

SECTION C: TRAFFIC CONTROL

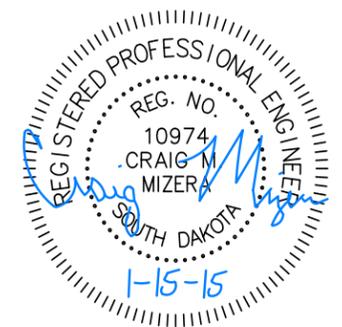
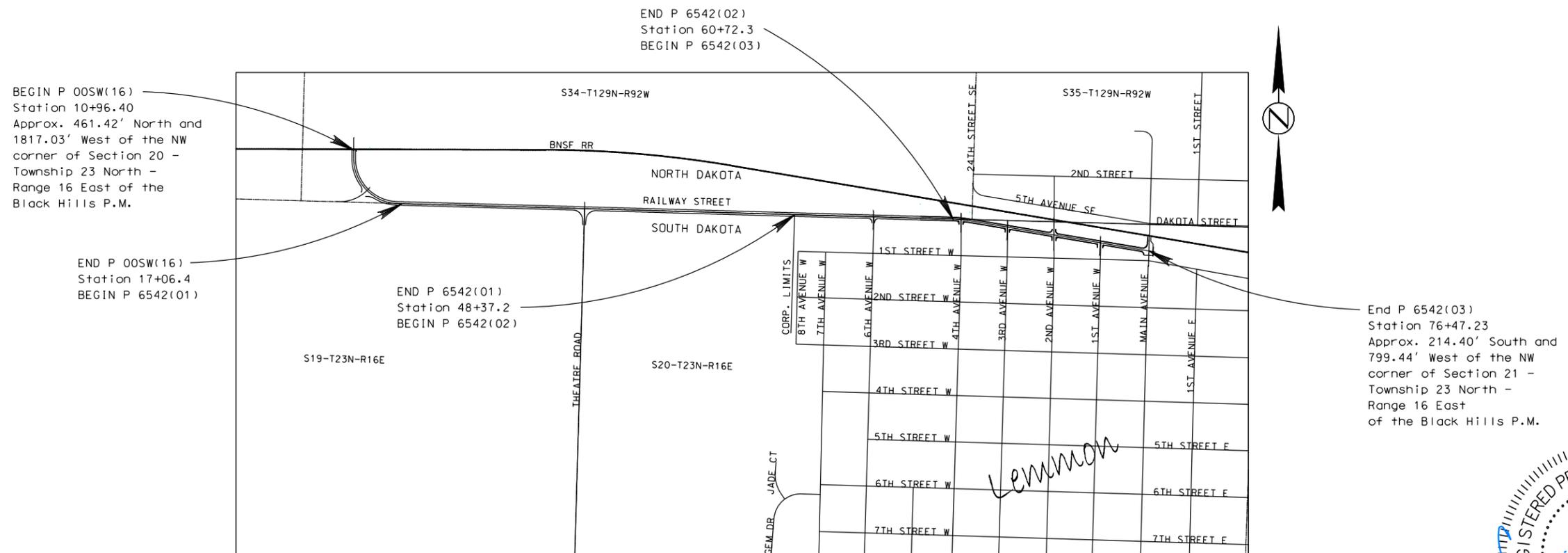
| STATE OF | PROJECTS | SHEET NO. | TOTAL SHEETS |
|---|--|-----------------------|--------------|
| SOUTH DAKOTA | P 00SW (16) / P 6542 (01) P 6542 (02) / P 6542 (03) | C1 | C11 |
| FILE: ...*Sheet_Files*C1.dgn PLOTTING DATE: 12-02-2014 | | REV DATE: INITIAL: | |

INDEX OF SHEETS

- C1 General Layout w/ Index
- C2-C3 Estimate of Quantities and General Notes
- C4-C6 Sign Details
- C7-C8 Traffic Control Layouts
- C9-C11 Standard Plates

Plot Scale - 1:1000

Plotted From - rmasfesa



SECTION C ESTIMATE OF QUANTITIES

| Std. Bid Item | Item Description | P 00SW(16) Quantity | P 6542(01) Quantity | P 6542(02) Quantity | P 6542(03) Quantity | Total Quantity | Unit |
|---------------|-------------------------------|---------------------|---------------------|---------------------|---------------------|----------------|------|
| 260E010 | Granular Material | 10.0 | 50.0 | 20.0 | 20.0 | 100.0 | Ton |
| 634E010 | Flagging | 4 | 20 | 8 | 8 | 40 | Hour |
| 634E0100 | Traffic Control | 310 | 1,549 | 619 | 619 | 3,097 | Unit |
| 634E0120 | Traffic Control Miscellaneous | | | | | Lump Sum | LS |
| 634E1002 | Detour Signing | 42.7 | 213.4 | 85.4 | 85.4 | 426.8 | SqFt |

SEQUENCE OF OPERATIONS

The Contractor shall follow the plan sequence of operations as shown on the Traffic Control Layout Sheets and as discussed below unless an alternate is submitted in writing a minimum of two weeks prior to the pre-construction meeting.

1. Install traffic control detour as shown on the layouts.
2. Cover all existing signs that conflict with proposed traffic control signs.
3. Install erosion control at all existing inlets and site perimeter.
4. Remove the existing surfacing.
5. Install proposed storm sewer pipe and inlets.
6. Complete grading operations.
7. Install gravel base and concrete, asphalt and gravel surfacing.
8. Install permanent signs and markings.
9. Install topsoil, seed, fertilizer, mulch and final erosion control.
10. Remove traffic control and open site to traffic.

DETOUR ROUTE THRU 2ND AVENUE AND RAILWAY STREET INTERSECTION

At the intersection of 2nd Avenue and Railway Street, the Contractor is allowed to use temporary gravel access roads to maintain access thru the site on the proposed detour route.

At a minimum, the Contractor shall provide at least two 11' lanes at all times for this access. See the heading **TEMPORARY GRAVEL ACCESS ROADS** on this sheet for more requirements on these temporary gravel access roads.

The Contractor shall also utilize flagging and barrels/cones to guide traffic thru this intersection as required during phasing of the project. Any flagging that may be required by the Contractor shall be included in the bid item "Flagging". Any barrels/cones that may be required by the Contractor shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

MAIN AVENUE AND RAILWAY STREET INTERSECTION

At the intersection of Main Avenue and Railway Street, the Contractor shall keep access open at all times to traffic for north-south and traffic on the east side of this intersection. The west leg of Main Avenue and Railway Street shall remain closed to traffic at all times.

At a minimum, the Contractor shall provide at least two 11' lanes at all times for this access. The Contractor is allowed to use temporary gravel access roads to maintain this access. See the heading **TEMPORARY GRAVEL ACCESS ROADS** on this sheet for more requirements on these temporary gravel access roads.

The Contractor is allowed to provide only one 11' lane for a maximum time period of one day. The Contractor is allowed to use this one day 11' lane scenario a maximum of six times throughout the project timeline. During the one day 11' lane use, the Contractor shall provide flaggers to guide traffic thru the work zone. After each one day 11' lane use, the Contractor shall return the intersection back to two 11' lanes.

The Contractor shall utilize barrels/cones to guide traffic thru this intersection as required during this work. Any barrels/cones that may be required by the Contractor shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

ACCESS TO EXISTING BUSINESS AND HOMES

The Contractor shall be required to maintain access to the existing business and homes along the project. The Contractor is allowed to use temporary gravel access roads to maintain this access. The Contractor shall coordinate with the Field Engineer on which existing business and homes will require access thru the project.

At a minimum, the Contractor shall provide at least one 11' lane to each home and business. See the heading **TEMPORARY GRAVEL ACCESS ROADS** on this sheet for more requirements on these temporary gravel access roads.

CONTRACTOR COMMUNICATIONS WITH BUSINESS AND HOME OWNERS

- The Contractor shall maintain thorough communications about the schedule of operations throughout the duration of the project. The Contractor shall be required to communicate with the following:
 - Business owners/tenants
 - Home owners/tenants
 - Area Engineer
 - City Project Manager
- Communications include, but are not limited to, meetings, direct visits and notifications by hangers/flyers. Communication must be approved by Project Engineer prior to releasing.
- The Contractor shall provide a minimum of one week notice when:
 - access to businesses or homes will be altered
 - access street intersections will be altered

All costs for this work shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

TEMPORARY GRAVEL ACCESS ROADS

- Temporary gravel access roads shall have a surface of 6" gravel depth. The ends of roads shall have a smooth transition onto the existing/proposed pavements.
- The Contractor shall re-grade the access roadway on a daily basis or as directed by the Engineer.
- **100 tons** of gravel is estimated to be used for temporary gravel access roads. The Contractor is allowed to use asphalt millings in lieu of gravel for the temporary access roads.
- All costs, labor and materials for furnishing, installing, removing and reinstallation per phasing, maintenance and removal of the temporary access road shall be incidental to the contract unit price per ton for "Granular Material".

FOR BIDDING PURPOSES ONLY

| | | | |
|-----------------------|--|-------|--------------|
| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P 00SW(16) / P 6542(01) P 6542(02) / P 6542(03) | C2 | C11 |

Plotting Date: 1/30/2015

Revised 01/30/2015

CONTRACTOR FURNISHED PROGRESS SCHEDULES

At least two weeks prior to the start of the work the Contractor shall furnish the Engineer two copies of a bar chart method progress schedule. The schedule shall consist of a construction schedule and a brief written narrative. The schedule shall contain the following information:

1. A time scale to graphically show percentage of work scheduled for the completion within the contract completion requirements.
2. Definition and relation of work activities to contract pay items.
3. Work activities (prime contractor and all subcontractor activities) in the order the work will be performed including submittals, approvals, deliveries, temporary traffic control, and permanent signing/stripping.
4. All major work activities that are controlling factors in the completion of the work.
5. The time required for each activity and its relationship in time to other activities.
6. The total expected time to complete all work.
7. The expected work shifts in days per week and hours per day and the days when work is not expected to be performed.

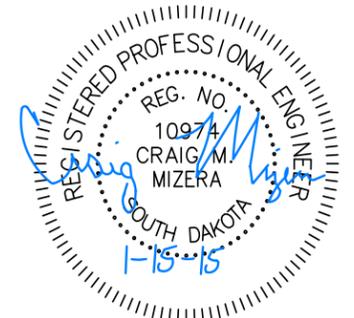
The schedule shall be updated, revised and resubmitted on a monthly interval until the project is substantially complete. There will be no direct payment for the contractor furnished schedule. All costs associated with the schedule shall be incidental to the bid item "Traffic Control, Miscellaneous". Failure to properly submit the required construction schedules will result in the withholding of progress payments until an approved schedule is received.

PEDESTRIAN TRAFFIC

The Contractor shall protect and restrict all pedestrians from work areas. Safety fence shall be installed around all work areas that are adjacent to pedestrian walkways and at other locations as designated by the Engineer. All costs for this work shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

"NO PARKING" SIGNS

"NO PARKING" traffic control signs shall be used as needed by the Contractor to increase traffic safety. The quantity of these signs shown in the sign quantity table may be increased or decreased as deemed necessary. All costs to install, maintain, remove and return the signs shall be incidental to the contract unit price per unit for "Traffic Control".



TRAFFIC CONTROL – GENERAL

1. Requests to deviate from the sequence of operations shall be submitted in writing to the Engineer for review. Approval of an alternate sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work. An alternate sequence shall be submitted for review a minimum of one week prior to potential implementation.
2. Traffic shall be maintained in accordance with Section 4.4 of the Specifications. Traffic control shall be installed in accordance with the Federal Manual on Uniform Traffic Control Devices (MUTCD) and standard plates located herein.
3. Unless otherwise stated in these plans, no work will be allowed during hours of darkness. Hours of darkness are defined, as ½ hour after sunset until ½ hour before sunrise.
4. Storage of vehicles and equipment shall be outside the clear zone and as near the right-of-way as possible. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work sites in a minimum number of vehicles necessary to perform the work. Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage of the vegetation, surfacing, embankment, delineators, and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.
5. Existing guide, route, informational logo, regulatory, and warning signs shall be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging and resetting of existing traffic control devices, including but not limited to, traffic signal heads, delineation, and signing shall be the responsibility of the Contractor. Non-applicable signing and all traffic control devices shall be covered or removed during periods of inactivity. Periods of inactivity shall be defined as no work taking place for a period of more than 24 hours. The cost of removing or covering non-applicable traffic control devices shall be incidental to the contract lump sum price for, "Traffic Control, Miscellaneous".
6. Construction signing mounted on portable supports shall not be used for a duration of more than 3 days, unless approved by the Engineer. Construction signing that remains in the same location for more than 3 days shall be mounted on fixed location, ground mounted, breakaway supports.
7. The quantity of Signs paid for will be for the greatest number of installations per sign in place at any one time regardless of the number of set-ups on the project.
8. Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.
9. All materials and equipment shall be stored a minimum distance of 30' from the traveled way during nonworking hours.
10. The Contractor shall provide documentation that all breakaway sign supports comply with FHWA NCHRP 350 or MASH crash-worthy requirements. The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.
11. The Contractor shall be required to have a person available 24 hour/day, 7 days/week to maintain traffic control devices. The name and cellular telephone number of this individual shall be given to the Engineer at the preconstruction meeting.
12. The Contractor or designated traffic control subcontractor shall make night inspections at the initial set up of traffic control and every week thereafter to ensure the adequacy, legibility and reflectivity of each sign and device. A written summary of each inspection shall be given to the Engineer within 24 hours after completion of the inspection. The cost for the nighttime inspection work shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

13. Vehicles working in traffic or alongside traffic shall be equipped with a flashing amber light visible from all directions. The amber light shall be mounted on the uppermost part of the Contractor's vehicle. Lights must have peak intensity within the range of 40 to 400 candelas and must flash at 75 ± 15 flashes per minute. Vehicle flasher/hazard lights are not acceptable. All haul trucks shall be equipped with a second flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights shall be incidental to the various related contract bid items.
14. All construction operations shall be conducted in the general direction of traffic movement.
15. If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD – whichever is more stringent shall be used, as determined by the Engineer.
16. Temporary Road Markers (Tabs) shall be used for lane closure tapers or lane shift tapers and shall be installed at 5' spacing. Tabs used for tapers and shifts will not be measured for payment. All costs associated to furnish, install, maintain (including replacement as required by the Engineer at no added cost to the Department), and remove all markers will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".
17. Drums are required in all lane closure tapers.
18. If traffic is routed to a completed section and the permanent signing is not complete, the Contractor shall use temporary signing consisting of salvaged permanent signs or temporary traffic control signs for traffic direction and safety. The cost of the temporary signing shall be at the Contractor's expense to install and maintain signs.

FOR BIDDING PURPOSES ONLY

| | | | |
|-----------------------|--|-------|--------------|
| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | P 00SW(16) / P 6542(01) P 6542(02) / P 6542(03) | C3 | C11 |

Plotting Date: 1/28/2015

Revised 01/29/2015

SPECIAL CONDITIONS

1. The Contractor will be required to maintain drainage on the project during the course of construction. This may include installing Contractor furnished pipe to temporarily connect drainage systems, performing the necessary shaping, and all needed miscellaneous work. No separate payment will be made for this work. All cost for maintaining the drainage shall be incidental to the cost of the various contract bid items. If existing cross pipe are needed to maintain drainage and are not removed from under the new roadway section, the pipe must be filled with flowable fill approved by the engineer. This process shall be incidental to the cost for the various contract bid items.
2. The Contractor shall saw existing concrete pavement where new asphalt concrete meets the existing pavement. Full depth sawing will be required in the intersections and the centerline to maintain traffic. The cost of completing this work shall be incidental work, grading bid item discussed in Section B.
3. Proposed permanent markings and signs shall be installed, per the Engineer's determination, before continuing to the next phase. If the Contractor is unable to install permanent markings, interim markings shall be installed to match the intent of the proposed markings at no extra cost to the Owner.
4. The Contractor will be required to remove the remaining interim pavement markings prior to the placement of the permanent pavement markings. The amount bid for the interim pavement marking shall include the cost of removing the interim marking installed on the project by the Contractor.
5. The roadway surface broomed and the interim pavement markings installed prior to opening the roadway to traffic.
6. The Contractor shall cover/bag existing traffic signs that conflict with the proposed traffic control. The bags used to cover the signs shall fully conceal the sign. The Contractor shall have the bags, used to cover the signs, approved by the Engineer, prior to installation. The Contractor shall include payment for the covered/bagged signs under the contract lump sum price for "Traffic Control, Miscellaneous".

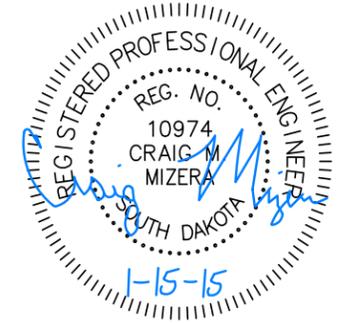
INCIDENTS

An incident is an emergency road user occurrence, a natural disaster, or other unplanned event that affects or impedes the normal flow of traffic such as an accident, hazardous materials spill, or similar event.

The Contractor shall set up a meeting prior to start of work to plan and coordinate responses to an incident. The Contractor will invite Department of Transportation, the South Dakota Highway Patrol, the City of Lemmon, and local emergency response entities to the meeting. The Contractor will conduct the meeting.

The Contractor shall provide adequate personnel to accomplish the necessary traffic control work in the event of an incident. The Contractor shall provide flaggers to direct or detour traffic. The Contractor shall relocate advance warning signs for a major traffic incident lasting for more than two hours. Ground mounted advance warning signs may be covered and additional portable warning signs provided.

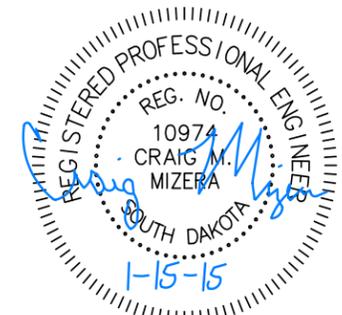
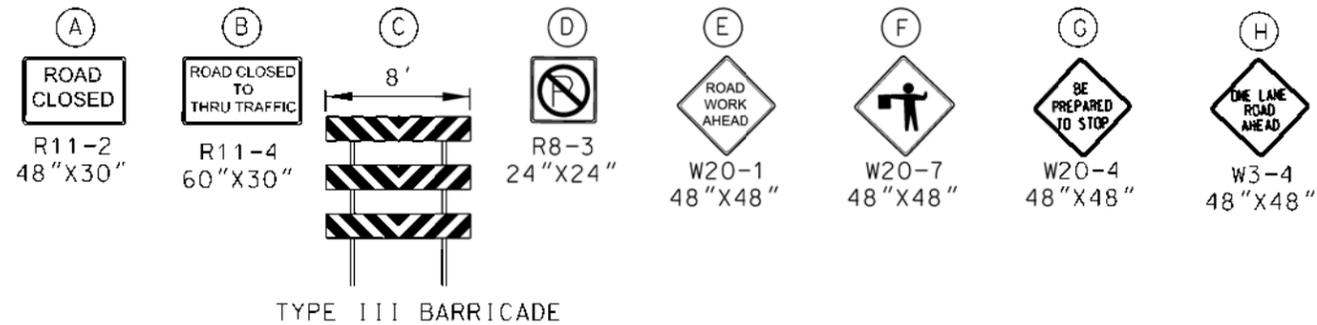
Costs for flagging shall be paid at the contract unit price per hour for "Flagging". Costs for the relocation of an advanced warning sign shall be 50% of the designated sign rate as per Section 634.5 Basis of Payment in the Specifications. Cost for additional signs shall be paid at the contract unit price per unit for "Traffic Control".



| | | | |
|--|--|-------------------------------------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECTS | SHEET NO. | TOTAL SHEETS |
| | P 00SW (16) / P 6542 (01) P 6542 (02) / P 6542 (03) | C4 | C11 |
| FILE: ...#Sheet_Files#C4-C6 PLOTTING DATE: 01-29-2015 | | REV DATE: 01/29/2015 INITIAL: DK | |

TABLE FOR TRAFFIC CONTROL (Units)

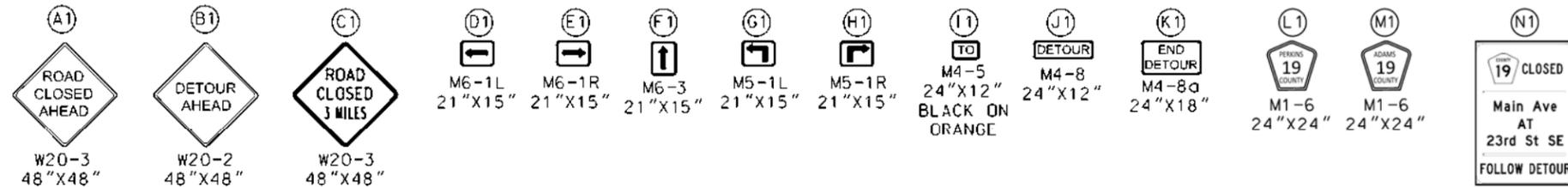
| Sign Description | Symbol | Sign Code | Width (in) | Height (in) | Units Per Sign | Detour Layout | | In-Town Detour Layout | | Field Determined | |
|-------------------------------|--------|-----------|------------|-------------|----------------|---------------|-------------|-----------------------|-------------|------------------|-------------|
| | | | | | | No. of Signs | Total Units | No. of Signs | Total Units | No. of Signs | Total Units |
| ROAD CLOSED | A | R11-2 | 48 | 30 | 27 | 3 | 81 | 8 | 216 | 2 | 54 |
| ROAD CLOSED TO THRU TRAFFIC | B | R11-4 | 60 | 30 | 30 | 4 | 120 | | | 3 | 90 |
| TYPE III BARRICADES-8' LENGTH | C | N/A | 8' | N/A | 56 | 10 | 560 | 24 | 1344 | 5 | 280 |
| NO PARKING (SYMBOL) | D | W8-3 | 24 | 24 | 16 | | | | | 5 | 80 |
| ROAD WORK AHEAD | E | W20-1 | 48 | 48 | 34 | | | | | 2 | 68 |
| FLAGGER | F | W20-7 | 48 | 48 | 34 | | | | | 2 | 68 |
| ONE LANE ROAD AHEAD | G | W20-4 | 48 | 48 | 34 | | | | | 2 | 68 |
| BE PREPARED TO STOP | H | W3-4 | 48 | 48 | 34 | | | | | 2 | 68 |
| Total: | | | | | | | 761 | | 1560 | | 776 |
| Grand Total: | | | | | | | | | 3097 | | |



FOR BIDDING PURPOSES ONLY

| | | | |
|---|--|-------------------------------------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECTS | SHEET NO. | TOTAL SHEETS |
| | P 00SW (16) / P 6542 (01) P 6542 (02) / P 6542 (03) | C5 | C11 |
| FILE: ...#Sheet_Files#C4-C6 PLOTING DATE: 01-29-2015 | | REV DATE: 01/29/2015 INITIAL: DK | |

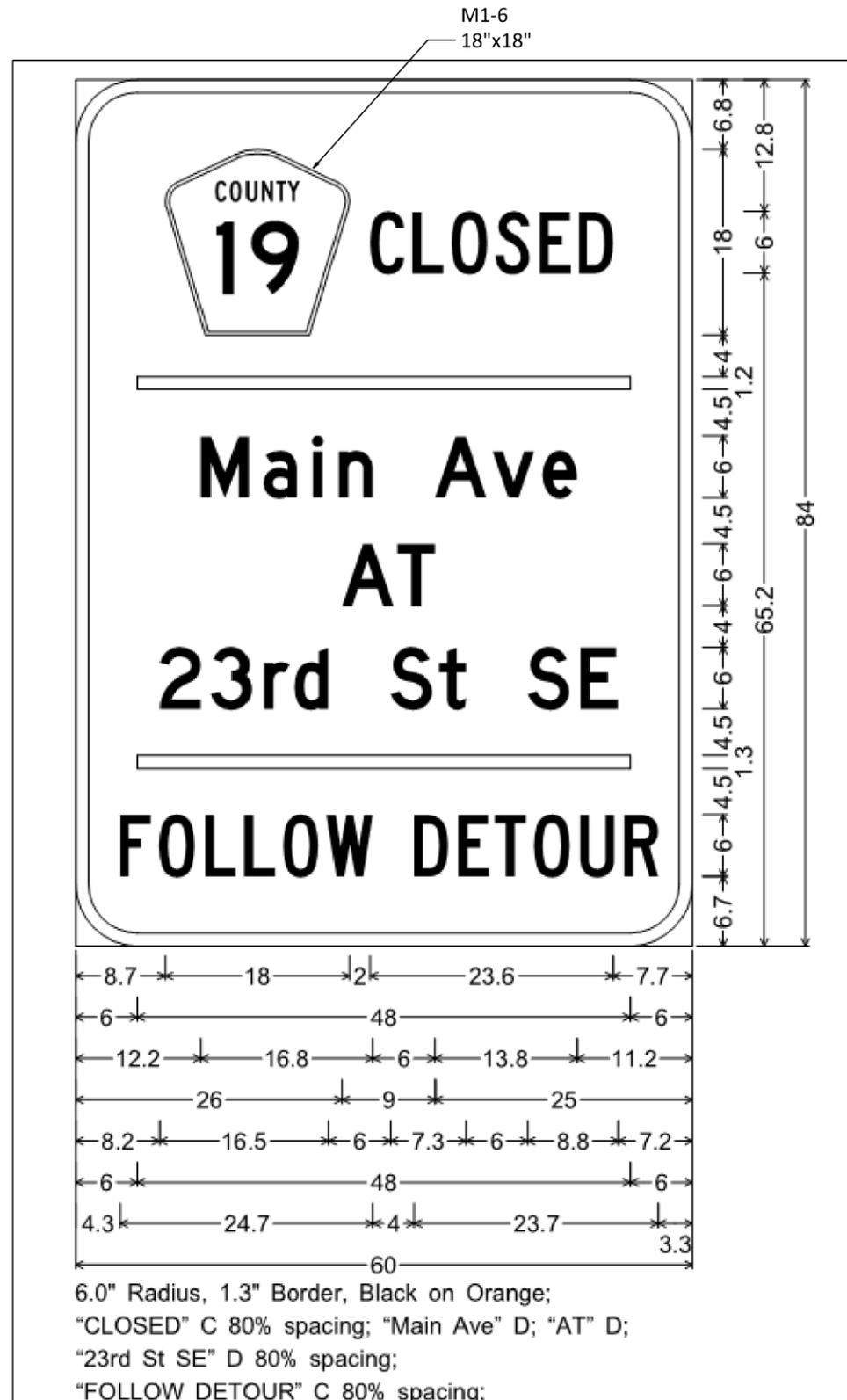
| TABLE FOR DETOUR SIGNING (SqFt) | | | | | | | | | | | |
|--|--------|-----------|-------|--------|---------------|---------------|--------------|-----------------------|-------------|------------------|-------------|
| Sign Description | Symbol | Sign Code | Width | Height | Sign Quantity | Detour Layout | | In-Town Detour Layout | | Field Determined | |
| | | | (in) | (in) | (SqFt) | No. of Signs | Total Units | No. of Signs | Total Units | No. of Signs | Total Units |
| ROAD CLOSED AHEAD | A1 | W20-3 | 48 | 48 | 16.0 | 5 | 80.0 | | | 2 | 32.0 |
| DETOUR AHEAD | B1 | W20-2 | 48 | 48 | 16.0 | 3 | 48.0 | | | 2 | 32.0 |
| ROAD CLOSED AHEAD (DISTANCE) | C1 | W20-3 | 48 | 48 | 16.0 | 1 | 16.0 | | | | |
| LEFT ARROW | D1 | M6-1L | 21 | 15 | 2.2 | 3 | 6.6 | 2 | 4.4 | | |
| RIGHT ARROW | E1 | M6-1R | 21 | 15 | 2.2 | 4 | 8.8 | 2 | 4.4 | | |
| UP ARROW | F1 | M6-3 | 21 | 15 | 2.2 | 5 | 10.9 | 3 | 6.6 | | |
| UP-LEFT ARROW | G1 | M5-1L | 21 | 15 | 2.2 | | | 1 | 2.2 | | |
| UP-RIGHT ARROW | H1 | M5-1R | 21 | 15 | 2.2 | | | | | | |
| TO | I1 | M4-5 | 24 | 12 | 2.0 | 3 | 6.0 | 2 | 4.0 | | |
| DETOUR | J1 | M4-8 | 24 | 12 | 2.0 | 11 | 22.0 | 7 | 14.0 | | |
| END DETOUR | K1 | M4-8a | 24 | 18 | 3.0 | 1 | 3.0 | 1 | 3.0 | | |
| PERKINS COUNTY HWY 19 | L1 | SPECIAL | 24 | 24 | 4.0 | 8 | 32.0 | 4 | 16.0 | | |
| ADAMS COUNTY HWY 19 | M1 | SPECIAL | 24 | 24 | 4.0 | 5 | 20.0 | 5 | 20.0 | | |
| HWY 19 CLOSED...MAIN AVE TO 23RD ST SE...FOLLOW DETOUR | N1 | SPECIAL | 60 | 84 | 35.0 | | | 1 | 35.0 | | |
| Total: | | | | | | | 253.3 | 109.5 | 64.0 | | |
| Grand Total: | | | | | | | 426.8 | | | | |



Plotted From - ckljseith

FOR BIDDING PURPOSES ONLY

| | | | |
|---|--|-----------------------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECTS | SHEET NO. | TOTAL SHEETS |
| | P 00SW (16) / P 6542 (01) P 6542 (02) / P 6542 (03) | C6 | C11 |
| FILE: ...*Sheet_Files*C4-C6 PLOTING DATE: 12-03-2014 | | REV DATE: INITIAL: | |



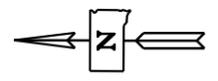
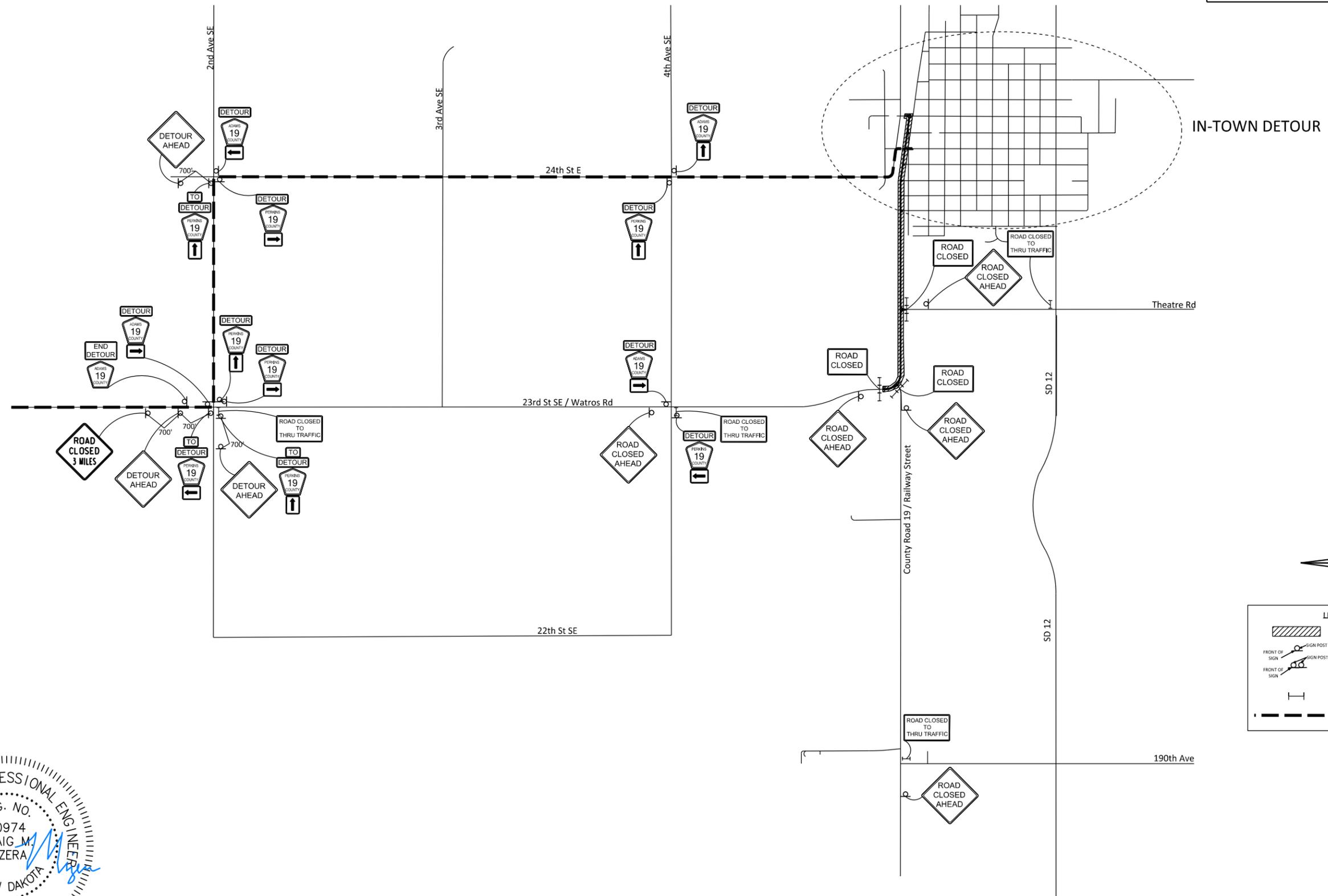
Plotted From - rmasfesa



DETOUR LAYOUT

| | | | |
|---|--|-----------------------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECTS | SHEET NO. | TOTAL SHEETS |
| | P 00SW (16) / P 6542 (01) P 6542 (02) / P 6542 (03) | C7 | C11 |
| FILE: ...*Sheet_Files*C7.dgn PLOTTING DATE: 12-02-2014 | | REV DATE: INITIAL: | |

Plot Scale - 1:2400



| LEGEND | |
|--------|---------------------------------------|
| | CONSTRUCTION AREA |
| | SIGN LOCATION/ORIENTATION |
| | DOUBLE POST SIGN LOCATION/ORIENTATION |
| | TYPE 3 BARRICADES |
| | DETOUR ROUTE |



Plotted From - mmasfesa

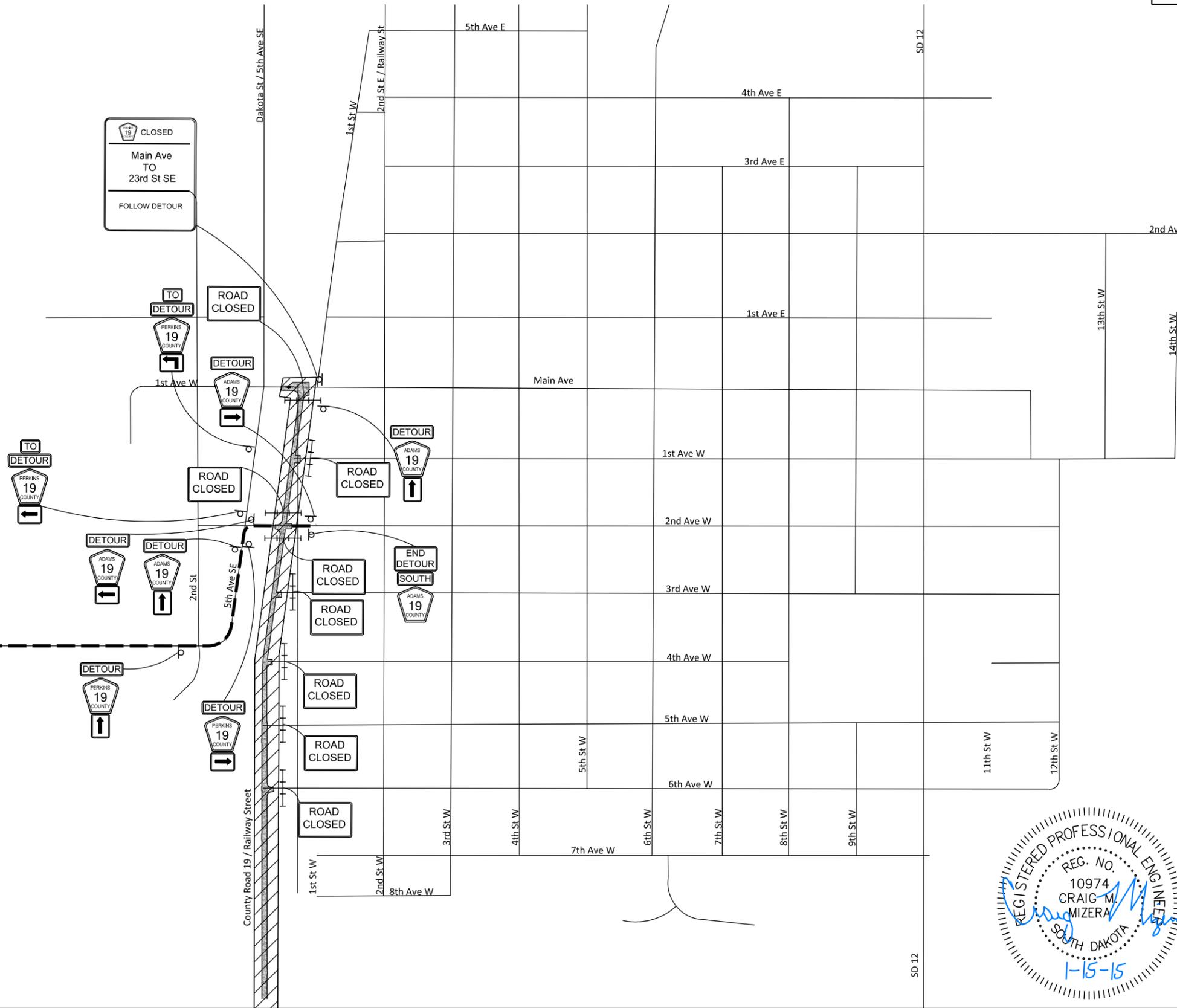
IN-TOWN DETOUR LAYOUT

FOR BIDDING PURPOSES ONLY

| | | | |
|---|--|-----------------------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECTS | SHEET NO. | TOTAL SHEETS |
| | P 00SW (16) / P 6542 (01) P 6542 (02) / P 6542 (03) | C8 | C11 |
| FILE: ...*Sheet_Files*C8.dgn PLOT DATE: 12-02-2014 | | REV DATE: INITIAL: | |

Plot Scale - 1:600

Plotted From - rmmasfesa

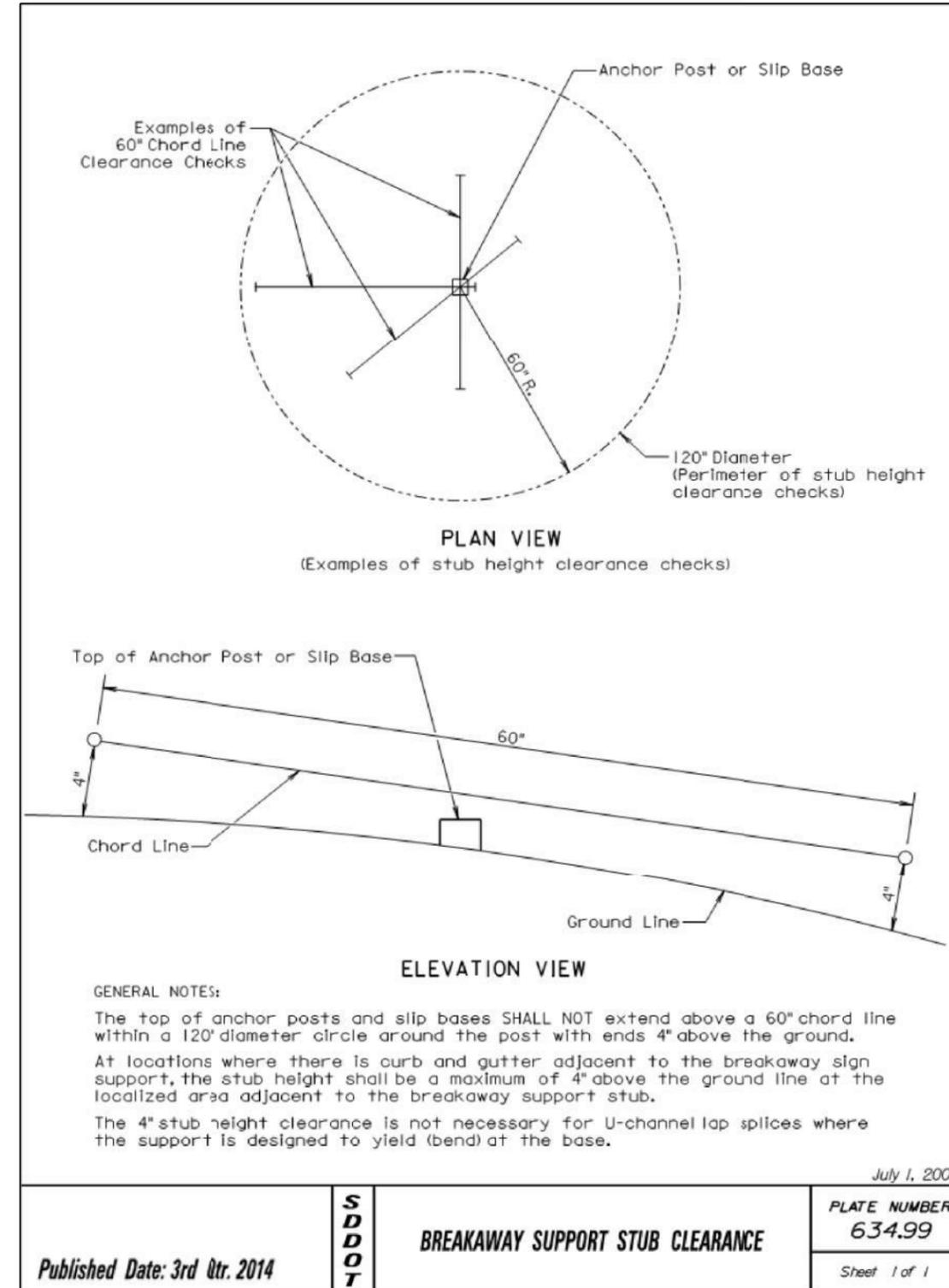
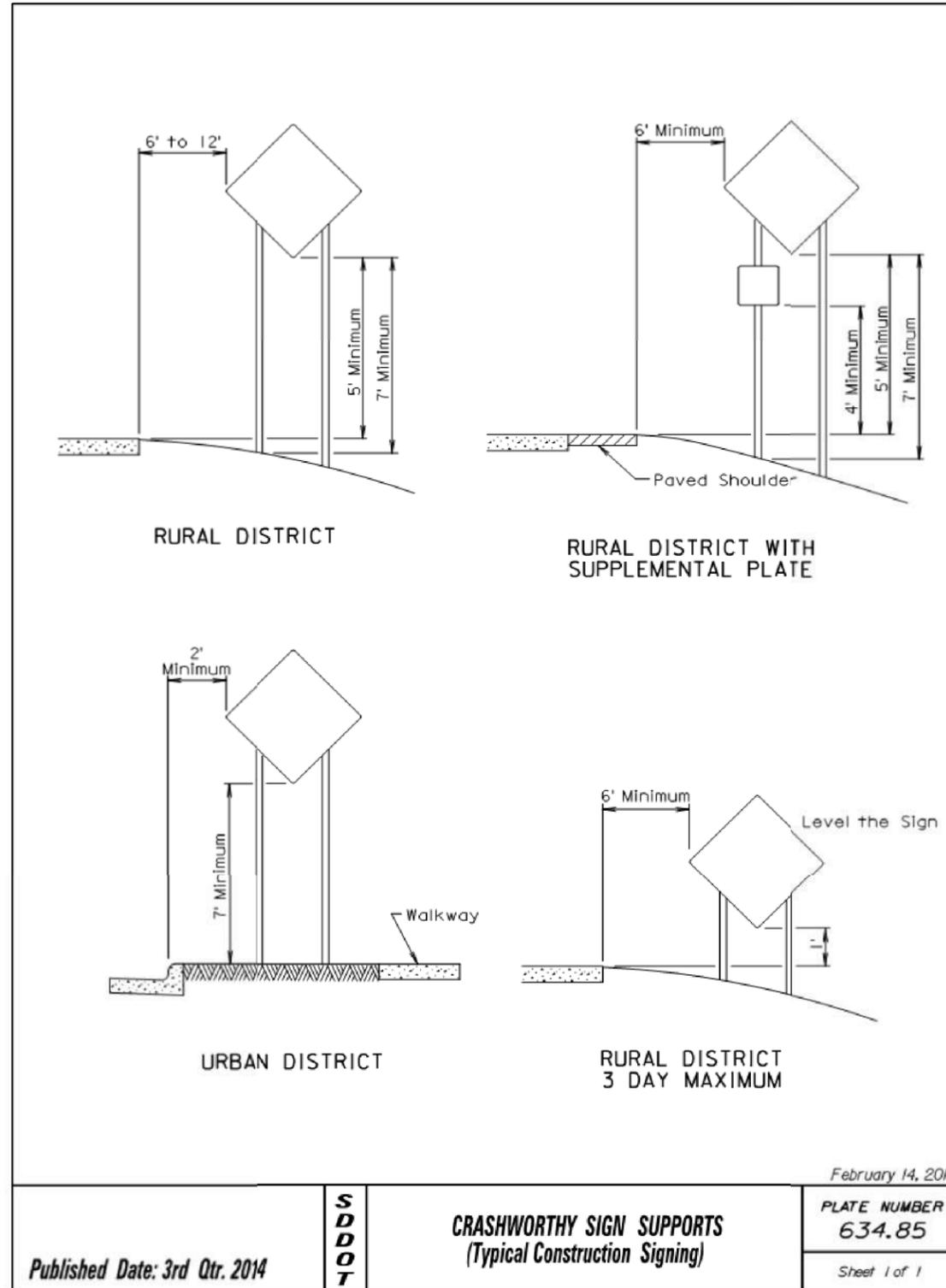


| LEGEND | |
|--------|---|
| | CONSTRUCTION AREA |
| | SIGN LOCATION/ORIENTATION |
| | DOUBLE POST SIGN LOCATION/ ORIENTATION |
| | TYPE 3 BARRICADE (DOUBLE SIDED) |
| | DETOUR ROUTE |



| | | | |
|--|--|-----------------------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECTS | SHEET NO. | TOTAL SHEETS |
| | P 005W (16) / P 6542 (01) P 6542 (02) / P 6542 (03) | C9 | C11 |
| FILE: ...*Sheet_Files\C9-11.dgn PLOT DATE: 12-02-2014 | | REV DATE: INITIAL: | |

Standard Details



Plotted From: rmasfesa



| | | | | |
|---------------------------------|---------------------------|---------------------------|-----------------------|------------------------|
| STATE OF SOUTH DAKOTA | PROJECTS | | SHEET NO. C10 | TOTAL SHEETS C11 |
| | P 005W (16) / P 6542 (01) | P 6542 (02) / P 6542 (03) | | |
| FILE: ...*Sheet_Files*09-11.dgn | | | REV DATE: INITIAL: | |
| PLOT DATE: 12-02-2014 | | | | |

Standard Details

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

Warning sign sequence in opposite direction same as below.

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

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

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

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

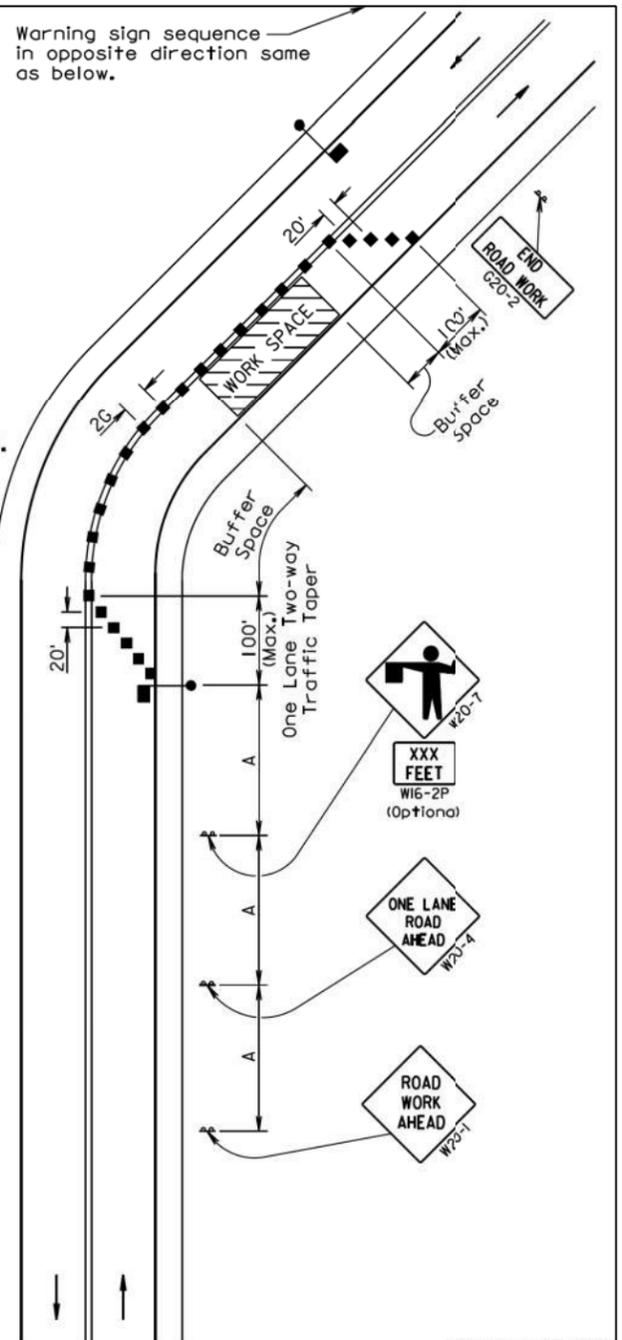
The channelizing devices shall be drums or 42" cones.

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

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

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

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



September 22, 2014

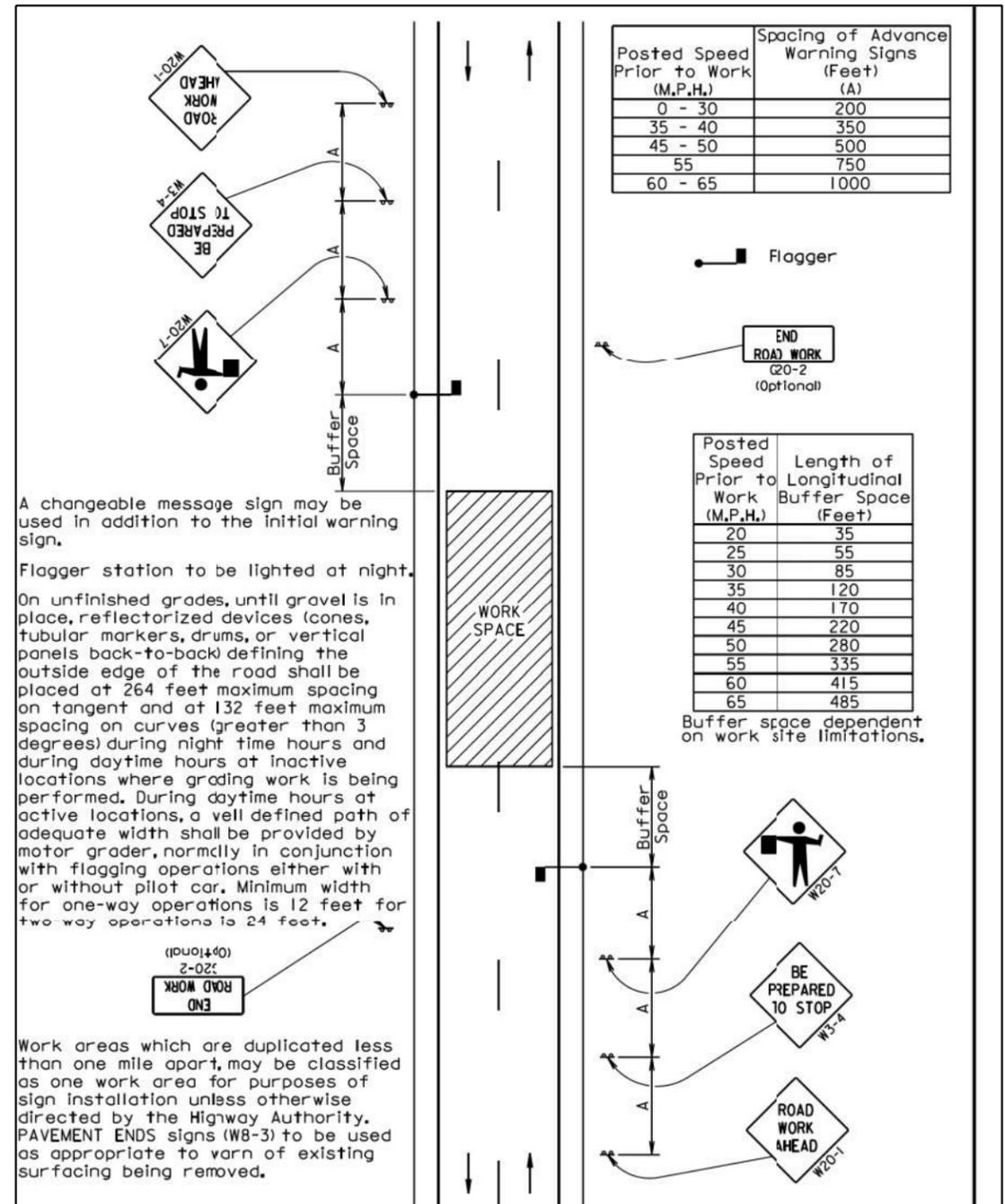
S D D O T

**GUIDES FOR TRAFFIC CONTROL DEVICES
LANE CLOSURE WITH FLAGGER PROVIDED**

PLATE NUMBER
634.23

Published Date: 4th Qtr. 2014

Sheet 1 of 1



September 22, 2014

S D D O T

**GUIDES FOR TRAFFIC CONTROL DEVICES
LONG TERM ROAD WORK**

PLATE NUMBER
634.31

Published Date: 4th Qtr. 2014

Sheet 1 of 1

Plotted From: mmastfesa



Standard Details

| | | | | |
|---------------------------------|---------------------------|---------------------------|-----------------------|-----------------|
| STATE OF SOUTH DAKOTA | PROJECTS | | SHEET NO. | TOTAL SHEETS |
| | P 00SW (16) / P 6542 (01) | P 6542 (02) / P 6542 (03) | C11 | C11 |
| FILE: ...*Sheet_Files*c9-11.dgn | | | REV DATE: INITIAL: | |
| PLOTING DATE: 12-02-2014 | | | | |

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

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

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

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

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

| Posted Speed Prior to Work (M.P.H.) | Spacing of Advance Warning Signs (Feet) (A) |
|-------------------------------------|---|
| 0 - 30 | 200 |
| 35 - 40 | 350 |
| 45 - 50 | 500 |
| 55 | 750 |
| 60 - 75 | 1000 |

Published Date: 4th Qtr. 2014

**S
D
D
O
T**

**GUIDES FOR TRAFFIC CONTROL DEVICES
WORK BEYOND THE SHOULDER**

July 1, 2005

PLATE NUMBER
634.01

Sheet 1 of 1