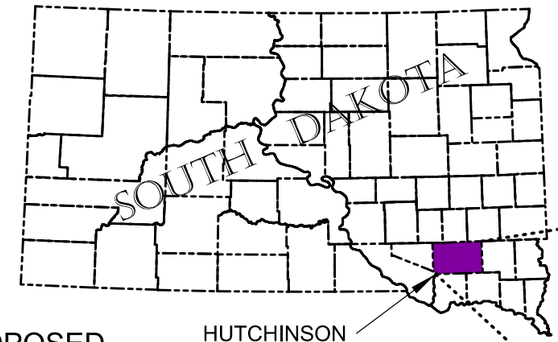
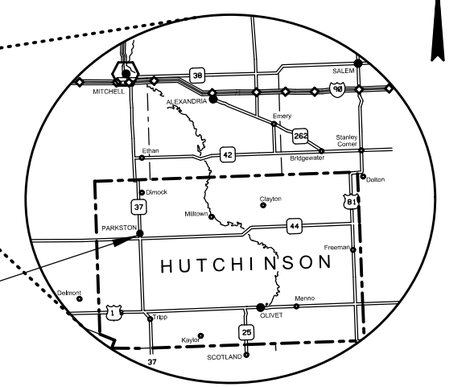
FOR BIDDING PURPOSES ONLY

CITY OF PARKSTON
SAFE ROUTES TO SCHOOL PROJECT 2013
SIDEWALK GRADING PLAN
P SRTS(31) PCN 03X3
PARKSTON, SOUTH DAKOTA

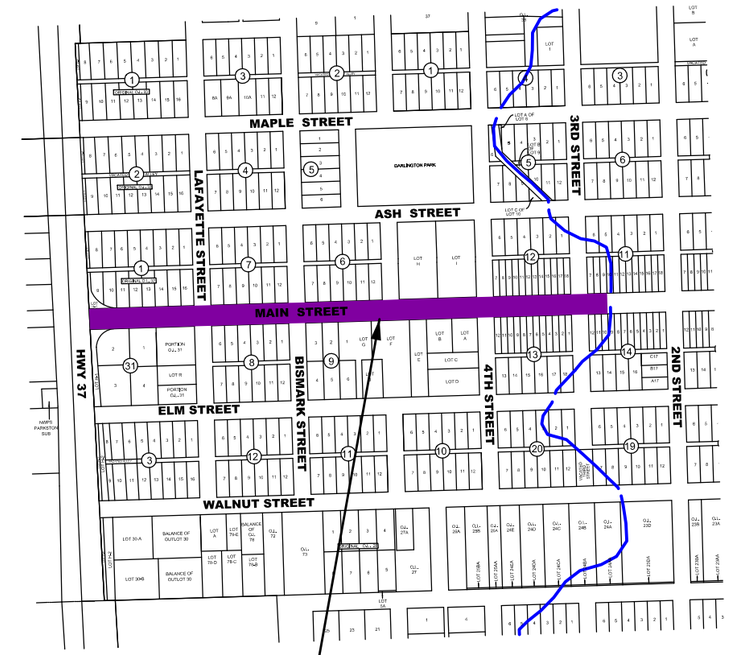
DAVID HOFFMAN, MAYOR
BRAD HOHN, STREET CHAIRMAN
DALE HOFER
KENNETH HENKE
TIM SEMMLER
JEFF MURTHA
ROBERT BERTRAM



HUTCHINSON COUNTY



PROJECT LOCATION
PARKSTON, SD



PROJECT LOCATION

LEGEND

EXISTING

- BUILDING
- POWER POLE/LIGHT POLE
- OP — OVERHEAD POWER LINE
- P — UNDERGROUND ELECTRICAL
- UNDERGROUND TELE., TV, or FIBER
- UNDERGROUND GAS
- CTV — UNDERGROUND CABLE TV
- FOL — UNDERGROUND FIBER OPTIC CABLE
- EDGE OF GRAVEL
- EDGE OF ASPHALT
- EDGE OF CONCRETE
- CENTERLINE OF DITCH
- CENTERLINE OF ROAD
- X — FENCE
- XC — CHAIN LINK FENCE
- PROPERTY LINE
- TREE CONIFEROUS
- TREE DECIDUOUS
- BORING HOLE
- BENCH MARK
- SIGN
- FIRE HYDRANT
- W — WATERMAIN DOMESTIC
- GATE VALVE/CURB STOP
- MANHOLE WATER/SEWER
- S — SANITARY SEWER LINE
- STORM SEWER LINE
- PROPERTY MONUMENT FOUND
- PROPERTY MONUMENT SET
- GUY WIRE TO POWER POLE
- CONCRETE DRIVEWAY OR WALK
- ASPHALT DRIVEWAY OR WALK
- ELECTRICAL TRANSFORMER
- PHONE JUNCTION BOX
- CTV JUNCTION BOX
- DITCH FLOW DIRECTION
- HANDICAPPED PARKING
- LIGHT POLE
- LAWN SPRINKLER HEAD
- LIGHT ON POLE
- FOUND/SET PK NAIL
- SATELLITE DISH
- TREE LINE

PROPOSED

- 1+00 — STATIONING
- SAW CUT / EDGE OF PAVING
- FIRE HYDRANT / GATE VALVE
- W — WATERMAIN DOMESTIC
- SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- STORM SEWER LINE
- STORM SEWER INLET
- STORM SEWER FRAME & GRATE
- SILT FENCE
- CONSTRUCTION LIMITS
- EDGE OF CONCRETE, CURB AND GUTTER
- CONCRETE DRIVEWAY, WALK OR VALLEY GUTTER
- CONCRETE DRIVEWAY
- GRAVEL DRIVEWAY
- EROSION CONTROL BLANKET
- RIPRAP
- COLORED AND PATTERNED SIDEWALK
- ASPHLAT PAVEMENT
- DRAINAGE FLOW
- RAILING
- PERMANENT EASEMENT
- STORM DRAINAGE PIPE FLOW

INDEX OF SHEETS

Page No.	Description
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13	Typical Sections
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26-30	Curb Ramp Detail Sheets
31-35	Pavement Marking Layout
36-42	Standard Plates

SCALES

PLAN: 1" = 40'
PROFILE: H 1" = 40'
V 1" = 4'

STORM WATER PERMIT
Major Recieving
Body of Water: Pony Creek
Area Disturbed: 1.01 acres
Total Project Area: 3.9 acres
Aprox. Begin Lat/Long: 43°23'40.92"N, 97°59'43.30"W

I, KIM LaRUE McLAURY DO HERBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS WERE PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF SOUTH DAKOTA.

KIM LaRUE McLAURY Kim L McLaury
DATE 2-3-14 REG. NO. 5801

REGISTERED PROFESSIONAL ENGINEER
REG. NO
5801
KIM LaRUE
McLAURY
2-3-14
SOUTH DAKOTA

Kim L McLaury

MEI
Professional Engineers and Land Surveyors
Plans Prepared by:
McLaury Engineering Inc.
Parkston, South Dakota

7

MEI #22130102

File Location: U:\Parkston\22130102 West Main Street SRTS\Cd\Sht 1 Title Sheet.dgn
Plot Time: 10:52:52 AM 2/3/2014

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	MOBILIZATION	Lump Sum	LS
100E0010	CLEAR AND GRUB STUMP	1	EACH
110E1130	REMOVE CONCRETE DRIVEWAY PAVEMENT	283.6	SqYd
110E1140	REMOVE CONCRETE SIDEWALK	1396	SqYd
120E0010	UNCLASSIFIED EXCAVATION	178	CuYd
230E0100	REMOVE AND REPLACE TOPSOIL	Lump Sum	LS
250E0020	INCIDENTAL WORK, GRADING	Lump Sum	LS
260E3010	GRAVEL SURFACING	6.6	TON
380E3020	6" PCC DRIVEWAY PAVEMENT	72.1	SqYd
380E3520	6" PCC APPROACH PAVEMENT	18.5	SqYd
633E1430	PAVEMENT MARKING PAINT, 24" WHITE	1330	FT
634E0010	FLAGGING	5	Hour
634E0120	TRAFFIC CONTROL, MISCELLANEOUS	1	LS
651E0040	4" CONCRETE SIDEWALK	14671	SqFt
651E0060	6" CONCRETE SIDEWALK	1831	SqFt
651E0440	4" COLORED AND PATTERNED CONCRETE SIDEWALK	24	SqFt
651E5000	SIDEWALK DRAIN	5	FT
651E7000	TYPE 1 DETECTABLE WARNINGS	374	SqFt
730E0206	TYPE D PERMANENT SEED MIXTURE	181	LB
731E0100	FERTILIZING	59	LB
734E0040	SOIL STABILIZER	89	LB
734E0845	SEDIMENT CONTROL AT INLET WITH FRAME & GRATE	7	EACH
734E5005	DEWATERING	Lump Sum	LS

SPECIFICATIONS

Standard Specifications for Roads & Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal.

GENERAL

At completion of the project, all finish backfill, finish shaping, and finish grading within the project shall create a finished product of quality (both in usage and appearance), shall be done to the satisfaction of the engineer, and shall be incidental to construction with no specific pay item.

The Contractor shall give 48-hour notification for staking.

The general contractor shall have a superintendent or foreman on site at all time during construction for direction and supervision. A subcontractor cannot represent the general contractor.

The Contractor shall perform construction operations only during daylight hours, unless the Engineer approved additional hours.

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

SUGGESTED SEQUENCE OF CONSTRUCTION

1) Erosion Control
2) Project Signage
3) Removals
4) Paving
5) Finish Work

The above sequence is a suggestion. The contractor may provide a different sequence. The contractor shall provide a schedule of construction activities to be reviewed and approved by the engineer at the pre-construction meeting.

MINIMUM TESTING REQUIREMENTS

The contractor shall hire a qualified testing company to perform all testing. This company shall be approved by the engineer before any concrete work can begin. The contractor shall coordinate with the testing company to have tests taken according to the specifications. All tests must be approved by the engineer before any work can continue in the tested area. The engineer can hire a testing company to verify any disputed tests provided by the contractor. The engineer has final approval on all compaction testing and concrete testing. All cost associated with testing shall be incidental to the project

In general, one set of concrete cylinders shall be made for the first 250 SY of concrete placed (for the first day's production); thereafter, one set of cylinders shall be made per 250 SY of concrete produced from each plant per day. No more than 1 set per day will be required, except in instances of failing fresh concrete tests. A set of cylinders shall consist of a minimum of 4 cylinders.

Concrete air content, unit weight, slump, and temperature determinations shall be made each time a concrete cylinder for compressive strength determination is made.

The contractor will be responsible for all failing tests and will pay for all retesting costs until a passing test is accomplished.

UTILITIES

The utility owners shall adjust utilities within the limits of the proposed construction unless otherwise indicated in these plans. The Contractor shall cooperate with the utility companies in accordance with Section 5.6 of the SDDOT Standard Specifications.

Field verification of depth and location of utilities will need to be done before construction of the project proceeds.

UTILITY	UTILITY COMPANY	CONTACT PERSON	PHONE
Water	City Of Parkston	Brenda Huether	605-928-3321
Sewer	City Of Parkston	Brenda Huether	605-928-3321
Telephone	SD One Call		800-781-7474
Electricity	SD One Call		800-781-7474
Gas	SD One Call		800-781-7474

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

The contractor shall coordinate the relocation of all privately owned utility facilities when necessary to accommodate the new construction.

The contractor shall safe guard all utilities and coordinate his efforts to coincide with utility work in order to avoid interference and to minimize inconvenience between contractors and the public.

Any damage to utilities because of the contractor's carelessness shall be repaired at the contractor's expense.

Utility location as shown on the plan sheets may not be complete and accurate. The contractor shall call for utility locations in the field prior to beginning any excavation. The contractor shall replace any damaged utilities if marked on the plan sheets or located by utility companies.

All underground utilities should be accurately located in the field by the respective utility companies before any excavation, and notification of such utilities will be the responsibility of the contractor. Utilities as located within these plans are shown as a convenience to the contractor, and the engineer will not be held responsible for any omissions or inaccuracies.

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HISTORICAL PRESERVATION OFFICE CLEARANCES

To obtain State Historical Preservation Office (SHPO) clearance, a cultural resources survey may need to be conducted by a qualified archaeologist. In lieu of a cultural resources survey, the Contractor could request a records search from Jim Donohue, State Archaeological Research Center (SARC). Provide SARC 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 no artifacts have been found *on* the site. The Contractor shall arrange and pay for the cultural resource survey and/or records search.

If any earth disturbing activities occur within the current geographical or historic boundaries of any South Dakota reservation, the Contractor shall obtain Tribal Historical Preservation Office (THPO) clearance. If no THPO exists, the required SHPO clearance shall suffice, with documentation of Tribal contact efforts provided to SHPO.

To facilitate SHPO or THPO responses, the Contractor should submit a records search or cultural resources survey report to the DOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3268). Allow 30 days from the date this information is submitted to the Environmental Engineer for SHPO/THPO approval. The Contractor is responsible for obtaining all required permits and clearances for staging areas, borrow sites, waste disposal sites, and all material processing sites. The Contractor shall provide the required permits and clearances to the Engineer at the preconstruction meeting.

WASTE DISPOSAL SITE

The Contractor will be required to furnish a site(s) for the disposal of construction/demolition debris generated by this project. Construction/demolition debris may not be disposed of within the ROW.

All material generated by this project must be disposed of at a permitted site. Depending on what material is generated and whether it is contaminated or uncontaminated will determine which permitted facility can accept it. Permitted facilities include construction and demolition debris sites, restricted use sites, and regional landfills. Contact the SD DENR Waste Management Program at 605-773-3153 to identify locally permitted disposal sites for various categories of contaminated and uncontaminated materials.

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 Engineer.

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

1. Construction/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/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”.

2. 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.

The property owner may have different agreement for taking on waste material. A copy of a written agreement (signed by both parties) will be required in the engineer’s office before any material is disposed of.

TRAFFIC CONTROL, MISCELLANEOUS

The Contractor will be required to maintain traffic in accordance with Section 4.4 of the Standard Specifications, 2004 Edition. Traffic Control shall be in accordance with Section 634 of the Standard Specifications, 2004 Edition, and The Manual on Uniform Traffic Control Devices (MUTCD), Millennium Edition. When warranted, 24 hour a day protection shall be undertaken.

Erect only those signs that are applicable to the work in progress. When the Contractor is working at specific work areas within the project, only those traffic control devices applicable to that operation should be displayed. Non-applicable traffic control devices shall be removed. The Fixed Location Signs at the ends of the project shall be installed prior to work beginning on the project.

Removing, relocating, covering, salvaging and resetting of permanent traffic control devices, including delineation, shall be the responsibility of the Contractor. The cost of this work shall be incidental to Traffic Control. Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the City.

Traffic Control includes all necessary traffic control devices and any relocation required to suit construction needs at that time. It also includes removing devices from the project at construction completion.

The Contractor shall designate an employee whose responsibility is the maintenance of traffic, 24 hours a day and 7 days a week. The person so designated must have training and experience in the field of construction traffic control and be knowledgeable about the Manual on Uniform Traffic Control Devices (MUTCD). The cost of the traffic control person shall be incidental to Traffic Control. The Engineer must approve the employee selected. The name, phone number (including cell number), and location of person(s) shall be provided to the local law enforcement and the Engineer.

A BUMP sign, if appropriate, shall be placed in advance of all areas that result in a rough driving surface. Sign will be W8-1, 36” x 36” in size.

Sufficient signs have been included in the Estimate of Quantities to sign one work area. If the Contractor elects to work on additional sites simultaneously, the cost of additional signing shall be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

The contract lump sum price for Traffic Control, Miscellaneous shall include all labor, equipment and materials necessary to furnish, erect and maintain the traffic control devices for the duration of the project.

Traffic control devices shall meet the crashworthy requirements of the National Cooperative Highway Research Program Report 350 (NCHRP 350) for Category I, II, and III devices. It shall be the responsibility of the Contractor to insure that all devices meet the applicable NCHRP 350 requirements.

Category I traffic control devices include low mass, single piece traffic cones, tubular markers, single piece drums, and delineators. Auxiliary lights or signs shall be attached to these devices, unless approval has been granted by FHWA. The manufacturer may certify these devices as being NCHRP 250 crashworthy.

Category II traffic control devices include those which are larger than the Category I devices and may weigh up to 100 pounds. This includes plastic barricades and portable sign supports. Acceptable Category II devices are those, which have been crash-tested and have received an acceptance letter from the Federal Highway Administration.

Category III traffic control devices include barriers or other fixed or high mass devices, including portable sign trailers.

The following Traffic control devices: reflectorized drums, cones, tubular markers and detour signs (M4-8, M4-9, or M4-10 series) shall be sheeted with micro-cube corner prismatic material. Orange colored material shall be fluorescent.

Tape may also be strung between traffic control devices to make a more visible barrier.

Signs can be mounted on mobile units or on breakaway posts. These will meet MUTCD standards.

Flagger(s) will be required where work activity and/or equipment encroach into a lane open to traffic. All work associated with flagging shall be incidental to the contract price per hour for Flagging.

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TRAFFIC CONTROL, MISCELLANEOUS (Cont.)

Work activities during non-daylight hours are subject to prior approval.

Storage of vehicles and equipment shall be as near the right-of-way as possible. Any damage to vegetation, surfacing, grading, and existing signs resulting from such individuals from indiscriminate use shall be repaired and/or restored by the contractor, at no expense to the City of Parkston, and to the satisfaction of the Engineer.

The parking of vehicles in front of the full roadway closure barricades will not be permitted. The Contractor's equipment and employee vehicles should be parked at a location where they will not obscure the traffic control or be hazard to approaching traffic.

Water will be used to control dust as necessary. Any cost for dust control would be incidental to the contract unit price for the various contract items.

Affected parties and the engineer shall be notified two (2) business days prior to any access closures.

The contractor shall furnish and install three (3) Road Work Ahead W20-1 (48"X48") signs at the locations directed by the engineer and maintain them during the entire project. The cost to furnish, install and maintain these signs shall be incidental to the price bid for Traffic Control, Miscellaneous, Lump Sum.

The contractor shall have 50 channelization devices and 2 rolls of orange fencing available to control individual work areas. These devises shall be moved as needed and shall be incidental to the price bid for Traffic Control, Miscellaneous, Lump Sum.

All truck traffic shall utilize SD Highway 37 and shall not be allowed down any City streets that are not designated as typical city truck route unless prior authorization is obtained.

CITY OF PARKSTON SALVAGE RIGHTS

Salvage work of any nature is incidental to the contract unless otherwise noted. The City shall salvage any material or items involved with the project that they desire including extra soil and reclaimed asphalt/concrete. Contact the City Engineer, McLaury Engineering, Inc., at (605) 928-7676 regarding any salvageable items.

CLEAR AND GRUB STUMP

The Contractor shall grind the stumps down to a minimum depth of 10" below proposed finish surface grade.

The approximate tree sizes listed in the Stump Removal Table are only approximate sizes and shall serve only as a guide in bidding. The actual size shall be verified in the field as the Engineer makes no guarantee of the size listed.

All costs associated to grind the stumps and dispose of the material shall be incidental to the contract unit price per each for "Clear and Grub Stump".

TABLE OF CLEAR AND GRUB STUMP

Station	L/R	Approx. Tree Size (in)	Quantity (Each)
12+89.7	32.91' R	24	1
		Total:	1

REMOVAL TABLES

TABLE OF CONCRETE DRIVEWAY PAVEMENT REMOVAL

Station to	Station	Quantity (SqYd)
2+81.4 - 39.99' L	3+12.5 - 39.95' L	27.3
2+82.3 - 49.83' R	3+05.9 - 49.76' R	23.6
3+19.5 - 45.63' R	3+41.6 - 45.42' R	12.5
3+70.1 - 39.88' L	3+93.5 - 39.85' L	20.9
6+03.6 - 37.01' L	6+21.2 - 37.08' L	9.9
6+17.8 - 42.71' R	6+45.4 - 43.05' R	15.5
6+63.4 - 40.24' L	6+72.5 - 40.27' L	8.1
7+10.3 - 40.41' L	7+20.5 - 40.45' L	9.1
7+10.7 - 45.63' R	7+19.2 - 45.57' R	7.7
7+54.9 - 37.48' L	7+66.6 - 37.49' L	6.4
8+79.8 - 51.14' R	9+05.9 - 51.23' R	64.3
9+53.8 - 41.63' R	9+62.6 - 41.59' R	4.9
10+24.8 - 40.99' R	10+35.7 - 41.06' R	5.8
10+76.9 - 40.21' R	10+85.7 - 40.33' R	6.3
11+39.6 - 43.82' R	11+51.9 - 43.79' R	11.1
12+14.7 - 39.86' R	12+26.7 - 40.01' R	5.8
12+73.3 - 40.56' R	12+81.5 - 40.54' R	4.6
13+43.1 - 39.71 R	13+56.0 - 39.69' R	6.3
14+47.6 - 39.62' R	14+61.3 - 39.52' R	6.5
17+03.2 - 42.25' L	17+20.3 - 42.27' L	15.7
17+12.5 - 39.23' R	17+19.4 - 39.21' R	3.8
17+85.8 - 39.31' L	17+95.8 - 39.31' L	5.3
18+97.0 - 38.56' R	19+31.4 - 38.43' R	2.2
	Total:	283.6

TABLE OF SIDEWALK REMOVAL

Station to	Station	Quantity (SqYd)
1+95.0 - 45.48' R	2+82.3 - 45.05' R	51.1
3+05.9 - 45.02' R	3+19.5 - 44.85' R	6.6
3+12.5 - 35.85' L	3+70.2 - 35.78' L	29.9
3+41.6 - 44.82' R	4+65.1 - 44.54' R	66.0
3+93.6 - 35.83' L	4+65.2 - 36.68' L	37.7
5+06.0 - 44.33' R	6+17.8 - 42.71' R	65.1
5+06.2 - 36.44' L	6+03.6 - 36.18' L	48.1
6+21.2 - 36.11' L	6+63.4 - 36.41' L	19.8
6+45.4 - 42.63' R	7+10.7 - 42.21' R	34.2
6+72.4 - 36.30' L	7+10.4 - 36.46' L	18.4
7+19.2 - 42.00' R	8+34.0 - 42.83' R	65.1
7+20.5 - 36.45' L	7+54.9 - 36.51' L	15.3
7+66.6 - 36.57' L	8+33.3 - 37.98' L	35.1
8+73.6 - 42.64' R	8+79.7 - 41.75' R	3.8
8+74.3 - 38.43' L	12+00.2 - 39.93' L	185.5
9+05.5 - 45.01' R	9+53.8 - 41.57' R	26.4
9+62.6 - 41.51' R	10+24.8 - 40.99' R	37.5
10+35.7 - 41.06' R	10+76.9 - 40.21' R	21.3
10+85.7 - 40.33' R	11+39.5 - 40.16' R	28.4
11+51.9 - 40.07' R	12+14.7 - 39.86' R	31.8
12+26.7 - 40.01' R	12+73.3 - 39.77' R	28.0
12+41.1 - 40.69' L	12+53.5 - 39.53' L	14.5
12+81.5 - 39.79' R	13+43.1 - 39.71' R	30.7
13+56.0 - 39.69' R	14+47.6 - 39.62' R	44.7
14+61.3 - 39.52' R	15+65.8 - 40.41' R	64.9
15+45.4 - 40.42' L	15+65.8 - 41.04' L	29.5
16+06.5 - 40.46' L	17+03.1 - 39.77' L	69.1
16+06.8 - 39.75' R	17+12.5 - 38.79' R	59.7
17+19.4 - 38.60' R	19+31.4 - 37.79' R	112.1
17+20.3 - 39.49' L	17+85.8 - 39.14' L	36.1
17+95.8 - 39.07' L	19+31.6 - 40.34' L	74.2
19+78.6 – 37.09' L	19+85.4 – 37.33'L	4.7
	Total:	1395.7

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UNCLASSIFIED EXCAVATION

UNCLASSIFIED EXCAVATION	
Street	Total Excavation (CY)
MAIN STREET	177.5
Total	177.5

Plans quantity will be the basis of payment for Unclassified Excavation. The bid item for Unclassified Excavation shall include all costs associated with subgrade preparation including scarification and recompaction of 10 inches of material below subgrade elevation and achieving subgrade elevation. This also includes salvaging and stockpiling any topsoil, and disposing of any waste material.

REMOVE AND REPLACE TOPSOIL

The Contractor may or may not salvage topsoil during grading operations. It is the Contractor's responsibility to provide topsoil to finish the project. Their source is their choice. No extra cost will be paid for material brought in. All labor and material associated with topsoiling is incidental to the "Remove & Replace Topsoil" bid item.

Topsoil location is from the Back of Curb location to the construction limits. Estimated quantity of topsoil is 319 CuYd. The payment for the standard bid item "Remove & Replace Topsoil" shall be based on plan shown quantities. No field measurement will be made for this item.

Topsoil shall be black in color, clumpless, placed at a thickness of a minimum of 4 inches, and approved by the Engineer. No gravel or rocks will be allowed in the topsoil.

REMOVE AND REPLACE TOPSOIL			
Street	To Street	Side	Quantity (CuYd)
WEST MAIN STREET			
Hwy 37	Lafayette St	North	21.1
Hwy 37	Lafayette St	South	32.2
Lafayette St	Bismark St	North	39.0
Lafayette St	Bismark St	South	39.8
Bismark St	Wallace St	North	47.5
Bismark St	4th St	South	70.0
Wallace St	4th St	North	2.0
4th St	3rd St	North	30.0
4th St	3rd St	South	36.9
		Total:	319

INCIDENTAL WORK, GRADING

The following is a list of major items of Incidental Work:

1.) Curb Stop Sleeves: There are a number of curb stops located in the proposed concrete. These curb stops will be required to have a PVC sleeve installed around them and adjusted to approximately 0.5" below finish concrete elevation. The contractor shall take care not to damage any existing curb stops.
2.) Mailboxes, Street & Miscellaneous Signs, and Sprinklers: See note on Page 8 for detailed explanation.
3.) Curb Grinding: See detailed note
4.) Protection of Existing Driveways: All work associated with protecting the edges of concrete driveway pavement which is to remain shall be incidental.
5.) Protection of Adjacent Landscaping and Existing Trees: All work associated with protecting and working around landscaping and trees which are to remain shall be incidental. Some trees and landscaping are very near or adjacent to proposed sidewalk.
6.) Werning Chiropractic Ramp & Railing: All additional work required to form and pour the access ramp to Werning Chiroproactic Clinic and detach, protect and reattach the existing handrail. The ramp sidewalk is paid for as 4" PCC Sidewalk. All other additional work necessary for the ramp and railing is incidental.
7.) Maintaining Appropriate Access to Werning Chiropractic: All work associated with maintaining an appropriate access to Werning Chiropractic at all times. Phasing of work or temporary crossings may be necessary in order to ensure that access to this business is maintained.

GRAVEL SURFACING

Gravel in gravel driveways will be a 6 inch compacted depth. The bid item for "Gravel Surfacing" is for all work associated to furnish and install the gravel to the depth and density specified in the specifications.

Gravel under concrete driveways and 6" sidewalks shall be 4 inches minimum and 2 inches minimum under 4" sidewalk. All gravel under driveways and sidewalks shall be incidental to the "6" PCC Driveway Pavement", "4 inch Concrete Sidewalk", and "6 inch Concrete Sidewalk" bid items.

TABLE OF 6" GRAVEL SURFACING			
Station to	Station	Quantity (CuYd)	Quantity (Ton)
10+24.9 - 44.25' R	10+37.1 - 44.18' R	0.6	1.1
12+17.1 - 43.67' R	12+25.4 - 43.65' R	0.5	0.9
13+43.2 - 43.43' R	13+55.5 - 43.40' R	0.7	1.3
14+47.1 - 43.23' R	14+61.0 - 43.20' R	0.8	1.5
14+48.2 - 35.23' R	14+61.3 - 35.20' R	0.7	1.3
17+95.8 - 42.31' L	18+01.6 - 42.32' L	0.3	0.6
	Total:	3.6	6.6

CURB GRINDING

The contractor shall grind existing curb to provide the sidewalk ramp with a 5 foot bottom and the designed transition section. The grinding shall produce a smooth, uniform surface with irregularities not exceeding ¼". At completion of curb grinding the ramp shall meet all applicable elevation, grade, and transition requirements as detailed for new construction on Standard Plate 651.02 Type 2 Curb Ramp as well as all ADA requirements.

The existing curb ramps have a bottom width of approximately 4 foot. This bottom width needs to be widened, as described above, to provide a 5 foot bottom width. Some areas do not currently have curb ramps. These areas will require grinding the full depth of the curb to provide a 5 foot bottom width and flares. The table provided gives an estimation of the linear feet of curb that will require grinding.

Curb Grinding shall include all equipment and labor to grind the curb to the elevation determined by the Engineer. Any damage caused to the surrounding curb during the grinding will be repaired at the cost of the Contractor. Curb Grinding shall be included the contract lump sum price for Incidental Work, Grading.

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CURB GRINDING (Cont.)

TABLE OF CURB GRINDING		
Station to	Station	Quantity (LF)
1+95.0 - 45.48' R	1+95.0 - 48.11' R	2.7
4+51.5 - 22.63' L	4+60.5 - 23.41' L	9.0
4+51.6 - 30.37' R	4+60.7 - 31.17' R	9.0
4+65.0 - 37.25' R	4+65.1 - 45.73' R	4.1
4+65.2 - 29.77' L	4+65.2 - 37.84' L	4.7
5+06.0 - 45.54' R	5+06.2 - 36.97' R	3.6
5+06.3 - 29.68' L	5+06.3 - 38.07' L	5.3
5+18.5 – 22.77' L	5+27.5 – 22.77' L	9.0
5+24.8 – 30.19' R	5+33.8 – 30.19' R	9.0
8+20.3 - 23.53' L	8+29.34 - 24.91' L	9.3
8+20.4 - 29.48' R	8+29.4 - 29.94' R	9.0
8+33.3 - 30.60' L	8+33.4 - 38.97' L	4.2
8+33.7 - 34.91' R	8+33.9 - 43.79' R	4.2
8+73.6 - 44.09' R	8+73.8 - 35.17' R	4.9
8+74.4 - 30.94' L	8+74.4 - 39.06' L	4.2
8+77.5 - 25.04' L	8+86.3 - 23.56' L	5.3
8+77.8 - 30.38' R	8+80.8 - 29.53' R	3.1
11+81.7 – 24.36' L	11+90.7 – 24.36' L	9.0
11+82.0 – 28.57' R	11+91.0 – 28.57' R	9.0
12+00.4 - 32.49' L	12+00.5 - 40.92' L	4.3
12+41.1 - 41.31' L	12+41.2 - 31.92' L	5.0
12+46.5 - 28.37' R	12+55.5 - 28.40' R	4.9
12+46.8 - 24.77' L	12+55.8 - 24.50' L	4.5
15+51.5 - 25.43' L	15+53.7 - 25.24' L	2.2
15+52.1 - 27.60' R	15+60.8 - 28.09' R	4.8
15+65.5 - 33.12' R	15+65.8 - 41.99' R	5.0
15+65.8 - 42.43' L	15+65.8 - 40.12' L	2.3
16+06.8 - 41.49' R	16+11.7 – 28.00' R	11.4
19+14.2 – 26.63' R	19+23.0 – 26.60'R	9.0
19+17.5 – 26.27' L	19+26.5 – 26.95' L	9.0
19+30.9 - 31.50' R	19+31.3 - 33.43' R	2.0
19+31.2 - 32.52' L	19+31.5 - 41.28' L	4.3
	Total:	188

CONCRETE, DRIVEWAY & SIDEWALK

Concrete shall be Class M-6 Portland Concrete Cement. Class M-6 Portland Concrete Cement shall conform to Class M6 (I28) in Section 462 of the SDDOT 2004 Standard Specifications for Roads & Bridges.

Contractor's unit price per square yard of 6 Inch PCC Driveway Pavement, 6 Inch PCC Approach Pavement or per square foot of 4 Inch Concrete Sidewalk, 6 Inch Concrete Sidewalk will be full compensation, complete in place, and will include the following:

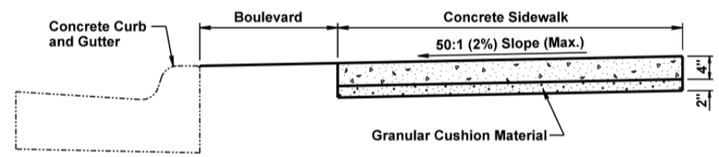
1. All those costs associated with the acquisition, loading, hauling, placing, and compacting of project backfill material to a point 4 inches below top of curb, and topsoil necessary to achieve typical section.
2. All those costs associated with the acquisition, loading, and hauling of reinforcing bar, expansion joint material, and final grading and compaction of detailed gravel cushion.

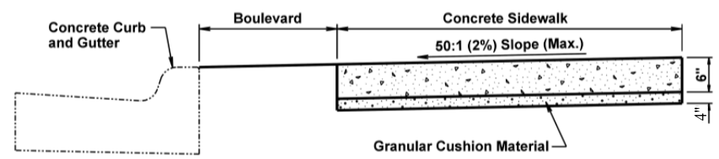
Field verification of existing joints may change plan removal of driveway concrete to a more logical location. These changes will be discussed and agreed upon by the Engineer prior to removal.

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

The Contractor shall install Detectable Warning Panels at all locations shown on the plan sheets. The warning panels shall be installed in accordance with the details. All cost associated with installing the warning panels in the sidewalk shall be incidental to the contract unit price per square foot for "Type 1 Detectable Warnings".

All 4" and 6" Concrete Sidewalks shall be in compliance with the Americans with Disability Act (ADA) regulations. The Contractor shall be solely responsible for ensuring that the sidewalk is installed according to all ADA rules and regulations.





The concrete sidewalk shall be constructed in accordance with Section 651 of the Standard Specifications. The sidewalk details shown above are typical of this project; however, the sidewalk widths, boulevard widths, and other special details are shown on Sidewalk Layout and Curb Ramp Details sheets.

Preparation of the sidewalk subgrade may require removal of tree roots in areas where sidewalk is placed adjacent to trees which are to remain in place. These removals shall be completed in a manner which will not cause excessive harm to the trees. Any necessary removals shall be incidental to the concrete sidewalk bid items.

TABLE OF 6" PCC DRIVEWAY PAVEMENT		
Station to	Station	Quantity (SqYd)
2+81.4 - 39.99' L	3+12.5 - 39.95' L	10.4
2+82.3 - 49.83' R	3+05.9 - 49.76' R	10.5
3+70.1 - 39.88' L	3+93.5 - 39.85' L	7.8
6+63.4 - 40.24' L	6+72.5 - 40.27' L	3.0
7+10.3 - 40.41' L	7+20.5 - 40.45' L	3.4
7+10.7 - 45.63' R	7+19.2 - 45.57' R	2.8
8+84.7 - 51.16' R	9+06.9 - 51.23' R	21.8
10+77.6 - 43.96' R	10+85.2 - 43.92' R	2.6
11+39.6 - 43.82' R	11+51.9 - 43.79' R	4.1
17+03.2 - 42.25' L	17+20.3 - 42.27' L	5.7
	Total:	72.1

TABLE OF 6" PCC APPROACH PAVEMENT		
Station to	Station	Quantity (SqYd)
8+84.7 - 37.01' R	9+05.7 - 36.90' R	18.5
	Total:	18.5

TABLE OF 4" CONCRETE SIDEWALK		
Station to	Station	Quantity (SqFt)
1+95.0 - 46.11' R	2+82.0 - 45.83' R	529
3+06.0 - 45.75' R	3+19.0 - 45.63' R	65
3+13.0 - 36.95' L	3+69.5 - 36.88' L	313
3+42.0 - 45.41' R	4+65.1 - 45.73' R	756
3+94.0 - 36.85' L	4+65.2 - 36.75' L	487
5+06.1 - 43.95' R	6+17.5 - 43.23' R	707
5+06.2 - 36.65' L	6+03.0 - 37.01' L	600
6+21.5 - 37.08' L	6+63.0 - 37.23' L	208
6+45.5 - 43.05' R	7+10.5 - 42.63' R	334
6+72.5 - 37.27' L	7+10.0 - 37.41' L	196
7+19.5 - 42.57' R	8+34.0 - 41.83' R	674
7+20.5 - 37.45' L	7+54.5 - 37.48' L	170
7+67.0 - 37.49' L	8+33.3 - 37.55' L	421
8+73.6 - 42.07' R	8+79.7 - 42.04' R	69
8+74.3 - 37.88' L	12+00.3 - 39.48' L	1966
9+06.0 - 41.89' R	9+53.5 - 41.64' R	238
9+63.0 - 41.58' R	10+24.5 - 41.25' R	338
10+36.0 - 41.19' R	10+76.5 - 40.97' R	211
10+86.0 - 40.92' R	11+39.5 - 40.82' R	278
11+52.0 - 40.79' R	12+14.5 - 40.67' R	375
12+27.0 - 40.65' R	12+73.0 - 40.56' R	290
12+41.1 - 39.15' L	12+53.5 - 39.53' L	189
12+81.5 - 40.54' R	13+43.0 - 40.43' R	315
13+56.0 - 40.40' R	14+47.5 - 40.23' R	468
14+61.5 - 40.20' R	15+65.8 - 40.00' R	656
15+45.4 - 40.43' L	15+65.8 - 40.43' L	274
16+06.6 - 39.19' L	17+03.0 - 39.25' L	604
16+06.8 - 39.47' R	17+12.5 - 39.23' R	636
17+19.5 - 39.21' R	19+31.4 - 38.43' R	1171
17+20.5 - 39.27' L	17+85.5 - 39.31' L	325
18+00.5 - 39.32' L	19+31.5 - 39.40' L	767
19+78.6 – 37.09' L	19+85.4 – 37.33' L	42
	Total:	14671

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CONCRETE, DRIVEWAY & SIDEWALK (Cont.)

TABLE OF 6" CONCRETE SIDEWALK		
Station to	Station	Quantity (SqFt)
2+81.0 - 36.99' L	3+13.0 - 36.95' L	160
2+82.0 - 45.83' R	3+06.0 - 45.75' R	120
3+19.0 - 45.63' R	3+42.0 - 45.41' R	115
3+69.5 - 36.88' L	3+94.0 - 36.85' L	123
6+03.0 - 37.01' L	6+21.5 - 37.08' L	93
6+17.5 - 43.23' R	6+45.5 - 43.05' R	140
6+63.0- 37.23' L	6+72.5 - 37.27' L	48
7+10.0 - 37.41' L	7+20.5 - 37.45' L	53
7+10.5 - 42.63' R	7+19.5 - 42.57' R	45
7+54.5 - 37.48' L	7+67.0 - 37.49' L	63
8+79.7 - 42.04' R	9+06.0 - 41.89' R	215
9+53.5 - 41.64' R	9+63.0 - 41.58' R	48
10+24.5 - 41.25' R	10+36.0 - 41.19' R	58
10+76.5 - 40.97' R	10+86.0 - 40.92' R	48
11+39.5 - 40.82' R	11+52.0 - 40.79' R	63
12+14.5 - 40.67' R	12+27.0 - 40.65' R	63
12+73.0 - 40.56' R	12+81.5 - 40.54' R	43
13+43.0 - 40.43' R	13+56.0 - 40.40' R	65
14+47.5 - 40.23' R	14+61.5 - 40.20' R	70
17+03.0 - 39.25' L	17+20.5 - 39.27' L	88
17+12.5 - 39.23' R	17+19.5 - 39.21' R	35
17+85.5 - 39.31' L	18+00.5 - 39.32' L	75
	Total:	1831

4" COLORED AND PATTERNED CONCRETE SIDEWALK

The color for the 4"Colored and Patterned Concrete Sidewalk shall be the color listed below or an equal approved by the Engineer.

ColorFlo Liquid Color
Color # 920 Smoke
Solomon Colors, Inc.
1.800.624.0261
www.solomoncolors.com

Two coats of a non-yellowing acrylic curing and sealing compound shall be applied to the surface of the colored concrete. The curing and sealing compound shall be the product listed below or an equal approved by the Engineer.

DECRA-SEAL
W.R. Meadows, Inc.
1.800.342.5976
www.wrmeadows.com

All costs for furnishing, handling, and applying the curing and sealing compound, and liquid integral color, including the materials, equipment, labor, and incidentals necessary shall be incidental to the contract unit price per square yard for "4"Colored and Patterned Concrete Sidewalk."

TABLE OF 4" COLORED AND PATTERNED CONCRETE SIDEWALK		
Station to	Station	Quantity (SqFt)
15+59.0 – 35.01' R	15+65.5 – 33.12' R	24
	Total:	24

CURING OF CONCRETE

Concrete Driveway and Concrete Sidewalk will be cured with Linseed Oil Base Emulsion Compound. Curing compound shall be incidental to each associated "Concrete" bid item. The contractor shall be responsible to protect concrete during the curing process.

SIDEWALK DRAINS

At the locations noted in the Table of Sidewalk Drains, drainage from adjacent buildings will be carried through the sidewalk to the gutter. The sidewalk drains shall be constructed in accordance with the details shown on Standard Plate 651.50.

TABLE OF SIDEWALK DRAINS		
Station	L/R	Length (Ft)
3+08.7	40.73' R	5
	Total:	5

TYPE 1 DETECTABLE WARNINGS

Detectable warning panels shall be in compliance with the Americans with Disability Act (ADA) 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 or obtain approval from the Engineer for a similar panel.

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	East Jordan Iron Works, Inc. 301 Spring Street East Jordan, MI 49727 800-626-4653 http://www.ejiw.com

All cost, equipment and labor associated with supplying the specified materials and installing the panels in accordance with ADA standards shall be incidental to the contract unit price per square foot for "Type 1 Detectable Warnings".

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TYPE 1 DETECTABLE WARNINGS (Cont.)

TABLE OF TYPE 1 DETECTABLE WARNINGS

Station	L/R	Quantity (SqFt)
4+56.02	22.73' L	10
4+56.14	30.56' R	10
4+65.03	41.74' R	10
4+65.17	34.25' L	10
5+06.07	41.45' R	10
5+06.27	34.15' L	10
5+20.46	22.78' R	10
5+26.80	30.21' R	10
8+24.84	23.94' L	10
8+24.92	29.55' R	10
8+33.29	35.05' L	10
8+33.98	39.33' R	10
8+73.67	39.57' R	10
8+74.29	35.38' L	10
8+81.76	24.03' L	10
8+82.12	29.70' R	10
11+83.72	24.36' L	10
11+83.98	28.57' R	10
12+00.26	36.98' L	10
12+41.13	36.80' L	10
12+50.96	28.37' R	10
12+51.25	24.69' L	10
15+56.45	26.19' L	12
15+56.51	27.46' R	10
15+62.99	28.89' L	12
15+65.69	36.43' L	16
15+65.83	37.50' R	10
16+06.77	36.19' L	12
16+06.83	36.97' R	10
16+08.54	29.60' L	12
16+08.66	31.27' R	10
19+18.52	26.62' R	10
19+22.00	26.37' L	10
19+31.29	35.93' R	10
19+31.49	36.90' L	10
19+78.63	37.09' L	10
	Total:	374

PERMANENT SEEDING

The areas to be seeded comprise of all newly graded areas within the project limits except for the top of roadways and paved areas.

All permanent seed shall be planted in the topsoil at a depth of ¼" to ½".

All seed broadcast must be raked or dragged in (incorporated) within the top ¼" to ½" of topsoil when possible. This requirement may be waived by the Engineer during construction when raking or dragging is deemed not feasible by conventional methods. The Permanent Seeding shall comply with the requirements of South Dakota Seed Law. Permanent Seeding shall be paid for based on plans quantity.

Type D Permanent Seed Mixture shall consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/1000 SqFt)
Kentucky Bluegrass	Alene, Avalanche	1.4
Perennial Ryegrass	Turf Type, Ascend	1.4
Creeping Red Fescue	Epic	1.4
Chewings Fescue	Ambrose	1.4
Alkali Grass	Fults, Fults II, Quill, Salty	1.4
	Total:	7

FERTILIZING

A commercial fertilizer with a minimum guaranteed analysis of 13-13-13, 18-46-0, 11-52-0, or an approved alternate fertilizer shall be applied to all areas designated for permanent seeding. The application rate of fertilizer shall be 3 pounds per 100 square feet.

SOIL STABILIZER

An estimated quantity of 89 pounds of soil stabilizer has been included in the Estimate of Quantities. The soil stabilizer shall be applied on permanently seeded areas and areas deemed necessary by the Engineer.

The Contractor shall apply soil stabilizer according to the manufacturer's application instructions and at the rate specified in the list of approved soil stabilizers.

Wood fiber mulch that contains a green dye shall be mixed with the soil stabilizer to be used as a tracer when the soil stabilizer is applied hydraulically. Wood fiber mulch shall be added at a rate of 300 pounds per acre to all of the approved soil stabilizers listed in the table except for the Pam-12 Plus product. The wood fiber mulch shall be a 100% wood fiber product and does not need to contain a tackifier.

All costs for furnishing and applying the soil stabilizer including wood fiber mulch, hauling, materials, equipment, labor, and incidentals necessary shall be paid for at the contract unit price per pound for "Soil Stabilizer".

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The soil stabilizer shall be from the list below or an approved equal:

Product	Manufacturer
StarTak 600 applied at a rate of 150 Lb/Acre	Chemstar Products Company 3915 Hiawatha Avenue Minneapolis, MN Phone: 800-328-5037 www.chemstar.com
Pam-12 Plus applied at a rate of: Slope None to 4:1 1000 Lb/Acre 4:1 to 3:1 1000 to 2000 Lb/Acre 3:1 to 2:1 2000 to 3000 Lb/Acre	ENCAP, LLC Green Bay, WI Phone: 877-405-5050 http://professional.encap.net/
M-Binder applied at a rate of 150 Lb/Acre	Ecology Controls P.O. Box 1275 Carpinteria, CA Phone: 805-684-0436 www.ssseeds.com
R-Tack applied at a rate of 150 Lb/Acre	Rantec Corporation P.O. Box 729 Ranchester, WY Phone: 307-655-9565 www.ranteccorp.com
Super Tack applied at a rate of 60 Lb/Acre	Rantec Corporation P.O. Box 729 Ranchester, WY Phone: 307-655-9565 www.ranteccorp.com

MAILBOXES, STREET & MISCELLANEOUS SIGNS, AND SPRINKLERS

The Contractor shall remove any mailboxes, street signs and miscellaneous signs and safe guard them thru construction. The Contractor shall reset any mailboxes, street signs and miscellaneous signs to the correct height and location behind the curb and gutter, when construction is complete. The Contractor shall coordinate with landowners and the US Postal Service for any temporary needs to address mail delivery. The contractor shall coordinate with landowner and US Postal Service for any temporary needs to address mail delivery to residents. The contractor shall install expansion material around all sign post, fire hydrants or any other obstruction located inside the proposed concrete paving. The contractor shall also safeguard any sprinklers systems in the ROW during construction if possible. There are anticipated to be some sprinklers along this project. If sprinklers are found during construction the contractor will make every attempt to safeguard them and work with the homeowner to prevent their destruction. This shall be incidental to the contract.

FOR BIDDING PURPOSES ONLY

WATER FOR GRANULAR MATERIAL

Water for granular material will be estimated at a rate of 12 gallons per ton. All water for granular material including hauling and application will be incidental to the contract unit price per Ton for "Gravel Surfacing" or to the various incidental sidewalk and driveway gravel items. No special payment will be made for watering base course, gravel surfacing, subgrade, or for dust control.

DAMAGE TO PROPERTY

The Contractor shall take care that private and public property off the construction site is not damaged by construction operations. In the event that such damage occurs due to the Contractor's negligence, the Contractor shall restore the damage area to the pre-construction condition at no cost to the City or any private property owner. This work shall be completed to the satisfaction of the Engineer and the property owner.

DEWATERING

Maintenance of Drainage is the Contractor's responsibility. The Contractor shall be aware of existing drainage conditions and facilities. The Contractor shall provide for drainage during all phases of construction. Damage caused by improper temporary drainage facilities shall be repaired at the Contractor's expense and to the satisfaction of the Engineer and the Owner.

The Contractor shall assure that drainage to inlets and manholes are accomplished at the conclusion of the construction.

No water will be allowed to sit on the project. Water shall be pumped immediately and any saturated material removed immediately. This will prevent water infiltration under curb and gutter, and sidewalks, and from causing moisture problems in different road materials. The labor and materials to do this shall be paid for at the contract lump sum price for "Dewatering".

EROSION CONTROL

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

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

Erosion and Sediment Control Measures will consist of inlet protection.

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

No additional payment will be made for any work, equipment or materials associated with Erosion Control except Sediment Control at Inlets with Frames and Grates.

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 Inlets with Frame and Grates 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 devices 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 Inlets with Frames and Grates" 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 Inlets with Frames and Grates shall be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

Sediment collection devices shall be:

A commercial made sediment collection device from the "Sediment Control at Inlet with Frame and Grate" list or an approved equal. The device shall be installed in reinforced concrete drop inlets according to the manufacturer's recommendations.

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://apps.sd.gov/Applications/HC54ApprovedProducts/main.asp

TABLE OF SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES

Station	L/R	Quantity (each)
5+07.3	31.92' R	1
5+07.8	24.29' L	1
8+17.5	22.25' L	1
8+17.9	28.28' R	1
10+10.8	27.77' R	1
10+32.8	22.61' L	1
19+30.0	27.94' R	1
	Total:	7

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE
McLAURY
2-3-14
SOUTH DAKOTA

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

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** 3.31 Acre **(4.2 1.b.)**
- **Total Area To Be Disturbed** 1.01 Acre **(4.2 1.b.)**
- **Existing Vegetative Cover** 18 **(%)**
- **Soil Properties: (4.2 1. d.)**
- **Name of Receiving Water Body/Bodies:** Pony Creek **(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.)

- **Clearing and grubbing.**
- **Remove and store topsoil.**
- **Stabilize disturbed areas.**
- **Install inlet protection.**
- **Complete final grading.**
- **Complete final paving of concrete.**
- **Complete traffic control installation and protection devices.**
- **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 $^{1}/_{3}$ of the height of the silt fence.
  - Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure's capacity, and at the conclusion of the construction.
  - Check dams will be inspected for stability. Sediment will be removed when depth reaches ½ the height of the dam.
  - All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
  - Inspection and maintenance reports will be prepared on form DOT 298 for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.
  - The SDDOT Project Engineer and contractor's 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:

FOR BIDDING PURPOSES ONLY

❖ **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, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
  - Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any 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.

❖ **Construction Changes (4.4)**

When changes are made to the construction project that will require alterations in the temporary erosion controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP plan (DOT 298) and drawings to reflect the needed changes. Copies of changes will be routed per DOT 298. Copies of forms and the SWPPP will be retained in a designated place for review over the course of the project.

❖ CERTIFICATIONS

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

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

➢ **South Dakota Department of Transportation**

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

Authorized Signature (See the General Permit, Section 6.7.1.C.)

➢ **Prime Contractor**

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

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

Authorized Signature

❖ CONTACT INFORMATION

➢ **Contractor Information**:

- Prime Contractor Name:
- Contractor Contact Name:
- Address:
- Address:
- City: State: Zip:
- Office Phone: Field:
- Cell Phone: Fax:

➢ **Erosion Control Supervisor**

- Name:
- Address:
- Address:
- City: State: Zip:
- Office Phone: Field:
- Cell Phone: Fax:

➢ **SDDOT Project Engineer**

- Name:
- Business Address:
- Job Office Location:
- City: State: Zip:
- Office Phone: Field:
- Cell Phone: Fax:

➢ **Design Engineer**

- Name: ***McLaury Engineering, Inc.***
- Business Address: ***110 N. First Street***
- City: ***Parkston*** State: ***SD*** Zip: ***57366***
- Office Phone: ***(605) 928-7676*** Fax:

➢ **SD DENR Contact Spill Reporting**

- Business Hours Monday-Friday (605) 773-3296
- Nights and Weekends (605) 773-3231

➢ **SD DENR Contact for Hazardous Materials.**

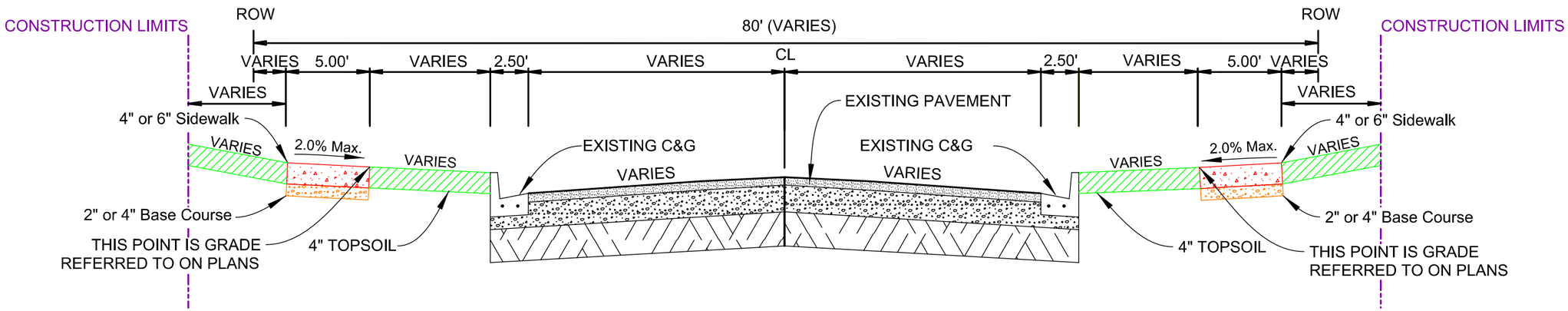
- (605) 773-3153

➢ **National Response Center Hotline**

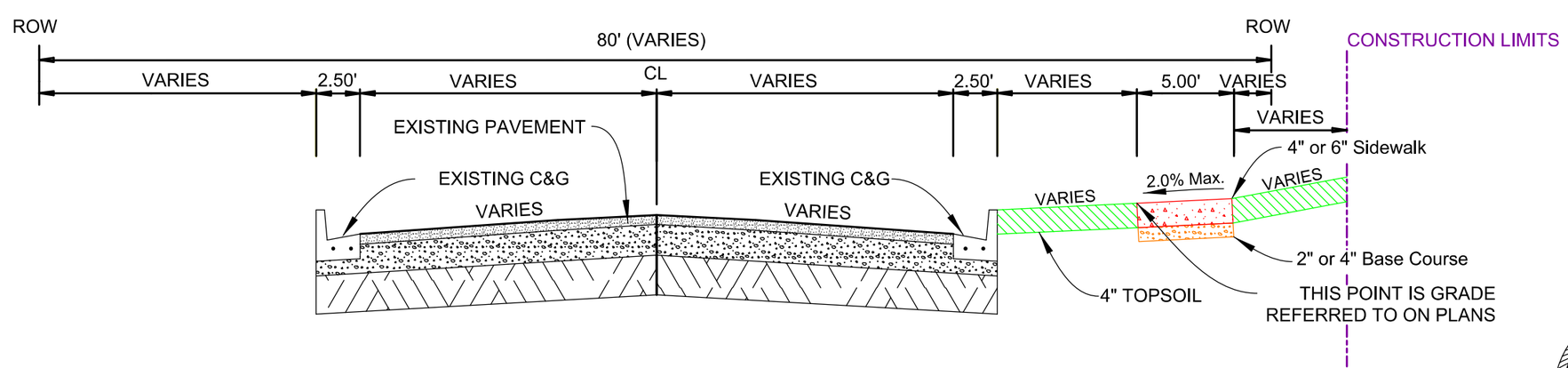
- (800) 424-8802.

TYPICAL SECTIONS

MAIN STREET
STA 2+56 TO STA 4+54
STA 5+14 TO 8+22
STA 8+85 TO 11+88
STA 16+18 TO 19+21



MAIN STREET
STA 1+95 TO STA 2+56
STA 11+88 TO STA 15+54



REGISTERED PROFESSIONAL ENGINEER
REG. NO
5801
KIM LaRUE
McLAURY
2-3-14
SOUTH DAKOTA

Kim L McLaury

NOT TO SCALE

FOR BIDDING PURPOSES ONLY

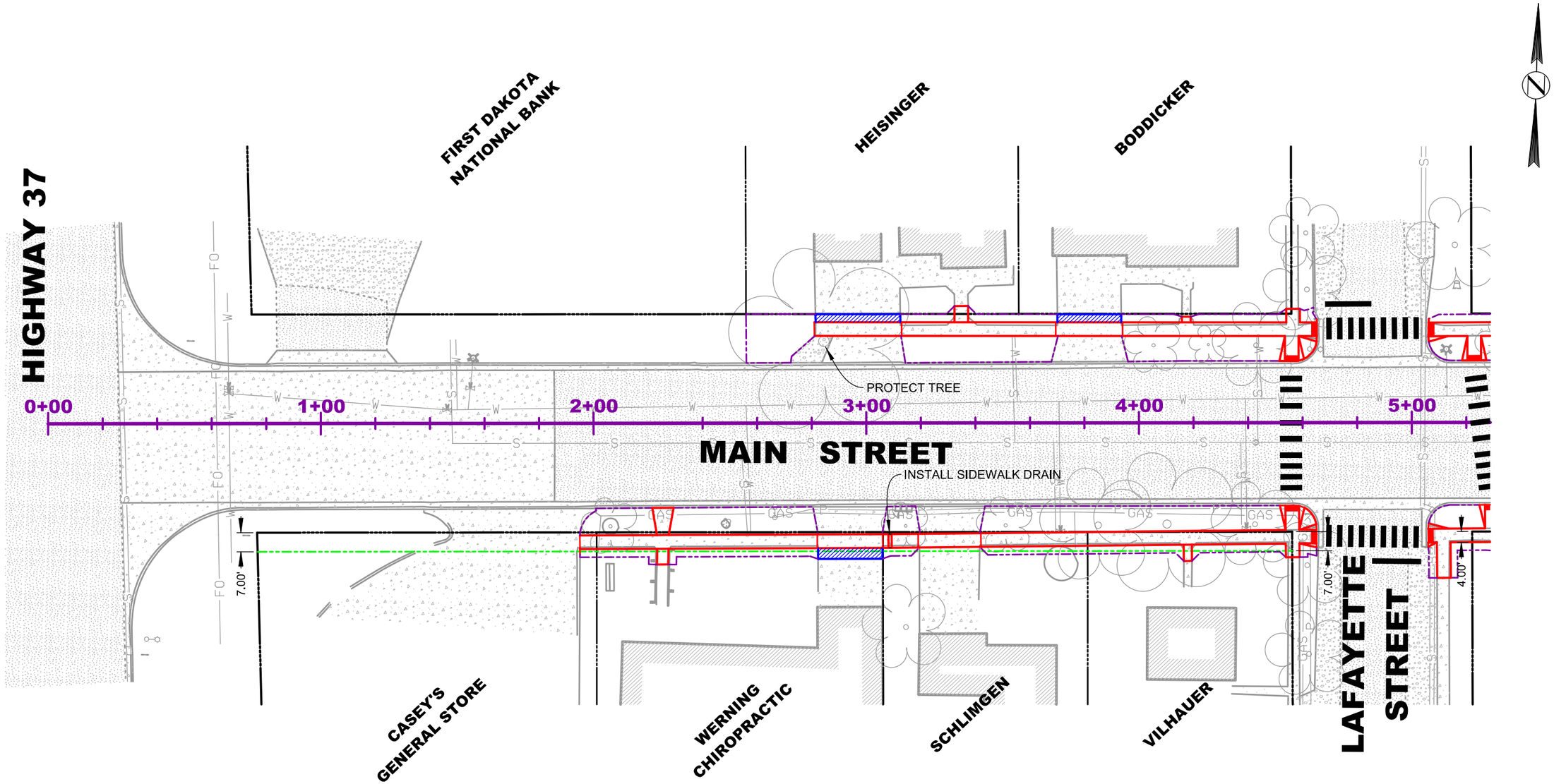
PROJECT	SHEET NO.	TOTAL SHEETS
CITY OF PARKSTON WEST MAIN ST. SRTS PROJECT 2013	14	42

INSTALL 4" PCC SIDEWALK
STA 1+95.0 - 46.11' R TO STA 2+82.0 - 45.83' R - 529 SF
STA 3+06.0 - 45.75' R TO STA 3+19.0 - 45.63' R - 65 SF
STA 3+13.0 - 36.95' L TO STA 3+69.5 - 36.88' L - 313 SF
STA 3+42.0 - 45.41' R TO STA 4+65.1 - 45.73' R - 756 SF
STA 3+94.0 - 36.85' L TO STA 4+65.2 - 36.75' L - 487 SF

INSTALL 6" PCC SIDEWALK
STA 2+81.0 - 36.99' L TO STA 3+13.0 - 36.95' L - 160 SF
STA 2+82.0 - 45.83' R TO STA 3+06.0 - 45.75' R - 120 SF
STA 3+19.0 - 45.63' R TO STA 3+42.0 - 45.41' R - 115 SF
STA 3+69.5 - 36.88' L TO STA 3+94.0 - 36.85' L - 123 SF

INSTALL SIDEWALK DRAIN
STA 3+08.7 - 40.73' R TO STA 3+08.7 - 45.73' R - 5 FT

INSTALL 6" PCC DRIVEWAY PAVEMENT
STA 2+81.4 - 39.99' L TO STA 3+12.5 - 39.95' L - 10.4 SY
STA 2+82.3 - 49.83' R TO STA 3+05.9 - 49.76' R - 10.5 SY
STA 3+70.1 - 39.88' L TO STA 3+93.5 - 39.85' L - 7.8 SY



REMOVE CONCRETE SIDEWALK
STA 1+95.0 - 45.48' R TO STA 2+82.3 - 45.05' R - 51.1 SY
STA 3+05.9 - 45.02' R TO STA 3+19.5 - 44.85' R - 6.6 SY
STA 3+12.5 - 35.85' L TO STA 3+70.2 - 35.78' L - 29.9 SY
STA 3+41.6 - 44.82' R TO STA 4+65.1 - 44.54' R - 66.0 SY
STA 3+93.6 - 35.83' L TO STA 4+65.2 - 36.68' L - 37.7 SY

REMOVE CONCRETE DRIVEWAY
STA 2+81.4 - 39.99' L TO STA 3+12.5 - 39.95' L - 27.3 SY
STA 2+82.3 - 49.83' R TO STA 3+05.9 - 49.76' R - 23.6 SY
STA 3+19.5 - 45.63' R TO STA 3+41.6 - 45.42' R - 12.5 SY
STA 3+70.1 - 39.88' L TO STA 3+93.5 - 39.85' L - 20.9 SY

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
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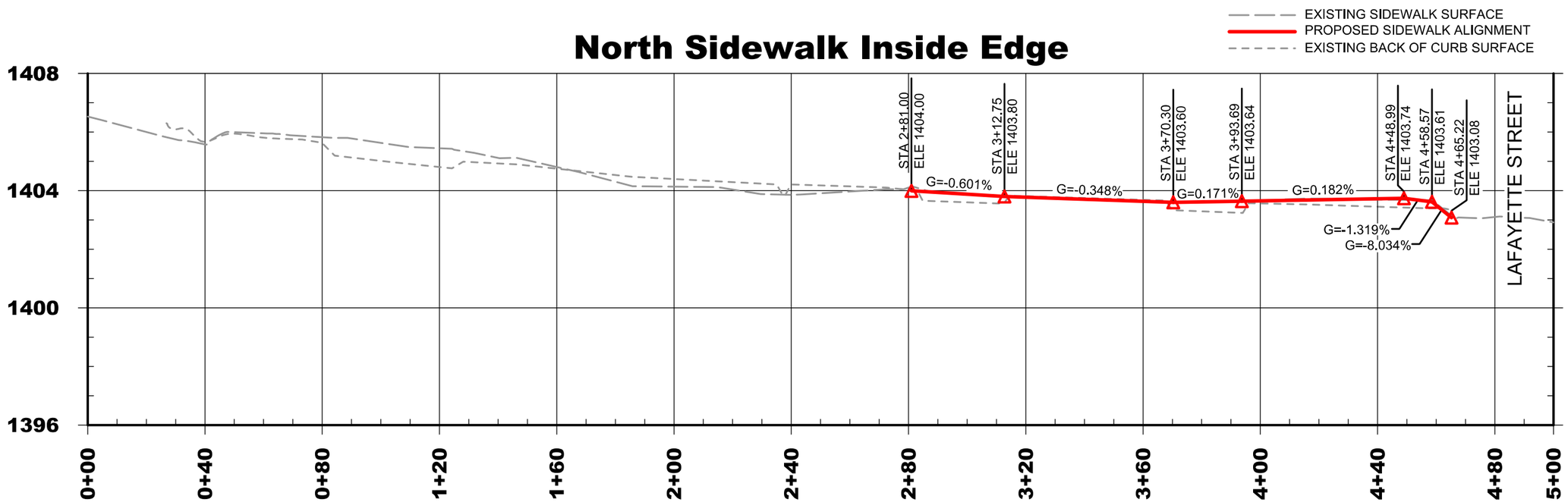
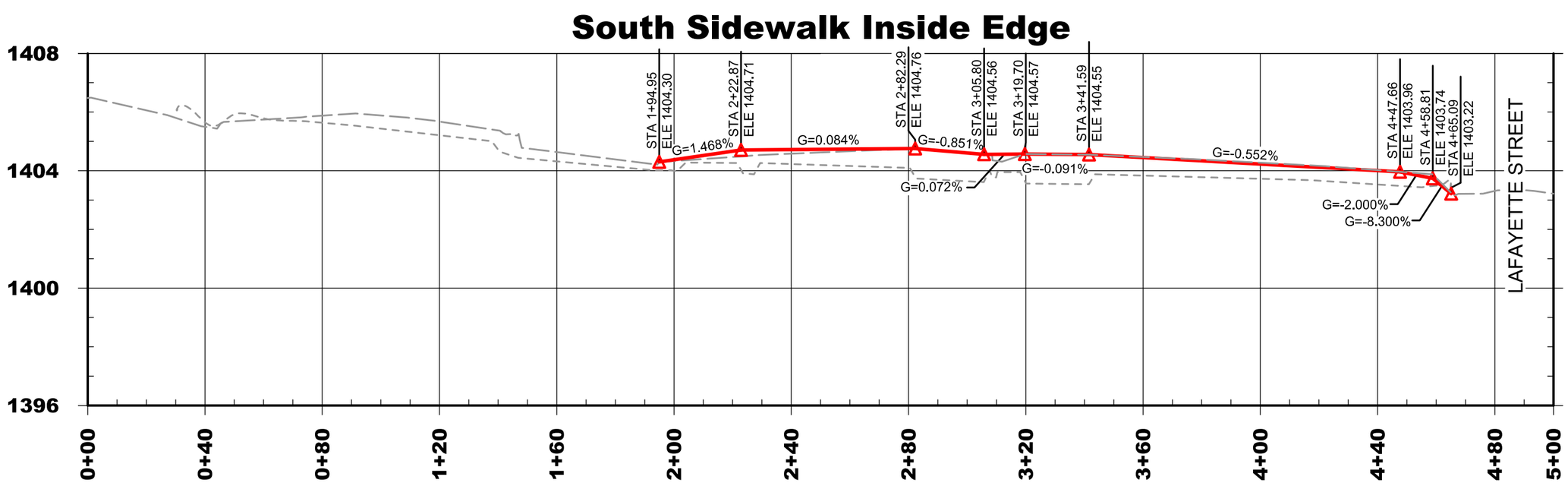
KIM LaRUE
McLAURY
23-14
SOUTH DAKOTA

Kim L McLaury

File Location:C:\Parkston\22130102 West Main Street SRTS\Cd\Sht 14 - 0+00 Plan.dgn
Plot Time: 10:52:41 AM 2/3/2014

The vertical alignment may be adjusted by the Engineer in the field.
The contractor shall not adjust any alignments without prior approval.





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SOUTH DAKOTA

Kim L McLaury

PROJECT	SHEET NO.	TOTAL SHEETS
CITY OF PARKSTON WEST MAIN ST. SRTS PROJECT 2013	16	42

FOR BIDDING PURPOSES ONLY

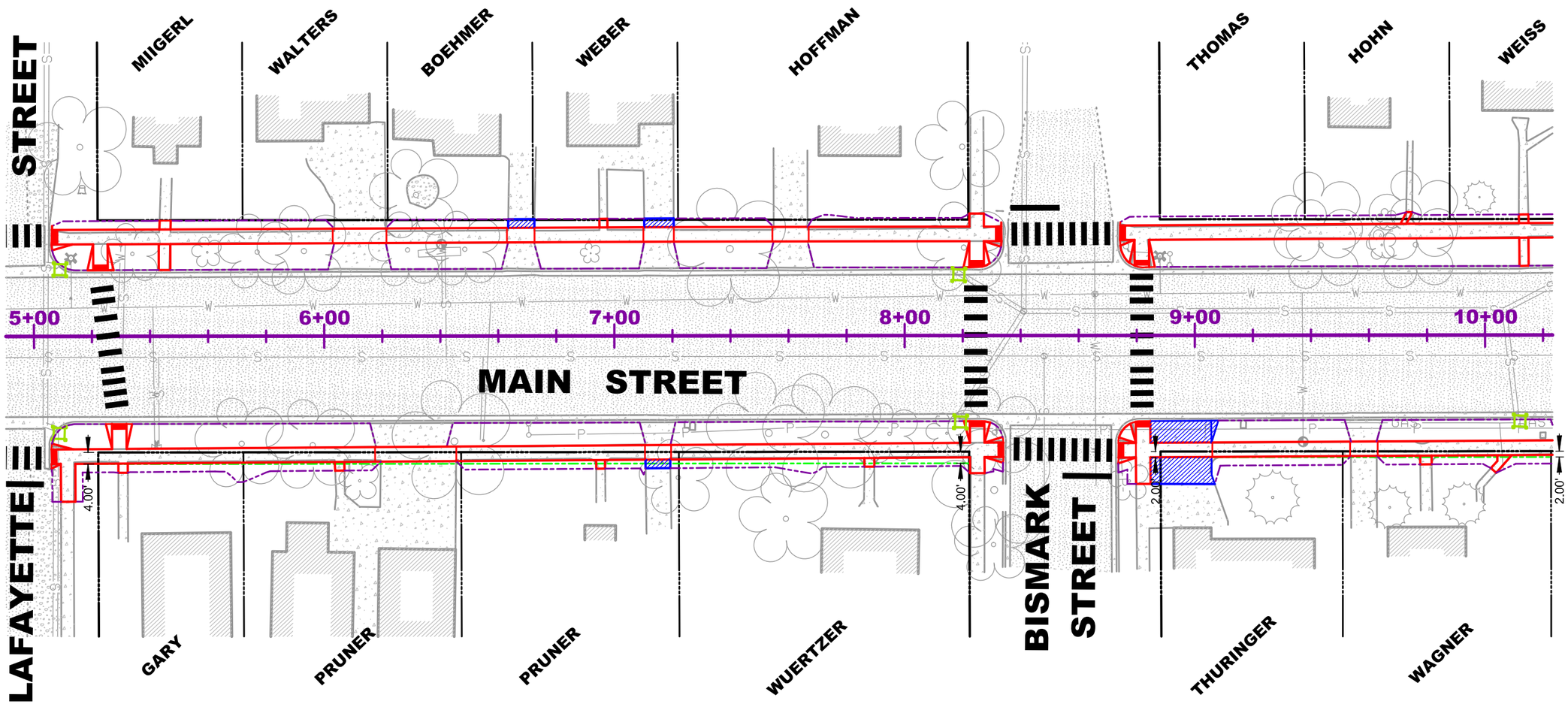
INSTALL 4" PCC SIDEWALK
STA 5+06.1 - 43.95' R TO STA 6+17.5 - 43.23' R - 707 SF
STA 5+06.2 - 36.65' L TO STA 6+03.0 - 37.01' L - 600 SF
STA 6+21.5 - 37.08' L TO STA 6+63.0 - 37.23' L - 208 SF
STA 6+45.5 - 43.05' R TO STA 7+10.5 - 42.63' R - 334 SF
STA 6+72.5 - 37.27' L TO STA 7+10.0 - 37.41' L - 196 SF
STA 7+19.5 - 42.57' R TO STA 8+34.0 - 41.83' R - 674 SF
STA 7+20.5 - 37.45' L TO STA 7+54.5 - 37.48' L - 170 SF
STA 7+67.0 - 37.49' L TO STA 8+33.3 - 37.55' L - 421 SF
STA 8+73.6 - 42.07' R TO STA 8+79.7 - 42.04' R - 69 SF
STA 8+74.3 - 37.88' L TO STA 12+00.3 - 39.48' L - 1966 SF
STA 9+06.0 - 41.89' R TO STA 9+53.5 - 41.64' R - 238 SF
STA 9+63.0 - 41.58' R TO STA 10+24.5 - 41.25' R - 338 SF

INSTALL 6" PCC SIDEWALK
STA 6+03.0 - 37.01' L TO STA 6+21.5 - 37.08' L - 93 SF
STA 6+17.5 - 43.23' R TO STA 6+45.5 - 43.05' R - 140 SF
STA 6+63.0 - 37.23' L TO STA 6+72.5 - 37.27' L - 48 SF
STA 7+10.0 - 37.41' L TO STA 7+20.5 - 37.45' L - 53 SF
STA 7+10.5 - 42.63' R TO STA 7+19.5 - 42.57' R - 45 SF
STA 7+54.5 - 37.48' L TO STA 7+67.0 - 37.49' L - 63 SF
STA 8+79.7 - 42.04' R TO STA 9+06.0 - 41.89' R - 215 SF
STA 9+53.5 - 41.64' R TO STA 9+63.0 - 41.58' R - 48 SF

INSTALL 6" PCC DRIVEWAY PAVEMENT
STA 6+63.4 - 40.24' L TO STA 6+72.5 - 40.27' L - 3.0 SY
STA 7+10.3 - 40.41' L TO STA 7+20.5 - 40.45' L - 3.4 SY
STA 7+10.7 - 45.63' R TO STA 7+19.2 - 45.57' R - 2.8 SY
STA 8+84.7 - 51.16' R TO STA 9+06.9 - 51.23' R - 21.8 SY

INSTALL 6" PCC APPROACH PAVEMENT
STA 8+84.7 - 37.01' R TO STA 9+05.7 - 36.90' R - 18.5 SY

SODDED TO CONTROL ATTACHES
STA 5+07.3 - 31.92' R
STA 5+07.8 - 24.29' L
STA 8+17.5 - 22.25' L
STA 8+17.9 - 28.28' R



REMOVE CONCRETE SIDEWALK
STA 5+06.0 - 44.33' R TO STA 6+17.8 - 42.71' R - 65.1 SY
STA 5+06.2 - 36.44' L TO STA 6+03.6 - 36.18' L - 48.1 SY
STA 6+21.2 - 36.11' L TO STA 6+63.4 - 36.41' L - 19.8 SY
STA 6+45.4 - 42.63' R TO STA 7+10.7 - 42.21' R - 34.2 SY
STA 6+72.4 - 36.30' L TO STA 7+10.4 - 36.46' L - 18.4 SY
STA 7+19.2 - 42.00' R TO STA 8+34.0 - 42.83' R - 65.1 SY
STA 7+20.5 - 36.45' L TO STA 7+54.9 - 36.51' L - 15.3 SY
STA 7+66.6 - 36.57' L TO STA 8+33.3 - 37.98' L - 35.1 SY
STA 8+73.6 - 42.64' R TO STA 8+79.7 - 41.75' R - 3.8 SY
STA 8+74.3 - 38.43' L TO STA 12+00.2 - 39.93' L - 185.5 SY
STA 9+05.5 - 45.01' R TO STA 9+53.8 - 41.57' R - 26.4 SY
STA 9+62.6 - 41.51' R TO STA 10+24.8 - 40.99' R - 37.5 SY

REMOVE CONCRETE DRIVEWAY
STA 6+03.6 - 37.01' L TO STA 6+21.2 - 37.08' L - 9.9 SY
STA 6+17.8 - 42.71' R TO STA 6+45.4 - 43.05' R - 15.5 SY
STA 6+63.4 - 40.24' L TO STA 6+72.5 - 40.27' L - 8.1 SY
STA 7+10.3 - 40.41' L TO STA 7+20.5 - 40.45' L - 9.1 SY
STA 7+10.7 - 45.63' R TO STA 7+19.2 - 45.57' R - 7.7 SY
STA 7+54.9 - 37.48' L TO STA 7+66.6 - 37.49' L - 6.4 SY
STA 8+79.8 - 51.14' R TO STA 9+05.9 - 51.23' R - 64.3 SY
STA 9+53.8 - 41.63' R TO STA 9+62.6 - 41.59' R - 4.9 SY

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE
McLAURY
2-3-14
SOUTH DAKOTA

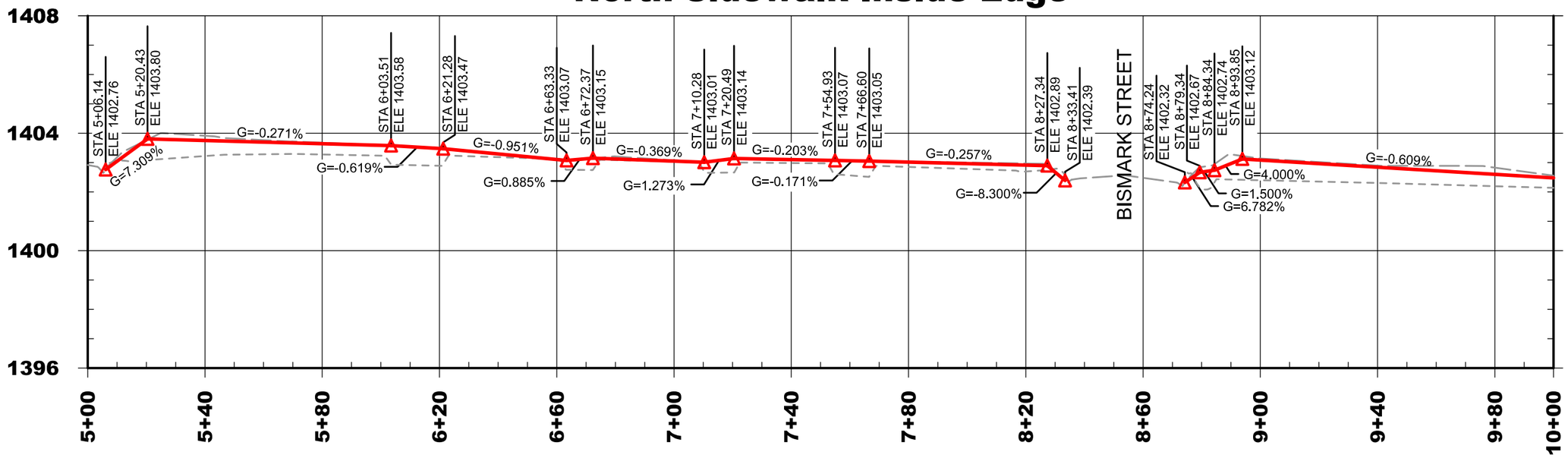
Kim LaRue McLaury

File Location:C:\Parkston\22130102 West Main Street SRTS\Cd\Sht 16 - 5+00 Plan.dgn
Plot Time: 10:52:50 AM 2/3/2014

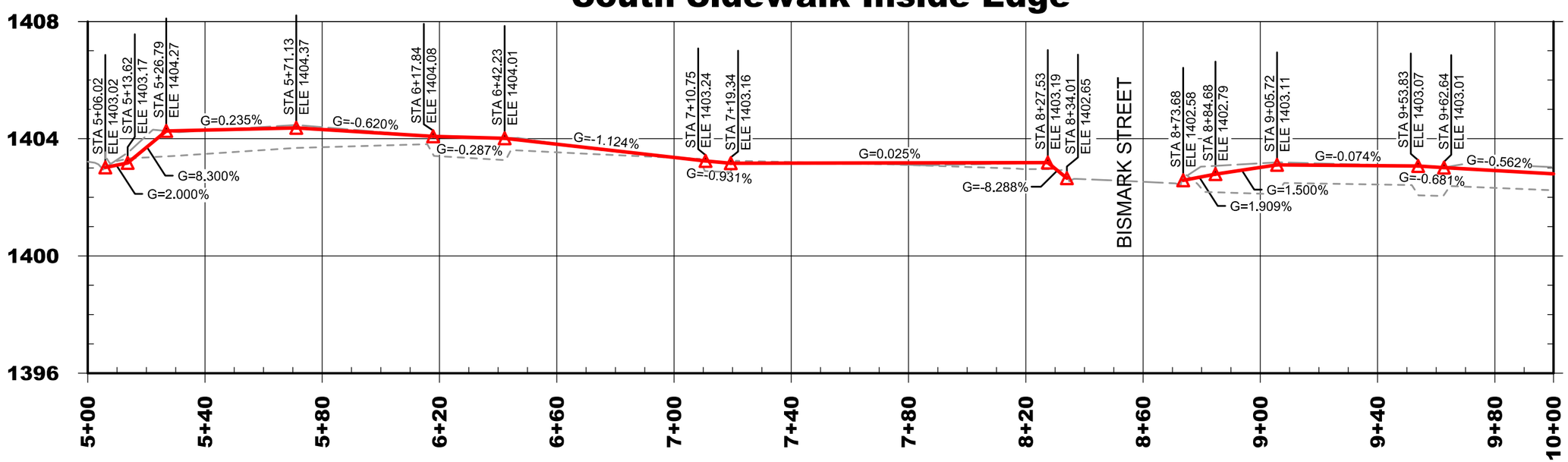
The vertical alignment may be adjusted by the Engineer in the field.
The contractor shall not adjust any alignments without prior approval.

EXISTING SIDEWALK SURFACE
PROPOSED SIDEWALK ALIGNMENT
EXISTING BACK OF CURB SURFACE

North Sidewalk Inside Edge



South Sidewalk Inside Edge



REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE McLAURY
2-3-14
SOUTH DAKOTA

Kim L McLaury

PROJECT	SHEET NO.	TOTAL SHEETS
CITY OF PARKSTON WEST MAIN ST. SRTS PROJECT 2013	18	42

FOR BIDDING PURPOSES ONLY

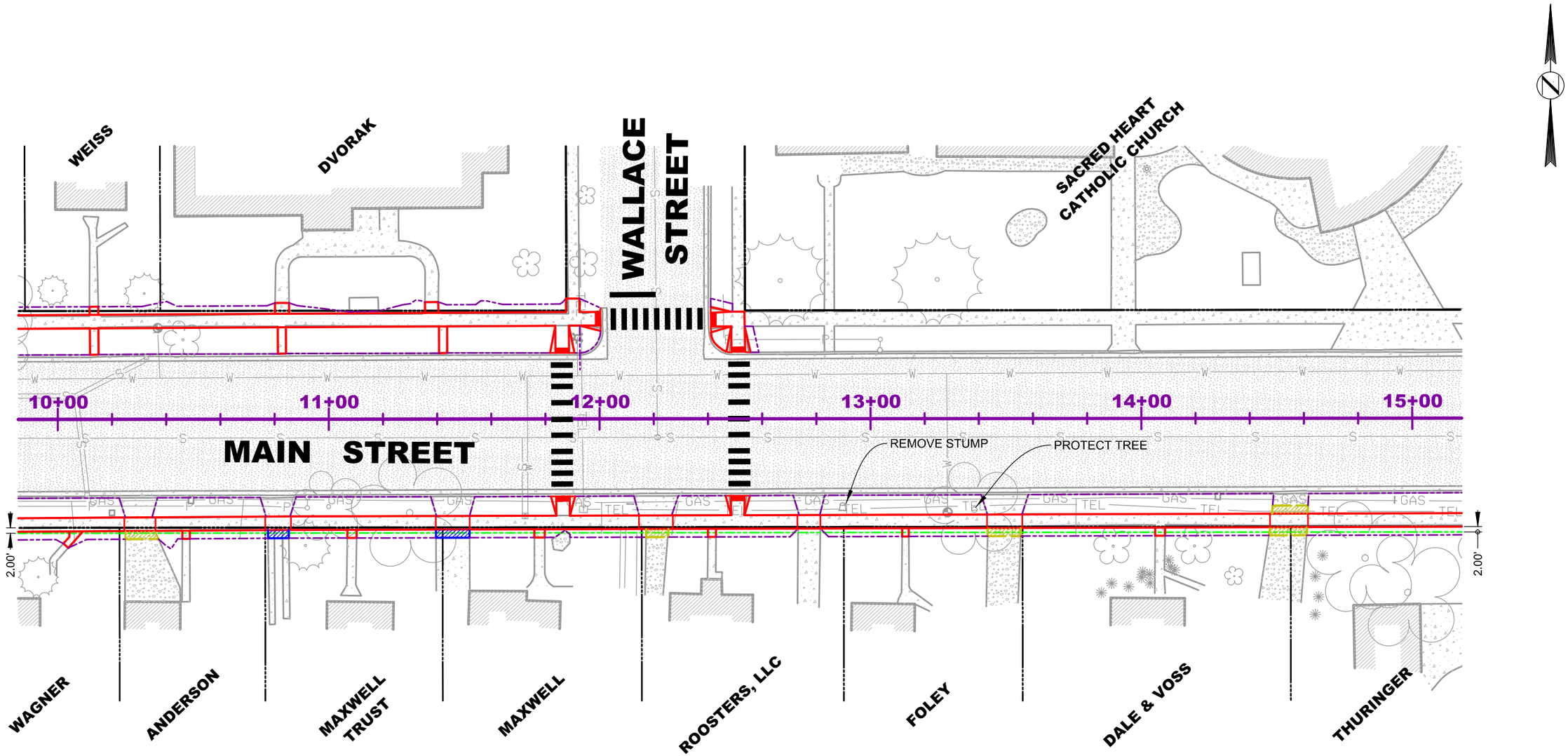
INSTALL 4" PCC SIDEWALK
STA 10+36.0 - 41.19' R TO STA 10+76.5 - 40.97' R - 211 SF
STA 10+86.0 - 40.92' R TO STA 11+39.5 - 40.82' R - 278 SF
STA 11+52.0 - 40.79' R TO STA 12+14.5 - 40.67' R - 374 SF
STA 12+27.0 - 40.65' R TO STA 12+73.0 - 40.56' R - 290 SF
STA 12+41.1 - 39.15' L TO STA 12+53.5 - 39.53' L - 189 SF
STA 12+81.5 - 40.54' R TO STA 13+43.0 - 40.43' R - 315 SF
STA 13+56.0 - 40.40' R TO STA 14+47.5 - 40.23' R - 468 SF
STA 14+61.5 - 40.20' R TO STA 15+65.8 - 40.00' R - 656 SF

INSTALL 6" PCC SIDEWALK
STA 10+24.5 - 41.25' R TO STA 10+36.0 - 41.19' R - 58 SF
STA 10+76.5 - 40.97' R TO STA 10+86.0 - 40.92' R - 48 SF
STA 11+39.5 - 40.82' R TO STA 11+52.0 - 40.79' R - 63 SF
STA 12+14.5 - 40.67' R TO STA 12+27.0 - 40.65' R - 63 SF
STA 12+73.0 - 40.56' R TO STA 12+81.5 - 40.54' R - 43 SF
STA 13+43.0 - 40.43' R TO STA 13+56.0 - 40.40' R - 65 SF
STA 14+47.5 - 40.23' R TO STA 14+61.5 - 40.20' R - 70 SF

INSTALL 6" PCC DRIVEWAY PAVEMENT
STA 10+77.6 - 43.96' R TO STA 10+85.2 - 43.92' R - 2.6 SY
STA 11+39.6 - 43.82' R TO STA 11+51.9 - 43.79' R - 4.1 SY

SEDIMENT CONTROL AT INLETS
STA 10+10.8 - 27.77' R
STA 10+32.8 - 22.61' L

6" GRAVEL DRIVEWAYS
STA 10+24.9 - 44.25' R TO STA 10+37.1 - 44.18' R - 0.6 CY
STA 12+17.1 - 43.67' R TO STA 12+25.4 - 43.65' R - 0.5 CY
STA 13+43.2 - 43.43' R TO STA 13+55.5 - 43.40' R - 0.7 CY
STA 14+47.1 - 43.23' R TO STA 14+61.0 - 43.20' R - 0.8 CY
STA 14+48.2 - 35.23' R TO STA 14+61.3 - 35.20' R - 0.7 CY



REMOVE CONCRETE SIDEWALK
STA 10+35.7 - 41.06' R TO STA 10+76.9 - 40.21' R - 21.3 SY
STA 10+85.7 - 40.33' R TO STA 11+39.5 - 40.16' R - 28.4 SY
STA 11+51.9 - 40.07' R TO STA 12+14.7 - 39.86' R - 31.8 SY
STA 12+26.7 - 40.01' R TO STA 12+73.3 - 39.77' R - 28.0 SY
STA 12+41.1 - 40.69' L TO STA 12+53.5 - 39.53' L - 14.5 SY
STA 12+81.5 - 39.79' R TO STA 13+43.1 - 39.71' R - 30.7 SY
STA 13+56.0 - 39.69' R TO STA 14+47.6 - 39.62' R - 44.7 SY
STA 14+61.3 - 39.52' R TO STA 15+65.8 - 40.41' R - 64.9 SY

REMOVE CONCRETE DRIVEWAY
STA 10+24.8 - 40.99' R TO STA 10+35.7 - 41.06' R - 5.8 SY
STA 10+76.9 - 40.21' R TO STA 10+85.7 - 40.33' R - 6.3 SY
STA 11+39.6 - 43.82' R TO STA 11+51.9 - 43.79' R - 11.1 SY
STA 12+14.7 - 39.86' R TO STA 12+26.7 - 40.01' R - 5.8 SY
STA 12+73.3 - 40.56' R TO STA 12+81.5 - 40.54' R - 4.6 SY
STA 13+43.1 - 39.71' R TO STA 13+56.0 - 39.69' R - 6.3 SY
STA 14+47.6 - 39.62' R TO STA 14+61.3 - 39.52' R - 6.5 SY

REMOVE STUMP
STA 12+89.7 - 32.91' R - 1 EACH

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE McLAURY
23-14
SOUTH DAKOTA

Kim L McLaury

File Location:C:\Parkston\22130102 West Main Street SRTS\Cd\Sht 18 - 10+00 Plan.dgn
Plot Time: 10:52:59 AM 2/3/2014

The vertical alignment may be adjusted by the Engineer in the field.
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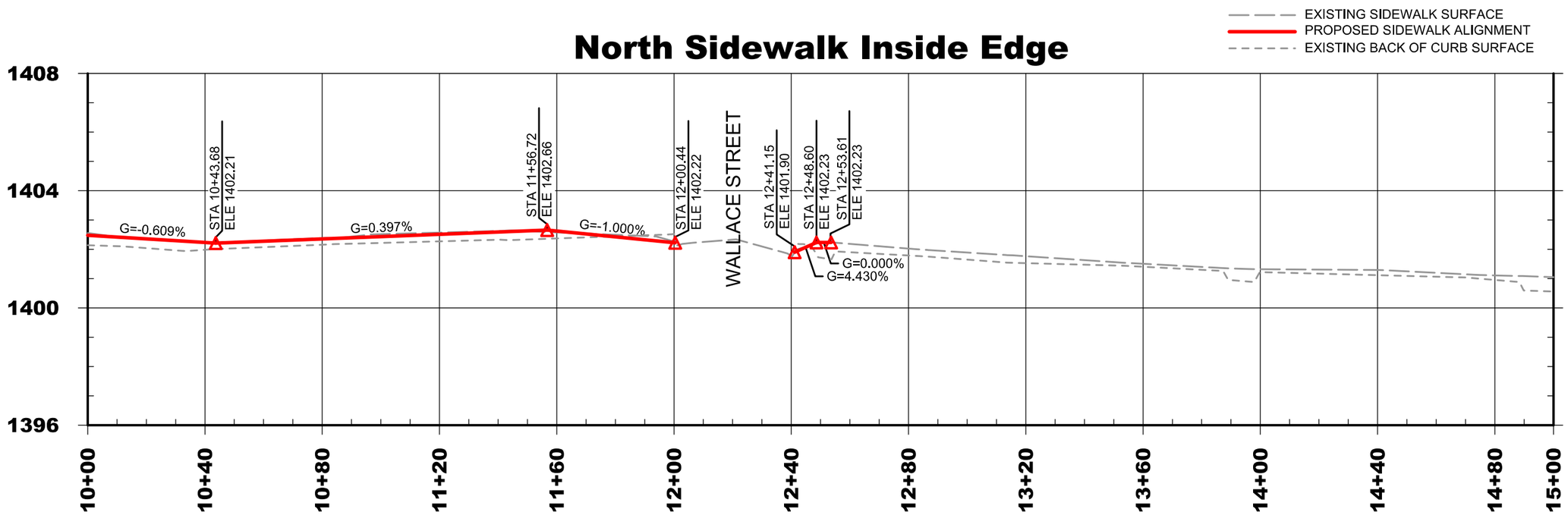
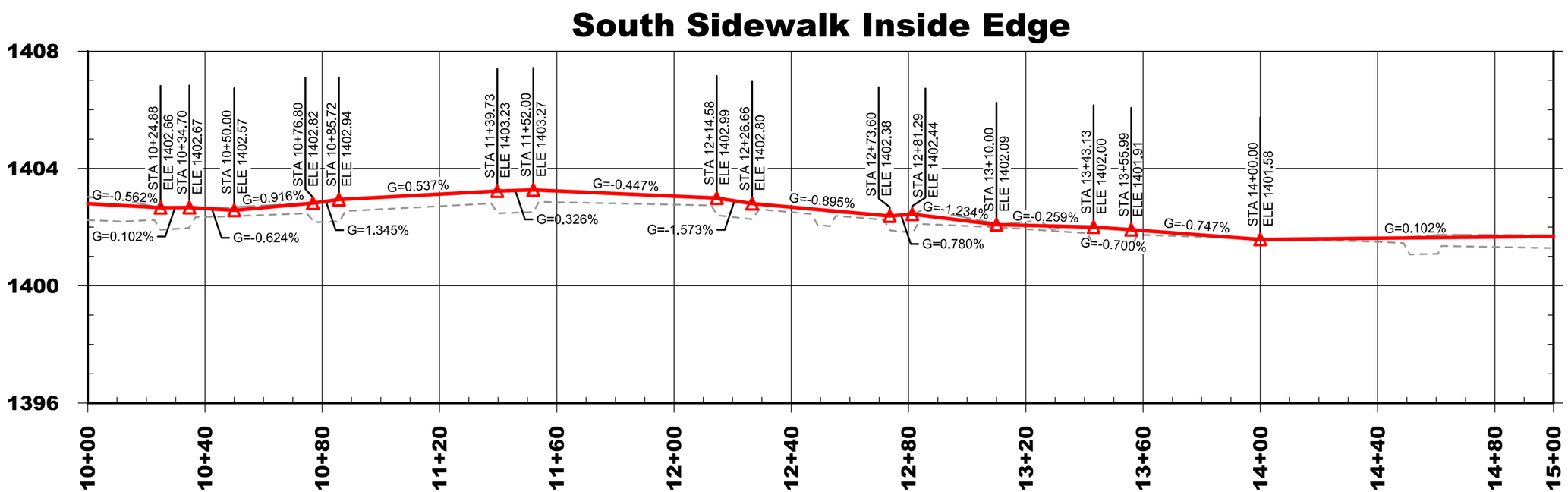




REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE
McLAURY
2-3-14
SOUTH DAKOTA

Kim L McLaury

PROJECT	SHEET NO.	TOTAL SHEETS
CITY OF PARKSTON WEST MAIN ST. SRTS PROJECT 2013	20	42

FOR BIDDING PURPOSES ONLY

INSTALL 4" PCC SIDEWALK
STA 15+45.4 - 40.43' L TO STA 15+65.8 - 40.43' L - 274 SF
STA 16+06.6 - 39.19' L TO STA 17+03.0 - 39.25' L - 604 SF
STA 16+06.8 - 39.47' R TO STA 17+12.5 - 39.23' R - 636 SF
STA 17+19.5 - 39.21' R TO STA 19+31.4 - 38.43' R - 1171 SF
STA 17+20.5 - 39.27' L TO STA 17+85.5 - 39.31' L - 325 SF
STA 18+00.5 - 39.32' L TO STA 19+31.5 - 39.40' L - 767 SF
STA 19+78.63 - 37.09' L TO STA 19+85.44 - 37.33' L - 42 SF

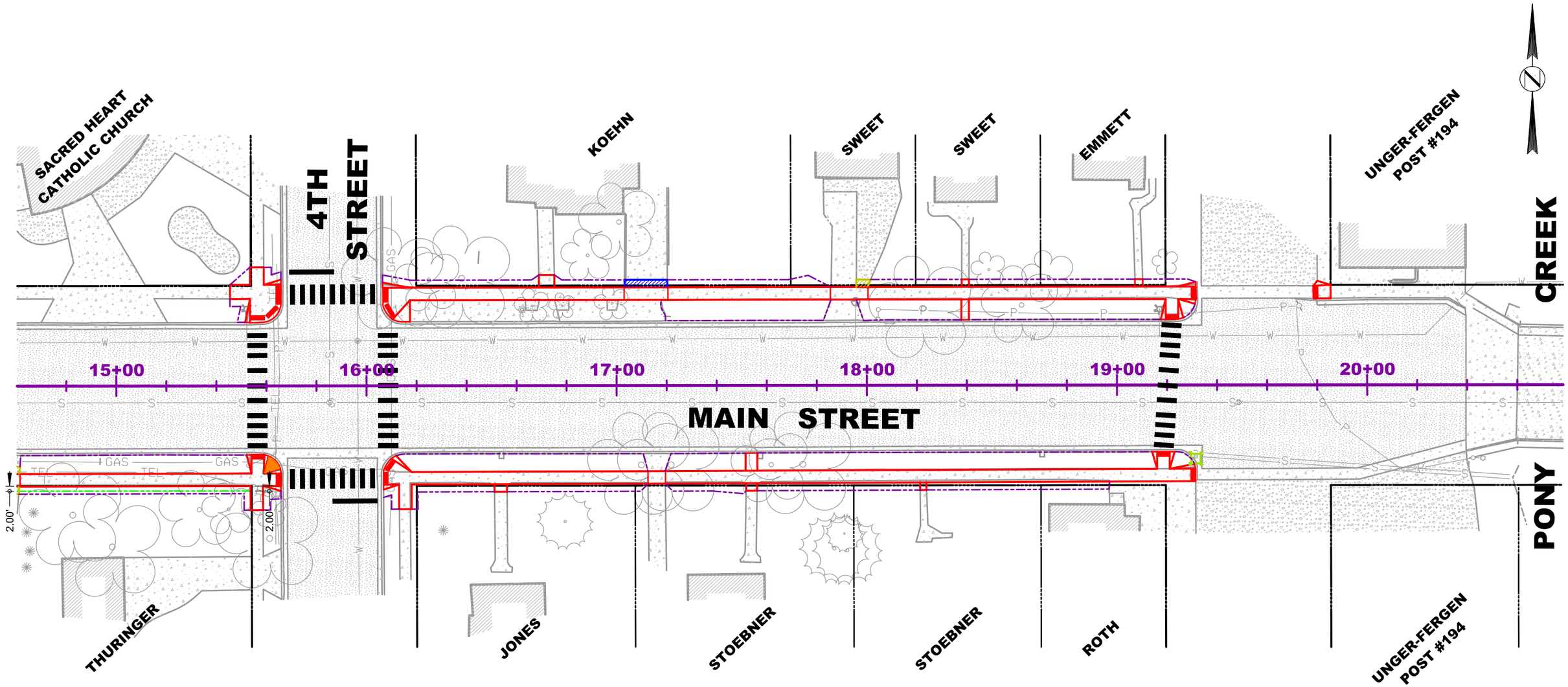
INSTALL 6" PCC SIDEWALK
STA 17+03.0 - 39.25' L TO STA 17+20.5 - 39.27' L - 88 SF
STA 17+12.5 - 39.23' R TO STA 17+19.5 - 39.21' R - 35 SF
STA 17+85.5 - 39.31' L TO STA 18+00.5 - 39.32' L - 75 SF

INSTALL 4" PCC COLORED AND PATTERNED SIDEWALK
STA 15+59.0 - 35.01' R TO STA 15+65.5 - 33.12' R - 24 SF

INSTALL 6" PCC DRIVEWAY PAVEMENT
STA 17+03.2 - 42.25' L TO STA 17+20.3 - 42.27' L - 5.7 SY

6" GRAVEL DRIVEWAYS
STA 17+95.8 - 42.31' L TO STA 18+01.6 - 42.32' L - 0.3 CY

SEDIMENT CONTROL AT INLETS
STA 19+30.0 - 27.94' R



REMOVE CONCRETE SIDEWALK
STA 15+45.4 - 40.42' L TO STA 15+65.8 - 41.04' L - 29.5 SY
STA 16+06.5 - 40.46' L TO STA 17+03.1 - 39.77' L - 69.1 SY
STA 16+06.8 - 39.75' R TO STA 17+12.5 - 38.79' R - 59.7 SY
STA 17+19.4 - 38.60' R TO STA 19+31.4 - 37.79' R - 112.1 SY
STA 17+20.3 - 39.49' L TO STA 17+85.8 - 39.14' L - 36.1 SY
STA 17+95.8 - 39.07' L TO STA 19+31.6 - 40.34' L - 74.2 SY
STA 19+78.6 - 37.09' L TO STA 19+85.4 - 37.33' L - 4.7 SY

REMOVE CONCRETE DRIVEWAY
STA 17+03.2 - 42.25' L TO STA 17+20.3 - 42.27' L - 15.7 SY
STA 17+12.5 - 39.23' R TO STA 17+19.4 - 39.21' R - 3.8 SY
STA 17+85.8 - 39.31' L TO STA 17+95.8 - 39.31' L - 5.3 SY
STA 18+97.0 - 38.56' R TO STA 19+31.4 - 38.43' R - 2.2 SY

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE McLAURY
2-3-14
SOUTH DAKOTA

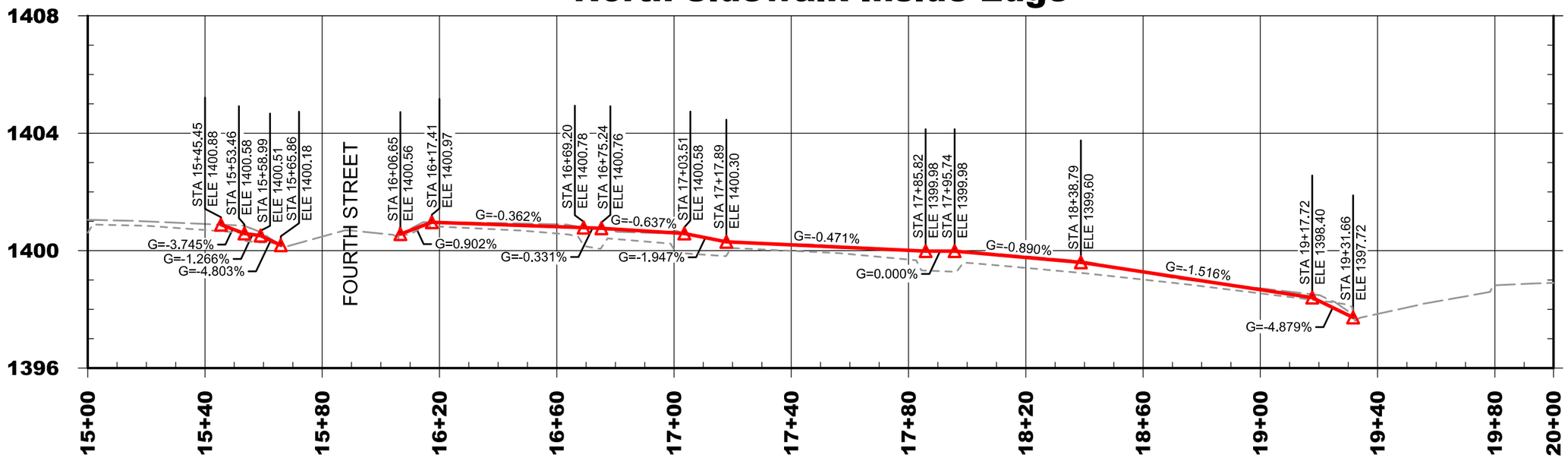
Kim L McLaury

File Location: U:\Parkston\22130102 West Main Street SRTS\Cd\Sht 20 - 15+00 Plan.dgn
Plot Time: 10:53:07 AM 2/3/2014

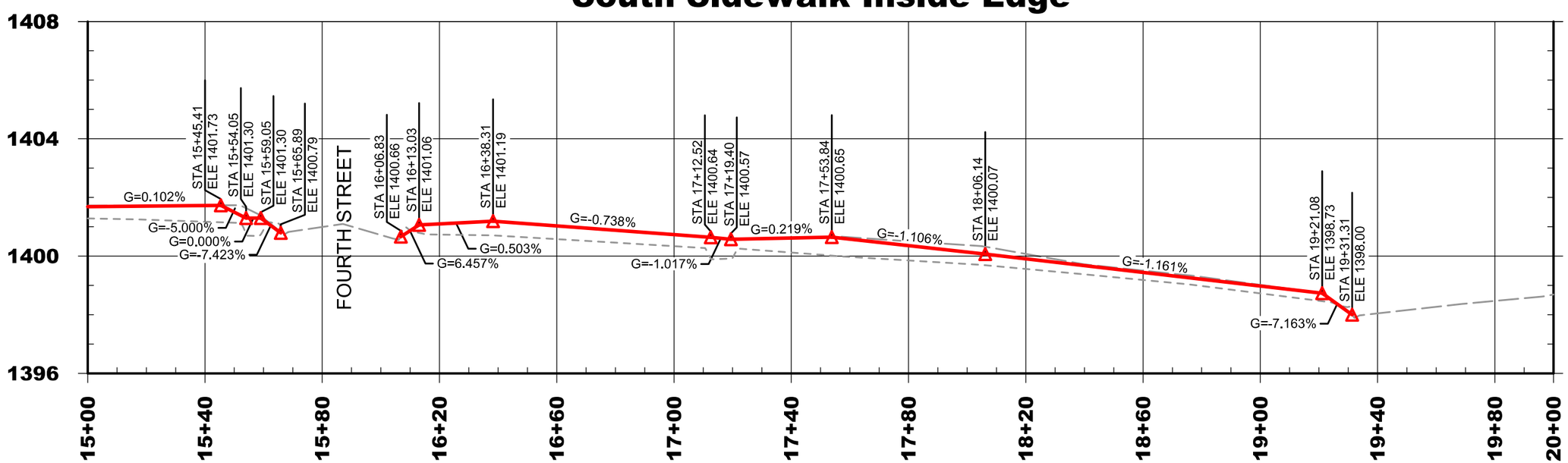
The vertical alignment may be adjusted by the Engineer in the field.
The contractor shall not adjust any alignments without prior approval.

EXISTING SIDEWALK SURFACE
PROPOSED SIDEWALK ALIGNMENT
EXISTING BACK OF CURB SURFACE

North Sidewalk Inside Edge



South Sidewalk Inside Edge



REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE McLAURY
2-3-14
SOUTH DAKOTA

Kim L. McLaury

PROJECT	SHEET NO.	TOTAL SHEETS
CITY OF PARKSTON WEST MAIN ST. SRTS PROJECT 2013	22	42

SIDEWALK LAYOUT

FOR BIDDING PURPOSES ONLY

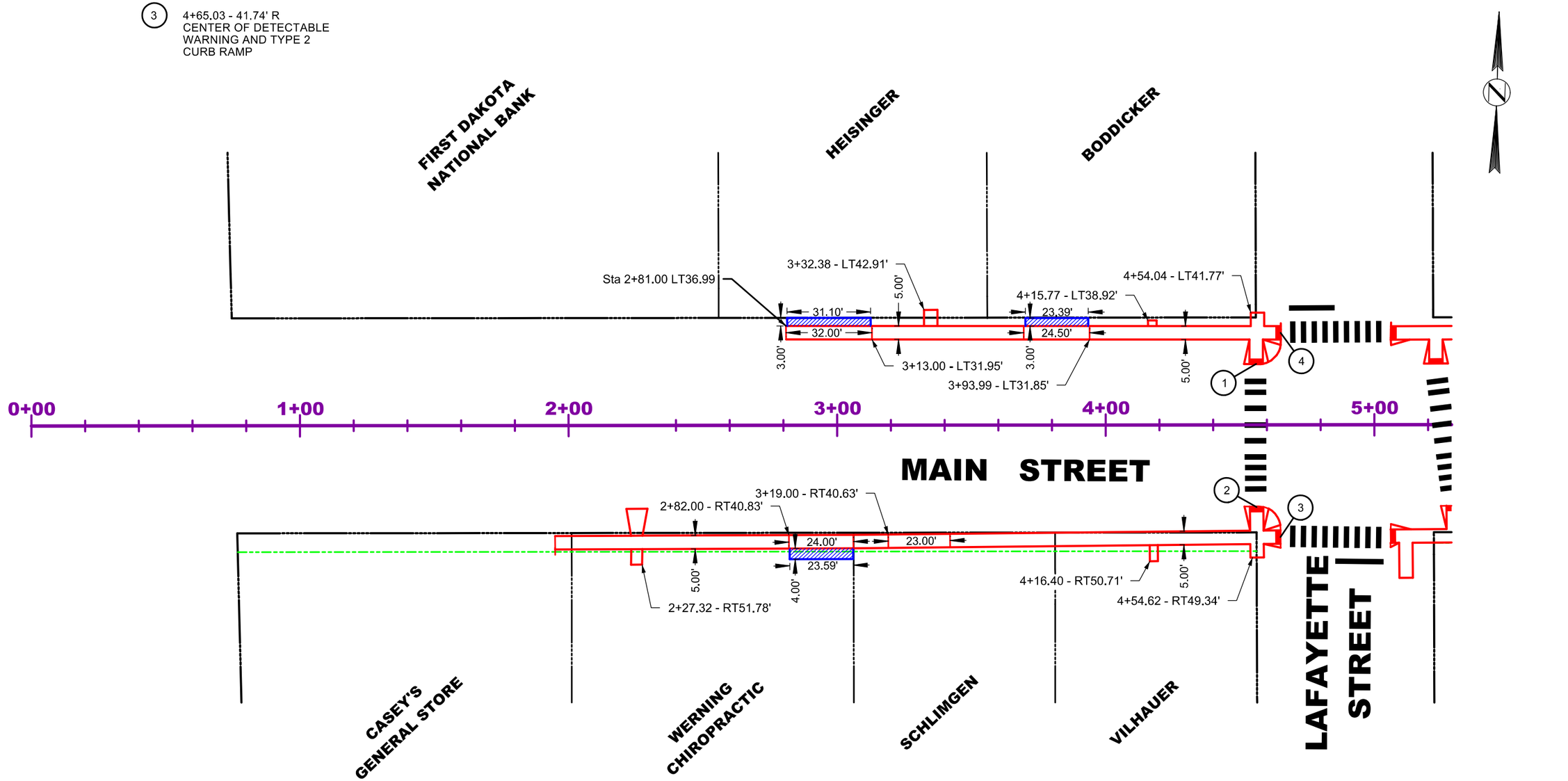
(1) 4+56.02 - 22.73' L
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(2) 4+56.14 - 30.56' R
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(3) 4+65.03 - 41.74' R
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(4) 4+65.17 - 34.25' L
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

NOTE:
All Sidewalk is 5.0' and all Drives are Type A except as noted.



REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE McLAURY
2-3-14
SOUTH DAKOTA

Kim L. McLaury

File Location:U:\Parkston\22130102 West Main Street SRTS\Cd\Sht 22 - 0+00 C&G.dgn
Plot Time: 10:53:10 AM 2/3/2014

FOR BIDDING PURPOSES ONLY

SIDEWALK LAYOUT

(5) 5+06.07 - 41.45' R
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(6) 5+06.27 - 34.15' L
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(6A) 5+22.96 - 22.79' L
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(6B) 5+29.32 - 30.19' R
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(7) 8+33.29 - 35.05' L
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(8) 8+33.98 - 39.33' R
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(9) 8+73.67 - 39.57' R
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(10) 8+74.29 - 35.38' L
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

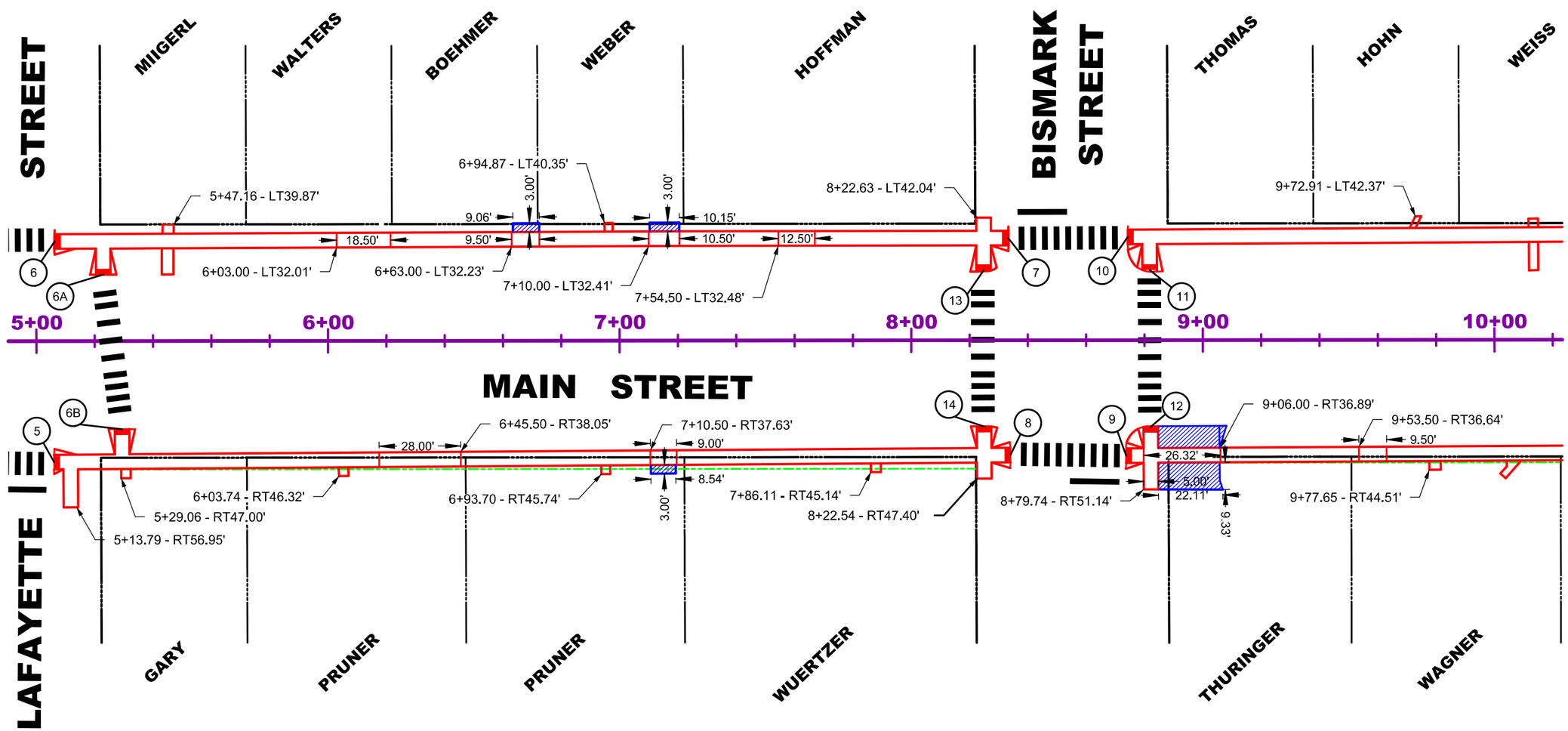
(11) 8+81.76 - 24.03' L
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(12) 8+82.12 - 29.70' R
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(13) 8+24.84 - 23.94' L
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(14) 8+24.92 - 29.55' R
CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

NOTE:
All Sidewalk is 5.0' and all Drives are Type A except as noted.



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5801
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23-14
SOUTH DAKOTA

Kim L. McLaury

SIDEWALK LAYOUT

FOR BIDDING PURPOSES ONLY

(14A) 11+86.22 - 24.35' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(14B) 11+86.48 - 28.56' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

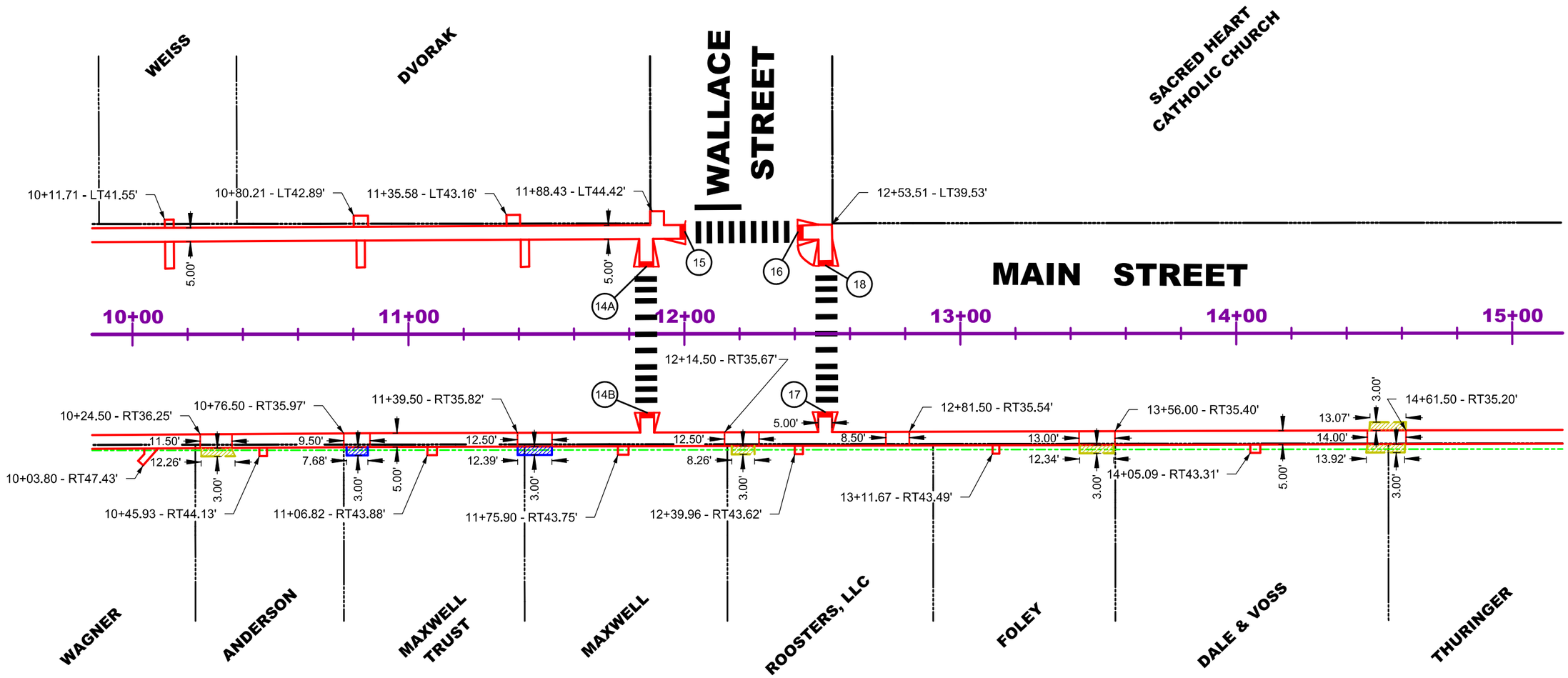
(15) 12+00.26 - 36.98' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(16) 12+41.13 - 36.80' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(17) 12+50.96 - 28.37' R CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(18) 12+51.25 - 24.69' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

NOTE:
All Sidewalk is 5.0' and all Drives are Type A except as noted.



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5801
KIM LaRUE McLAURY
2-3-14
SOUTH DAKOTA

Kim L. McLaury

SIDEWALK LAYOUT

FOR BIDDING PURPOSES ONLY

NOTE:
All Sidewalk is 5.0' and all Drives are Type A except as noted.

(19) 15+56.45 - 26.19' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(20) 15+56.51 - 27.46' R CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(21) 15+62.99 - 28.89' L CENTER OF DETECTABLE WARNING

(22) 15+65.69 - 36.43' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(23) 15+65.83 - 37.50' R CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(24) 16+06.77 - 36.19' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(25) 16+06.83 - 36.97' R CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(26) 16+08.54 - 29.60' L CENTER OF DETECTABLE WARNING

(27) 16+08.66 - 31.27' R CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

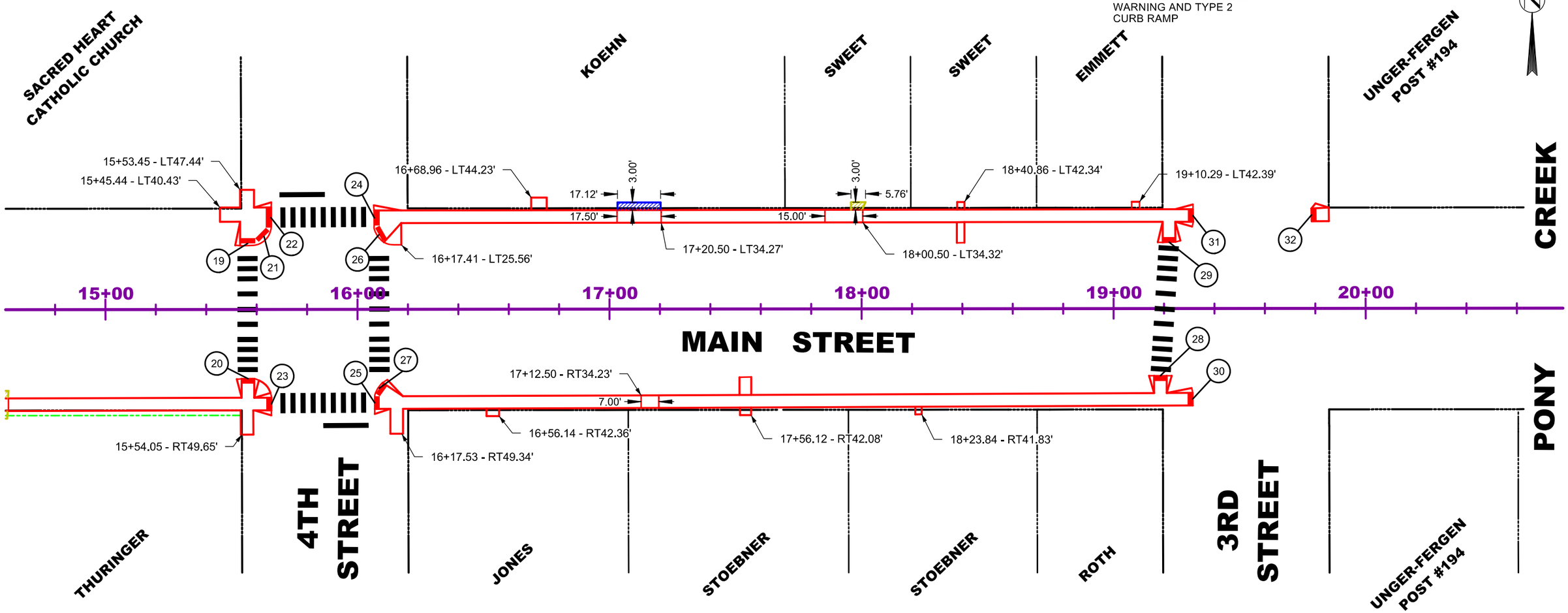
(28) 19+18.52 - 26.62' R CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(29) 19+22.00 - 26.37' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(30) 19+31.29 - 35.93' R CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(31) 19+31.49 - 36.90' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP

(32) 19+78.63 - 37.09' L CENTER OF DETECTABLE WARNING AND TYPE 2 CURB RAMP



REGISTERED PROFESSIONAL ENGINEER
REG. NO.
5801
KIM LaRUE McLAURY
2-3-14
SOUTH DAKOTA

Kim LaRue McLaury

PROJECT	SHEET NO.	TOTAL SHEETS
CITY OF PARKSTON WEST MAIN ST. SRTS PROJECT 2013	26	42

FOR BIDDING PURPOSES ONLY

CURB RAMP DETAILS

NOTES:

All Sidewalk is 5' wide except as noted.

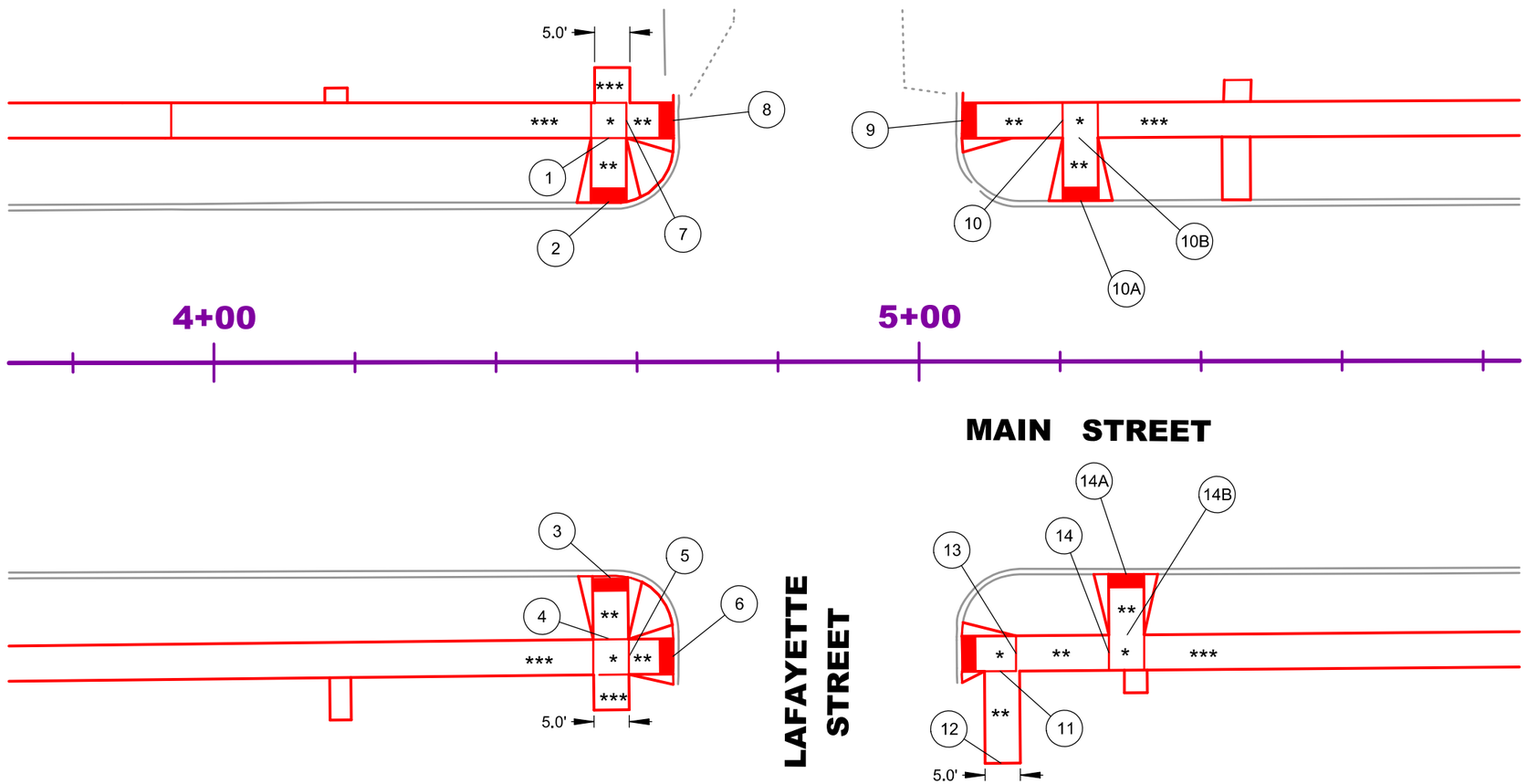
* Landing

** Ramp Slopes with 8.3% Max Slope

\# Ramp Slopes with 5.0% Max Slope

*** Sidewalk with 5% Max Long. Slope

Detectable Warning Surface



1 4+56.0 - 31.76' L Begin Ramp Slope (7.1%)	5 4+58.8 - 41.80' R Begin Ramp Slope (8.1%)	9 5+06.3 - 34.15' L End Ramp Slope	11 5+11.5 - 43.91' R End Ramp Slope	14A 5+29.3 - 30.19' R End Ramp Slope
2 4+56.0 - 22.73' L End Ramp Slope	6 4+65.0 - 41.74' R End Ramp Slope	10 5+20.4 - 34.20' L Begin Ramp Slope (7.3%)	12 5+11.5 - 56.96' R Begin Ramp Slope (8.3%)	14B 5+29.5 - 38.80' R Begin Ramp Slope (8.3%)
3 4+56.1 - 30.56' R End Ramp Slope	7 4+58.5 - 34.26' L Begin Ramp Slope (8.0%)	10A 5+23.0 - 22.79' L End Ramp Slope	13 5+13.7 - 41.40' R End Ramp Slope	
4 4+56.2 - 39.33' R Begin Ramp Slope (7.6%)	8 4+65.2 - 34.25' L End Ramp Slope	10B 5+22.7 - 31.73' L Begin Ramp Slope (8.3%)	14 5+26.9 - 41.31' R Begin Ramp Slope (8.3%)	

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2-3-14
SOUTH DAKOTA

Kim L McLaury

File Location:C:\Parkston\22130102 West Main Street SRTS\Cd\Sht 27 - 5+00 Ramp.dgn
Plot Time: 10:53:15 AM 2/3/2014

CURB RAMP DETAILS

NOTES:

All Sidewalk is 5' wide except as noted.

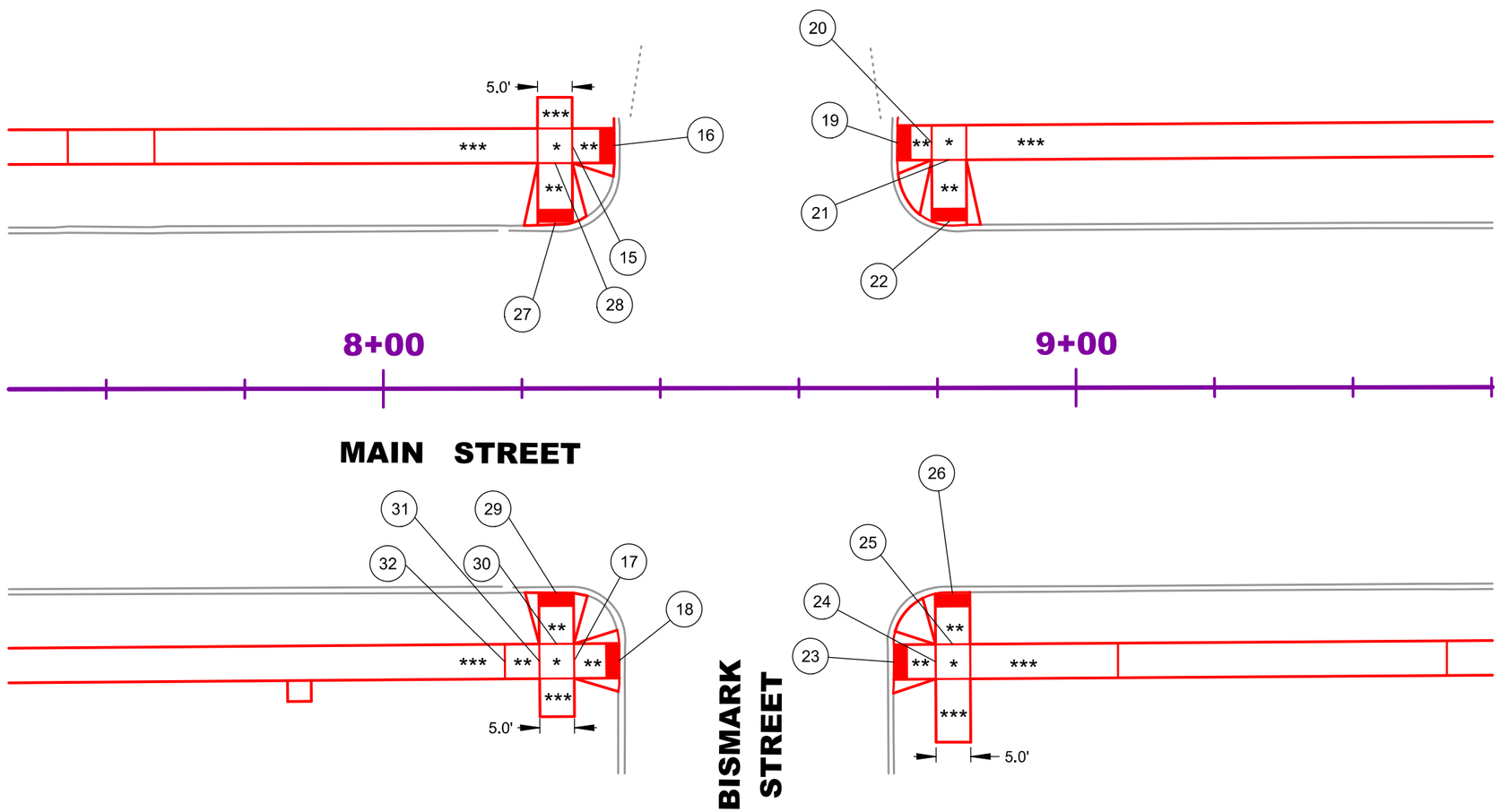
* Landing

** Ramp Slopes with 8.3% Max Slope

\# Ramp Slopes with 5.0% Max Slope

*** Sidewalk with 5% Max Long. Slope

Detectable Warning Surface



15	8+27.3 - 35.05' L Begin Ramp Slope (8.3%)	19	8+74.3 - 35.38' L End Ramp Slope	23	8+73.7 - 39.57' R End Ramp Slope	27	8+24.8 - 23.94' L End Ramp Slope	31	8+22.5 - 39.40' R End Ramp Slope
16	8+33.3 - 35.05' L End Ramp Slope	20	8+79.2 - 35.41' L Begin Ramp Slope (7.2%)	24	8+79.7 - 39.54' R Begin Ramp Slope (1.6%)	28	8+24.8 - 32.55' L Begin Ramp Slope (6.6%)	32	8+17.5 - 39.43' R Begin Ramp Slope (2.8%)
17	8+27.5 - 39.37' R Begin Ramp Slope (7.5%)	21	8+81.7 - 32.92' L Begin Ramp Slope (6.1%)	25	8+82.1 - 36.97' R Begin Ramp Slope (7.6%)	29	8+24.9 - 36.89' R Begin Ramp Slope (7.9%)		
18	8+34.0 - 39.33' R End Ramp Slope	22	8+81.8 - 24.03' L End Ramp Slope	26	8+82.1 - 29.70' R End Ramp Slope	30	8+24.9 - 29.55' R End Ramp Slope		

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2-3-14
SOUTH DAKOTA

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CURB RAMP DETAILS

NOTES:

All Sidewalk is 5' wide except as noted.

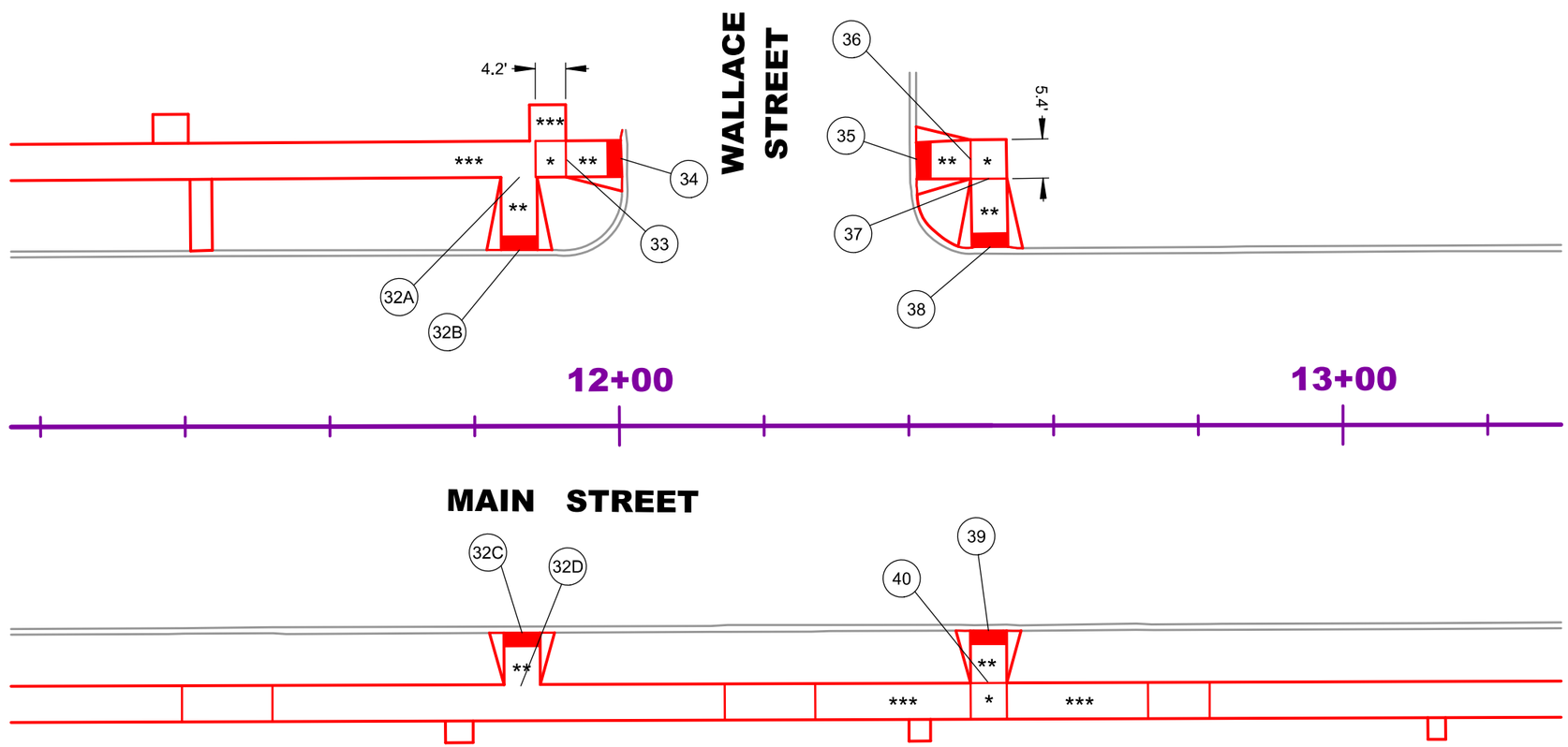
* Landing

** Ramp Slopes with 8.3% Max Slope

\# Ramp Slopes with 5.0% Max Slope

*** Sidewalk with 5% Max Long. Slope

Detectable Warning Surface



32A	11+86.2 - 34.43' L Begin Ramp Slope (3.7%)	33	11+92.7 - 36.94' L Begin Ramp Slope (1.4%)	37	12+51.1 - 34.12' L Begin Ramp Slope (5.7%)
32B	11+86.2 - 24.37' L End Ramp Slope	34	12+00.3 - 36.98' L End Ramp Slope	38	12+51.3 - 24.69' L End Ramp Slope
32C	11+86.48 - 28.56' R End Ramp Slope	35	12+41.1 - 36.80' L End Ramp Slope	39	12+51.0 - 28.37' R End Ramp Slope
32D	11+86.3 - 35.91' R Begin Ramp Slope (8.3%)	36	12+48.6 - 36.81' L Begin Ramp Slope (4.6%)	40	12+51.0 - 35.60' R Begin Ramp Slope (7.3%)

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5801
KIM LaRUE
McLAURY
2-3-14
SOUTH DAKOTA

Kim L McLaury

PROJECT	SHEET NO.	TOTAL SHEETS
CITY OF PARKSTON WEST MAIN ST. SRTS PROJECT 2013	29	42

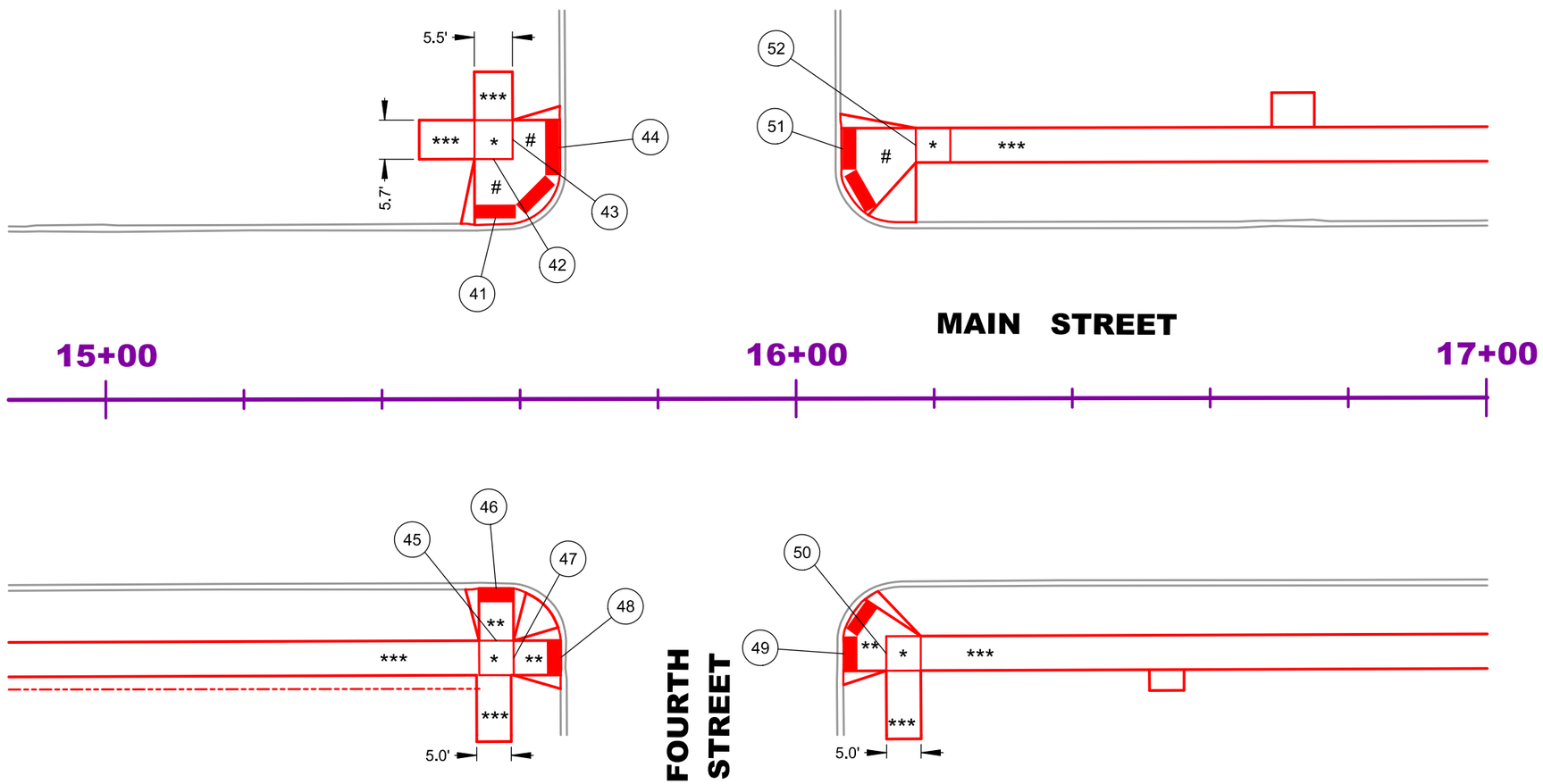
FOR BIDDING PURPOSES ONLY

CURB RAMP DETAILS

NOTES:

All Sidewalk is 5' wide except as noted.

- * Landing
- ** Ramp Slopes with 8.3% Max Slope
- # Ramp Slopes with 5.0% Max Slope
- *** Sidewalk with 5% Max Long. Slope
- Detectable Warning Surface



41	15+56.5 - 26.19' L End Ramp Slope	45	15+56.5 - 35.02' R Begin Ramp Slope (8.1%)	49	16+06.8 - 36.97' R End Ramp Slope
42	15+56.2 - 34.78' L Begin Ramp Slope (2.6%)	46	15+56.5 - 27.46' R End Ramp Slope	50	16+13.0 - 36.96' R Begin Ramp Slope (7.1%)
43	15+59.0 - 37.60' L Begin Ramp Slope (4.9%)	47	15+59.0 - 37.51' R Begin Ramp Slope (7.5%)	51	16+06.8 - 36.19' L End Ramp Slope
44	15+65.7 - 36.43' L End Ramp Slope	48	15+65.8 - 37.50' R End Ramp Slope	52	16+17.4 - 36.70' L Begin Ramp Slope (3.9%)

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CURB RAMP DETAILS

NOTES:

All Sidewalk is 5' wide except as noted.

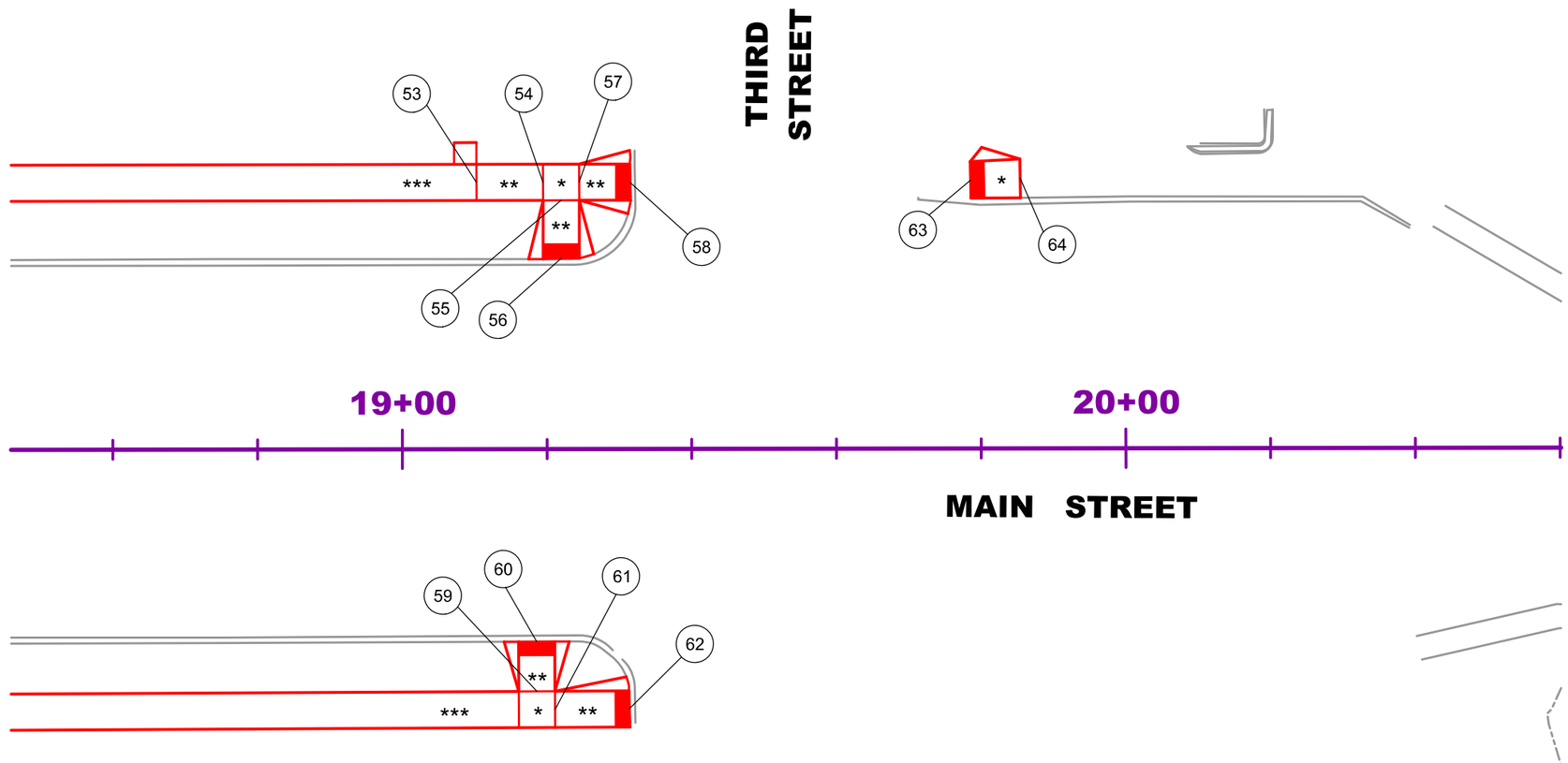
* Landing

** Ramp Slopes with 8.3% Max Slope

\# Ramp Slopes with 5.0% Max Slope

*** Sidewalk with 5% Max Long. Slope

Detectable Warning Surface



53	19+10.3 - 36.89' L Begin Ramp Slope (8.3%)	57	19+24.5 - 36.90' L Begin Ramp Slope (4.9%)	61	19+21.1 - 35.97' R Begin Ramp Slope (7.2%)
54	19+19.5 - 36.89' L End Ramp Slope	58	19+31.5 - 36.90' L End Ramp Slope	62	19+31.3 - 35.93' R End Ramp Slope
55	19+22.0 - 34.40' L Begin Ramp Slope (4.9%)	59	19+18.6 - 33.48' R Begin Ramp Slope (8.3%)	63	19+78.6 - 37.09' L Begin Landing Slope (2.0% Max)
56	19+22.0 - 26.37' L End Ramp Slope	60	19+18.5 - 26.62' R End Ramp Slope	64	19+85.44 - 37.33' L End Landing Slope

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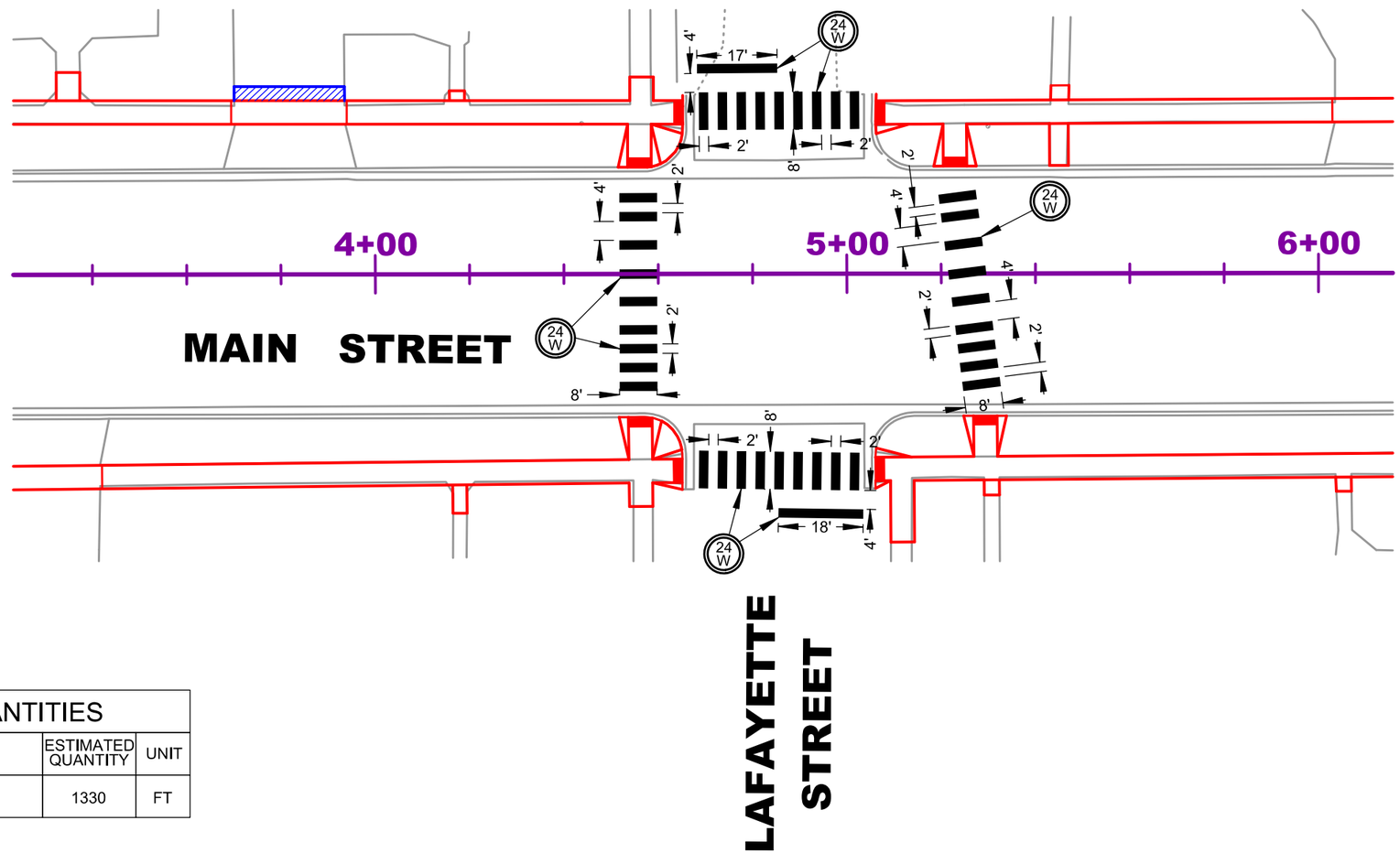
PAVEMENT MARKING LAYOUT

STATION 3+40 TO 6+00



ESTIMATE OF QUANTITIES			
KEY	ITEM	ESTIMATED QUANTITY	UNIT
24 W	Pavement Marking Paint, 24" White	1330	FT

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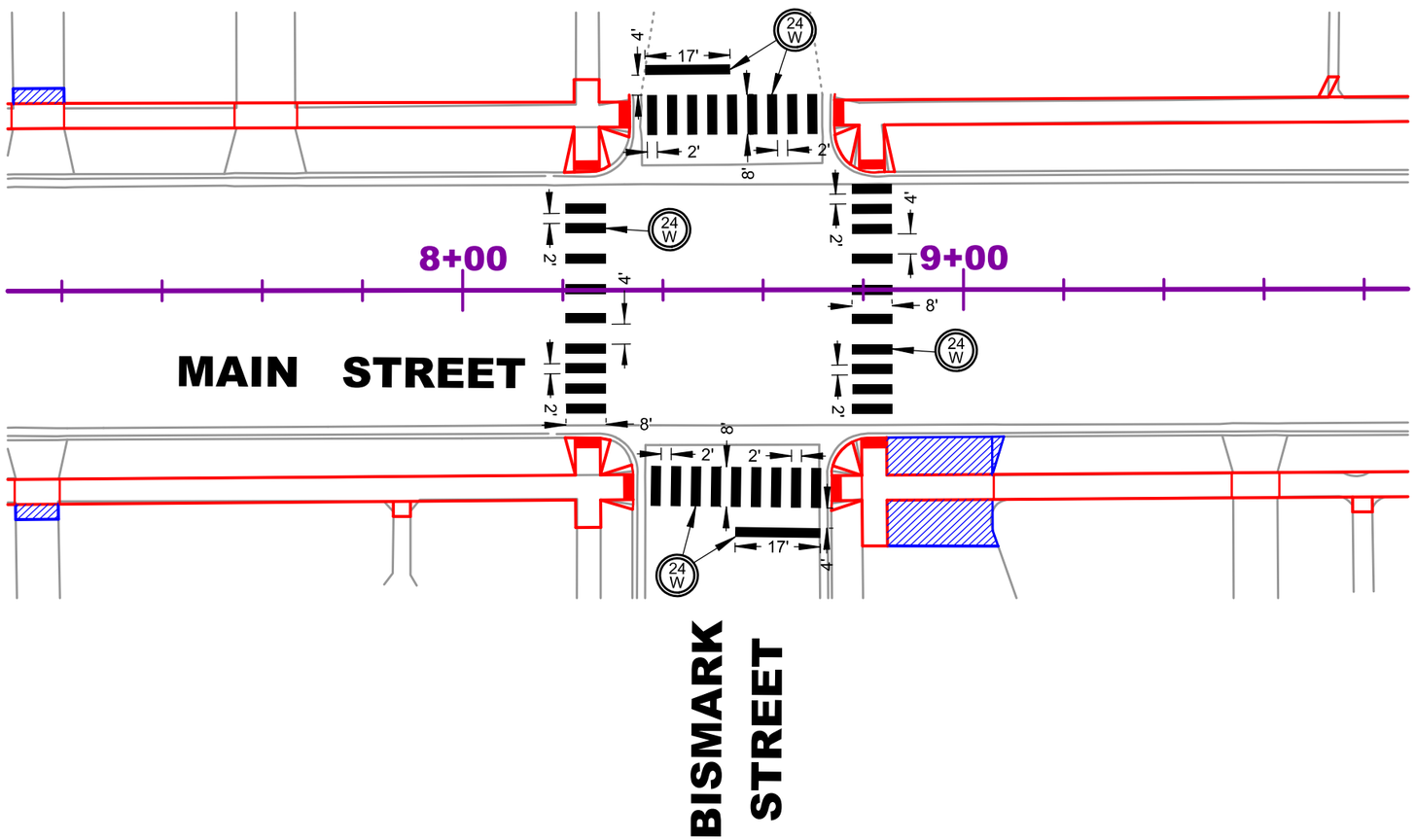
PAVEMENT MARKING LAYOUT

STATION 7+20 TO 9+80



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2-3-14

Kim L McLaury

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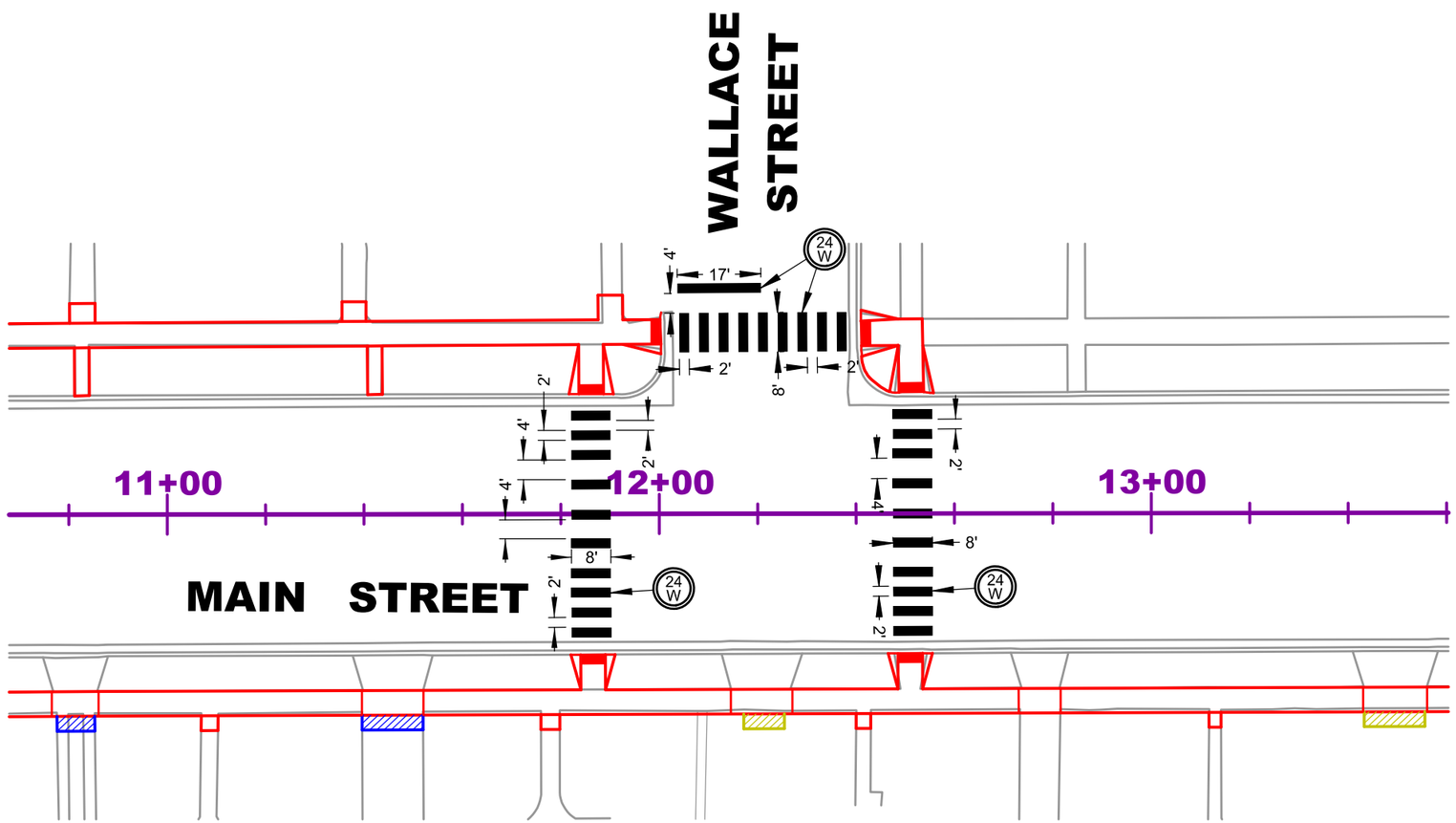
PAVEMENT MARKING LAYOUT

STATION 10+80 TO 13+40



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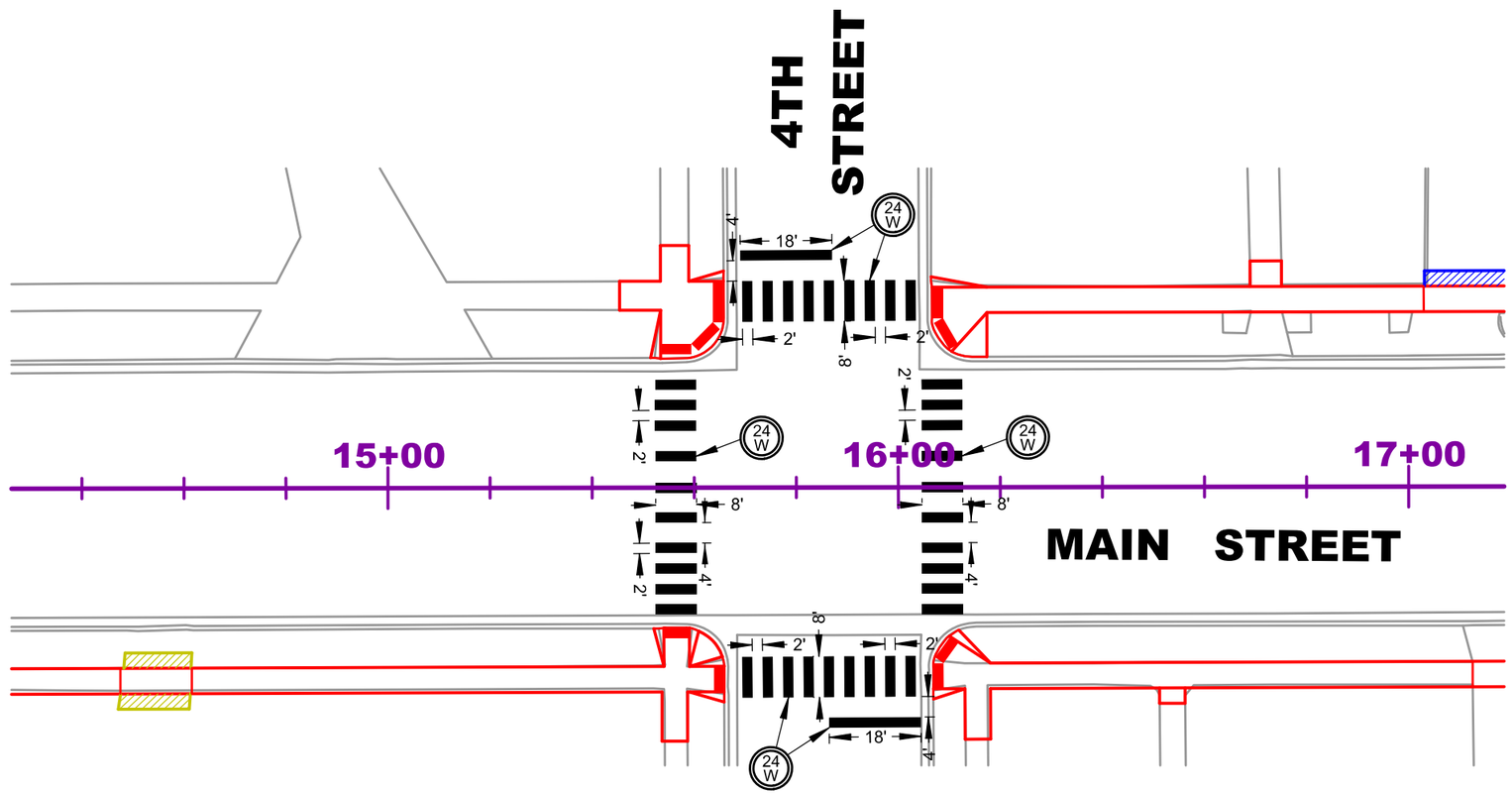
PAVEMENT MARKING LAYOUT

STATION 14+40 TO 17+00



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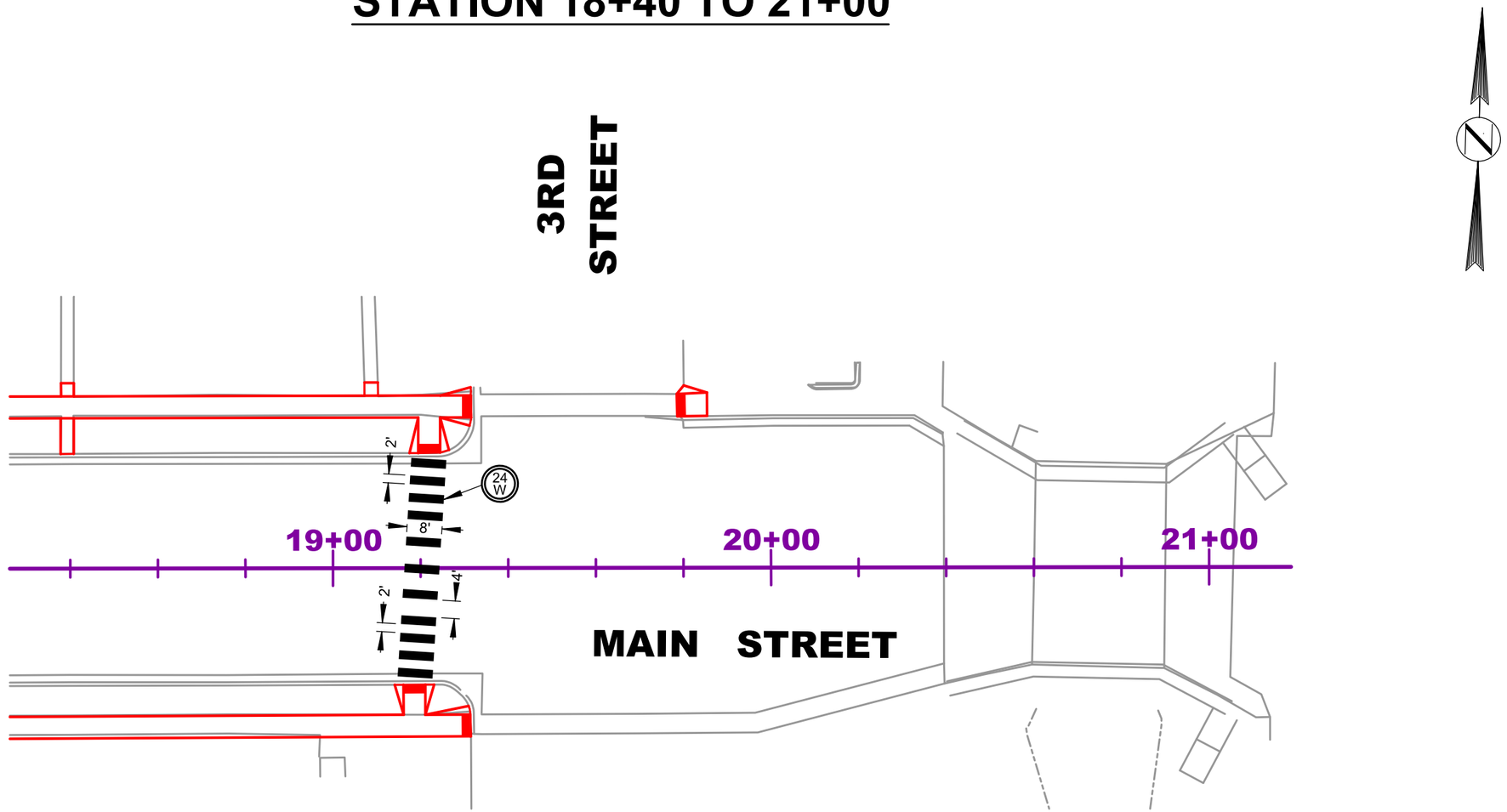
Kim LaRue McLaury

FOR BIDDING PURPOSES ONLY

PAVEMENT MARKING LAYOUT

STATION 18+40 TO 21+00



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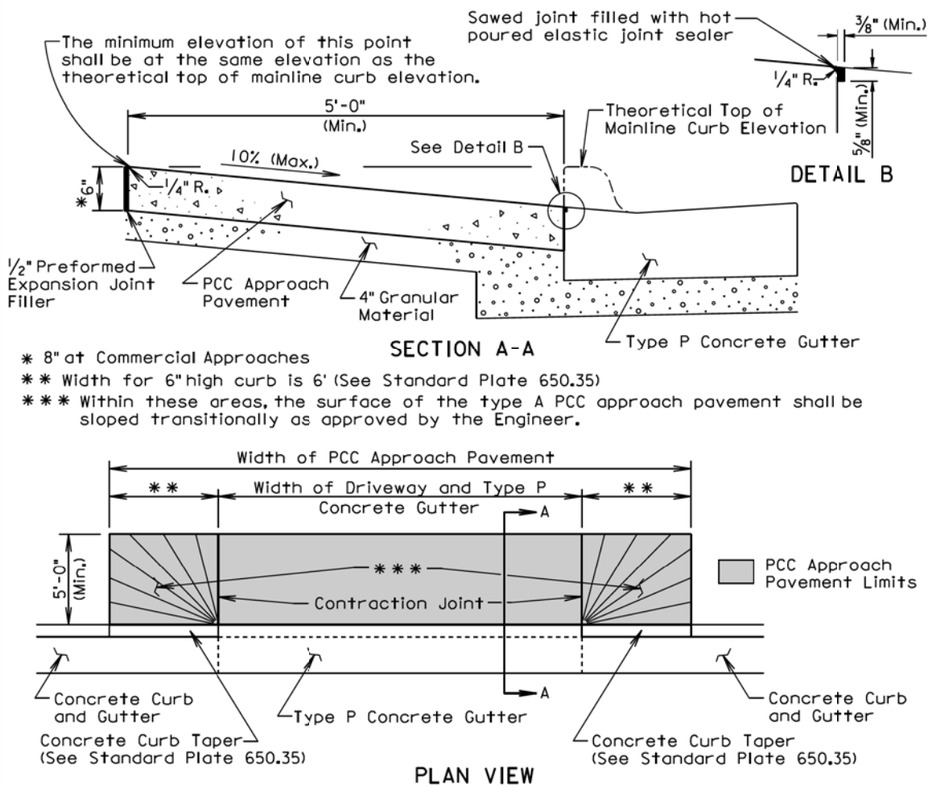
2-3-14
SOUTH DAKOTA

Kim LaRue McLaury



GENERAL NOTES:

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

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

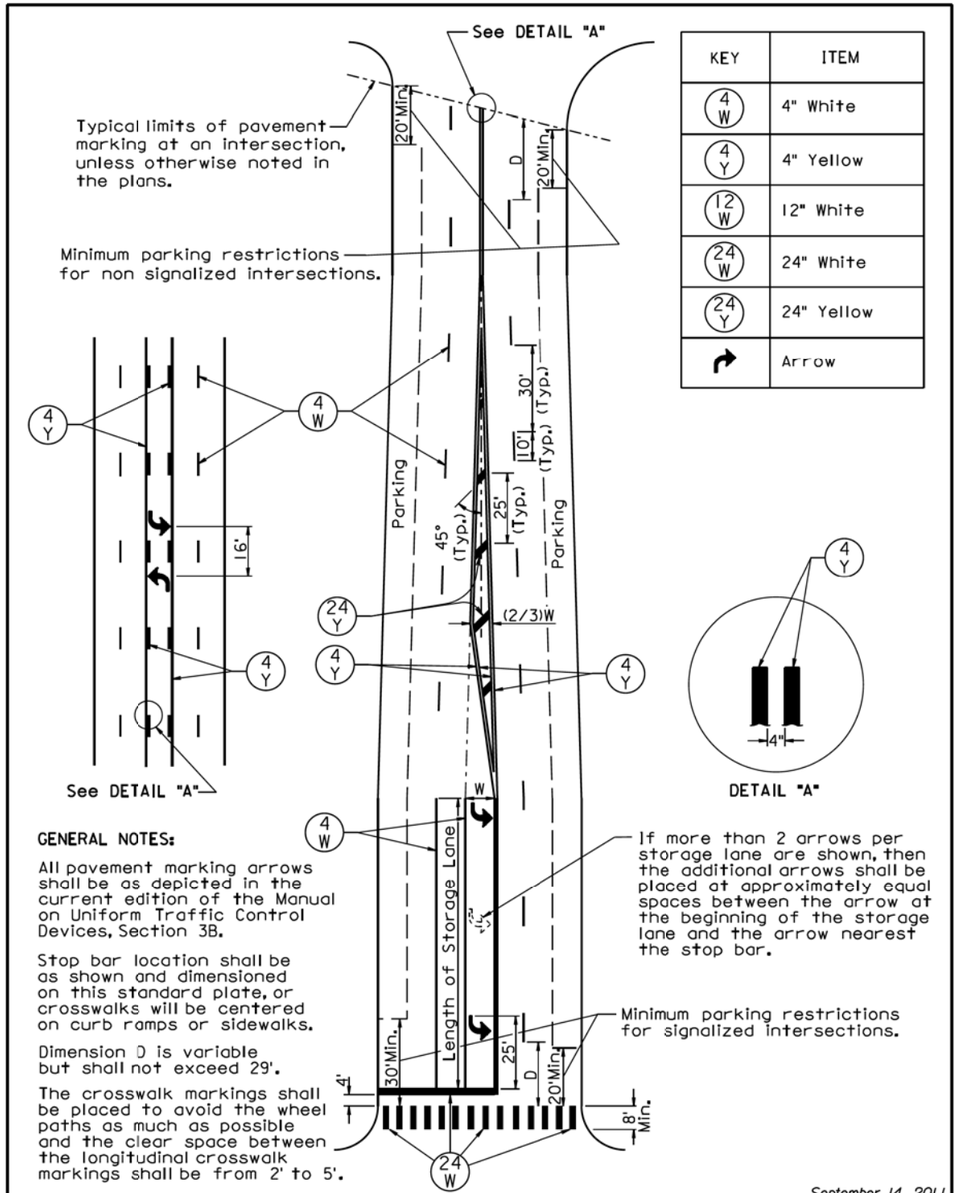
One joint at the center of the approach for driveways 16' to 24' wide.
Two joints spaced at equal intervals for driveways greater than 24' to 40' wide.

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.

September 14, 2005

Published Date: 2nd Qtr. 2013	SDDOT	TYPE A PCC APPROACH PAVEMENT	PLATE NUMBER 380.40
			Sheet 1 of 1



KEY	ITEM
4 W	4" White
4 Y	4" Yellow
12 W	12" White
24 W	24" White
24 Y	24" Yellow
↱	Arrow

GENERAL NOTES:

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

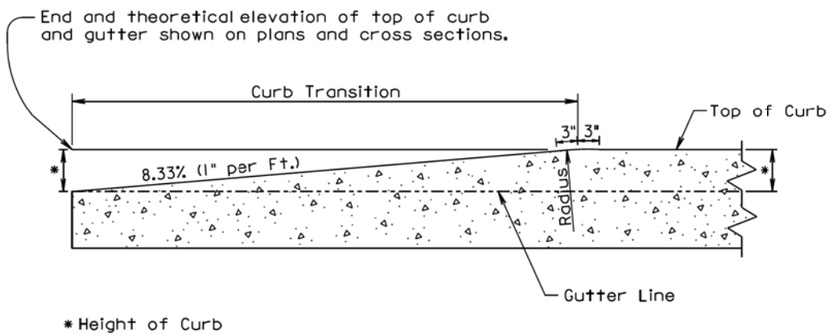
Stop bar location shall be as shown and dimensioned on this standard plate, or crosswalks will be centered on curb ramps or sidewalks.

Dimension D is variable but shall not exceed 29'.

The crosswalk markings shall be placed to avoid the wheel paths as much as possible and the clear space between the longitudinal crosswalk markings shall be from 2' to 5'.

September 14, 2011

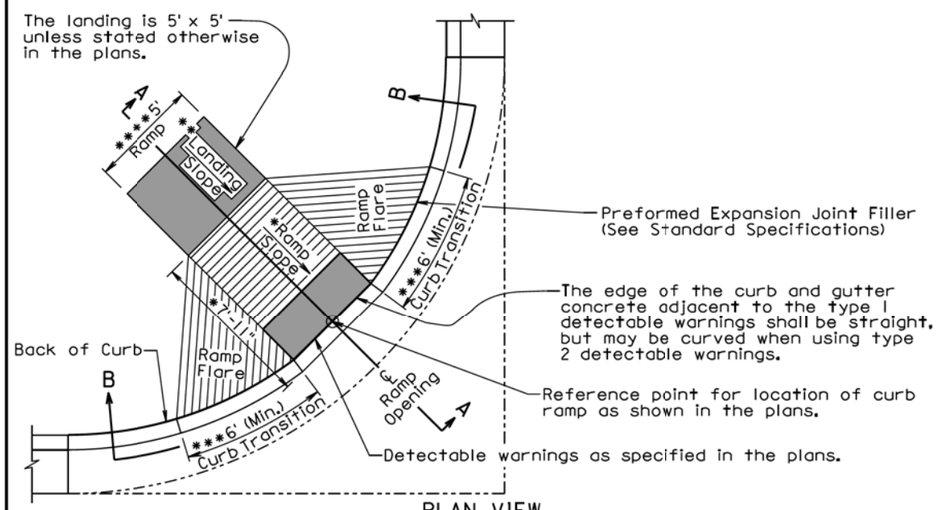
Published Date: 2nd Qtr. 2013	SDDOT	PAVEMENT MARKINGS FOR ADJACENT INTERSECTIONS AND CENTER TURN LANE	PLATE NUMBER 633.01
			Sheet 1 of 1



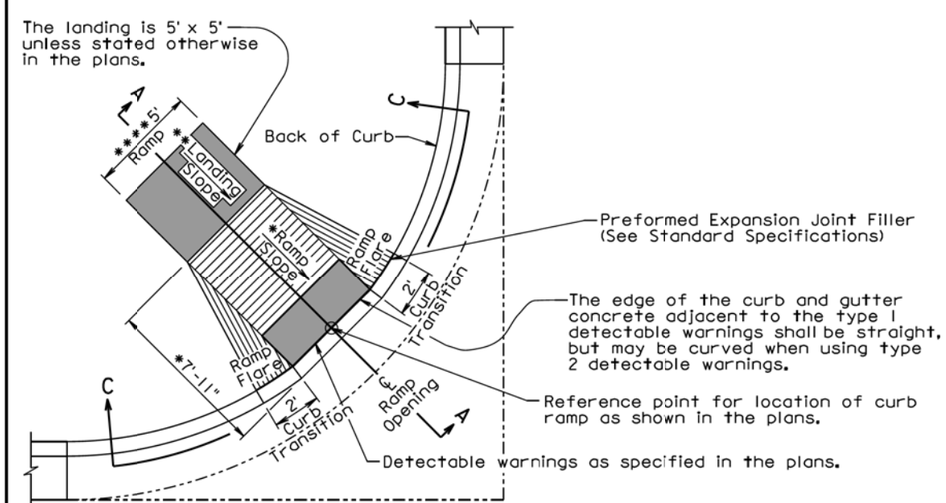
LONGITUDINAL SECTION OF CONCRETE CURB TAPER

September 14, 2005

Published Date: 2nd Qtr. 2013	SDDOT	CONCRETE CURB TAPER	PLATE NUMBER 650.35
			Sheet 1 of 1



PLAN VIEW
(With 6'+ Curb Transition)



PLAN VIEW
(With 2' Curb Transition)

March 22, 2013

Published Date: 2nd Qtr. 2013	SDDOT	TYPE 1 CURB RAMP (PERPENDICULAR CURB RAMP)	PLATE NUMBER 651.01
			Sheet 1 of 3

The ramp slope shall be 12:1 (8.3%) maximum. The ramp length shall not exceed 15' unless stated otherwise in the plans. Ramp slopes are designed at 12:1 (8.3%) unless stated otherwise in the plans.

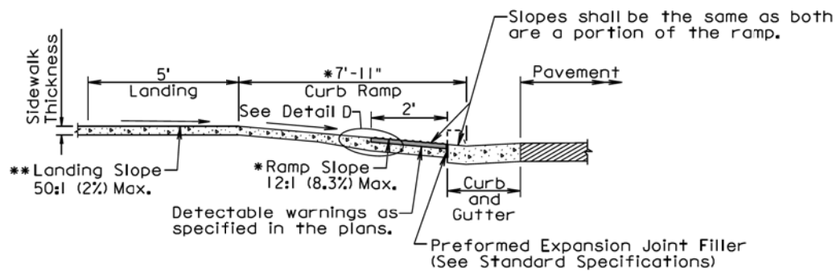
* The cross slope of the ramp shall not be steeper than 50:1 (2%).

The 7'-11" dimension was computed based on a flat roadway profile, a continuous 2% theoretical slope from top of theoretical curb to the top of ramp, and a 6" high curb. The dimension shall be adjusted based on the curb type shown in the plans, the roadway geometrics, and the sidewalk geometrics.

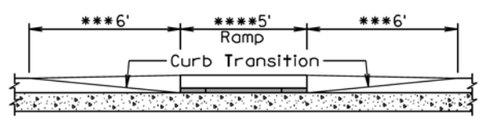
** The landing slope shall not be steeper than 50:1 (2%) in any direction of pedestrian travel.

*** 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 10:1 (10%) unless stated otherwise in the plans.

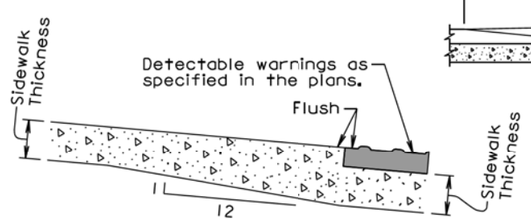
**** The ramp width is 5' unless stated otherwise in the plans.



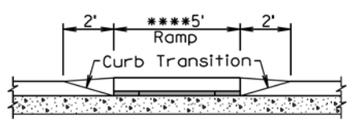
SECTION A-A



SECTIONAL VIEW B-B



DETAIL D



SECTIONAL VIEW C-C

March 22, 2013

Published Date: 2nd Qtr. 2013	SDDOT	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, with curved curb and gutter, or with straight 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 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 ramp, free of sags and short grade changes.

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

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

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 detectectable 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.

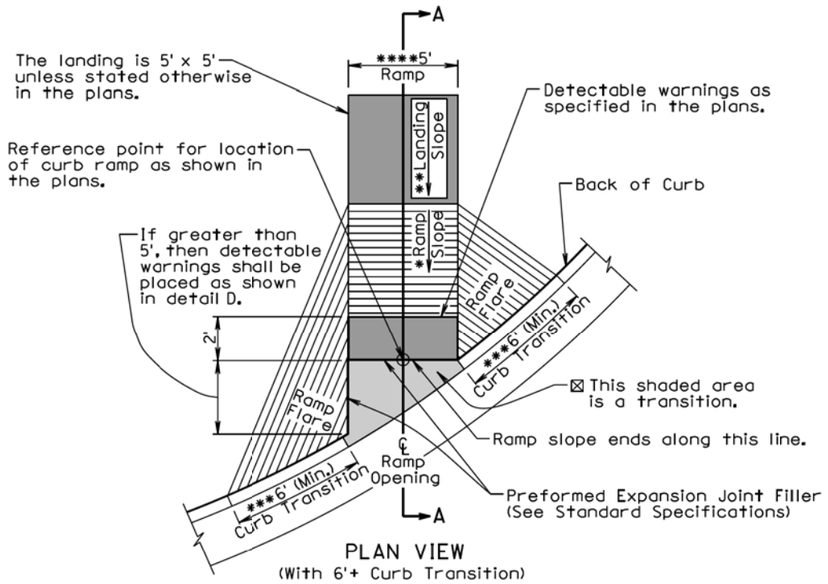
The curb transitions and ramp opening shall be measured and paid for at the contract unit price per foot for the corresponding curb and gutter bid item when curb and gutter is used. The curb transitions and ramp opening shall be measured and paid for at the contract unit price per square yard for the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

March 22, 2013

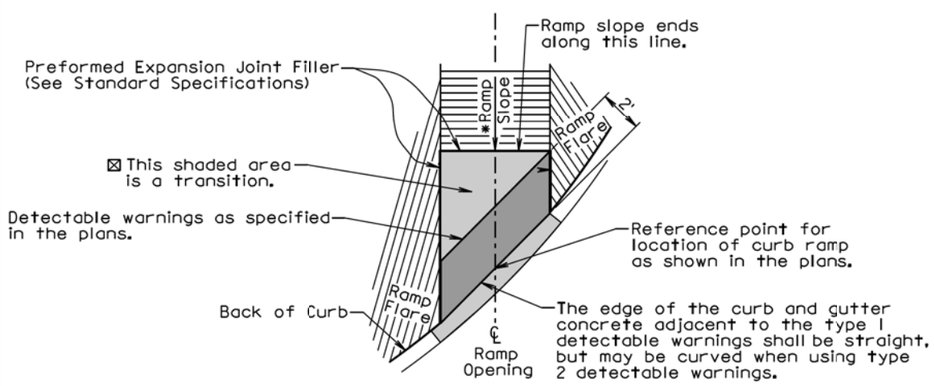
Published Date: 2nd Qtr. 2013	SDDOT	TYPE 1 CURB RAMP (PERPENDICULAR CURB RAMP)	PLATE NUMBER 651.01
			Sheet 3 of 3



PLAN VIEW
(With 6'+ Curb Transition)

⊠ The slope within the transition area shall not be steeper than a 20:1 (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.

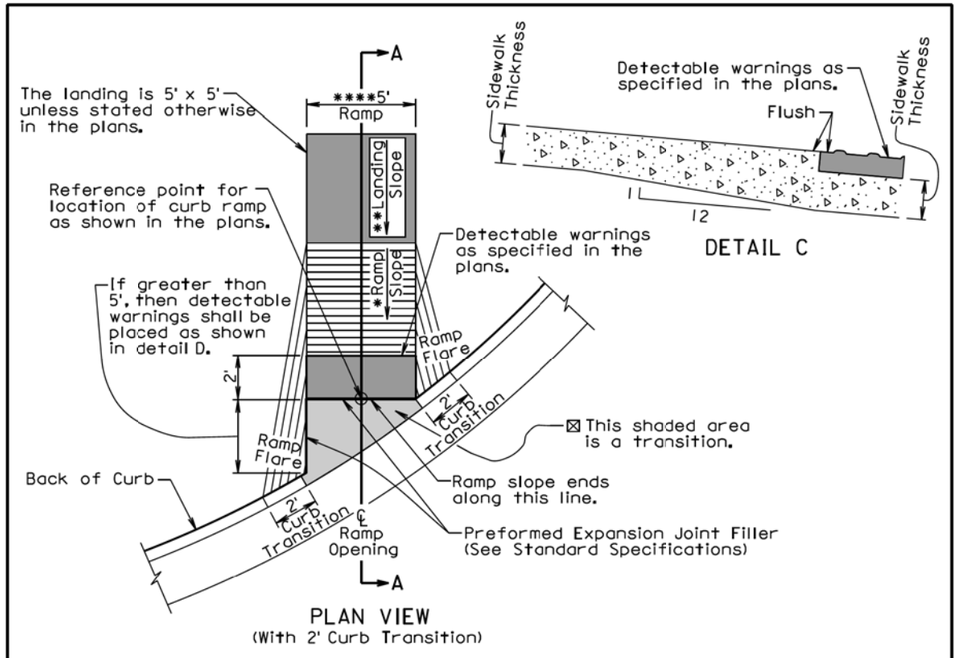
*** The curb transition shall be a minimum of 6' long, a maximum of 10' long, and the curb transition slope shall not be steeper than a 10:1 (10%) unless stated otherwise in the plans.



DETAIL D

March 22, 2013

Published Date: 2nd Qtr. 2013	SDDOT	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02
			Sheet 1 of 3



DETAIL C

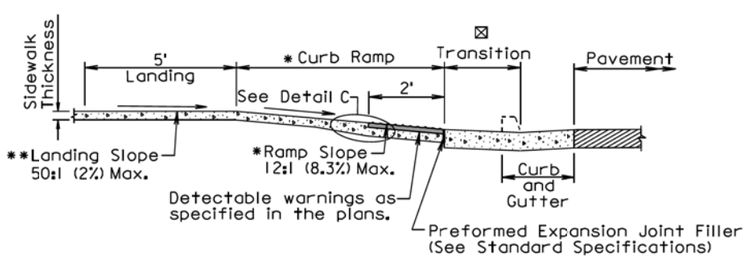
PLAN VIEW
(With 2' Curb Transition)

* The ramp slope shall be 12:1 (8.3%) maximum. The ramp length shall not exceed 15' unless stated otherwise in the plans. Ramp slopes are designed at 12:1 (8.3%) unless stated otherwise in the plans.

The cross slope of the ramp shall not be steeper than 50:1 (2%).

** The landing slope shall not be steeper than a 50:1 (2%) in any direction of pedestrian travel.

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



SECTION A-A

March 22, 2013

Published Date: 2nd Qtr. 2013	SDDOT	TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)	PLATE NUMBER 651.02
			Sheet 2 of 3

GENERAL NOTES:

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

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

Sidewalk shall not be placed adjacent to the 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 ramp, free of sags and short grade changes.

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

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

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 detectectable 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.

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.

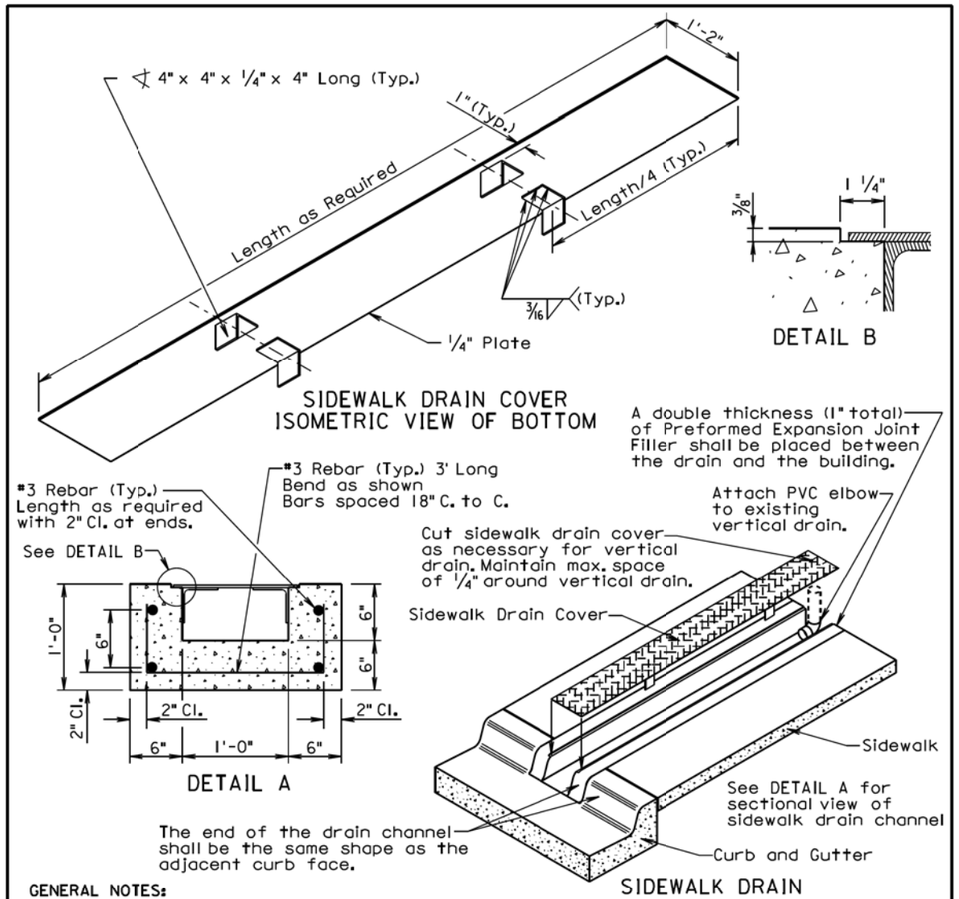
All costs for furnishing and installing the transition area at the base of the ramp shall be incidental to the contract unit price per foot for the corresponding curb and gutter bid item when curb and gutter is used and shall be incidental to the contract unit price per square yard for the corresponding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

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

March 22, 2013

Published Date: 2nd Qtr. 2013	SDDOT	**TYPE 2 CURB RAMP (DIRECTIONAL CURB RAMP)**	PLATE NUMBER 651.02 Sheet 3 of 3



GENERAL NOTES:

Concrete shall be Class M6 in accordance with Section 462 of the Standard Specifications.

Reinforcing steel shall conform to ASTM A615, Grade 60.

Structural Steel shall conform to ASTM A36.

Welding and weld inspection shall be in conformance with the current edition of the AWS D1.1 Structural Welding Code-Steel.

The cover plate assembly shall be galvanized after fabrication. Galvanizing shall be in accordance with ASTM 123.

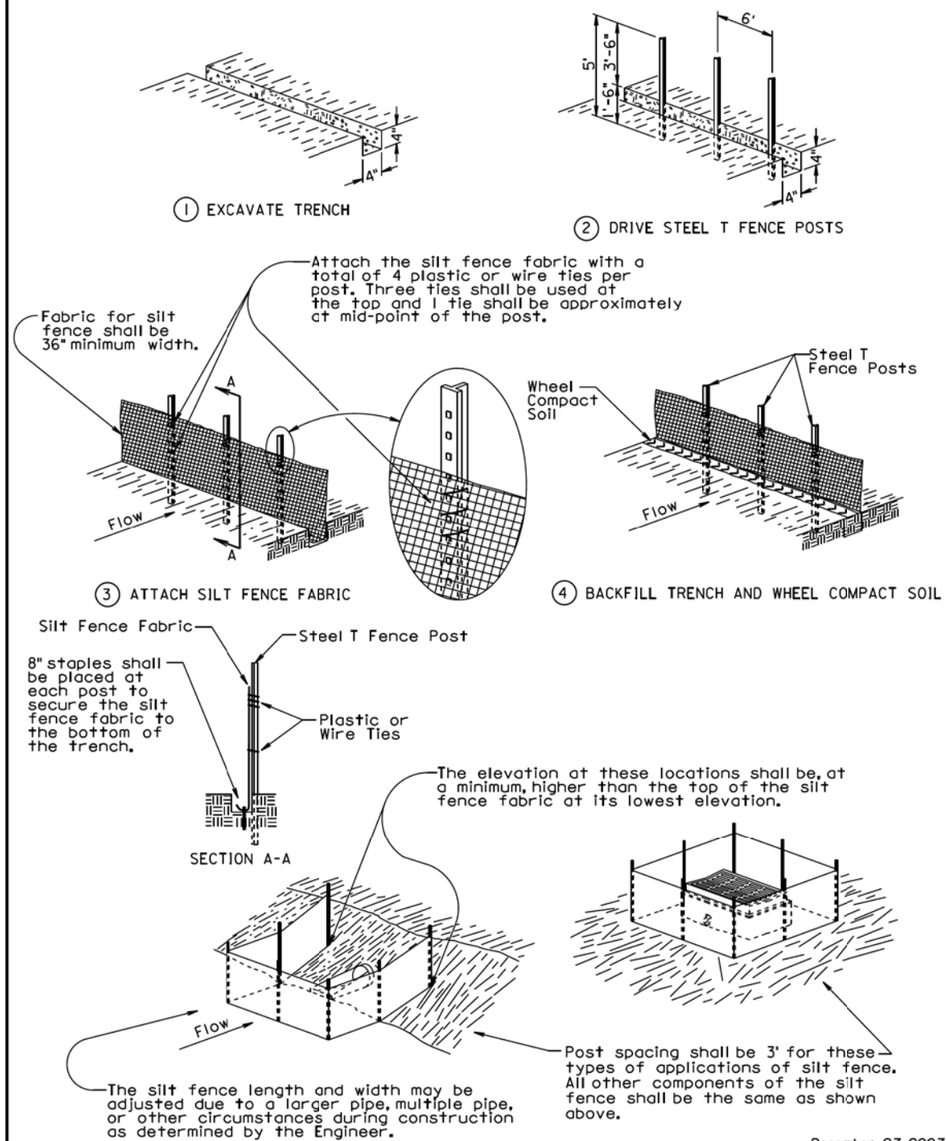
All costs associated for providing the required curb cut shall be incidental to the contract unit price per foot for the corresponding curb and gutter bid item.

The sidewalk drain shall be measured and paid for to the nearest tenth of a foot. The length of the drain shall be measured from the gutter to the necessary end location adjacent to the building. All costs associated with furnishing and installing the sidewalk drain channel and cover including the attachment to the vertical drain shall be incidental to the contract unit price per foot for "Sidewalk Drain".

September 6, 2008

Published Date: 2nd Qtr. 2013	SDDOT	**SIDEWALK DRAIN**	PLATE NUMBER 651.50 Sheet 1 of 1

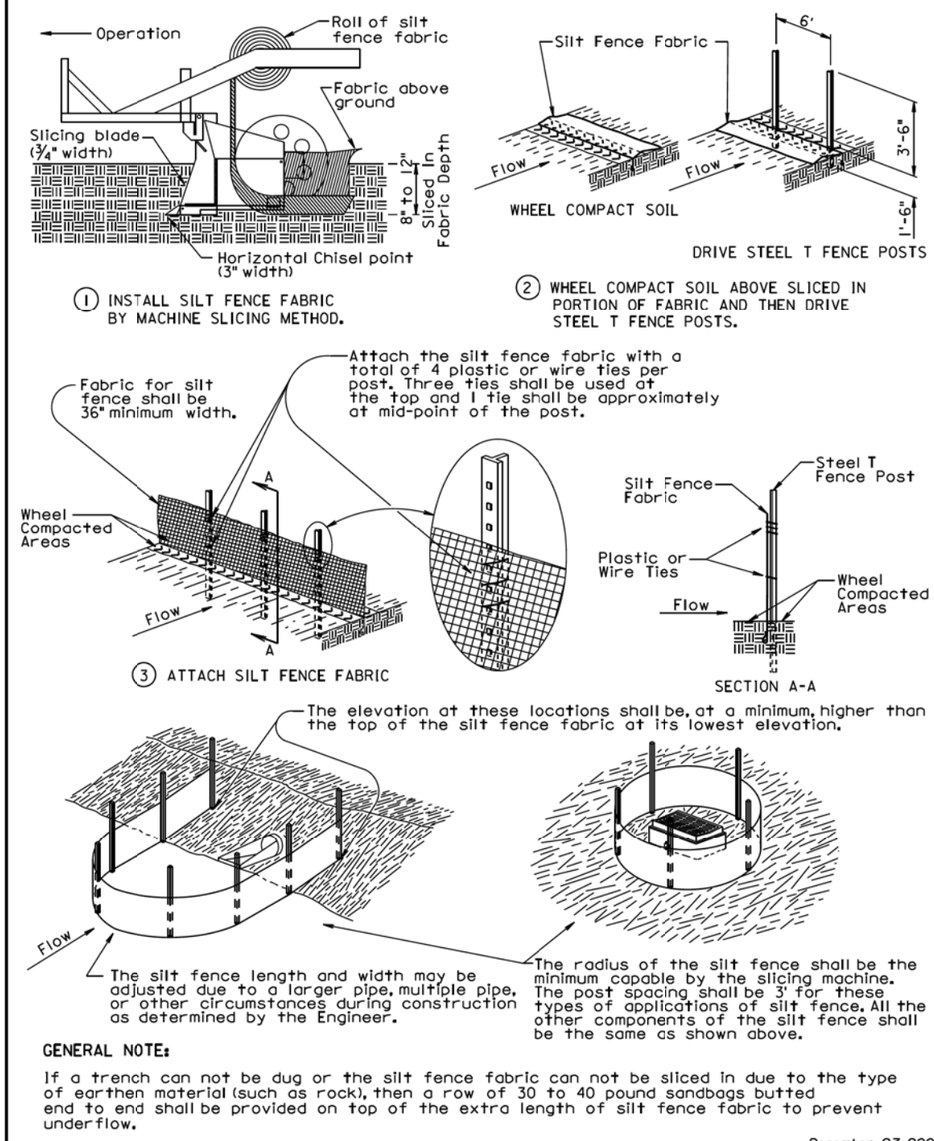
MANUAL HIGH FLOW SILT FENCE INSTALLATION



December 23, 2003

Published Date: 2nd Qtr. 2013	SDDOT	HIGH FLOW SILT FENCE	PLATE NUMBER 734.05 Sheet 1 of 2

MACHINE SLICED HIGH FLOW SILT FENCE INSTALLATION



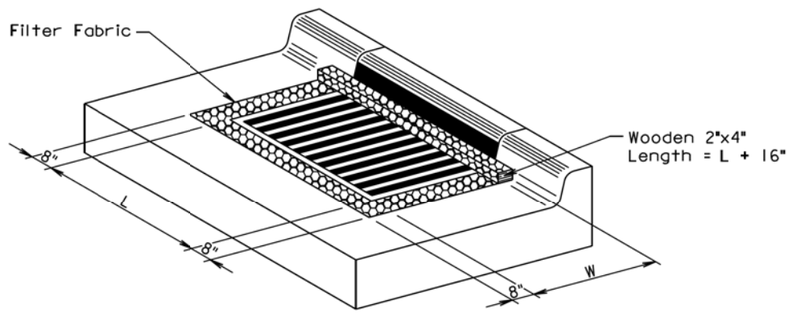
GENERAL NOTE:

If a trench can not be dug or the silt fence fabric can not be sliced in due to the type of earthen material (such as rock), then a row of 30 to 40 pound sandbags butted end to end shall be provided on top of the extra length of silt fence fabric to prevent underflow.

December 23, 2003

Published Date: 2nd Qtr. 2013	SDDOT	HIGH FLOW SILT FENCE	PLATE NUMBER 734.05 Sheet 2 of 2

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. 2013	SDDOT	SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES	PLATE NUMBER 734.10 Sheet 1 of 1