

February 19, 2025

**ADDENDUM NO. 1**

**RE: Item #13, March 5, 2025 Letting - NH 0081(114)0, PCN 07DH, Yankton County - ADA,  
Modify Intersection, Signals**

**TO WHOM IT MAY CONCERN:**

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

**SPECIAL PROVISIONS:**    **PEN AND INK CHANGE:** Change the Completion Date from November 7, 2025 to June 26, 2026 on the NOTICE TO CONTRACTORS.

**PEN AND INK CHANGE:** Change the Work Type for this Project from Work Type 14 to Work Type 10 on the NOTICE TO CONTRACTORS.

Please remove the Index of Special Provisions and replace with attached Index of Special Provisions revised 2/19/25.

Please add the "Special Provision for Contract Time", dated 2/13/25 before the "Special Provision for Prosecution and Progress", dated 1/21/21.

Please remove the "Special Provision Regarding Right of Entry/Work Limits", dated 2/3/25.

**SDEBS BID PROPOSAL:**    *The electronic bid proposal for this contract has been revised to include the changes associated with this addendum. Bidders must log in to the SDEBS to retrieve and incorporate these changes into their bid.*

**Bid Items were added:**

Bid Item 009E1000 "Incentive/Disincentive Pay"

Bid Item 634E0915 "Short Term Temporary Traffic Control Signal"

**PLANS:**    Please destroy sheets A1, C2 & L4 and replace with the enclosed sheets, dated 2/19/25. Sheets C2A, C6A-C6F & C11A-C11C were added.

**Sheets A1 & C2:** Bid Item 634E0915 "Short Term Temporary Traffic Control Signal" was added.

**Sheet C2A:** SHORT TERM TEMPORARY CONTROL SIGNAL notes were added.

**Sheets C6A-C6F:** TEMPORARY SPAN WIRE SIGNAL LAYOUTS and TRAFFIC SIGNAL HEADS, LUMINAIRES AND SPAN WIRE SYSTEM detail were added.

**Sheets C11A-C11C:** Standard Plates were added.

**Sheet L4:** SUBSURFACE notes were revised.

Sincerely,

Sam Weisgram  
Engineering Supervisor

SW/cj

CC: Travis Dressen, Mitchell Region Engineer  
Greg Rothschadl, Yankton Area Engineer

REV 2/19/25

INDEX OF SPECIAL PROVISIONS

PROJECT NUMBER(S): NH 0081(114)0 PCN: 07DH

TYPE OF WORK: ADA, MODIFY INTERSECTION, SIGNALS

COUNTY: YANKTON

The following clauses have been prepared subsequent to the Standard Specifications for Roads and Bridges and refer only to the above described improvement, for which the following Proposal is made.

The Contractor's attention is directed to the need for securing from the Department of Environment & Natural Resources, Foss Building, Pierre, South Dakota, permission to remove water from public sources (lakes, rivers, streams, etc.). The Contractor should make his request as early as possible after receiving his contract, and insofar as possible at least 30 days prior to the date that the water is to be used.

Lacey Johnson is the official in charge of the Yankton Career Center for Yankton County.

**THE FOLLOWING ITEMS ARE INCLUDED IN THIS PROPOSAL FORM:**

**Special Provision for Contract Time, dated 2/13/25.**

**Special Provision for Prosecution and Progress, dated 1/21/21.**

**Special Provision Regarding Railroad Insurance Requirements and Working on Railroad Property for Grading and Interim Surfacing with BNSF Railway Company, dated 7/25/24.**

**NOTE: The Contractor WILL NOT be granted permission to proceed with any work on Railroad Right-of-Way until he has been notified by the Railroad that the insurance has been approved and the insurances and certificates has been provided to the SDDOT area office.**

**Exhibit "C"**

**Special Provision for Optical Activated Emergency Vehicle Pre-Emption System, dated 8/26/24.**

**Special provision for Battery Backup System for Traffic Signal, dated 8/26/24.**

**Special Provision for Contractor Staking, dated 8/26/24.**

Special Provision for Steel Beam Guardrail AASHTO M 180 Designation, date 10/8/24.

Special Provision for Acknowledgment and Certification Regarding Article 3, Section 12 of the South Dakota Constitution, dated 8/24/23.

Special Provision for Buy America, dated 5/1/24.

Special Provision for Liability Insurance, dated 4/21/22.  
Special Provision for Responsibility for Damage Claims, dated 4/21/22.  
Special Provision for Restriction of Boycott of Israel, dated 1/31/20.  
Special Provision for Contractor Administered Preconstruction Meeting, dated 12/18/19.  
Fuel Adjustment Affidavit, DOT form 208 dated 7/15.  
Standard Title VI Assurance, dated 3/1/16.  
Special Provision For Disadvantaged Business Enterprise, dated 2/9/24.  
Special Provision For EEO Affirmative Action Requirements on Federal and Federal-Aid Construction Contracts, dated 2/5/24.  
Special Provision For Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. October 23, 2023), dated 10/18/23.  
Required Contract Provisions Federal-Aid Construction Contracts, Form FHWA 1273 (Rev. 10/23/23).  
Special Provision Regarding Minimum Wage on Federal-Aid Projects, dated 10/24/19.  
Wage and Hour Division US Department of Labor Washington DC. - US Dept. of Labor Decision Number SD20230032, dated 3/10/23.  
Special Provision for Supplemental Specifications to 2015 Standard Specifications for Roads and Bridges, dated 9/7/22.  
Special Provision for Price Schedule for Miscellaneous Items, dated 12/6/23.

**STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION  
FOR  
CONTRACT TIME**

**PROJECT NH 0081(114)0; PCN 07DH  
YANKTON COUNTY**

**FEBRUARY 13, 2025**

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**Intersection Work Restrictions**

The Contractor will be allowed to work on three intersections with temporary signal systems installed and pedestrian ADA sidewalk work being completed concurrently.

Work at 21<sup>st</sup> St and 23<sup>rd</sup> St intersections will not be allowed to be completed concurrently.

**November 7, 2025 Interim Completion Requirement**

At any intersection where interim temporary signal systems are installed, and ADA work has started in 2025, the Contractor will have all work at the intersection completed, open to vehicle and pedestrian traffic, and permanent signals installed and operational by November 7, 2025 interim completion date.

Any turn lane modifications construction or ADA work adjacent to the railroad tracks where work has started in 2025, will be completed and open to vehicle and pedestrian traffic by the November 7, 2025 interim completion date.

If the Contractor does not complete the work by the interim completion requirement, the Department will make a disincentive assessment in the amount of \$1000 per working day. A contract item for incentive/disincentive pay is included in the bid schedule for the Department's use in assessing disincentive. The Department will use a negative quantity of days for assessing disincentives. The Department will count working days in accordance with Section 8.6 C.

**Field Work Completion**

The Contractor will complete the project by the June 26, 2026 field work completion date.

**Failure to Complete on Time**

The Contractor will complete all work on the project prior to the field work completion requirement. If the Contractor does not complete all work by the field work completion

requirement, the Department will assess liquidated damages in accordance with Section 8.8. The Department will assess liquidated damages for each working day the work (project) is late until the Contractor completes all field work.

In the event the Contractor does not complete all field work on time, the Department will count working days in accordance with Section 8.6 C.

**Expected Adverse Weather Days**

The Department has provided Attachment 1 for information purposes only as a guide to bidders. Table 1 depicts the typical number of adverse weather days expected for any given month, based on historical records. The Department will consider this project a surfacing project in Zone 6.

The Department will consider expected adverse weather days cumulative in nature over the time period when the Contractor is actively pursuing completion of the work. The Department will not consider adverse weather days during an extended period of time when the Contractor is not pursuing completion of the work. When considering a time extension for interim completion or field work completion of the project, the Engineer will compare the total number of expected adverse weather days against the total number of actual adverse weather days for the time period during which the work was being completed.

\* \* \* \* \*

# ATTACHMENT 1

Figure A - Expected Adverse Weather Days for South Dakota

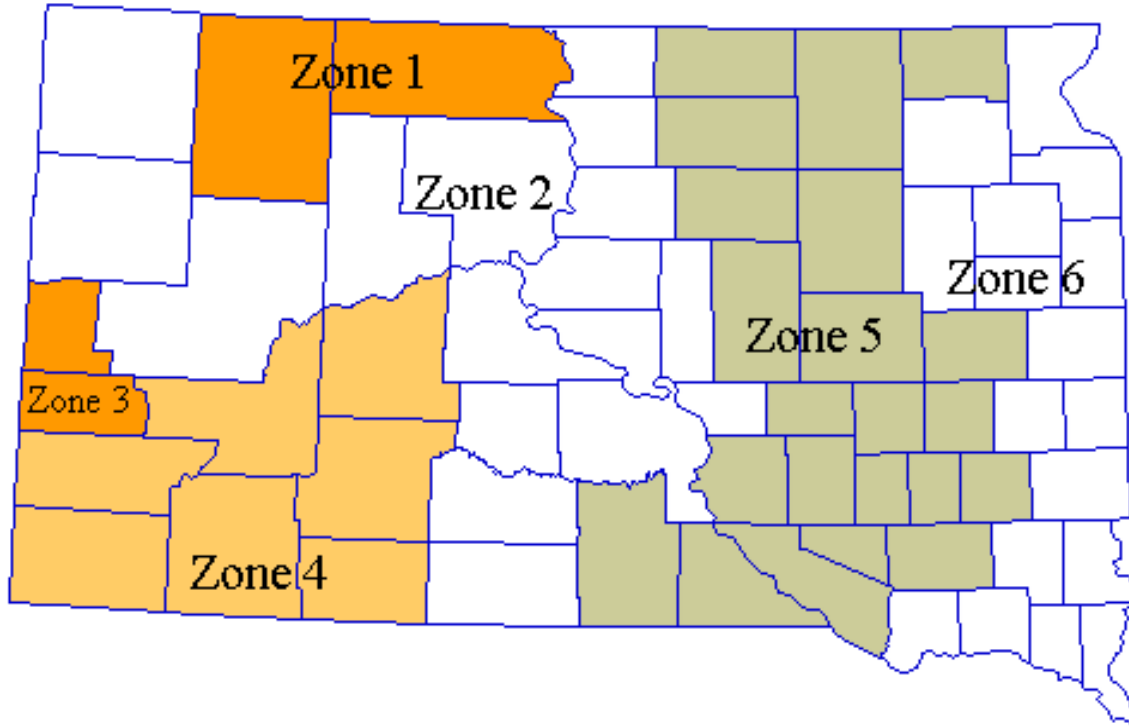


Table 1 - Expected Adverse Weather Days for South Dakota

	Grading Projects						Surfacing and Structural Projects					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Jan	18	18	16	16	22	24	18	18	15	16	21	23
Feb	19	18	12	14	19	21	19	18	12	14	19	21
Mar	12	10	9	8	11	13	12	10	9	8	10	12
Apr	6	5	8	5	6	6	5	4	6	4	4	4
May	6	6	8	6	6	6	5	5	6	4	4	5
Jun	7	6	7	6	7	8	5	5	5	4	5	6
Jul	5	5	6	5	6	7	4	4	5	3	4	5
Aug	4	4	5	4	5	6	3	3	4	3	4	4
Sep	3	3	4	3	4	5	2	2	3	2	3	4
Oct	4	3	5	3	4	4	3	3	4	2	3	3
Nov	11	9	8	7	10	12	11	9	8	7	10	11
Dec	21	19	15	14	20	22	21	19	15	14	20	22

NOTE: Includes Holidays and Weekends.

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET A1	TOTAL SHEETS A4
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Plotting Date: 02/19/2025  
Revised Date: 02/19/2025 MDJ

## Section B - Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	15	Each
009E3230	Grade Staking	0.141	Mile
009E3250	Miscellaneous Staking	0.070	Mile
009E3280	Slope Staking	0.070	Mile
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	1,722	Ft
110E0400	Remove Drop Inlet	4	Each
110E1010	Remove Asphalt Concrete Pavement	1.3	SqYd
110E1100	Remove Concrete Pavement	543.0	SqYd
110E1140	Remove Concrete Sidewalk	1,175.9	SqYd
250E0020	Incidental Work, Grading	Lump Sum	LS
260E2010	Gravel Cushion	287.4	Ton
320E1200	Asphalt Concrete Composite	0.2	Ton
380E0080	9.5" Nonreinforced PCC Pavement	547.4	SqYd
380E3540	8" PCC Approach Pavement	396.0	SqYd
380E4080	9.5" PCC Fillet Section	623.5	SqYd
380E6110	Insert Steel Bar in PCC Pavement	1,143	Each
450E0122	18" RCP Class 2, Furnish	4	Ft
450E0130	18" RCP, Install	4	Ft
450E0142	24" RCP Class 2, Furnish	36	Ft
450E0150	24" RCP, Install	36	Ft
450E0416	24" RCP Bend, Furnish	1	Each
450E0417	24" RCP Bend, Install	1	Each
462E0100	Class M6 Concrete	17.0	CuYd
480E0100	Reinforcing Steel	2,866	Lb
650E0095	Type B69.5 Concrete Curb and Gutter	1,074	Ft
650E0395	Type BL69.5 Concrete Curb and Gutter	499	Ft
650E4695	Type P9.5 Concrete Gutter	24	Ft
651E0040	4" Concrete Sidewalk	11,367	SqFt
651E0740	4" Reinforced Colored Concrete Sidewalk	187	SqFt
651E7000	Type 1 Detectable Warnings	660	SqFt
670E5340	4' x 11' Precast Concrete Type S Drop Inlet Lid	4	Each
671E6007	Type A7 Manhole Frame and Lid	1	Each
998E0100	Railroad Protective Insurance	Lump Sum	LS

## Section C - Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	50.0	Hour
634E0110	Traffic Control Signs	1,075.2	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	6	Each
634E0330	Temporary Raised Pavement Markers	9,240	Ft
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0915	Short Term Temporary Traffic Control Signal	5	Site

## Section D - Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	1.9	CuYd
110E1693	Remove Erosion Control Wattle	250	Ft
110E1695	Remove Sediment Filter Bag	244	Ft
110E1700	Remove Silt Fence	196	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0206	Type D Permanent Seed Mixture	30	Lb
731E0100	Fertilizing	146	Lb
732E0600	Hydraulic Straw Mulch	297	Lb
734E0154	12" Diameter Erosion Control Wattle	250	Ft
734E0165	Remove and Reset Erosion Control Wattle	63	Ft
734E0180	Sediment Filter Bag	244	Ft
734E0604	High Flow Silt Fence	196	Ft
734E0610	Mucking Silt Fence	14	CuYd
734E0620	Repair Silt Fence	49	Ft
734E0845	Sediment Control at Inlet with Frame and Grate	1	Each
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	52	Ft
734E5005	Dewatering	Lump Sum	LS

### INDEX OF SHEETS

A1 and A2 Estimate of Quantities for Sections B, C, D, L, M and S  
A3 Environmental Commitments

### SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.



**SECTION C ESTIMATE OF QUANTITIES**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	50.0	Hour
634E0110	Traffic Control Signs	1,075.2	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	6	Each
634E0330	Temporary Raised Pavement Markers	9,240	Ft
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0915	Short Term Temporary Traffic Control Signal	5	Site

**SEQUENCE OF OPERATIONS**

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work.

**GENERAL TRAFFIC CONTROL**

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

All construction operations will be conducted in the general direction of traffic movement.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

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

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

All haul trucks will be equipped with an additional flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights will be incidental to the various related contract items.

The Contractor will notify businesses/homeowners a minimum of two weeks prior to construction to inform them of upcoming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

**TRAFFIC CONTROL SIGNS**

Sufficient traffic control devices have been included in these plans to sign two lane closures to complete work at four intersection corners. If the Contractor elects to work on additional locations simultaneously, the cost for additional traffic control devices will be incidental to the contract unit price per square foot for "Traffic Control Signs".

Traffic control devices have been included in these plans to sign one additional left turn lane closure at the intersection of Broadway Ave. and 4<sup>th</sup> St. The Contractor will not be allowed to simultaneously work on the left turn lane and close the adjacent shoulders at the intersection of Broadway Ave. and 4<sup>th</sup> St.

**TEMPORARY RAISED PAVEMENT MARKERS**

Temporary raised pavement markers will be used for marking edge lines, lane lines, and centerlines. Temporary raised pavement markers will be used on all new permanent surfacing sections of roadway and on existing surfacing where temporary marking locations are different than existing marking locations, unless noted or as directed by the Engineer.

Temporary raised pavement markers will be attached to the roadway surface with a flexible non-permanent bituminous adhesive capable of being removed from the roadway surface or with an adhesive approved by the Engineer.

All costs to furnish, install, replace if necessary, and remove the markers will be incidental to the contract unit price per foot for "Temporary Raised Pavement Markers".

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	C2A	C11

## SHORT TERM TEMPORARY CONTROL SIGNAL

02/19/2025(MY)

The Contractor will install a short term temporary traffic control signals at the following intersections:

- SD HWY 50 / Broadway Ave & 4<sup>TH</sup> Street
- SD HWY 50 / Broadway Ave & 8<sup>TH</sup> Street
- SD HWY 50 / Broadway Ave & 15<sup>TH</sup> Street
- SD HWY 50 / Broadway Ave & 21<sup>st</sup> Street
- SD HWY 50 / Broadway Ave & 23<sup>rd</sup> Street

Flashing yellow arrow vehicle signal heads will be used for all protected/permitted left turn phases.

Five section vehicle signal heads will be used for all protected/permitted left turn phases.

Pedestrian signal heads and pedestrian push buttons will be provided on all approaches.

Temporary luminaires will provided on each signal support pole. Luminaires will be 250-Watt HTP, Type 3 distribution or approved LED equivalent, and will be controlled automatically by timer or photoelectric cell.

Vehicle detection will be provided on all approaches.

All vehicle signal heads will have backplates with retroreflective border. The vehicle signal head backplates will have a factory applied 3-inch wide yellow retroreflective border. Sheeting for the border will be Type IX or Type XI in conformance with ASTM D4956.

Signal backplates will be polycarbonate, aluminum, or aluminum-composite. Minimum material thicknesses are:

- Polycarbonate, 0.10-inch
- Aluminum, 0.06-inch
- Aluminum-Composite, 0.08-inch

Signal backplates will extend not less than 5 inches from the edge of the signal head at the top, bottom, and sides. The bottom of the backplate on vehicle signal faces, mounted directly above pedestrian signal indications, will be sized to permit the separate adjustment of the vehicle and pedestrian signal indication and may be less than 4 inches.

All traffic signal equipment and materials will meet the requirements of Sections 635 and 985 of the Specifications.

Initial signal timings for the short term temporary traffic control signal will be provide by the Mitchel Region Traffic Engineer. The Region Traffic Engineer, Corey Pinkley, can be reached at 605-770-7401.

All costs involved with constructing the short term temporary traffic control signal as specified above and in the plans, will be included in the contract unit price per site for "Short Term Temporary Traffic Control Signal".

Wood span wire utility pole locations will be field verified and approved by the project engineer.

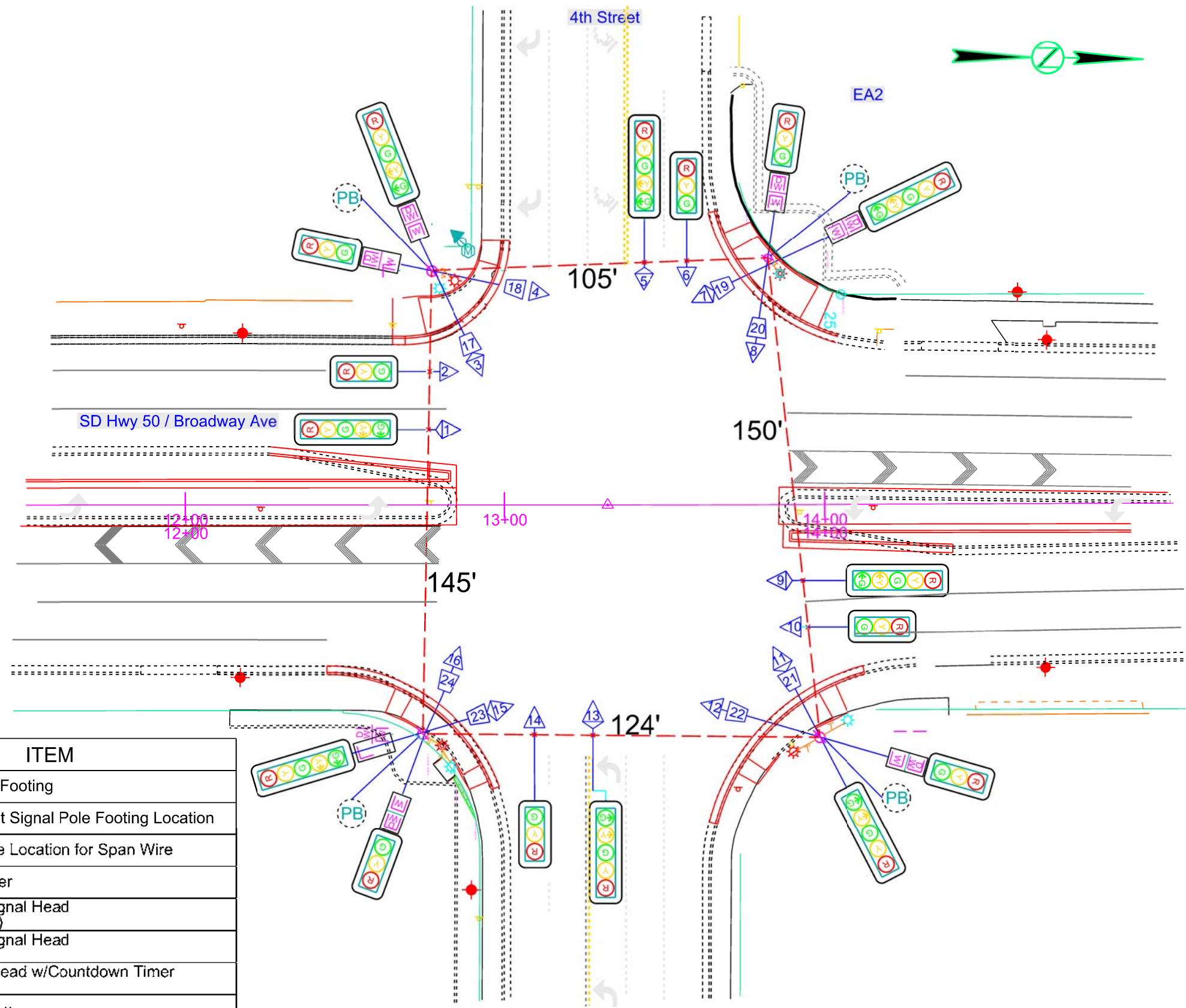
# TEMPORARY SPAN WIRE SIGNAL LAYOUT

## SD HWY 50 / BROADWAY AVE. & 4TH STREET

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	C6A	C11

Plotting Date: 02/19/2025

02/19/2025(MY)



KEY	ITEM
	Existing Signal Pole Footing
	Proposed Permanent Signal Pole Footing Location
	Proposed Wood Pole Location for Span Wire
	Span Wire with Tether
	3 Section Vehicle Signal Head (2,4,6,8,10,12,14,16)
	5 Section Vehicle Signal Head (1,3,5,7,9,11,13,15)
	Pedestrian Signal Head w/Countdown Timer (17-24)
	Pedestrian Push Button

PLOT SCALE - 1:90.0762

PLOTTED FROM - TRM113318

PLOT NAME - 2

FILE - ...\\TC\DN\SPAN WIRE SIGNAL.DGN

# TEMPORARY SPAN WIRE SIGNAL LAYOUT

## SD HWY 50 / BROADWAY AVE. & 8TH STREET

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	C6B	C11

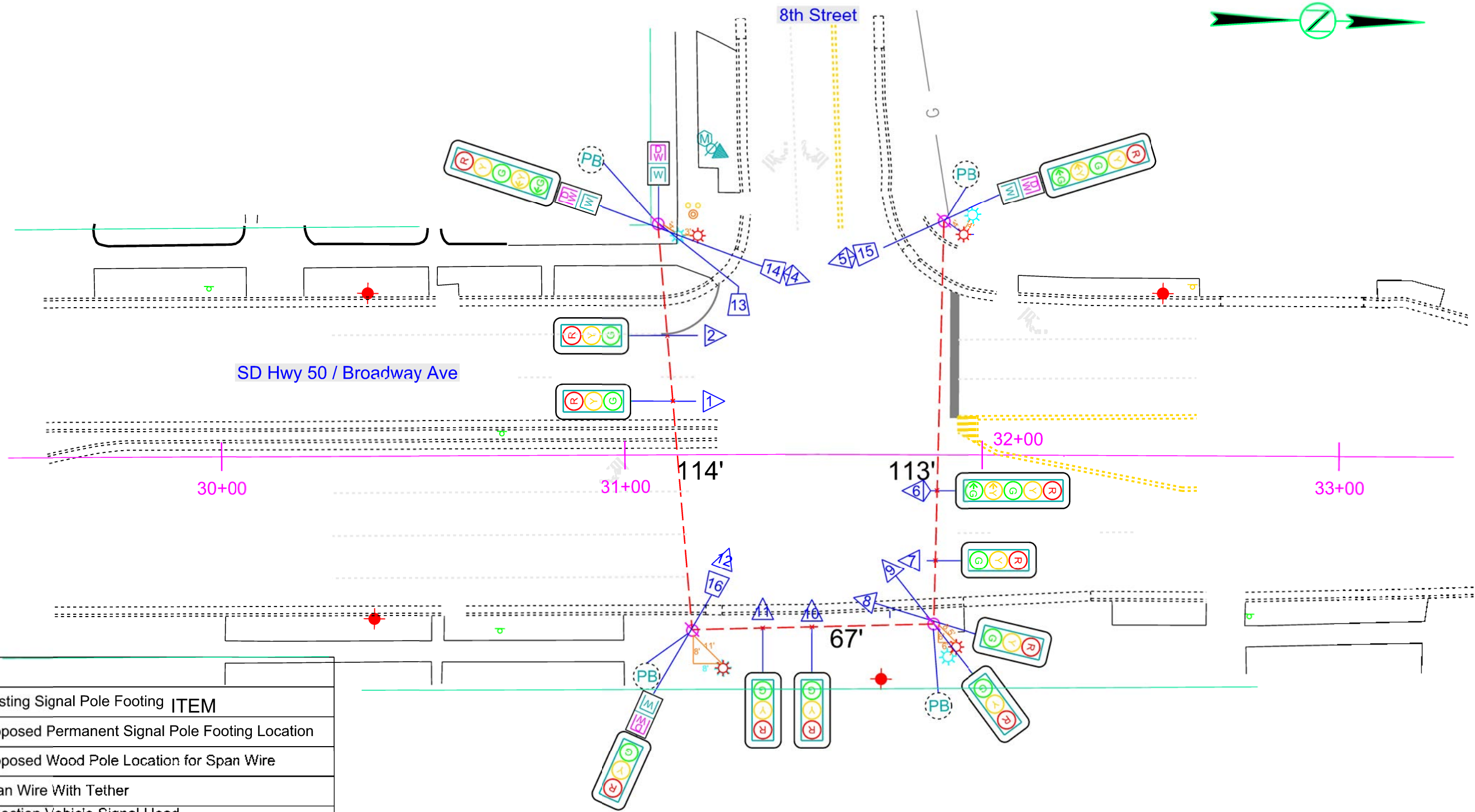
Plotting Date: 02/19/2025

02/19/2025(MY)

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PLOT NAME - 3

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KEY	
	Existing Signal Pole Footing ITEM
	Proposed Permanent Signal Pole Footing Location
	Proposed Wood Pole Location for Span Wire
	Span Wire With Tether
	3 Section Vehicle Signal Head (1-2, 7-12)
	5 Section Vehicle Signal Head (4-6)
	Pedestrian Signal Head w/Countdown Timer (13-16)
	Pedestrian Push Button

PLOTTED FROM - TRM113318

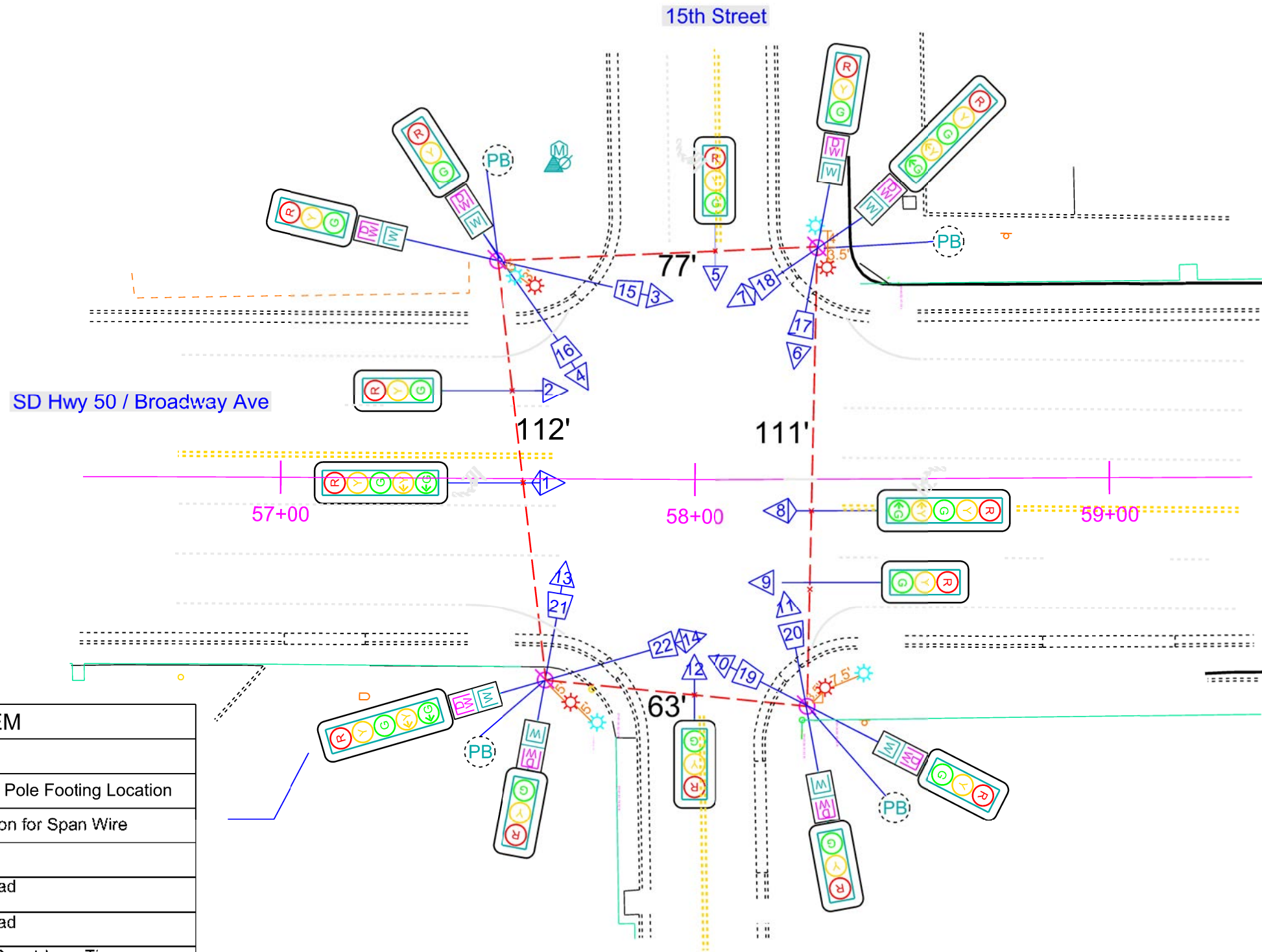
# TEMPORARY SPAN WIRE SIGNAL LAYOUT

## SD HWY 50 / BROADWAY AVE. & 15TH STREET

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET C6C	TOTAL SHEETS C11
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Plotting Date: 02/19/2025

02/19/2025(MY)



KEY	ITEM
	Existing Signal Pole Footing
	Proposed Permanent Signal Pole Footing Location
	Proposed Wood Pole Location for Span Wire
	Span Wire with Tether
	3 Section Vehicle Signal Head (2-6, 9-13)
	5 Section Vehicle Signal Head (1, 7, 8, 14)
	Pedestrian Signal Head w/Countdown Timer (15-22)
	Pedestrian Push Button

PLOT SCALE - 1:90.0762

PLOTTED FROM - TRM113318

PLOT NAME - 4

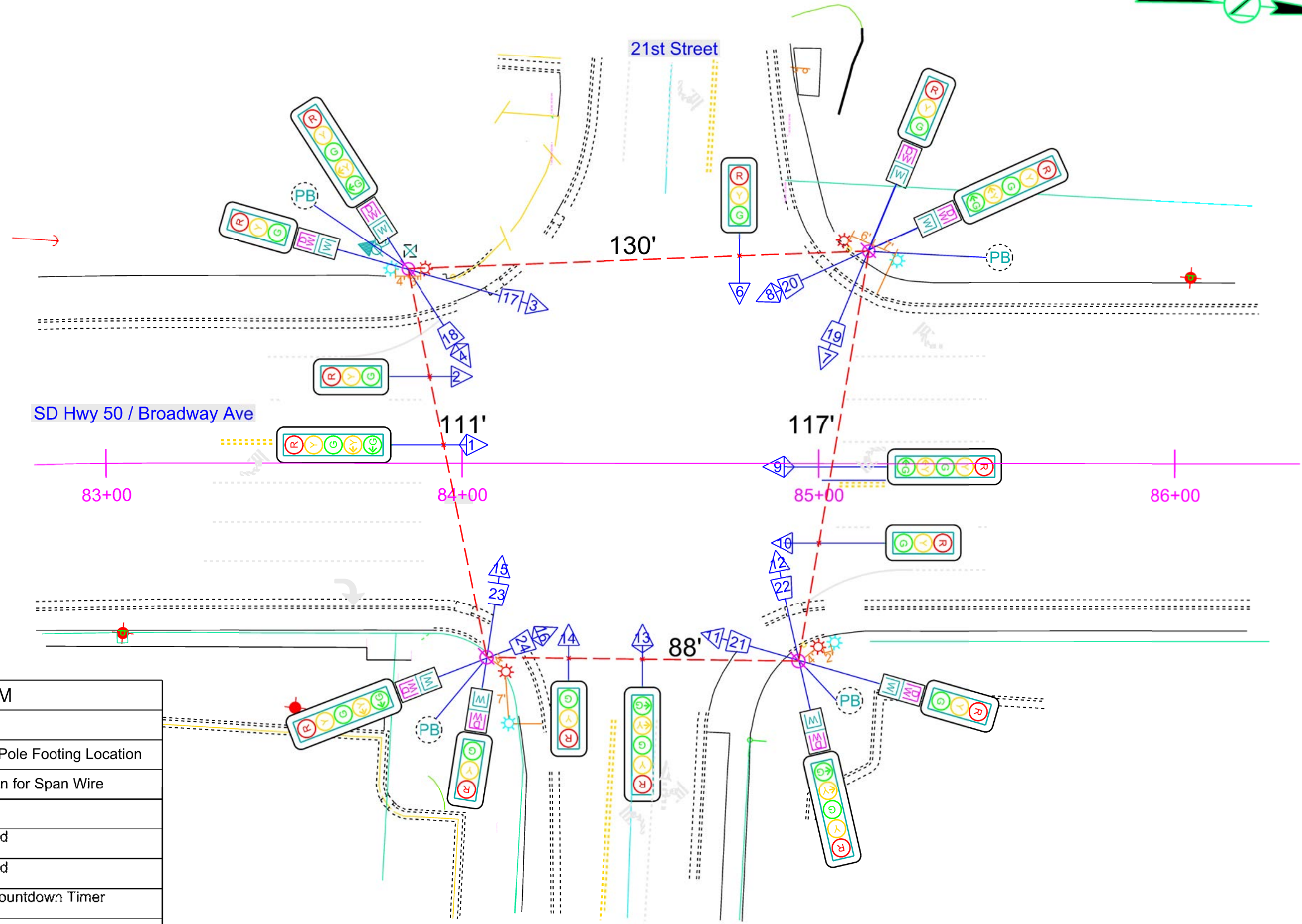
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# TEMPORARY SPAN WIRE SIGNAL LAYOUT

## SD HWY 50 / BROADWAY AVE. & 21ST STREET

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	C6D	C11

Plotting Date: 02/19/2025  
02/19/2025(MY)



KEY	ITEM
	Existing Signal Pole Footing
	Proposed Permanent Signal Pole Footing Location
	Proposed Wood Pole Location for Span Wire
	Span Wire With Tether
	3 Section Vehicle Signal Head (2, 3, 6, 7, 10, 11, 14, 15)
	5 Section Vehicle Signal Head (1, 4, 5, 8, 9, 12, 13, 16)
	Pedestrian Signal Head w/Countdown Timer (17-25)
	Pedestrian Push Button

PLOT SCALE - 1:90.0762

PLOTTED FROM - TRM113318

PLOT NAME - 5

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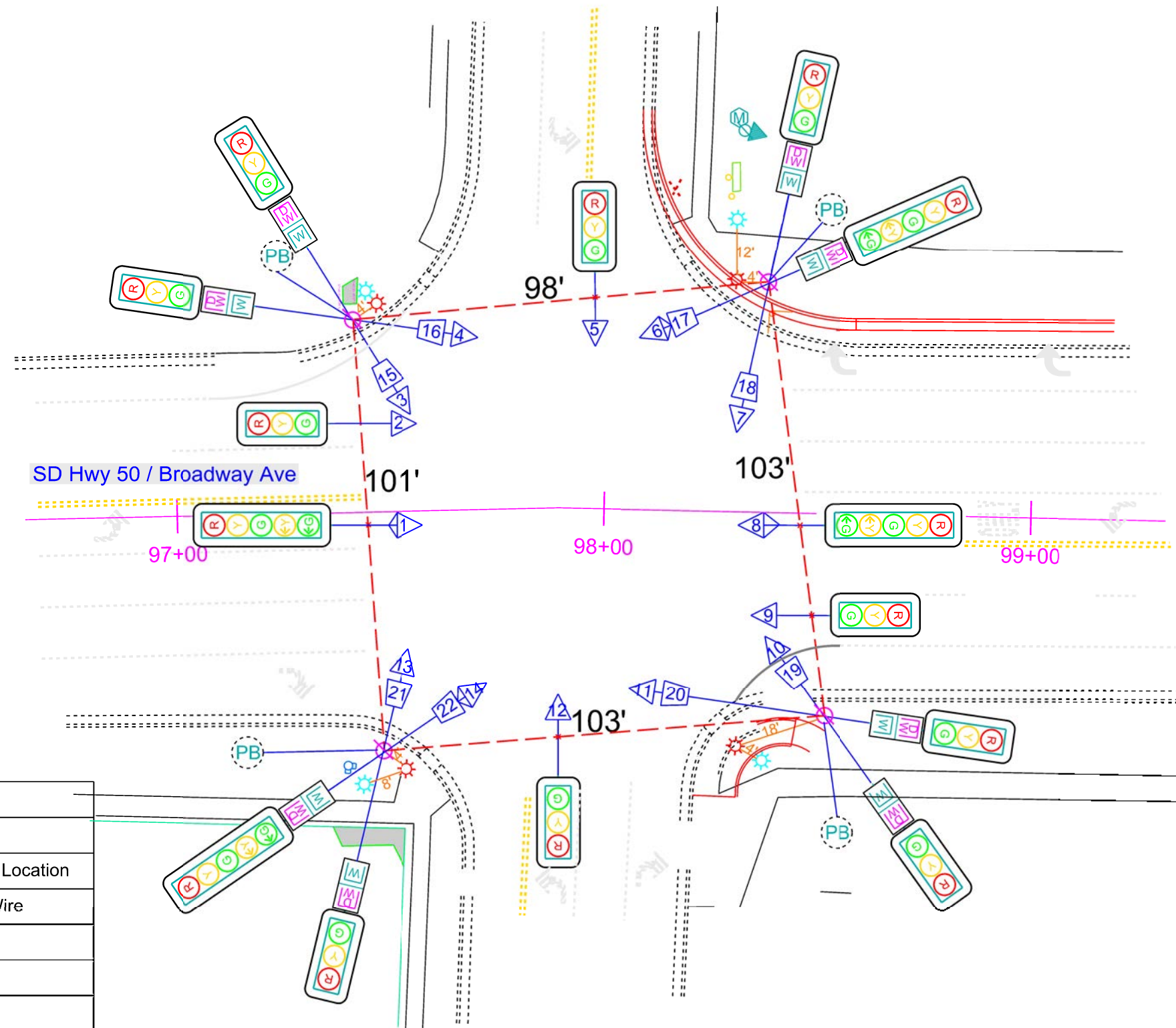
# TEMPORARY SPAN WIRE SIGNAL LAYOUT

## SD HWY 50 / BROADWAY AVE. & 23RD STREET

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET C6E	TOTAL SHEETS C11
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Plotting Date: 02/19/2025

02/19/2025(MY)



KEY	ITEM
	Existing Signal Pole Footing
	Proposed Permanent Signal Pole Footing Location
	Proposed Wood Pole Location for Span Wire
	Span Wire with Tether
	3 Section Vehicle Signal Head (2, 3, 4, 5, 7, 9, 10, 11, 12, 13)
	5 Section Vehicle Signal Head (1, 6, 8, 14)
	Pedestrian Signal Head w/Countdown Timer (15-22)
	Pedestrian Push Button

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PLOTTED FROM - TRM113318

PLOT NAME - 6

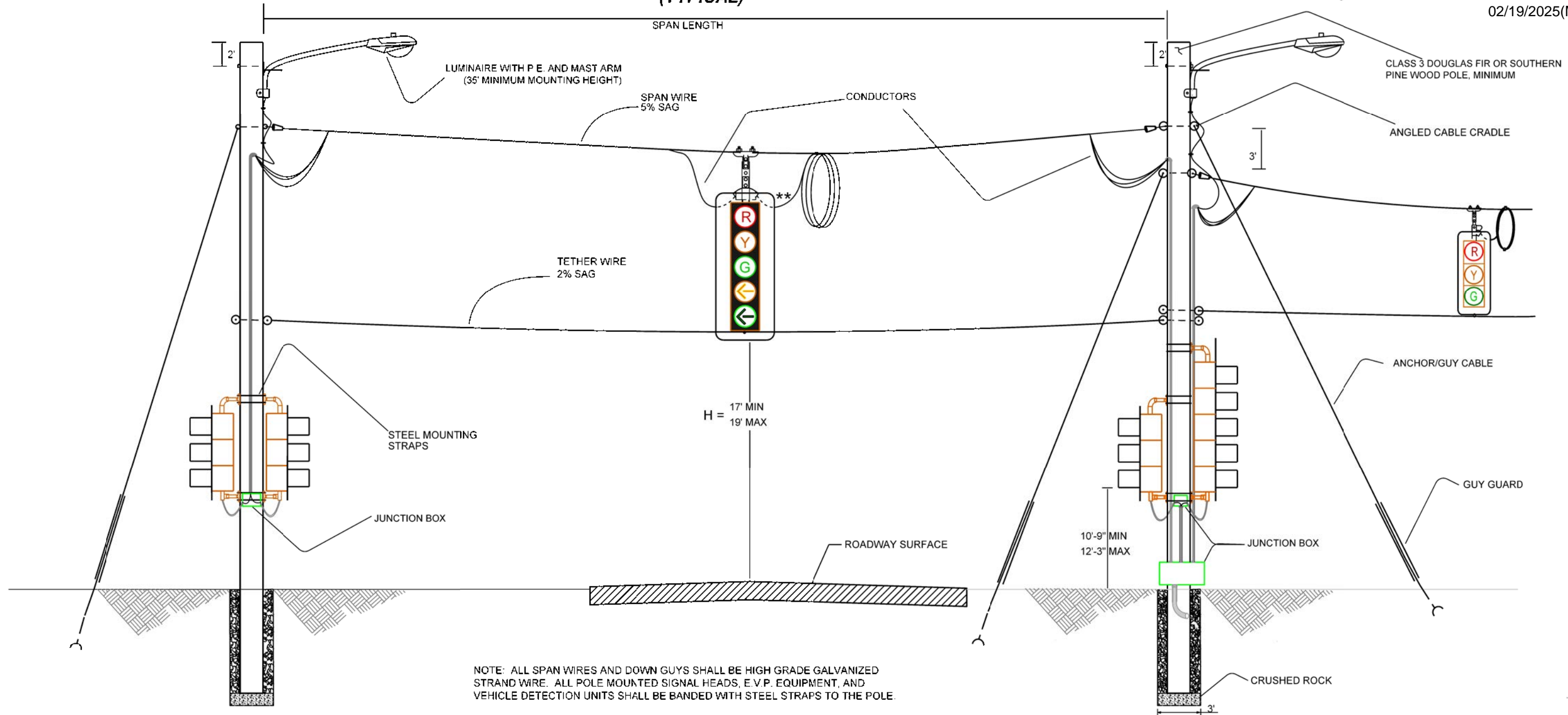
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# TRAFFIC SIGNAL HEADS, LUMINAIRES AND SPAN WIRE SYSTEM (TYPICAL)

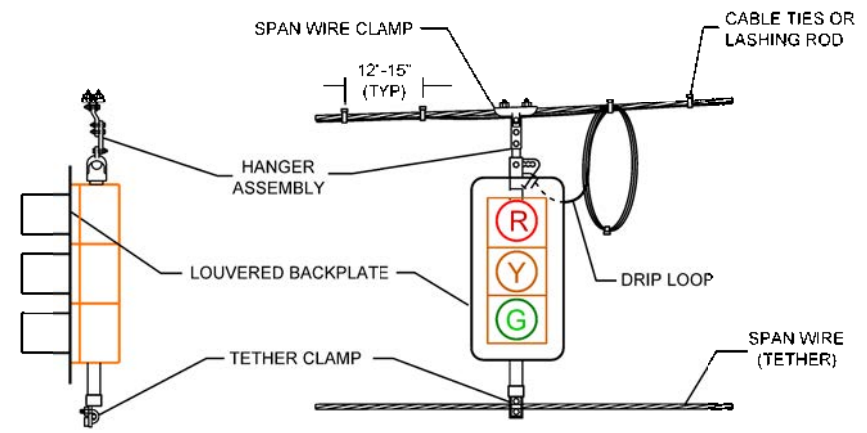
STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET C6F	TOTAL SHEETS C11
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Plotting Date: 02/19/2025

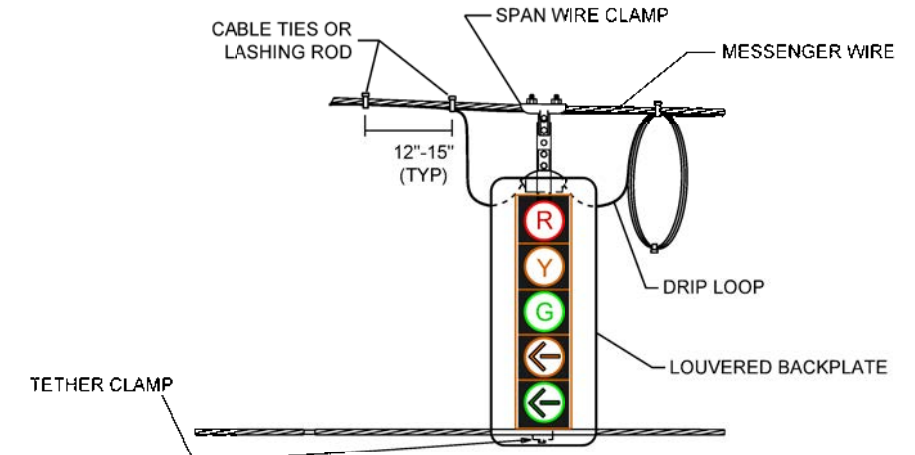
02/19/2025(MY)



### 3-SECTION HEAD



### 5-SECTION HEAD



KEY	ITEM
●	ROADWAY LUMINAIRE
—	LUMINAIRE ARM - 6 FT. MOUNTED ON WOOD POLE
∅	WOOD SPAN WIRE UTILITY POLE (NOT A BID ITEM)
---	SPAN WIRE WITH TETHER (NOT A BID ITEM)
←	SPAN WIRE POLE ANCHOR (NOT A BID ITEM)

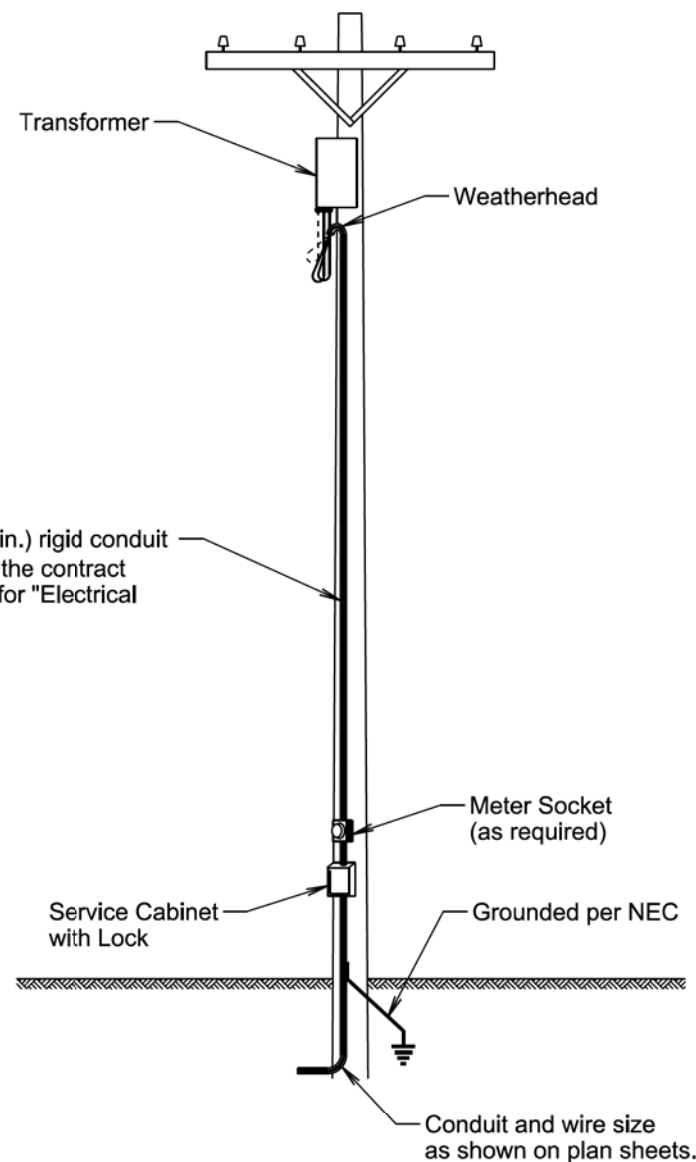
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PLOTTED FROM - TRM113318

PLOT NAME - 7

FILE - ... \CADD\SPAN WIRE SIGNAL.DGN





Cost for the 1/4" (Min.) rigid conduit will be incidental to the contract unit price per each for "Electrical Service Cabinet".

**ELEVATION VIEW**

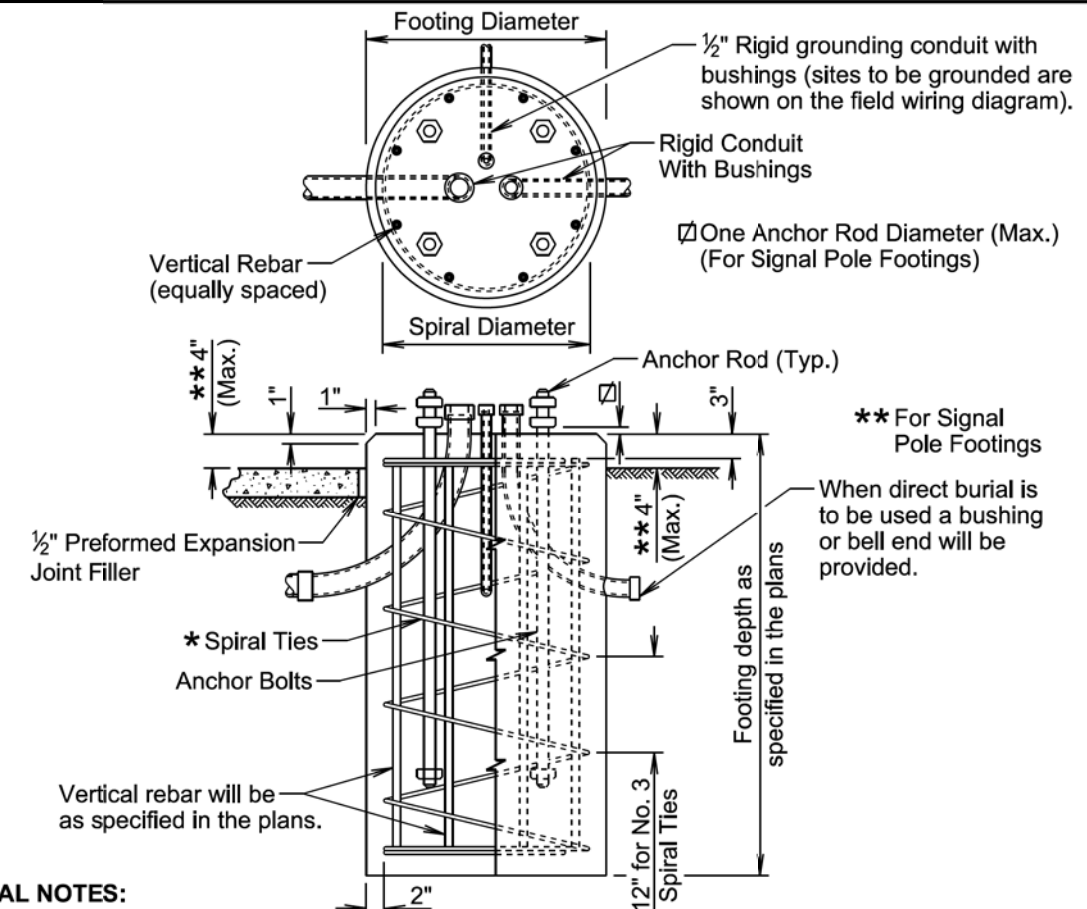
**GENERAL NOTES:**

All costs for furnishing and installing all materials from the electrical service cabinet to the transformer including labor, wire, equipment, hookup fees, all items within the cabinet, lockable enclosure with receptacle outlet, lock and keys, meter socket if required, conduit and incidentals will be incidental to the contract unit price per each for "Electrical Service Cabinet."

March 31, 2024

<b>S D D O T</b>	<b>SERVICE CABINET ON OVERHEAD UTILITY POLE</b>	PLATE NUMBER 635.40
		Sheet 1 of 1

Published Date: 2025



**GENERAL NOTES:**

\* Circular ties may be used in lieu of the spiral ties. The No. 3 ties will be spaced 12 inches apart except for the top two which will be spaced 6 inches apart. The ties will be lapped 18 inches and the laps will be staggered around the cage.

Spiral ties will have 1-1/2 extra turns at each end.

See Section 985 of the Specifications for footing materials.

Conduits and bushings may project 2 1/2 inches to 6 inches above footing for fixed base poles but will not project above the slip plane or fracture plane for breakaway poles.

Conduits will be sealed water-tight during all phases of construction until poles are in place.

The anchor rods will fit inside the reinforcing steel cage. If the anchor rods designed by the Pole Manufacturer do not fit, contact the Office of Bridge Design for footing redesign. No additional payment will be made for the redesigned footing.

Costs of conduit and conduit bushings shown on footing detail will be incidental to the footing bid item(s).

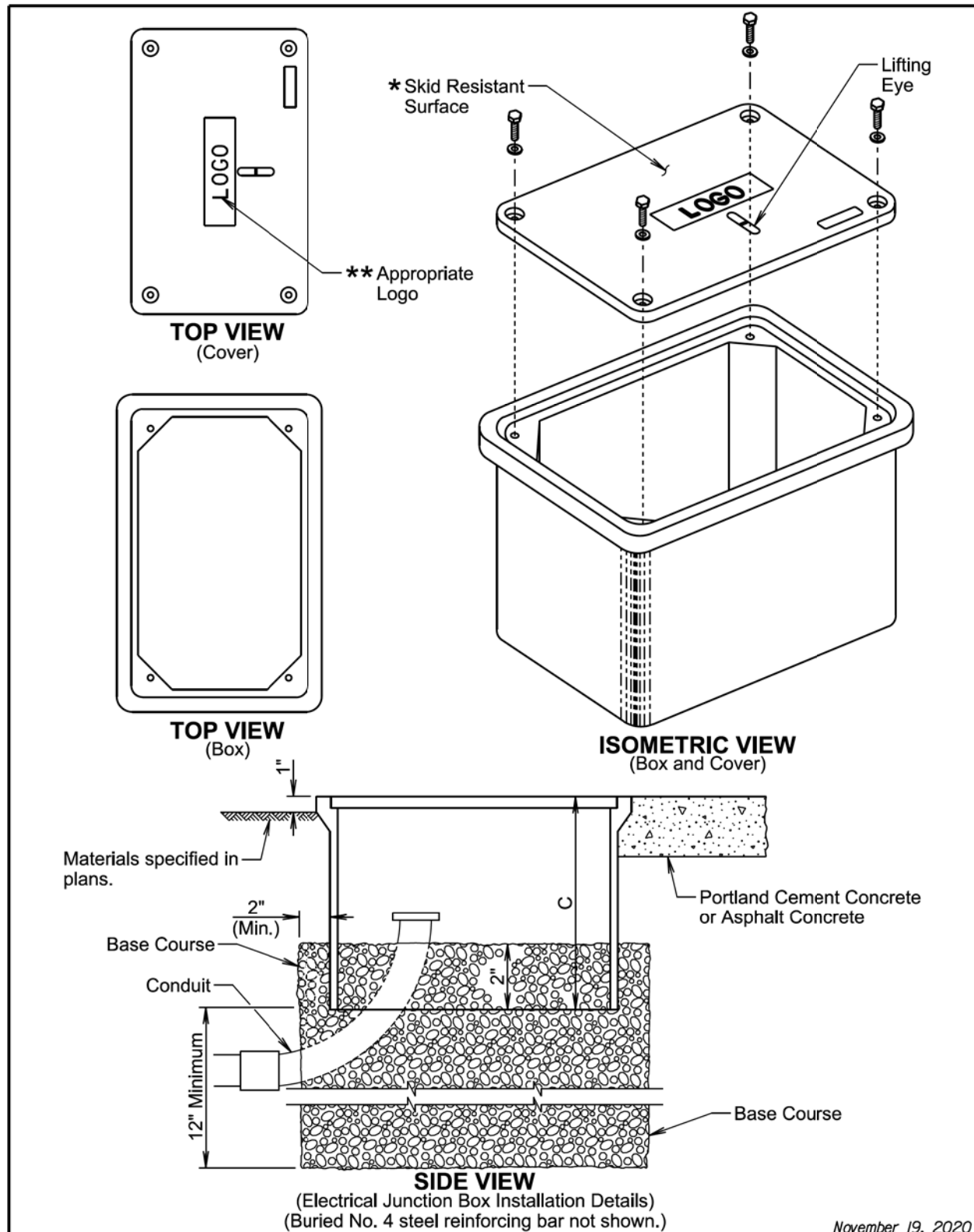
The pole will not be installed until the concrete has attained design strength (4000 psi).

The contour of the area surrounding the breakaway pole will be flat, though not necessarily level for a distance of 5 feet in all directions. The Contractor may be required to provide finish grading at some breakaway pole locations.

November 19, 2022

<b>S D D O T</b>	<b>POLE FOOTING</b>	PLATE NUMBER 635.55
		Sheet 1 of 1

Published Date: 2025



November 19, 2020

<b>Published Date: 2025</b>	<b>S D D O T</b>	<b>ELECTRICAL JUNCTION BOXES TYPE 1 THROUGH TYPE 4</b>	PLATE NUMBER 635.65
			Sheet 1 of 2

ELECTRICAL JUNCTION BOX			
TYPE	DESCRIPTION	APPROXIMATE COVER SIZE	MINIMUM DEPTH (C)
1	Open Bottom with Gasket	11"x18"	18"
2	Open Bottom with Gasket	13"x24"	18"
3	Open Bottom with Gasket	17"x30"	18"
3A	Open Bottom with Gasket	24"x36"***	24"
4	Open Bottom with Gasket	30"x48"***	24"

**GENERAL NOTES:**

The cover will be gasketed with a minimum of two stainless steel bolts and washers.

The cover will have a lifting eye.

\* The surface of the cover will have a minimum wet and dry coefficient of friction value of 0.5 as determined by ASTM F609.

\*\* The cover of the junction box will have the appropriate logo in one inch size letters and will be recessed. When the junction box contains cables or wires for a traffic signal then the logo will be "Signal". When the junction box contains lighting conductors then the logo will be "Lighting".

\*\*\* Two piece covers will be used for Type 3A and Type 4 junction boxes.

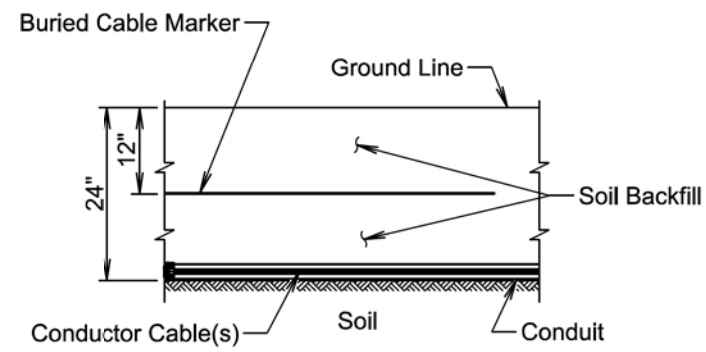
The electrical junction boxes will comply with the American National Standards Institute (ANSI)/Society of Cable Telecommunications Engineers (SCTE) 77 2007 Specification for Underground Enclosure Integrity. The loading requirement for all electrical junction boxes and covers will be Tier 22 of ANSI/SCTE 77 2007.

The electrical junction boxes will be UL listed.

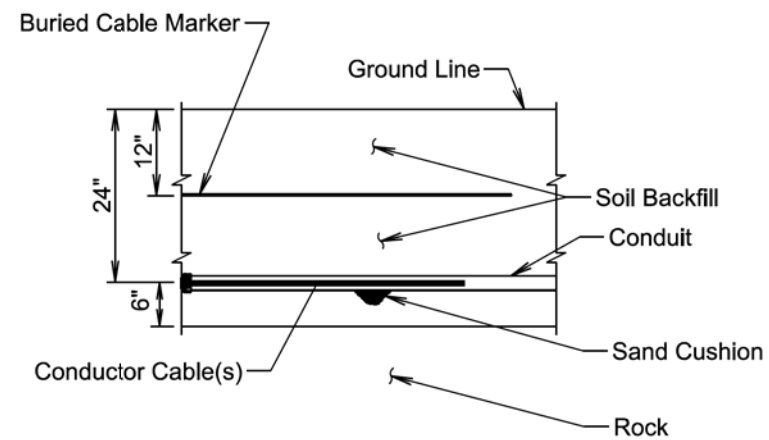
For junction boxes located outside of pavement, a No. 4 steel reinforcing bar with a minimum length of 18" will be buried adjacent to the long side of the junction box. All costs associated with furnishing and placing the steel reinforcing bar will be incidental to the contract unit price per each for "Type \_ Electrical Junction Box".

November 19, 2020

<b>Published Date: 2025</b>	<b>S D D O T</b>	<b>ELECTRICAL JUNCTION BOXES TYPE 1 THROUGH TYPE 4</b>	PLATE NUMBER 635.65
			Sheet 2 of 2



**SECTION VIEW**



**SECTION VIEW**

**GENERAL NOTE:**

The Buried Cable Marker will be plastic, approximately 6" wide, and will be capable of sustaining a minimum of a 350% tolerance of elongation without tearing. The Buried Cable Marker will have a life expectancy approximately equal to that of the conductor(s) beneath it. A phrase indicating the presence of a buried electric circuit below will be printed in a contrasting color on the cable marker. The Buried Cable Marker will be subject to approval by the Engineer. All costs associated with furnishing and installing the Buried Cable Marker will be incidental to the contract unit price per foot for the bid item used for the electrical conductor.

November 19, 2022

<i>Published Date: 2025</i>	<b>S D D O T</b>	<b>CONDUIT INSTALLATION</b>	PLATE NUMBER <b>635.76</b>
			Sheet 1 of 1

## SUBSURFACE

The soils at the proposed traffic signal footing locations range from silt clay to clay sand.

Footing locations that have high water tables are potential candidates for caving soils. If caving soils are encountered, it may be necessary to use casing or drilling fluids to maintain an open excavation. Casing will be of sufficient strength to withstand handling and installation procedures. Casing material may consist of Sonotube, corrugated metal pipe, pvc, smooth metal pipe or any other material as approved by the Engineer. Drilling fluids can be water or other slurries as approved by the engineer. Concrete placed through drilling fluids will be tremied. If caving is not an issue but, water is present, it will be removed prior to concrete placement or the concrete will be tremied.

At signal A2 an old building foundation was encountered at 8' when trying to install the cylindrical footing in 2003. The excavation ended up being enlarged while trying to drill through the obstruction. Drilling was terminated at 8'. A 4' diameter sonotube was installed with the enlarged area (size unknown) around the sonotube backfilled with flowable fill and concrete rubble.

## METER SOCKETS FOR TRAFFIC SIGNALS

The meter sockets provided for traffic signals by the Contractor will be a 200-amp, positive by-pass.

## EXISTING ELECTRICAL SERVICES

The existing electrical services at 4<sup>th</sup> Street, 8<sup>th</sup> Street, 15<sup>th</sup> Street, 21<sup>st</sup> Street, and 23<sup>rd</sup> Street will be removed by the Contractor and replaced as shown on the plans. Contractor will coordinate with NorthWestern Energy to connect new conduit and wire between the new service and the existing service. All cost associated with removal, disposal, and replacement of electrical services will be incidental to the contract unit price per each "Electrical Service Cabinet".

The contact for NorthWestern Energy is:  
Robert Gehm  
605-668-4602  
Robert.gehm@northwestern.com

## TRAFFIC SIGNAL CONTROLLER

The new Traffic Signal Controllers must be fully compatible with all features and functionality of Econolite Centracs Local Edition software.

The Contractor is responsible for programming controllers with the signal timings provided in these plans.

Controllers and flashers are not required to have dimming capability.

Anchor bolts for traffic signal cabinets may have hooked ends.

All costs for the detector units necessary to operate the signal as shown in these plans, constructing the concrete pad and footing, materials, labor, and furnishing and installing the controller cabinet will be incidental to the contract unit price per each for "Traffic Signal Controller".

The Contractor will ensure that the Traffic Signal Controller at 23<sup>rd</sup> Street will be orientated that the door faces to the east.

## BATTERY BACKUP CABINET

The Contractor will supply cabinets with concrete pad and footing for housing the battery backup system for each signal in the plans. The cabinets will be an aluminum NEMA 3R type and will have a thermostatically controller exhaust fan. The cabinet will be securely attached to the concrete pad with steel anchors and to the back wall of the controller cabinet using chase nipples as approved by the Engineer. Anchor bolts for battery backup cabinets may have hooked ends.

All costs for constructing the concrete pad and footing, materials, labor, and furnishing and installing the battery backup cabinet will be incidental to the contract unit price per each for "Battery Backup System for Traffic Signal."

## VIDEO DETECTION SYSTEM

The video detection system will be one of the following, or an approved equal:

<u>Product</u>	<u>Manufacturer</u>
GRIDSMART System	GRIDSMART Technologies, Inc. Knoxville TN 37932 Phone: 1-865-482-2112 <a href="http://www.gridsmart.com">www.gridsmart.com</a>
Autoscope AIS-IV and RVP2	Econolite Anaheim, CA 92807 Phone: 1-714-630-3700 <a href="http://www.econolite.com">www.econolite.com</a>
Vantage Next	Iteris, Inc. Santa Ana, CA 92705-5551 Phone: 1-949-270-9400 <a href="http://www.iteris.com">www.iteris.com</a>
TrafficLink Detection	Miovision Technologies, Inc. 137 Glasgow St., Suite 110 Kitchener, Ontario Canada N2G 4X8 Phone: 1-519-513-2407 <a href="http://www.miovision.com">www.miovision.com</a>

The new video detection system provided at 31<sup>st</sup> Street (North US81&SD50 intersection) will be capable of dilemma zone detection.

All cabling and hardware necessary to make the detection system operational will be incidental to the contract unit price per each for "Video Detection System".

## ACCESSIBLE PEDESTRIAN SIGNAL

The work will consist of furnishing and installing accessible pedestrian signals (APS). Each APS will consist of an interactive vibrotactile pedestrian pushbutton with speaker, an informational sign, a latching light emitting diode (LED) indicator light, a solid-state electronic control board, a power supply, wiring, and all necessary mounting hardware. The operation and performance of the APS units will meet the requirements of MUTCD Sections 4E.08 to 4E.13. and the applicable sections of NEMA Standards Publication TS-2.

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The APS units will be capable of supporting a minimum of 16 push button stations.

The traffic signal cabinet must have four dedicated load switches for the pedestrian phases. If the traffic signal cabinet does not have four dedicated load switches for the pedestrian phases, then the Contractor will furnish and install the necessary number of load switches. All costs associated with furnishing and installing any additional load switches will be incidental to the contract unit price per each for "Accessible Pedestrian Signal".

All mounting fasteners will be stainless steel; all threads will be coated with anti-seize compound meeting the requirements of USA Dept. of Defense specification MIL-PRF-907F.

The push button component of APS will meet the requirements of Section 985.1 S of the Specifications except that all housings and external hardware will be aluminum, powder coated yellow.

The APS control unit will include capability to monitor the push buttons and pedestrian signal head displays. Conflicts will cause the channel to be powered off.

The APS control unit will include capability to monitor communications with the push buttons. Communication faults will automatically reset the control unit.

Two licensed copies of any APS programming software will be furnished. All software programming, firmware updates, and audio message programming of the APS will be through USB port or Ethernet connection.

All costs for furnishing and installing the accessible pedestrian signal including labor, materials, and equipment, will be incidental to the contract unit price per each for "Accessible Pedestrian Signal".

## PEDESTRIAN PUSH BUTTON POLE

Pedestrian push button poles will be aluminum and will conform to the following requirements:

Aluminum will conform to ASTM B221, Alloy 6061, and Temper T6.

Poles will be round with a minimum outside pole diameter of 4 inches, and the pole assembly will have a square, cast aluminum base with aluminum access door. The base will conform to the breakaway requirements of MASH.

The pole to base connection will be a threaded connection; threads will be 8 TPI, NPT. All bolt and connection threads will be coated with a commercially available anti-seize compound intended for use in aluminum-to-aluminum and steel-to-aluminum connections.

The pole finish will either be brushed satin or spun. The top of the pole will be sealed by an aluminum cap.

Anchor bolts for pedestrian push button poles may have hooked ends.