


SECTION S: PERMANENT SIGNING PLANS

FOR BIDDING PURPOSES ONLY

| | | | |
|--|---------------------|-------|--------------|
|  STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | NH 0012(230)171...+ | S1 | S7 |

Plotting Date: 6/20/2024

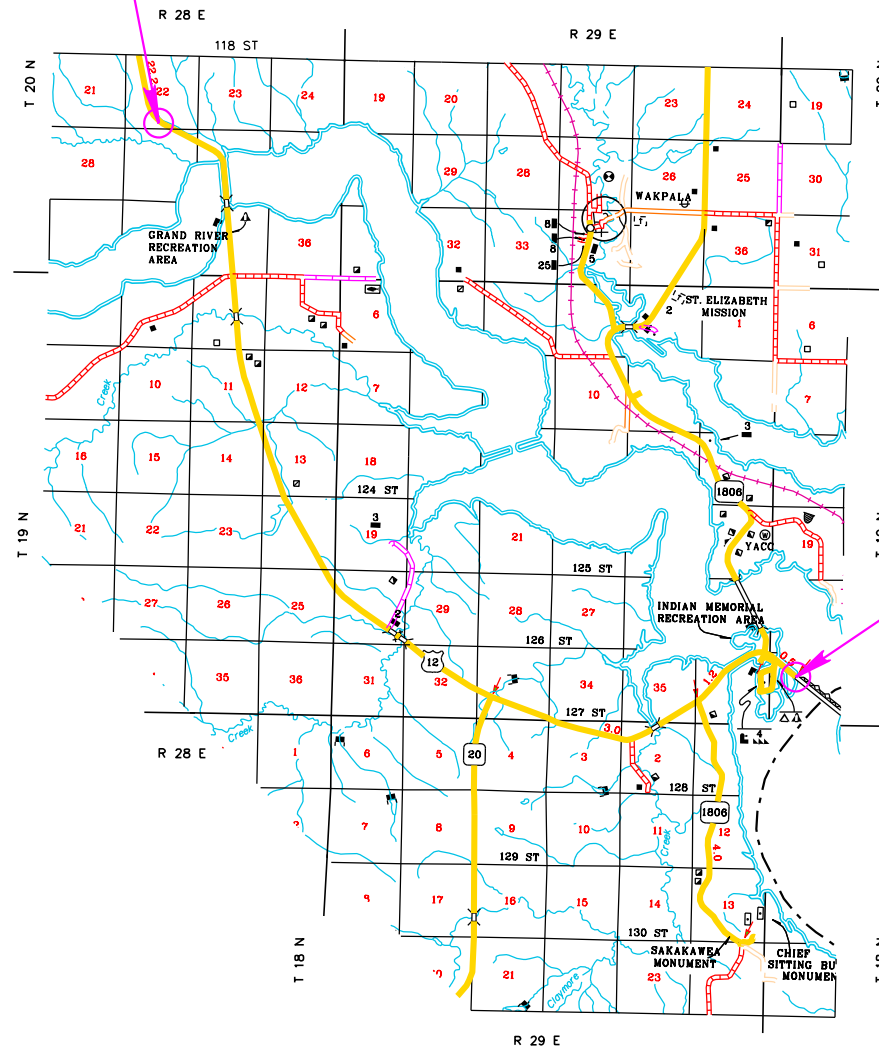
INDEX OF SHEETS

- S1-S3 General Layout with Index
- S4 Estimate with General Notes & Tables
- S5-S7 Standard Plates



BEGIN NH 0012(230)171
US 12 - 05TY
STATION 176+72.2

END NH 0012(230)171
US 12 - 05TY
STATION c 268+01.75

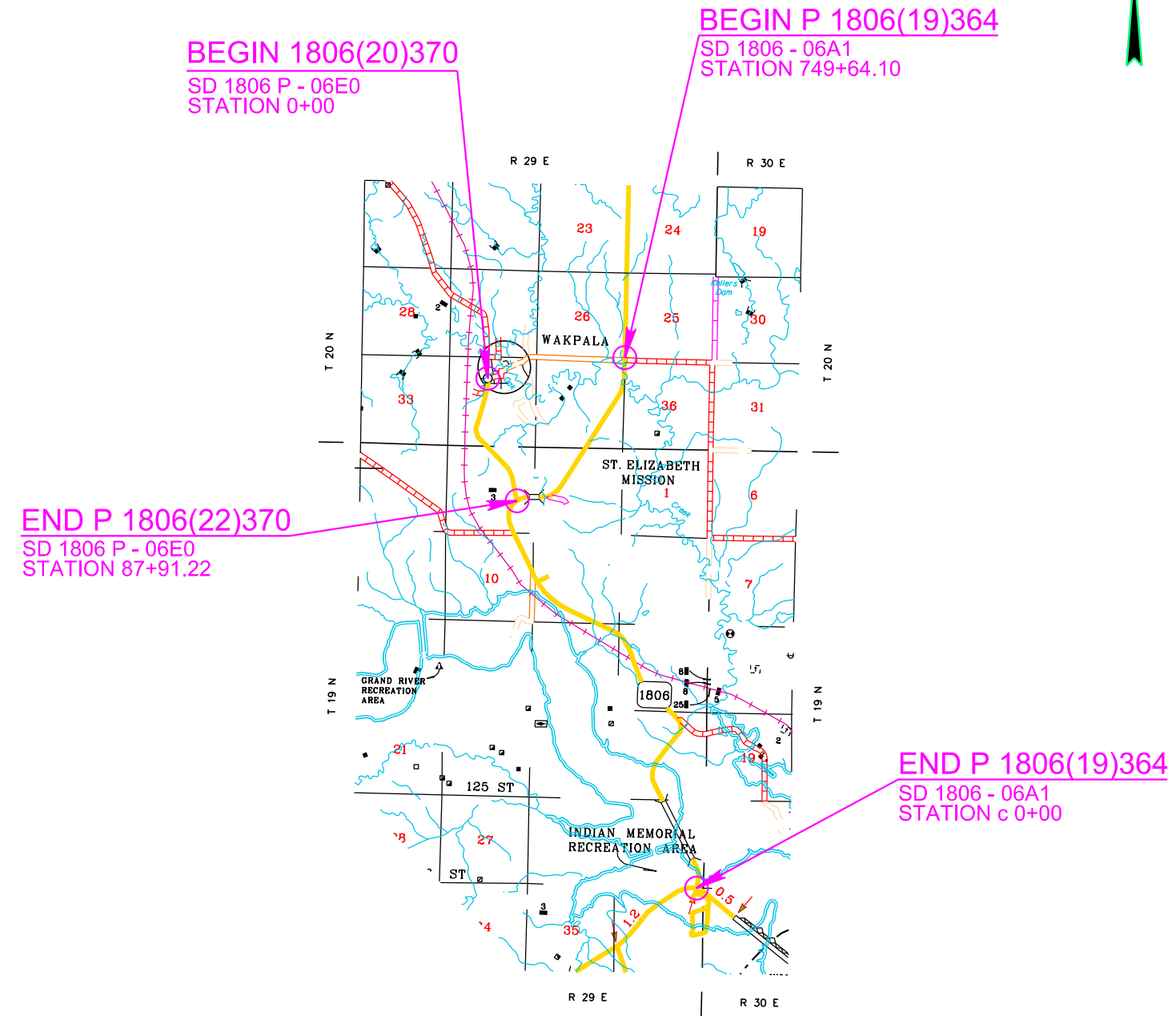


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| | | | | |
|-----|-----------------------|---------------------|-------|--------------|
| KLJ | STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | | NH 0012(230)171...+ | S3 | S7 |

Plotting Date: 6/20/2024




Plot Scale - 1:200

Plotted From - sydfnevmarczak

File - ...Section S\SiteS_06EO_06A1.dgn

SECTION S: PERMANENT SIGNING PLANS

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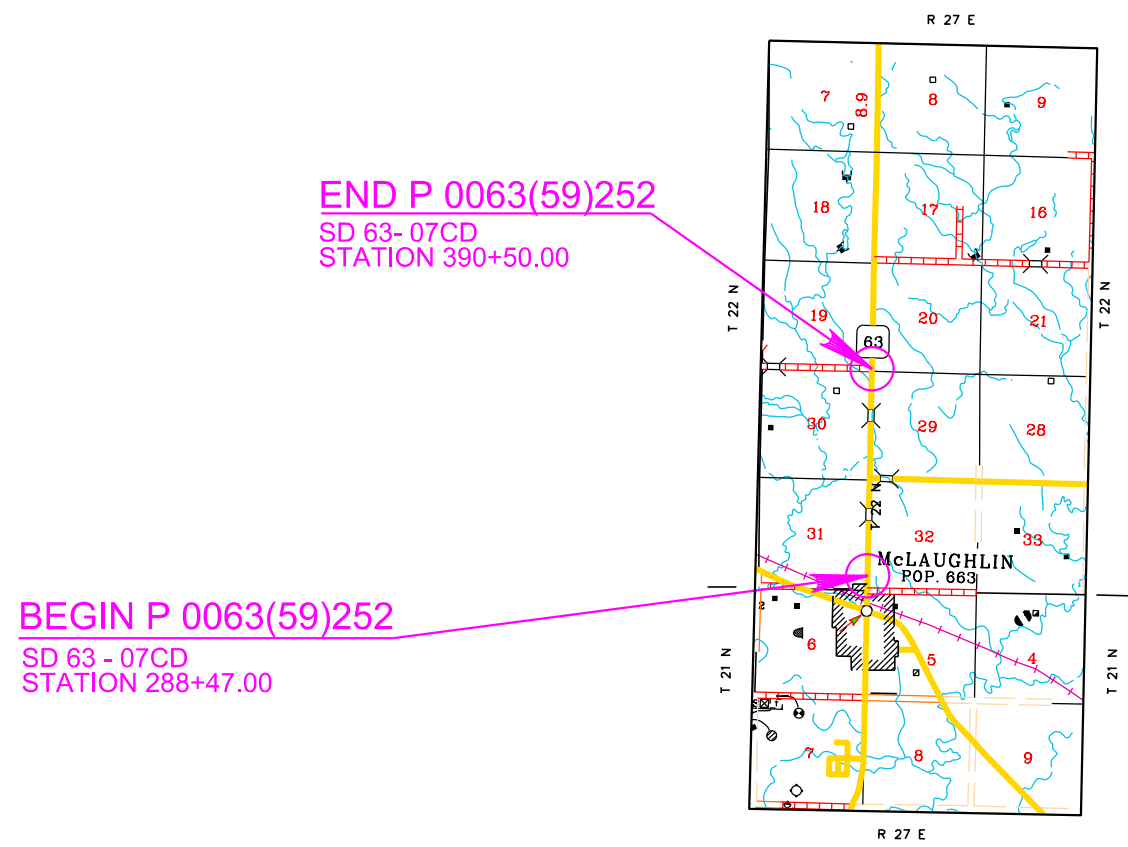
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|  STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
| | NH 0012(230)171...+ | S3 | S7 |

Plotting Date: 6/21/2024

Plot Scale - 1:200

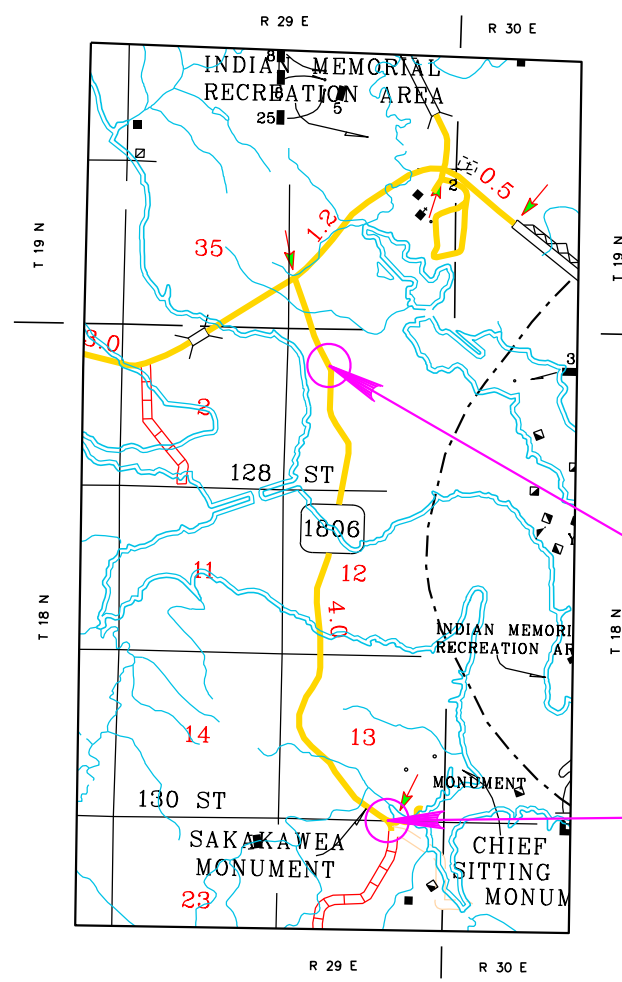
Plotted From - evanwolf

File - ...Section S\SiteS_07CD_06RC.dgn



END P 0063(59)252
SD 63- 07CD
STATION 390+50.00

BEGIN P 0063(59)252
SD 63 - 07CD
STATION 288+47.00



BEGIN 1806(22)359
SD 1806 - 06RC
STATION 69+11.74

END P 1806(22)359
SD 1806 - 06RC
STATION b 229+74.50



SECTION S ESTIMATE OF QUANTITIES

05TY-Section S

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|-----------------|--|----------|------|
| 110E7150 | Remove Sign for Reset | 22 | Each |
| 110E7152 | Remove Delineator for Reset | 300 | Each |
| 632E2022 | 4"x4" White Delineator Back to Back with 1.12 Lb/Ft Post | 10 | Each |
| 632E2024 | 4"x8" White Delineator with 1.12 Lb/Ft Post | 31 | Each |
| 632E2028 | 4" Tubular White Delineator with 1.12 Lb/Ft Post | 26 | Each |
| 632E2100 | Reset Delineator | 300 | Each |
| 632E2220 | Guardrail Delineator | 56 | Each |
| 632E3500 | Reset Sign | 22 | Each |

06A1-Section S

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|-----------------|-----------------------------|----------|------|
| 110E7150 | Remove Sign for Reset | 4 | Each |
| 110E7152 | Remove Delineator for Reset | 150 | Each |
| 632E2100 | Reset Delineator | 150 | Each |
| 632E2220 | Guardrail Delineator | 48 | Each |
| 632E3500 | Reset Sign | 4 | Each |

06RC-Section S

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|-----------------|-----------------------------|----------|------|
| 110E7150 | Remove Sign for Reset | 2 | Each |
| 110E7152 | Remove Delineator for Reset | 3 | Each |
| 632E2100 | Reset Delineator | 3 | Each |
| 632E3500 | Reset Sign | 2 | Each |

06E0-Section S

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|-----------------|-----------------------------|----------|------|
| 110E7152 | Remove Delineator for Reset | 40 | Each |
| 632E2100 | Reset Delineator | 40 | Each |

07CD-Section S

| BID ITEM NUMBER | ITEM | QUANTITY | UNIT |
|-----------------|-----------------------------|----------|------|
| 110E7150 | Remove Sign for Reset | 3 | Each |
| 110E7152 | Remove Delineator for Reset | 45 | Each |
| 632E2100 | Reset Delineator | 45 | Each |
| 632E2220 | Guardrail Delineator | 32 | Each |
| 632E3500 | Reset Sign | 3 | Each |

GENERAL PERMANENT SIGNING

The Contractor will be responsible for contacting South Dakota One Call to locate the utilities at the staked sign installation locations.

Delineators will be placed as per the Standard Plates.

MILEAGE REFERENCE MARKERS

Mileage Reference Markers (MRMs) are not to be disturbed. If an MRM is attached to a sign listed for replacement it will be salvaged and reattached to the new sign in the same location. Payment for this work will be incidental to the various signing contract items.

REMOVE DELINEATOR FOR RESET AND RESET DELINEATOR

Delineators and Type 2 Object Makers, Back to Back in the shoulder widening areas will be removed and stored by the Contractor. Delineators and object markers will be handled with care so that they are not damaged during the relocation process. The Contractor will replace and pay for any reset delineators or object markers damaged in their care.

All costs for removing and storing the delineators and object markers will be incidental to the contract unit price per each for "Remove Delineator for Reset". All costs for resetting the existing delineators and object markers will be incidental to the contract unit price per each for "Reset Delineator".

TABLE OF DELINEATORS AT INTERSECTIONS

| 05TY Location | 4"x4" White Delineator | 4" Tubular White Delineator | 4"x8" White Delineator |
|--------------------|------------------------|-----------------------------|------------------------|
| US12 and SD20 | 4 | 10 | 15 |
| US12 and SD1806 | 6 | 16 | 16 |
| 05TY Totals | 10 | 26 | 31 |

REMOVE SIGN FOR RESET AND RESET SIGN

Signs at the intersections of US12/SD20 and US12/SD1806 will be dismantled and reassembled to the extent needed by the Contractor to properly reset the sign. Signs will be handled with care so that the existing signs, posts, and bases are not damaged during the relocation process. The Contractor will replace and pay for any reset signs damaged in their care. The existing guide and destination signing will be temporarily reset, as directed by the Engineer, to provide direction to travelers at the intersection. Existing stop signs will be temporarily reset during the widening of US12 at each intersection.

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

All removed signs will be reset at the existing location, at the offsets required by the MUTCD.

FOR BIDDING PURPOSES ONLY

| | | | |
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| STATE OF SOUTH DAKOTA | PROJECT NH 0012(230)171...+ | SHEET S4 | TOTAL SHEETS S7 |
|-----------------------|--------------------------------|-------------|--------------------|

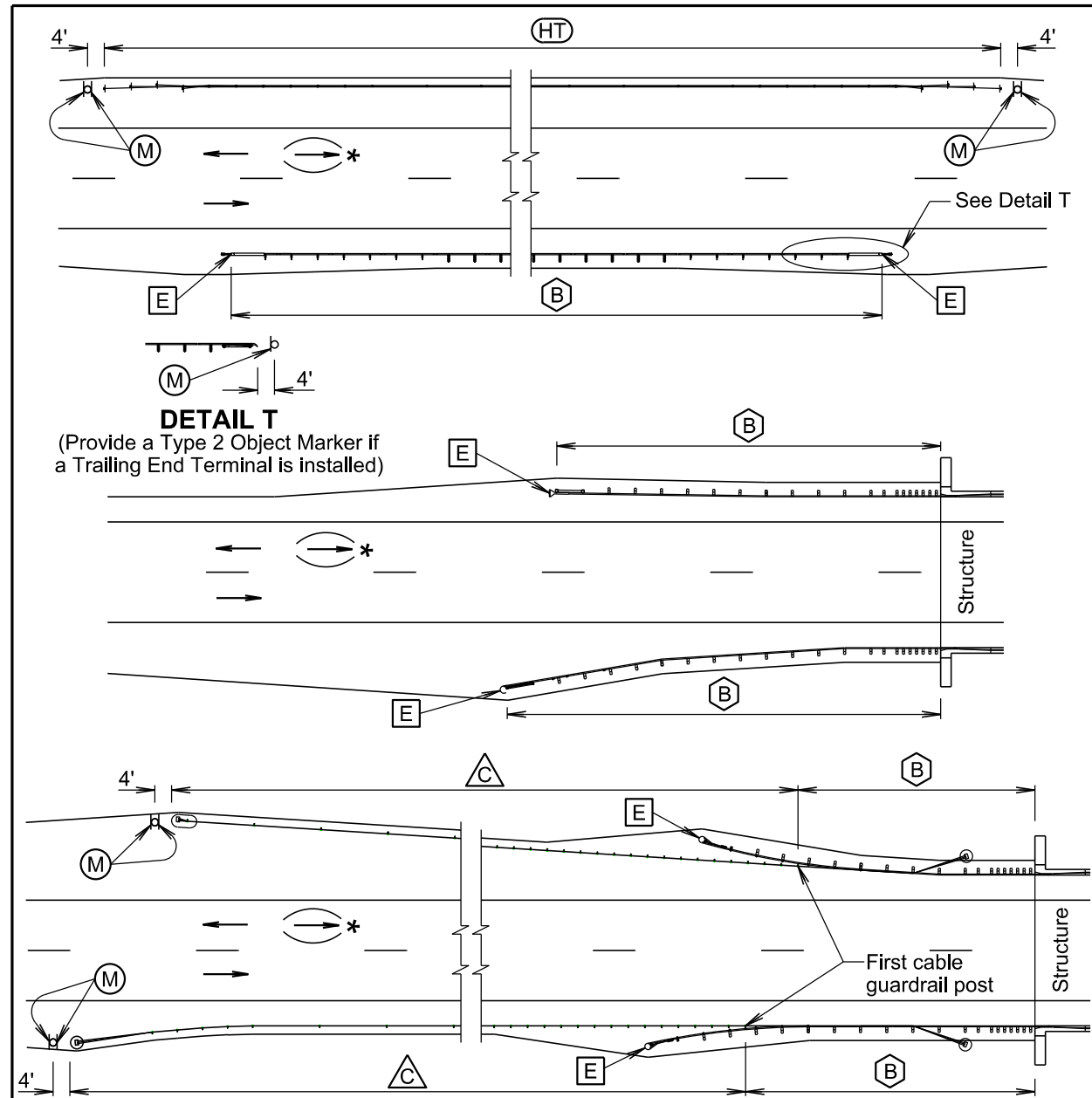
Revised: 8/1/24 - EJW

TABLE OF REMOVE AND RESET SIGN

| MRM | Disp | L/R | Each | Description |
|-------------|------------|-----|-------------------|---------------------------------|
| 05TY | | | | |
| 181 | 0.407 | L | 1 | McLaughlin/McIntosh |
| 181 | 0.425 | R | 1 | Mobridge |
| 181 | 0.498 | L | 1 | Speed Limit |
| 181 | 0.512 | L | 1 | Route Marker |
| 181.5 | 0.001 | R | 1 | Direction Arrow/Route Markers |
| 181.52 | 0.015 | L | 1 | Lewis And Clark Trail Marker |
| 181.52 | 0.031 | L | 1 | Direction Arrow/Route Markers |
| 181.52 | 0.036 | R | 1 | Direction Arrow/Route Markers |
| 181.52 | 0.052 | R | 1 | Speed Limit |
| 181.52 | 0.103 | R | 1 | Mobridge Jct/ Aberdeen |
| 181.52 | 0.104 | L | 1 | McLaughlin/Timberlake |
| 181.52 | 0.183 | L | 1 | Direction Arrow/Route Markers |
| 181.52 | 0.242 | R | 1 | No Passing Zone |
| 185 | 0.468 | R | 1 | Direction Arrow/Route Markers |
| 185 | 0.529 | R | 1 | Stop |
| 185 | 0.579 | R | 1 | Wakpala 7 |
| 185 | 0.61 | R | 1 | Indian Memorial Recreation Area |
| 185 | 0.641 | L | 1 | Speed Limit |
| 185 | 0.671 | R | 1 | Direction Arrow/Route Markers |
| | Additional | | 3 | |
| | | | 05TY Total | 22 |
| 06A1 | | | | |
| 367 | 0.128 | R | 1 | No Passing Zone |
| 367 | 0.354 | L | 1 | No Passing Zone |
| 367 | 0.429 | R | 1 | No Passing Zone |
| | Additional | | 1 | |
| | | | 06A1 Total | 4 |
| 06RC | | | | |
| 362 | 0.708 | R | 1 | Left Curve Arrow/Advisory Speed |
| | Additional | | 1 | |
| | | | 06RC Total | 2 |

An additional 3 signs 07CD have been added to remove signs for reset and to reset signs as determined by the Engineer.





DETAIL T
(Provide a Type 2 Object Marker if a Trailing End Terminal is installed)

PLAN VIEW
(Typical Guardrail Layouts)

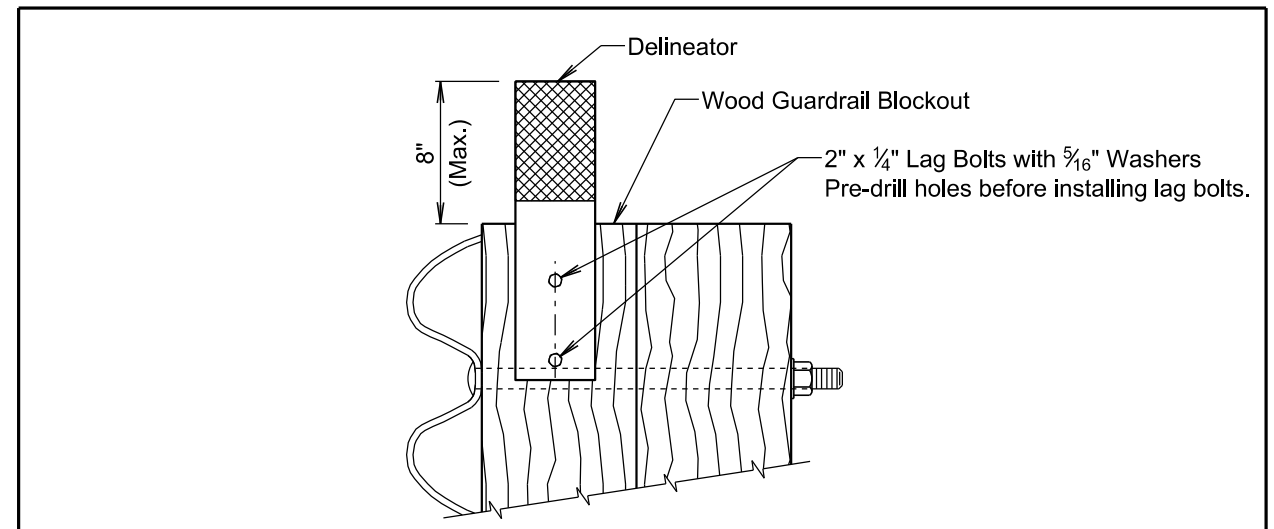
- (B) Steel Beam Guardrail Delineation
- (HT) High Tension Cable Guardrail Delineation
- (E) Guardrail End Terminal Object Marker
- (M) Type 2 Object Marker
- (C) 3 Cable Guardrail (Low Tension) Delineation

*For two-way traffic, install delineation at the opposite end of structure the same as shown. Back-to-back delineation is required for two-way traffic, single-sided delineation for one-way traffic.

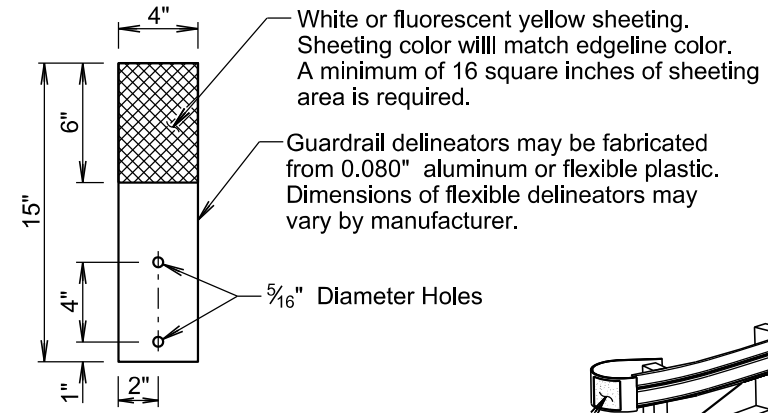
March 31, 2024

| | | |
|----------------------------------|---------------------------------|-------------------------------|
| S D D O T | DELINEATION OF GUARDRAIL | PLATE NUMBER 632.40 |
| | | Sheet 1 of 4 |

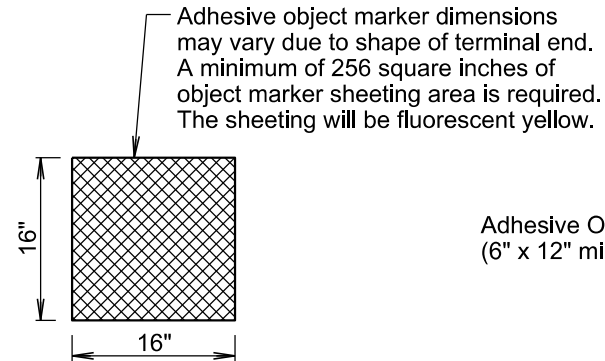
Published Date: 2025



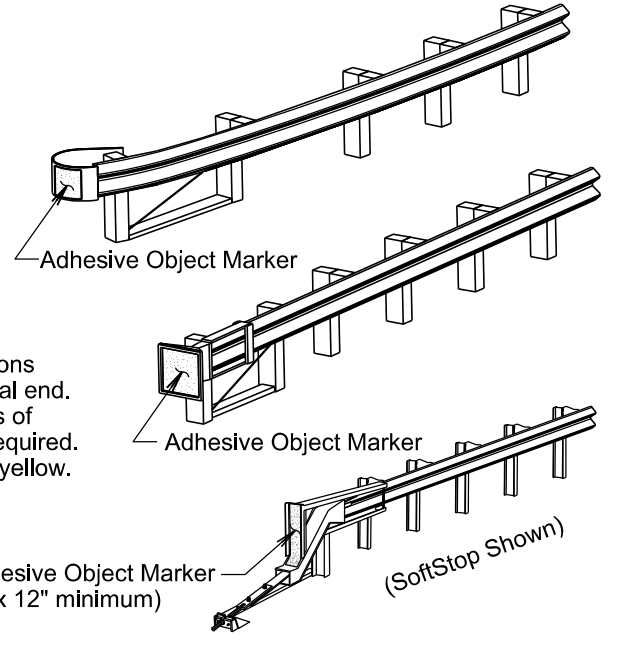
(B) STEEL BEAM GUARDRAIL DELINEATION



DELINEATOR
(For Steel Beam Guardrail)



ADHESIVE OBJECT MARKER

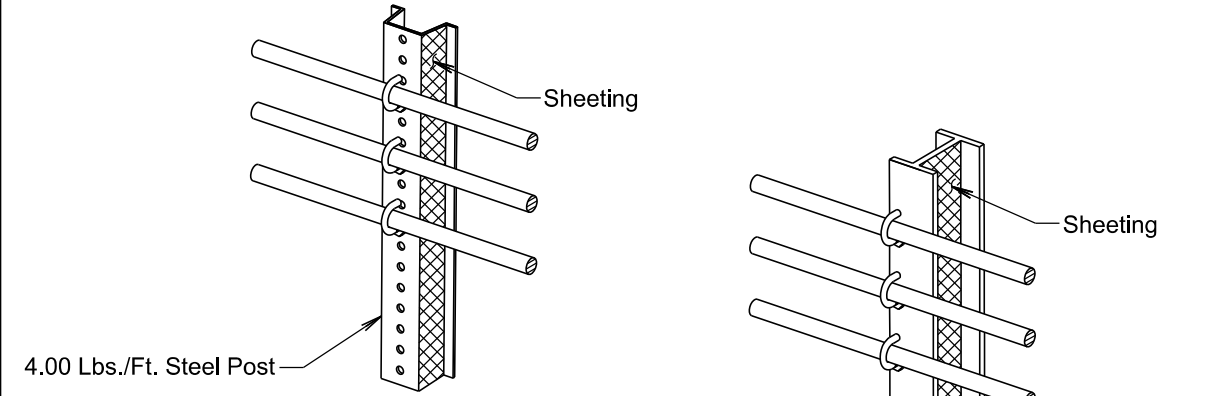


(E) GUARDRAIL END TERMINAL OBJECT MARKER

March 31, 2024

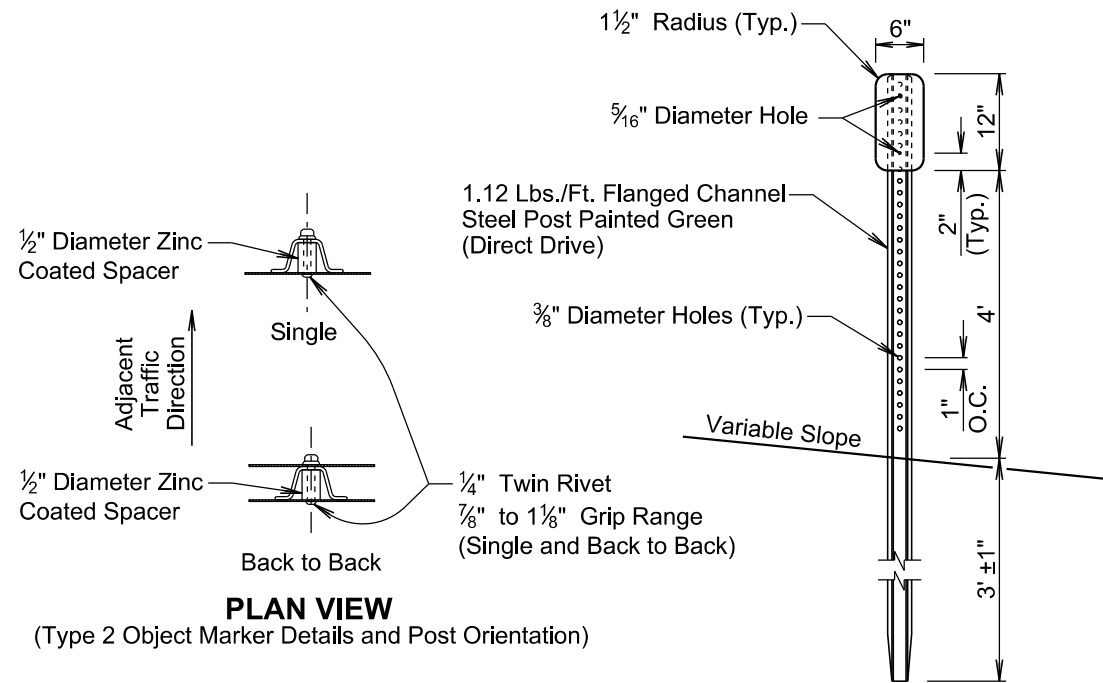
| | | |
|----------------------------------|------------------------------|-------------------------------|
| S D D O T | DELINEATION GUARDRAIL | PLATE NUMBER 632.40 |
| | | Sheet 2 of 4 |

Published Date: 2025



△ 3 CABLE GUARDRAIL (LOW TENSION) DELINEATION

△ 3 CABLE GUARDRAIL (LOW TENSION) DELINEATION



PLAN VIEW
(Type 2 Object Marker Details and Post Orientation)

ELEVATION VIEW

Ⓜ (Type 2 Object Marker)
(For Marking 3 Cable Guardrail (Low Tension) Anchor, High Tension Cable Guardrail Anchor, and Trailing End Terminal)

March 31, 2024

| | | | |
|----------------------|-----------------------|--------------------------|------------------------|
| Published Date: 2025 | S D D O T | DELINEATION OF GUARDRAIL | PLATE NUMBER 632.40 |
| | | | Sheet 3 of 4 |

GENERAL NOTES:

The delineation of high tension cable guardrail will be reflective sheeting placed back to back on every third post cap or cable spacer. Maximum spacing of delineation will not exceed 35 feet. The sheeting will be type XI in conformance with ASTM D4956. The color of the reflective sheeting will be the same as the nearest pavement marking.

The delineators for steel beam guardrail and sheeting on 3 cable guardrail (low tension) posts will be covered with a minimum of 16 square inches of reflective sheeting. The reflective sheeting will be type XI in conformance with ASTM D4956. Along two-way roadways the sheeting will be on both sides of the delineators and guardrail posts and will be white in color. For one-way roadways the sheeting will only be required on the side facing traffic and the color will be the same as the nearest pavement marking, yellow on the left side of the roadway and white on the right side.

When steel beam guardrail is attached to a bridge the first delineator will be attached to the post nearest the bridge.

At bridges with guardrail less than 200 feet in length, a minimum of 4 delineators will be placed in addition to the end terminal yellow object marker. The spacing between the delineators will be approximately one third of the length of the guardrail.

At bridges with guardrail 200 feet and greater in length, including bridges that have steel beam guardrail transitioning to 3 cable guardrail (low tension), the delineators will be placed at a spacing of approximately 50 feet. Delineation will extend throughout the length of the guardrail system.

Steel beam guardrail that is not attached to a bridge and is less than 200 feet in length, a minimum of 4 delineators will be placed in addition to the end terminal yellow object markers. The spacing between the delineators will be approximately one third of the length of the guardrail.

Steel beam guardrail that is not attached to a bridge and is 200 feet and greater in length, including steel beam guardrail transitioning to 3 cable guardrail (low tension), the delineators will be placed at a spacing of approximately 50 feet. Delineation will extend throughout the length of the guardrail system.

All costs for furnishing and installing single or back to back guardrail delineation on 3 cable guardrail and steel beam guardrail will be included in the contract unit price per each for "Guardrail Delineator".

All costs for furnishing and installing the reflective sheeting on the cable spacers or post caps for the high tension cable guardrail will be incidental to the respective high tension cable guardrail contract item.

An adhesive object marker will be placed on the end of the W beam guardrail or MGS end terminal. The adhesive object marker dimensions may vary due to the shape of the terminal end. A minimum of 256 square inches of object marker reflective sheeting area is required on end terminals with sufficient surface area. Other end terminals (SoftStop) will require an adhesive object marker with a minimum size of 6" x 12". The reflective sheeting will be fluorescent yellow type XI sheeting in conformance with ASTM D4956. All costs for furnishing and installing the adhesive object marker will be incidental to various contract items.

A type 2 object marker will be placed adjacent to the 3 cable guardrail (low tension) anchor, high tension cable guardrail anchor, and trailing end terminal at the location noted on sheet 1 of this standard plate. The type 2 object marker (6" x 12") will have fluorescent yellow type XI sheeting in conformance with ASTM D4956. All costs for furnishing and installing the type 2 object marker including the steel post, 6" x 12" reflective panel, and hardware will be included in the contract unit price per each for "Type 2 Object Marker" for single-sided and "Type 2 Object Marker Back to Back" for back to back type 2 object markers.

March 31, 2024

| | | | |
|----------------------|-----------------------|--------------------------|------------------------|
| Published Date: 2025 | S D D O T | DELINEATION OF GUARDRAIL | PLATE NUMBER 632.40 |
| | | | Sheet 4 of 4 |

