – 29 SF

EPOXY PAVEMENT MARKING PAINT, 24" WHITE
STA 13+62 TO STA 14+10 – 96 LF

EXISTING FENCE TO BE RESET WITHIN THE ROW BY OTHERS

SIGNS ON POST:
R1-1 (30"X30")

SIGNS ON POST:
R2-1 (24"X30")
S4-3P (24"X8")

FIRE HYDRANT TO BE RELOCATED OUTSIDE OF CURB RAMP BY OTHERS.

ESSEX AVENUE

MINNESOTA STREET

WASHINGTON AVENUE

REMOVE ASPHALT CONCRETE PAVEMENT
STA 11+47 TO STA 11+63 – 4 SY
STA 11+60 TO STA 12+88 – 50 SY
STA 13+54 TO STA 13+77 – 13 SY

REMOVE CONCRETE PAVEMENT
STA 13+60 TO STA 13+75 – 9 SY

REMOVE CONCRETE SIDEWALK
STA 10+63 TO STA 13+73 – 283 SY

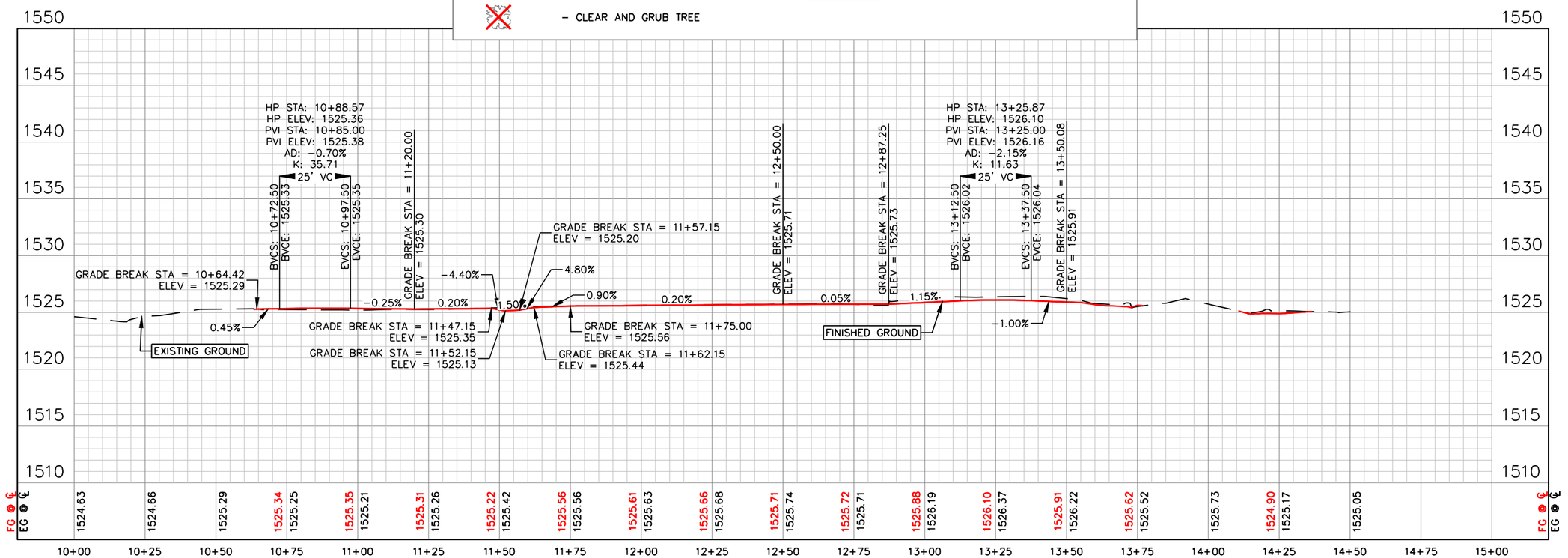
REMOVE CONCRETE CURB AND GUTTER
STA 11+47 TO STA 11+63 – 15 LF
STA 13+54 TO STA 13+60 – 6 LF
STA 13+72 TO STA 13+75 – 8 LF

REMOVE SIGN FOR RESET
STA 13+50 – 4'R – 1 EA
STA 13+67 – 7'L – 1 EA

LEGEND:

- ASPHALT CONCRETE COMPOSITE
- 4" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK (TRANSITION)
- 6" CONCRETE SIDEWALK
- 6" PCC DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE
- 6" PCC VALLEY GUTTER
- 6" PCC FILLET SECTION
- SPECIAL CONCRETE CURB AND GUTTER
- TYPE 1 DETECTABLE WARNINGS
- GRAVEL SURFACING
- 24" PAVEMENT MARKINGS

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
15287
JACOB T. MORRIS
SOUTH DAKOTA
2/3/2025



PLAN AND PROFILE

FOR DESIGN PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	32	65

FILE: 672021 – Plan and Profile.dwg
PLOTTING DATE: 2025-02-03 INITIALS: JTM
REVISION DATE:

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4" CONCRETE SIDEWALK
STA 21+59 TO STA 21+64 – 50 SF
STA 22+31 TO STA 22+36 – 55 SF
STA 23+22 TO STA 23+29 – 36 SF
STA 24+03 TO STA 24+11 – 20 SF

5" CONCRETE SIDEWALK (TRANSITION)
STA 21+16 TO STA 21+93 – 176 SF
STA 22+21 TO STA 22+77 – 109 SF
STA 23+02 TO STA 24+19 – 240 SF

6" CONCRETE SIDEWALK
STA 20+44 TO STA 20+57 – 95 SF
STA 21+01 TO STA 21+17 – 121 SF
STA 24+42 TO STA 24+56 – 105 SF

SPECIAL CONCRETE CURB AND GUTTER
STA 20+42 TO STA 20+45 – 2 LF
STA 20+57 TO STA 20+60 – 4 LF
STA 20+98 TO STA 21+01 – 11 LF
STA 21+13 TO STA 21+19 – 6 LF
STA 21+92 TO STA 22+22 – 30 LF
STA 22+76 TO STA 23+03 – 27 LF
STA 24+18 TO STA 24+43 – 24 LF
STA 24+55 TO STA 24+58 – 5 LF

REMOVE SIGN FOR RESET
STA 21+05 – 6'L – 1 EA
STA 21+05 – 3'R – 1 EA
STA 21+13 – 7'R – 1 EA
STA 22+73 – 4'R – 1 EA
STA 24+22 – 6'R – 1 EA

CLEAR AND GRUB TREE
STA 21+21 – 5'R – 1 EA
STA 23+90 – 6'R – 1 EA

CLEAR AND GRUB STUMP
STA 24+16 – 5'R – 1 EA

5" CONCRETE SIDEWALK
STA 20+36 TO STA 20+52 – 97 SF
STA 21+07 TO STA 24+45 – 2,049 SF

6" PCC FILLET SECTION
STA 20+44 TO STA 20+60 – 12 SY
STA 20+98 TO STA 21+14 – 12 SY
STA 24+42 TO STA 24+59 – 12 SY

6" PCC DRIVEWAY PAVEMENT
STA 21+92 TO STA 22+22 – 27 SY
STA 22+76 TO STA 23+03 – 22 SY
STA 24+18 TO STA 24+43 – 34 SY

ASPHALT CONCRETE COMPOSITE
STA 20+42 TO STA 20+62 – 3 TON
STA 20+96 TO STA 21+19 – 5 TON
STA 21+92 TO STA 22+22 – 3 TON
STA 22+76 TO STA 23+03 – 3 TON
STA 24+18 TO STA 24+61 – 5 TON

TYPE 1 DETECTABLE WARNINGS
STA 20+46 TO STA 20+57 – 30 SF
STA 21+01 TO STA 21+12 – 31 SF
STA 24+44 TO STA 24+56 – 31 SF

EPOXY PAVEMENT MARKING PAINT, 24" WHITE
STA 20+63 TO STA 21+14 – 96 LF
STA 24+60 TO STA 24+93 – 48 LF

REMOVE CONCRETE DRIVEWAY PAVEMENT
STA 21+98 TO STA 22+13 – 27 SY
STA 22+82 TO STA 22+97 – 21 SY
STA 24+25 TO STA 24+43 – 32 SY

REMOVE ASPHALT CONCRETE PAVEMENT
STA 20+42 TO STA 20+62 – 11 SY
STA 20+96 TO STA 21+19 – 21 SY
STA 21+92 TO STA 22+22 – 10 SY
STA 22+76 TO STA 23+03 – 8 SY
STA 24+18 TO STA 24+61 – 21 SY

REMOVE CONCRETE SIDEWALK
STA 20+36 TO STA 20+57 – 21 SY
STA 21+00 TO STA 24+56 – 198 SY

REMOVE CONCRETE PAVEMENT
STA 20+44 TO STA 20+59 – 7 SY

REMOVE CONCRETE CURB AND GUTTER
STA 20+42 TO STA 20+59 – 6 LF
STA 21+00 TO STA 21+19 – 39 LF
STA 21+92 TO STA 22+22 – 30 LF
STA 22+76 TO STA 23+03 – 27 LF
STA 24+18 TO STA 24+58 – 50 LF

ADJUST CURB STOP BOX
STA 22+13 – 3'R – 1 EA

SIGNS ON POST:
R5-2 (24"X24")

SIGNS ON POST:
R1-1 (30"X30")

SIGNS ON POST:
2 EA – CUSTOM (WASHINGTON AVE)
2 EA – CUSTOM (MINNESOTA ST)

ADJUST

SIGNS ON POST:
R2-1 (24"X30")
S4-2P (24"X10")
S4-3P (24"X8")

SIGNS ON POST:
S1-1 (36"X36")
W16-9P (24"X12")

PROTECT EXISTING FENCE

FIRE HYDRANT TO BE RELOCATED OUTSIDE OF CURB RAMP BY OTHERS.

FIRE HYDRANT TO BE RELOCATED OUTSIDE OF CURB RAMP BY OTHERS.

MINNESOTA STREET

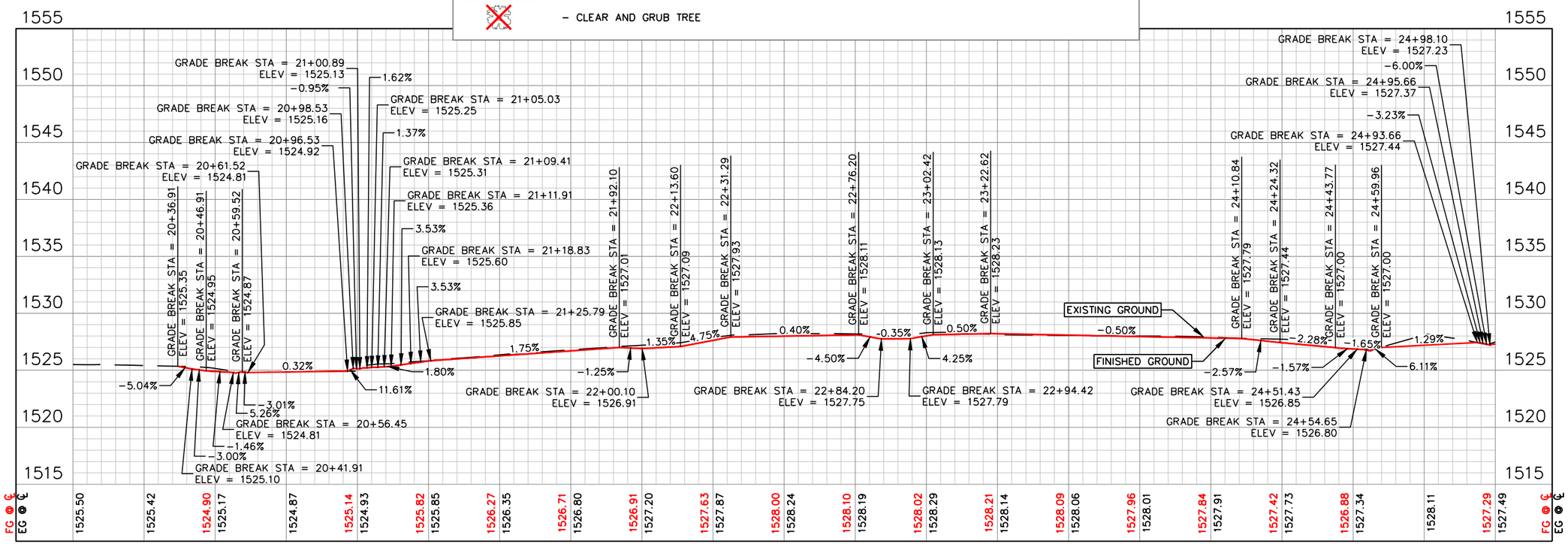
WASHINGTON AVENUE

HILL STREET

LEGEND:

- ASPHALT CONCRETE COMPOSITE
- 4" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK (TRANSITION)
- 6" CONCRETE SIDEWALK
- 6" PCC DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE
- 6" PCC VALLEY GUTTER
- 6" PCC FILLET SECTION
- SPECIAL CONCRETE CURB AND GUTTER
- TYPE 1 DETECTABLE WARNINGS
- GRAVEL SURFACING
- 24" PAVEMENT MARKINGS

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
15287
JACOB T.
MORRIS
SOUTH DAKOTA
2/3/2025



PLAN AND PROFILE

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	33	65

FILE: 672021 – Plan and Profile.dwg
PLOTTING DATE: 2025-03-03 INTIALS: JTM
REVISION DATE: 2025-03-04

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4" CONCRETE SIDEWALK
STA 25+59 TO STA 25+64 – 31 SF
STA 27+50 TO STA 27+55 – 32 SF

5" CONCRETE SIDEWALK
STA 25+09 TO STA 27+98 – 1,731 SF
STA 28+57 TO STA 30+00 – 867 SF

5" CONCRETE SIDEWALK (TRANSITION)
STA 25+14 TO STA 25+90 – 167 SF
STA 26+45 TO STA 26+87 – 87 SF
STA 27+43 TO STA 27+93 – 103 SF
STA 28+69 TO STA 29+43 – 182 SF

6" CONCRETE SIDEWALK
STA 24+98 TO STA 25+15 – 128 SF
STA 27+92 TO STA 28+08 – 122 SF
STA 28+51 TO STA 28+69 – 140 SF

6" PCC FILLET SECTION
STA 24+95 TO STA 25+11 – 12 SY
STA 27+95 TO STA 28+11 – 12 SY
STA 28+48 TO STA 28+64 – 12 SY

SPECIAL CONCRETE CURB AND GUTTER
STA 24+95 TO STA 24+98 – 3 LF
STA 25+10 TO STA 25+16 – 5 LF
STA 25+90 TO STA 26+46 – 56 LF
STA 26+86 TO STA 27+44 – 58 LF
STA 27+90 TO STA 27+95 – 5 LF
STA 28+07 TO STA 28+11 – 6 LF
STA 28+48 TO STA 28+51 – 3 LF
STA 28+63 TO STA 28+71 – 8 LF
STA 29+42 TO STA 29+96 – 53 LF

6" PCC DRIVEWAY PAVEMENT
STA 25+90 TO STA 26+46 – 74 SY
STA 26+86 TO STA 27+44 – 54 SY
STA 29+42 TO STA 29+96 – 55 SY

6" CONCRETE VALLEY GUTTER
STA 28+48 TO STA 28+56 – 38 SY

TYPE 1 DETECTABLE WARNINGS
STA 24+98 TO STA 25+10 – 32 SF
STA 27+97 TO STA 28+08 – 29 SF
STA 28+51 TO STA 28+64 – 35 SF

ASPHALT CONCRETE COMPOSITE
STA 24+93 TO STA 25+16 – 5 TON
STA 25+90 TO STA 26+46 – 5 TON
STA 26+86 TO STA 27+44 – 5 TON
STA 27+90 TO STA 28+13 – 5 TON
STA 28+43 TO STA 28+71 – 25 TON
STA 29+42 TO STA 29+96 – 5 TON

ADJUST CURB STOP BOX
STA 26+75 – 2'R – 1 EA

REFURBISH SINGLE MAILBOX
STA 27+56 – 6'R – 1 EA

ADJUST WATER VALVE BOX
STA 28+12 – 5'R – 1 EA

TYPE B FRAME AND GRATE
STA 25+07 – 9'R – 1 EA

EPOXY PAVEMENT MARKING PAINT, 24" WHITE
STA 28+13 TO STA 28+46 – 48 LF

REMOVE SIGN FOR RESET
STA 28+63 – 4'R – 1 EA

REMOVE CONCRETE PAVEMENT
STA 28+48 TO STA 28+58 – 48 SY

REMOVE ASPHALT CONCRETE PAVEMENT
STA 24+93 TO STA 25+16 – 12 SY
STA 25+90 TO STA 26+46 – 16 SY
STA 26+86 TO STA 27+44 – 17 SY
STA 27+90 TO STA 28+13 – 13 SY
STA 28+43 TO STA 28+51 – 41 SY
STA 28+58 TO STA 28+71 – 20 SY
STA 29+42 TO STA 29+96 – 15 SY

REMOVE CONCRETE DRIVEWAY
STA 25+94 TO STA 26+41 – 80 SY
STA 26+93 TO STA 27+39 – 66 SY
STA 29+49 TO STA 29+90 – 75 SY

CLEAR AND GRUB TREE
STA 26+51 – 6'R – 1 EA

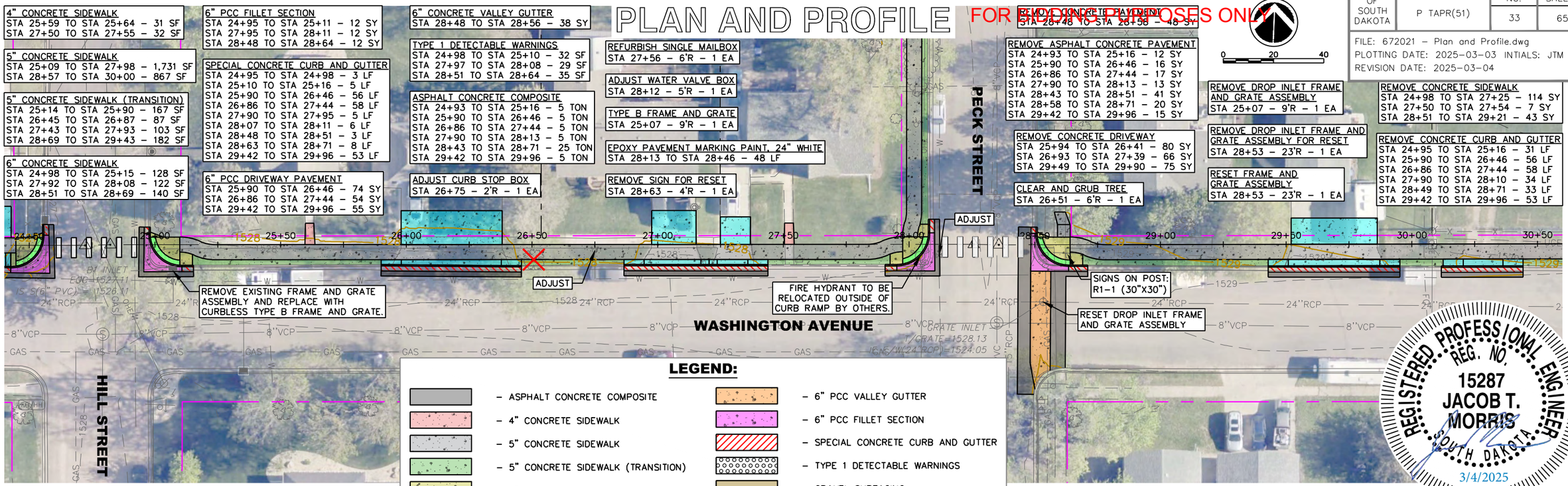
REMOVE DROP INLET FRAME AND GRATE ASSEMBLY
STA 25+07 – 9'R – 1 EA

REMOVE DROP INLET FRAME AND GRATE ASSEMBLY FOR RESET
STA 28+53 – 23'R – 1 EA

RESET FRAME AND GRATE ASSEMBLY
STA 28+53 – 23'R – 1 EA

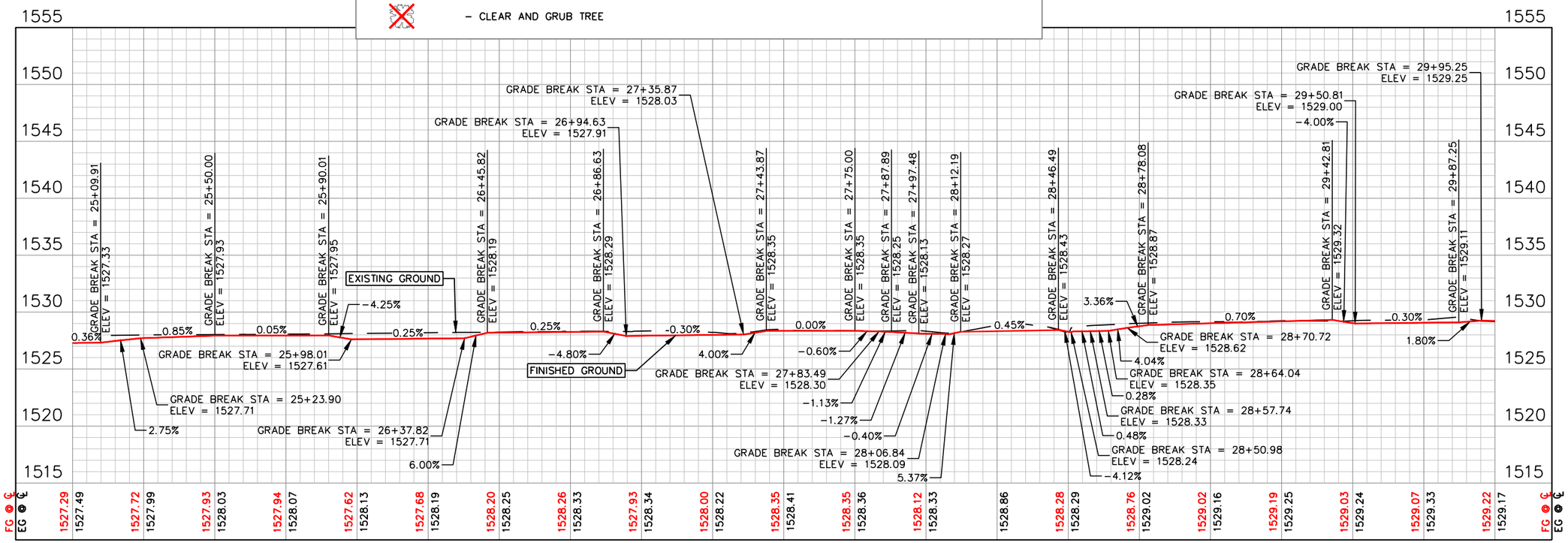
REMOVE CONCRETE SIDEWALK
STA 24+98 TO STA 27+25 – 114 SY
STA 27+50 TO STA 27+54 – 7 SY
STA 28+51 TO STA 29+21 – 43 SY

REMOVE CONCRETE CURB AND GUTTER
STA 24+95 TO STA 25+16 – 31 LF
STA 25+90 TO STA 26+46 – 56 LF
STA 26+86 TO STA 27+44 – 58 LF
STA 27+90 TO STA 28+10 – 34 LF
STA 28+49 TO STA 28+71 – 33 LF
STA 29+42 TO STA 29+96 – 53 LF



LEGEND:

- ASPHALT CONCRETE COMPOSITE
- 4" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK (TRANSITION)
- 6" CONCRETE SIDEWALK
- 6" PCC DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE
- 6" PCC VALLEY GUTTER
- 6" PCC FILLET SECTION
- SPECIAL CONCRETE CURB AND GUTTER
- TYPE 1 DETECTABLE WARNINGS
- GRAVEL SURFACING
- 24" PAVEMENT MARKINGS



REGISTERED PROFESSIONAL ENGINEER
REG. NO.
15287
JACOB T. MORRIS
SOUTH DAKOTA
3/4/2025

PLAN AND PROFILE

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	34	65

FILE: 672021 – Plan and Profile.dwg
PLOTTING DATE: 2025-02-03 INTIALS: JTM
REVISION DATE:

0 20 40

5" CONCRETE SIDEWALK
STA 30+00 TO STA 34+64 – 2,811 SF

5" CONCRETE SIDEWALK (TRANSITION)
STA 29+95 TO STA 30+13 – 47 SF
STA 30+44 TO STA 31+44 – 301 SF
STA 31+58 TO STA 32+04 – 146 SF
STA 32+18 TO STA 32+61 – 144 SF
STA 32+86 TO STA 34+43 – 539 SF

SPECIAL CONCRETE CURB AND GUTTER
STA 30+11 TO STA 30+45 – 33 LF
STA 31+43 TO STA 32+21 – 78 LF
STA 32+61 TO STA 32+87 – 26 LF
STA 33+15 TO STA 33+21 – 6 LF

ASPHALT CONCRETE COMPOSITE
STA 30+11 TO STA 30+45 – 3 TON
STA 31+43 TO STA 32+11 – 6 TON

6" PCC DRIVEWAY PAVEMENT
STA 30+12 TO STA 30+45 – 10 SY
STA 32+61 TO STA 32+87 – 10 SY

GRAVEL SURFACING
STA 32+10 TO STA 32+21 – 1 TON
STA 32+61 TO STA 32+87 – 2 TON
STA 33+15 TO STA 33+21 – 1 TON

TYPE 1 DETECTABLE WARNINGS
STA 31+49 TO STA 31+54 – 10 SF
STA 32+09 TO STA 32+14 – 10 SF

SIGNS ON POST:
R2-1 (24"X30")

CB #1-2'X2' CATCH BASIN
DEPTH =2.39'
T/RIM = 1529.05
IE S(12" PVC)= 1526.66

12" PVC @ 0.50%

CONNECT TO EXISTING INLET
IE N(12" PVC) = 1526.60

GRATE INLET
T/GRATE=1529.00
IE S(12" PVC) = 1526.50

FIRE HYDRANT TO REMAIN IN PLACE. CONCRETE TO BE POURED AROUND EXISTING HYDRANT.

FIRE HYDRANT
T/NUT=1532.00

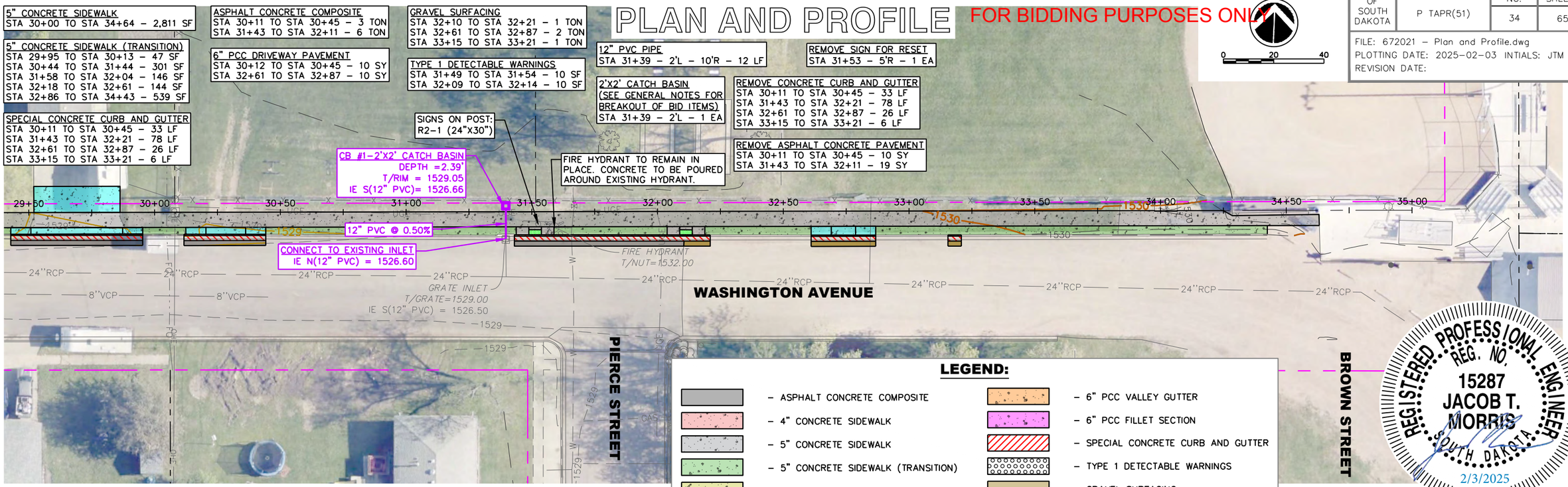
12" PVC PIPE
STA 31+39 – 2'L – 10'R – 12 LF

2'X2' CATCH BASIN
(SEE GENERAL NOTES FOR BREAKOUT OF BID ITEMS)
STA 31+39 – 2'L – 1 EA

REMOVE SIGN FOR RESET
STA 31+53 – 5'R – 1 EA

REMOVE CONCRETE CURB AND GUTTER
STA 30+11 TO STA 30+45 – 33 LF
STA 31+43 TO STA 32+21 – 78 LF
STA 32+61 TO STA 32+87 – 26 LF
STA 33+15 TO STA 33+21 – 6 LF

REMOVE ASPHALT CONCRETE PAVEMENT
STA 30+11 TO STA 30+45 – 10 SY
STA 31+43 TO STA 32+11 – 19 SY



LEGEND:

- ASPHALT CONCRETE COMPOSITE
- 4" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK (TRANSITION)
- 6" CONCRETE SIDEWALK
- 6" PCC DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE
- 6" PCC VALLEY GUTTER
- 6" PCC FILLET SECTION
- SPECIAL CONCRETE CURB AND GUTTER
- TYPE 1 DETECTABLE WARNINGS
- GRAVEL SURFACING
- 24" PAVEMENT MARKINGS

REGISTERED PROFESSIONAL ENGINEER
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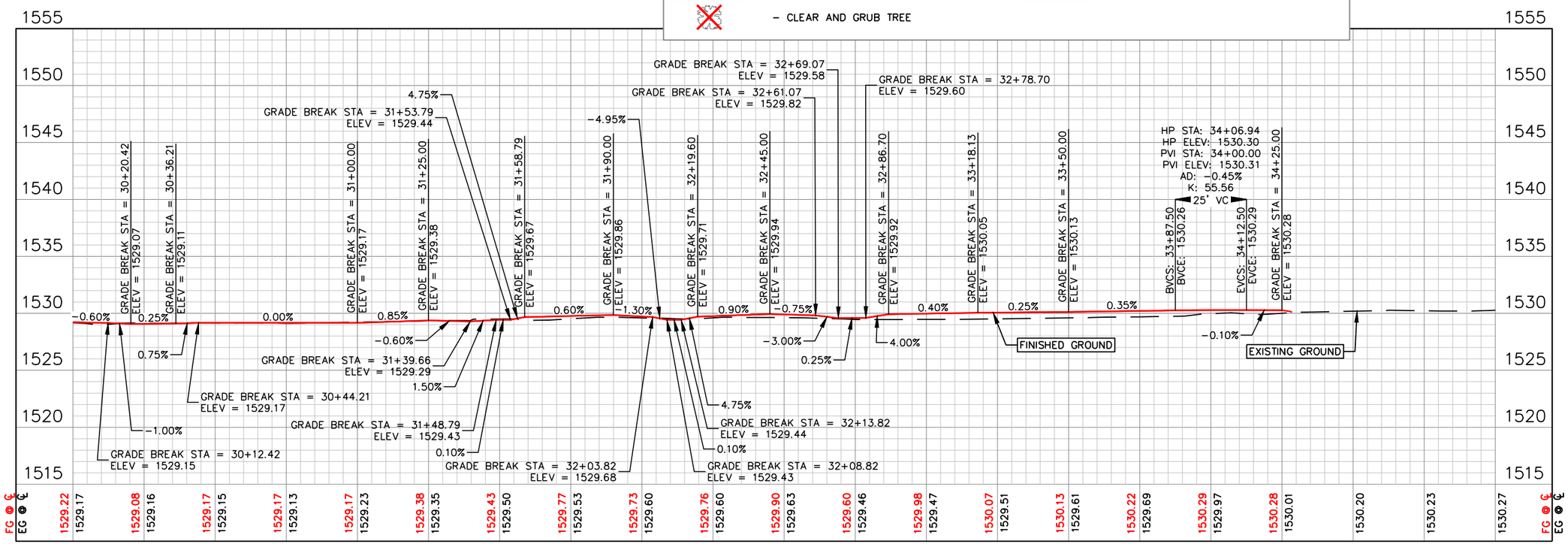
15287
JACOB T.
MORRIS
SOUTH DAKOTA
2/3/2025



PLAN AND PROFILE

FOR BIDDING PURPOSES ONLY

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	35	65

FILE: 672021 – Plan and Profile.dwg
PLOTTING DATE: 2025-02-03 INTIALS: JTM
REVISION DATE:

5" CONCRETE SIDEWALK
STA 42+18 TO STA 44+72 – 1,544 SF

5" CONCRETE SIDEWALK (TRANSITION)
STA 42+23 TO STA 43+63 – 329 SF
STA 43+94 TO STA 44+62 – 135 SF

6" CONCRETE SIDEWALK
STA 44+62 TO STA 44+77 – 92 SF

6" PCC DRIVEWAY PAVEMENT
STA 43+63 TO STA 43+95 – 28 SY

6" PCC FILLET SECTION
STA 44+66 TO STA 44+79 – 9 SY

SPECIAL CONCRETE CURB AND GUTTER
STA 43+63 TO STA 43+95 – 31 LF
STA 44+60 TO STA 44+67 – 7 LF
STA 44+76 TO STA 44+79 – 4 LF

ASPHALT CONCRETE COMPOSITE
STA 43+63 TO STA 43+95 – 3 TON
STA 44+60 TO STA 44+81 – 3 TON

TYPE 1 DETECTABLE WARNINGS
STA 44+67 TO STA 44+77 – 27 SF

EPOXY PAVEMENT MARKING PAINT, 24" WHITE
STA 44+83 TO STA 45+16 – 48 LF

ADJUST CURB STOP BOX
STA 42+63 – 4'R – 1 EA

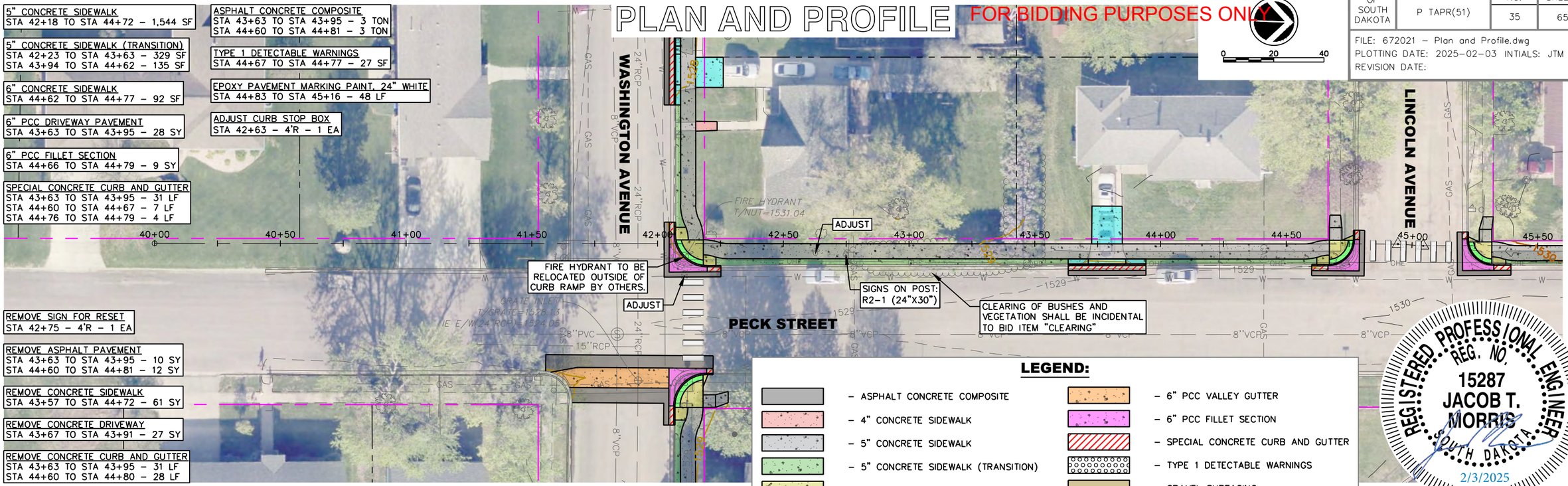
REMOVE SIGN FOR RESET
STA 42+75 – 4'R – 1 EA

REMOVE ASPHALT PAVEMENT
STA 43+63 TO STA 43+95 – 10 SY
STA 44+60 TO STA 44+81 – 12 SY

REMOVE CONCRETE SIDEWALK
STA 43+57 TO STA 44+72 – 61 SY

REMOVE CONCRETE DRIVEWAY
STA 43+67 TO STA 43+91 – 27 SY

REMOVE CONCRETE CURB AND GUTTER
STA 43+63 TO STA 43+95 – 31 LF
STA 44+60 TO STA 44+80 – 28 LF



LEGEND:

- ASPHALT CONCRETE COMPOSITE
- 4" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK (TRANSITION)
- 6" CONCRETE SIDEWALK
- 6" PCC DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE
- 6" PCC VALLEY GUTTER
- 6" PCC FILLET SECTION
- SPECIAL CONCRETE CURB AND GUTTER
- TYPE 1 DETECTABLE WARNINGS
- GRAVEL SURFACING
- 24" PAVEMENT MARKINGS

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
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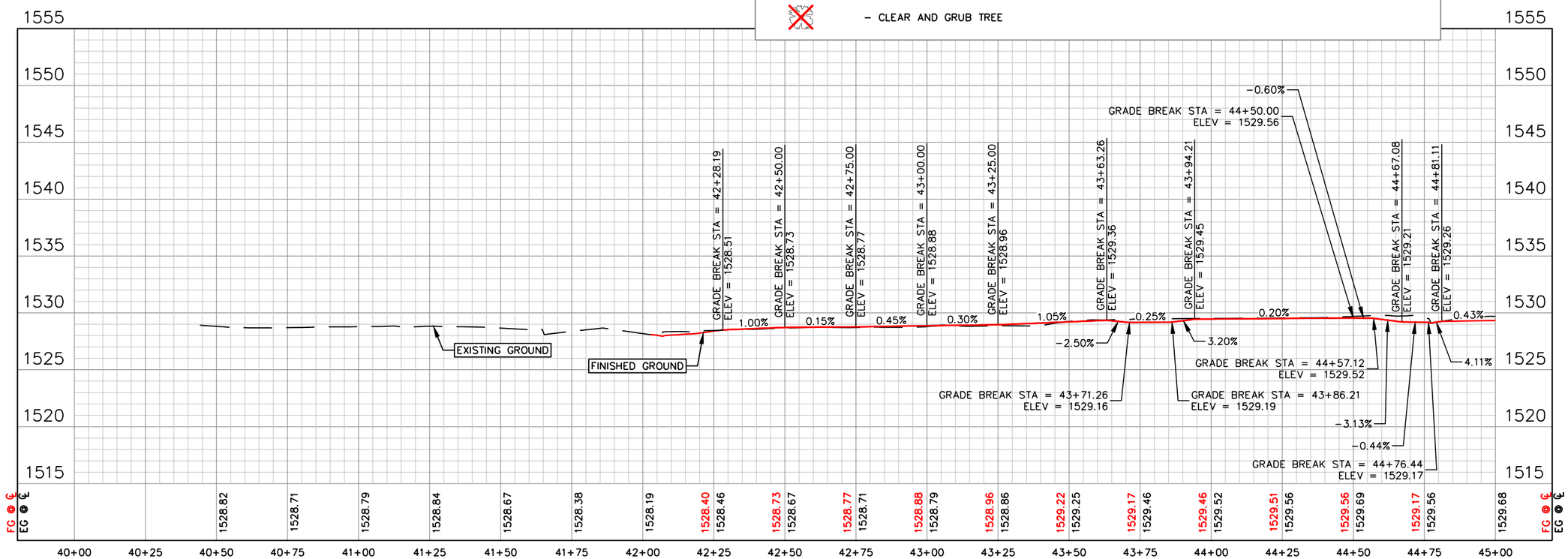
JACOB T. MORRIS
SOUTH DAKOTA
2/3/2025



PLAN AND PROFILE

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	36	65

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PLOTTING DATE: 2025-02-03 INITIALS: JTM
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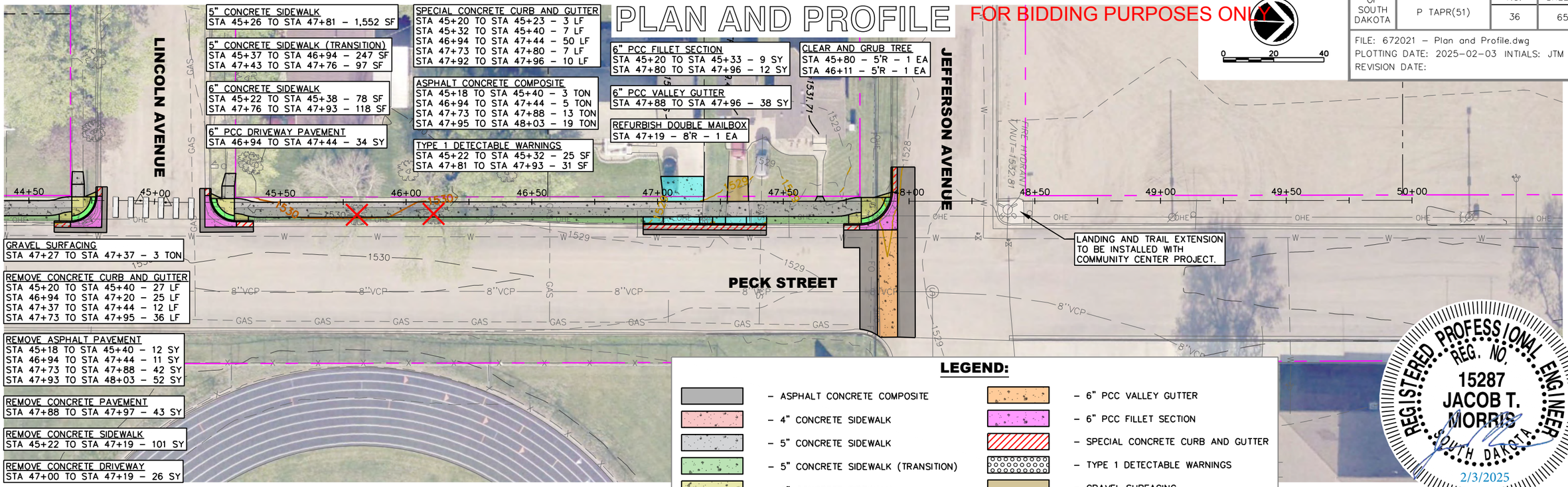

LEGEND:

- ASPHALT CONCRETE COMPOSITE
- 4" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK (TRANSITION)
- 6" CONCRETE SIDEWALK
- 6" PCC DRIVEWAY PAVEMENT
- CLEAR AND GRUB TREE
- 6" PCC VALLEY GUTTER
- 6" PCC FILLET SECTION
- SPECIAL CONCRETE CURB AND GUTTER
- TYPE 1 DETECTABLE WARNINGS
- GRAVEL SURFACING
- 24" PAVEMENT MARKINGS

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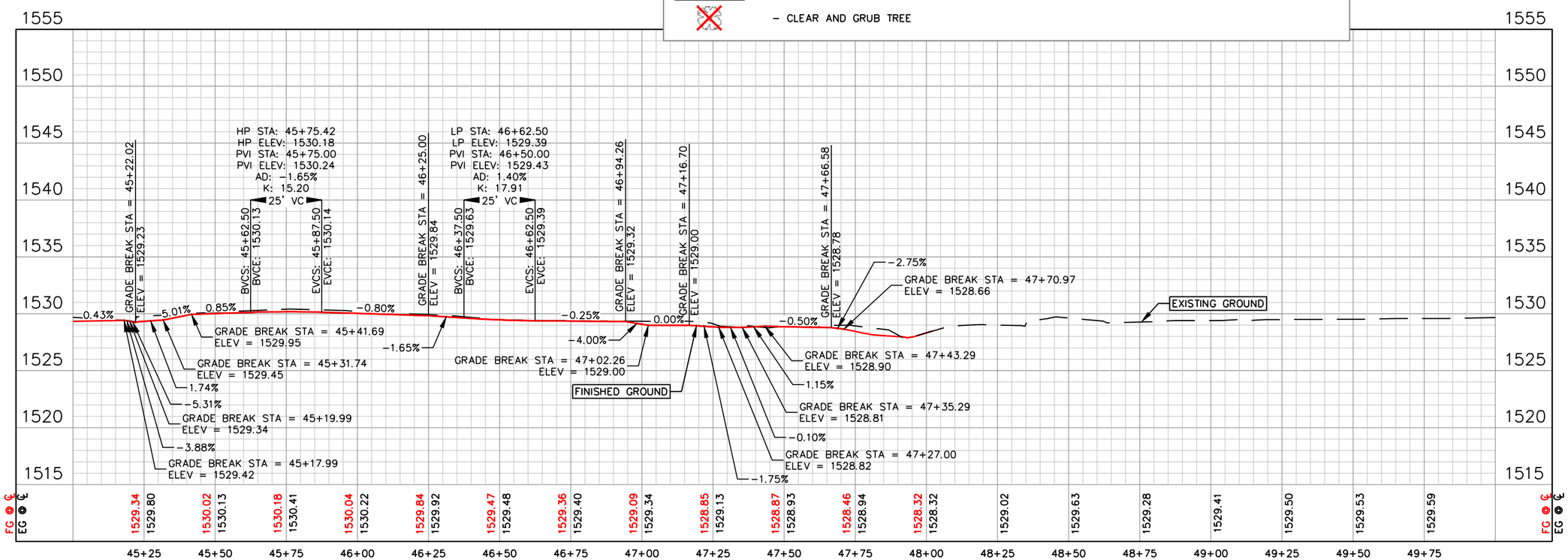

INTERSECTIONS AND PAVEMENT MARKINGS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	37	65

FILE: 672021 – Intersections.dwg
PLOTTING DATE: 2025-03-03 INITIALS: JTM
REVISION DATE: 2025-03-04

LEGEND:

- – ASPHALT CONCRETE COMPOSITE
- – 5" CONCRETE SIDEWALK
- – 5" CONCRETE SIDEWALK (TRANSITION)
- – 6" CONCRETE SIDEWALK
- – 6" PCC DRIVEWAY PAVEMENT
- – 6" PCC VALLEY GUTTER
- – 6" PCC FILLET SECTION
- – CONCRETE CURB AND GUTTER
- – TYPE 1 DETECTABLE WARNINGS
- – GRAVEL SURFACING

BT	– BOTTOM OF CURB TAPER
ME	– MATCH EXISTING
POF	– POINT OF FILLET
SW	– TOP OF SIDEWALK
TC	– TOP OF CURB
TT	– TOP OF CURB TAPER

0 5 10

WASHINGTON AVENUE

MINNESOTA STREET

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
15287
JACOB T.
MORRIS
SOUTH DAKOTA
3/4/2025

INTERSECTIONS AND PAVEMENT MARKINGS

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	38	65

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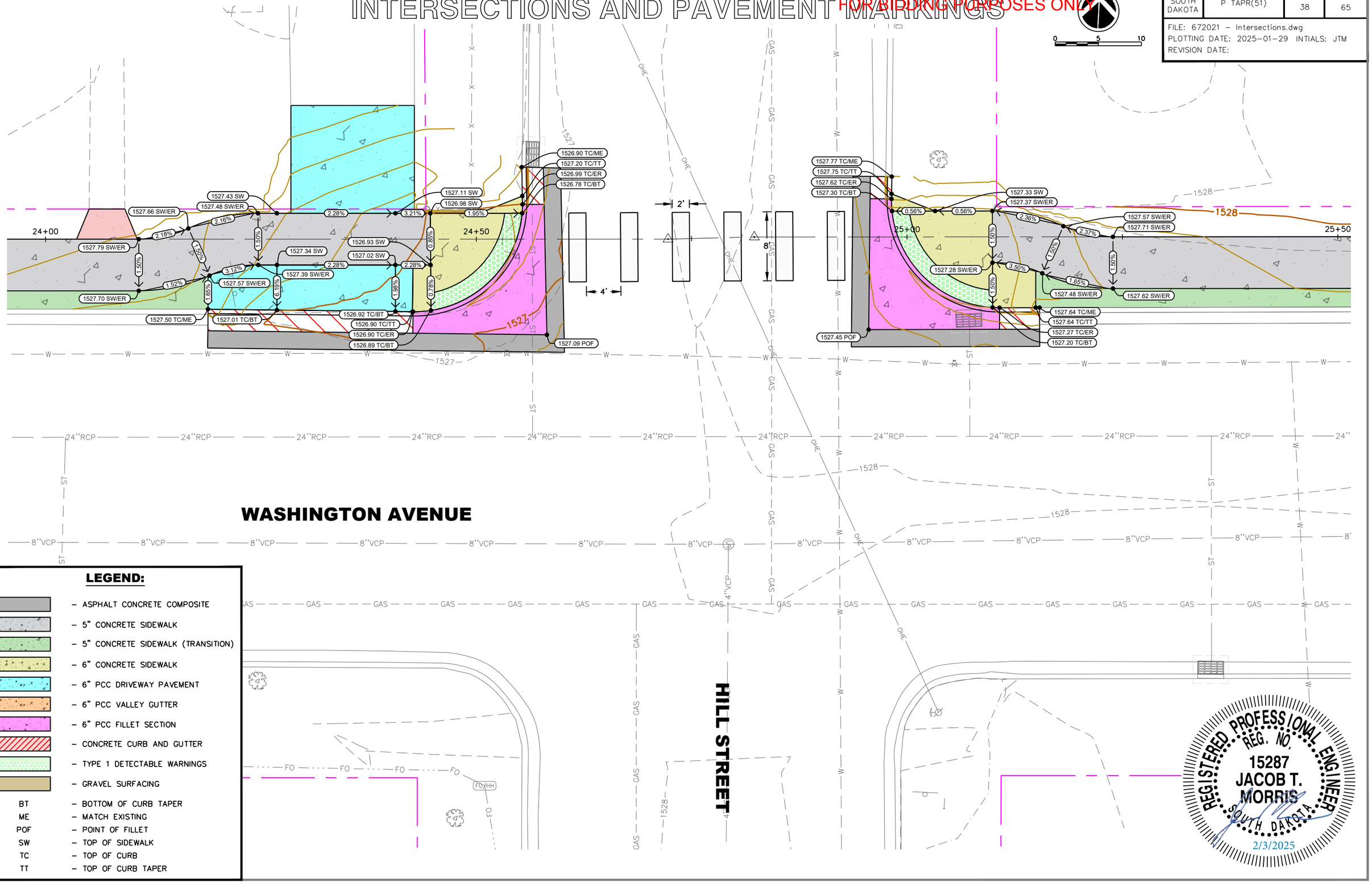


LEGEND:

- ASPHALT CONCRETE COMPOSITE
- 5" CONCRETE SIDEWALK
- 5" CONCRETE SIDEWALK (TRANSITION)
- 6" CONCRETE SIDEWALK
- 6" PCC DRIVEWAY PAVEMENT
- 6" PCC VALLEY GUTTER
- 6" PCC FILLET SECTION
- CONCRETE CURB AND GUTTER
- TYPE 1 DETECTABLE WARNINGS
- GRAVEL SURFACING

BT	BOTTOM OF CURB TAPER
ME	MATCH EXISTING
POF	POINT OF FILLET
SW	TOP OF SIDEWALK
TC	TOP OF CURB
TT	TOP OF CURB TAPER

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
15287
JACOB T.
MORRIS
SOUTH DAKOTA
2/3/2025

INTERSECTIONS AND PAVEMENT MARKINGS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	39	65

FILE: 672021 – Intersections.dwg
PLOTTING DATE: 2025-01-29 INTIALS: JTM
REVISION DATE:

0 5 10

LEGEND:

- – ASPHALT CONCRETE COMPOSITE
- – 5" CONCRETE SIDEWALK
- – 5" CONCRETE SIDEWALK (TRANSITION)
- – 6" CONCRETE SIDEWALK
- – 6" PCC DRIVEWAY PAVEMENT
- – 6" PCC VALLEY GUTTER
- – 6" PCC FILLET SECTION
- – CONCRETE CURB AND GUTTER
- – TYPE 1 DETECTABLE WARNINGS
- – GRAVEL SURFACING

BT	– BOTTOM OF CURB TAPER
ME	– MATCH EXISTING
POF	– POINT OF FILLET
SW	– TOP OF SIDEWALK
TC	– TOP OF CURB
TT	– TOP OF CURB TAPER

WASHINGTON AVENUE

PECK STREET

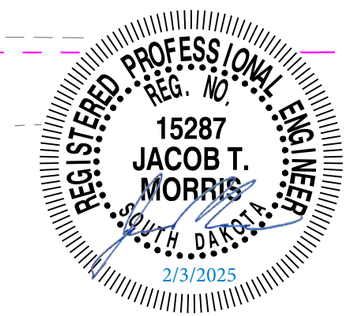
28+00 42+00 28+50 29+00 41+50

1528.42 SW/ER 1528.28 SW/ER 1528.60 TC/ME 1528.59 TC/TT 1528.26 TC/ER 1528.12 TC/BT 1528.16 POF
1528.51 SW/ER 1528.37 SW/ER 1528.18 SW/ER 1528.30 SW/ER 1528.25 SW/ER 1528.14 SW 1528.09 SW/ER
1528.16 SW/ER 1528.21 SW/ER 1528.39 TC/ME 1528.41 TC/TT 1528.19 TC/ER 1528.00 TC/BT
1528.80 SW/ME 1528.99 SW/ME 1528.78 TC/ME 1528.77 TC/TT 1528.66 TC/ER 1528.33 TC/BT
1528.65 SW 1528.68 SW 1528.37 SW 1528.40 SW/ER 1528.67 SW/ER 1528.86 SW/ER
1528.30 SW/ER 1528.58 SW/ER 1528.77 SW/ER 1528.74 TC/ME 1528.73 TC/TT
1528.38 POF 1528.28 TC/ER 1528.28 TC/BT

1.50% 3.32% 2.33% 1.50% 3.33% 3.46% 0.60% 0.60% 0.85% 0.93% 1.50% 1.50% 1.20% 1.67% 0.66%
3.84% 3.42% 5.76% 0.60% 5.62% 5.62% 0.57% 0.60% 3.26% 3.23% 1.50% 1.50% 1.70% 4.85% 1.75% 2.26% 0.55%

4' 2' 8'

1528 1529 24"RCP 8"VCP 8"PVC 15"RCP OHE W GAS



INTERSECTIONS AND PAVEMENT MARKINGS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	40	65

FILE: 672021 – Intersections.dwg
PLOTTING DATE: 2025-01-29 INTIALS: JTM
REVISION DATE:

LEGEND:

- – ASPHALT CONCRETE COMPOSITE
- – 5" CONCRETE SIDEWALK
- – 5" CONCRETE SIDEWALK (TRANSITION)
- – 6" CONCRETE SIDEWALK
- – 6" PCC DRIVEWAY PAVEMENT
- – 6" PCC VALLEY GUTTER
- – 6" PCC FILLET SECTION
- – CONCRETE CURB AND GUTTER
- – TYPE 1 DETECTABLE WARNINGS
- – GRAVEL SURFACING

BT	– BOTTOM OF CURB TAPER
ME	– MATCH EXISTING
POF	– POINT OF FILLET
SW	– TOP OF SIDEWALK
TC	– TOP OF CURB
TT	– TOP OF CURB TAPER

0 5 10

1530

31+50 32+00 32+50

UGE W ST 24"RCP GAS

1529.39 SW 0.10% 1529.40 SW 1529.34 SW 0.10% 1529.35 SW

4.16% 4.18% 0.96% 0.98%

0.08% 0.08%

1529.71 TC/TT
1529.27 TC/BT
1529.75 TC/TT
1529.31 TC/BT

1529.26 TC/ME
1529.26 TC/TT
1529.26 TC/BT

1529.76 TC/ME
1529.76 TC/TT
1529.32 TC/BT

WASHINGTON AVENUE

PIERCE STREET

1529

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2/3/2025

INTERSECTIONS AND PAVEMENT MARKINGS

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LEGEND:

- – ASPHALT CONCRETE COMPOSITE
- – 5" CONCRETE SIDEWALK
- – 5" CONCRETE SIDEWALK (TRANSITION)
- – 6" CONCRETE SIDEWALK
- – 6" PCC DRIVEWAY PAVEMENT
- – 6" PCC VALLEY GUTTER
- – 6" PCC FILLET SECTION
- – CONCRETE CURB AND GUTTER
- – TYPE 1 DETECTABLE WARNINGS
- – GRAVEL SURFACING

BT	– BOTTOM OF CURB TAPER
ME	– MATCH EXISTING
POF	– POINT OF FILLET
SW	– TOP OF SIDEWALK
TC	– TOP OF CURB
TT	– TOP OF CURB TAPER

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	41	65

FILE: 672021 – Intersections.dwg
PLOTTING DATE: 2025-01-29 INITIALS: JTM
REVISION DATE:

0 5 10

LINCOLN AVENUE

PECK STREET

1529.95 SW
1529.86 SW
1529.96 TC/ME
1529.94 TC/TT
1529.66 SW
1529.51 TC/ER
1529.44 TC/BT
1529.75 SW
1529.46 SW/ER
1529.60 SW
1529.73 SW/ME
1529.44 SW/ER
1529.70 SW/ME
1529.53 SW
1529.36 SW
1529.67 TC/ME
1529.70 TC/TT
1529.54 TC/ER
1529.28 TC/BT
1529.52 POF
1529.17 TC/BT
1529.23 TC/ER
1529.59 TC/TT
1529.57 TC/ME
1529.20 POF
1529.20 SW
1529.45 SW
1529.68 SW/ME
1529.14 SW/ER
1529.72 SW/ME
1529.48 SW
1529.23 SW/ER
1529.09 TC/BT
1529.13 TC/ER
1529.49 TC/TT
1529.48 TC/ME
1529.40 SW/ER
1529.31 SW/ER
1529.52 SW/ER
1529.43 SW/ER

REGISTERED PROFESSIONAL ENGINEER
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2/3/2025

INTERSECTIONS AND PAVEMENT MARKINGS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	42	65

FILE: 672021 – Intersections.dwg
PLOTTING DATE: 2025-01-29 INTIALS: JTM
REVISION DATE:

0 5 10

LEGEND:

- – ASPHALT CONCRETE COMPOSITE
- – 5" CONCRETE SIDEWALK
- – 5" CONCRETE SIDEWALK (TRANSITION)
- – 6" CONCRETE SIDEWALK
- – 6" PCC DRIVEWAY PAVEMENT
- – 6" PCC VALLEY GUTTER
- – 6" PCC FILLET SECTION
- – CONCRETE CURB AND GUTTER
- – TYPE 1 DETECTABLE WARNINGS
- – GRAVEL SURFACING

BT	– BOTTOM OF CURB TAPER
ME	– MATCH EXISTING
POF	– POINT OF FILLET
SW	– TOP OF SIDEWALK
TC	– TOP OF CURB
TT	– TOP OF CURB TAPER

JEFFERSON AVENUE

PECK STREET

48+50

48+00

1527.93 TC/BT
1528.34 TC/TT
1528.34 TC/ER
1528.28 TC/ME
1528.11 POF
1528.17 SW/ER
1528.16 SW/ER
1528.45 SW/ER
1528.66 SW/ER
1528.36 SW/ER
1528.57 SW/ER
1528.18 TC/BT
1528.24 TC/ER
1528.69 TC/TT
1528.71 TC/ME

0.93%
1.90%
0.19%
0.20%
4.98%
4.98%
1.50%
3.96%
3.96%
1.50%

8"VCP
8"PVC
OHE
W
FO
GAS
UGE

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
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MORRIS
SOUTH DAKOTA

2/3/2025

PERMANENT SIGNING LAYOUT

FOR BIDDING PURPOSES ONLY

LEGEND:

- – FURNISH AND INSTALL NEW SIGN
- – REMOVE SIGN FOR RESET
- – RESET SIGN

NOTE:
ALL SIGNS SHALL COMPLY WITH THE MOST CURRENT VERSION OF THE MUTCD.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	43	65

FILE: 672021 – Permanent Signing Layout.dwg
PLOTTING DATE: 2025-01-29 INITIALS: JTM
REVISION DATE:

0 60 120

1	R1-1 STOP 18"x18"	
2	R5-3 NO MOTOR VEHICLES 24"x24"	
3	R1-1 STOP 30"x30"	
4	W11-2 30"x30"	4
5	W16-7P 24"x12"	
6	W16-9P AHEAD 24"x12"	
7	CUSTOM SCHOOL SPEED LIMIT 15 WHEN CHILDREN ARE PRESENT CUSTOM	
8	R5-2 24"x12"	
9	R2-1.15 SPEED LIMIT 15 24"x30"	
10	CUSTOM MINNESOTA ST CUSTOM	
11	CUSTOM WASHINGTON AV CUSTOM	

JEFFERSON AVENUE
LINCOLN AVENUE
WASHINGTON AVENUE
MINNESOTA STREET
HILL STREET
PECK STREET

REGISTERED PROFESSIONAL ENGINEER
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SOUTH DAKOTA
2/3/2025

PERMANENT SIGNING LAYOUT

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	44	65

FILE: 672021 – Permanent Signing Layout.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:

TABLE OF NEW PERMANENT SIGNS

LOCATION	SIGN CODE	DESCRIPTION	SIGN SIZE	SUPER/VERY HIGH INTENSITY TRAFFIC SIGN AREA (SQFT)	HIGH INTENSITY TRAFFIC SIGN AREA (SQFT)	2" SQ. TUBE POST (FT)
10+60 - 7'R	R5-3	NO MOTORIZED VEHICLES	24" x 24"		4.0	7.0
13+55 - 7'R	R1-1	STOP	18" x 18"	2.3		7.0
13+60 - 2'L	R5-3	NO MOTORIZED VEHICLES	24" x 24"		4.0	7.0
13+65 - 35'L	W11-2	PEDESTRIAN	30" x 30"	6.3		7.0
	W16-7P	ARROW PLAQUE	24" x 12"	2.0		
21+20 - 3'L	R1-1	STOP	18" x 18"	2.3		7.0
21+20 - 7'R	R5-3	NO MOTORIZED VEHICLES	24" x 24"		4.0	7.0
21+50 - 7'R	W11-2	PEDESTRIAN	30" x 30"	6.3		7.0
	W16-7P	ARROW PLAQUE	24" x 12"	2.0		
24+44 - 6'R	R1-1	STOP	18" x 18"	2.3		7.0
25+05 - 5'L	R1-1	STOP	18" x 18"	2.3		7.0
27+90 - 7'R	R1-1	STOP	18" x 18"	2.3		7.0
28+75 - 2'L	R1-1	STOP	18" x 18"	2.3		7.0
34+60 - 7'R	R5-3	NO MOTORIZED VEHICLES	24" x 24"		4.0	
42+25 - 1.5'L	R1-1	STOP	18" x 18"	2.3		7.0
42+35 - 8'R	W11-2	PEDESTRIAN	30" x 30"	6.3		7.0
	W16-7P	ARROW PLAQUE	24" x 12"	2.0		
44+60 - 7'R	R1-1	STOP	18" x 18"	2.3		7.0
45+40 - 1.5'L	R1-1	STOP	18" x 18"	2.3		7.0
47+75 - 7'R	R1-1	STOP	18" x 18"	2.3		7.0
47+85 - 3'L	R5-3	NO MOTORIZED VEHICLES	24" x 24"		4.0	7.0
			TOTAL:	47.8	20.0	119.0

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SOUTH DAKOTA
2/3/2025

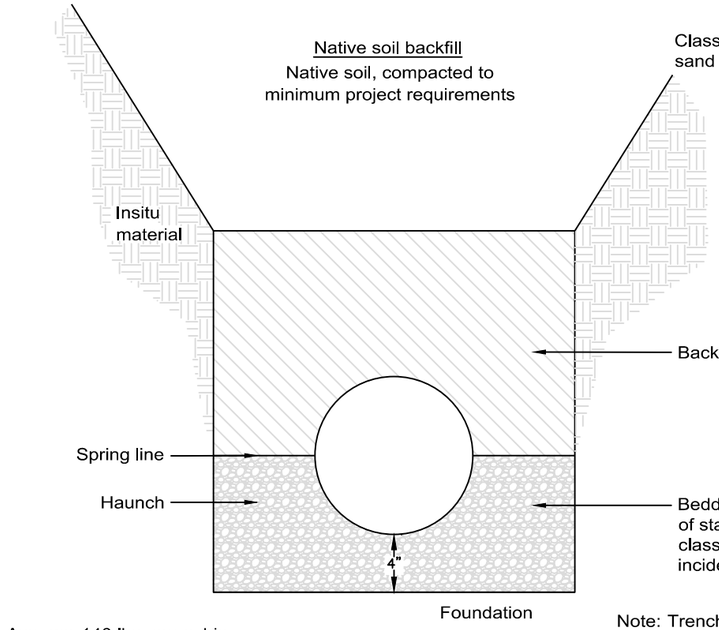
DETAILS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	45	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–30 INTIALS: JTM
REVISION DATE:

BEDDING AND BACKFILL FOR RCP INSTALLATION



Material

Class I: Crushed rock or gravel
100% passing 1 1/2"sieve
<5% passing #200 sieve

Class II: Coarse grained soils includes sand
100% passing 1 1/2" sieve
<5% passing #200 sieve

Assume: 140 lbs. per cubic foot pipe strength class shown on plans

Note: Trench width to be twice the outside diameter, or the outside diameter plus two feet, which ever is less.

Quantity Estimate

Table For Bedding

Material	
12"	0.14 Ton/L.F.
15"	0.19 Ton/L.F.
18"	0.25 Ton/L.F.
21"	0.29 Ton/L.F.
24"	0.33 Ton/L.F.
27"	0.36 Ton/L.F.
30"	0.40 Ton/L.F.
33"	0.44 Ton/L.F.
36"	0.48 Ton/L.F.
42"	0.57 Ton/L.F.
48"	0.67 Ton/L.F.
54"	0.77 Ton/L.F.
60"	0.88 Ton/L.F.
66"	0.98 Ton/L.F.
72"	1.10 Ton/L.F.
78"	1.24 Ton/L.F.
84"	1.35 Ton/L.F.

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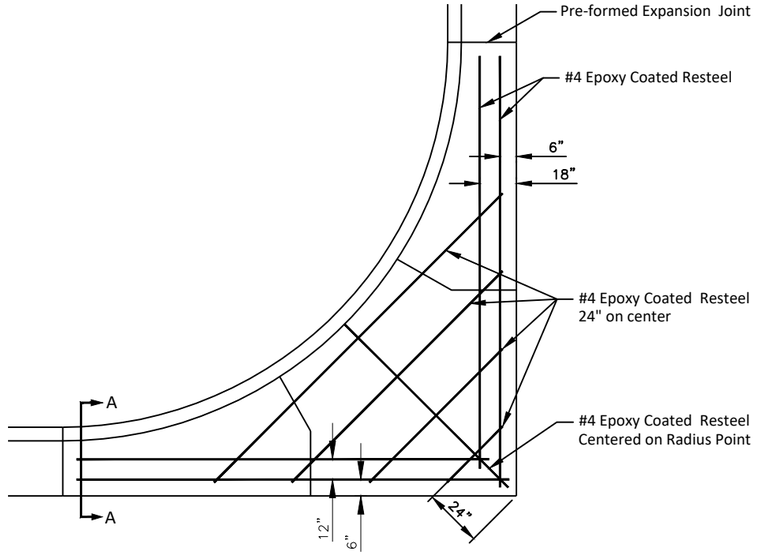
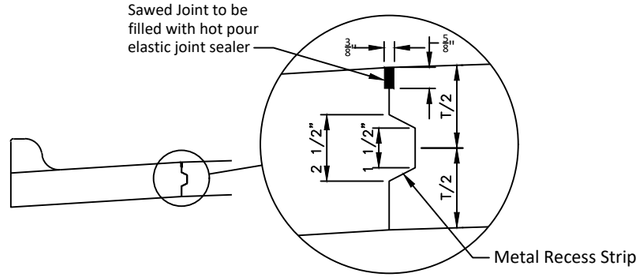
2/3/2025

CONCRETE FILLET





SECTION A-A

GENERAL NOTES

1. All reinforcing steel must have 1-1/2" clearance and must conform to ASTM a615, grade 40.
2. M-6 concrete must be used in the construction of the fillets.
3. The curb must be monolithic with the fillet. No separate payment will be made for the curb as it will be considered part of the fillet.
4. Fillet thickness must be equal to the depth of adjoining pavement but not less than 6".
5. Fillets adjacent to PCC pavement must have a keyway construction joint without tie bar.
6. Fillets will be measured and paid for at the contract unit price per square yard of fillet section. Payment includes all labor and materials necessary to complete the work.
7. The plans will call out the curb opening locations, taper lengths and slopes to meet ADA accessibility. If not, contact the City Engineer's office to provide this information.

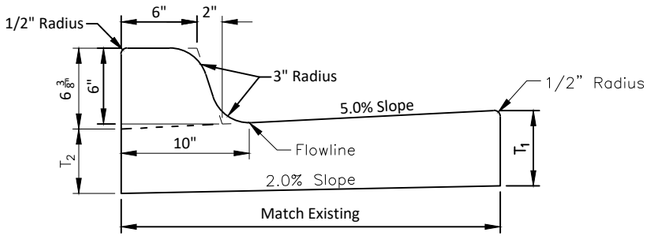
DETAILS

FOR BIDDING PURPOSES ONLY

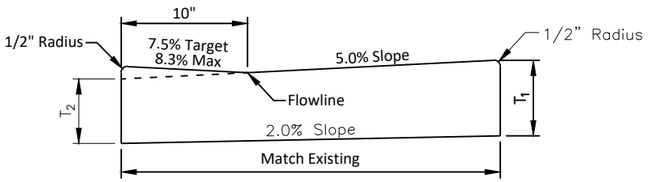
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	46	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–30 INTIALS: JTM
REVISION DATE:

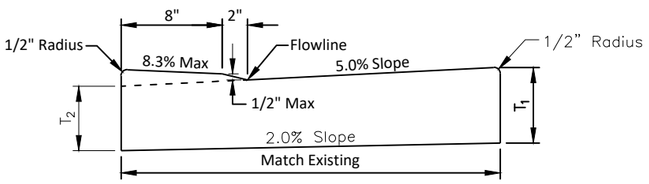
SPECIAL CONCRETE CURB AND GUTTER



STANDARD CURB AND GUTTER



DROP CURB FOR ADA CURB RAMPS



DROP CURB FOR DRIVEWAY APPROACH

T_1 = Thickness will be equal to the depth of the adjacent pavement but not less than 6"
T_2 = T_1-7/8"

GENERAL NOTES:

1) On PCC pavement a keyway longitudinal joint with tie bars must be used when curb and gutter is poured separately.

2) Curb and gutter will be constructed using M6 concrete unless monolithically constructed with the adjacent pavement. In monolithic paving, concrete mix for the curb and gutter may be the same as the adjacent concrete pavement.

3) The curb transition length at ADA curb ramps will be dependent on the type of curb ramp being installed. The plans should call out the length of the transitions. Refer to plate 651.02 for additional curb transition information.

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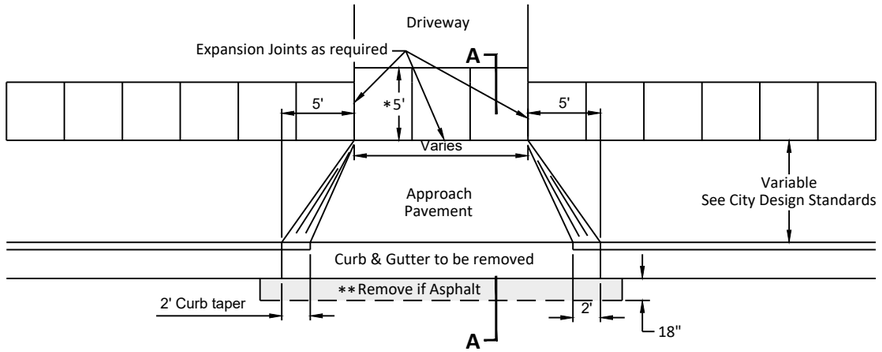
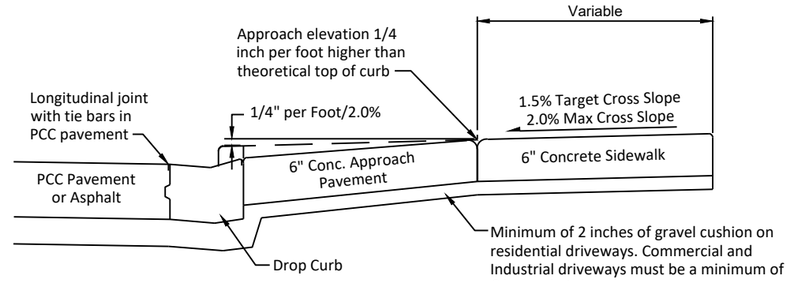
CONCRETE APPROACH PAVEMENT





SECTION VIEW A-A

GENERAL NOTES

*On new construction, the sidewalk must be a minimum of 5' wide through the driveway approach to accommodate passing space requirements. When the adjoining sidewalk is less than 5' wide, the additional width through the driveway approach will be located on the building side of the sidewalk, unless insufficient right of way exists to prevent the sidewalk from being installed entirely in the public right of way. In these cases, install the additional sidewalk width on the street side of the sidewalk

The curb and gutter will be taken out to the nearest construction joint when the joint is within 4' of the end of that driveway.

Full depth sawing is required when the curb and gutter is not removed at a construction joint. A clean, neat, and vertical cut through the curb section is required.

Sidewalks within the driveway limits must have a minimum thickness of 6" unless otherwise specified.

Contraction joints must be formed in the approach pavement by means of a suitable grooving tool. These joints must have a depth of at least one quarter the thickness of the concrete approach pavement.

2" gravel cushion is required under the approach pavement and will be paid for at the contract unit price per ton for gravel cushion unless otherwise specified.

The "Concrete Approach Pavement" will be measured and paid for at the contract unit price per square yard, such price being full compensation for all labor, materials and incidentals in connection with constructing the same.

The concrete in "Concrete Approach Pavement" will comply with the requirements of the specifications for class M6 concrete.

DETAILS

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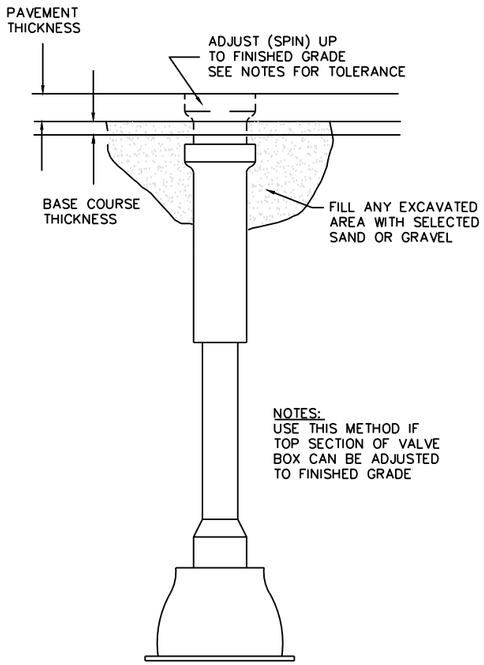
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	47	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025-01-30 INITIALS: JTM
REVISION DATE:

VALVE BOX ADJUSTMENT

SPIN UP METHOD



NO SCALE

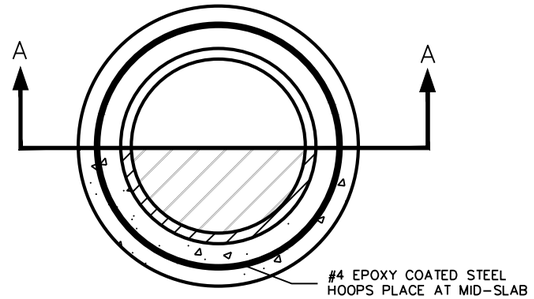
SPIN UP METHOD:

1. IF THE 1/4" TO 3/4" TOLERANCE CANNOT BE MET BY THE "SPIN UP" METHOD ON ASPHALT STREETS, THEN THE CONTRACTOR SHALL BE REQUIRED TO ADJUST THE VALVE BOX BY THE CIRCULAR CUTOUT METHOD. THIS ADDITIONAL WORK, IF REQUIRED, SHALL BE INCIDENTAL TO THE "VALVE BOX ADJUSTMENT" BID ITEM.

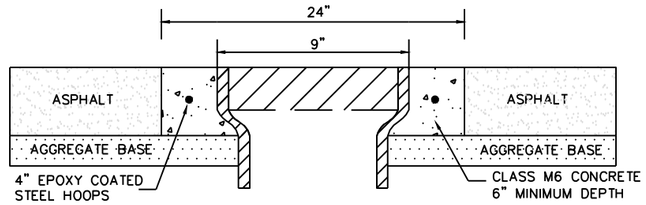
2. IF THE 1/4" TO 3/4" TOLERANCE CAN NOT BE MET BY THE "SPIN UP" METHOD ON CONCRETE STREETS, THE REPAIR METHOD WILL BE DETERMINED BY THE ENGINEER. THIS ADDITIONAL WORK SHALL BE INCIDENTAL TO THE "VALVE BOX ADJUSTMENT" BID ITEM.

3. IF THE VALVE BOX NEEDS MINOR ADJUSTMENT, A MINIMAL AMOUNT OF HEAT CAN BE APPLIED TO BREAK THE BOND BETWEEN THE VALVE BOX AND THE ASPHALT. FULL DEPTH HEATING OF THE ASPHALT WILL NOT BE ALLOWED. IF THE ASPHALT APPEARS TO SHOW SIGNS OF DETERIORATION, IT WILL BE AT THE DISCRETION OF THE ENGINEER TO REQUIRE THE CUT OUT METHOD.

CUTOUT METHOD



CIRCULAR VALVE BOX CUTOUT



SECTION A–A

CUT OUT METHOD:

1. THE CIRCULAR CONCRETE CUTOUT SHALL BE CENTERED ON THE VALVE BOX FRAME.
2. THE CIRCULAR CONCRETE CUTOUT SHALL BE CONSTRUCTED AFTER THE INSTALLATION OF THE TOP LIFT OF ASPHALT. THE PAVEMENT SHALL BE SAWED FULL DEPTH WITH A VERTICAL FACE. THE CONTRACTOR SHALL ENSURE THAT THE ADJACENT ASPHALT SURFACE IS LEFT INTACT AND UNDAMAGED WHEN REMOVING THE CIRCULAR CUTOUT.
3. THE CIRCULAR CONCRETE CUTOUT DIAMETER SHALL BE 24".
4. APPLY TACK COAT TO THE VERTICAL ASPHALT SURFACES PRIOR TO PLACEMENT OF CONCRETE CUTOUT.
5. CLASS M6 CONCRETE SHALL BE USED FOR THE CUTOUT. FAST TRACK CONCRETE MAY BE USED AT THE DISCRETION OF THE ENGINEER.
6. STEEL REINFORCING SHALL BE EPOXY COATED GRADE 40.
7. STEEL REINFORCING SHALL CONSISTS OF #4 HOOPS (VARIABLE LENGTH) SUPPORTED BY APPROVED CHAIRS.
8. MAINTAIN A MINIMUM OF 2" CLEARANCE ON ALL STEEL REINFORCING.
9. ALL WORK ASSOCIATED WITH CONSTRUCTING THE CIRCULAR CONCRETE CUTOUT, INCLUDING, BUT NOT LIMITED TO: ALL MATERIALS, SAWING, STEEL REINFORCING, CHAIRS, CONCRETE, LABOR, TOOLS, REMOVAL AND REPLACEMENT, EXCAVATION AND BACKFILLING AND OTHER APPURTENANCES SHALL BE INCIDENTAL TO THE "VALVE BOX ADJUSTMENT" BID ITEM.

GENERAL NOTES:

1. ADJUST TOP OF VALVE BOX TO MATCH STREET SURFACE.
2. VALVE BOX SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO PLACEMENT OF THE PAVEMENT SURFACING.
3. ALL VALVE BOXES SHALL BE ADJUSTED TO BE FLUSH WITH THE PAVEMENT SURFACE. THE ALLOWABLE VERTICAL TOLERANCE BETWEEN THE PAVEMENT SURFACE AND ANY PART OF THE VALVE BOX SHALL BE 1/4" TO 3/4" LOW. IN NO CASE SHALL THE VALVE BOX BE ABOVE THE SURFACE OF THE PAVEMENT.
4. NON-THREADED ADJUSTMENTS WILL NOT BE ALLOWED.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A SYSTEM TO PREVENT MATERIAL FROM ENTERING THE VALVE BOX DURING THE WORK.
6. ALL ADJUSTMENTS SHALL BE COMPLETED PRIOR TO OPENING UP THE STREET TO TRAFFIC.

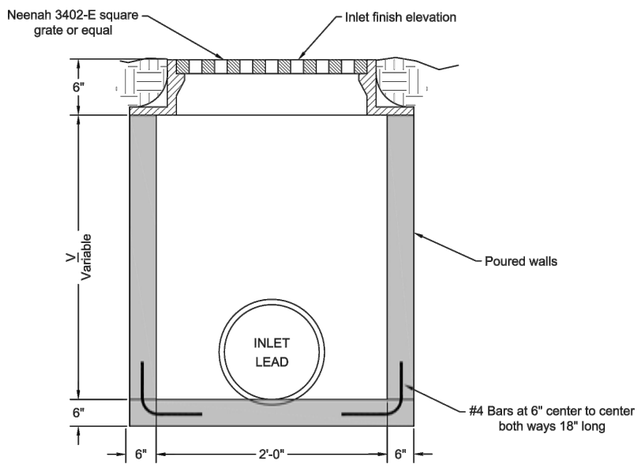
DETAILS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	48	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025-01-30 INITIALS: JTM
REVISION DATE:

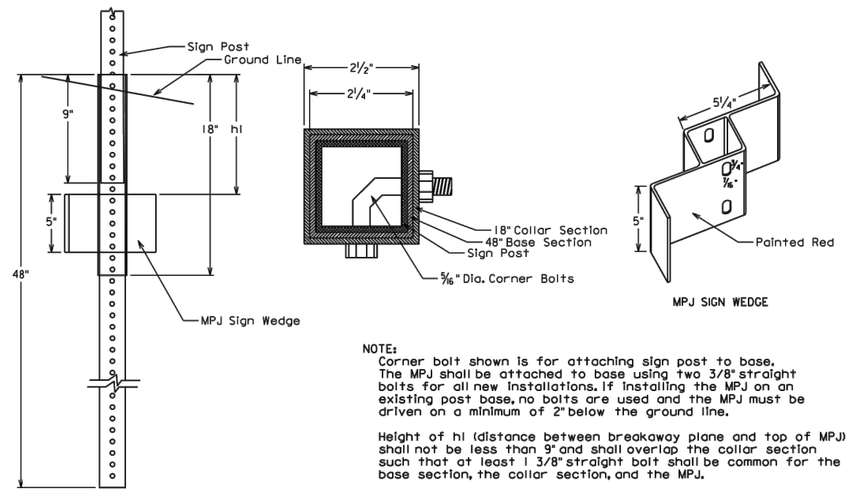
2'X2' CATCH BASIN



Estimated Quantities			
Item	Unit	Constant	Variable
* Class M6 concrete	CuYds	0.17	0.19V
Reinforcement-conc. masonry	LBS	16	---

* Constant shall be reduced for the appropriate pipe or Combination of pipes, thus; 12" Dia.=-0.03 C.Y., 15" Dia=-0.04 C.Y., 18" ia.=-0.05 C.Y., 24" Dia.=-0.09 C.Y.

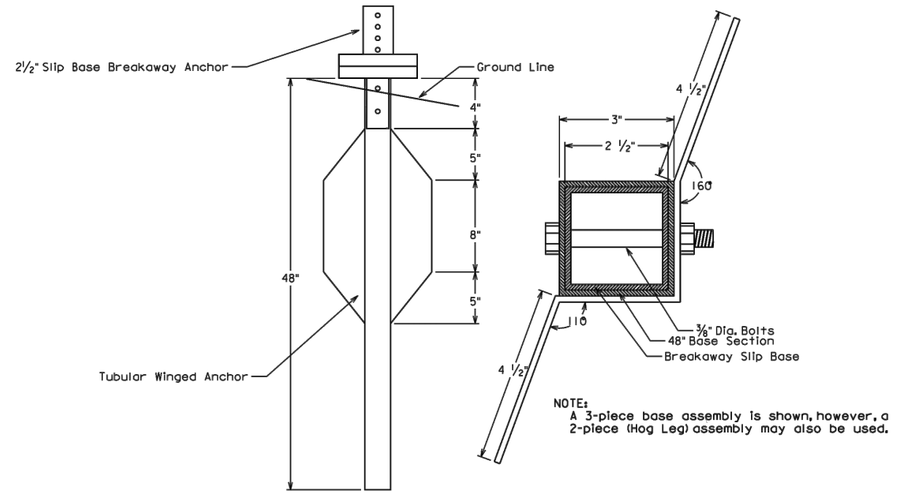
SIGN BASE DETAILS FOR A 2" SIGN POST



NOTE:
Corner bolt shown is for attaching sign post to base. The MPJ shall be attached to base using two 3/8" straight bolts for all new installations. If installing the MPJ on an existing post base, no bolts are used and the MPJ must be driven on a minimum of 2" below the ground line.

Height of hl (distance between breakaway plane and top of MPJ) shall not be less than 9" and shall overlap the collar section such that at least 1 3/8" straight bolt shall be common for the base section, the collar section, and the MPJ.

SIGN BASE DETAILS FOR A 2½" SIGN POST



NOTE:
A 3-piece base assembly is shown, however, a 2-piece (Hog Leg) assembly may also be used.

March 28, 2014

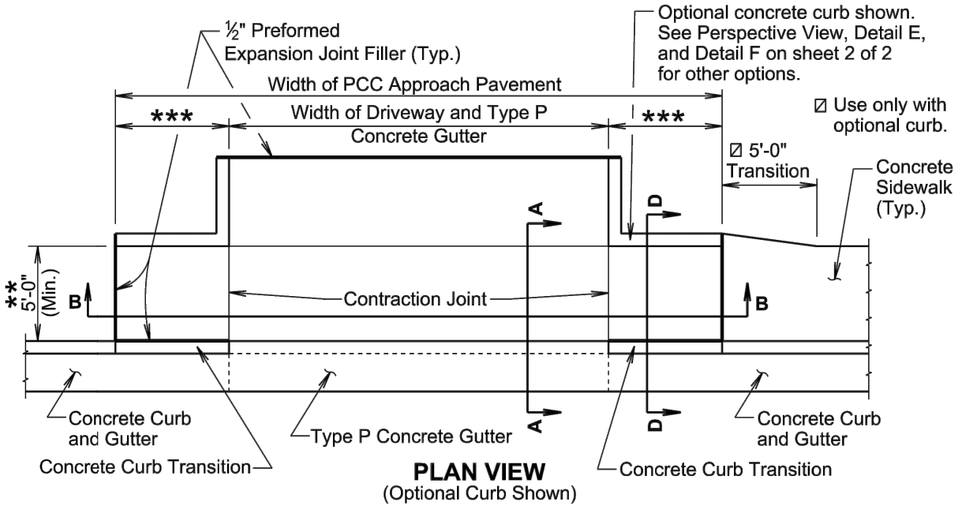
REGISTERED PROFESSIONAL ENGINEER
REG. NO.
15287
JACOB T. MORRIS
SOUTH DAKOTA
2/3/2025

	SDDOT	TUBULAR POST BASE DETAILS (Typical Soil Installation)	SPECIAL DETAIL L21
			Sheet 1 of 1

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	49	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:



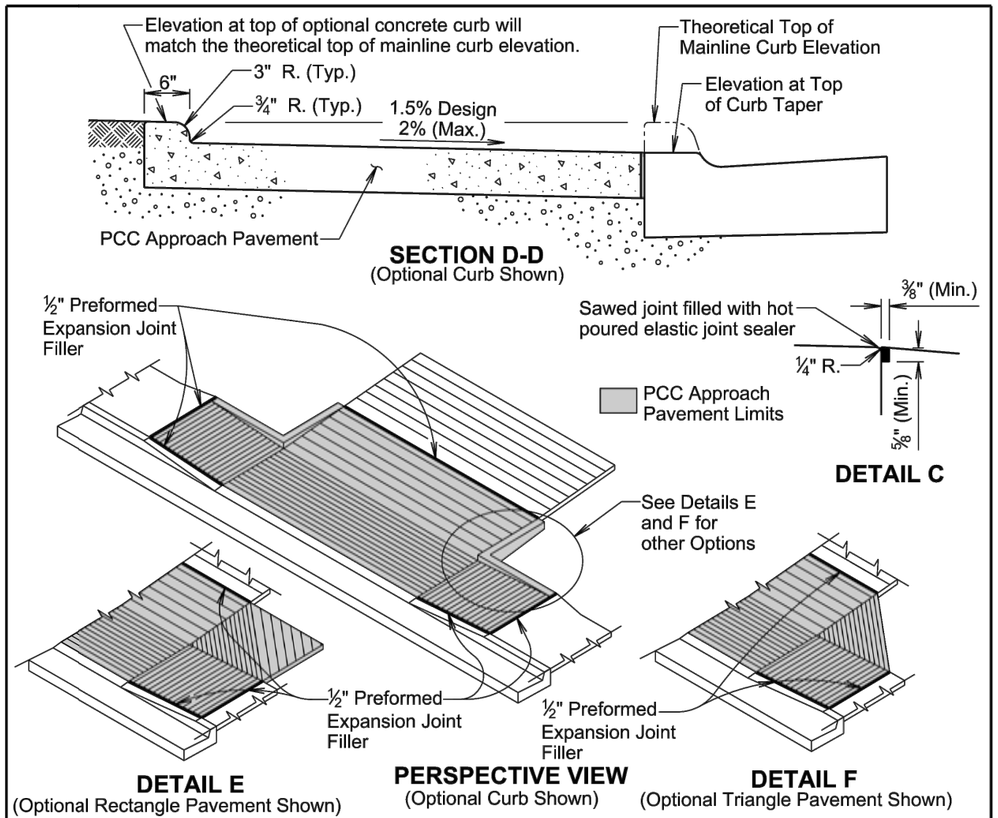
* 8 inches at Commercial Approaches

** Sidewalk width is 5 feet unless specified otherwise in the plans. The cross slope of the sidewalk is designed at 1.5% and will not be steeper than 2% unless specified otherwise in the plans.

*** The slope of the type B PCC approach pavement in these areas will match the slope of the concrete curb transition and the length will not be longer than 15 feet. The slope is designed at 7.5% and will not be steeper than 8.3% unless specified otherwise in the plans.

June 26, 2019

Published Date: 2025	SDDOT	TYPE B PCC APPROACH PAVEMENT	PLATE NUMBER 380.41 Sheet 1 of 2



GENERAL NOTES:

Use the plan specified option for the pavement adjacent to the driveway and sidewalk. The options are shown above in the Perspective View, Detail E, and Detail F.

The concrete for the type B PCC approach pavement and adjacent driveway will comply with the requirements of the Specifications for class M6 concrete unless otherwise stated in the plans.

Contraction joints in the type B PCC approach pavement will be 1½ inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint will be at least ¼ the thickness of the approach pavement. Additional contraction joints not shown in the Plan View will be spaced as follows:

One joint at the center of the approach for driveways 16 feet to 24 feet wide.
Two joints spaced at equal intervals for driveways greater than 24 feet to 40 feet wide.

All costs for furnishing and placing the type B PCC approach pavement and constructing the expansion and contraction joints including labor, equipment, excavation, and materials including the earthen backfill and granular material will be incidental to the contract unit price per square yard for the corresponding PCC Approach Pavement contract item.

June 26, 2019

Published Date: 2025	SDDOT	TYPE B PCC APPROACH PAVEMENT	PLATE NUMBER 380.41 Sheet 2 of 2

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	50	65

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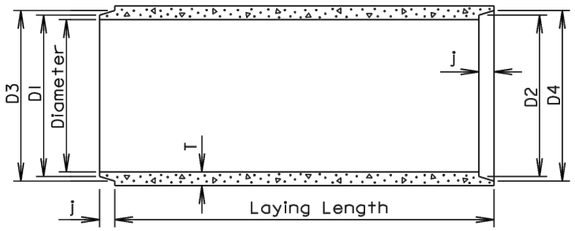
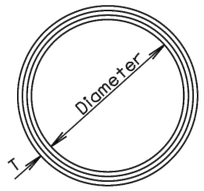
REVISION DATE:

TOLERANCES IN DIMENSIONS

Diameter: ±1.5% for 24" Dia. or less and ±1% or 3/8" whichever is more for 27" Dia. or greater.
Diameters at joints: ± 3/16" for 30" Dia. or less and ± 1/4" for 36" or greater.
Length of joint (j): ± 1/4".
Wall thickness (T): not less than design T by more than 5% or 3/16", whichever is greater.
Laying length: shall not underrun by more than 1/2".



LONGITUDINAL SECTION



END VIEW

GENERAL NOTES:

Construction of R. C. P. shall conform to the requirements of Section 990 of the Specifications.

Not more than 2 four-foot sections shall be permitted near the ends of any culvert. Four-foot lengths shall be used only to secure the required length of culvert.

Diam. (in.)	Approx. Wt. /Ft. (lb.)	T (in.)	J (in.)	D1 (in.)	D2 (in.)	D3 (in.)	D4 (in.)
12	92	2	1 3/4	13 1/4	13 5/8	13 7/8	14 1/4
15	127	2 1/4	2	16 1/2	16 7/8	17 1/4	17 5/8
18	168	2 1/2	2 1/4	19 5/8	20	20 3/8	20 3/4
21	214	2 3/4	2 1/2	22 7/8	23 1/4	23 3/4	24 1/8
24	265	3	2 3/4	26	26 3/8	27	27 3/8
27	322	3 1/4	3	29 1/4	29 5/8	30 1/4	30 5/8
30	384	3 1/2	3 1/4	32 3/8	32 3/4	33 1/2	33 7/8
36	524	4	3 3/4	38 3/4	39 1/4	40	40 1/2
42	685	4 1/2	4	45 1/8	45 5/8	46 1/2	47
48	867	5	4 1/2	51 1/2	52	53	53 1/2
54	1070	5 1/2	4 1/2	57 7/8	58 3/8	59 3/8	59 7/8
60	1296	6	5	64 1/4	64 3/4	66	66 1/2
66	1542	6 1/2	5 1/2	70 5/8	71 1/8	72 1/2	73
72	1810	7	6	77	77 1/2	79	79 1/2
78	2098	7 1/2	6 1/2	83 3/8	83 7/8	85 5/8	86 1/8
84	2410	8	7	89 3/4	90 1/4	92 1/8	92 5/8
90	2740	8 1/2	7	95 3/4	96 1/4	98 1/8	98 5/8
96	2950	9	7	102 1/8	102 5/8	104 1/2	105
102	3075	9 1/2	7 1/2	109	109 1/2	111 1/2	112
108	3870	10	7 1/2	115 1/2	116	118	118 1/2

June 26, 2015

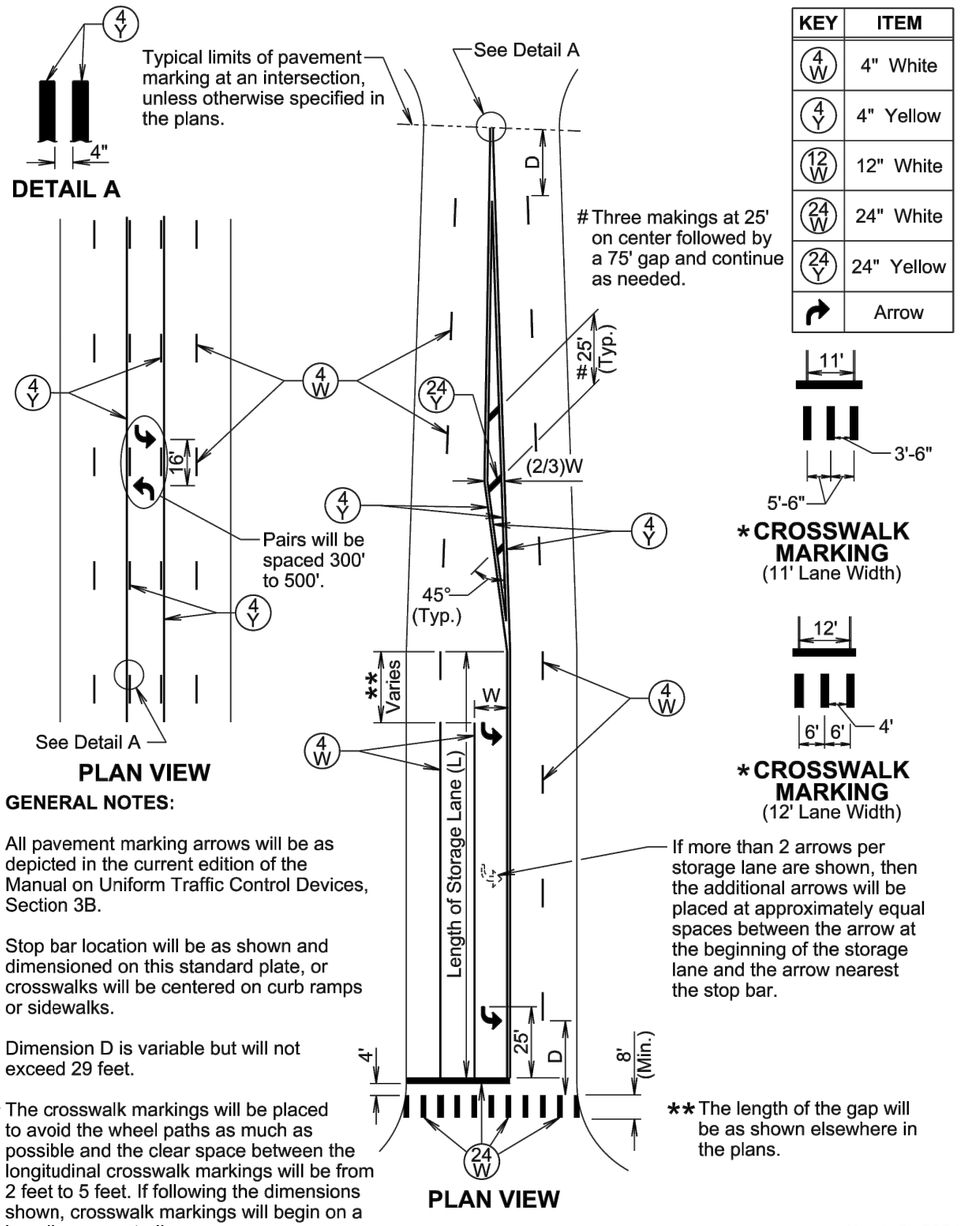
Published Date: 2025

SDDOT

REINFORCED CONCRETE PIPE

PLATE NUMBER 450.01

Sheet 1 of 1



GENERAL NOTES:

All pavement marking arrows will be as depicted in the current edition of the Manual on Uniform Traffic Control Devices, Section 3B.

Stop bar location will be as shown and dimensioned on this standard plate, or crosswalks will be centered on curb ramps or sidewalks.

Dimension D is variable but will not exceed 29 feet.

* The crosswalk markings will be placed to avoid the wheel paths as much as possible and the clear space between the longitudinal crosswalk markings will be from 2 feet to 5 feet. If following the dimensions shown, crosswalk markings will begin on a lane line or centerline.

If more than 2 arrows per storage lane are shown, then the additional arrows will be placed at approximately equal spaces between the arrow at the beginning of the storage lane and the arrow nearest the stop bar.

** The length of the gap will be as shown elsewhere in the plans.

March 31, 2024

Published Date: 2025

SDDOT

PAVEMENT MARKINGS FOR ADJACENT INTERSECTIONS AND CENTER TURN LANE

PLATE NUMBER 633.01

Sheet 1 of 1

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	51	65

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REVISION DATE:

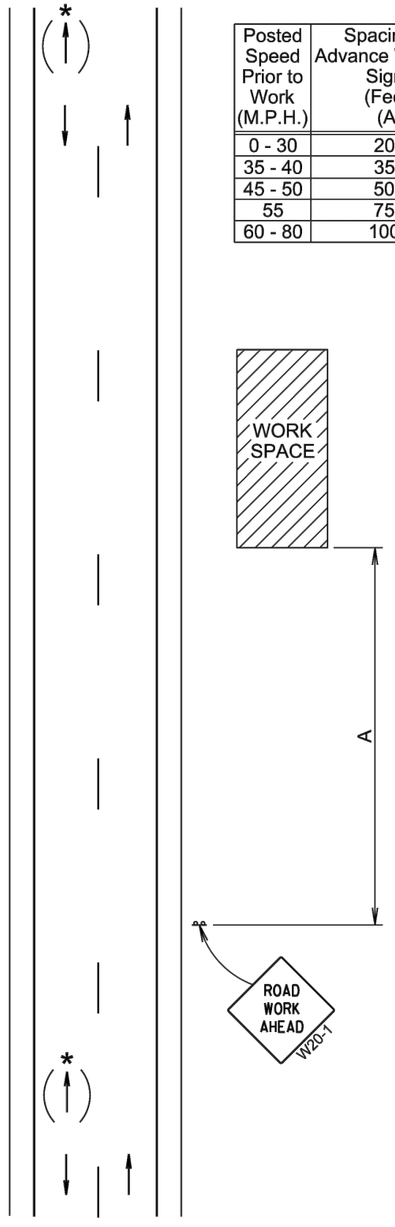
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated will be used where there are distracting situations; such as: vehicles parked on shoulder, vehicles accessing the work site via the highway, and equipment traveling on or crossing the roadway to perform work operations.

The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

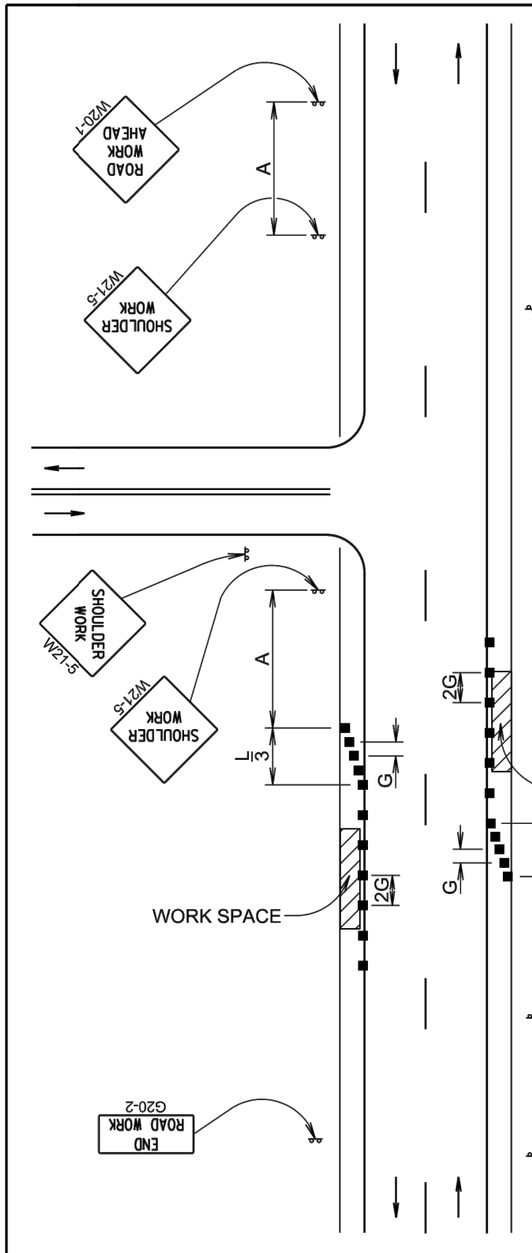
For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)
0 - 30	200
35 - 40	350
45 - 50	500
55	750
60 - 80	1000

January 22, 2021

Published Date: 2025 | SDDOT | WORK BEYOND THE SHOULDER | PLATE NUMBER 634.01 | Sheet 1 of 1



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	180	25
35 - 40	350	320	25
45	500	600	25
50	500	600	50
55	750	660	50
60 - 65	1000	780	50

■ Channelizing Device

END ROAD WORK
G20-2

The channelizing devices will be drums or 42" cones if traffic control must remain overnight.

For short duration operations (1 hour or less) all channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.

Worker signs (W21-1 or W21-1a) may be used instead of SHOULDER WORK signs.

A SHOULDER WORK sign should be placed on the left side of a divided or one-way roadway only if the left shoulder is affected.

The SHOULDER WORK sign on an intersecting roadway is not required if drivers emerging from that roadway will encounter another advance warning sign before they reach a work activity area.

January 22, 2021

Published Date: 2025 | SDDOT | WORK ON SHOULDERS | PLATE NUMBER 634.03 | Sheet 1 of 1

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	52	65

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REVISION DATE:

Only the traffic control devices controlling pedestrian flows are shown. Other devices may be needed to control traffic on the streets. Use lane closure signing or ROAD NARROWS signs, as needed.

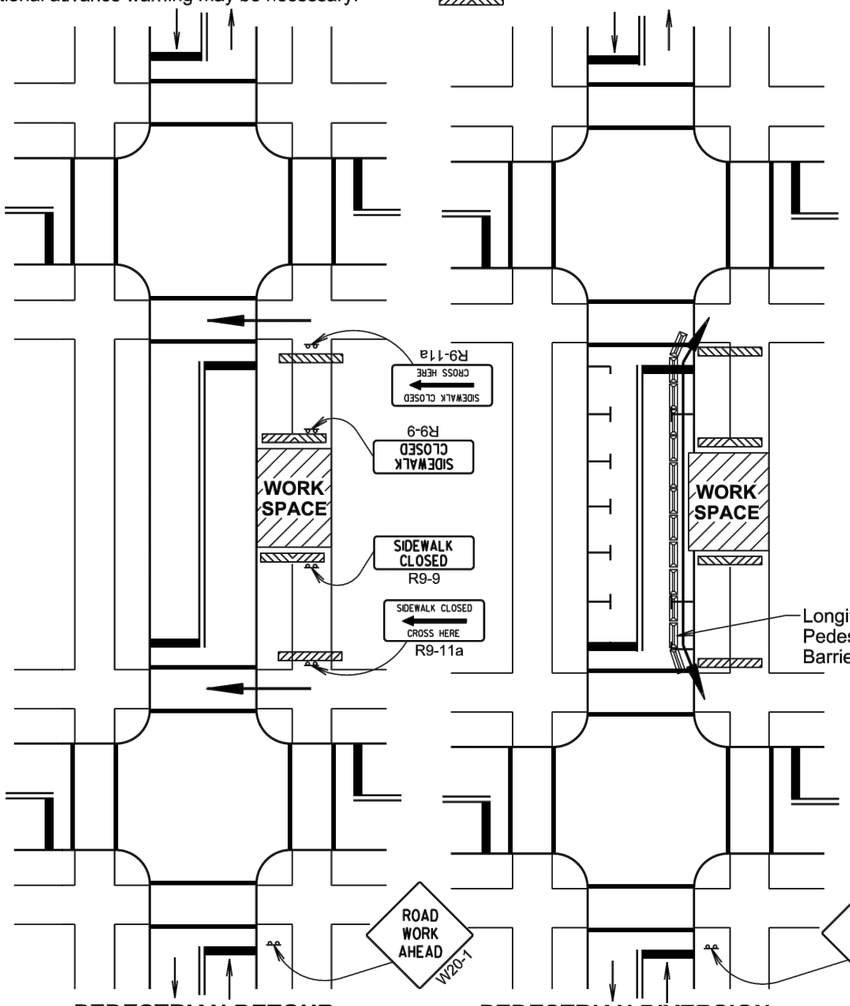
Signs may be placed along a temporary diversion to guide or direct pedestrians. Examples include KEEP RIGHT and KEEP LEFT signs.

Additional advance warning may be necessary.

For nighttime closures, Type A flashing warning lights may be used on barricades supporting signs and closing sidewalks. Type C steady-burn lights may be used on channelizing devices separating the temporary pedestrian diversion from vehicular traffic.

Street lighting should be considered.

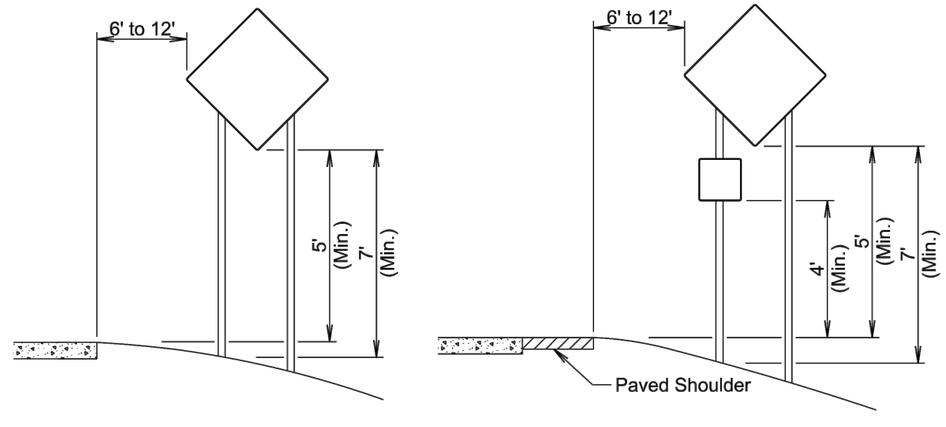
Longitudinal Pedestrian Barricade and



PEDESTRIAN DETOUR **PEDESTRIAN DIVERSION**

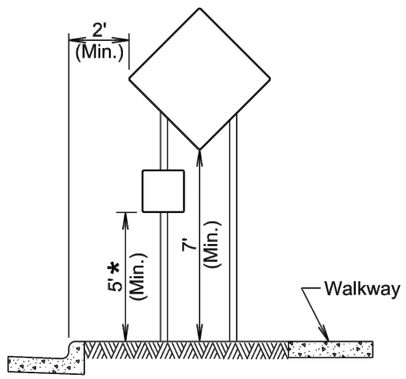
January 22, 2021

Published Date: 2025	SDDOT	PEDESTRIAN DETOUR AND PEDESTRIAN DIVERSION	PLATE NUMBER 634.34
			Sheet 1 of 1

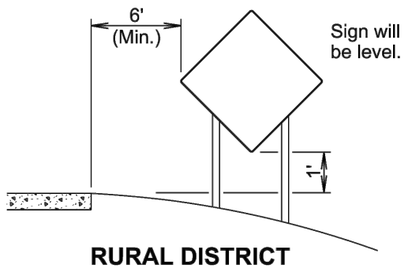


RURAL DISTRICT

RURAL DISTRICT WITH SUPPLEMENTAL PLATE



URBAN DISTRICT



RURAL DISTRICT 3 DAY MAXIMUM
(Not applicable to regulatory signs)

*If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

January 22, 2021

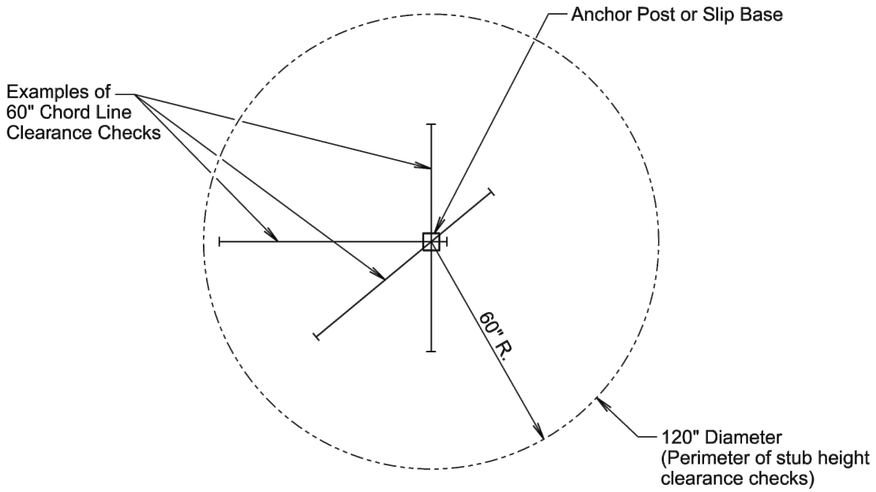
Published Date: 2025	SDDOT	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1

STANDARD PLATES

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	53	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:



PLAN VIEW
(Examples of stub height clearance checks)

ELEVATION VIEW

GENERAL NOTES:

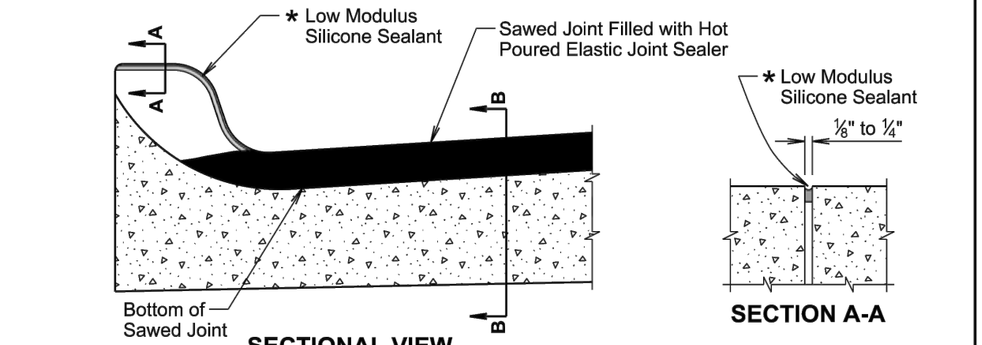
The top of anchor posts and slip bases WILL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

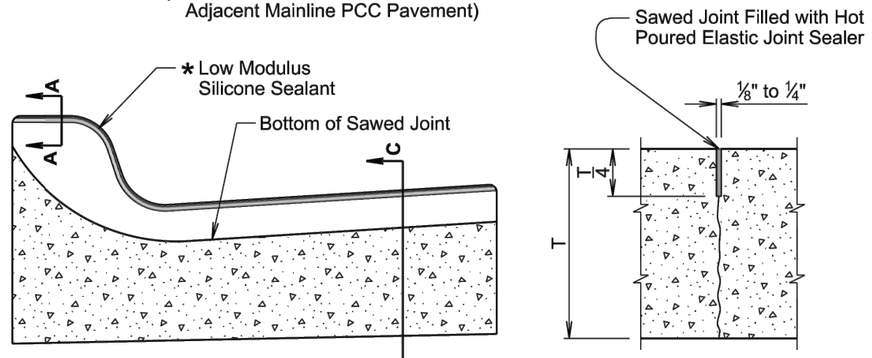
January 22, 2021

Published Date: 2025	SDDOT	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99 Sheet 1 of 1



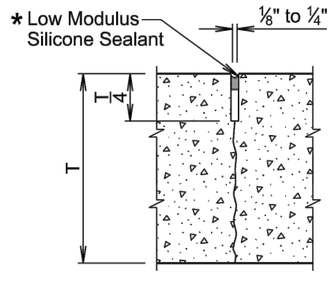
SECTIONAL VIEW
(Curb and Gutter Placed Monolithic with Adjacent Mainline PCC Pavement)

SECTION A-A



SECTIONAL VIEW
(Curb and Gutter not Placed Monolithic with Adjacent Mainline PCC Pavement or Mainline Surfacing is not PCC Pavement)

SECTION B-B



SECTION C-C

* The silicone sealant will be placed such that it completely seals the joint and is bonded to the sides of the clean joint as approved by the Engineer.

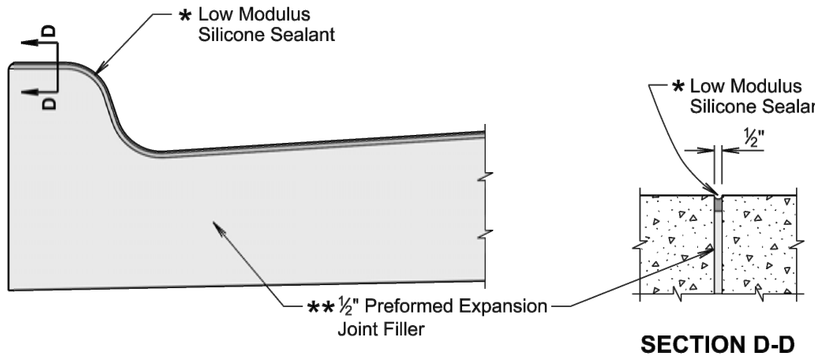
December 23, 2019

Published Date: 2025	SDDOT	JOINTS IN CONCRETE CURB AND GUTTER	PLATE NUMBER 650.90 Sheet 1 of 2

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	54	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:



SECTIONAL VIEW
(Curb and Gutter at ½" Preformed Expansion Joint Filler Location)

SECTION D-D

* The silicone sealant will be placed such that it completely seals the joint and is bonded to the sides of the clean joint as approved by the Engineer.

GENERAL NOTES:

For illustrative reason, only the type B curb and gutter is shown.

** A ½-inch preformed expansion joint filler will be placed transversely in the curb and gutter at the following locations:

At each junction between the radius return of curb and gutter, and curb and gutter which is parallel to the project centerline.

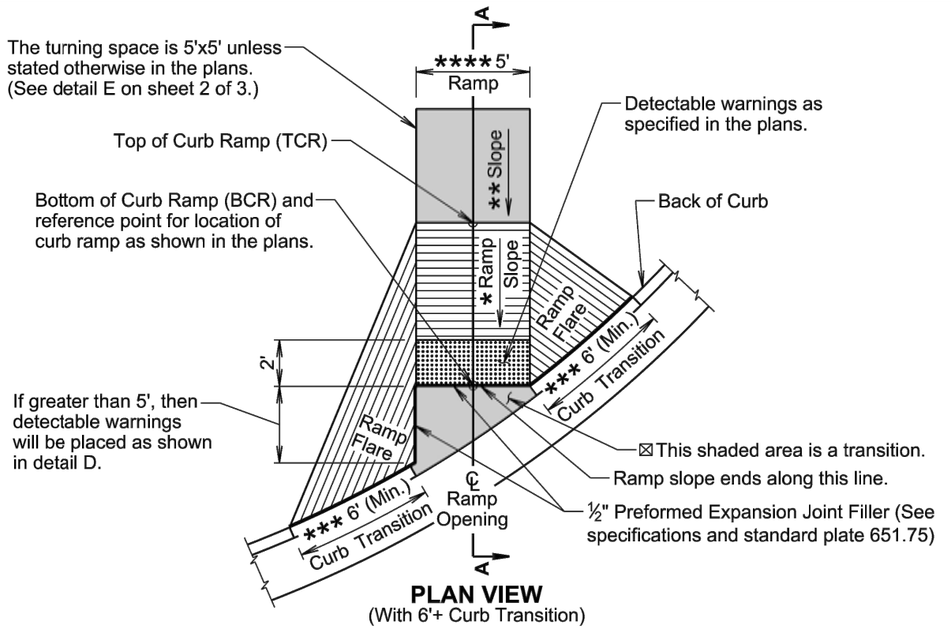
At each junction between new curb and gutter and existing curb and gutter.

Transverse contraction joints will be constructed at 10 foot intervals in the concrete curb and gutter except when the concrete curb and gutter is constructed adjacent to mainline PCC pavement. When concrete curb and gutter is constructed adjacent to mainline PCC pavement, a transverse contraction joint will be constructed in the concrete curb and gutter at each mainline PCC pavement transverse contraction joint location.

When concrete curb and gutter is not placed monolithically with the mainline PCC pavement or when the adjacent mainline surfacing is not PCC concrete, the transverse contraction joints in the concrete curb and gutter will be 1½ inches deep if formed in the fresh concrete using a suitable grooving tool. If a saw is used to cut the contraction joints, then the depth of the joint will be at least ¼ the thickness of the concrete and the joint will be sealed in accordance with the details shown above.

December 23, 2019

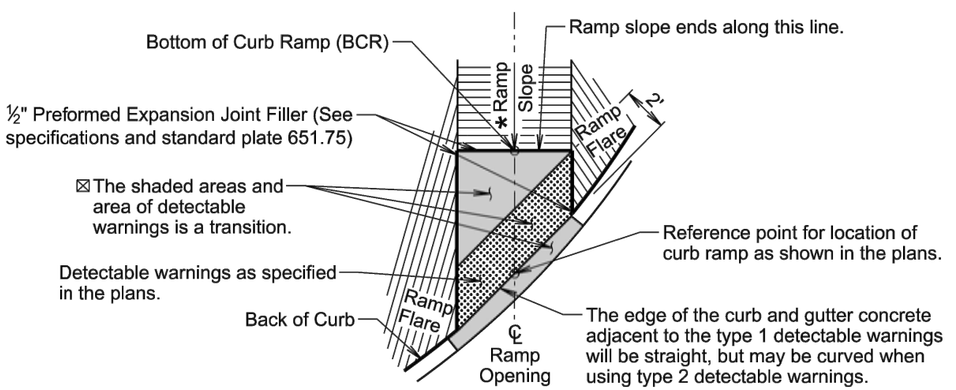
Published Date: 2025	SDDOT	JOINTS IN CONCRETE CURB AND GUTTER	PLATE NUMBER 650.90
			Sheet 2 of 2



PLAN VIEW
(With 6'+ Curb Transition)

☒ The slope within the transition area will not be steeper than 5%. The concrete within the transition will be placed monolithic with the curb and gutter or fillet section concrete. The concrete thickness within the transition will be the same as the curb and gutter or fillet section concrete thickness.

*** The curb transition will be a minimum of 6' long, a maximum of 10' long, and the curb transition slope will not be steeper than 10% unless stated otherwise in the plans. The curb transition length will be adjusted as necessary to meet slope and length requirements based on field geometrics.



DETAIL D

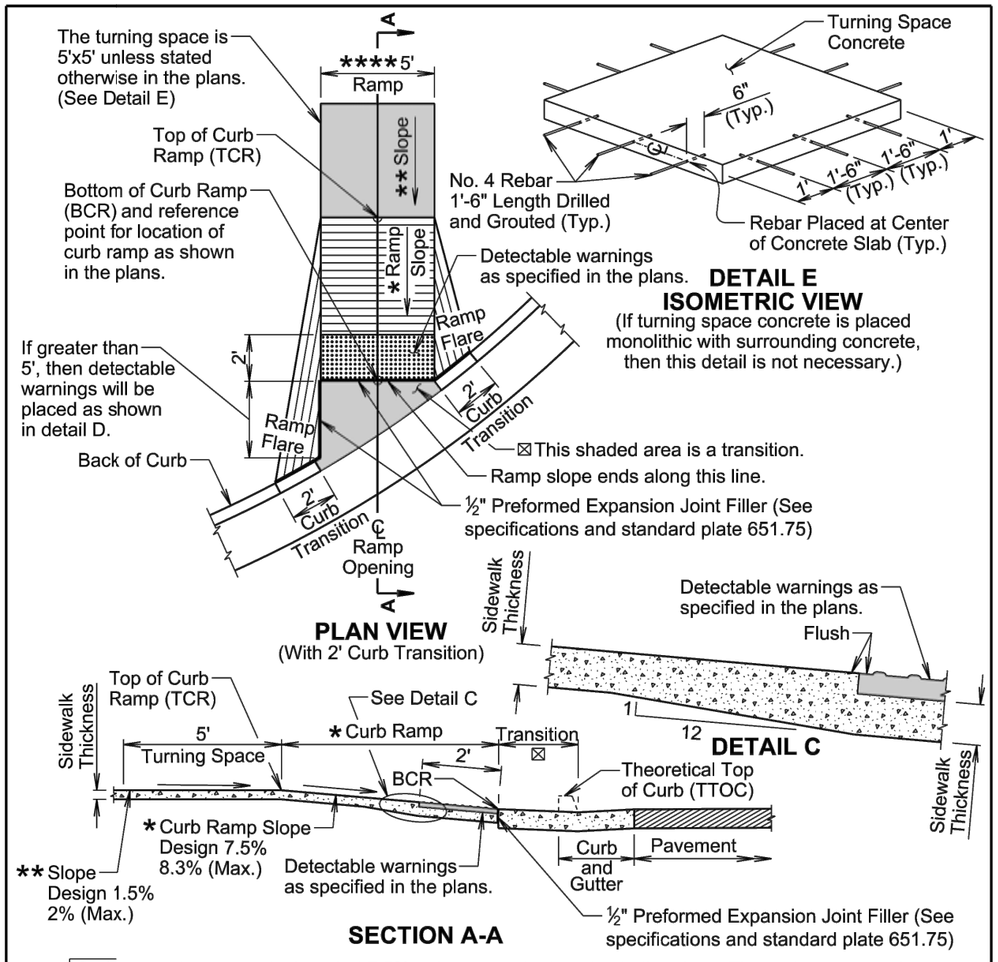
February 14, 2020

Published Date: 2025	SDDOT	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02
			Sheet 1 of 3

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	55	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:



Curb ramp slopes are designed at 7.5% unless stated otherwise in the plans. The curb ramp may have a maximum slope of 8.3% and will not exceed 15' in length unless stated otherwise in the plans.

* The elevation of point TCR will always be higher than the elevation of point TTOC unless specified otherwise in the plans. The curb ramp length dimension as shown in the plans will be adjusted as necessary to meet all slope and length requirements based on field geometrics.

The cross slope of the ramp will not be steeper than 2%. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

** The slope in the turning space will not be steeper than 2% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

**** The ramp width is 5' unless stated otherwise in the plans.

February 14, 2020

Published Date: 2025	SDDOT	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02
			Sheet 2 of 3

GENERAL NOTES:

For illustrative purpose only, type 1 detectable warnings are shown in the drawings.

The curb ramp depicted on this standard plate may be used with a PCC fillet section or curb and gutter. The curb ramp will be placed at the location stated in the plans.

Sidewalk will not be placed adjacent to the curb ramp flares when a 2-foot curb transition is used unless shown otherwise in the plans.

* Care will be taken to ensure a uniform grade on the curb ramp, free of sags and short grade changes.

Surface texture of the curb ramp will be obtained by coarse brooming transverse to the slope of the curb ramp.

The normal gutter line profile will be maintained through the area of the ramp opening.

Joints will be sawed or tooled into the concrete adjacent to the detectable warnings to alleviate possible corner cracking.

Care will be taken to ensure that the surface of the detectable warnings are clean and maintains a uniform color.

The detectable warnings will be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings will be incidental to the corresponding detectable warning contract item.

There will be no separate payment for curb ramps. The curb ramp will be measured and paid for at the contract unit price per square foot for the corresponding concrete sidewalk contract item. The square foot area of the detectable warnings will be included in the measured and paid for quantity of sidewalk.

If rebar is placed in the Turning Space as depicted in DETAIL E, the cost of the materials, labor, and equipment to furnish and install the rebar will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.

The curb transitions and ramp opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and ramp opening will be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.

All costs for furnishing and installing the transition area at the base of the curb ramp will be incidental to the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used and will be incidental to the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.

The type 1 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 1 detectable warnings including labor, equipment, materials, and incidentals will be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".

The type 2 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding will be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

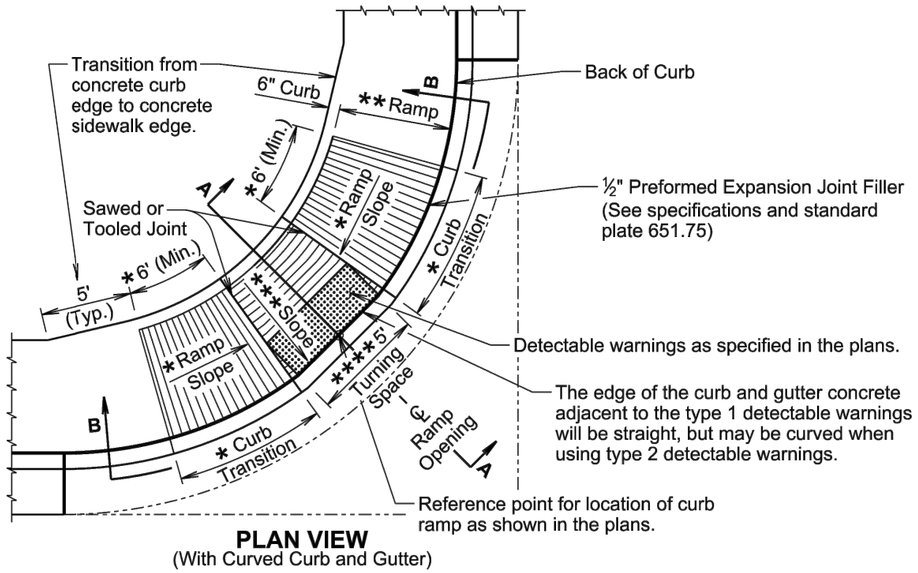
February 14, 2020

Published Date: 2025	SDDOT	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02
			Sheet 3 of 3

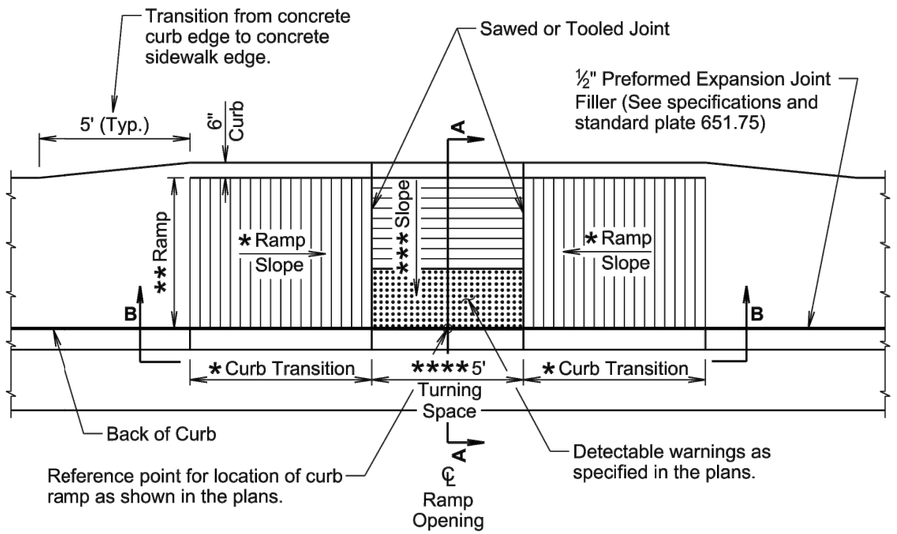
STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	56	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:



PLAN VIEW
(With Curved Curb and Gutter)



PLAN VIEW
(With Straight Curb and Gutter)

April 18, 2021

Published Date: 2025	SDDOT	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03
			Sheet 1 of 3

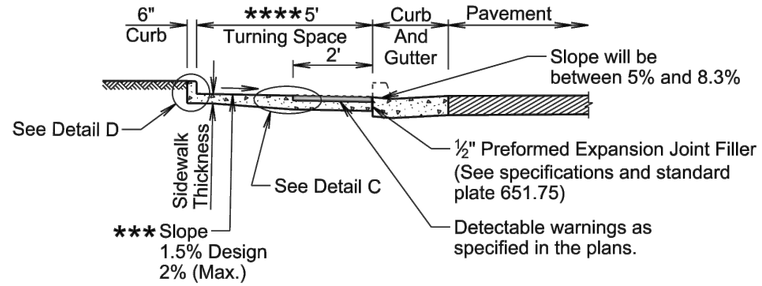
* The curb transition slope will match the curb ramp slope. Curb ramp slopes are designed at 7.5% unless stated otherwise in the plans. The curb ramp may have a maximum slope of 8.3% at any location of the curb ramp and will not exceed 15' in length unless stated otherwise in the plans. The curb transitions and curb ramp lengths will be adjusted as necessary to meet all slope and length requirements based on field geometrics.

** The cross slope of the ramp will not be steeper than 2% and the ramp width is 5' unless stated otherwise in the plans. Plans are designed using a 1.5% cross slope for the ramp unless stated otherwise in the plans.

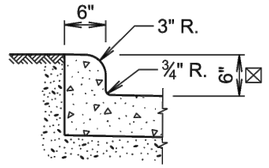
*** The slope in the turning space will not be steeper than 2% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

**** The turning space is 5'x5' unless stated otherwise in the plans.

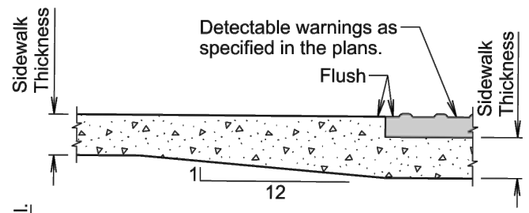
☒ The curb height will be 6" unless stated otherwise in the plans.



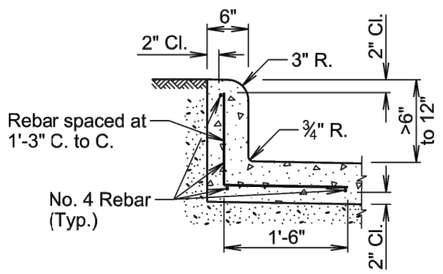
SECTION A-A



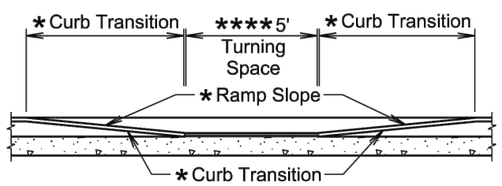
DETAIL D



DETAIL C



DETAIL D
(Use this detail when the curb height is greater than 6" and less than 12")



SECTIONAL VIEW B-B

April 18, 2021

Published Date: 2025	SDDOT	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03
			Sheet 2 of 3

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	57	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:

GENERAL NOTES:

For illustrative purpose only, type 1 detectable warnings are shown in the drawings.

For illustrative purpose only, a PCC fillet section is shown in one of the drawings. The curb ramp depicted on this standard plate may be used with a PCC fillet section or with curb and gutter.

The curb ramp will be placed at the location stated in the plans.

Sidewalk adjacent to the curb ramp will be as shown in the plans.

Care will be taken to ensure a uniform grade on the curb ramp, free of sags and short grade changes.

Surface texture of the curb ramp will be obtained by coarse brooming transverse to the slope of the curb ramp.

The normal gutter line profile will be maintained through the area of the ramp opening.

Joints will be sawed or tooled into the concrete adjacent to the detectable warnings to alleviate possible corner cracking (see plan view for joint location).

Care will be taken to ensure that the surface of the detectable warnings are clean and maintains a uniform color.

The detectable warnings will be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings will be incidental to the corresponding detectable warning contract item.

When curb height is greater than 6" and less than 12", reinforcing steel is required in accordance with the detail on sheet 2 of 3. The reinforcing steel will conform to ASTM A615, Grade 60. Cost for furnishing and installing the reinforcing steel will be incidental to the contract unit price per square foot for the corresponding concrete sidewalk contract item.

There will be no separate payment for curb ramps. The curb ramp will be measured and paid for at the contract unit price per square foot for the corresponding concrete sidewalk contract item. The square foot area of the detectable warnings and the curb along the short radius will be included in the measured and paid for quantity of sidewalk.

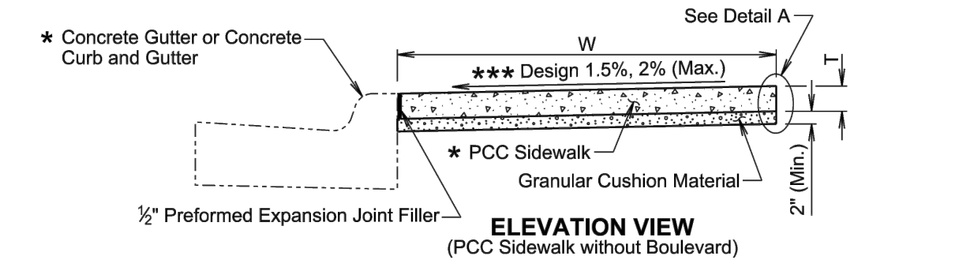
The curb transitions and ramp opening will be measured and paid for at the contract unit price per foot for the corresponding curb and gutter contract item when curb and gutter is used. The curb transitions and ramp opening will be measured and paid for at the contract unit price per square yard for the corresponding PCC fillet section contract item when a PCC fillet section is used.

The type 1 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 1 detectable warnings including labor, equipment, materials, and incidentals will be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".

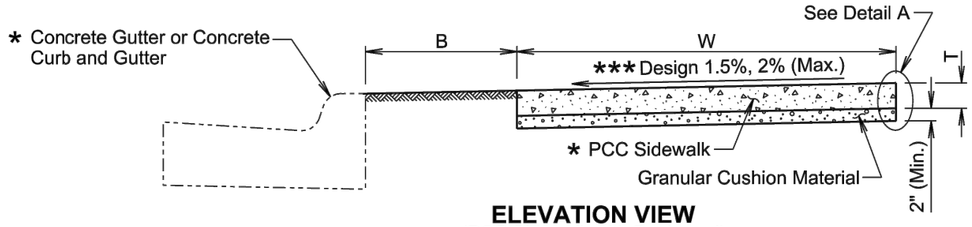
The type 2 detectable warnings will be measured to the nearest square foot. All costs for furnishing and installing the type 2 detectable warnings including labor, equipment, and materials, including adhesive, necessary sealant or grout, and necessary grinding will be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

April 18, 2021

Published Date: 2025	SDDOT	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03
			Sheet 3 of 3



ELEVATION VIEW
(PCC Sidewalk without Boulevard)



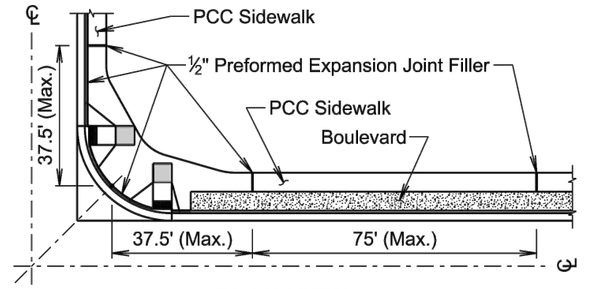
ELEVATION VIEW
(PCC Sidewalk with Boulevard)

B Width of boulevard as specified in the plans.

T Thickness of PCC sidewalk as specified in the plans.

W Width of PCC sidewalk as specified in the plans.

* Type as specified in the plans.



PLAN VIEW

GENERAL NOTES:

The PCC sidewalk will be constructed in accordance with Section 651 of the Specifications.

*** The cross slope of the sidewalk is designed at 1.5% and the maximum slope allowed is 2% unless specified otherwise in the plans.

The maximum length between expansion joints in the PCC sidewalk is 75 feet.

PCC sidewalk placed adjacent to intersection of roadways will have an expansion joint placed transversely a maximum of 37.5 feet from the intersection. See Plan View.

An expansion joint in the PCC sidewalk will consist of a ½ -inch thick preformed expansion joint filler material placed full depth and width of the PCC sidewalk.

** Large areas of PCC pavement adjacent to the PCC sidewalk may require a different joint treatment than shown in the detail. If a different joint detail is necessary, plans will contain the joint detail and the Contractor will construct the joint treatment in accordance with the plans.

February 14, 2020

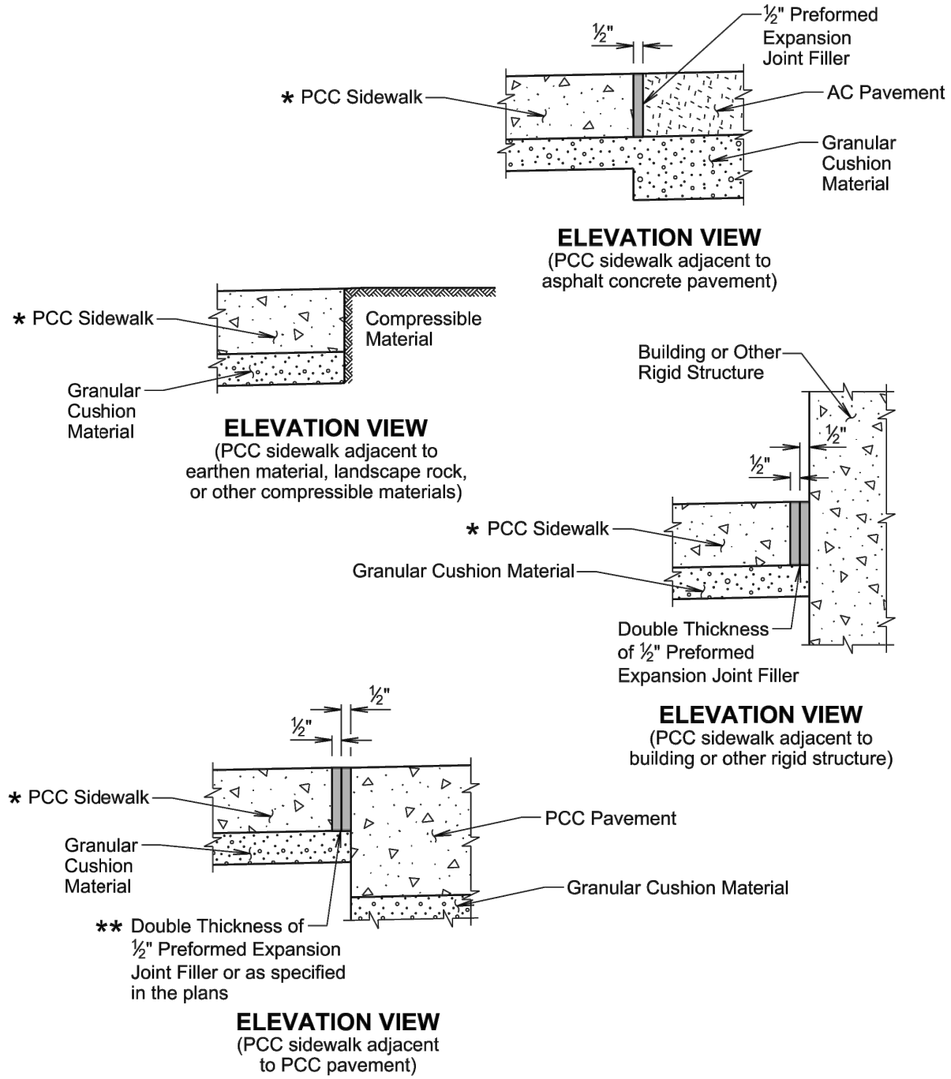
Published Date: 2025	SDDOT	PCC SIDEWALK	PLATE NUMBER 651.75
			Sheet 1 of 2

STANDARD PLATES

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	58	65

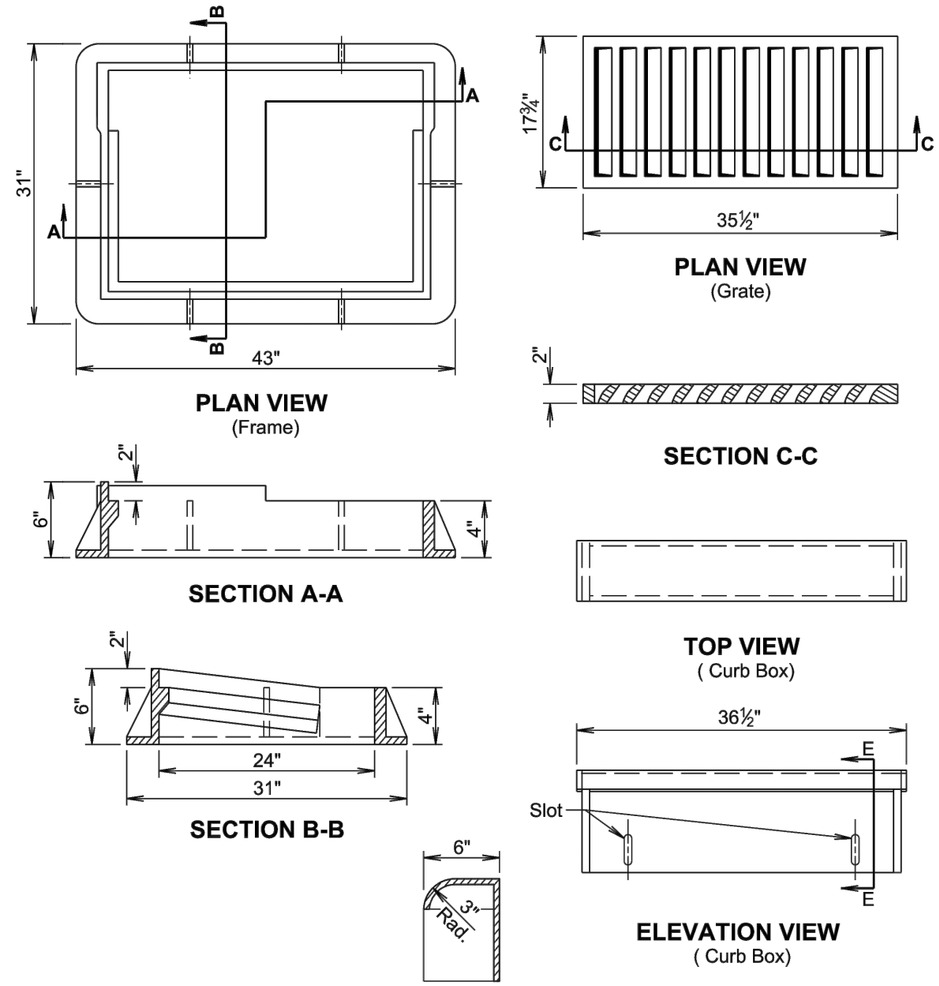
FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:



DETAIL A
(Use Appropriate Detail(s))

February 14, 2020

Published Date: 2025	SDDOT	PCC SIDEWALK	PLATE NUMBER 651.75
			Sheet 2 of 2



GENERAL NOTES:

The product dimensions may vary from those shown on the standard plate depending on the manufacturer. Grate size and configuration will be similar to the standard plate for hydraulic capacity and bicycle safety. Any variation in dimensions will be approved by the Engineer and the type B frame and grate assembly will be from a manufacturer on the approved products lists.

Design load for the grate will meet the requirements of AASHTO HL-93.

The curb box will be adjustable 6" to 9".

June 1, 2022

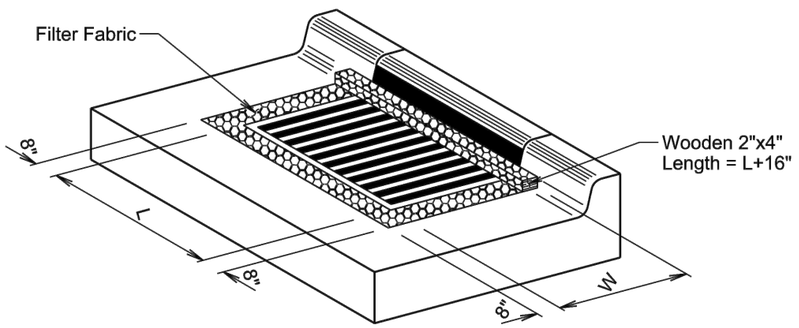
Published Date: 2025	SDDOT	TYPE B FRAME AND GRATE	PLATE NUMBER 670.80
			Sheet 1 of 1

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	59	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:

L = Length of Grate
W = Width of Grate



ISOMETRIC VIEW

GENERAL NOTES:

The grate and curb and gutter shown are for illustrative purposes only.

The sediment control at inlet with frame and grate will be placed at locations stated in the plans or at locations determined by the Engineer.

The filter fabric will be the type specified in the plans.

The filter fabric will be placed in the inlet opening prior to placing the grate. Approximately 18 inches of excess filter fabric will be wrapped around the 2"x4" and stapled securely to the 2"x4" after the grate has been placed.

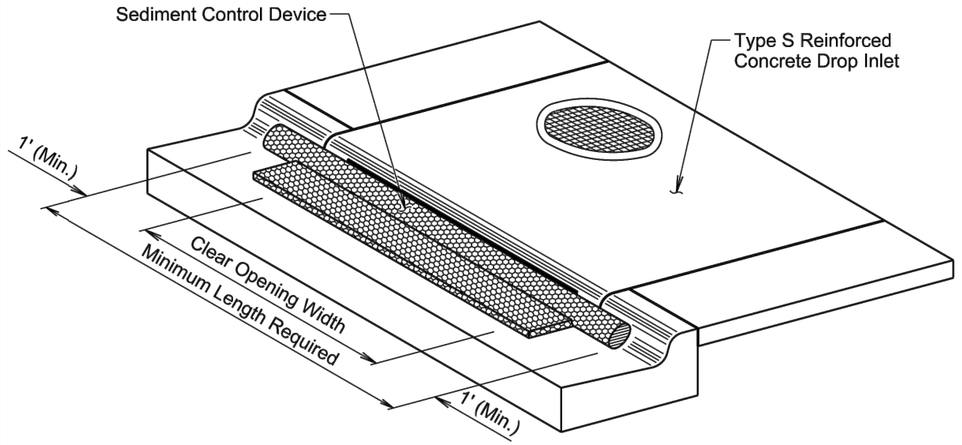
The Contractor and Engineer will inspect the sediment control device in accordance with the storm water permit. The Contractor will maintain the sediment control device by removing accumulated sediment and replacing torn filter fabric with new filter fabric.

The removed sediment will be placed at a location away from the drop inlet where the sediment will not be washed back into the drop inlet or other storm sewer system.

All costs for furnishing, installing, inspecting, maintaining, removing, and replacing the sediment control device at the inlet including labor, equipment, and materials will be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

February 14, 2020

Published Date: 2025	SDDOT	SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES	PLATE NUMBER 734.10
			Sheet 1 of 1



ISOMETRIC VIEW

GENERAL NOTES:

The type of sediment control device shown is for illustrative purposes only.

The type of sediment control device used will be one of the types as specified in the plans.

The sediment control device will be placed at the drop inlets according to the manufacturer's installation instructions.

The sediment control at inlet for type S reinforced concrete drop inlet will be placed at locations stated in the plans or at locations determined by the Engineer.

The Contractor and Engineer will inspect the sediment control device in accordance with the storm water permit. The Contractor will maintain the sediment control device by removing the device, removing accumulated sediment, and resetting the device.

The removed sediment will be placed at a location away from the drop inlet where the sediment will not be washed back into the drop inlet or other storm sewer system.

Payment for the "Sediment Control at Type S Drop Inlet" will be based on the minimum length required at the drop inlets. Some of the sediment control devices specified in the plans will have to be longer due to available length.

All costs for furnishing, installing, inspecting, maintaining, removing, and resetting the sediment control device at the drop inlet including labor, equipment, and materials will be incidental to the contract unit price per foot for "Sediment Control at Type S Reinforced Concrete Drop Inlet".

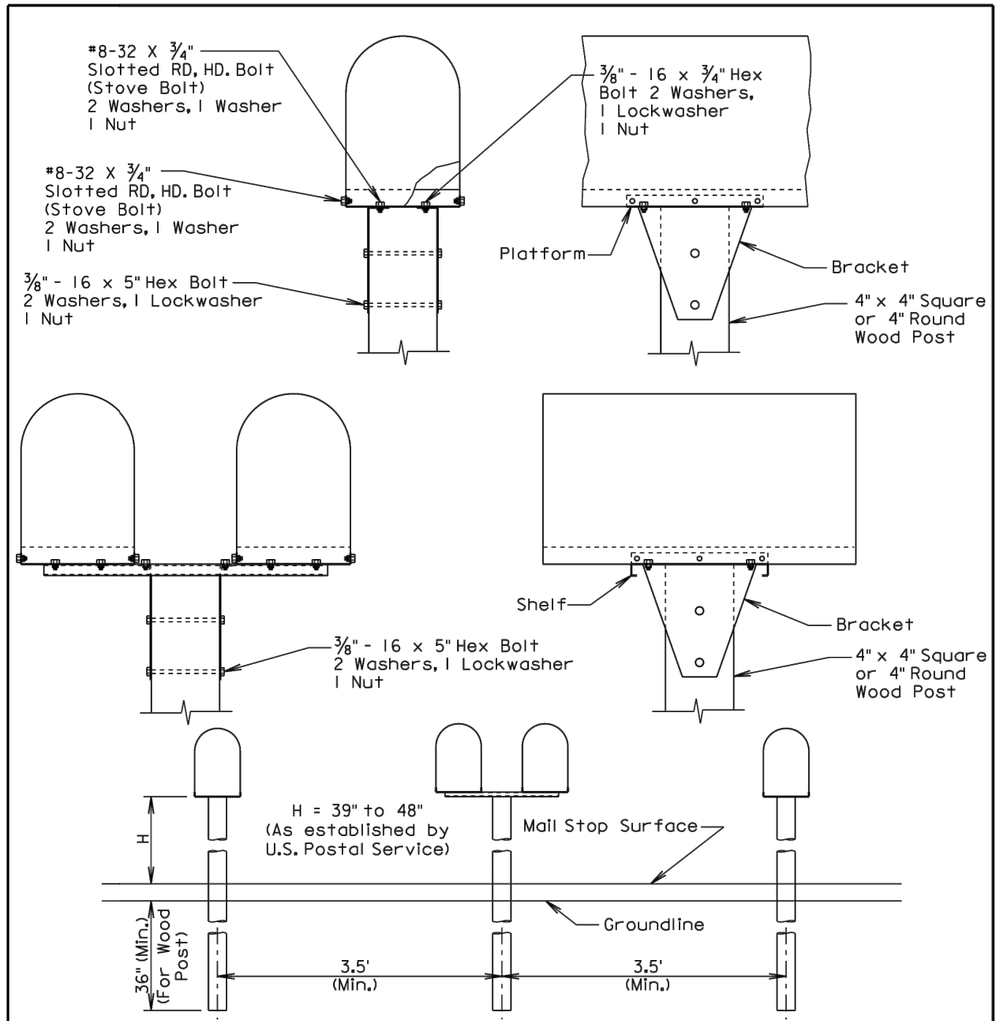
February 14, 2020

Published Date: 2025	SDDOT	SEDIMENT CONTROL AT INLETS FOR TYPE S REINFORCED CONCRETE DROP INLETS	PLATE NUMBER 734.11
			Sheet 1 of 1

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	60	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025-01-29 INTIALS: JTM
REVISION DATE:



SPACING FOR MULTIPLE POST INSTALLATION

GENERAL NOTES:

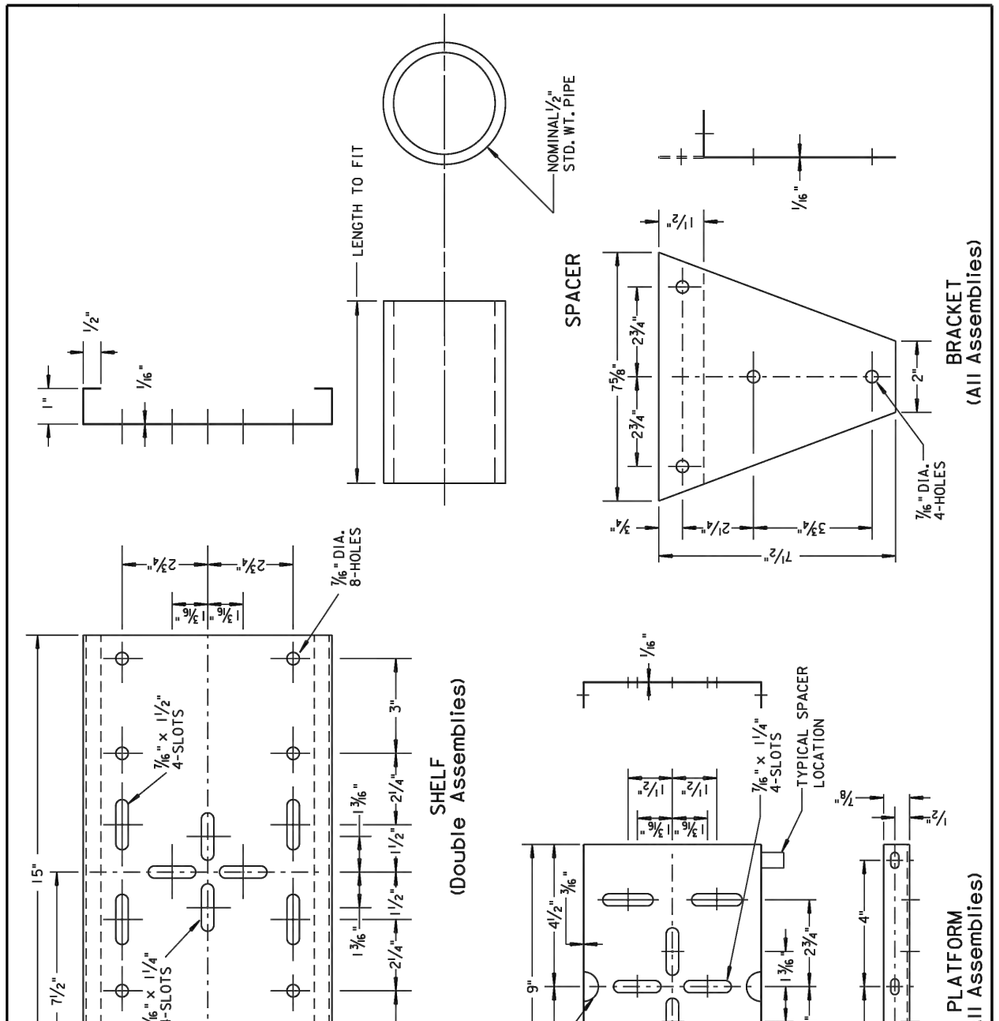
The post support assemblies provided should be consistant throughout the project. Single and double mailboxes may be in any sequence.

Post support assemblies shall be one from the approved products list, a 4"x4" or 4" round wood post, or an alternate post support assembly that meets the test level 3 crash testing requirements of NCHRP 350 or MASH.

Alternate mailbox support assemblies shall be approved by the Engineer prior to installation. The Contractor shall provide the Engineer written certification that the mailbox support assembly has met the crash testing requirements and will be installed in accordance with the manufacturer's installation instructions.

September 6, 2013

Published Date: 2025	SDDOT	SINGLE AND DOUBLE MAILBOX ASSEMBLIES	PLATE NUMBER 900.02
			Sheet 1 of 1



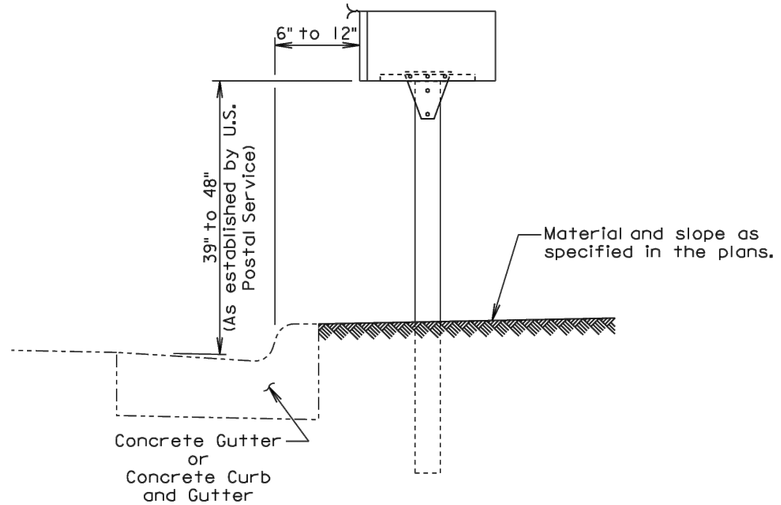
March 31, 2000

Published Date: 2025	SDDOT	MAILBOX SUPPORT HARDWARE	PLATE NUMBER 900.03
			Sheet 1 of 1

STANDARD PLATES FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	61	65

FILE: 672021 – Details.dwg
PLOTTING DATE: 2025–01–29 INTIALS: JTM
REVISION DATE:



ELEVATION VIEW

GENERAL NOTES:

The post support assemblies provided should be consistant throughout the project.

Post support assemblies shall be one from the approved products list, a 4"x4" or 4" round wood post, or an alternate post support assembly that meets the test level 3 crash testing requirements of NCHRP 350 or MASH.

Alternate mailbox support assemblies shall be approved by the Engineer prior to installation. The Contractor shall provide the Engineer written certification that the mailbox support assembly has met the crash testing requirements and will be installed in accordance with the manufacturer's installation instructions.

February 10, 2014

Published Date: 2025	SDDOT	***MAILBOX ADJACENT TO CONCRETE GUTTER OR CONCRETE CURB AND GUTTER***	***PLATE NUMBER*** 900.05 *Sheet 1 of 1*

CROSS SECTIONS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	62	65

FILE: 672021 – Cross Sections.dwg
PLOTTING DATE: 2025-01-30 INTIALS: JTM
REVISION DATE: 2020-03-19

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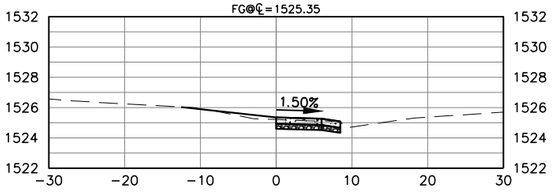

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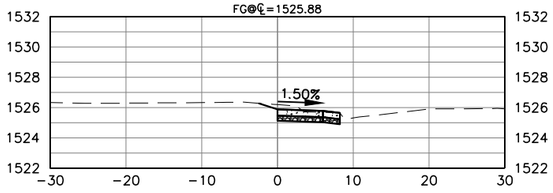

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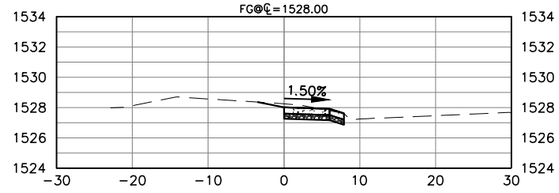

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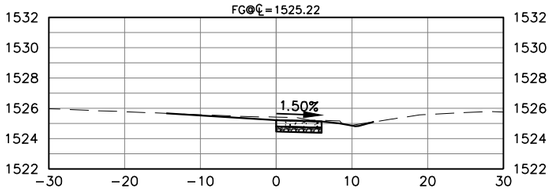

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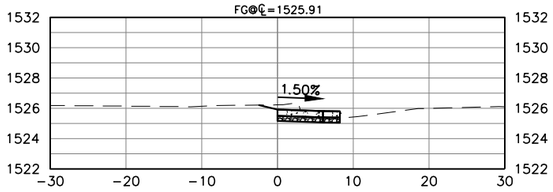

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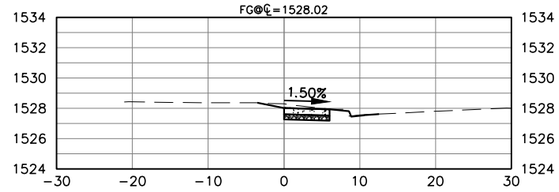

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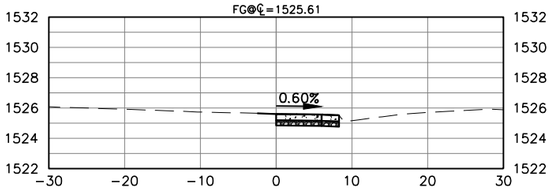

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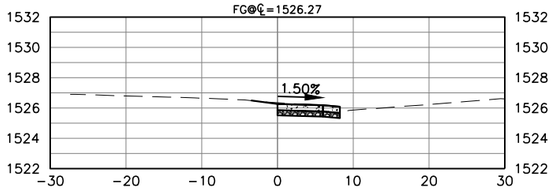

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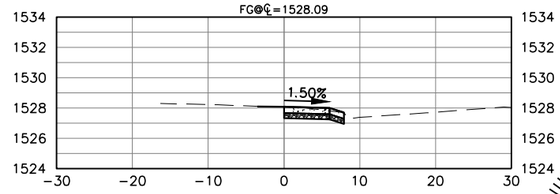

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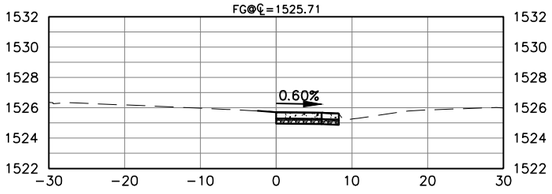

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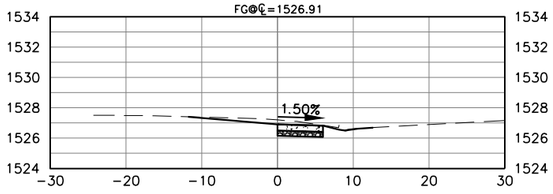

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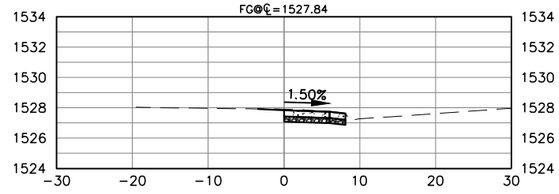

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
15287
JACOB T.
MORRIS
SOUTH DAKOTA
2/3/2025

CROSS SECTIONS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	63	65

FILE: 672021 – Cross Sections.dwg
PLOTTING DATE: 2025-01-30 INTIALS: JTM
REVISION DATE: 2020-03-19

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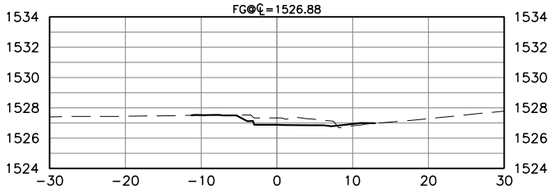

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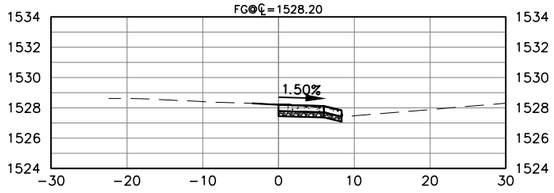

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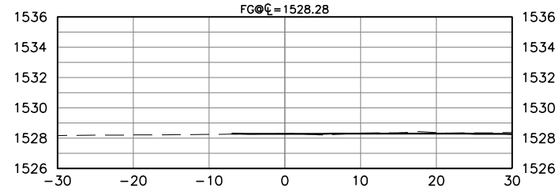

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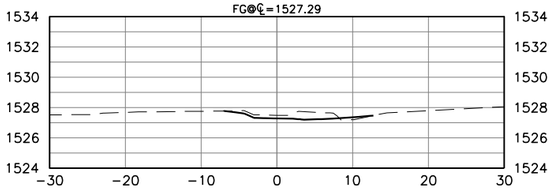

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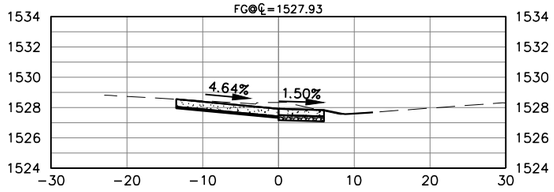

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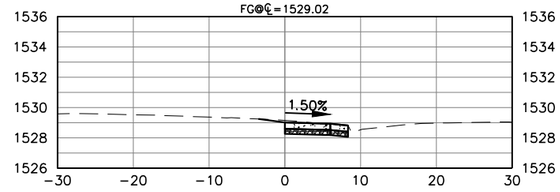

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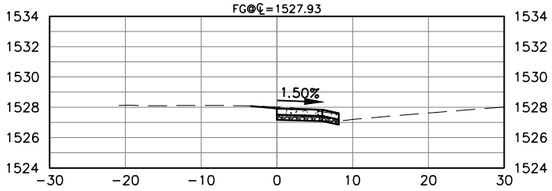

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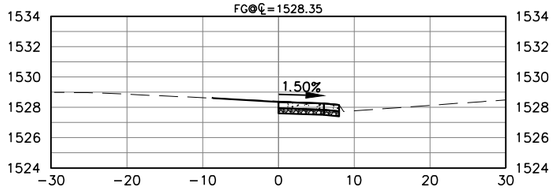

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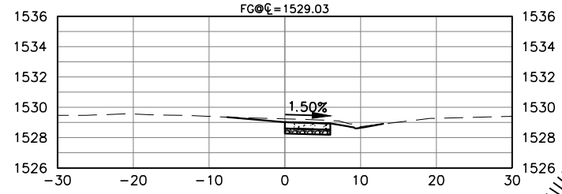

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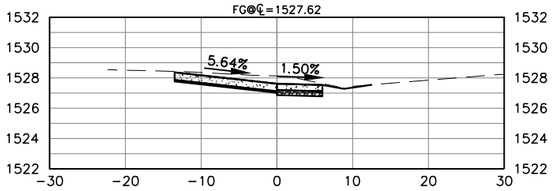

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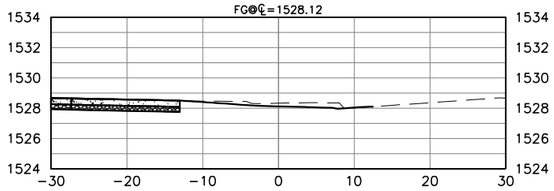

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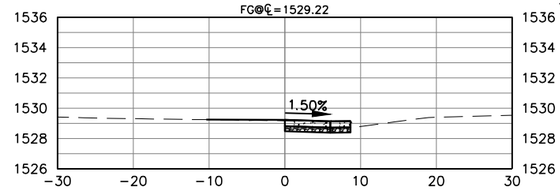

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SOUTH DAKOTA
2/3/2025

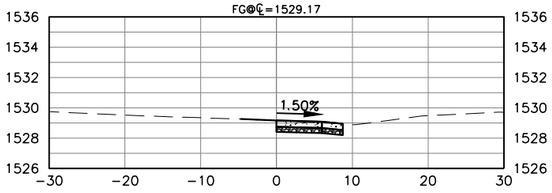
CROSS SECTIONS

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	64	65

FILE: 672021 – Cross Sections.dwg
PLOTTING DATE: 2025-01-30 INTIALS: JTM
REVISION DATE: 2020-03-19

30+50



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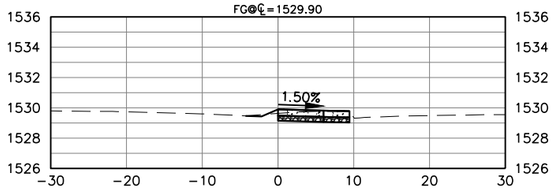

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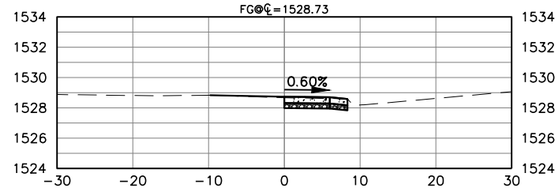

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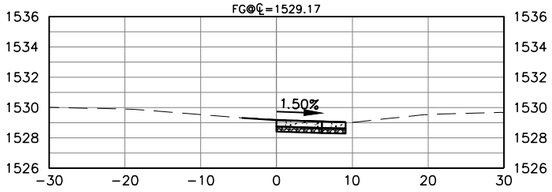

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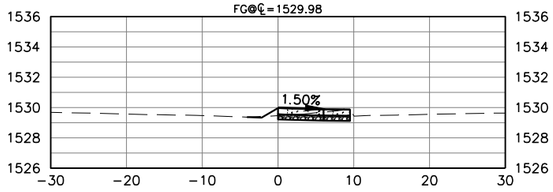
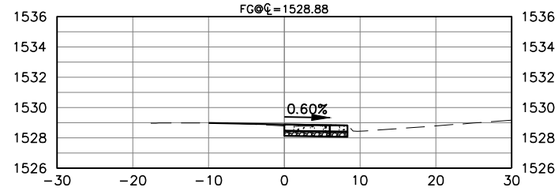


43+00



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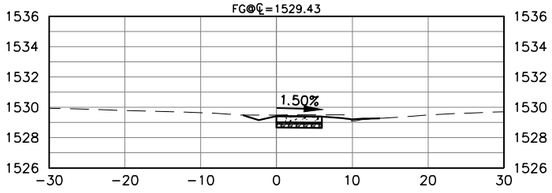

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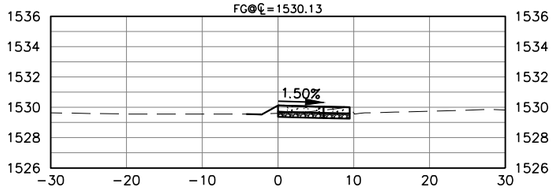

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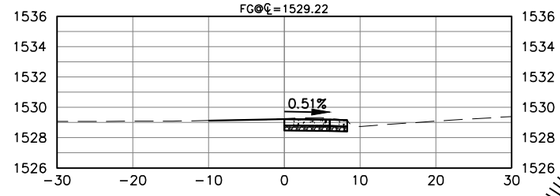

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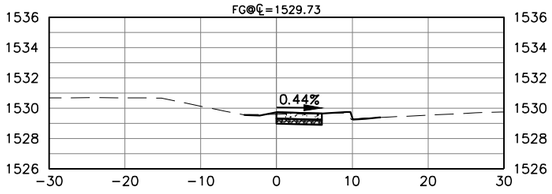

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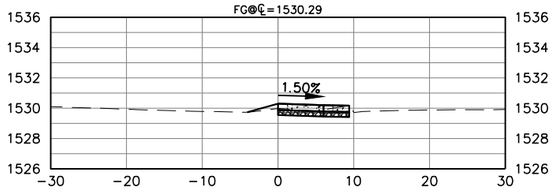

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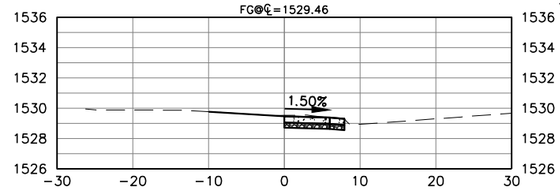

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2/3/2025

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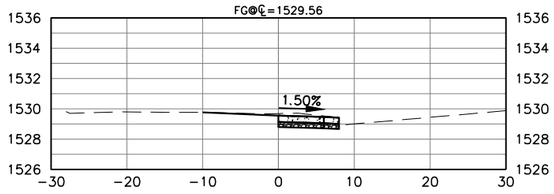
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P TAPR(51)	65	65

FILE: 672021 – Cross Sections.dwg
PLOTTING DATE: 2025–01–30 INTIALS: JTM
REVISION DATE: 2020–03–19

44+50



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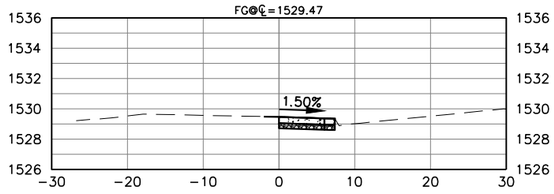

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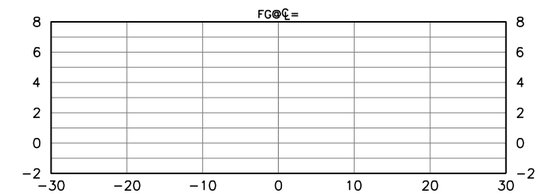

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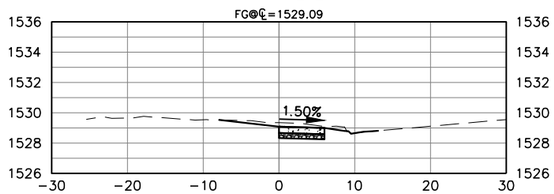

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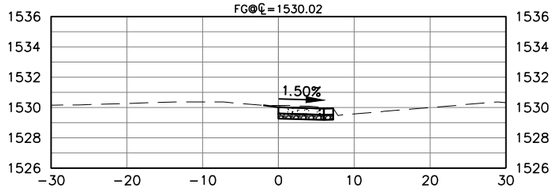

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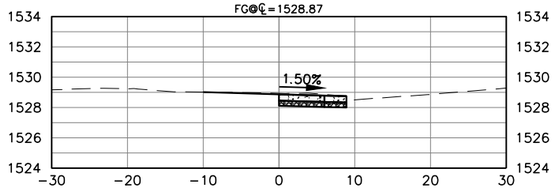

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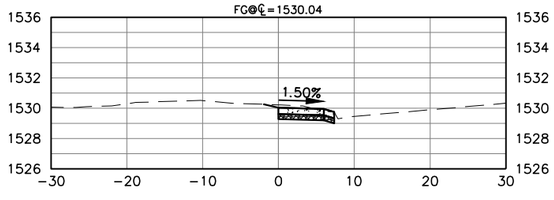

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