

FOR BIDDING PURPOSES ONLY

STATE OF DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	1	40

Revised June 15, 2016 by JWD

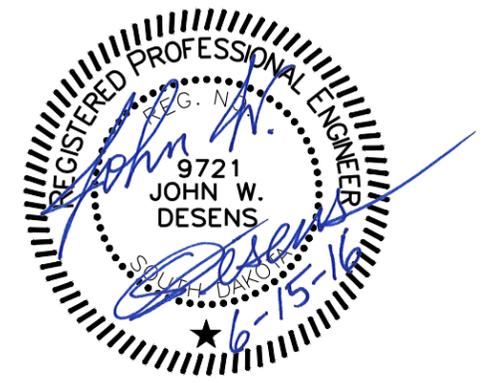


PROJECT LOCATION

STATE OF SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

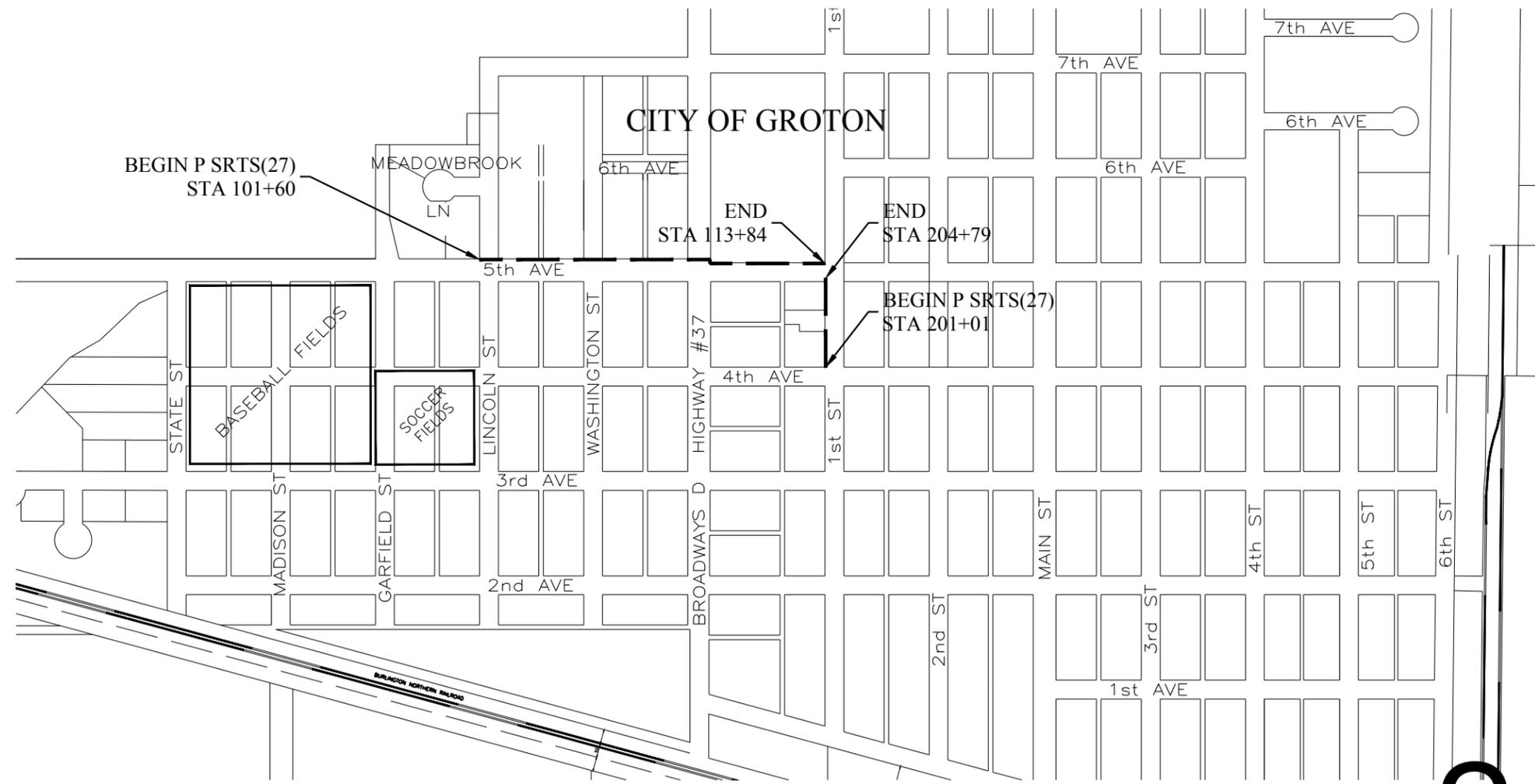
PLANS FOR PROPOSED PROJECT P SRTS(27) SAFE ROUTES TO SCHOOL INFRASTRUCTURE PROJECT BROWN COUNTY PCC SIDEWALK PCN 03X0

SHEET INDEX	
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STORM WATER PERMIT

Major Receiving Body of Water: Unnamed Tributary
 Area Disturbed: 0.54 Acres
 Total Project Area: 0.86 Acres
 Latitude: 45°27'09"
 Longitude: 98°13'42"



LOCATION MAP



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Estimate of Quantities

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	0.304	Mile
009E3250	Miscellaneous Staking	0.304	Mile
009E3280	Slope Staking	0.304	Mile
009E3300	Three Man Survey Crew	40	Hour
100E0100	Clearing	Lump Sum	LS
110E1010	Remove Asphalt Concrete Pavement	13.2	SqYd
110E1100	Remove Concrete Pavement	29.0	SqYd
110E1110	Remove Concrete Approach Pavement	28.6	SqYd
110E1130	Remove Concrete Driveway Pavement	50.0	SqYd
110E1140	Remove Concrete Sidewalk	54.3	SqYd
120E0010	Unclassified Excavation	379	CuYd
230E0010	Placing Topsoil	186	CuYd
250E0010	Incidental Work	Lump Sum	LS
380E3520	6" PCC Approach Pavement	97.8	SqYd
380E4010	6" PCC Fillet Section	29.0	SqYd
634E0110	Traffic Control Signs	323	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E2020	Temporary Curb Ramp	8	Each
651E0040	4" Concrete Sidewalk	6523	SqFt
651E0060	6" Concrete Sidewalk	1281	SqFt
651E3000	Grinding Miscellaneous Concrete	4	SqFt
651E7000	Type 1 Detectable Warnings	80	SqFt
670E5205	Special Grate	2	Each
730E0206	Type D Permanent Seed Mixture	81	Lb
731E0100	Fertilizing	394	Lb
734E0845	Sediment Control at Inlet with Frame and Grate	10	Each
734E5010	Sweeping	8	Hour
735E2225	2.5" Caliper Deciduous Tree, Furnish and Plant	6	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

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived 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. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

Action Taken/Required:

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

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor shall 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 street ROW.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the General Permit for Highway, Road, and Railway Construction/Demolition Debris Disposal under the South Dakota Waste Management Program issued by the Department of Environment and Natural Resources.

The waste disposal site(s) shall 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 Project Engineer.

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

- Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of fences, gates, and placement of a sign or signs at the entrance to the site stating "No Dumping Allowed".
- Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period of time not to exceed the duration of the project. Prior to project completion, the waste shall 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) shall be incidental to the various contract items.

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historical 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:

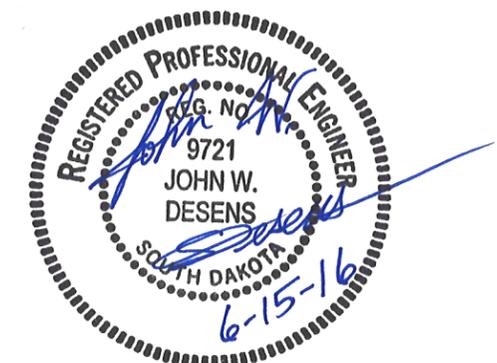
All earth disturbing activities not designated within the plans require review of cultural resources impacts. This work includes, but is not limited to: staging areas, borrow sites, waste disposal sites, and all material processing sites.

The Contractor shall arrange and pay for a cultural resource survey and/or records search. 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; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor shall provide ARC with the following: a topographical map or aerial view on 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 shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). 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.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order to determine an appropriate course of action.



COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES (Continued)

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for staging areas, borrow sites, waste disposal sites, or material processing sites that affect wetlands, threatened and endangered species, or waterways. The Contractor shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

GRADING OPERATIONS

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 2.7 MGal. No separate payment will be made for the Water for Embankment and all costs associated shall be incidental to the contract unit price per cubic yard of "Unclassified Excavation".

UTILITIES

The Contractor shall 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 shall contact each utility owner and confirm the status of all existing and new utility facilities.

UTILITY CONTACT INFORMATION

Telephone and Cable TV: James Valley Telephone Groton, SD Telephone: 605-397-2323

Midcontinent Communications 3828 6th Ave SE, Suite A Aberdeen, SD 57401 Telephone: 800-888-1300

Natural Gas & Electrical Power: Northwestern Energy PO Box 1120 Aberdeen, SD 57402-1120 Telephone: 605-225-6300

Electrical: City of Groton Groton, SD Telephone: 605-397-2690

One Call Utility Locates: Telephone: 1-800-781-7474

CLEARING

Before clearing activities begin, the Contractor shall contact the Engineer to determine the limits of clearing for the project. If the trees or shrubs that are supposed to remain within the limits of work are damaged or destroyed by the Contractor, the Contractor shall replace them with the same size and type at the Contractor's expense. Removal of trees and stumps will be done by the Owner.

TABLE OF TREE AND STUMP REMOVAL BY OWNER

Station	Offset	Type
104+70	29' L	Deciduous
104+93	29' L	Deciduous
105+31	29' L	Deciduous
106+21	27' L	Deciduous
106+29	35' L	Coniferous
106+38	27' L	Deciduous
106+47	34' L	Coniferous
106+94	26' L	Deciduous

The Contractor shall provide 30 days notice to the Owner of date trees and stumps need to be removed. All trees within the limits of the work not listed for removal are to remain. Contractor to work with the Owner to remove any additional stumps found during construction that need removal.

FERTILIZING

The Contractor shall apply an all-natural slow release fertilizer prior to seeding or placing sod. The all-natural fertilizer shall have a minimum guaranteed analysis of 4-6-4 and be USDA Certified BioBased. It should provide a minimum of 4% (N) nitrogen with a minimum water insoluble nitrogen (WIN) fraction of 3.2%, a minimum of 6% (P2O5) available phosphate, a minimum of 4% (K2O) soluble potash, and a maximum carbon to nitrogen ratio (C:N ratio) of 5:1. The all-natural fertilizer shall be free of weed-seed and pathogens accomplished through thermophilic composting, and not mechanical or chemical sterilization, to assure presence of beneficial soil microbiology. The fertilizer shall have a near neutral pH, a low salt index, a low biological oxygen demand, contain organic humic and fulvic acids, and have high aerobic organism counts. The fertilizer shall also be stable, free of bad odors, and be unattractive as a food source for animals. It should also be in a granular form that is easily spread.

The fertilizer shall be applied at a rate of 34 pounds per 1,000 square feet in accordance with the manufacturer's recommended method of application.

The all-natural slow release fertilizer shall be as shown below or an approved equal:

Product	Manufacturer
Sustane	Sustane Corporate Headquarters Cannon Falls, Minnesota Phone: 1-800-352-9245 http://www.sustane.com/

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.

The varieties listed for seed mixtures are preferred varieties. Seed Mixture shall consist of the following:

Type D Permanent Seed Mixture shall consist of the following:

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

GENERAL PLANTING NOTES

All trees shall conform to or exceed minimum quality standards as defined by the American Nursery and Landscaping Association, current edition of American Standard for Nursery Stock, and shall be purchased from a Landscape Nursery. Trees furnished shall be of the same genus, species, cultivar, and size as specified in the plans. Species and variety may be substituted only by the approval of the Engineer. Each tree shall have an identification label.

All trees shall bear the same relationship to the finished grade as the plant's original grade before digging. All trees shall be planted in accordance with all the drawings and specifications included in the plans.

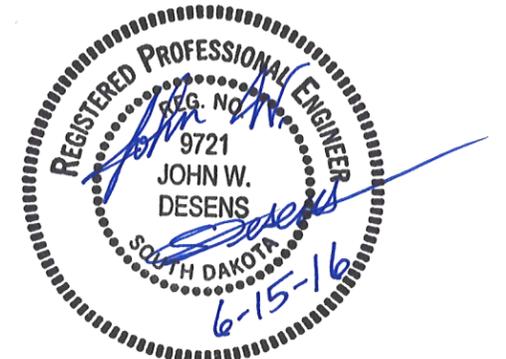
Planting locations for each individual species shall be identified prior to planting. Location shall be approved by the Engineer prior to installation.

All trees shall be fertilized.

Within 2 hours after being planted, trees shall be watered to thoroughly saturate the backfill soil as this provides settlement and filling of voids in the backfill.

As soon as the initial planting is completed, the Engineer shall visually inspect trees for health, vigor, and condition, and shall at that time accept or reject them.

The Contractor shall provide a one year warranty for all trees. After one year from initial planting, the Engineer shall make an inspection and dead, unhealthy, or otherwise not acceptable trees shall be replaced by the Contractor at no additional cost to the City.



GENERAL PLANTING NOTES (Continued)

All costs for furnishing, handling, storing, fertilizing, and planting the trees including the materials, equipment, labor, preparation of the ground, initial watering, clean-up of the planted areas, and the warranty, shall be incidental to the contract unit price per each for "2.5" Caliper Deciduous Tree, Furnish and Plant".

TABLE OF FURNISH AND PLANT DECIDUOUS TREE

Station	Offset
104+70	23.6' L
104+93	23.6' L
105+31	23.5' L
106+11	24.3' L
106+43	23.5' L
106+99	23.5' L

Trees to be the following species: 1 Bur Oak, 1 Hackberry, 1 Honey Locust, 1 Hybrid Elm, 1 Quaking Aspen, and 1 Linden (Basswood). Coordinate with the City for location of each species.

SHRINKAGE FACTOR: Embankment +30%

TABLE OF UNCLASSIFIED EXCAVATION

Item	Cut (CY)	Fill (CY)
Non-Topsoil Excavation	53	64
Topsoil Excavation	326	143
Shrinkage		62
Sub-total	379	269
Waste		110
Excavation	379	379

Notes:

About 326 CY of topsoil is to be stripped and stockpiled for re-use based on an estimated 6" existing topsoil thickness. About 53 CY of non-topsoil excavation is needed to excavate to proposed subgrades. About 143 CY compacted volume (approximately 186 CY loose volume) will be re-spread topsoil 4" thick from stockpiles (located outside of the sidewalk). This will leave an excess of about 110 CY to be wasted. Topsoil volume is listed for earthwork balance purposes only, actual quantity may vary. The Placing Topsoil plan quantity shall be used for final payment. No field measurements will be made for payment except if changes from the plan are ordered by the Engineer.

UNCLASSIFIED EXCAVATION

The Unclassified Excavation plan quantity shall be used for final payment. No field measurements will be made for payment except if changes from the plan are ordered by the Engineer. Compaction shall be to the satisfaction of the Engineer.

SAW EXISTING PAVEMENT

Sawing shall be performed at all locations shown on the plans or as directed by the Engineer during construction. The pavement shall be sawed full depth. Sawing of asphalt shall be incidental to related removal

bid items. Additional sawing required to form neat edges prior to paving may be necessary.

INCIDENTAL WORK

Station	L/R	Remarks
103+73.9	L	Coordinate power pole and electrical box relocation with power company.
107+42.6	L	Coordinate power pole relocation with power company.

TABLE OF REMOVAL AND REPLACEMENT OF DROP INLET GRATES

Station	L/R	Remarks
201+14	22'L	Remove and replace drop inlet grate.
201+53	21'L	Remove and replace drop inlet grate.

Notes:

"Remove and replace drop inlet grate" shall include removing the existing grate and salvaging it to the Owner along with furnishing and installing a Neenah Foundry R-4808-A grate or Engineer approved equal grate on the drop inlet frame. Verify dimensions of existing frames will fit with new grates before ordering. The drop inlet frames are to be left in place. Payment shall be paid for at the contract unit price per each for "Special Grate".

TABLE OF CONCRETE APPROACH PAVEMENT REMOVAL

Station	to	Station	L/R	Quantity (SqYd)
103+26		103+49	L	11.2
104+11		104+44	L	17.4
Total:				28.6

TABLE OF ASPHALT CONCRETE DRIVEWAY PAVEMENT REMOVAL

Station	to	Station	L/R	Quantity (SqYd)
103+29		103+46	L	13.2
Total:				13.2

TABLE OF CONCRETE DRIVEWAY PAVEMENT REMOVAL

Station	to	Station	L/R	Quantity (SqYd)
104+14		104+42	L	50.0
Total:				50.0

TABLE OF CONCRETE PAVEMENT REMOVAL

Station	to	Station	L/R	Quantity (SqYd)
105+85		105+98	L	9.2
201+01		201+16	L	10.8
201+02		201+16	R	9.0
Total:				29.0

Note: Concrete Pavement Removal includes removal of concrete fillets and the monolithic concrete curb along fillets (which is considered part of the fillets).

TABLE OF SIDEWALK REMOVAL

Station	to	Station	L/R	Quantity (SqYd)
101+60		101+80	L	14.4
201+01		201+14	L	14.1
201+02		201+14	R	12.3
201+53		201+66	L	13.5
Total:				54.3

GRINDING MISCELLANEOUS CONCRETE

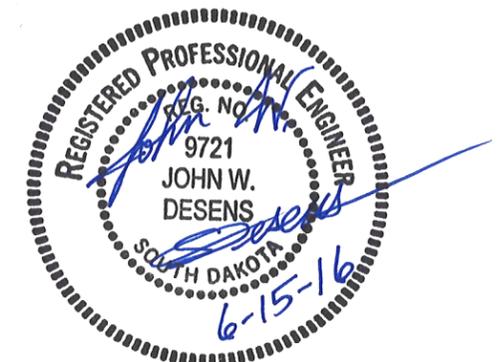
Grinding Miscellaneous Concrete shall include grinding the concrete curb from 102+22.94-26.64'L to 102+27.98-21.87'L to remove the lip of curb for the new pedestrian ramp at this location. The grinding includes 7.0 feet of curb length at 0.5' wide, for an area of 3.5 square feet.

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 shall be installed prior to working in the vicinity of the drop inlets.

The Contractor shall be responsible for maintaining and repairing the sediment control device for the duration of the project for which sediment control measures are required. Maintenance shall 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 shall be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".



SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES (Continued)

Sediment collection device shall 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 shall 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>

TABLE OF SEDIMENT CONTROL AT DROP INLETS

Station	L/R	Quantity (Each)
101+66.0	18.3' L	1
102+21.8	19.4' L	1
105+32.3	18.8' L	1
105+99.6	19.8' L	1
107+35.5	19.4' L	1
113+73.9	20.8' R	1
113+76.1	20.7' L	1
201+13.1	21.3' R	1
201+14.7	21.7' L	1
201+53.0	21.0' L	1
Total:		10

STREET SWEEPING

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

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

At a minimum, sweeping will be required:

1. Prior to opening any segment or roadway to traffic.

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

TYPE 1 DETECTABLE WARNINGS

Detectable warnings shall be in compliance with the Americans with Disability Act regulations.

The detectable warnings shall 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 shall be placed below the Type 1 Detectable Warnings. When concrete is placed below the detectable

warnings then the concrete thickness shall be transitioned at the rate of 1" per foot to match the adjacent concrete sidewalk thickness.

The detectable warnings shall 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 shall 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.ejw.com
TufTile (wet-set) Cast Iron Replaceable Tile	TufTile 1200 Flex Court Lake Zurich, IL 60047 888-960-8897 http://www.tuftile.com/

TABLE OF TYPE 1 DETECTABLE WARNINGS

Station	L/R	Quantity (SqFt)
101+76.25	24.51' L	10
102+25.31	24.09' L	10
105+42.79	23.93' L	10
105+90.40	25.33' L	10
201+10.24	23.69' L	10
201+10.37	22.93' R	10
201+57.52	24.05' L	10
204+75.31	24.02' L	10
Total:		80

TABLE OF 6" PCC APPROACH PAVEMENT

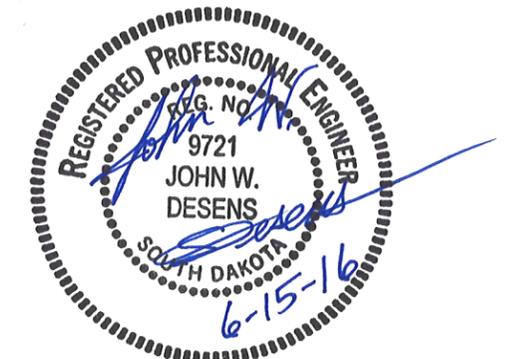
Station	L/R	Type	Quantity (SqYd)
103+22.76 to 103+52.26	L	A	22.7
104+07.83 to 104+47.92	L	A	75.1
Total:			97.8

TABLE OF 4" CONCRETE SIDEWALK

Station	to Station	L/R	Quantity (SqFt)
101+59.78	101+80.17	L	135.1
102+21.26	103+28.76	L	580.3
103+46.26	104+13.79	L	337.6
104+41.97	105+46.51	L	560.9
105+87.00	106+63.52	L	430.1
106+87.24	107+43.94	L	283.5
107+59.32	107+89.95	L	153.2
108+22.88	109+00.60	L	411.7
109+78.36	113+39.74	L	1828.0
201+01.48	201+13.88	L	126.6
201+01.69	201+13.57	R	110.5
201+53.78	203+66.32	L	1171.6
203+76.34	204+01.91	L	127.9
204+35.16	204+79.38	L	265.5
Total:			6522.5

TABLE OF 6" CONCRETE SIDEWALK

Station	to Station	L/R	Quantity (SqFt)
103+28.76	103+46.26	L	87.5
106+63.52	106+87.24	L	192.8
107+43.94	107+59.32	L	131.0
107+89.95	108+22.88	L	249.3
113+39.69	113+84.10	L	311.8
203+66.32	203+76.34	L	70.8
204+01.91	204+35.16	L	238.0
Total:			1281.2



6" PCC FILLET SECTIONS

Payment for "6" PCC Fillet Section" shall 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	L/R	Quantity (SqYd)
105+85		105+98	L	9.2
201+01		201+16	L	10.8
201+02		201+16	R	9.0
Total:				29.0

TRAFFIC CONTROL

Sign Code	Sign Size	Description	No. Req'd.	SqFt/ Sign	SqFt
W20-1	48"x48"	Road Work Ahead	8	16	128
W21-5	48"x48"	Shoulder Work	8	16	128
G20-2	36"x18"	End Road Work	7	5	35
R9-9	24"x12"	Sidewalk Closed	8	2	16
R9-11a	24"x12"	Sidewalk Closed with Arrow (L or R) Cross Here	8	2	16
Total:					323

PEDESTRIAN TRAFFIC CONTROL

The existing sidewalks cannot be closed without supplying an alternate route. When crosswalks, sidewalks, or other pedestrian facilities are blocked, closed or relocated, temporary facilities shall include accessibility features.

The Contractor shall adhere to the requirements of the Americans with Disabilities Act (ADA) during construction. Tape, rope, or plastic chain strung between devices is not detectable, does not comply with design standards in the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG), and should not be used as a control for pedestrian movements.

A temporary pedestrian ramp shall be provided by the Contractor in all cases where an alternate route cannot be found, and the intersection will carry pedestrian traffic.

The Contractor shall adequately sign and barricade the sidewalk for pedestrian traffic. The Contractor must not leave un-barricaded holes open overnight.

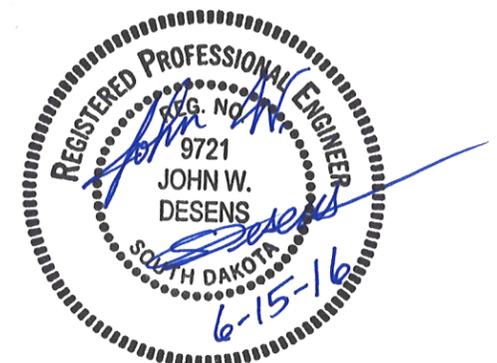
TEMPORARY CURB RAMP

Temporary curb ramps should be firm, stable, and have a non-slip surface. They shall not warp or buckle, and should be made of materials strong enough to support a weight of 800 pounds. Temporary curb ramps shall also be color contrasting and contain marked edges so they are noticeable

by pedestrians who have visual impairments. Lateral joints or gaps between surfaces shall be a maximum of 0.5 inches in width.

Temporary curb ramps shall be the full width of the temporary pedestrian access route, with a recommended width of 60" and a minimum width of 48". Temporary curb ramps shall have a maximum slope of 1:12, and have free draining surfaces with a maximum cross slope of 2 percent. Handrails on curb ramps are not required unless the curb ramp has a rise exceeding 6" and a length exceeding 72".

All costs shall be incidental to the contract unit price per each for TEMPORARY CURB RAMP.



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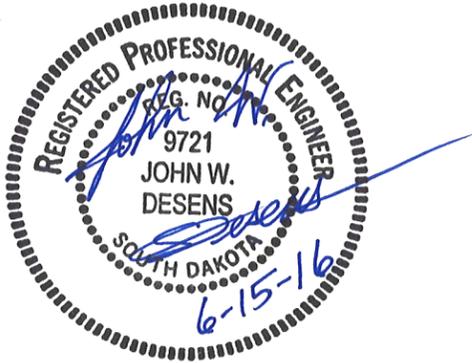
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	7	40

TABLE OF CONSTRUCTION STAKING
(See Special Provision for Contractor Staking)

Roadway and Description	Begin Station	End Station	Number of Lanes	Length (Ft)	Grade Staking			Miscellaneous Staking Quantity (Mile)	Slope Staking Quantity (Mile)
					Length (Mile)	Lane Factor	*Sets of Stakes		
5 th Avenue (PCC Sidewalk on north side)	101+60	113+84	1	1224	0.232	0.5	2	0.232	0.232
1 st Street (PCC Sidewalk on west side)	201+01	204+79	1	378	0.072	0.5	2	0.072	0.072
Totals:								0.304	0.304

* 2 = Blue Top and Paving Hub Stakes (PCC Sidewalk)

** Grade Staking Quantity = (Length) x (Lane Factor) x (Sets of Stakes)



STORM WATER POLLUTION PREVENTION PLAN CHECKLIST

(The numbers right of the title headings are **reference numbers** to the **GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES**)

❖ **SITE DESCRIPTION (4.2 1)**

- **Project Limits: See Title Sheet (4.2 1.b)**
- **Project Description: See Title Sheet (4.2 1.a.)**
- **Site Map(s): See Title Sheet and Plans (4.2 1.f. (1)-(6))**
- **Major Soil Disturbing Activities** (check all that apply)
 - Clearing and grubbing
 - Excavation/borrow
 - Grading and shaping
 - Filling
 - Cutting and filling
 - Other (describe):
- **Total Project Area** 0.86 Acres **(4.2 1.b.)**
- **Total Area To Be Disturbed** 0.54 Acres **(4.2 1.b.)**
- **Existing Vegetative Cover (%)** 93%
- **Soil Properties:** USDA-NRCS Soil Series Classification G720A and G871A (Silt Loams) **(4.2 1. d.)**
- **Name of Receiving Water Body/Bodies** Unnamed Tributary **(4.2 1.e.)**

❖ **ORDER OF CONSTRUCTION ACTIVITIES (4.2 1.c.)**

- (Stabilization measures shall be initiated as soon as possible, but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Initiation of final or temporary stabilization may exceed the 14-day limit if earth disturbing activities will be resumed within 21 days.)
- **Install perimeter protection where runoff sheets from the site.**
 - **Remove and store topsoil.**
 - **Stabilize disturbed areas.**
 - **Install inlet and culvert protection.**
 - **Install sidewalk, curb and gutter.**
 - **Complete final grading.**
 - **Reseed areas disturbed by removal activities.**

❖ **EROSION AND SEDIMENT CONTROLS (4.2 2.a.(1)(a)-(f))**

- (Check all that apply)
- **Stabilization Practices (See Detail Plan Sheets)**
 - Temporary Seeding (Cover Crop Seeding)
 - Permanent Seeding
 - Sodding
 - Planting (Woody Vegetation for Soil Stabilization)
 - Mulching (Grass Hay or Straw)
 - Hydraulic Mulch (Wood Fiber Mulch)
 - Soil Stabilizer
 - Bonded Fiber Matrix
 - Erosion Control Blankets or Mats
 - Vegetation Buffer Strips
 - Roughened Surface (e.g. tracking)
 - Dust Control
 - Other:
 - **Structural Temporary Erosion and Sediment Controls**
 - Silt Fence
 - Floating Silt Curtain
 - Straw Bale Check
 - Temporary Berm
 - Temporary Slope Drain

- Straw Wattles or Rolls
- Turf Reinforcement Mat
- Rip Rap
- Gabions
- Rock Check Dams
- Sediment Traps/Basins
- Inlet Protection
- Outlet Protection
- Surface Inlet Protection (Area Drain)
- Curb Inlet Protection
- Stabilized Construction Entrances
- Entrance/Exit Equipment Tire Wash
- Interceptor Ditch
- Concrete Washout Area
- Temporary Diversion Channel
- Work Platform
- Temporary Water Barrier
- Temporary Water Crossing
- 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.

➤ **Storm Water Management (4.2 2.b., (1) and (2))**

Storm water management will be handled by temporary controls outlined in "EROSION AND SEDIMENT CONTROLS" above, and any permanent controls needed to meet permanent storm water management needs in the post construction period. Permanent controls will be shown on the plans and noted as permanent.

➤ **Other Storm Water Controls (4.2 2.c., (1) and (2))**

- **Waste Disposal**
All liquid waste materials will be collected and stored in sealed metal containers approved by the project engineer. 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 in the field office. The general contractor's representative responsible for the conduct of work on the site will be responsible for seeing 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 individual designated as the contractor's on-site representative 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 in a timely manner by a licensed waste management contractor or as required by any local regulations.

❖ **Maintenance and Inspection (4.2 3. and 4.2 4.)**➤ **Maintenance and Inspection Practices**

- Inspections will be conducted at least one time per week and after a storm event of 0.50 inches or greater.
- 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 in order 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 $\frac{1}{3}$ 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 $\frac{1}{2}$ 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 site superintendent are responsible for inspections. Maintenance, 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.

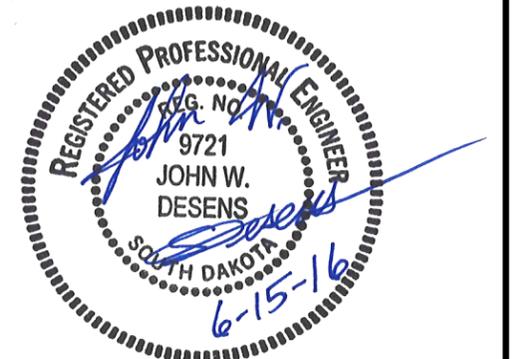
❖ **Non-Storm Water Discharges (3.0)**

- The following non-storm water 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.

❖ **Materials Inventory (4.2. 2.c.(2))**

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 headings "EROSION AND SEDIMENT CONTROLS" and "SPILL PREVENTION" (check all that apply).

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



❖ **Spill Prevention (4.2 2.c.(2))**➤ **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 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.
- Vegetation areas not essential to the construction project will be preserved and maintained as noted on the plans.

▪ **Hazardous Materials**

- Products will be kept in original containers unless the container is not resealable.
- 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, degreasing 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 storm water system or storm water 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 storm water runoff.

➤ **Product Specific Practices (6.8)**▪ **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 storm water. 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 provide designated truck washout areas on the site. These areas must be self contained and not connected to any storm water outlet of the site. Upon completion of construction washout areas will be properly stabilized.

➤ **Spill Control Practices (4.2 2 c.(2))**

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 clean up 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 clean up 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. The contractor is responsible for ensuring that the site superintendent has had appropriate training for hazardous materials handling, spill management, and cleanup.

➤ **Spill Response (4.2 2 c.(2))**

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens storm water 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.

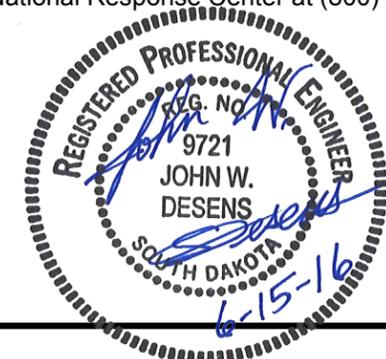
- Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the contractor at the site.
- If oil sheen is observed on surface water (e.g. settling ponds, detention ponds, swales), action will be taken immediately to remove the material causing the 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 SD DENR.
- Personnel with primary responsibility for spill response and clean up 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.

❖ **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 DENR immediately **if any one of the following** conditions exists:
 - The discharge threatens or is in a position to threaten the waters of the state (surface water or ground water).
 - The discharge causes an immediate danger to human health or safety.
 - The discharge exceeds 25 gallons.
 - The discharge causes a sheen on surface water.
 - The discharge of any substance that exceeds the ground water quality standards of ARSD (Administrative Rules of South Dakota) chapter 74:51:01.
 - The discharge of any substance that exceeds the surface water quality standards of ARSD chapter 74:51:01.
 - The discharge of any substance that harms or threatens to harm wildlife or aquatic life.
 - The discharge of crude oil in field activities under SDCL (South Dakota Codified Laws) chapter 45-9 is greater than 1 barrel (42 gallons).

To report a release or spill, call DENR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central time). To report the release after hours, on weekends or holidays, call State Radio Communications at 605-773-3231. Reporting the release to DENR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, the responsible person must also contact local authorities to determine the local reporting requirements for releases. DENR recommends that spills also be reported to the National Response Center at (800) 424-8802.

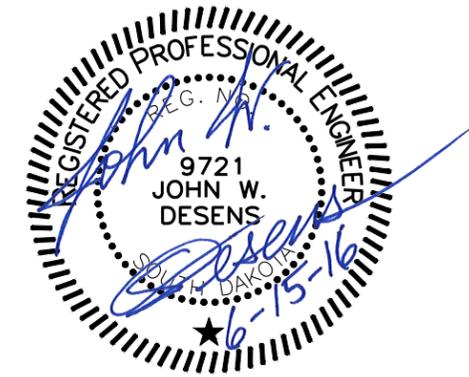


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STATE OF SOUTH DAKOTA	PROJECT P SRTS(27)	SHEET 11	TOTAL SHEETS 40
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CONTROL DATA

CP#	LOCATION	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	NW OF TOWN	CP D	50,000.000	100,000.000	1304.58
4	NE OF TOWN	CP A	50,256.926	107,864.980	1303.48
5	SE OF TOWN	CP B	45,151.581	107,991.395	1301.31
6	W OF TOWN	CP C	46,965.528	100,106.429	1303.43
7	SE CORNER OF INTER. OF STATE ST & 5th AVE	CP 7 /RBR CAP	47,436.895	103,515.267	1299.85
8	5th AVE - MIDWAY BETWEEN STATE & LINCOLN ST	CP 8 /RBR CAP	47,518.306	104,030.237	1304.97
BM #1	SE COR. OF INTER. OF STATE ST & 5th AVE	SE BOLT w/TAG ON F.H.			1302.16
BM #4	NW COR. OF INTER. OF 5th AVE & LINCOLN ST	SW BOLT w/TAG ON F.H.			1305.37
BM #5	SW COR. OF INTER. OF 5th AVE & WASHINGTON ST.	SW BOLT w/TAG ON F.H.			1306.73
BM #13	WEST END OF CUL-DE-SAC OF MEADOWBROOK LANE	SOUTH BOLT w/TAG ON F.H.			1306.22
BM #14	N. SIDE OF ENTRANCE TO BASEBALL FIELD ON EAST SIDE OF STREET	BENCHTIE (YELLOW) IN P.P.L.			1304.79
BM #15	NW COR. OF INTER. OF STATE ST & 3rd AVE	TOP TURNING NUT ON F.H.			1306.86
BM #16	SE COR. OF INTER. OF STATE ST & 2nd AVE	BENCHTIE (YELLOW) IN P.P.L.			1304.52
BM #17	NW COR. OF INTER. OF 2nd AVE & MADISON ST	NW BOLT w/TAG ON F.H.			1306.03
BM #18	NE COR. OF INTER. OF 2nd AVE & GARFIELD ST	BENCHTIE (YELLOW) IN P.P.L.			1304.07
BM #19	SW COR. OF INTER. OF 3rd AVE & GARFIELD ST	SE BOLT w/TAG ON F.H.			1305.63
BM #20	SW COR. OF INTER. OF 3rd AVE & MADISON ST	SE BOLT w/TAG ON F.H.			1307.00



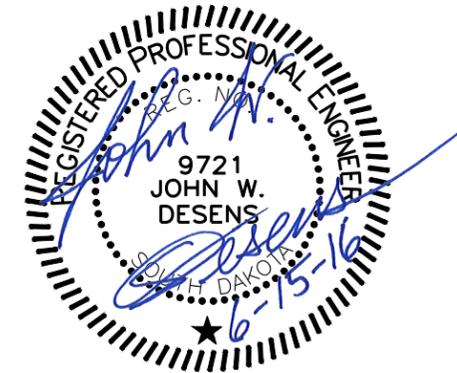
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	12	40

HORIZONTAL ALIGNMENT DATA

5th Avenue				
PI Station	Northing	Easting	Distance	Direction
100+00.00	47,483.16	104,383.89		
			168.197'	N89° 37' 51.67"E
101+68.20	47,484.2434'	104,552.0798'		
			66.337'	N89° 19' 19.45"E
102+34.53	47,485.0283'	104,618.4122'		
			331.841'	N88° 52' 02.66"E
105+66.37	47,491.5875'	104,950.1881'		
			464.922'	N88° 53' 12.79"E
110+31.30	47,500.6192'	105,415.0227'		
			468.703'	N87° 45' 03.24"E
115+00.00	47,519.0131'	105,883.3650'		

North 1st Street				
PI Station	Northing	Easting	Distance	Direction
200+00.00	47,015.6365'	105,805.9433'		
			600.000'	N1° 26' 33.68"W
206+00.00	47,615.4463'	105,790.8371'		



FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT P SRTS(27)	SHEET 13	TOTAL SHEETS 40
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EXISTING TOPOGRAPHY SYMBOLOLOGY & LEGEND

--- ACMP ---	--- ACMP ---	--- ACMP ---	Corrugated Metal Pipe Arch-Existing
----- ACMP	----- ACMP	----- ACMP	Corrugated Metal Pipe Arch-Pro
--- CMP ---	--- CMP ---	--- CMP ---	Corrugated Metal Pipe-Existing
----- CMP	----- CMP	----- CMP	Corrugated Metal Pipe-Pro
---*---*---*---*---*---*	---*---*---*---*---*---*	---*---*---*---*---*---*	Fence Barbed Wire-Existing
---o---o---o---o---o---	---o---o---o---o---o---	---o---o---o---o---o---	Fence Chain Link-Existing
---x---x---x---x---x---	---x---x---x---x---x---	---x---x---x---x---x---	Fence Generic-Existing
---□---□---□---□---□---	---□---□---□---□---□---	---□---□---□---□---□---	Fence Wooden-Existing
--- G ---	--- G ---	--- G ---	Gas-Existing
----- G	----- G	----- G	Gas-Pro
--- OP ---	--- OP ---	--- OP ---	Overhead Power-Existing
--- OTP ---	--- OTP ---	--- OTP ---	Overhead Telephone-Existing
--- OTV ---	--- OTV ---	--- OTV ---	Overhead Television-Existing
--- PVC ---	--- PVC ---	--- PVC ---	Polyvinyl Chloride Pipe-Existing
--- ARCP ---	--- ARCP ---	--- ARCP ---	Reinforced Concrete Pipe Arch-Existing
--- RCP ---	--- RCP ---	--- RCP ---	Reinforced Concrete Pipe-Existing
--- HDPE ---	--- HDPE ---	--- HDPE ---	Ribbed High Density Polyethylene Pipe-Existing
--- S ---	--- S ---	--- S ---	Sanitary Sewer-Existing
--- SF ---	--- SF ---	--- SF ---	Silt Fencing
--- ST ---	--- ST ---	--- ST ---	Storm Sewer-Existing
----- TFO	----- TFO	----- TFO	Telephone Fiber Optic
----- TVFO	----- TVFO	----- TVFO	Television Fiber Optic
--- UTV ---	--- UTV ---	--- UTV ---	Underground Cable Television-Existing
--- UTP ---	--- UTP ---	--- UTP ---	Underground Telephone-Existing
--- UP ---	--- UP ---	--- UP ---	Underground Power-Existing
--- W ---	--- W ---	--- W ---	Water-Existing

●	Sprinkler Head	FO	Fiber Optic Pedestal
☀	Street Light	~o	Flag Pole
⊕	Street Sign	☀	Tree-Coniferous
STOP	Stop Sign	☀	Tree-Deciduous
○	Single Post Sign	☀	Bush
○○	Double Post Sign	●	Rebar w/Plastic Cap
TP	Telephone Pedestal	CP	Control Point
TV	Television/Cable Pedestal	SA	Sanitary Sewer Manhole
P	Power Box	oo	Sanitary Sewer Cleanout
P	Power Pedestal	ST	Storm Sewer Manhole
⊗	Power Pole	⊕	Drop Inlet
☀⊗	Power Pole w/Light	W	Water Valve
□	Guy Pole	⊕	Water Curb Stop
>	Guy Wire	⊕	Fire Hydrant 2
☀	Light Pole	⊕	Fire Hydrant 3

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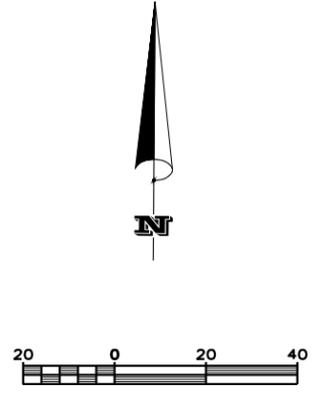
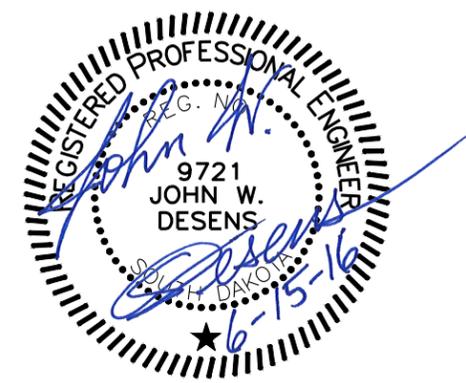
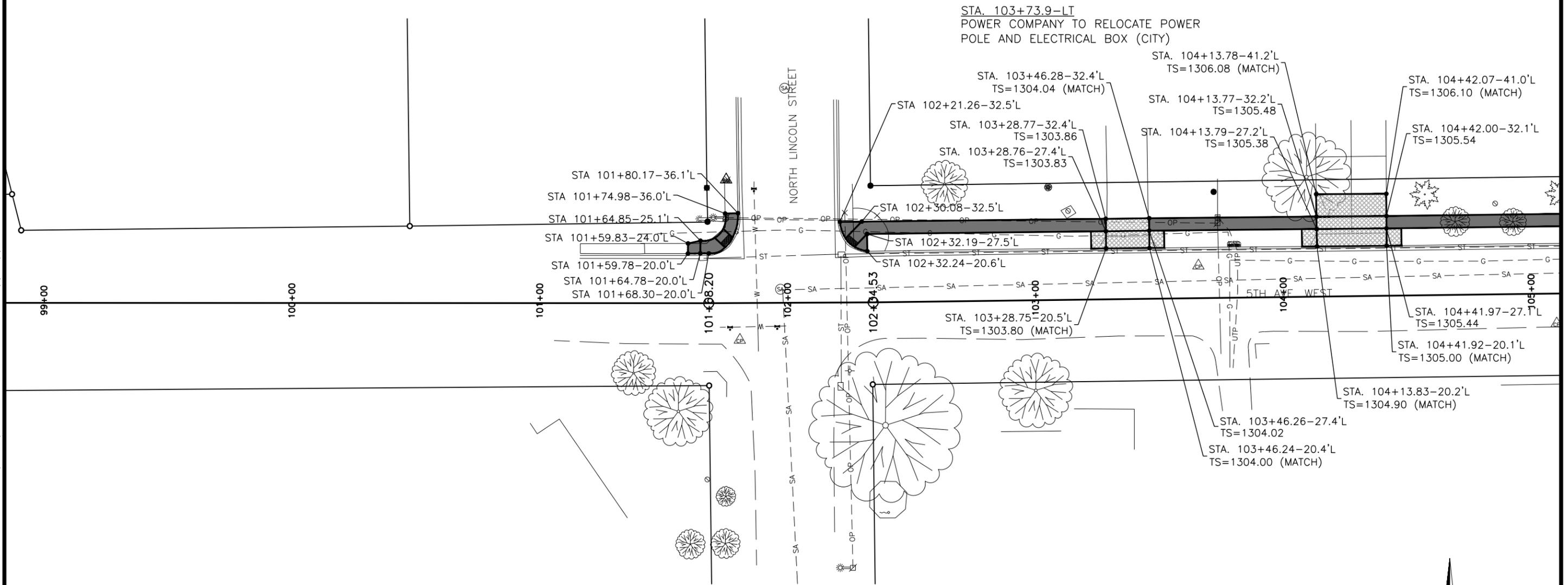


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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	14	40

-  DENOTES PROPOSED 4" CONCRETE SIDEWALK
-  DENOTES PROPOSED 6" PCC APPROACH PAVEMENT OR 6" CONCRETE SIDEWALK

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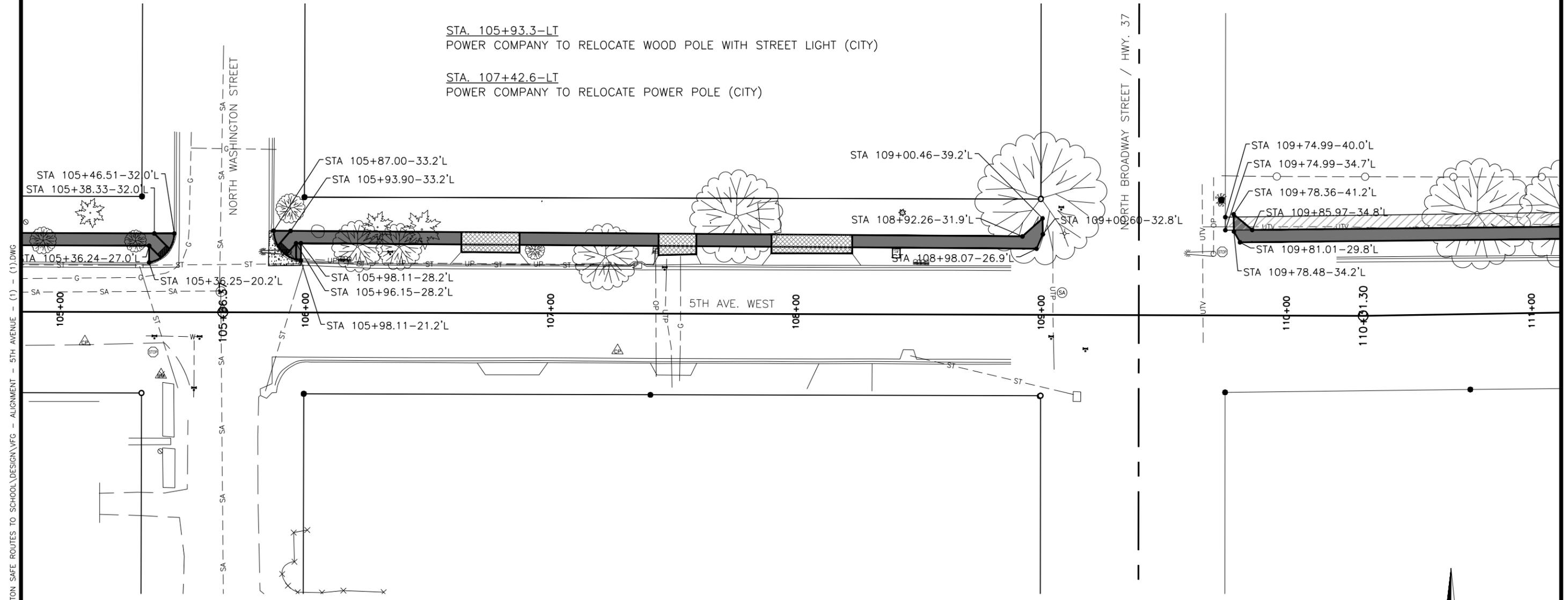
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	15	40

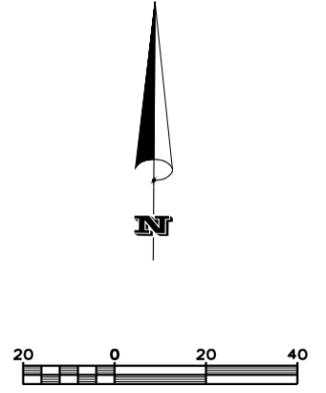
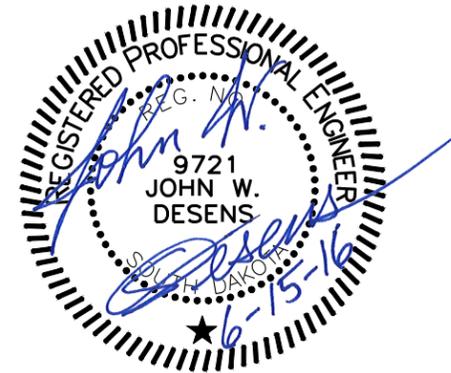
-  DENOTES TEMPORARY CONSTRUCTION EASEMENT
-  DENOTES PROPOSED 4" CONCRETE SIDEWALK
-  DENOTES PROPOSED 6" PCC APPROACH PAVEMENT OR 6" CONCRETE SIDEWALK

STA. 105+93.3-LT
POWER COMPANY TO RELOCATE WOOD POLE WITH STREET LIGHT (CITY)

STA. 107+42.6-LT
POWER COMPANY TO RELOCATE POWER POLE (CITY)



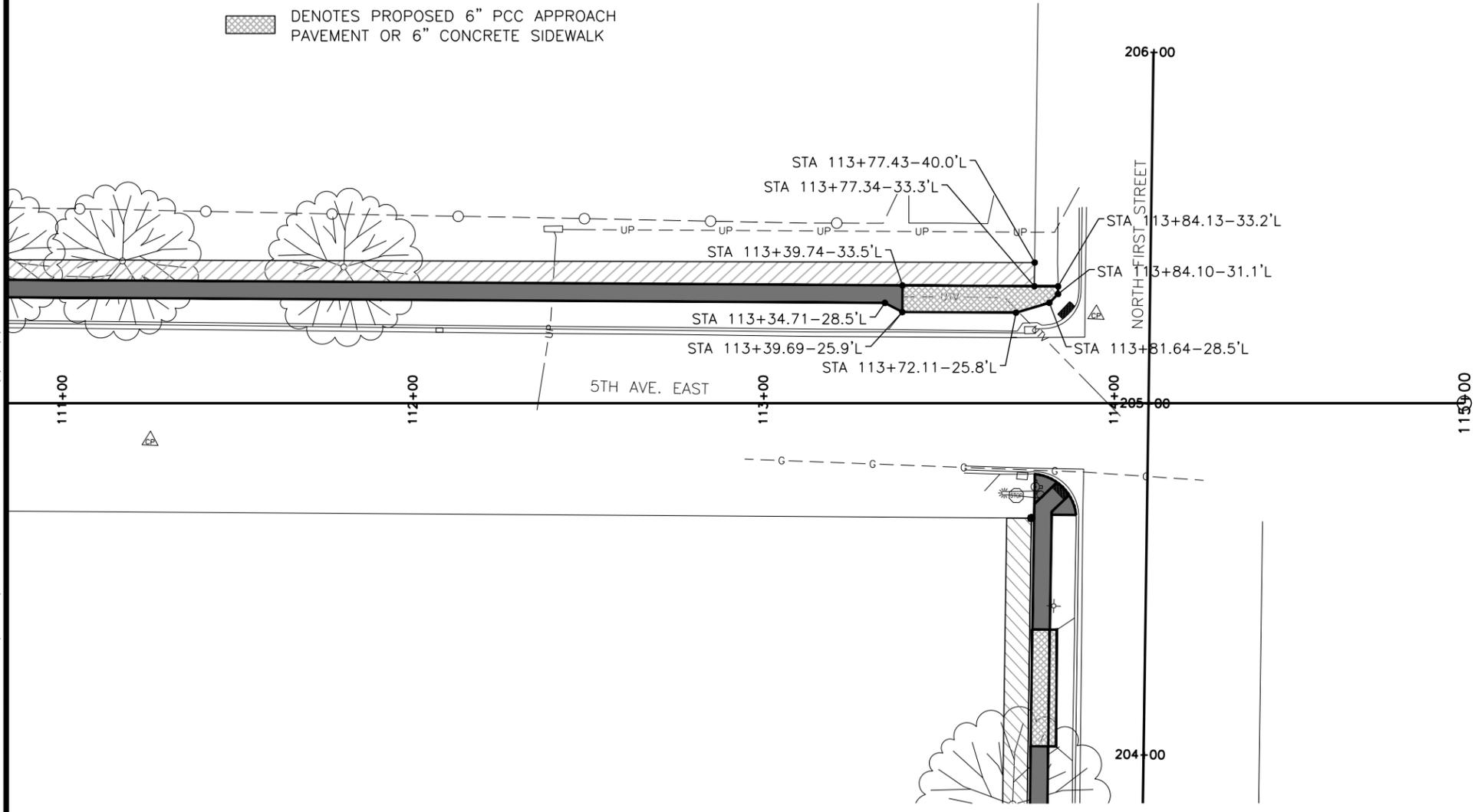
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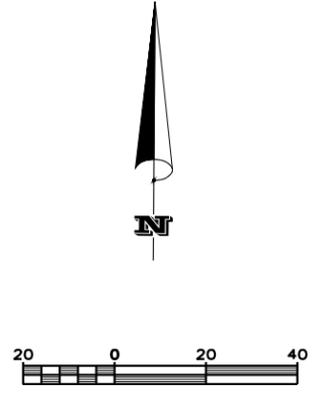
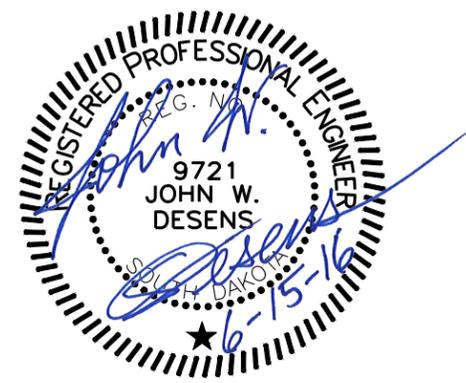
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	16	40

-  DENOTES TEMPORARY CONSTRUCTION EASEMENT
-  DENOTES PROPOSED 4" CONCRETE SIDEWALK
-  DENOTES PROPOSED 6" PCC APPROACH PAVEMENT OR 6" CONCRETE SIDEWALK



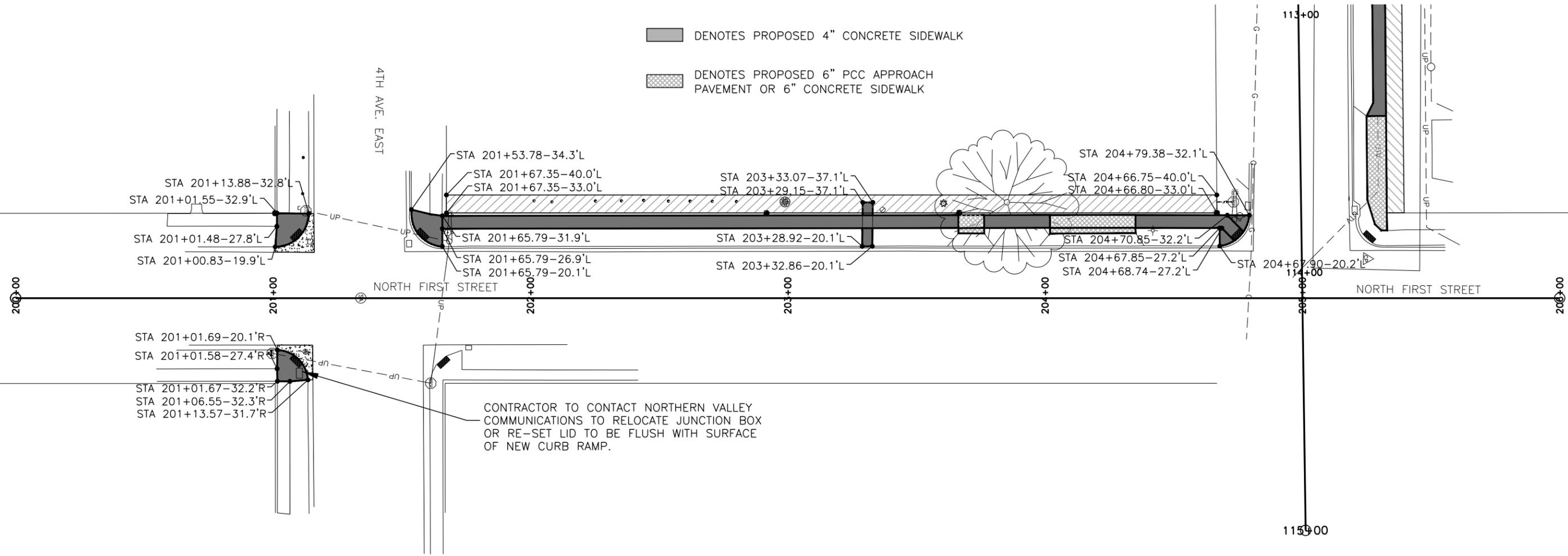
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FOR BIDDING PURPOSES ONLY

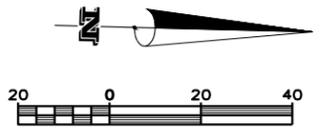
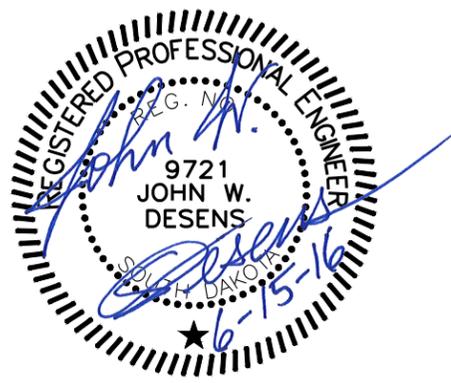
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	17	40

-  DENOTES TEMPORARY CONSTRUCTION EASEMENT
-  DENOTES PROPOSED 4" CONCRETE SIDEWALK
-  DENOTES PROPOSED 6" PCC APPROACH PAVEMENT OR 6" CONCRETE SIDEWALK



- STA 201+01.69-20.1'R
- STA 201+01.58-27.4'R
- STA 201+01.67-32.2'R
- STA 201+06.55-32.3'R
- STA 201+13.57-31.7'R

CONTRACTOR TO CONTACT NORTHERN VALLEY COMMUNICATIONS TO RELOCATE JUNCTION BOX OR RE-SET LID TO BE FLUSH WITH SURFACE OF NEW CURB RAMP.



Z:\2013 PROJECTS\13074 GROTON SAFE ROUTES TO SCHOOL\DESIGN\VFG - NORTH 1ST STREET - (2) - (2).DWG

TRAFFIC CONTROL PLAN

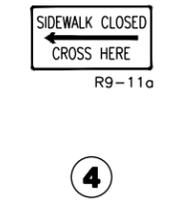
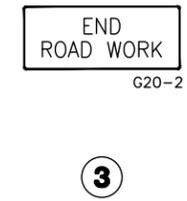
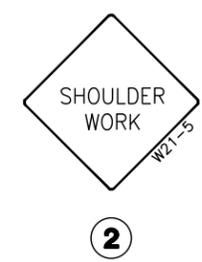
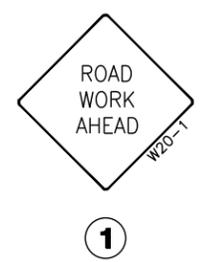
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT P SRTS(27)	SHEET 18	TOTAL SHEETS 40
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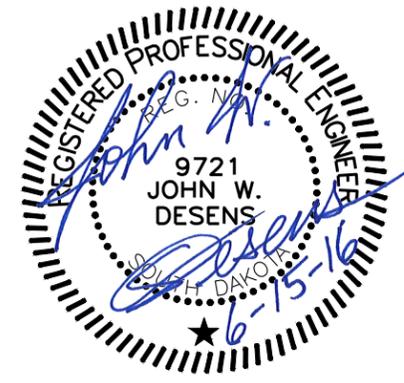
Revised June 15, 2016 by JWD

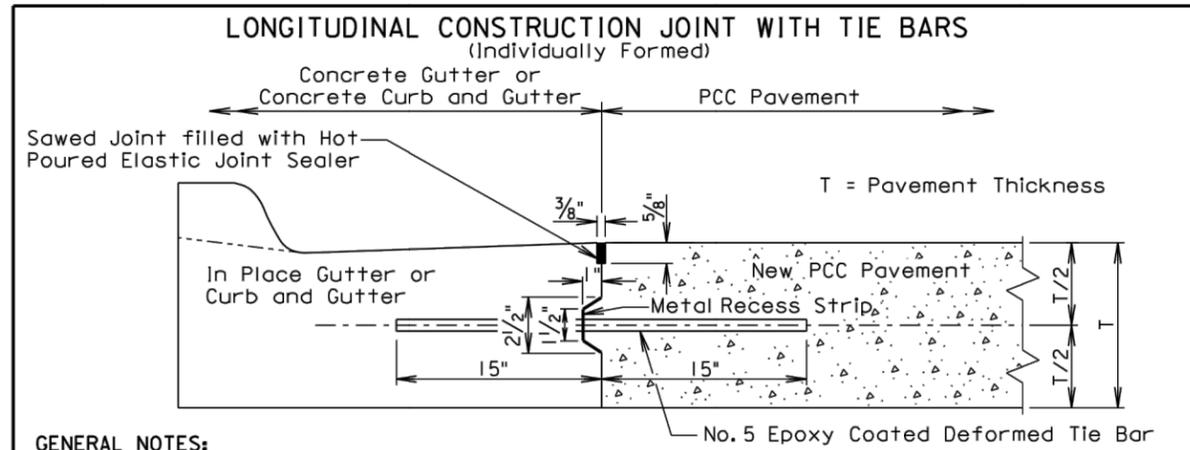


TYPICAL SIGNAGE LAYOUT



NOTE: TYPE I BARRICADE AT ALL SIGNS 4 & 5 PER SDDOT PLAT 634.34





GENERAL NOTES:

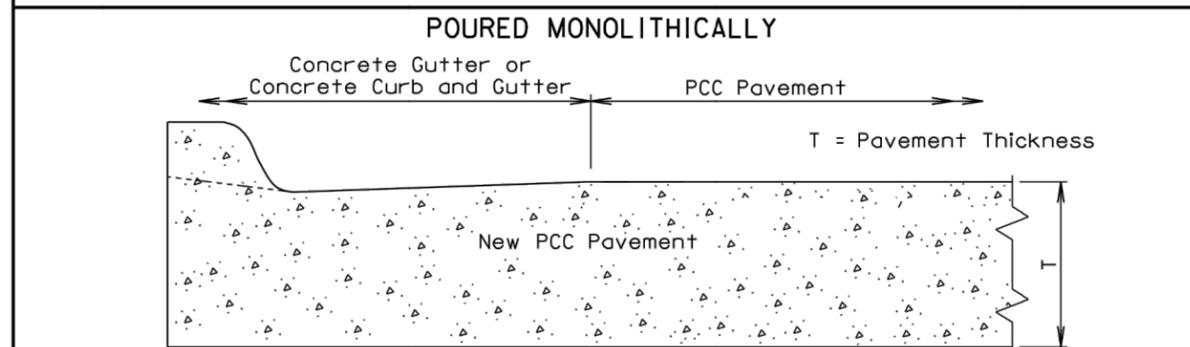
No. 5 epoxy coated deformed tie bars shall be spaced 48 inches center to center. The keyway shown above is a female keyway.

The tie bars shall be placed a minimum of 15 inches from existing transverse contraction joints.

The keyway is optional and is not required. When concrete pavement is formed and a keyway is provided, a metal recess strip shall be used. When concrete pavement is slip formed, a metal recess strip is not required.

The transverse contraction joints in the concrete gutter or concrete curb and gutter shall be placed at each mainline PCC pavement transverse contraction joint. The transverse contraction joints in the concrete gutter or the concrete curb and gutter shall be 1 1/2 inches deep if formed in fresh concrete using a suitable grooving tool. If a saw is used to cut the transverse contraction joints, then the depth of the joint shall be at least 1/4 the thickness of the concrete gutter or concrete curb and gutter.

The term "In Place Gutter or Curb and Gutter" in the above drawing indicates that the in place concrete gutter and concrete curb and gutter was placed on the current project.



GENERAL NOTES:

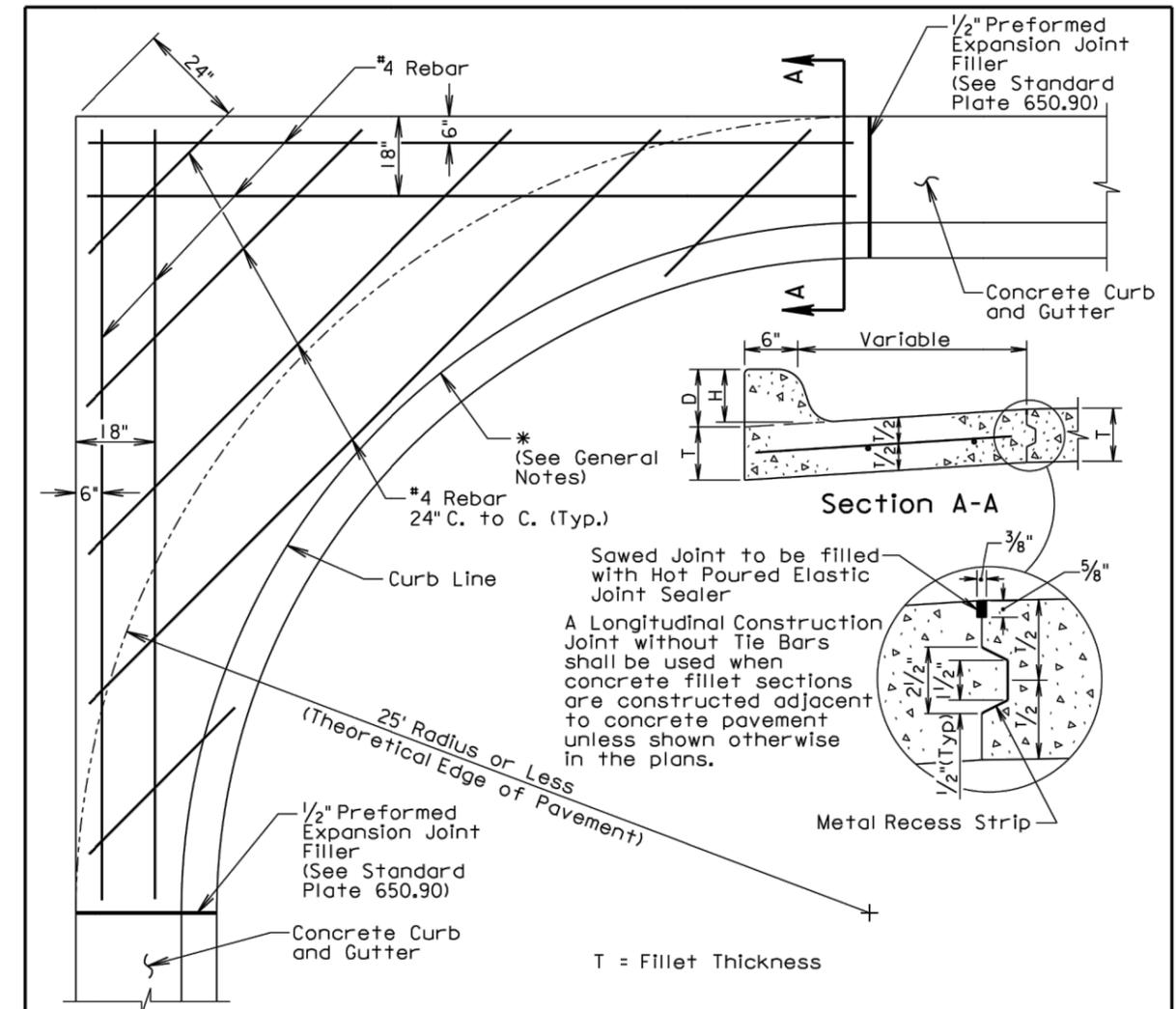
The mainline curb and gutter may be placed monolithically with the PCC pavement if the mainline lane width is less than or equal to 12 feet. If this method of construction is used, the tie bars and the sawed joint between the curb and gutter and the PCC pavement shall be eliminated.

The gutter or curb and gutter shall be sawed transversely at each mainline transverse contraction joint. The transverse contraction joints in the gutter or curb and gutter shall be sawed and sealed same as the transverse contraction joints in the PCC pavement.

The slope of the gutter shall be the slope designated for the type of gutter or curb and gutter to be constructed. The bottom slope of the gutter or curb and gutter shall be constructed at the same slope as the mainline concrete pavement.

June 26, 2013

Published Date: 2nd Qtr. 2016	S D D O T	PCC PAVEMENT LONGITUDINAL CONSTRUCTION JOINTS WITH CONCRETE GUTTER OR CONCRETE CURB AND GUTTER	PLATE NUMBER 380.11
			Sheet 1 of 1



GENERAL NOTES:

* If a curb ramp is constructed adjacent to a PCC fillet section, the curb will need to be modified. Refer to the corresponding curb ramp standard plate or other special details in the plans for modification of the PCC fillet section.

Dimensions D, H, and T shall conform to those shown on the appropriate curb and gutter standard plate.

All rebar shall be in conformance with Sections 480 and 1010 of the Specifications. All rebar shall have a minimum of 3" clear cover.

Class M6 Concrete shall be used in construction of the fillets.

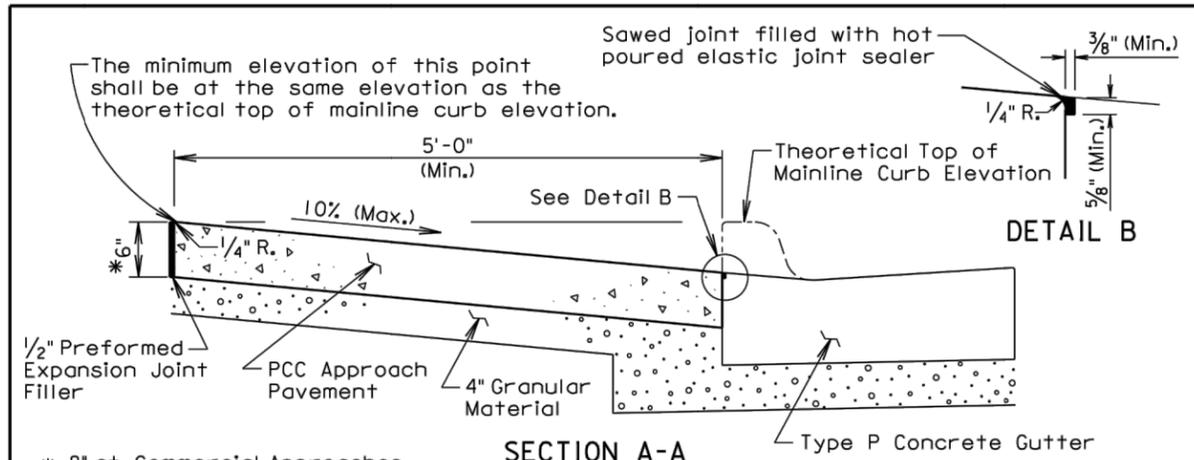
The concrete curb shall be monolithic with the concrete fillet. No separate payment for this curb will be made as the curb is considered a part of the fillet.

Joints shall be constructed at 10' intervals except when fillets are constructed adjacent to PCC Pavement. If there is adjacent PCC Pavement the joints shall be extended from edge of pavement through the fillet section as directed by the Engineer.

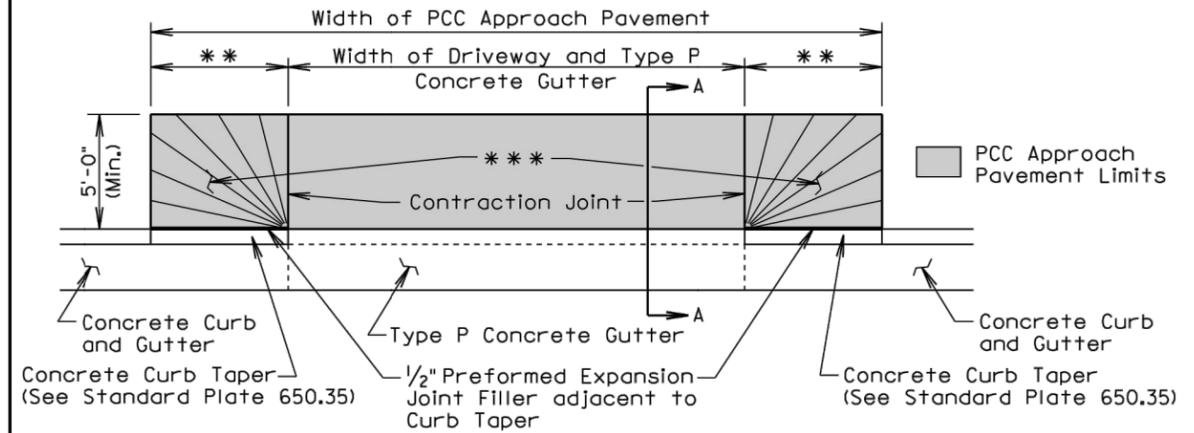
The cost for all materials, labor, and incidentals necessary to construct the PCC fillet section with curb and gutter shall be incidental to the contract unit price per square yard for the corresponding PCC fillet section bid item.

June 26, 2015

Published Date: 2nd Qtr. 2016	S D D O T	PCC FILLET SECTION WITH TYPE B CURB AND GUTTER	PLATE NUMBER 380.16
			Sheet 1 of 1



- * 8" at Commercial Approaches
- ** Width for 6" high curb is 6' (See Standard Plate 650.35)
- *** Within these areas, the surface of the type A PCC approach pavement shall be sloped transitionally as approved by the Engineer.



GENERAL NOTES:

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

Contraction joints in the type A PCC approach pavement shall be 1/2 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 shall be at least 1/4 the thickness of the approach pavement. Additional contraction joints not shown in the Plan View shall be spaced as follows:

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

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

All costs for excavation required for placing the type A PCC approach pavement and granular material shall be incidental to the contract unit price per cubic yard for "Unclassified Excavation". All costs for furnishing and placing the granular material shall be incidental to the contract unit price per ton for the corresponding granular material bid item.

June 26, 2015

Published Date: 2nd Qtr. 2016	S D D O T	TYPE A PCC APPROACH PAVEMENT	PLATE NUMBER 380.40
			Sheet 1 of 1

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 shall 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.

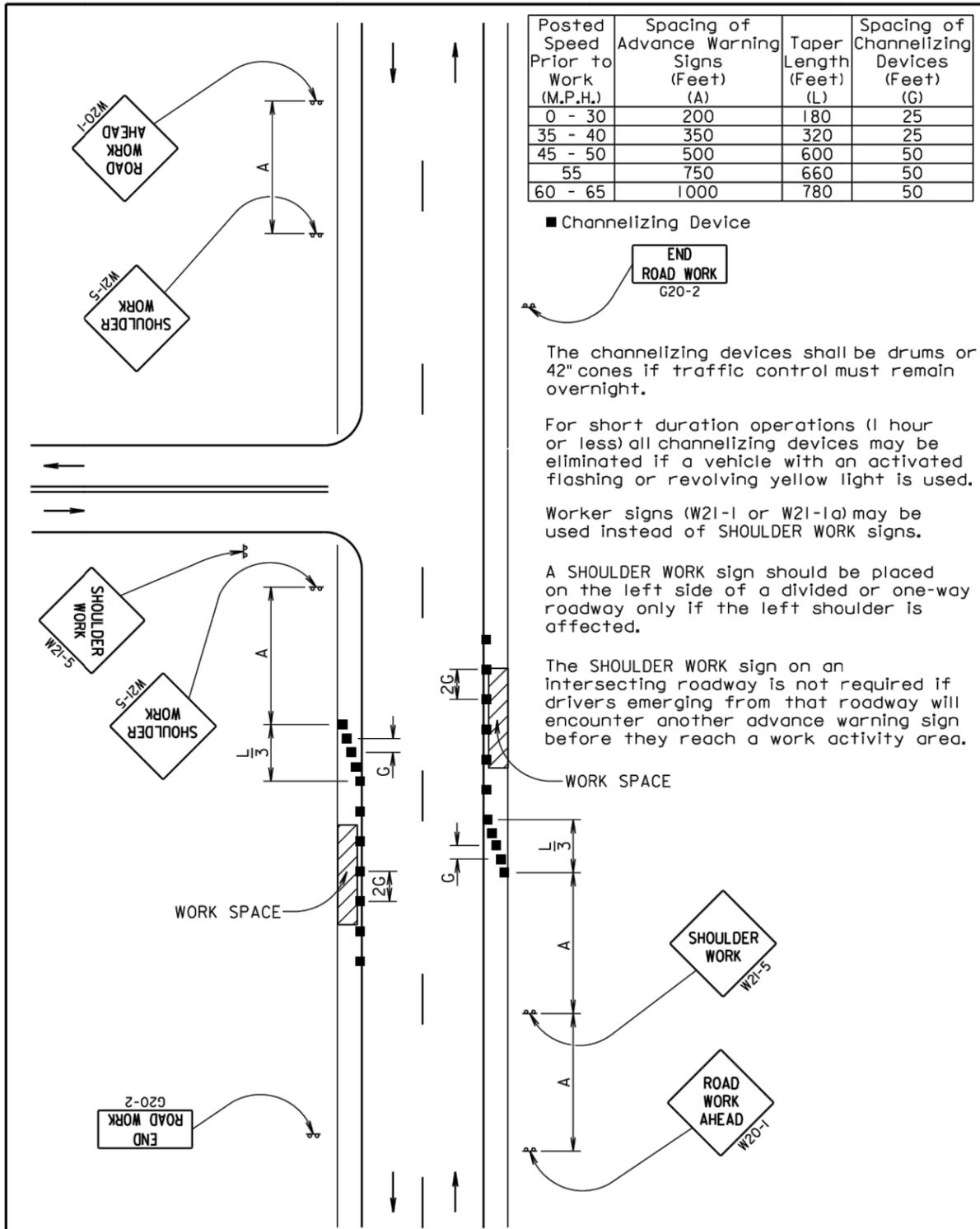
* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

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

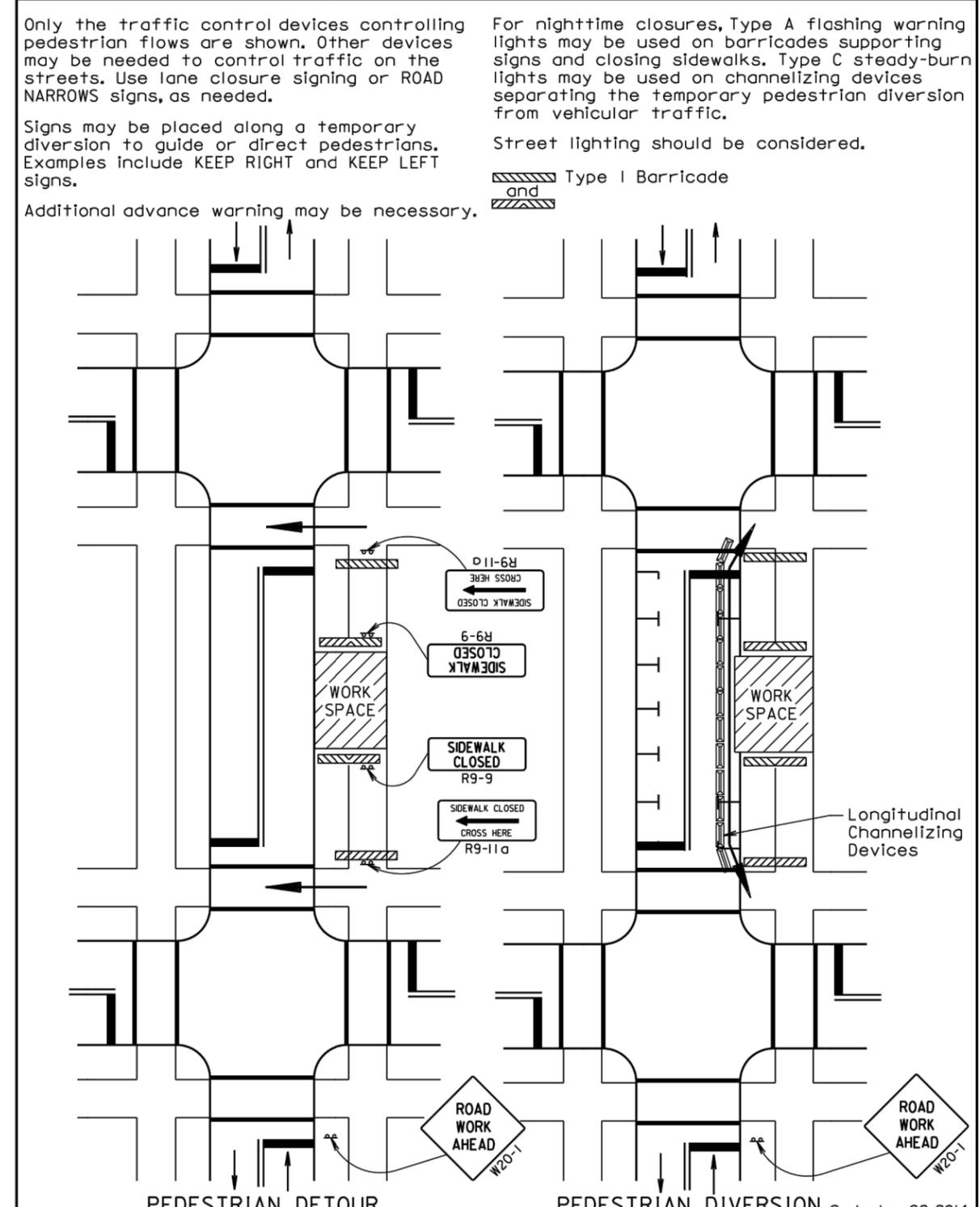
April 15, 2015

Published Date: 2nd Qtr. 2016	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES WORK BEYOND THE SHOULDER	PLATE NUMBER 634.01
			Sheet 1 of 1



September 22, 2014

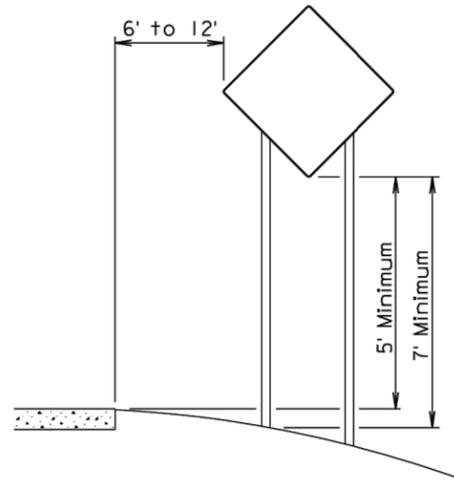
Published Date: 2nd Qtr. 2016	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES WORK ON SHOULDERS	PLATE NUMBER 634.03
			Sheet 1 of 1



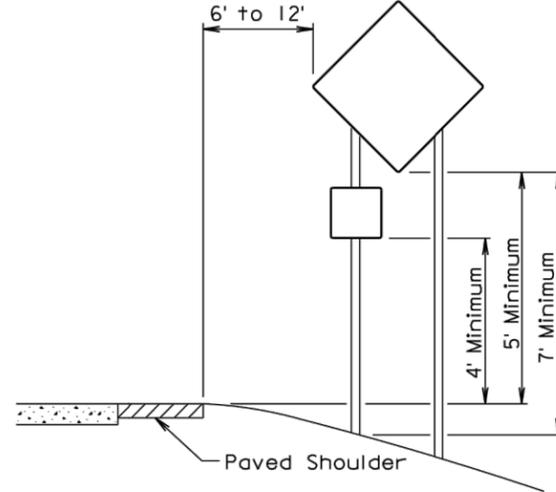
September 22, 2014

Published Date: 2nd Qtr. 2016	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES PEDESTRIAN DETOUR AND PEDESTRIAN DIVERSION	PLATE NUMBER 634.34
			Sheet 1 of 1

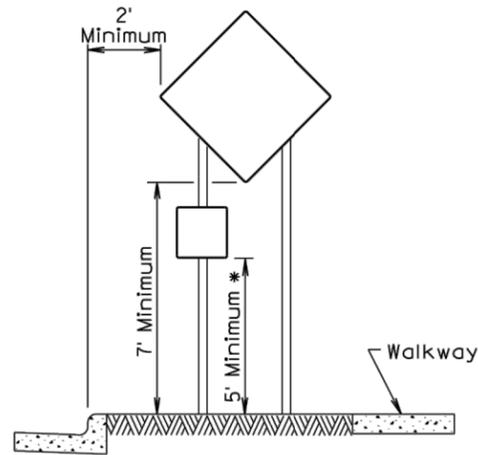
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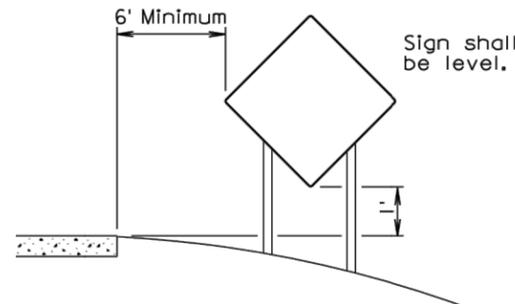
RURAL DISTRICT



RURAL DISTRICT WITH SUPPLEMENTAL PLATE



URBAN DISTRICT



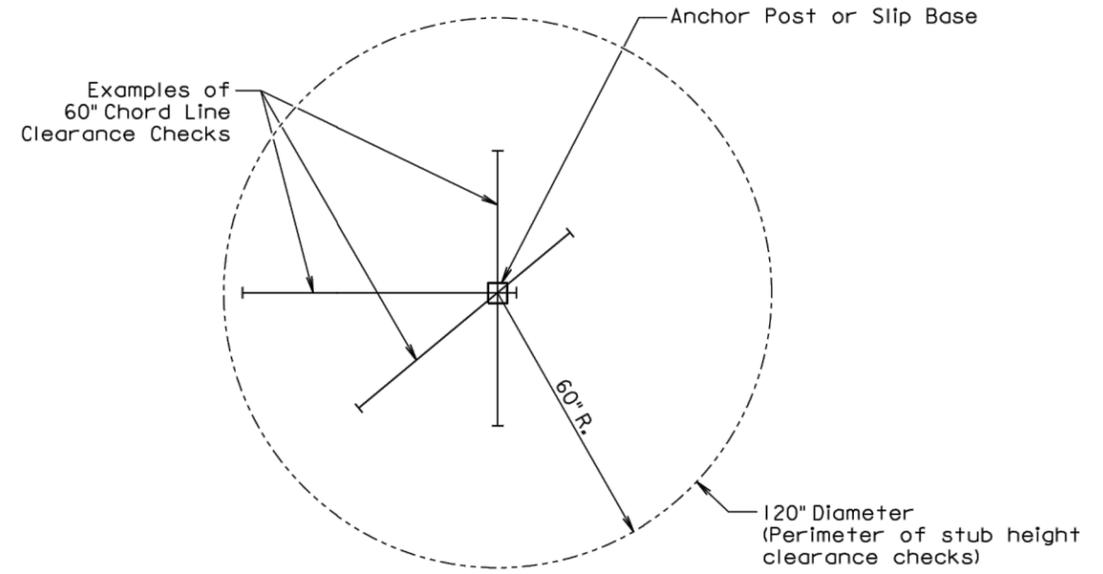
RURAL DISTRICT 3 DAY MAXIMUM

(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.

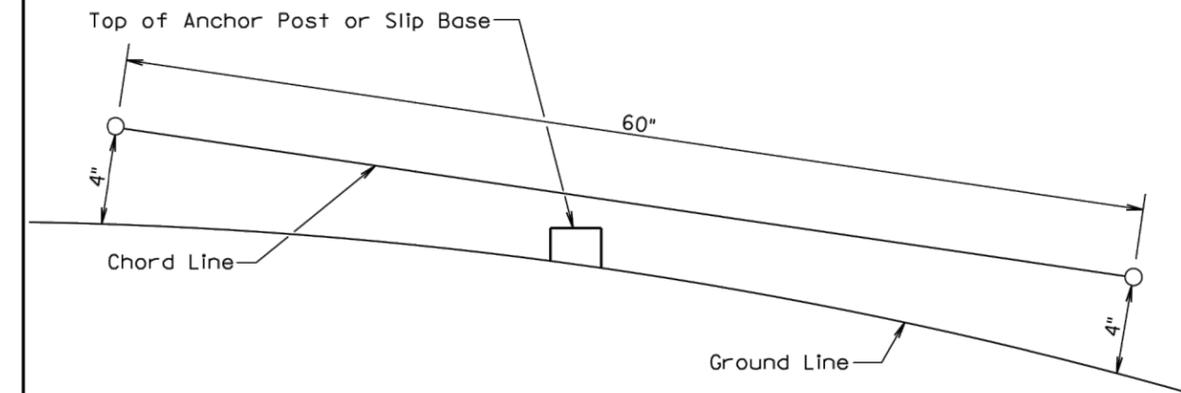
September 22, 2014

Published Date: 2nd Qtr. 2016	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1



PLAN VIEW

(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

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

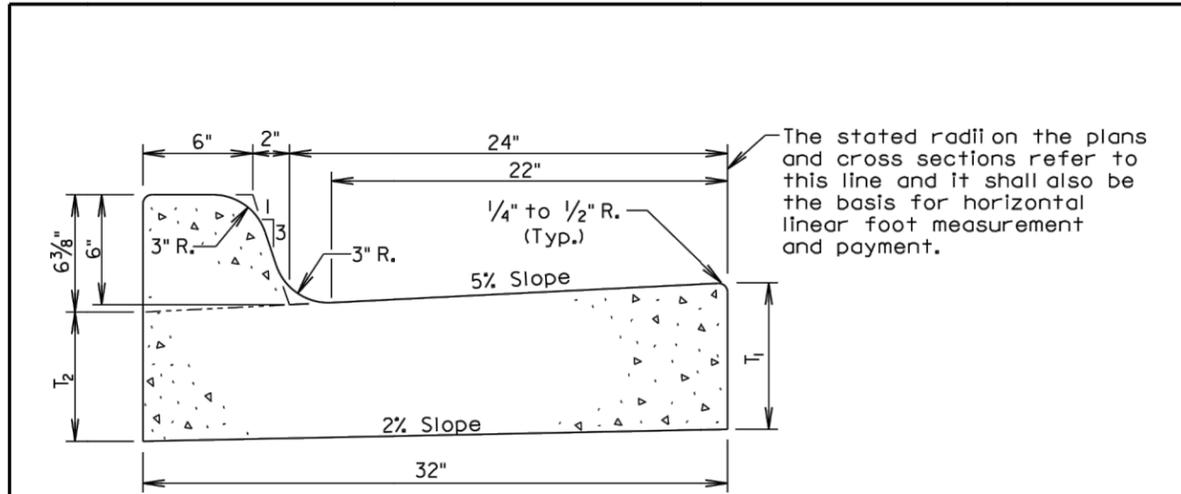
At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height shall be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

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

July 1, 2005

Published Date: 2nd Qtr. 2016	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1

Revised June 15, 2016 by JWD



Type	T ₁ (Inches)	T ₂ (Inches)	Cu. Yd. Per Lin. Ft.	Lin. Ft. Per Cu. Yd.
B66	6	5/16	0.057	17.7
B67	7	6/16	0.065	15.4
B68	8	7/16	0.073	13.7
B68.5	8.5	7 9/16	0.077	13.0
B69	9	8/16	0.081	12.3
B69.5	9.5	8 9/16	0.085	11.7
B610	10	9/16	0.090	11.2
B610.5	10.5	9 9/16	0.094	10.7
B611	11	10/16	0.098	10.2
B611.5	11.5	10 9/16	0.102	9.8
B612	12	11 1/16	0.106	9.4

GENERAL NOTES:

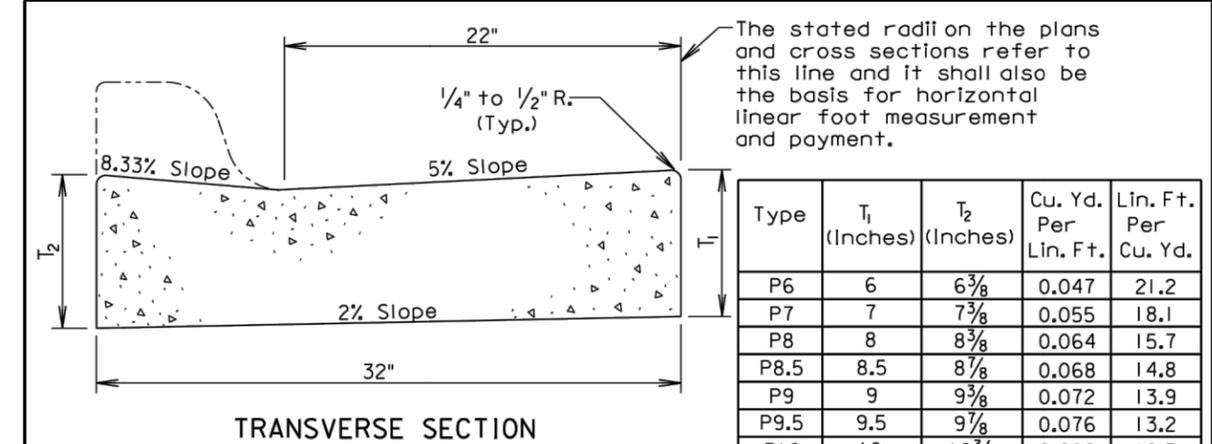
When concrete curb and gutter longitudinally adjoins new concrete pavement, the method of attachment shall be by one of the methods shown on Standard Plate 380.11.

See Standard Plate 650.90 for expansion and contraction joints in the curb and gutter.

September 6, 2008

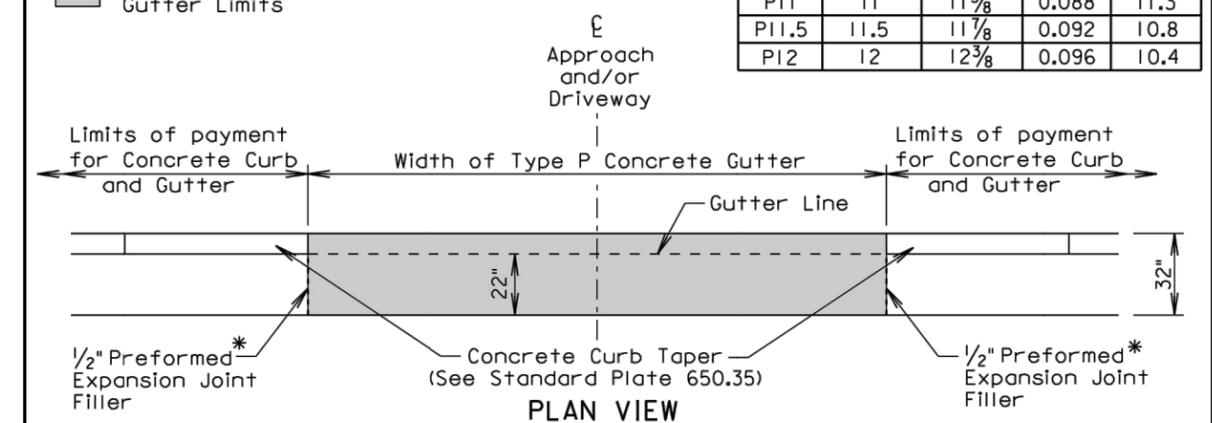
S D D O T	TYPE B CONCRETE CURB AND GUTTER	PLATE NUMBER 650.01
		Sheet 1 of 1

Published Date: 2nd Qtr. 2016



Type P Concrete
Gutter Limits

Type	T ₁ (Inches)	T ₂ (Inches)	Cu. Yd. Per Lin. Ft.	Lin. Ft. Per Cu. Yd.
P6	6	6 3/8	0.047	21.2
P7	7	7 3/8	0.055	18.1
P8	8	8 3/8	0.064	15.7
P8.5	8.5	8 7/8	0.068	14.8
P9	9	9 3/8	0.072	13.9
P9.5	9.5	9 7/8	0.076	13.2
P10	10	10 3/8	0.080	12.5
P10.5	10.5	10 7/8	0.084	11.9
P11	11	11 3/8	0.088	11.3
P11.5	11.5	11 7/8	0.092	10.8
P12	12	12 3/8	0.096	10.4



* Joint will not be needed if concrete curb and gutter and type P concrete gutter is placed at the same time. If the 1/2" Preformed Expansion Joint Filler is provided, then the joint shall be sealed in accordance with Standard Plate 650.90.

GENERAL NOTES:

The concrete for the Type P Concrete Gutter shall comply with the requirements of the Specifications for Class M6 Concrete.

When concrete gutter longitudinally adjoins new concrete pavement, the method of attachment shall be by one of the methods shown on Standard Plate 380.11.

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

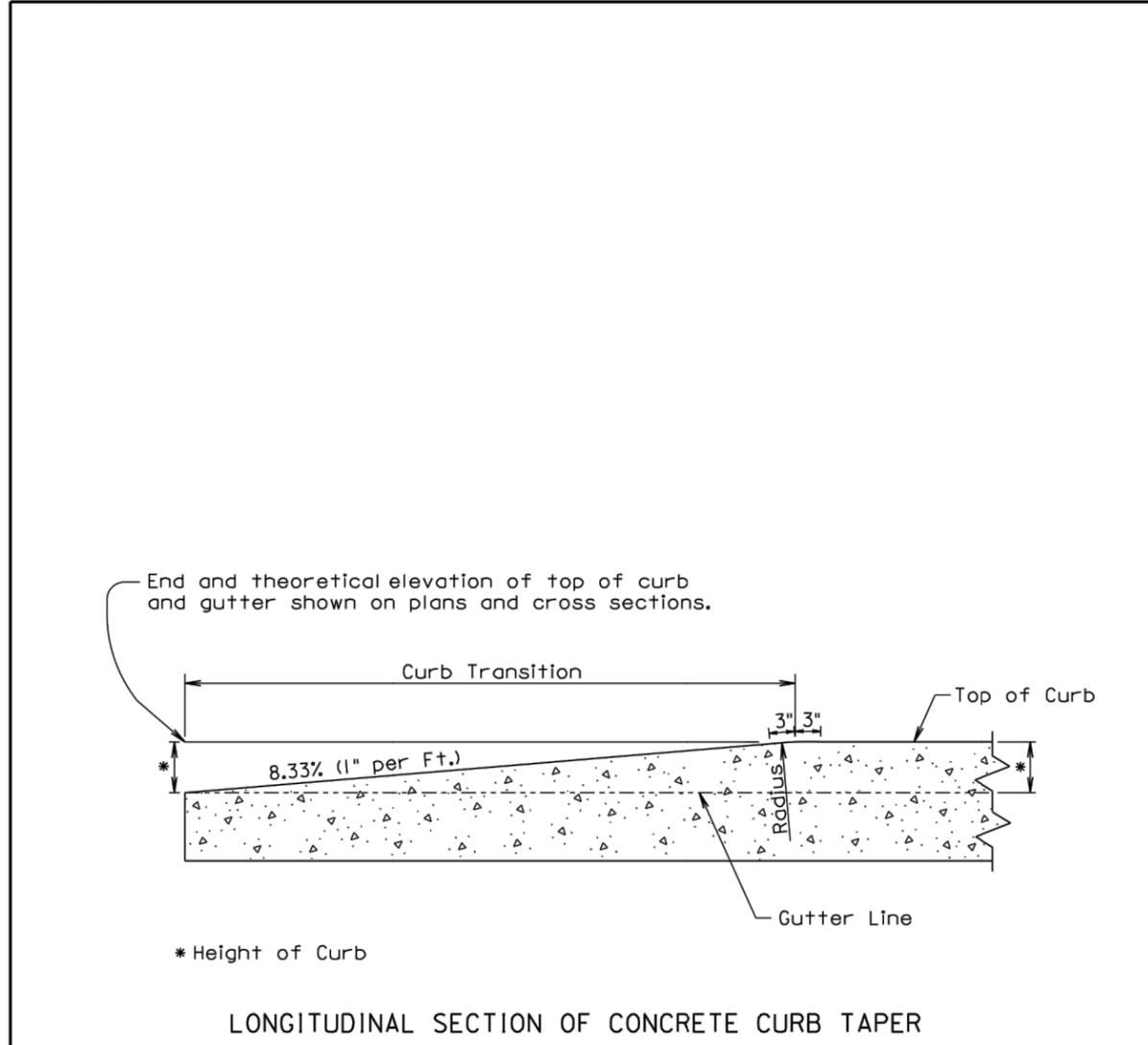
When concrete gutter is placed monolithically with mainline PCC pavement, the transverse contraction joints in the concrete gutter shall be sawed and sealed the same as the transverse contraction joints in the mainline PCC pavement.

When concrete gutter is not placed monolithically with the mainline PCC pavement and when the adjacent mainline surfacing is not PCC concrete, the transverse contraction joints in the concrete gutter shall be 1/2 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 shall be at least 1/4 the thickness of the concrete.

June 26, 2015

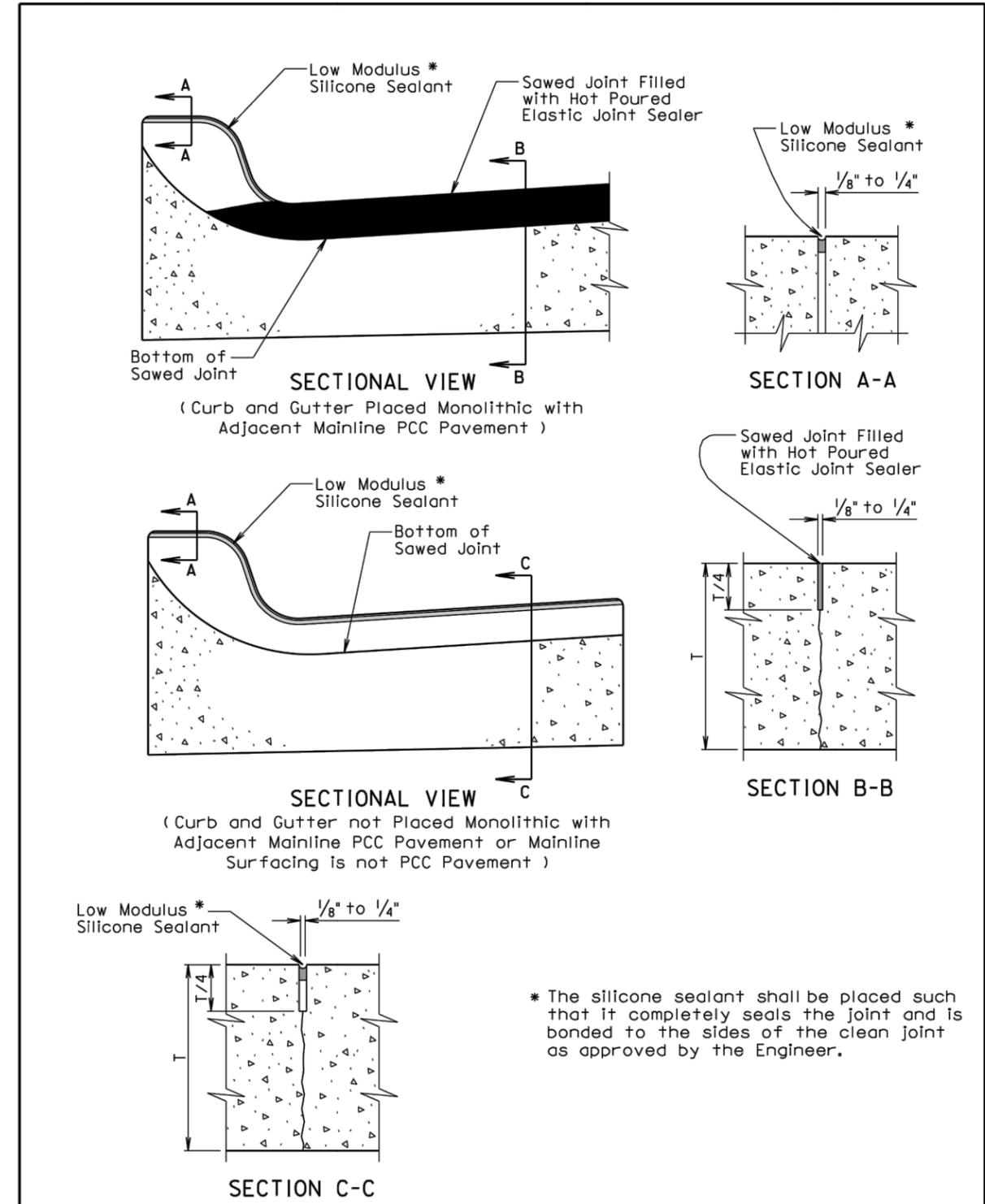
S D D O T	TYPE P CONCRETE GUTTER	PLATE NUMBER 650.30
		Sheet 1 of 1

Published Date: 2nd Qtr. 2016



September 14, 2005

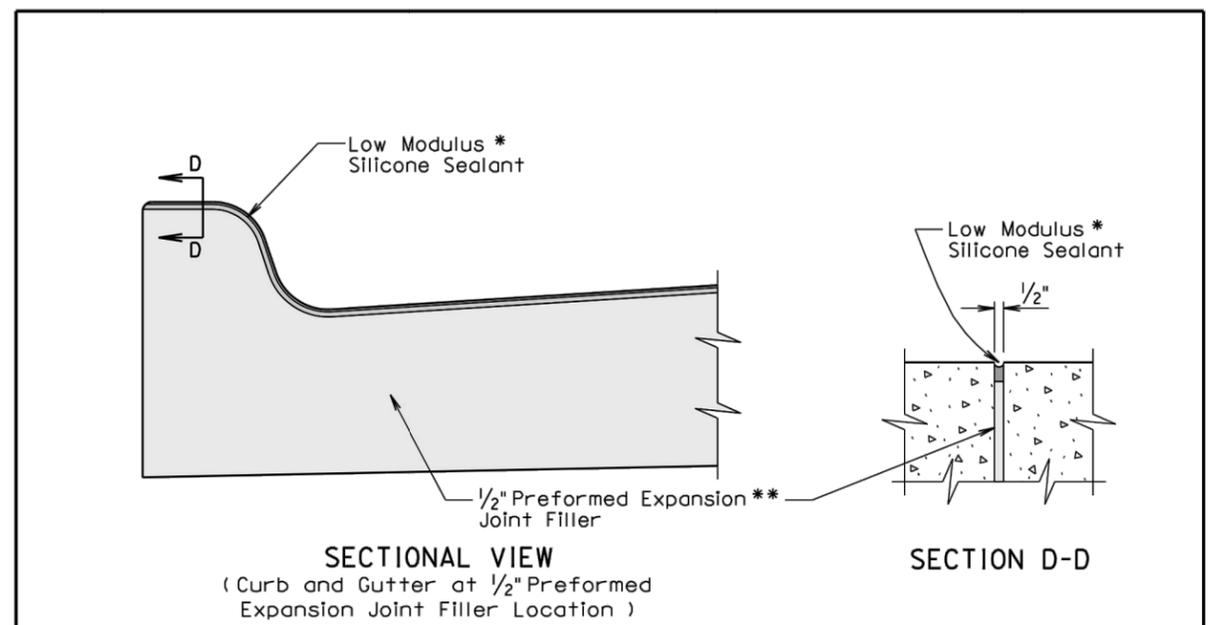
Published Date: 2nd Qtr. 2016	S D D O T	CONCRETE CURB TAPER	PLATE NUMBER 650.35
			Sheet 1 of 1



September 6, 2013

Published Date: 2nd Qtr. 2016	S D D O T	JOINTS IN CONCRETE CURB AND GUTTER	PLATE NUMBER 650.90
			Sheet 1 of 2

Revised June 15, 2016 by JWD



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

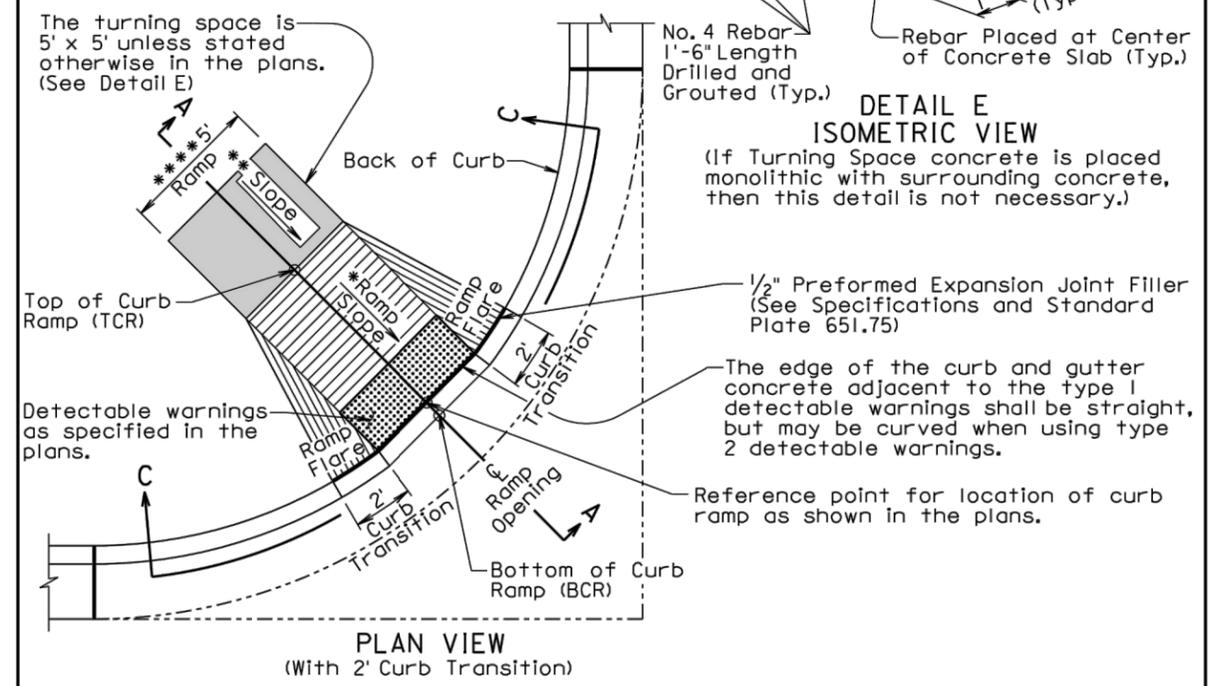
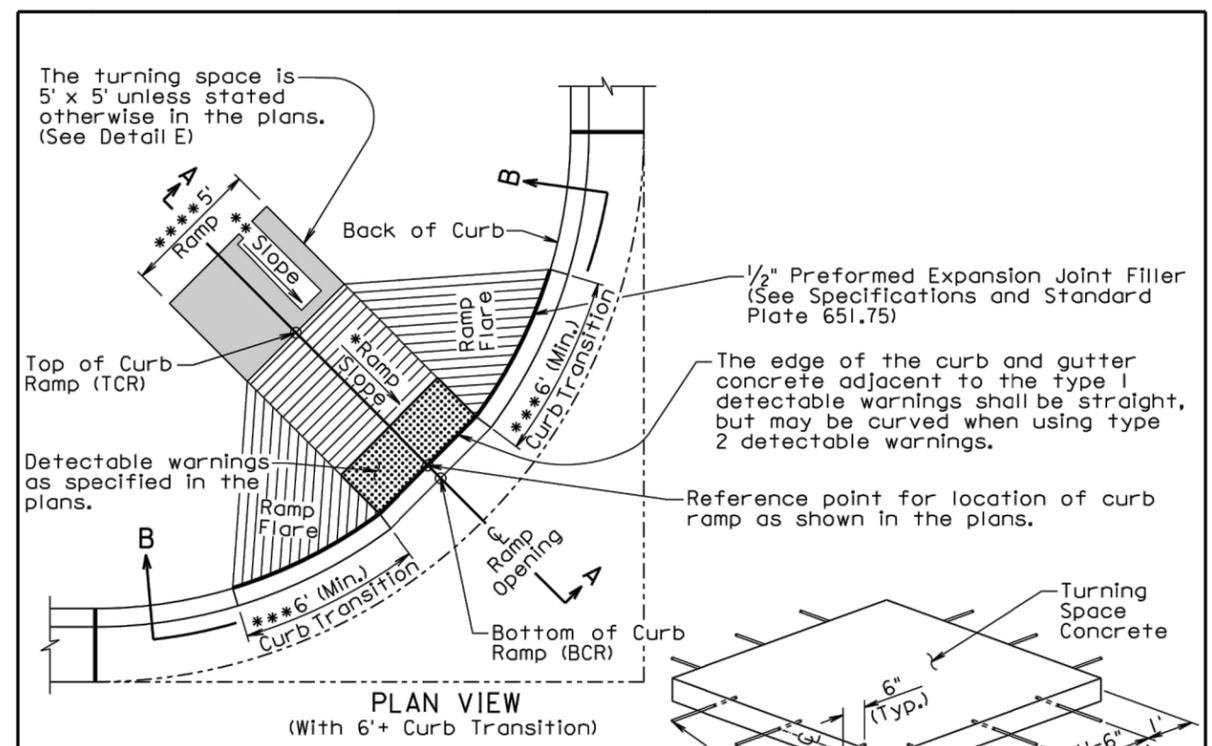
GENERAL NOTES:

- For illustrative reason, only the type B curb and gutter is shown.
- ** A 1/2" preformed expansion joint filler shall be placed transversely in the curb and gutter at the following locations:
1. At each junction between the radius return of curb and gutter and curb and gutter which is parallel to the project centerline.
 2. At each junction between new curb and gutter and existing curb and gutter.
- Transverse contraction joints shall be constructed at 10' 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 shall 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 shall be 1/2 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 shall be at least 1/4 the thickness of the concrete and the joint shall be sealed in accordance with the details shown above.

September 6, 2013

SDOT	JOINTS IN CONCRETE CURB AND GUTTER	PLATE NUMBER 650.90	
		Sheet 2 of 2	

Published Date: 2nd Qtr. 2016



September 6, 2015

SDOT	TYPE 1 CURB RAMP (PERPENDICULAR CURB RAMP)	PLATE NUMBER 651.01	
		Sheet 1 of 3	

Published Date: 2nd Qtr. 2016

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STATE OF SOUTH DAKOTA	PROJECT P SRTS(27)	SHEET 26	TOTAL SHEETS 40
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Revised June 15, 2016 by JWD

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 shall not exceed 15' in length unless stated otherwise in the plans.

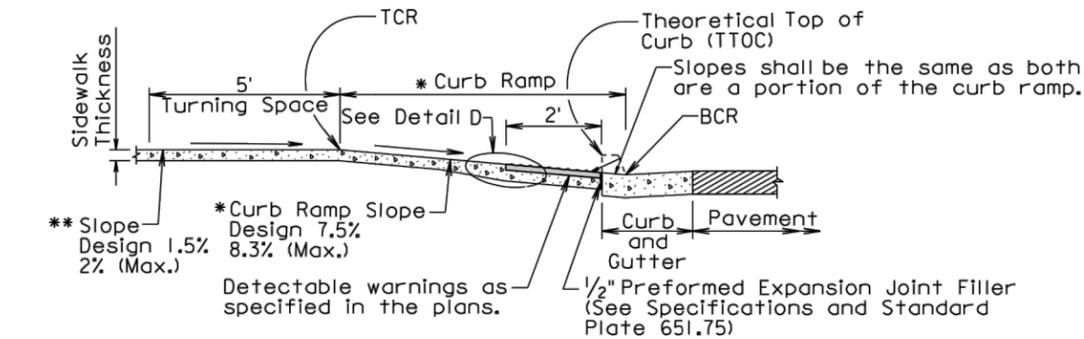
* The curb ramp length may be computed based on the intersection of a continuous 1.5% theoretical slope from theoretical top of curb (TTOC) with the curb ramp using a continuous 7.5% curb ramp slope. The elevation of point TCR shall always be higher than the elevation of point TTOC unless specified otherwise in the plans. The curb ramp length dimension as shown in the plans shall be adjusted as necessary to meet all slope and length requirements based on field geometrics.

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

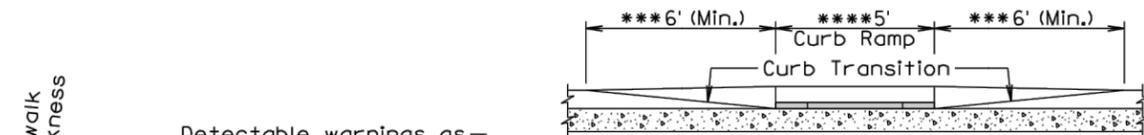
** The slope in the turning space shall not be steeper than 2% in any direction of pedestrian travel. Plans are designed using a 1.5% slope unless stated otherwise in the plans.

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

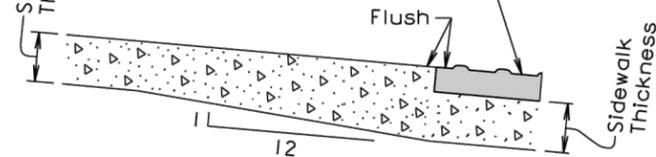
**** The ramp width is 5' unless stated otherwise in the plans.



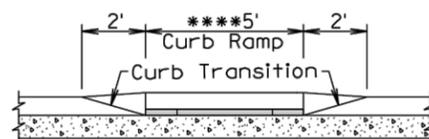
SECTION A-A



SECTIONAL VIEW B-B



DETAIL D



SECTIONAL VIEW C-C

September 6, 2015

Published Date: 2nd Qtr. 2016	S D D O T	TYPE 1 CURB RAMP (PERPENDICULAR CURB RAMP)	PLATE NUMBER 651.01
			Sheet 2 of 3

GENERAL NOTES:

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

For illustrative purpose only, PCC fillet sections 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.

For illustrative purpose only, the curb ramp location is shown at the center of a PCC fillet section. The curb ramp shall be placed at the location stated in the plans.

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

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

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

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

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

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

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

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

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

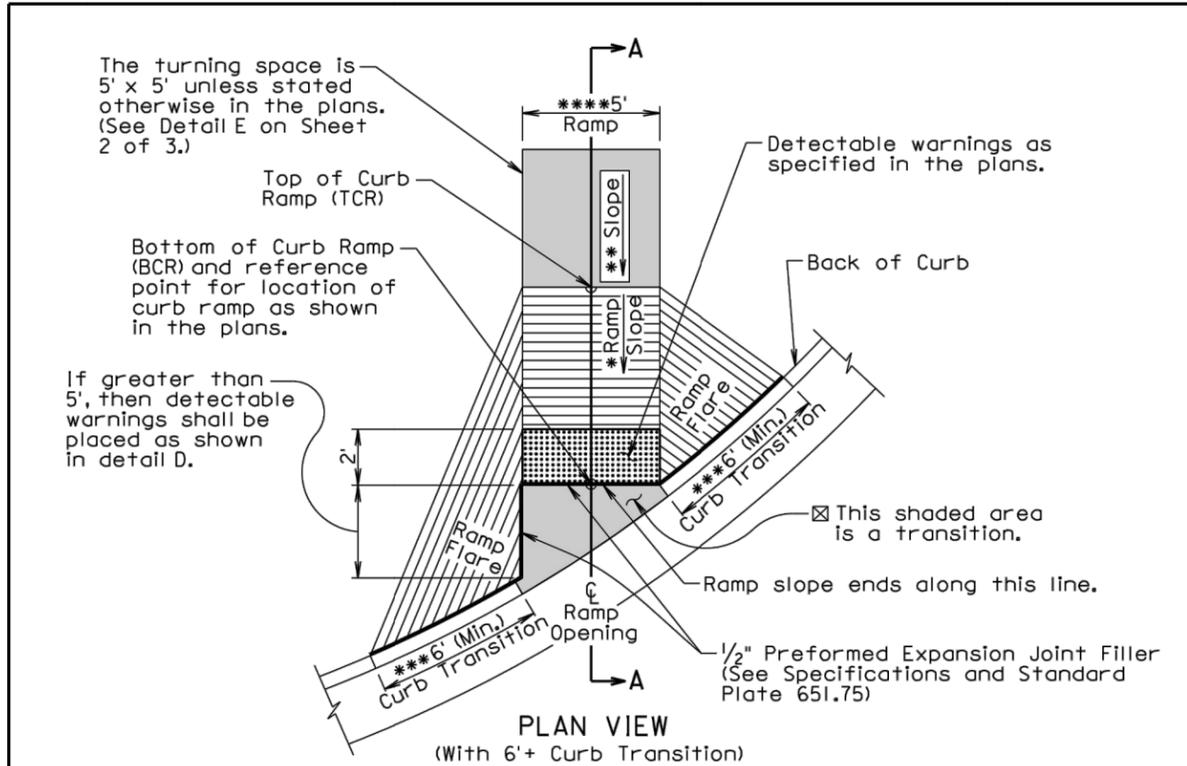
The type 1 detectable warnings shall be measured to the nearest square foot. All costs for furnishing and installing the type 1 detectable warnings including labor, equipment, materials, and incidentals shall be paid for at the contract unit price per square foot for "Type 1 Detectable Warnings".

The type 2 detectable warnings shall 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 shall be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

September 6, 2015

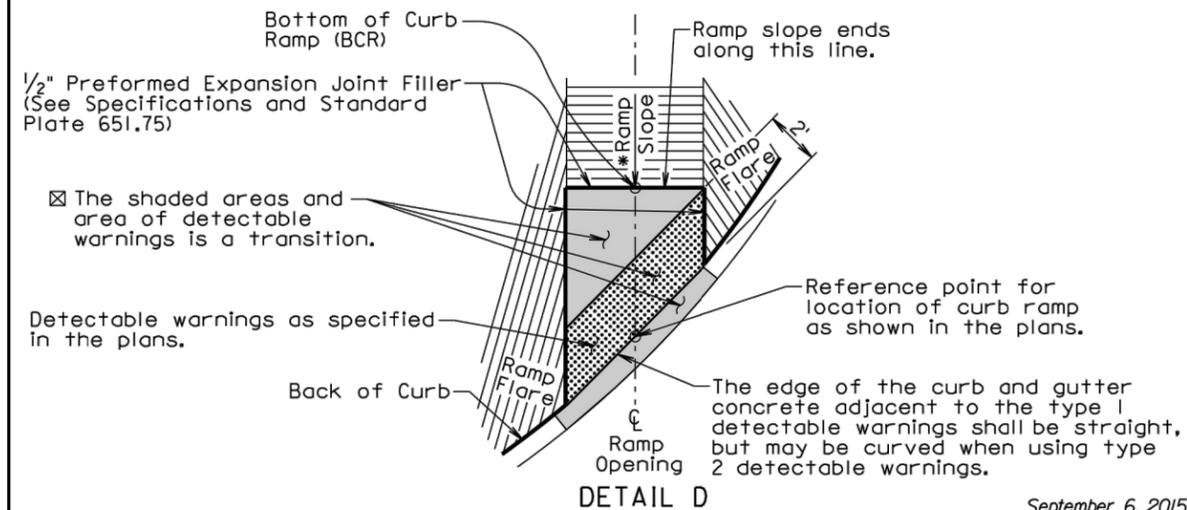
Published Date: 2nd Qtr. 2016	S D D O T	TYPE 1 CURB RAMP (PERPENDICULAR CURB RAMP)	PLATE NUMBER 651.01
			Sheet 3 of 3

Revised June 15, 2016 by JWD



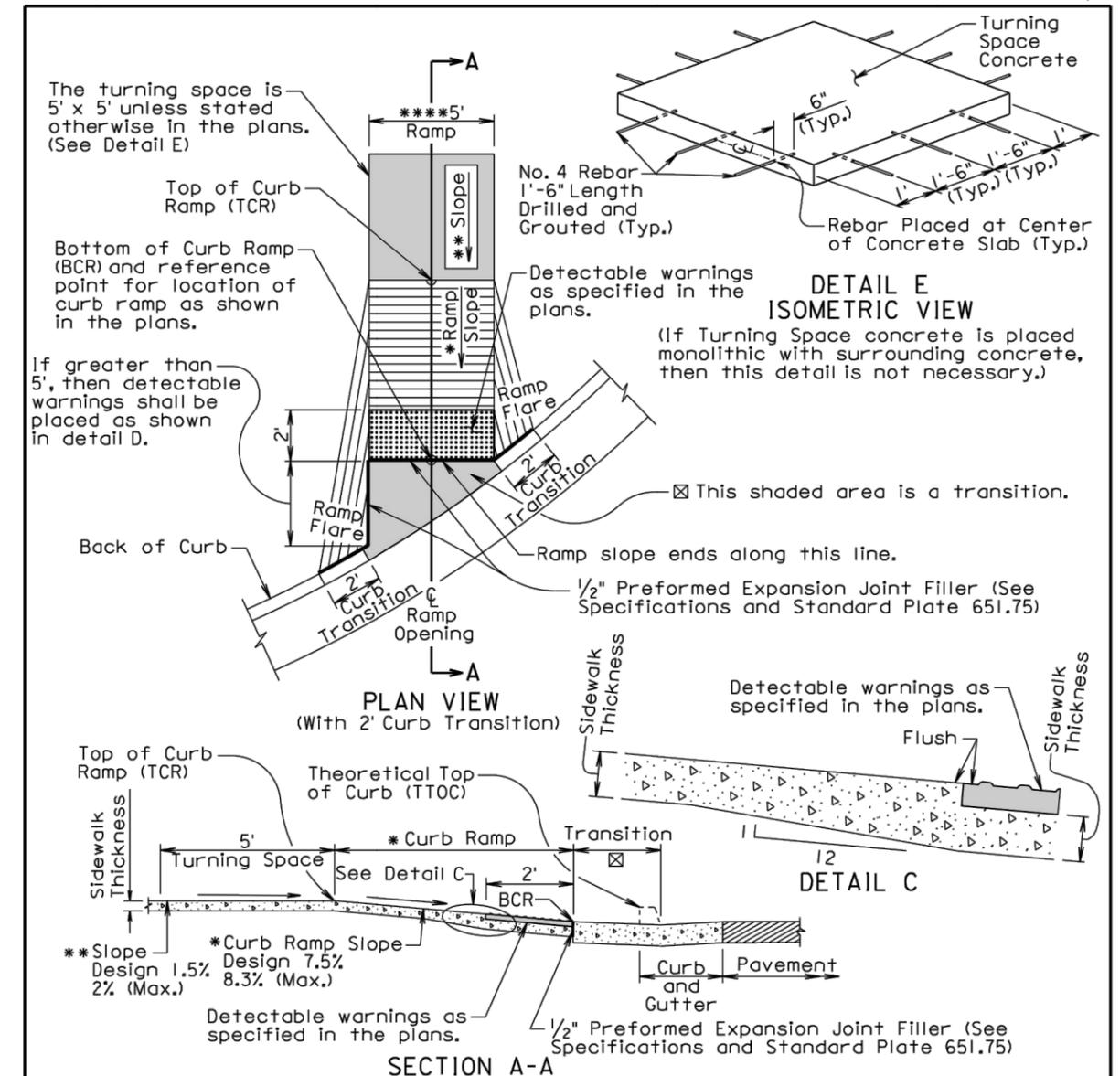
☒ The slope within the transition area shall not be steeper than 5%. The concrete within the transition shall be placed monolithic with the curb and gutter or fillet section concrete. The concrete thickness within the transition shall be the same as the curb and gutter or fillet section concrete thickness.

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



September 6, 2015

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			Sheet 1 of 3



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 shall not exceed 15' in length unless stated otherwise in the plans.

* The elevation of point TCR shall 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 shall be adjusted as necessary to meet all slope and length requirements based on field geometrics.

The cross slope of the ramp shall 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 shall 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.

September 6, 2015

Published Date: 2nd Qtr. 2016	S D D O T	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02
			Sheet 2 of 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT P SRTS(27)	SHEET 28	TOTAL SHEETS 40
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Revised June 15, 2016 by JWD

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 shall be placed at the location stated in the plans.

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

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

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

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

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

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

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

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

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

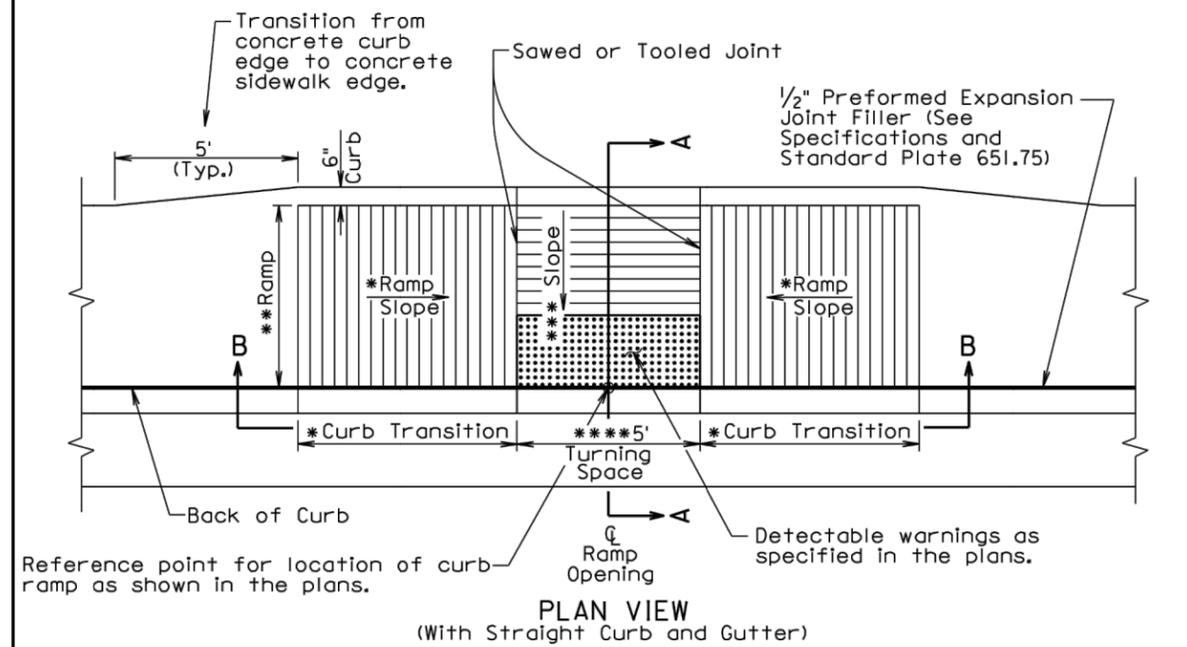
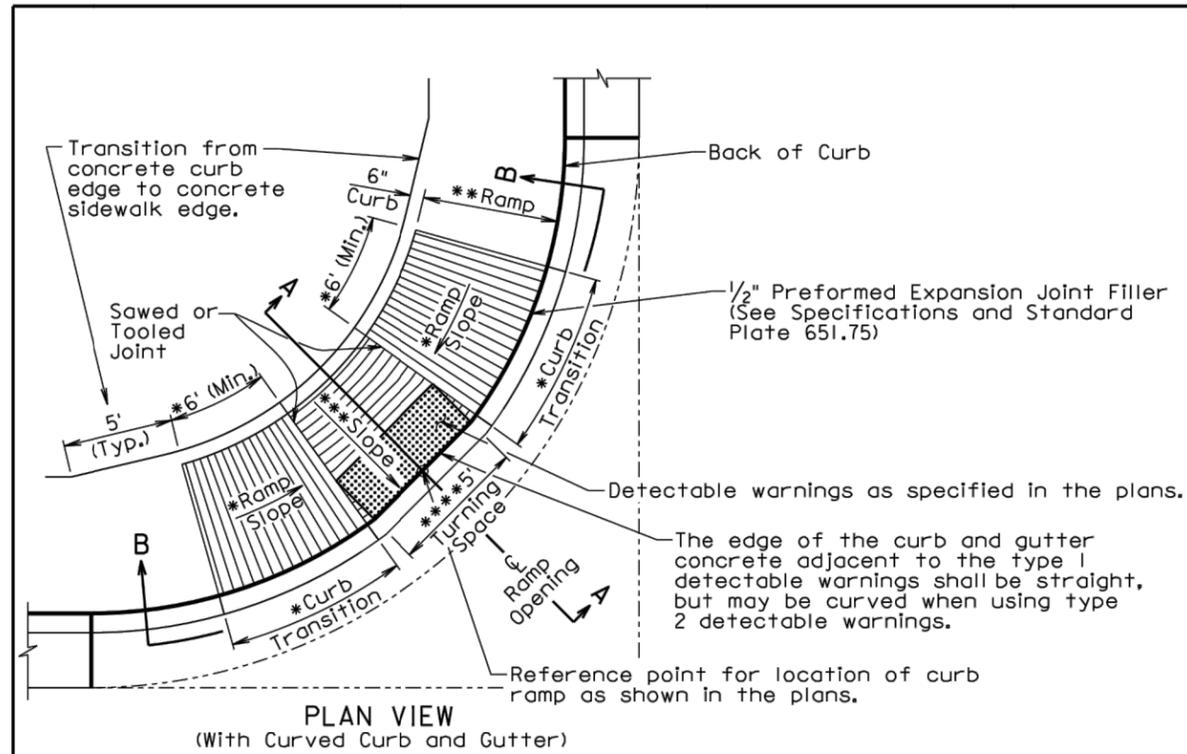
All costs for furnishing and installing the transition area at the base of the curb ramp shall be incidental to the contract unit price per foot for the corresponding curb and gutter bid item when curb and gutter is used and shall be incidental to the contract unit price per square yard for the corresponding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

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

The type 2 detectable warnings shall 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 shall be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

September 6, 2015

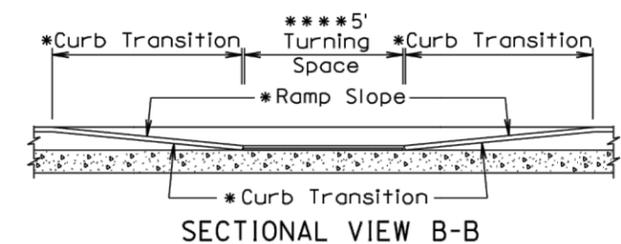
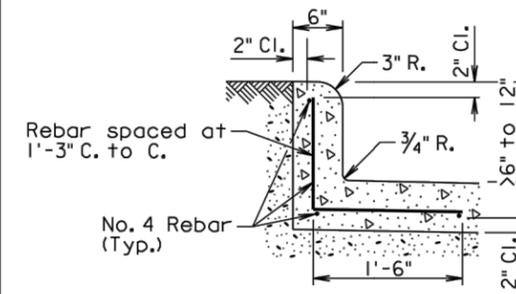
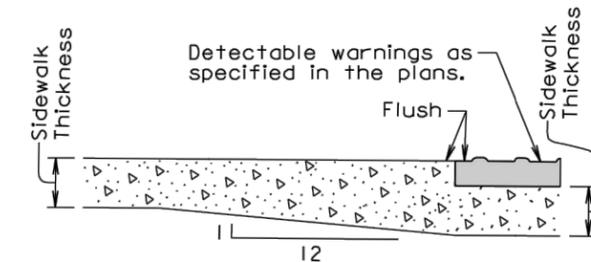
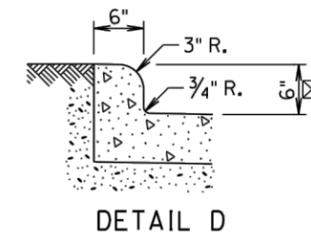
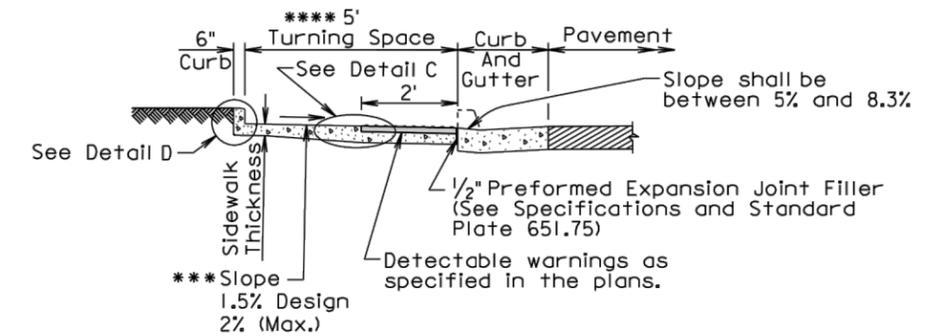
<i>Published Date: 2nd Qtr. 2016</i>	S D D O T	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02
			Sheet 3 of 3



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Published Date: 2nd Qtr. 2016	S D D O T	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03
			Sheet 1 of 3

- * The curb transition slope shall 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 shall not exceed 15' in length unless stated otherwise in the plans. The curb transitions and curb ramp lengths shall be adjusted as necessary to meet all slope and length requirements based on field geometrics.
- ** The cross slope of the ramp shall 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 shall 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' x 5' unless stated otherwise in the plans.
- ☒ The curb height shall be 6" unless stated otherwise in the plans.



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

September 6, 2015

Published Date: 2nd Qtr. 2016	S D D O T	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03
			Sheet 2 of 3

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STATE OF SOUTH DAKOTA	PROJECT P SRTS(27)	SHEET 30	TOTAL SHEETS 40
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Revised June 15, 2016 by JWD

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 shall be placed at the location stated in the plans.

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

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

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

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

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

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

The detectable warnings shall be cut as necessary to fit the plan specified limits of the detectable warnings. Cost for cutting the detectable warnings shall be incidental to the corresponding detectable warning bid 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 shall conform to ASTM A615, Grade 60. Cost for furnishing and installing the reinforcing steel shall be incidental to the contract unit price per square foot for the corresponding concrete sidewalk bid item.

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

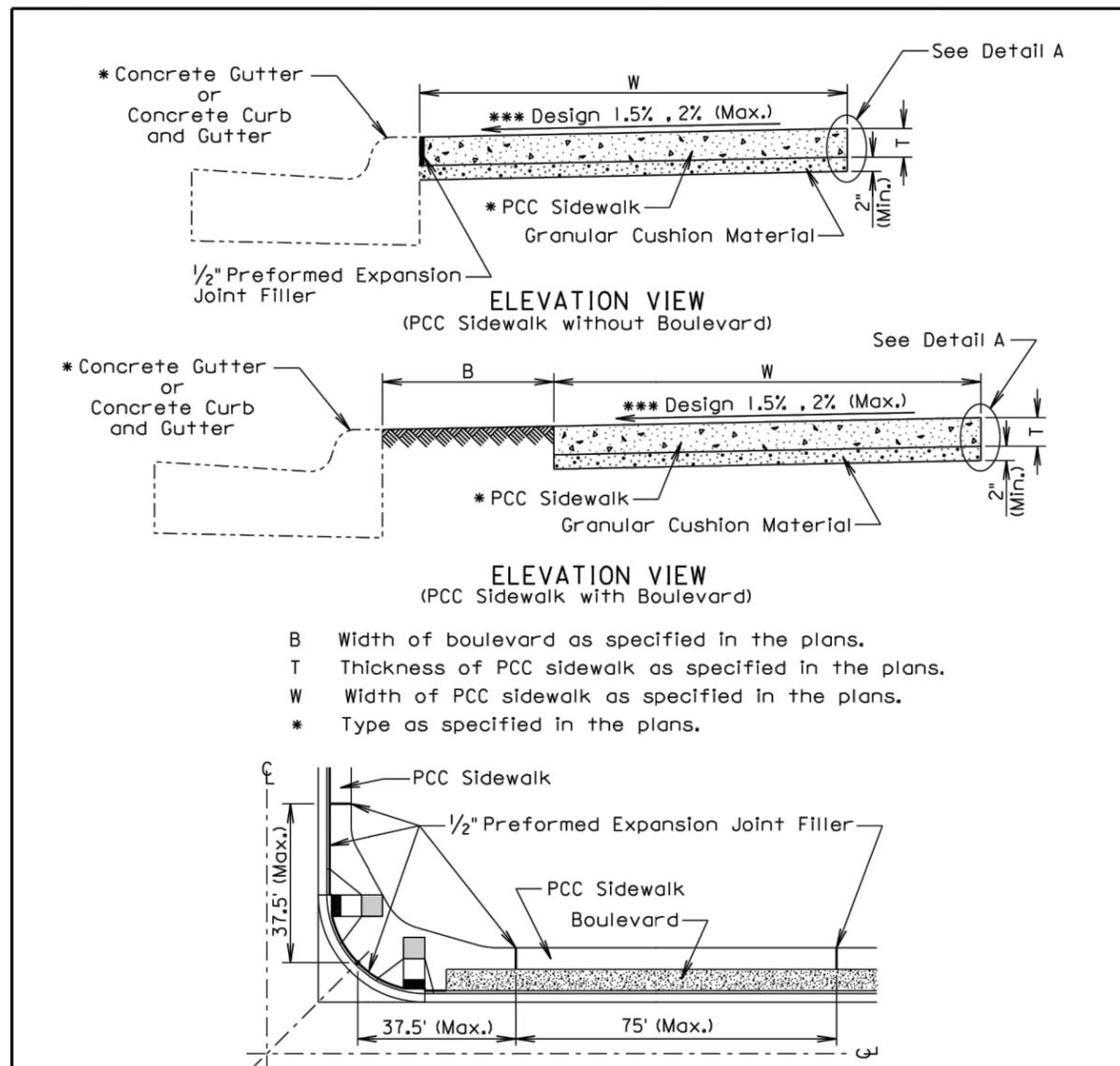
The curb transitions and ramp opening shall be measured and paid for at the contract unit price per foot for the corresponding curb and gutter bid item when curb and gutter is used. The curb transitions and ramp opening shall be measured and paid for at the contract unit price per square yard for the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

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

The type 2 detectable warnings shall 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 shall be paid for at the contract unit price per square foot for "Type 2 Detectable Warnings".

September 6, 2015

<i>Published Date: 2nd Qtr. 2016</i>	S D D O T	TYPE 3 CURB RAMP (PARALLEL CURB RAMP)	PLATE NUMBER 651.03
			Sheet 3 of 3

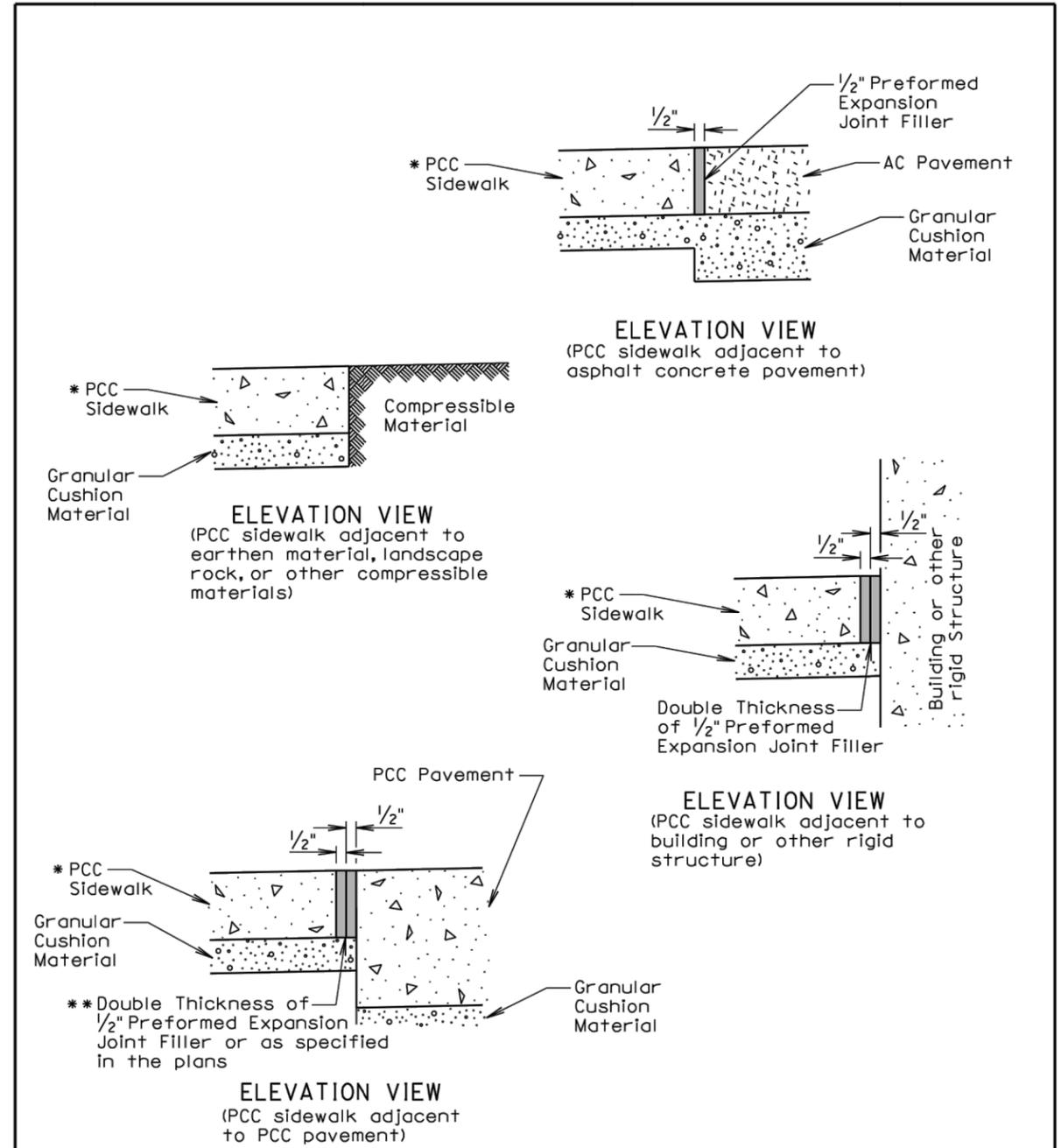


B Width of boulevard as specified in the plans.
 T Thickness of PCC sidewalk as specified in the plans.
 W Width of PCC sidewalk as specified in the plans.
 * Type as specified in the plans.

GENERAL NOTES:
 The PCC sidewalk shall 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 PCC sidewalk is 75 feet.
 PCC sidewalk placed adjacent to intersection of roadways shall have an expansion joint placed transversely a maximum of 37.5 feet from the intersection. See PLAN VIEW.
 An expansion joint in PCC sidewalk shall consist of a 1/2 inch thick preformed expansion joint filler material placed full depth and width of the PCC sidewalk.
 ** Large areas of PCC pavement adjacent to 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 shall construct the joint treatment in accordance with the plans.

September 6, 2015

Published Date: 2nd Qtr. 2016	S D D O T	PCC SIDEWALK	PLATE NUMBER 651.75
			Sheet 1 of 2



Detail A
 (Use Appropriate Detail(s))

September 6, 2015

Published Date: 2nd Qtr. 2016	S D D O T	PCC SIDEWALK	PLATE NUMBER 651.75
			Sheet 2 of 2

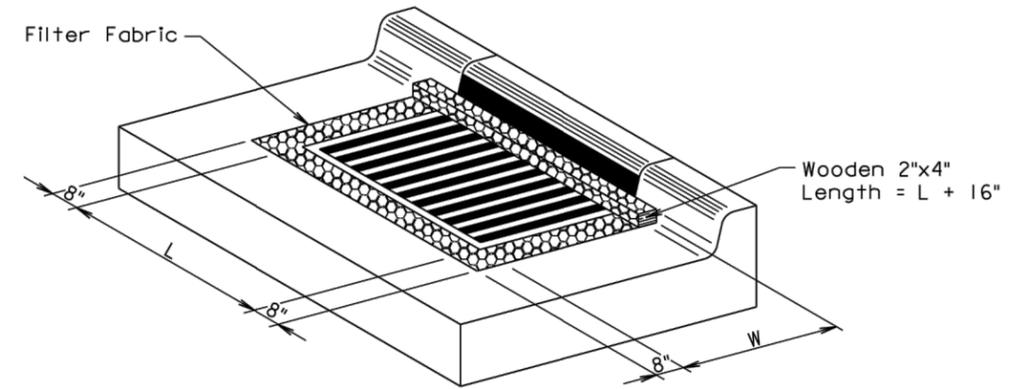
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FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT P SRTS(27)	SHEET 32	TOTAL SHEETS 40
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Revised June 15, 2016 by JWD

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 shall be placed at locations stated in the plans or at locations determined by the Engineer.

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

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

The Contractor shall inspect and maintain the sediment control device once every week and within 24 hours after every rainfall event. The Contractor shall maintain the sediment control device by removing accumulated sediment and replacing torn filter fabric with new filter fabric.

The removed sediment shall 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 shall be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

September 14, 2005

Published Date: 2nd Qtr. 2016

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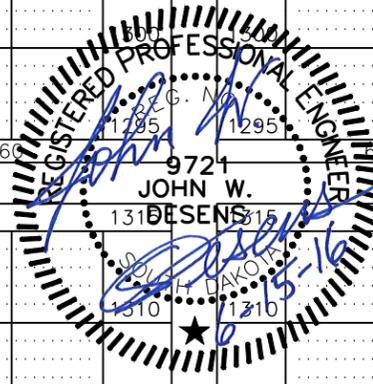
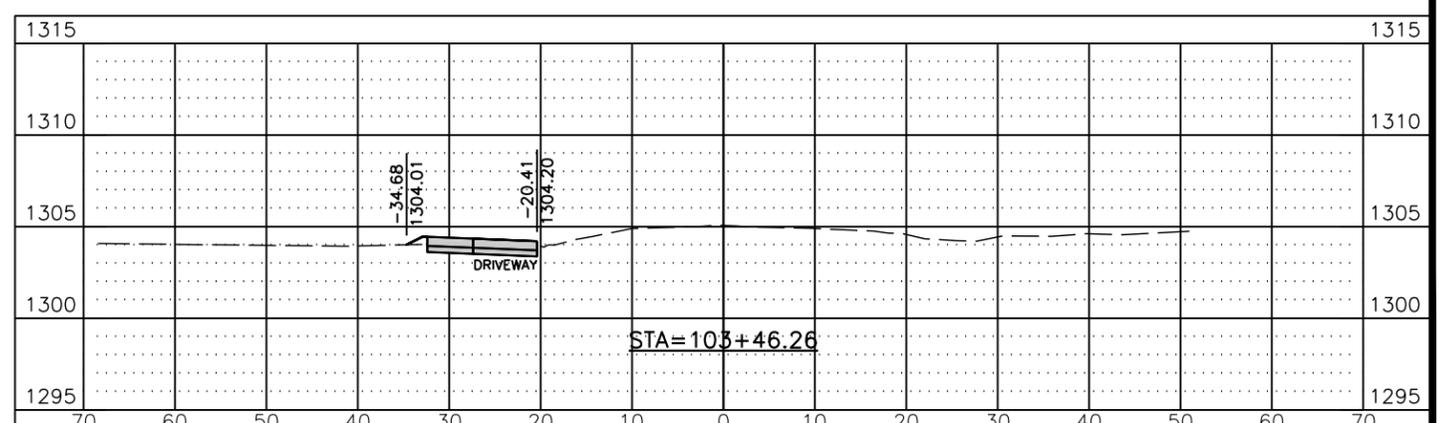
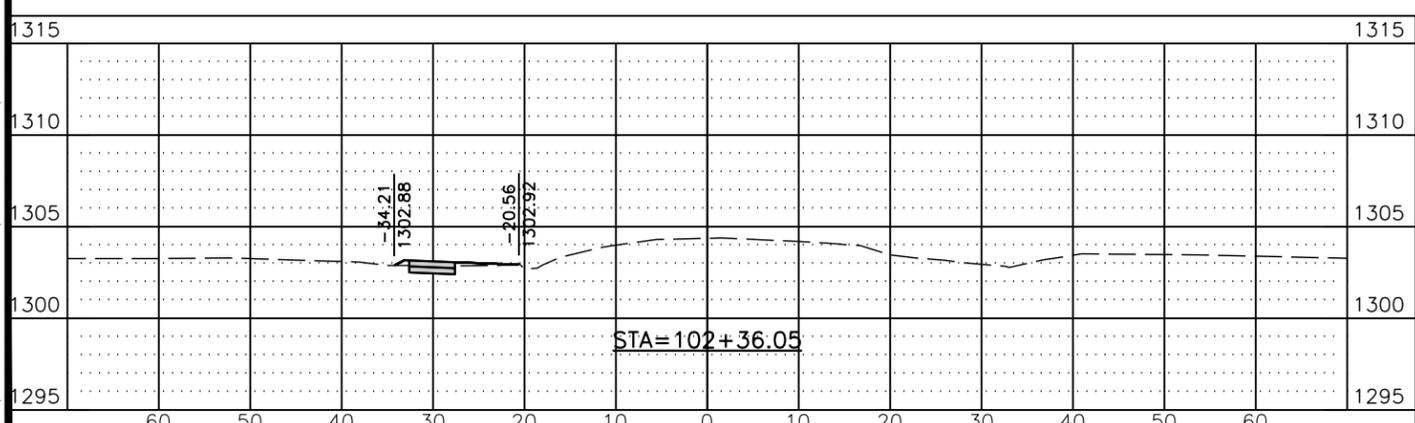
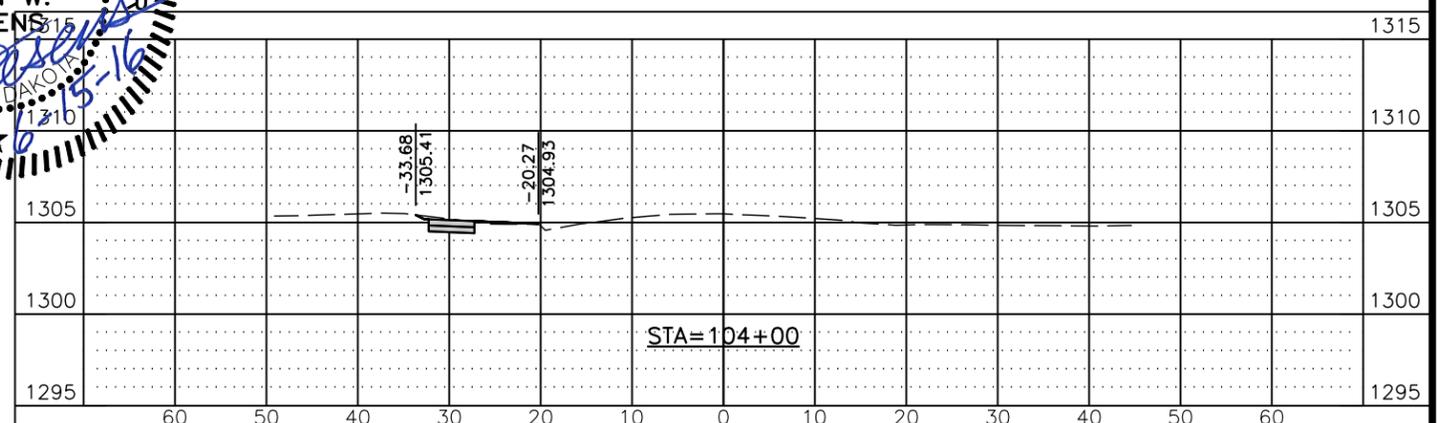
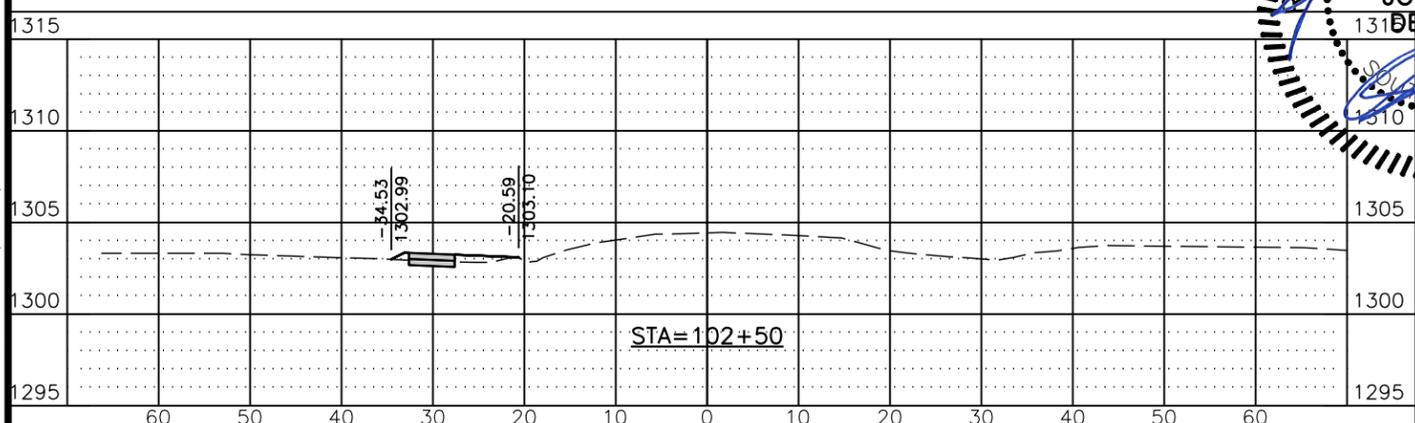
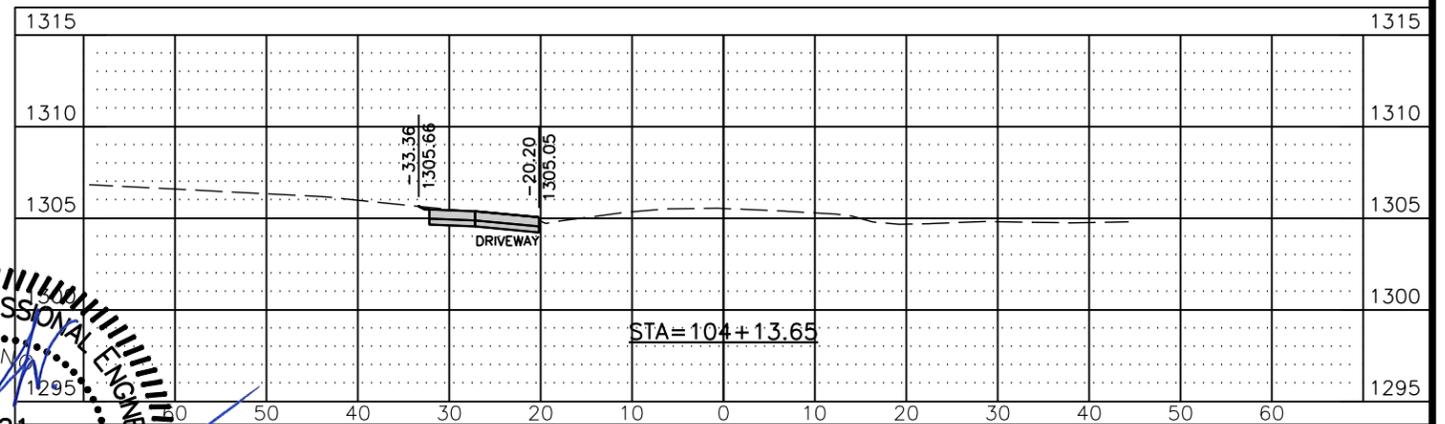
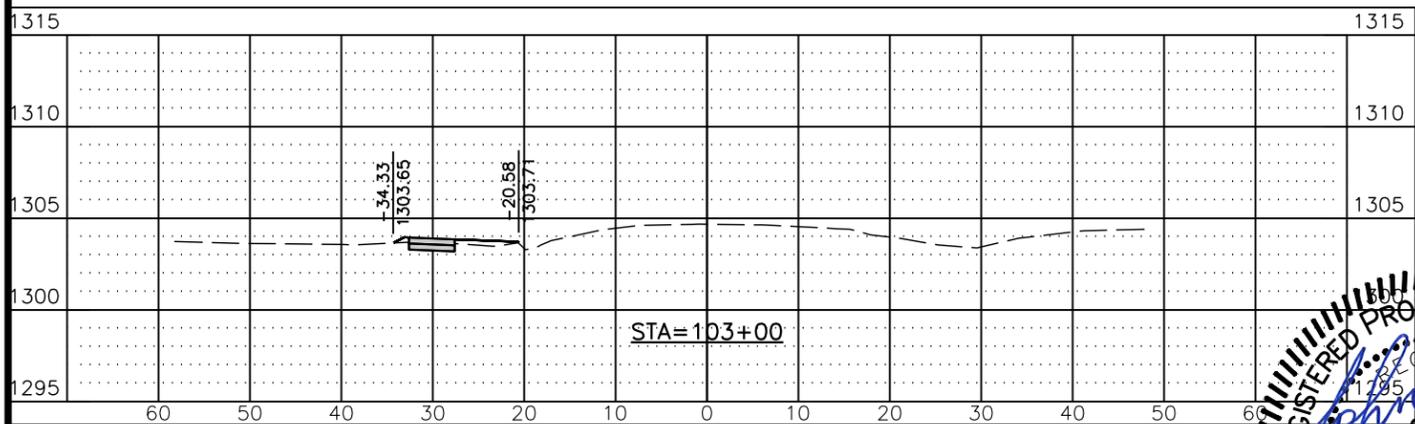
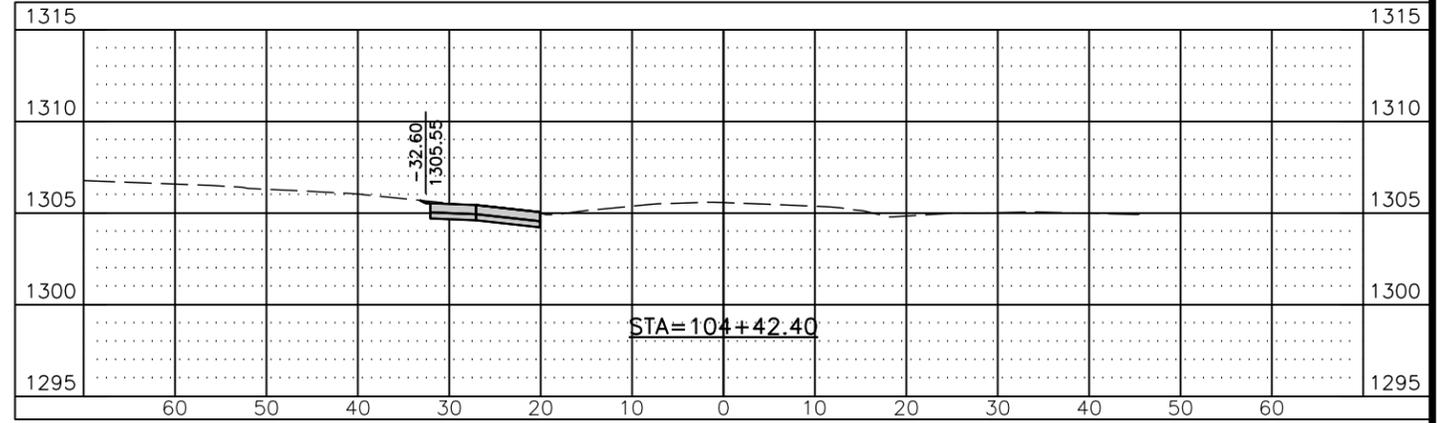
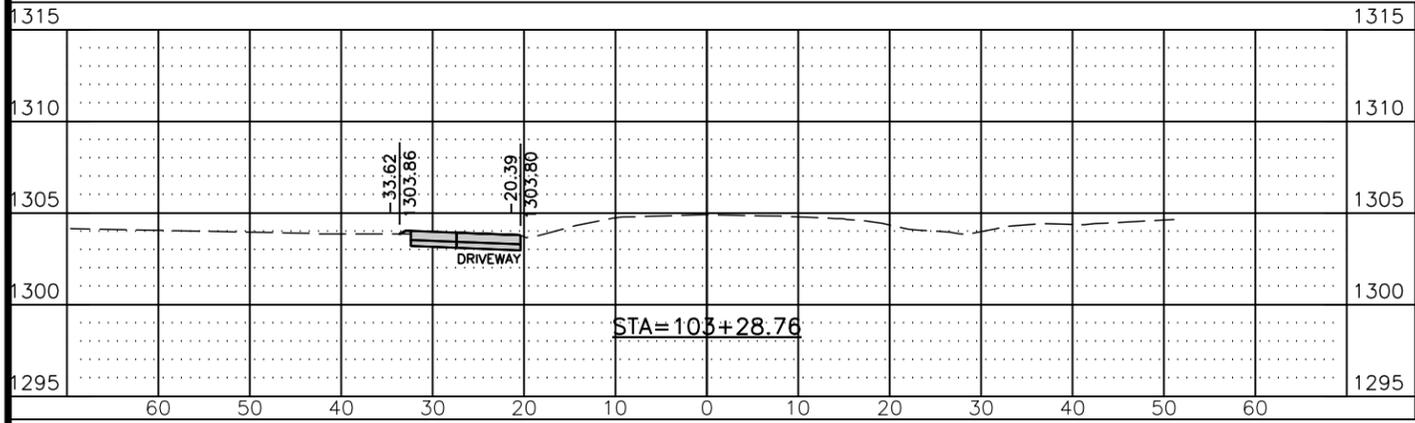
**SEDIMENT CONTROL AT INLETS
WITH FRAMES AND GRATES**

PLATE NUMBER
734.10

Sheet 1 of 1

FOR BIDDING PURPOSES ONLY

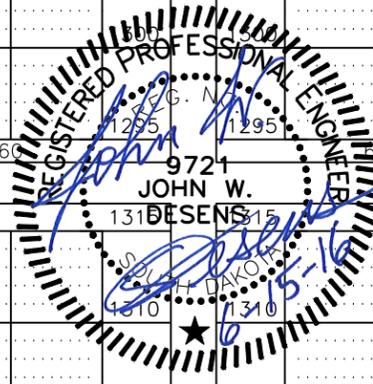
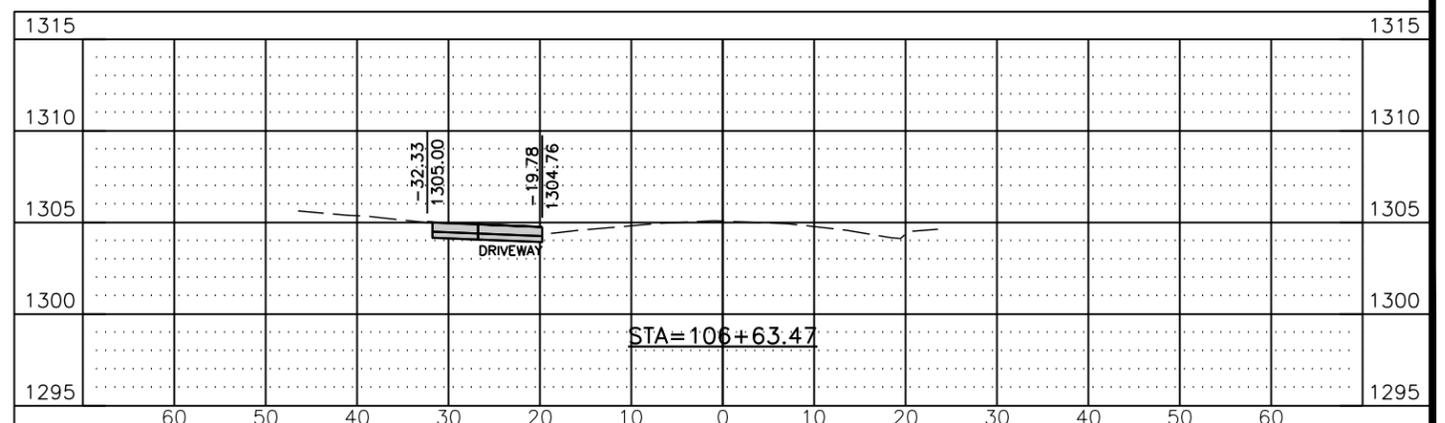
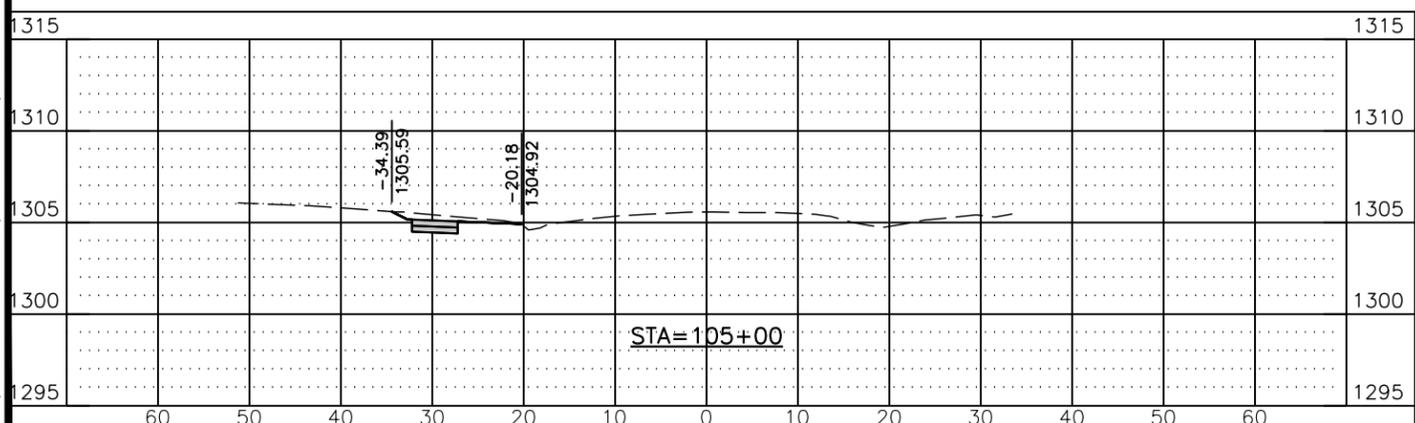
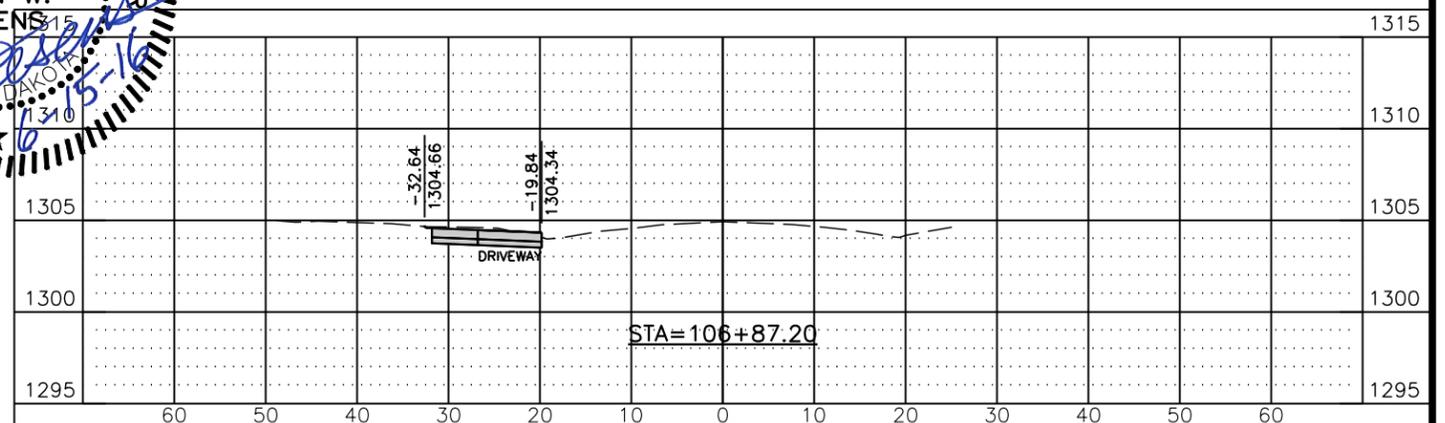
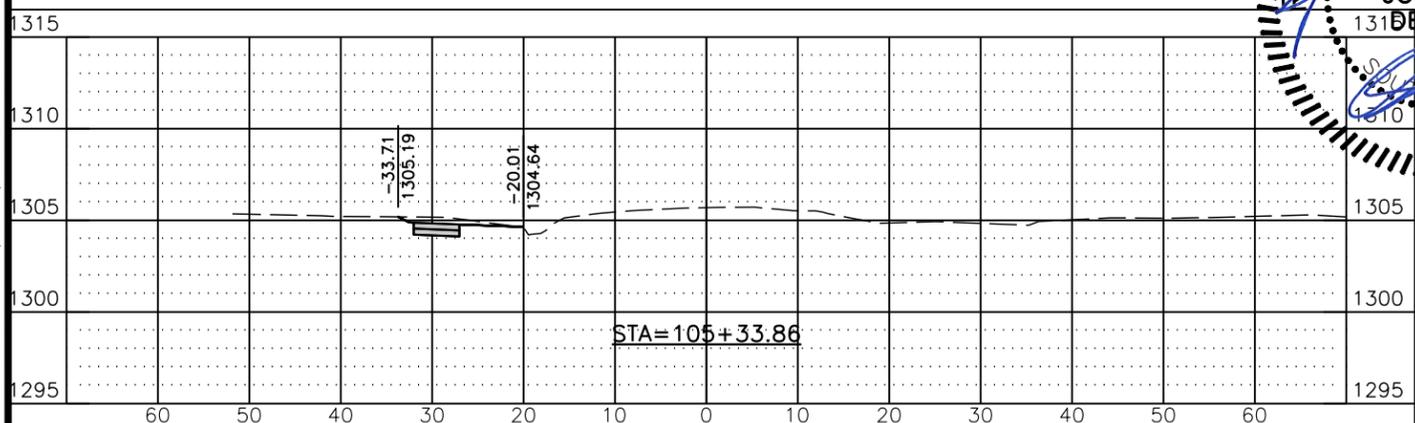
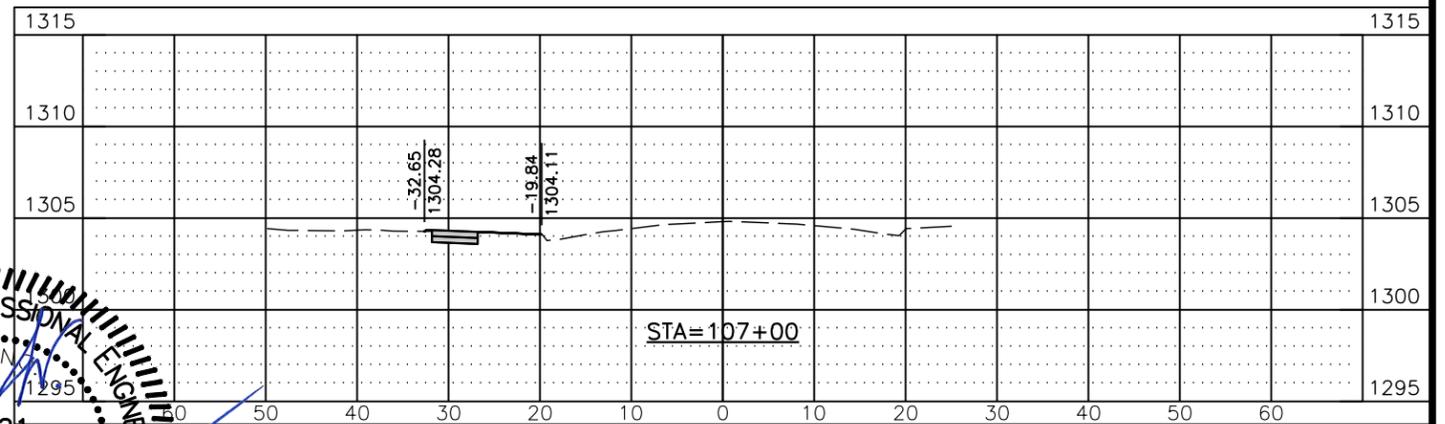
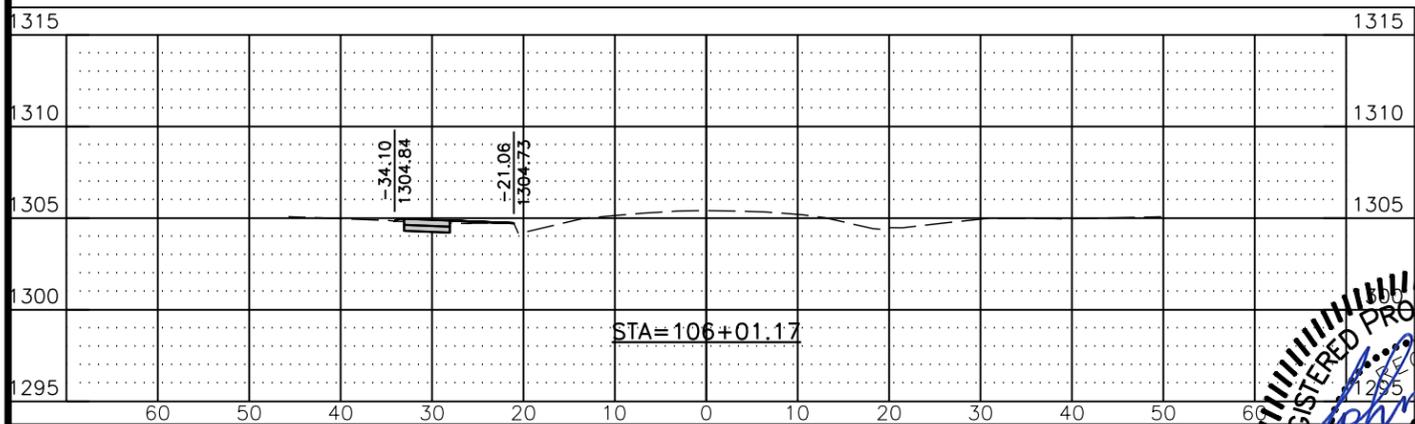
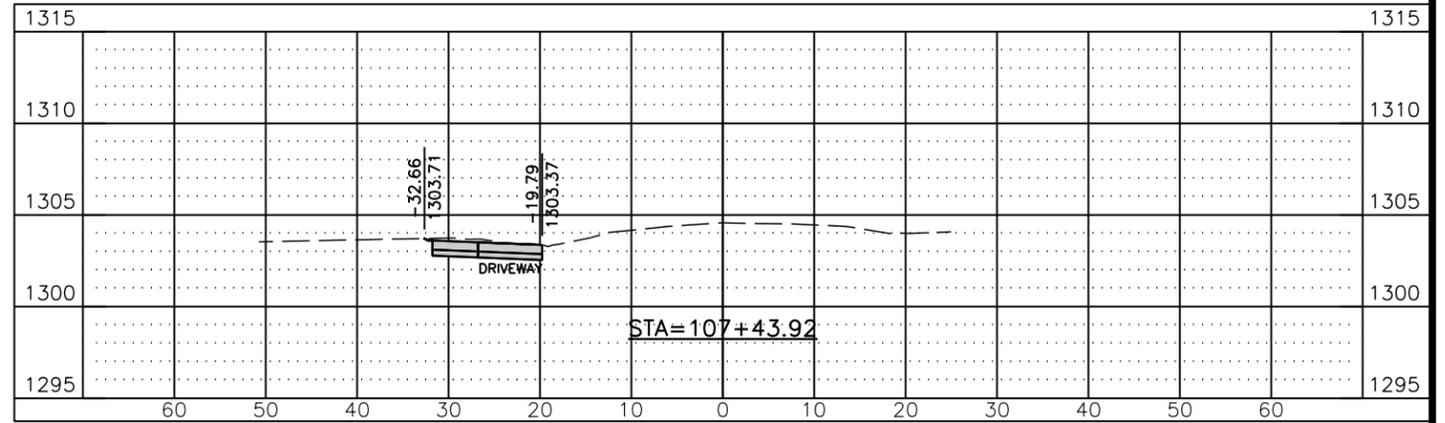
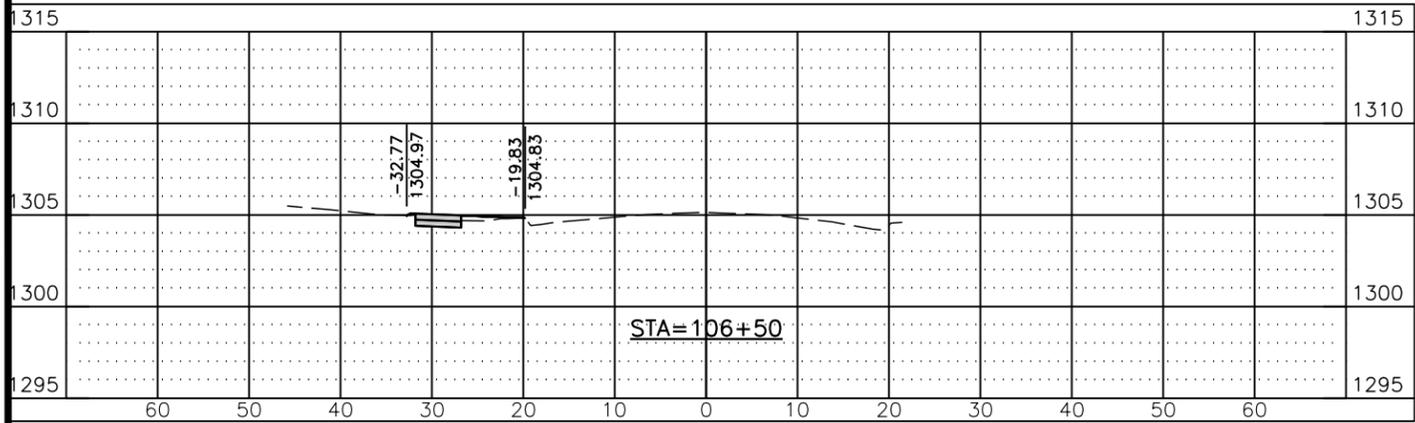
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	33	40



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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	34	40



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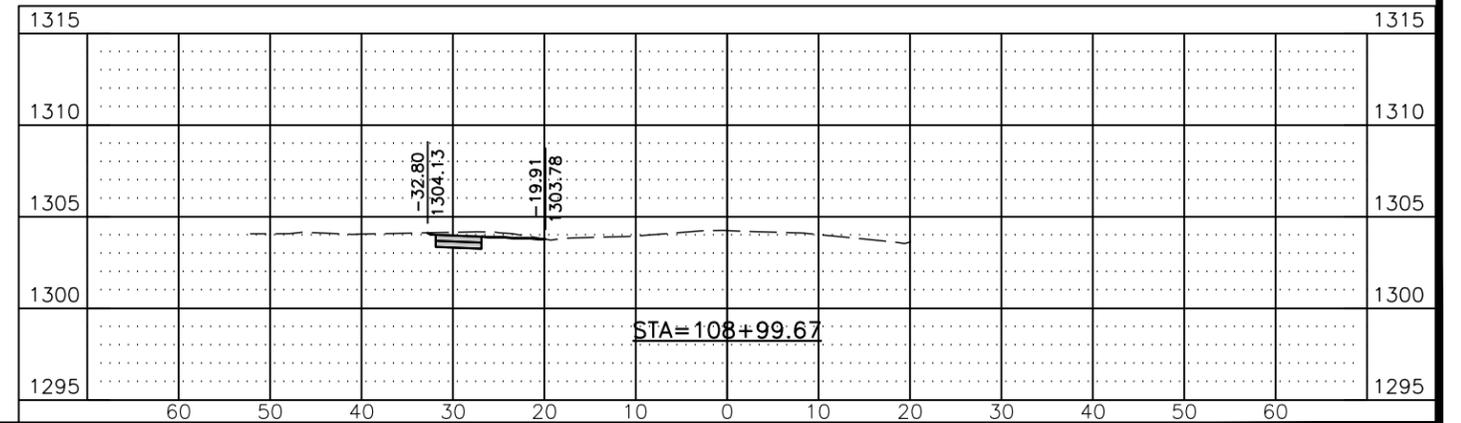
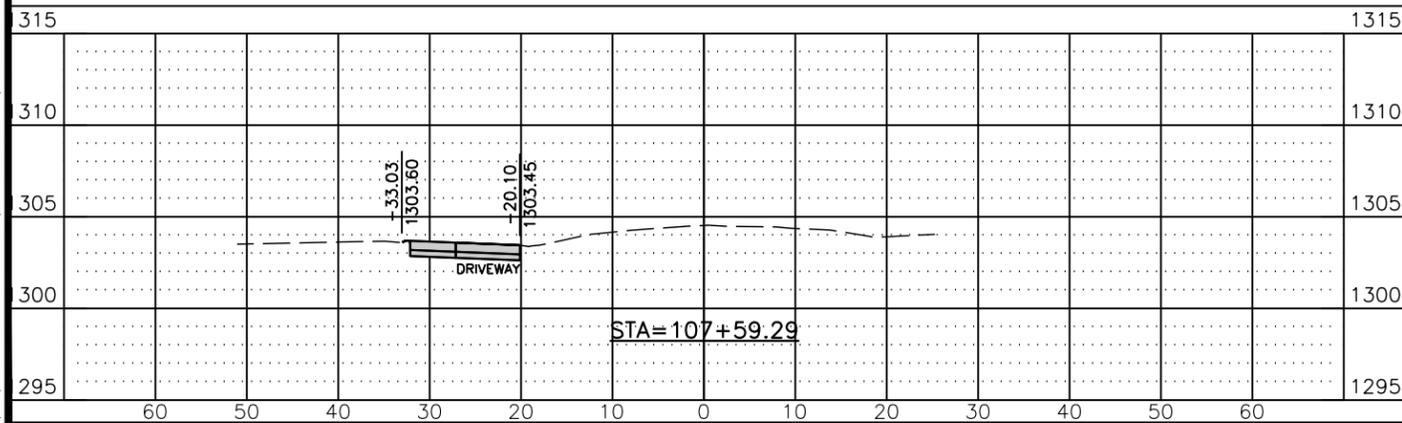
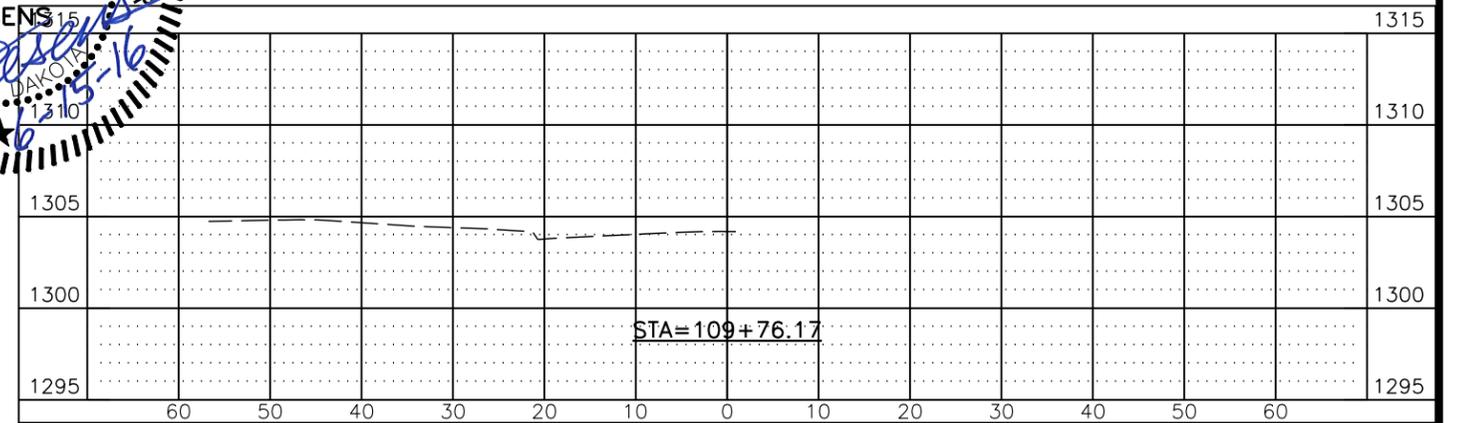
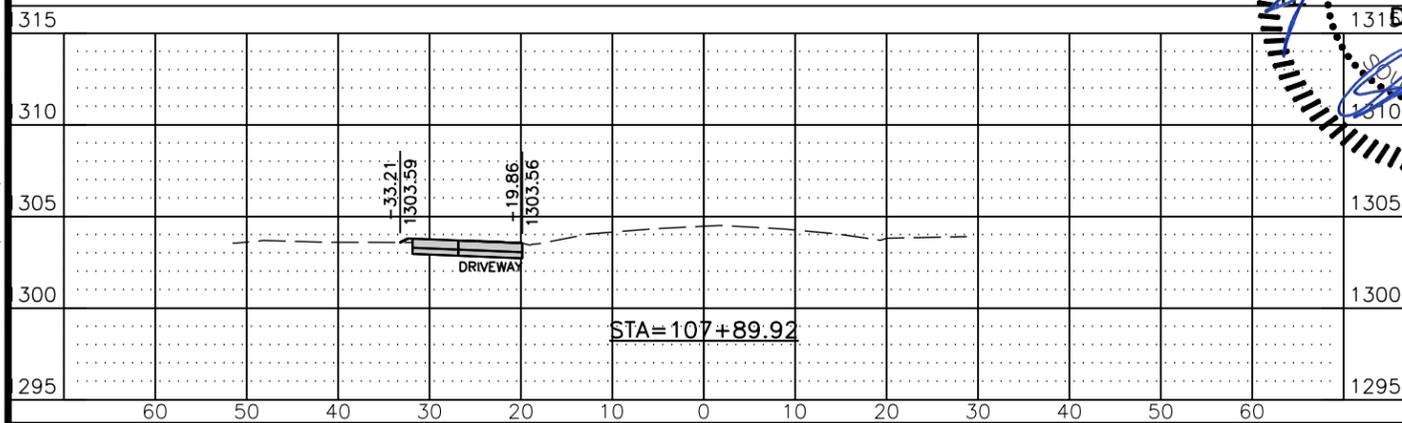
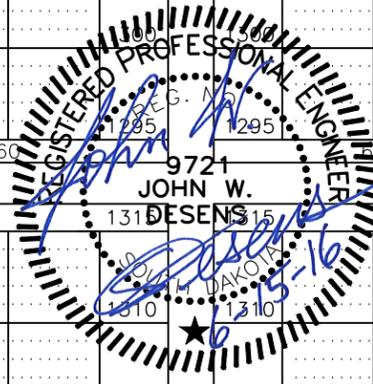
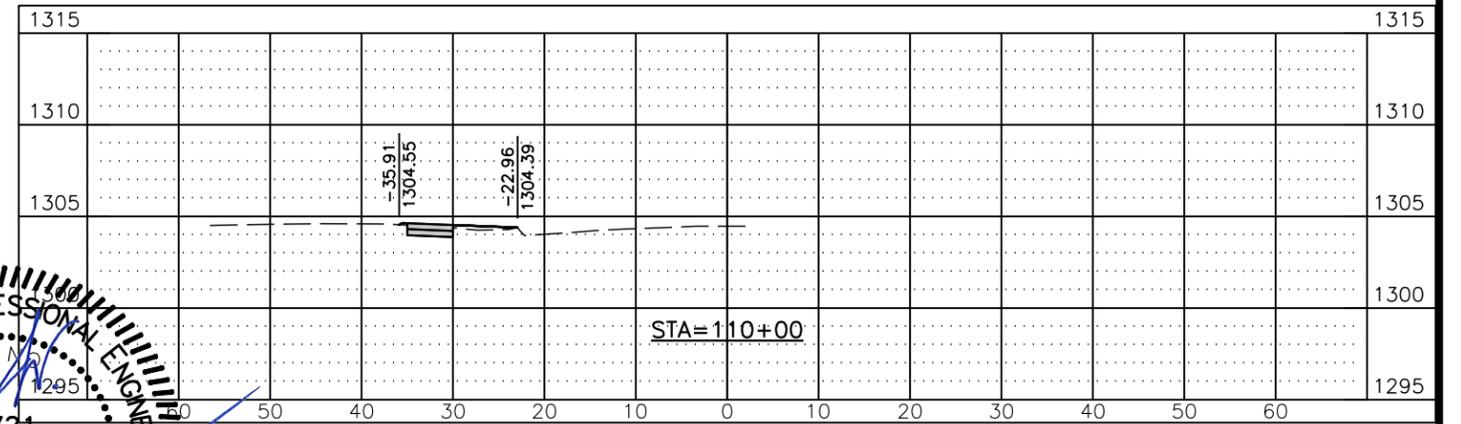
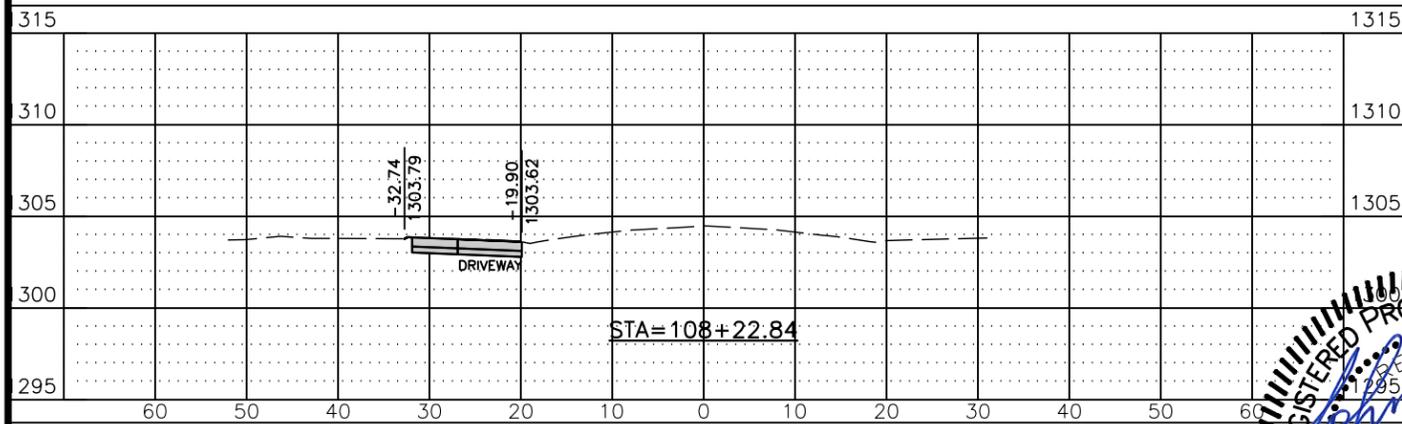
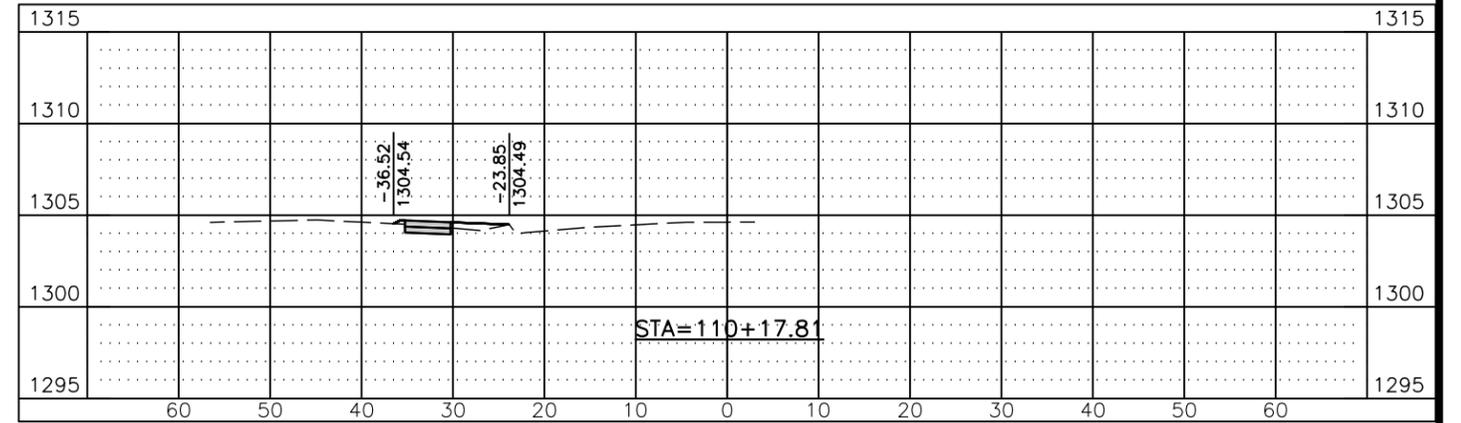
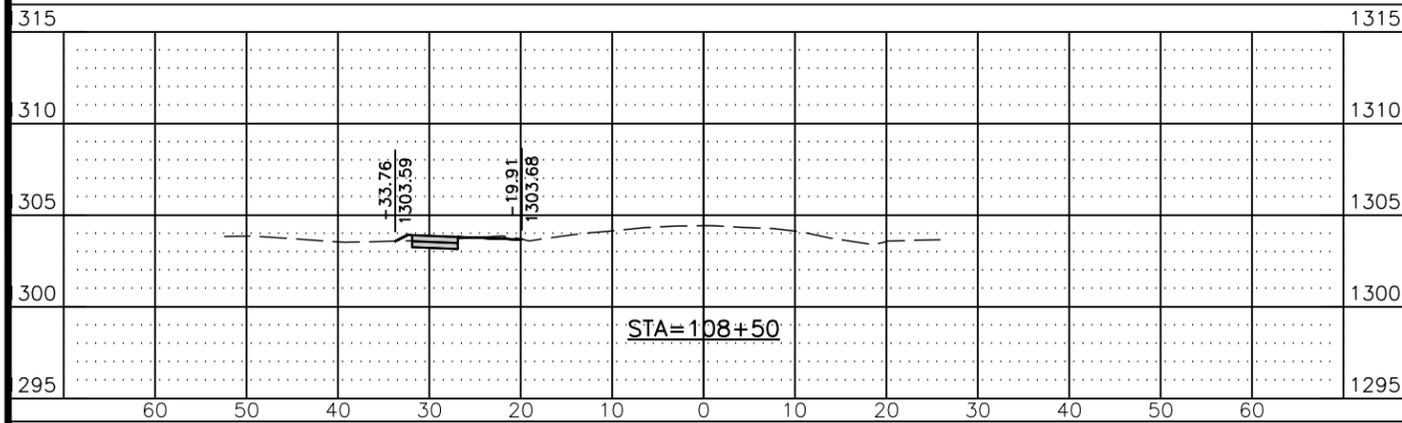
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STATE OF
SOUTH
DAKOTA

PROJECT
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SHEET
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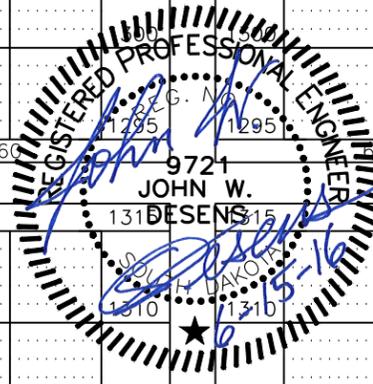
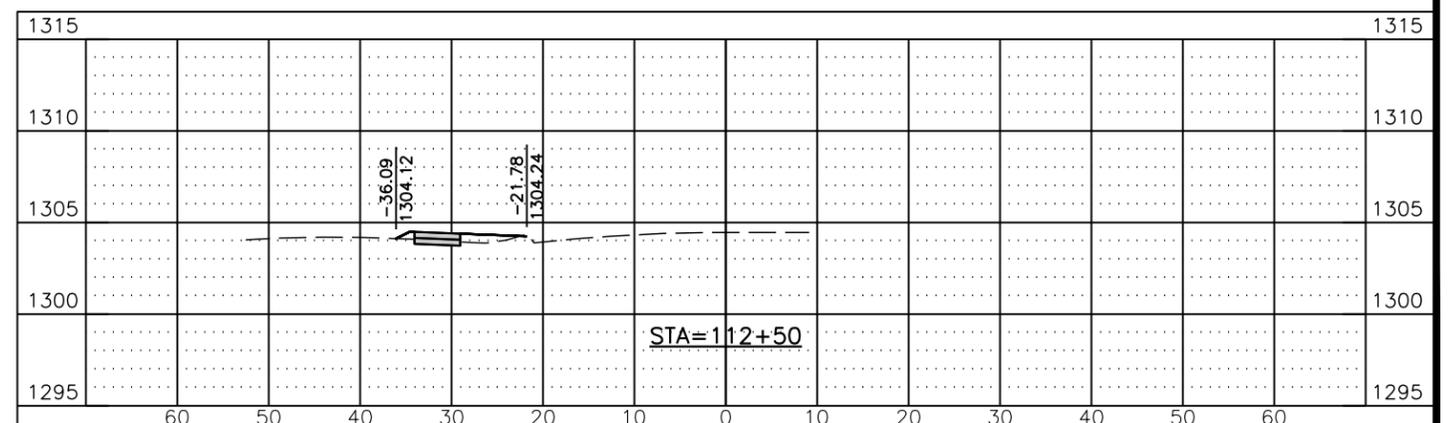
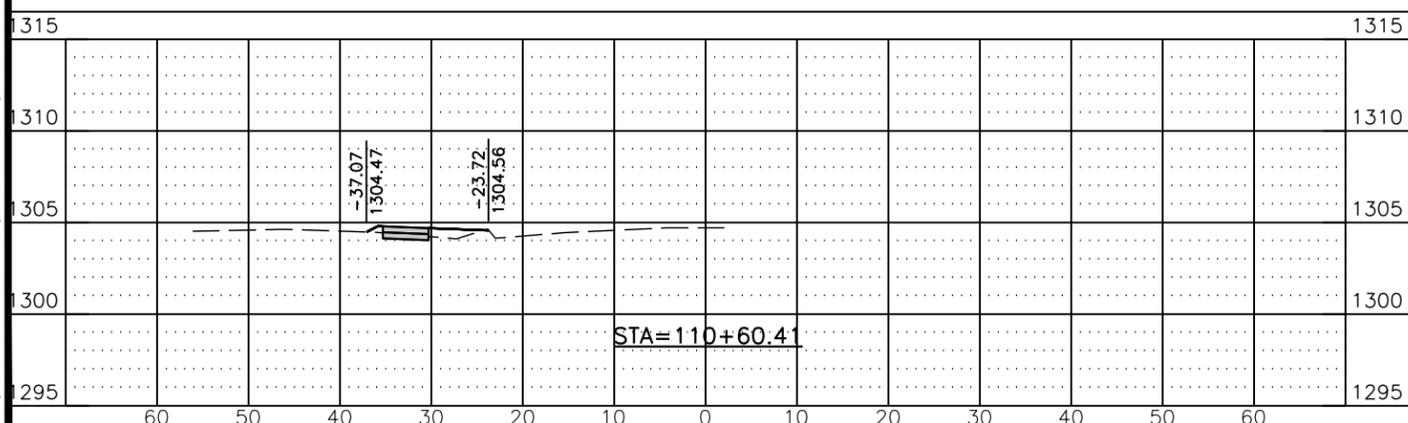
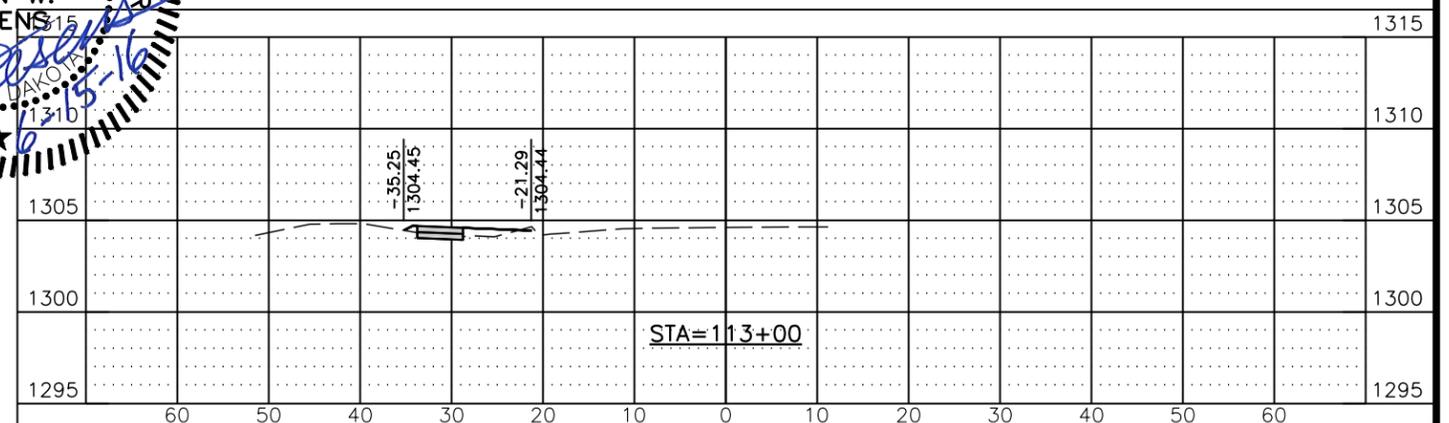
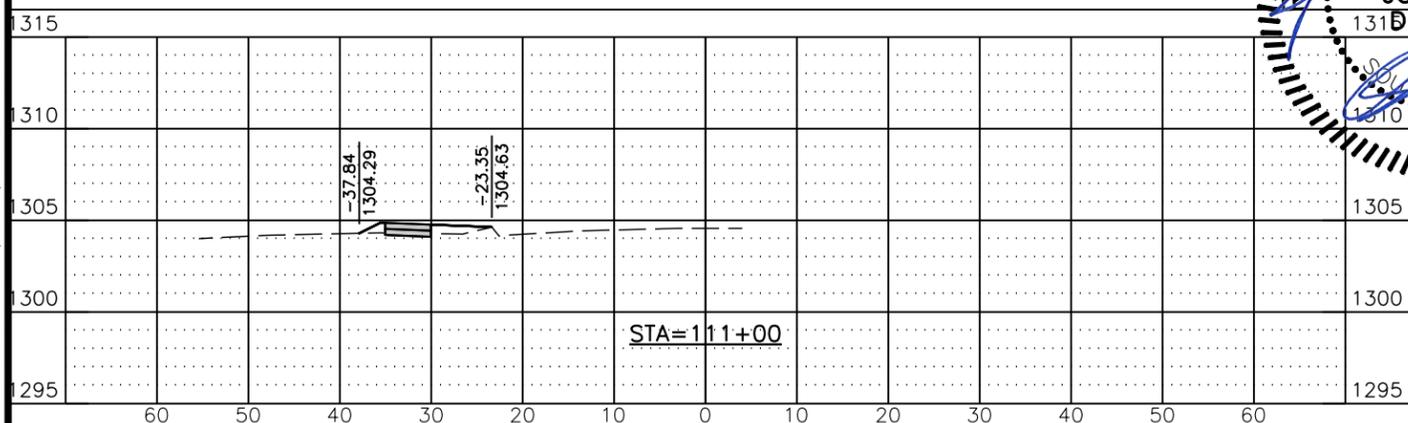
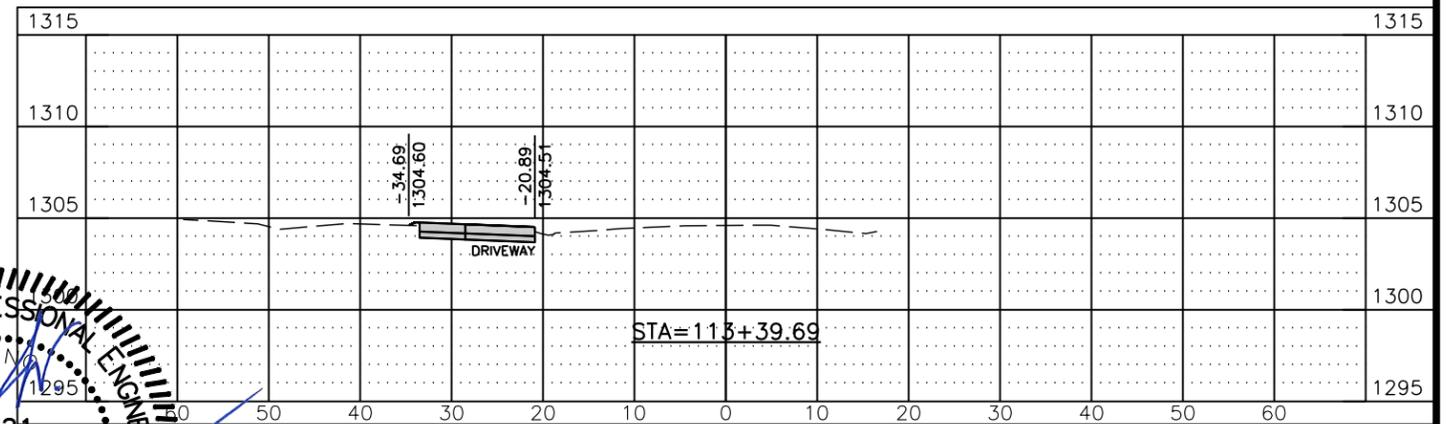
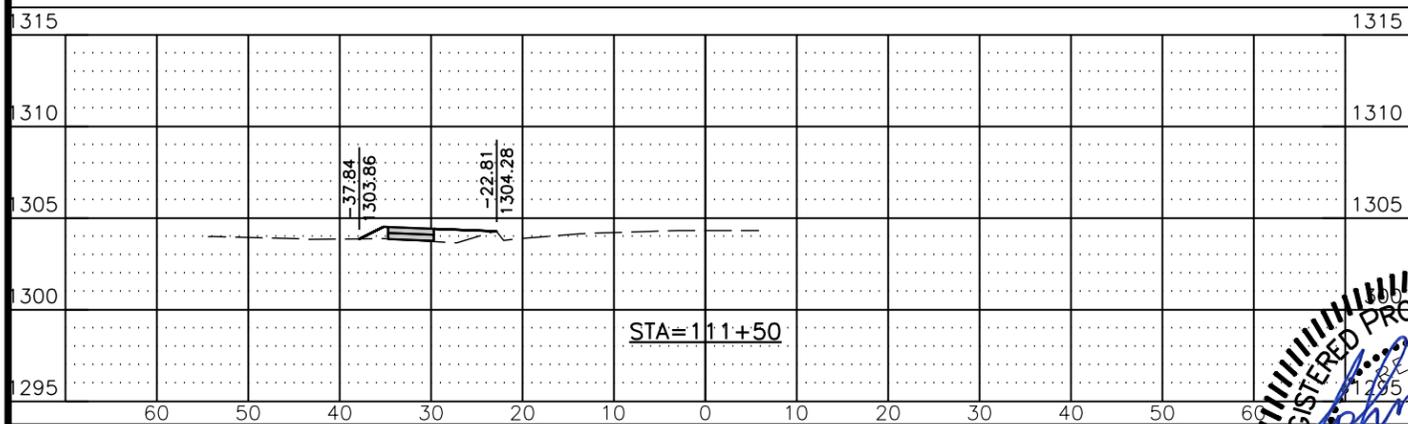
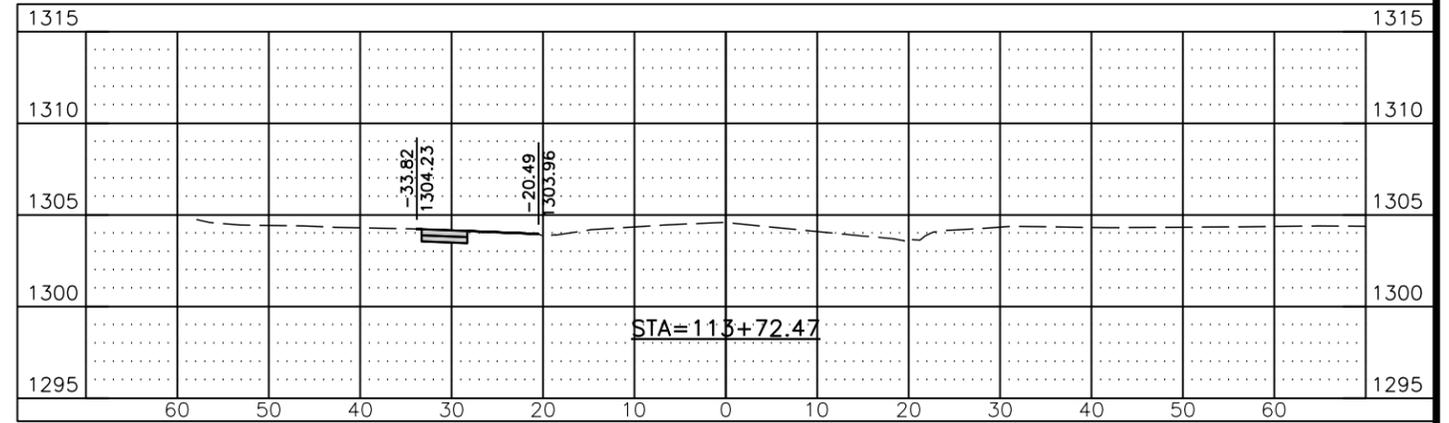
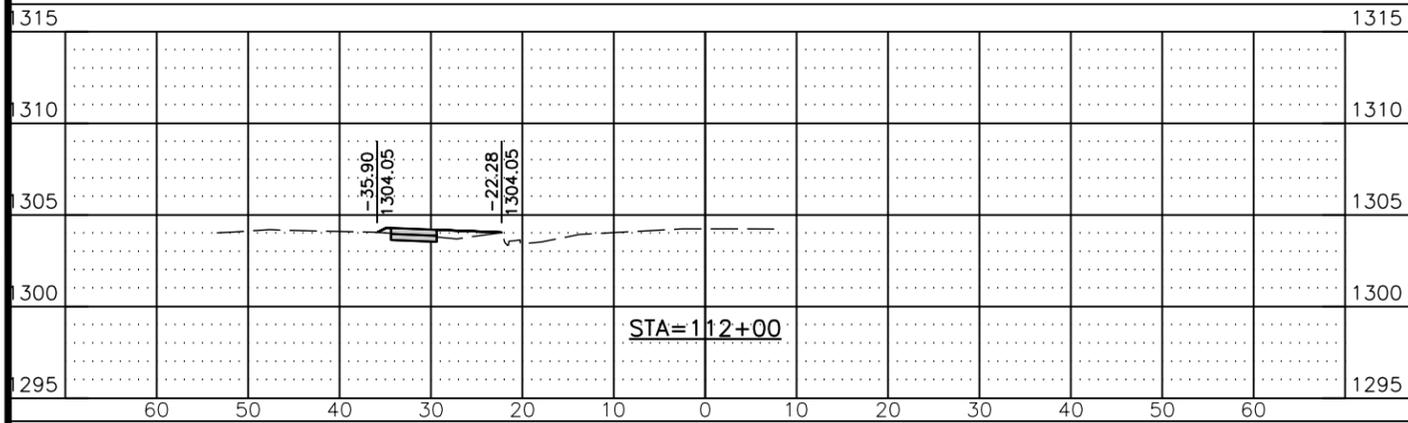
TOTAL
SHEETS
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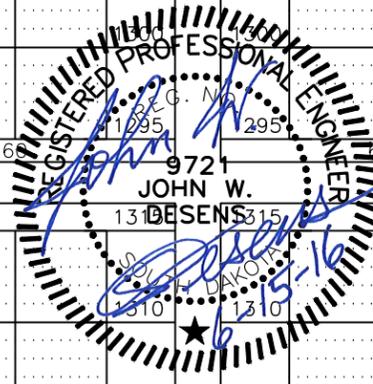
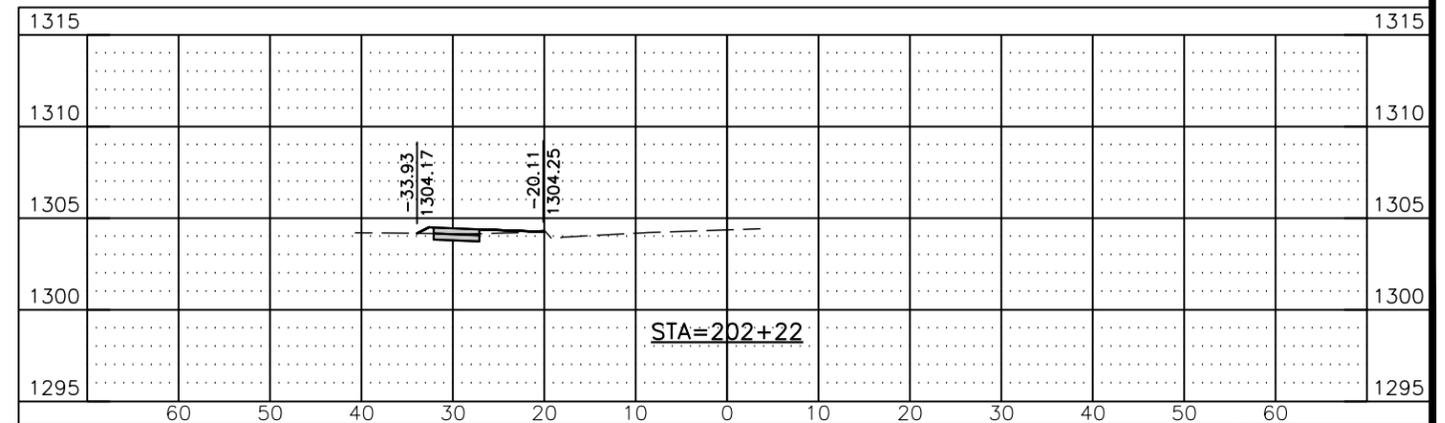
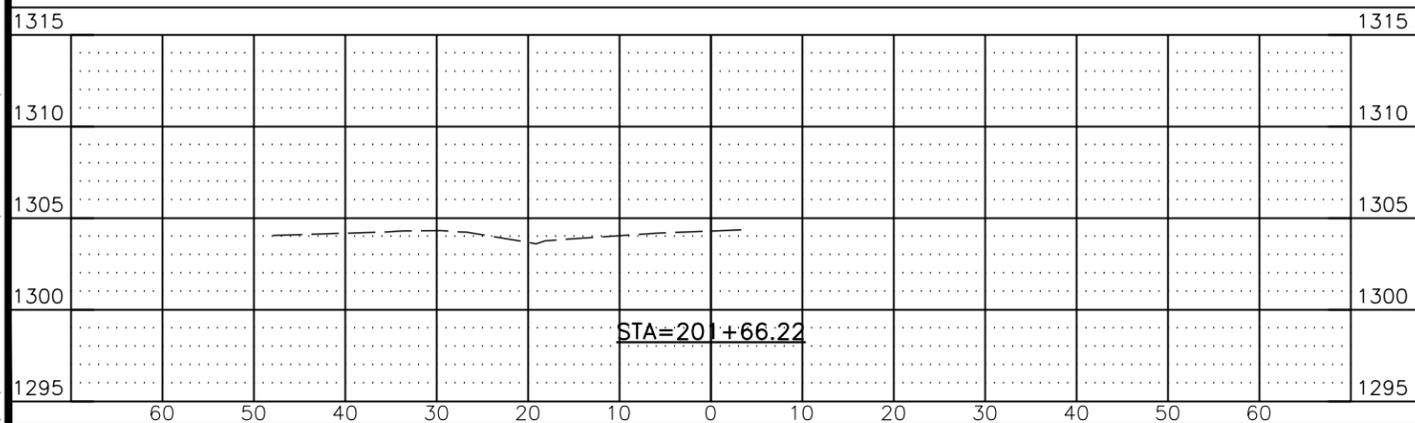
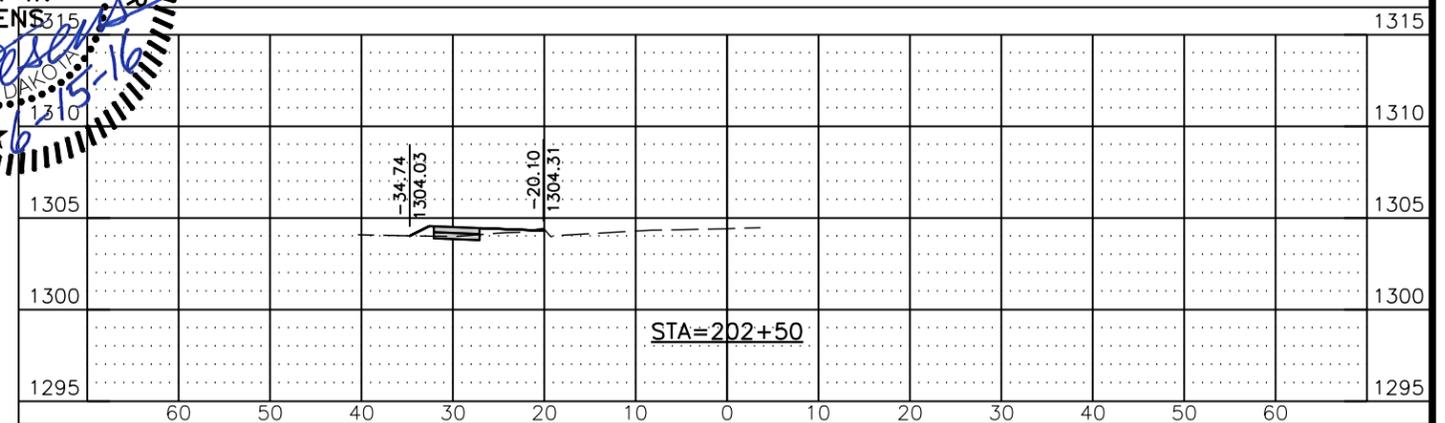
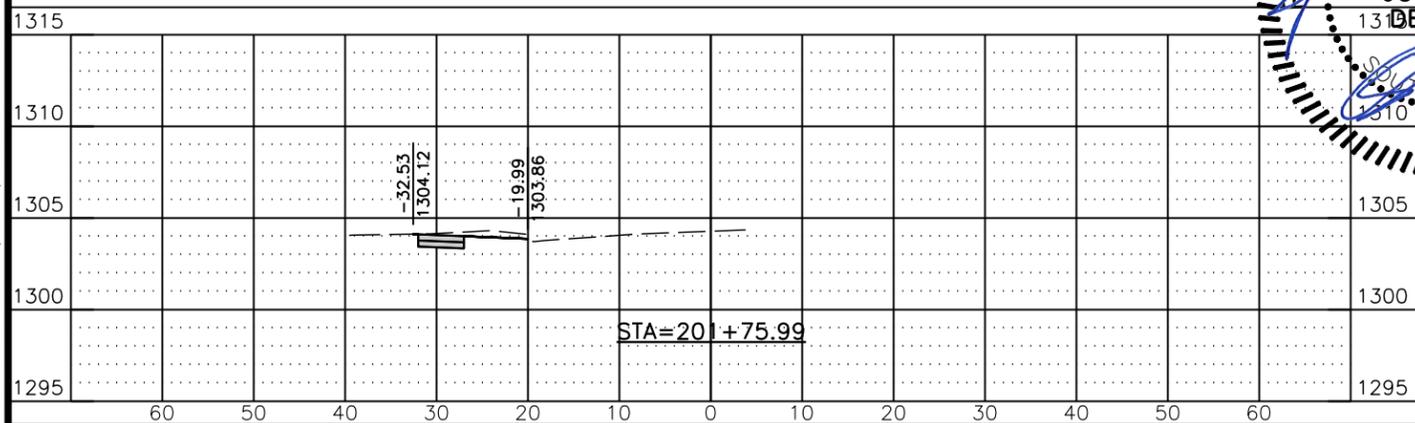
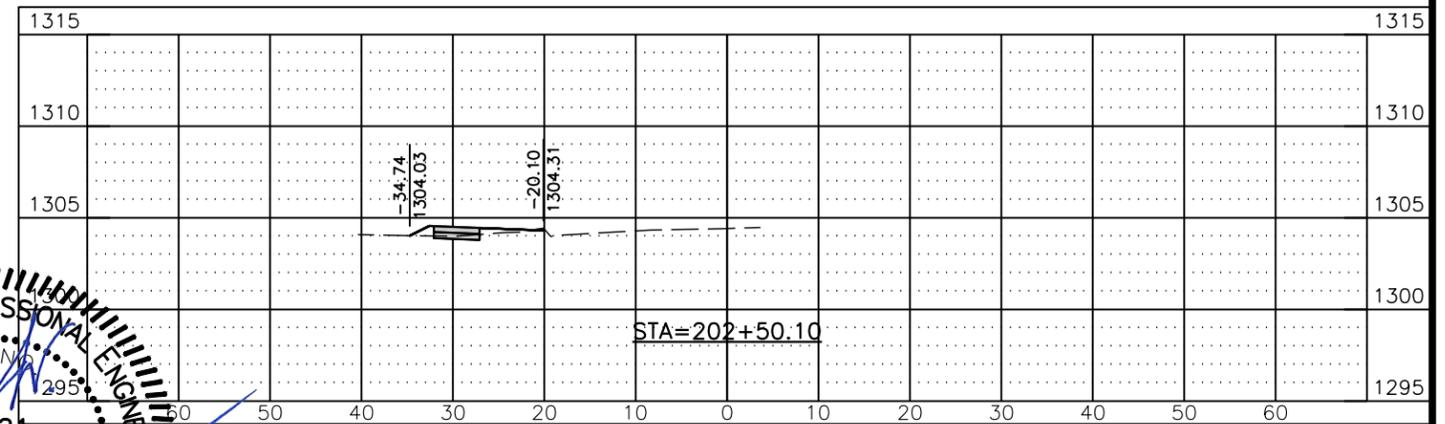
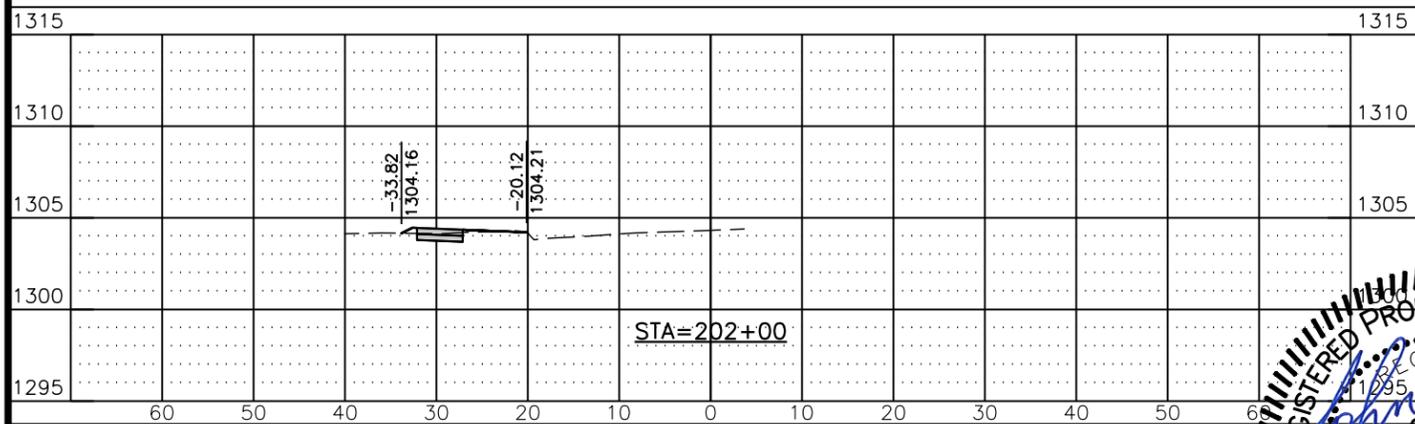
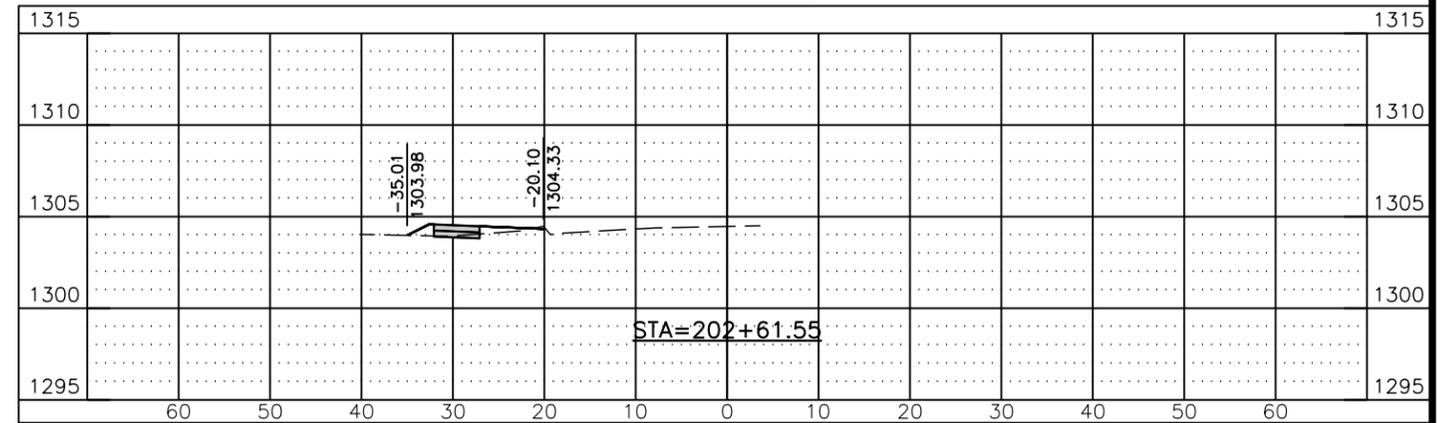
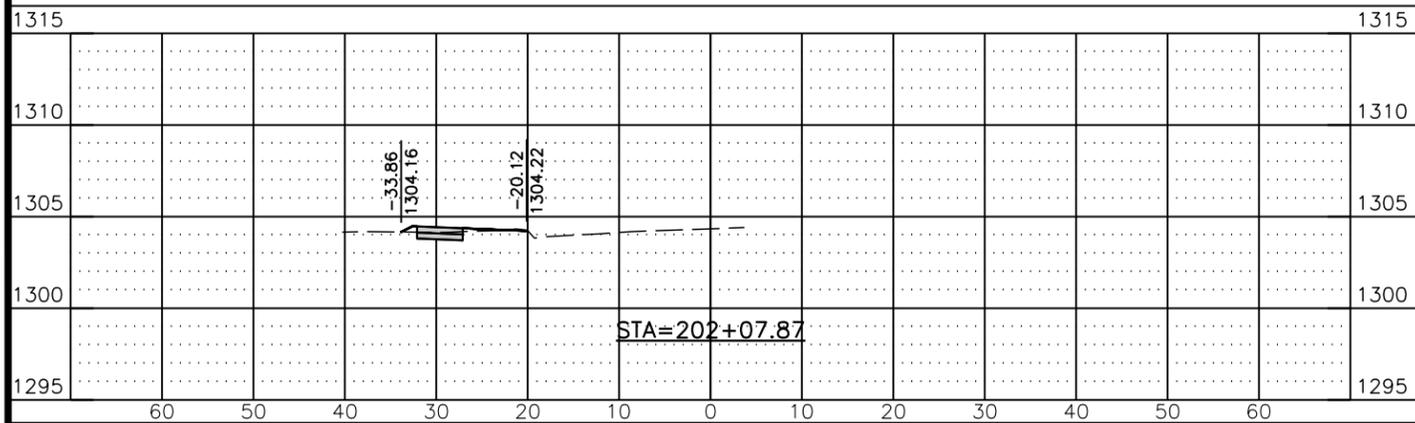
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	37	40



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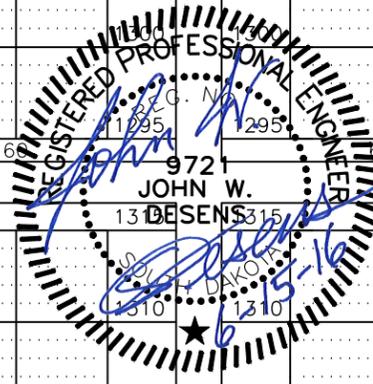
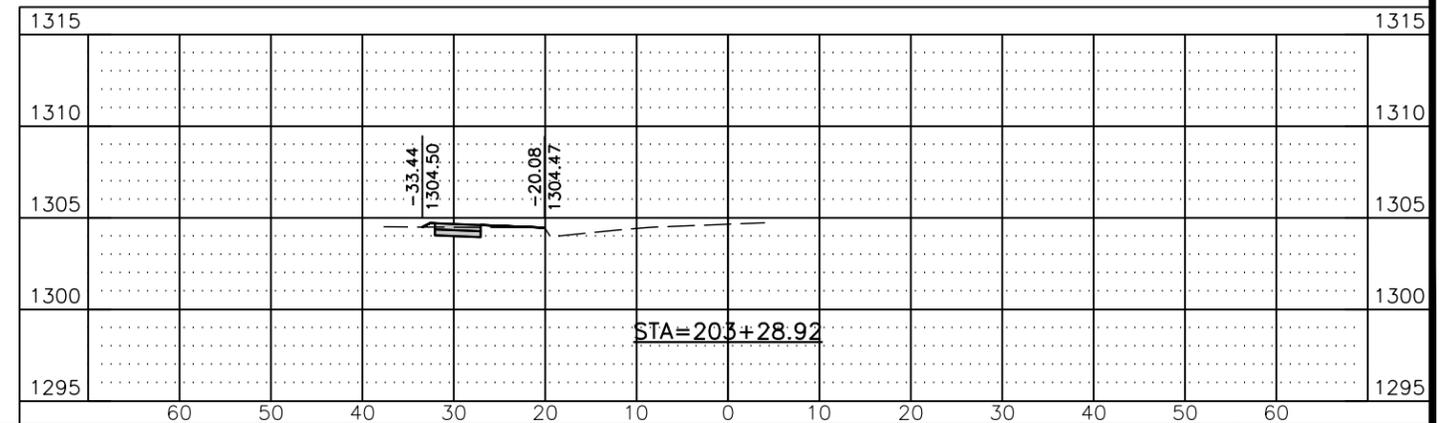
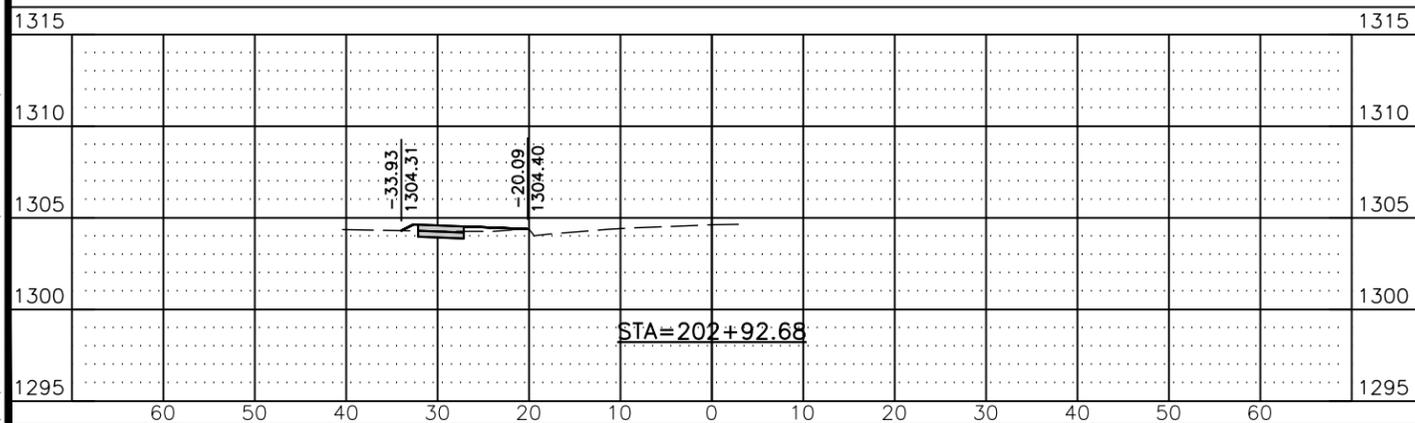
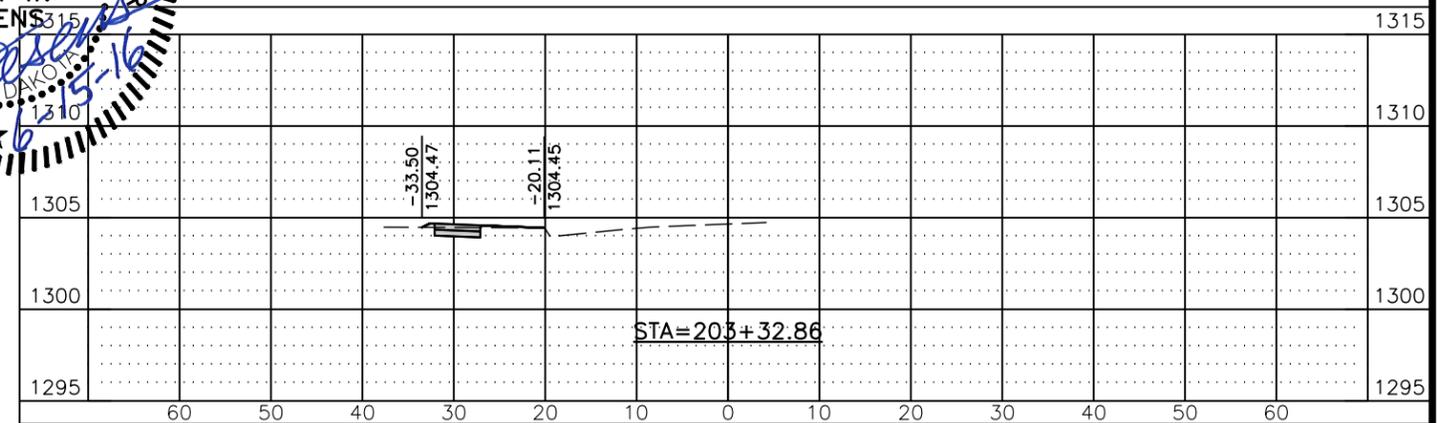
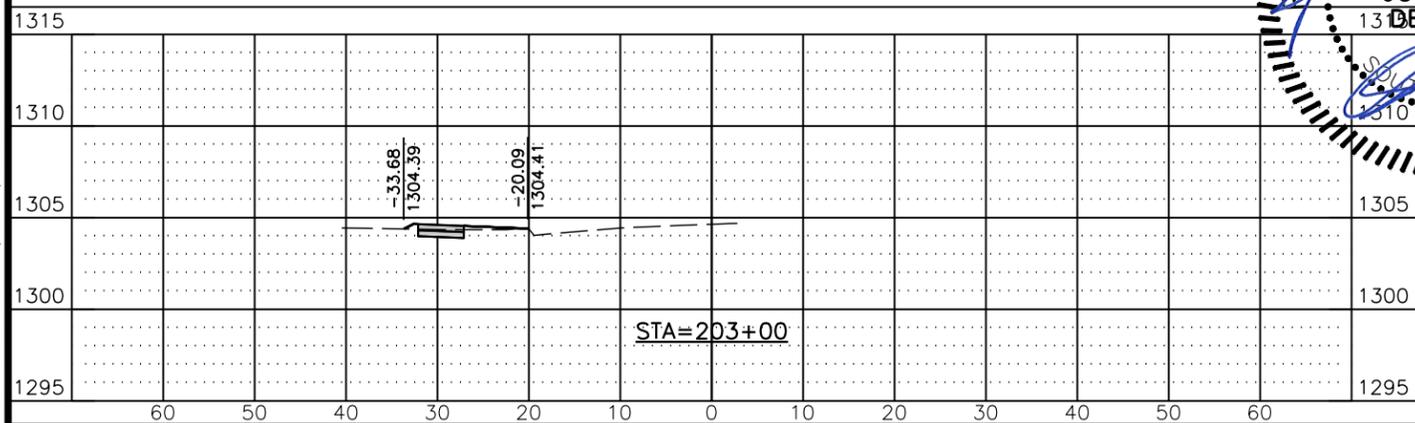
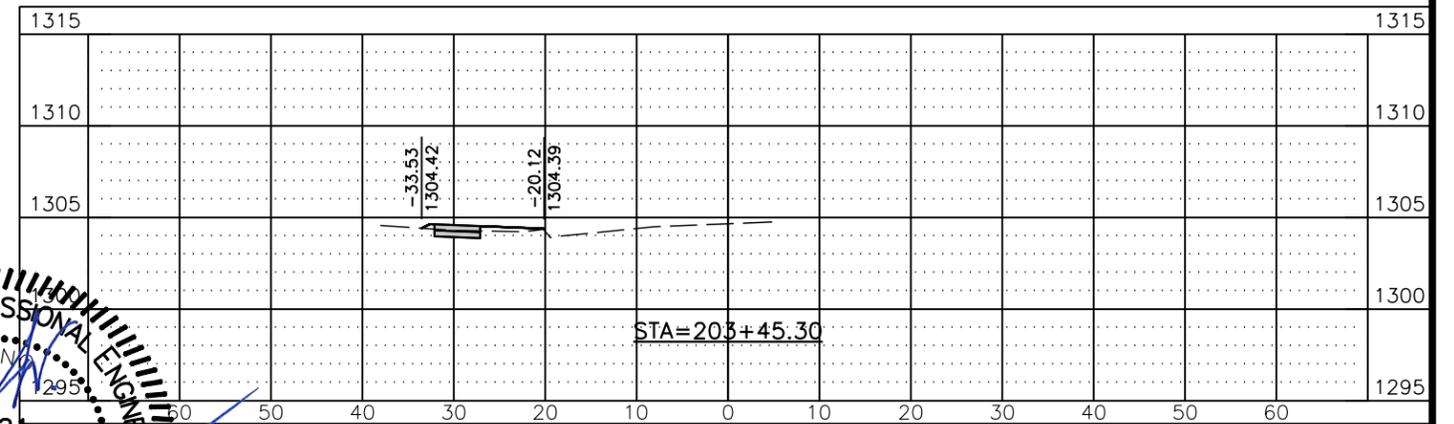
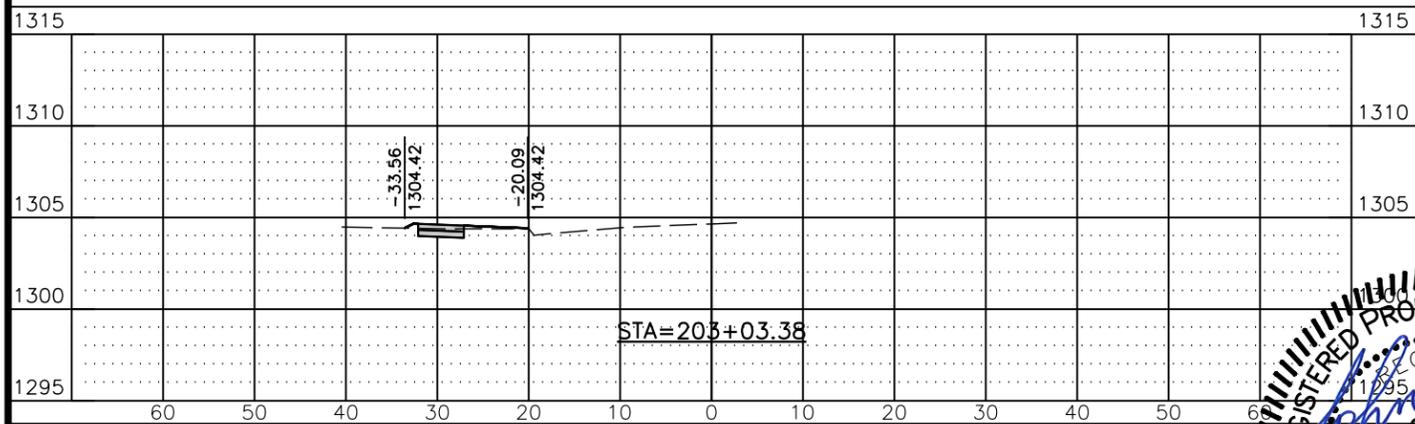
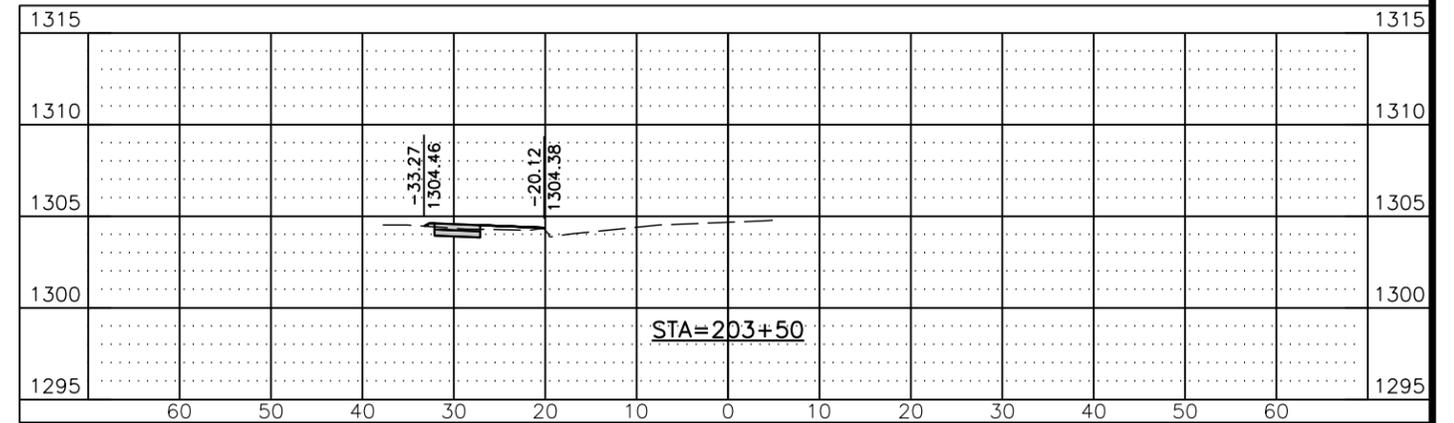
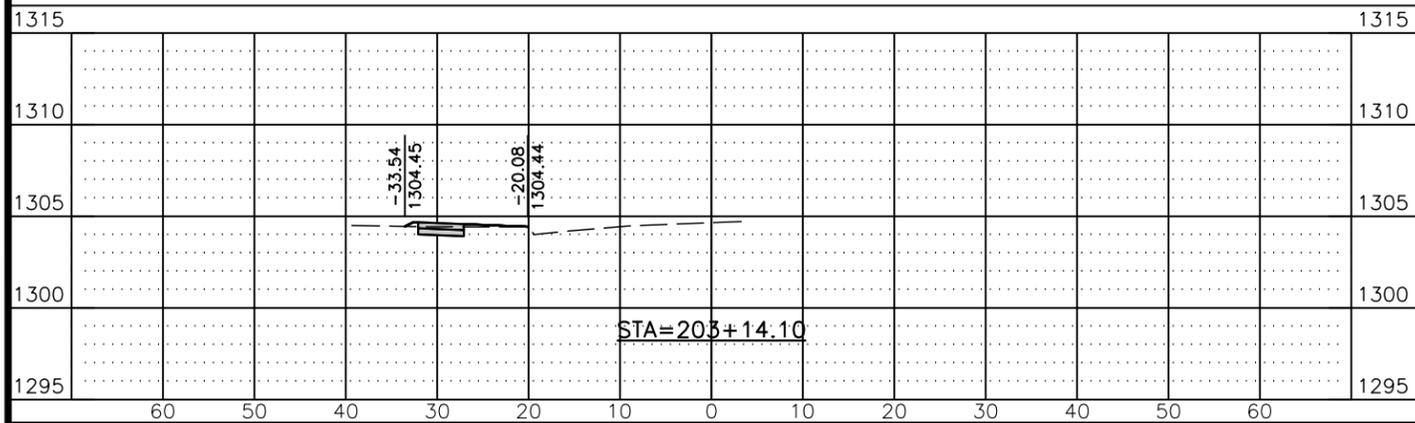
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STATE OF
SOUTH
DAKOTA

PROJECT
P SRTS(27)

SHEET
38

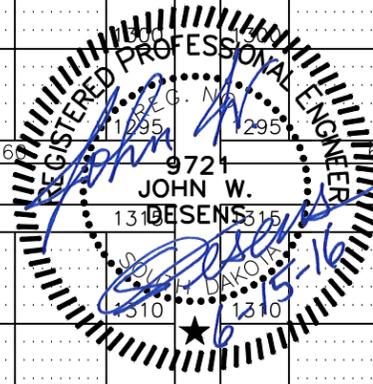
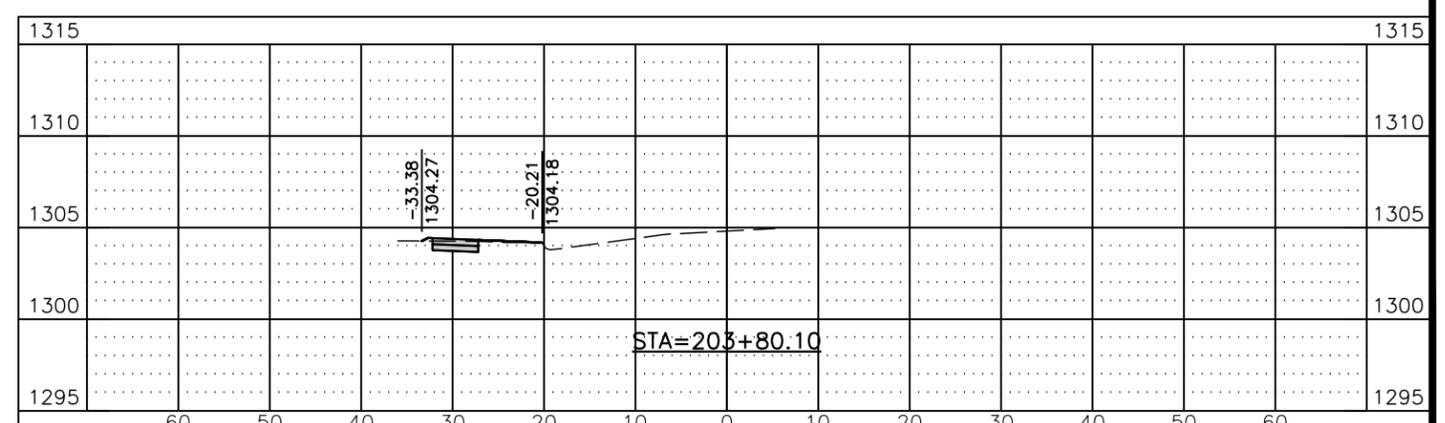
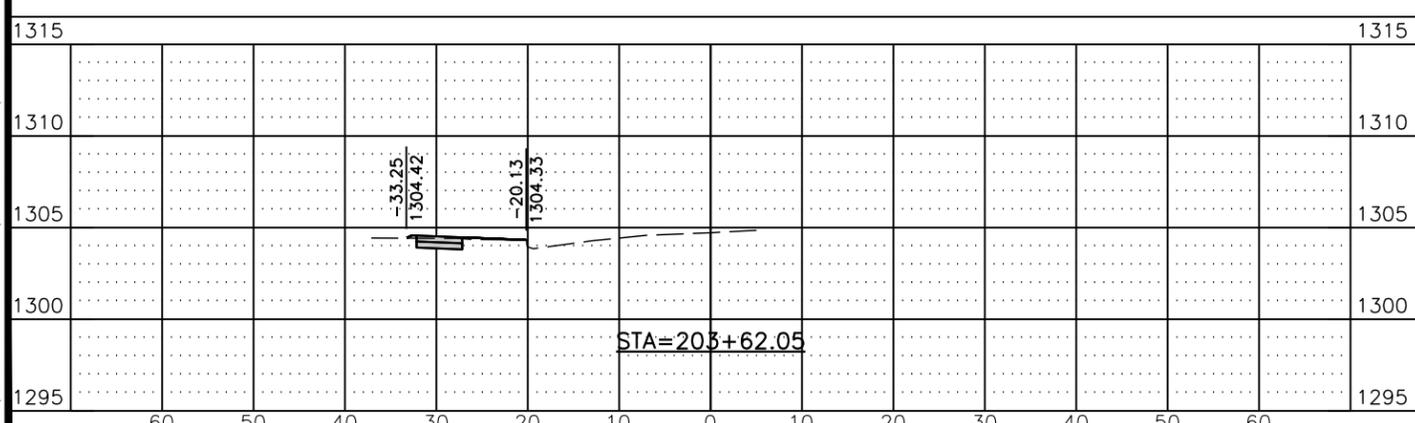
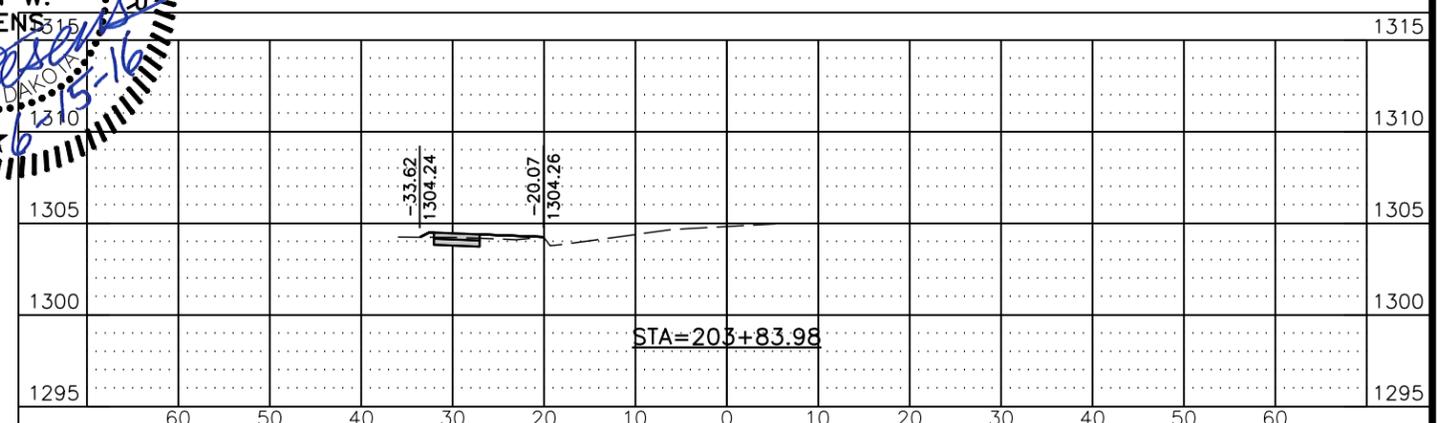
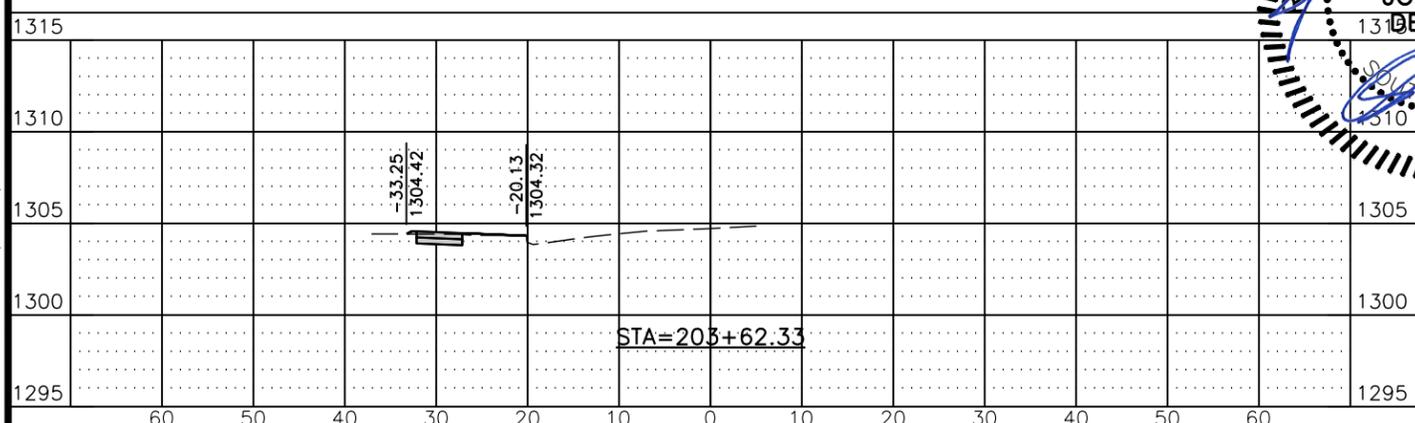
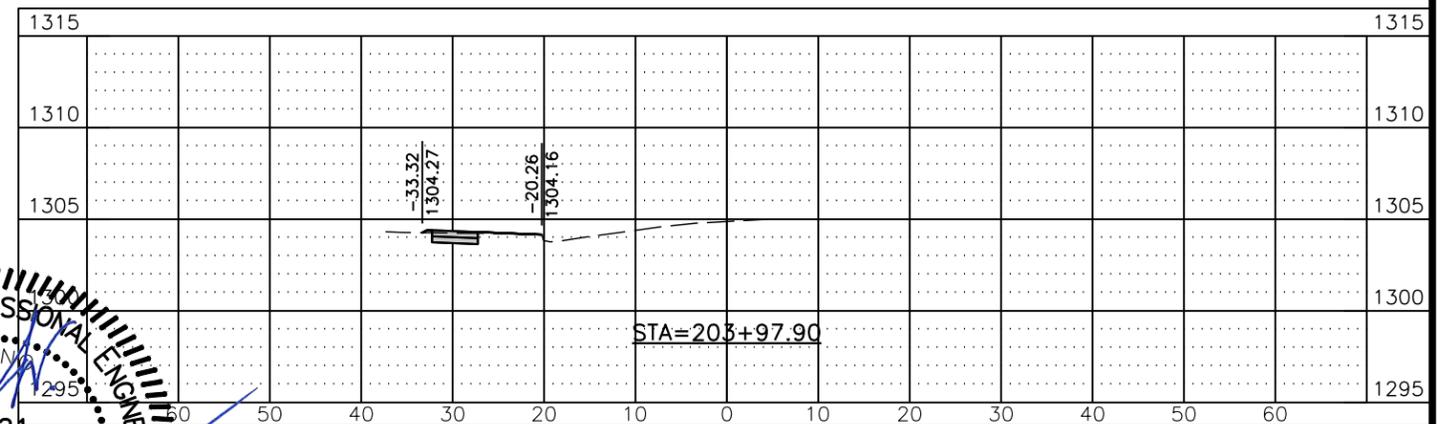
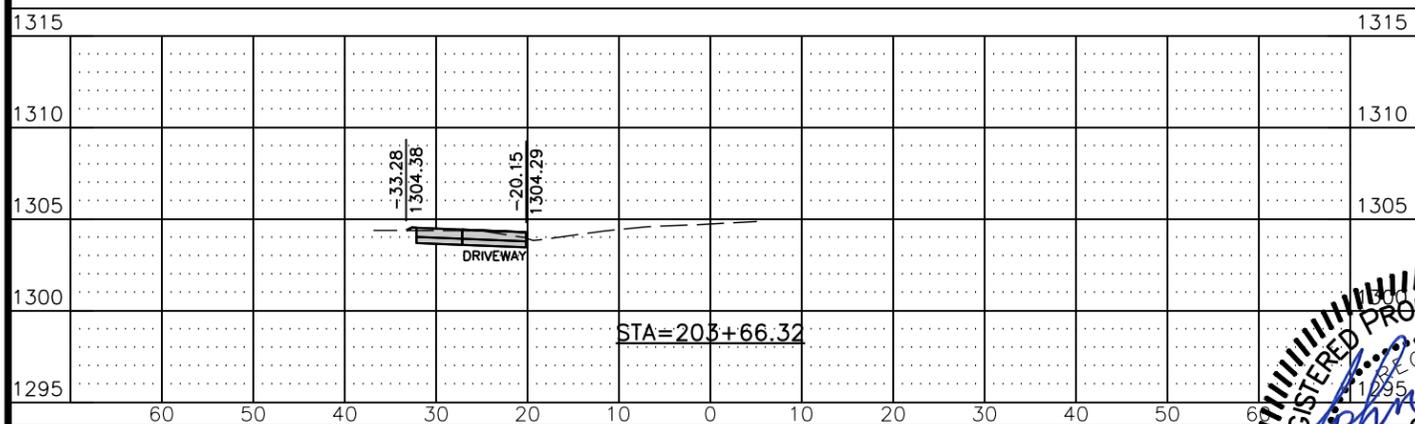
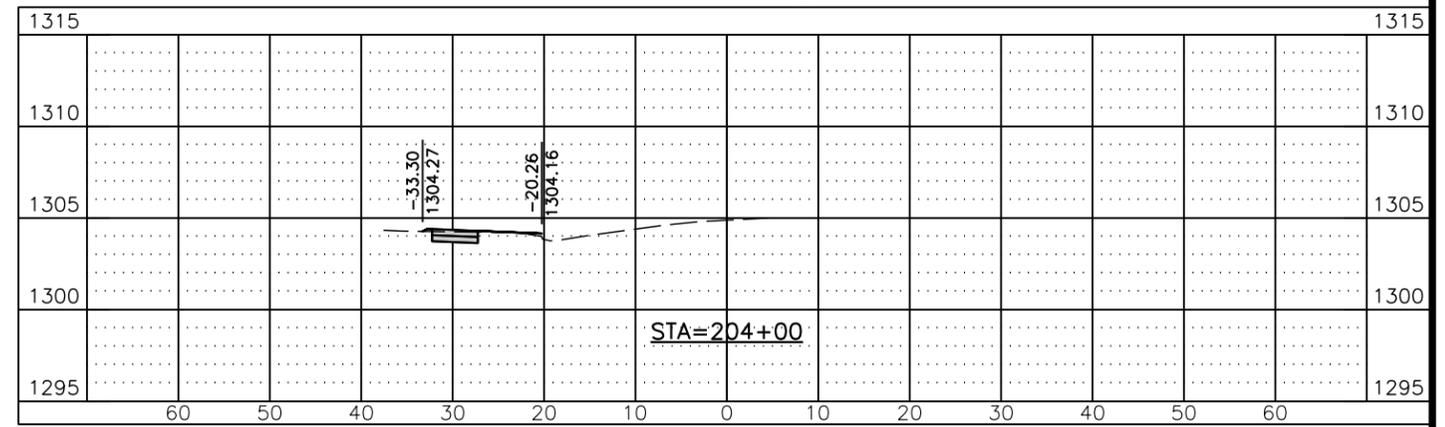
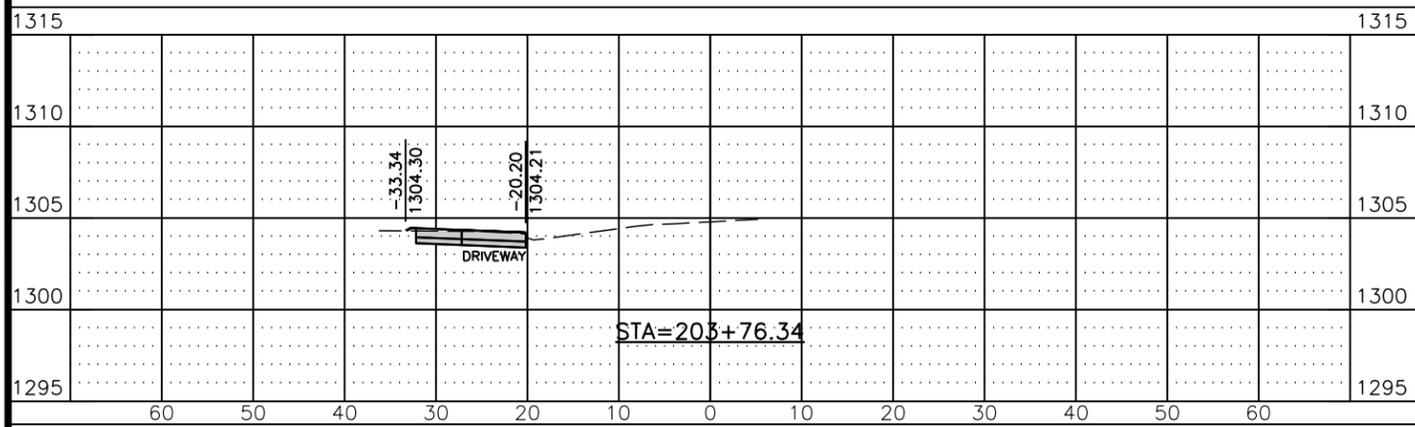
TOTAL
SHEETS
40



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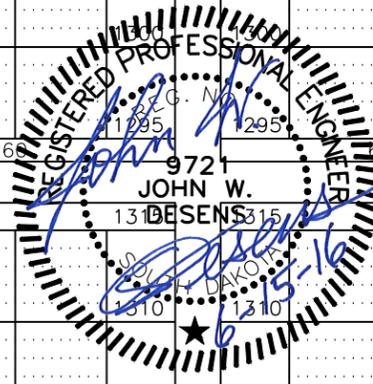
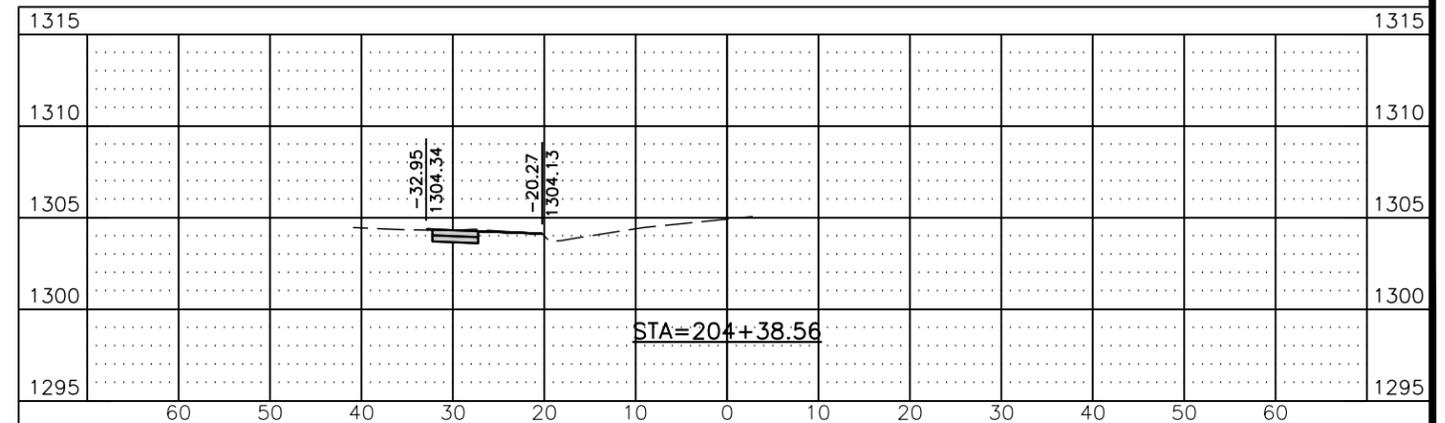
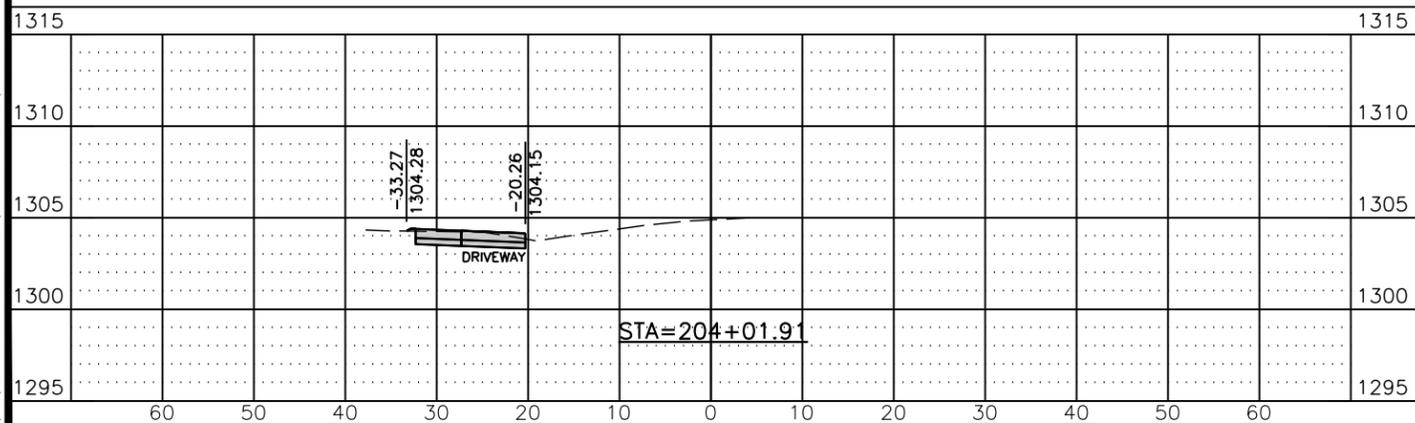
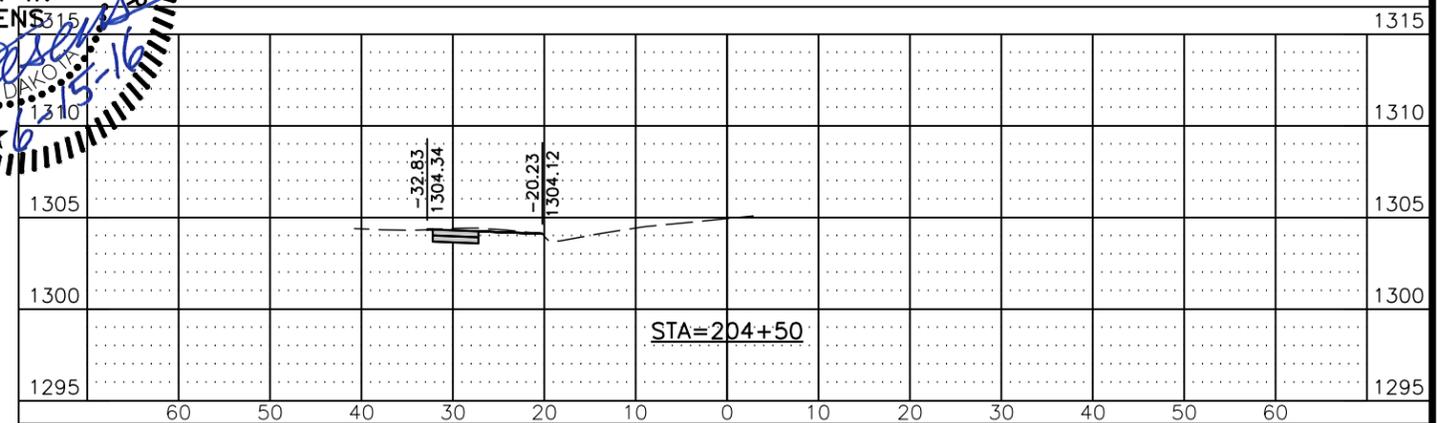
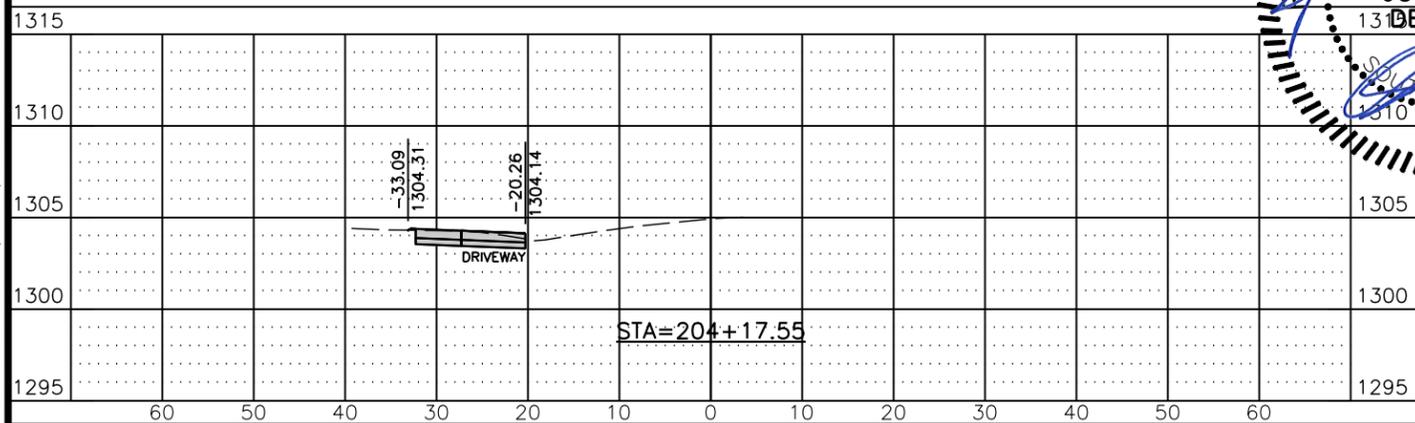
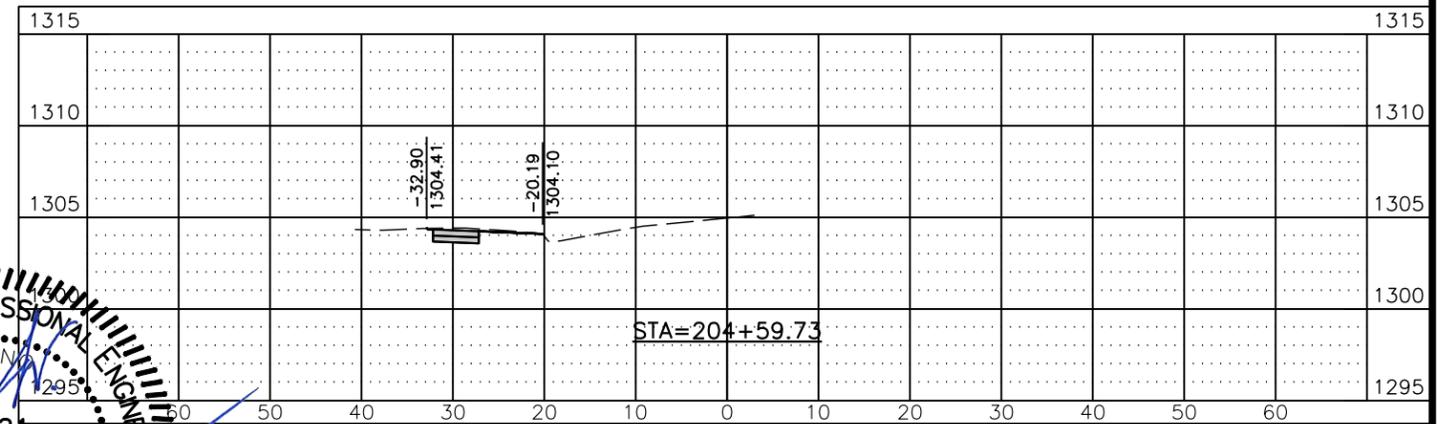
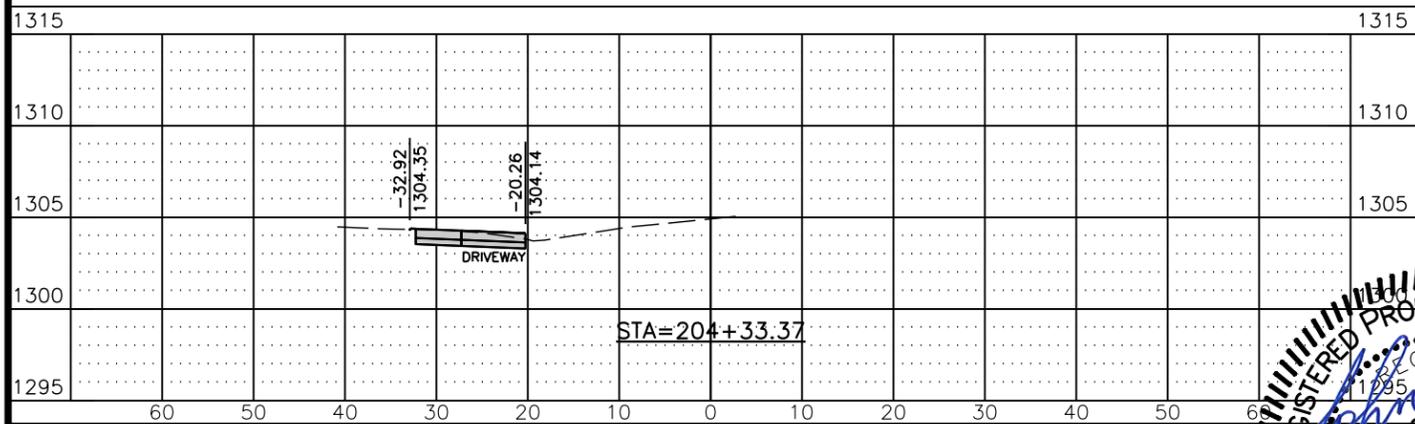
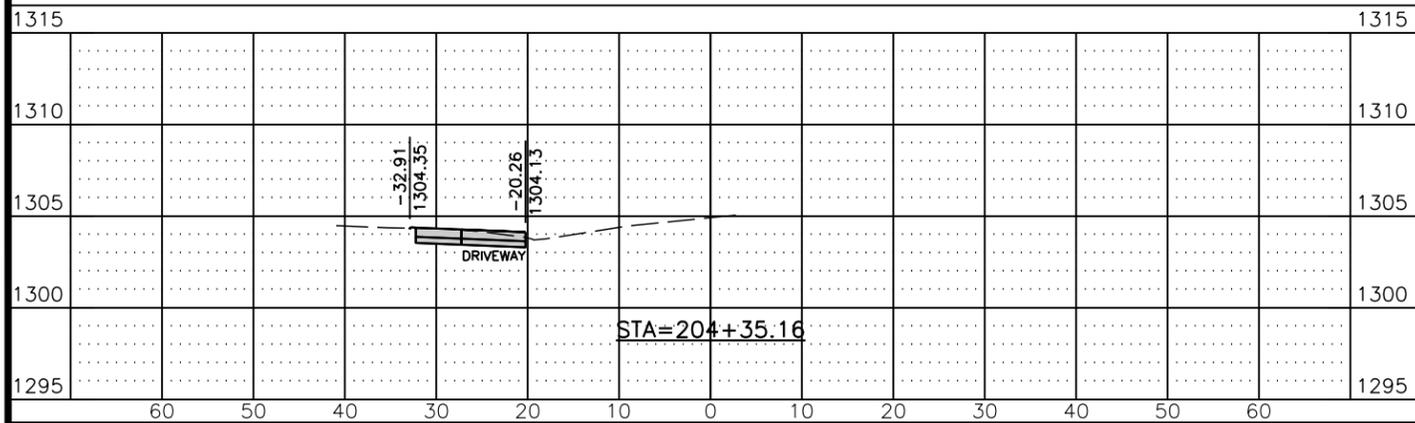
STATE OF SOUTH DAKOTA	PROJECT P SRTS(27)	SHEET 39	TOTAL SHEETS 40
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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P SRTS(27)	40	40



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