

AGREEMENT NO	1059392
USDOTNO	067282F
STATE PROJECT	4210-61
Railroad flagging services for roadway construction Project on TH 68 (W. Main St.), Marshall, Lyon County, MN	
BNSF Railway Company	
Standard Encroachment Agreement	

**THIS AGREEMENT** is made and entered into by and between **BNSF RAILWAY COMPANY**, (Company), the **CITY OF MARSHALL** (Local Agency), and the **STATE OF MINNESOTA through its COMMISSIONER OF TRANSPORTATION**, (State),

**RECITALS:**

1. The State has prepared plans, specifications and special provisions for the construction of S.P. 4210-61 (the Project) a crossing surface replacement and drainage improvement Project on TH 68 (W. Main St.), Marshall, Lyon County MN.
2. The Project’s plans, specifications and special provisions together with the MnDOT Standard Specifications for Construction, 2020 Edition on file with the State, constitute the specifications for the Project.
3. The State and Company have entered into MnDOT Agreement #1059178 allocating costs for the crossing surface replacement. The State and Company shall coordinate the Project work during this crossing surface replacement.
4. The State and Local Agency have entered into MnDOT Agreement #90606-R outlining maintenance responsibilities for the storm sewer facilities that the Project will be modifying.
5. In order to accommodate the Project, it will be necessary for the Company to provide railroad flagging services for construction purposes, and if necessary to accommodate construction, remove and replace the median signal mast, and the Company is willing to do so under the terms and conditions set forth in this Agreement.
6. The State, pursuant to Minnesota Statute Section 161.20 is authorized to enter into an agreement with the Company for the work.

**CONTRACT:**

**1. EXHIBITS**

**1.1** The State’s “Standard Clauses for Railroad-Highway Agreements” (Standard Clauses), is attached and incorporated as Exhibit “A”. Except as expressly modified, all of the terms and conditions set forth in the Standard Clauses are incorporated into this Agreement.

**1.2** Exhibit “B”, the location print and Exhibit “C”, the final approved planset, are attached and incorporated into this Agreement.

**1.3** Exhibit “D”, the special provisions, is attached for purposes of identification. The State will incorporate Exhibit “D” into the Special Provisions of the State’s contract with each contractor who will be performing the Project construction. Exhibit “D” amends or supplements the MnDOT Standard Specifications for Construction, 2020 Edition, § 1407, § 1505, §1708 and § 1717. Those sections govern contractual requirements for MnDOT highway contractors when performing road/bridge work at or near operating rail lines. The Standard Specifications for Construction are incorporated into every MnDOT agreement for road/bridge work and are specifically amended or supplemented by Exhibit “D”.

**1.4** Exhibit “E”, the Local Agency Resolution is attached and incorporated into this Agreement.

**2. WORK TO BE PERFORMED BY THE COMPANY**

**2.1** At the request of the State, subsequent to the execution of this Agreement and at the Company’s cost, the Company will provide all flagging services required in connection with the Project. The location of the Project is as shown on the print attached hereto, marked Exhibit “B”. As used herein, “flagging” refers to flagging for the protection of the Company’s employees, operations, property, facilities, and equipment (and the employees, operations, property, facilities, and equipment of other railroads that are using the Company’s tracks with the Company’s permission), and the protection of MnDOT employees and its contractor personnel while on Company’s property.

**2.2** This Agreement is effective upon the date the State obtains all signatures as required by Minnesota Statutes Section 16C.05, Subdivision 2. Any work by the Company prior to the effective date of this Agreement is not reimbursable.

**2.3** The Daily Utility Report provided for in Article 7a of the Standard Clauses will not be required if the construction work is expected to last 10 working days or less.

### 3. ENVIRONMENTAL AND MISCELLANEOUS

**3.1** In addition to the Special Provisions set forth in Exhibit “D” as described in Section 1.3 above, the contract or contracts between the State and its contractor or contractors for the construction of the Project must contain Specifications 1407 (Final Cleanup), 1701 (Laws to be Observed), 1712.4 (General Liability) and 1717 (Air, Land and Water Pollution) of the MnDOT Standard Specifications for Construction, 2020 Edition or, in the event MnDOT Standard Specifications for Construction, 2020 Edition are no longer in effect, specifications substantially similar to such Specifications. The following will also apply to such contracts:

**3.1.1** As used in Sections 1407 (Final Cleanup), 1505 (Cooperation by Contractors), 1708 (Railroad-Highway Provisions), and 1717 (Air, Land, and Water Pollution) of the MnDOT Standard Specifications for Construction, 2020 Edition, the terms “Railway,” “Railroad,” “BNSF,” and “Company” mean BNSF Railway Company.

**3.1.2** The State will modify Specification 1407 (Final Cleanup) of the MnDOT Standard Specifications for Construction, 2020 Edition to read as follows:

#### **1407**

##### **Final Cleanup**

Before final acceptance, the Contractor shall remove from the Right of Way and from other ground occupied in connection with the work all surplus and discarded materials, equipment, rubbish, and temporary structures. The Contractor shall leave all parts of the work, including borrow pits, in a condition acceptable to the Engineer. The Contractor will consider the cost of final cleanup as incidental to other items. BNSF’s property shall be left in a condition at least equal to that existing before the work was started, as determined by the Engineer and BNSF after consultation.

**3.1.3** The State will modify Specification 1717 (Air, Land, and Water Pollution) of the MnDOT Standard Specifications for Construction, 2020 Edition by adding the following:

#### **1717.3**

##### **Additional BNSF Requirements**

**A.** As used in this subsection 1717.3:

The terms “hazardous waste”, “pollutant”, and “contaminant” will have the meaning given to such terms in the Resource Conservation and Recovery Act (“RCRA”), Minnesota Statutes Chapters 115A and 116, and the regulations promulgated under RCRA and Minnesota Statutes Chapters 115A and 116. The term "Environmental Laws" means all federal and State of Minnesota statutes, regulations, codes, and rules applicable to the contractor’s work and pertaining in any way to the

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protection of human health or the environment, including, but not limited to, RCRA, the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), the Toxic Substances Control Act, the Clean Air Act, the Clean Water Act, Minnesota Statutes Chapters 115A and 116, and the Minnesota Environmental Response and Liability Act (“MERLA”). The term “Environmental Laws” also includes any lawful order of a federal or State of Minnesota department, agency, or court acting pursuant to applicable Environmental Laws. The term "Hazardous Substance" means (1) hazardous waste (as defined above) and (2) any and every other hazardous, toxic, radioactive, or infectious substance, material, or waste as defined in, listed in, or regulated under any Environmental Law, including, but not limited to, petroleum oil and any of its fractions. The terms “release” and “threatened release” have the meaning given to them in CERCLA and MERLA.

**B.** The contractor and its employees, agents, and subcontractors shall not:

- (1) Treat, store or dispose of any hazardous waste, pollutant, or contaminant in such a way as to subject it to permitting requirements for a treatment, storage, or disposal facility under the RCRA or other applicable Environmental laws; or
- (2) Knowingly or negligently cause, contribute to, or exacerbate the release of any Hazardous Substance, Pollutant, or Contaminant on BNSF’s property or any public right of way traversing BNSF’s property.

**C.** If the contractor (or any of its employees, agents, or subcontractors) discovers any Hazardous Substance, Pollutant, or Contaminant including but not limited to any non-containerized commodity or material, on BNSF’s property or any public right of way traversing BNSF’s property while performing the work under this contract, the contractor shall immediately notify BNSF's Resource Operations Center at (800) 832-5452 of such discovery and shall take the actions set forth in subsections 1717.1 and 1717.2. In addition, if such discovery occurs, the contractor will take safeguards necessary to protect its employees, subcontractors, agents, and/or third parties, and exercise due care with respect to the Hazardous Substance, including the taking of all appropriate measures to minimize the impact of the release of such Hazardous Substance, Pollutant, or Contaminant.

**3.2** To the extent stockpiling on Company property is feasible and agreeable to Company, prior to the start of construction, the State’s Project engineer will contact the Company’s Manager of Public Projects or their designee to determine the general area(s) where stockpiles can be placed during construction. Stockpile locations will be determined based on construction staging and access constraints. Approval of

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stockpile general area(s) shall not be unreasonably withheld by the Company. The State's Project engineer will limit the construction contractor's stockpiling activities to the general area(s) pre-approved by both State and Company. The Company will not be notified during the construction Project of individual stockpile placement, location, or re-location within the pre-approved general area(s).

**3.3** The State's Project engineer will contact the Company no later than 36 hours prior to the start of excavation activities in known or suspected contaminated area(s) on the Company's property.

**3.4** The mere fact that the State or its contractor performs work on or about BNSF's property (including work on any public right of way traversing BNSF's property) shall not, in and of itself, make the State or its contractor a "responsible person" with respect to any "hazardous substance", "pollutant", or "contaminant" (as such quoted terms are defined in CERCLA and MERLA) found on such property except to the extent that: (1) the State or its contractor, through some act, omission or neglect, caused, contributed to, or exacerbated the "release" or "threatened release" of any such "hazardous substance, pollutant, or contaminant on or from such property; or (2) the Environmental Laws otherwise make the State or its contractor a "Responsible Person" with respect to the release or threatened release of such hazardous substance, pollutant, or contaminant. Notwithstanding the foregoing, nothing in this Agreement will be construed to preclude the State's contractor from asserting that it is a "contractor" for the purposes of Minnesota Statutes section 115B.03 (subd. 10).

**3.5** The State acknowledges that in the course of performing the work required to complete the Project on the Company's property, there is a possibility of encountering a hazardous substance, pollutant, or contaminant. The State further acknowledges that encountering such hazardous substance, pollutant, or contaminant may result in the State being required to perform "clean-up" actions in order to comply with applicable Environmental Laws. These clean-up actions may include, without limitation, excavating, treating, and disposing of such materials and contaminated soils, and constructing barriers to prevent the spread of pollutants and contaminants. The State further acknowledges that "but for" the construction of the State's Project, such clean-up actions may not have become necessary. It is the intent of the parties that the State will, through its contract with its contractor or otherwise, be responsible for performing such clean-up actions as are required to complete the State's Project in accordance with the Environmental Laws. The State will not be required to perform any clean-up of a hazardous substance, pollutant, or contaminant on the Company's property that is not directly necessitated by the State's Project or which the State is not otherwise responsible pursuant to this Agreement, and, to the extent the State is required (by the lawful order of a court or government agency) to perform any such additional work, that neither the State nor the Company waives any right they may have to seek contribution for such additional work.

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The State shall give the Company prompt and reasonable notice of any such additional work. The Company has the right, but not the obligation, to conduct such additional work.

**3.6** All soils and materials removed by the State from Company’s property or right-of-way must be properly characterized, managed, transported, and disposed of at an appropriately-licensed facility at the State’s expense, in accordance with all Environmental Laws. The Company shall not be responsible as or named “generator” of any soils, materials, or other wastes removed from the property by or disposed of by the State or its contractor.

**4. MODIFICATIONS OF STANDARD CLAUSES (EXHIBIT “A”)**

In addition to the revisions in Exhibit “A” itself, the following clauses of the “STANDARD CLAUSES” are modified as follows in the context of this Agreement:

- 6. ELIGIBILITY OF COSTS** - deleted in its entirety.
- 8. REIMBURSEMENT** - deleted in its entirety.
- 10. COST SHARING** - deleted in its entirety.
- 12. OVERRUN OF ESTIMATED COSTS WITH NO WORK CHANGES** - deleted in its entirety.
- 13. STATE AUDITS** - deleted in its entirety
- 16. DISADVANTAGED BUSINESS ENTERPRISE** – deleted in its entirety, as there are no federal funds being used.
- 18. PLAN REVIEW (BRIDGE)** – deleted in its entirety, as there is no bridge work on this Project.

**5. MAINTENANCE**

**5.1 LOCAL AGENCY** - Upon completion of the drainage work outlined in Exhibit C, and as outlined in Article VI, Section D, first paragraph of MnDOT Agreement 90606-R, which provision is incorporated by reference herein, the Local Agency, at its own cost and expense, will maintain the entire drainage system as modified by the Project. Nothing contained herein shall be construed to relieve either the Local Agency, State, or the Company of common law or statutory liability, if any, for any damages to the drainage system, resulting from their respective operations.

*The Remainder of this page has been intentionally left blank.*

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**COMPANY**

Company certifies that the appropriate person(s) have executed the contract on behalf of Company as required by applicable articles, bylaws or resolutions.

Signed: DocuSigned by: Richard Scott  
14D9B96E64784B8...

Title: Assistant Director Public Projects

Date: March 20, 2025

**COMMISSIONER OF TRANSPORTATION**

(as delegated)

Signed: \_\_\_\_\_

Title: Manager, Rail safety and Coordination Section

Date: \_\_\_\_\_

**COMMISSIONER OF ADMINISTRATION**

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

**LOCAL AGENCY**

Local Agency certifies that the appropriate person(s) have executed the contract on behalf of Local Agency as required by applicable articles, bylaws or resolutions.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

EXHIBIT "A"

STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION

STANDARD CLAUSES  
FOR  
RAILROAD-HIGHWAY AGREEMENTS

**1. EFFECTIVE DATE**

This Agreement will become effective upon the date State obtains all signatures required by Minnesota Statutes Section 16C.05 (Subd. 2).

**2. CANCELLATION**

The State may immediately terminate this Agreement if it does not obtain funding from the Minnesota Legislature, or other funding source; or if funding cannot be continued at a level sufficient to allow for the payment of the services covered here. Termination must be by written or fax notice to the Company. The State is not obligated to pay for any services that are provided after notice and effective date of termination. However, the Company will be entitled to payment, determined on a pro rata basis for services satisfactorily performed to the extent that funds are available. The State will not be assessed any penalty if the Agreement is terminated because of the decision of the Minnesota Legislature, or other funding source, not to appropriate funds. The State must provide the Company notice of the lack of funding within a reasonable time of the State's receiving that notice.

**3. GOVERNING LAW, JURISDICTION, AND VENUE**

Minnesota law, without regard to its choice-of-law provisions, governs this Agreement. Venue for all legal proceedings arising out of this Agreement, or its breach, will be in the appropriate state or federal court with competent jurisdiction in Ramsey County, Minnesota.

**4. COMMISSIONER'S OFFICIAL CAPACITY**

The Commissioner of Transportation of the State of Minnesota is acting in an official capacity only and is not personally responsible or liable to the Company or to any person or persons whomsoever for any claims, damages, actions, or causes of action of any kind or character arising out of or by reason of the execution of this Agreement or the performance or completion of the Project.

**5. DATA DISCLOSURE**

Under Minnesota Statutes Section 270C.65, and other applicable law, the Company consents to disclosure of its social security number, federal employer tax identification number, and/or Minnesota tax identification number, already provided to the State, to federal and state tax agencies and state personnel involved in the payment of state obligations. These identification numbers may be used in the enforcement of federal and state tax laws which could result in action requiring the Company to file state tax returns and pay delinquent state tax liabilities, if any.

**6. ELIGIBILITY OF COSTS**

[INTENTIONALLY DELETED.]

**7. WORK REPORTS**

The Company will furnish the State's Engineer in charge of the Project:

- a. "Form 21191, Minnesota Department of Transportation, Daily Utility Report", or equivalent approved by the State's engineer showing the number of people on payroll, classification, and total hours worked, and equipment used, at a time mutually agreed upon by the Company and the State.



- b. Full detailed information as to progress of work and amount of labor and material used as of the time of request.

The Company will, make other reports, keep other records and perform other work in such manner a time as may be necessary to enable State to collect and obtain available federal aid.

## **8. REIMBURSEMENT**

[INTENTIONALLY DELETED.]

## **9. WORKERS' COMPENSATION**

The Company certifies that it is in compliance with workers' compensation insurance coverage required by Minnesota Law, or Federal Law if the Company is subject to Federal Law which preempts the Minnesota Law. The Company will require its contractors to present proof of coverage under the Minnesota Workers Compensation Act. The Company's employees and agents will not be considered State employees. Any claims arising under workers' compensation laws and any claims made by a third party as a consequence of the acts or omissions of the Company, its agents, employees or contractors are in no way the responsibility of the State.

## **10. COST-SHARING**

[INTENTIONALLY DELETED.]

## **11. INSPECTION, STANDARDS OF PERFORMANCE**

The Company, and Local Agency if applicable, will permit the State to inspect and approve the work performed under this Agreement during the regular working hours of the Company without prior notice. The State may refuse to approve any and all work performed under this Agreement for failure to comply with applicable standards for work of that type. If the State fails to approve the work performed under this Agreement, the State may refuse to make any further payments under this Agreement until the work at issue is performed in accordance with acceptable standards for work of this type and said work is approved by the State.

The Company, and Local Agency if applicable, warrants that it will perform all work under this Agreement in a workmanlike and timely manner in accordance with all applicable standards for work of the type at issue. Should the work fail to be performed in a timely manner or in accordance with applicable standards, the State may immediately suspend further payments under this Agreement and the Company must repay all funds expended on unsatisfactory work.

## **12. OVERRUN OF ESTIMATED COSTS WITH NO WORK CHANGES**

[INTENTIONALLY DELETED.]

## **13. STATE AUDITS**

[INTENTIONALLY DELETED.]

## **14. DATA PRACTICES**

Government Data Practices. Company and State must comply with the applicable provisions of the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, but only to the extent that it applies to all data provided by State under this Agreement, and only to the extent that it applies to all data created, collected, received, stored, used, maintained or disseminated by Company under this Agreement. The civil remedies of Minnesota Statutes Section §13.08 apply to the release of the data governed by the Minnesota Government Data Practices Act by either Company or the State.

If Company receives a request to release the data referred to in this Clause, Company must immediately notify State. State will give Company instructions concerning the release of the data to the requesting party before the data is released.

## **15. NONDISCRIMINATION**

If and only to the extent the laws and regulations set forth in “Appendix A” attached hereto and made a part hereof apply to the Company’s work and services under this Agreement, then when the Company enters into a contract with a contractor to perform all or any portion of the Company’s work set forth in this Agreement, the Company for itself, its assigns and successors in interest, agrees that it will not discriminate in its choice of contractors and will include all of the nondiscrimination provisions in this Agreement and as set forth in “Appendix A”. Notwithstanding the foregoing, the State acknowledges that the Company is not a contractor, subcontractor, or agent of the State in the Company’s work and services on the Project. Moreover, nothing herein is intended to waive, nor shall it waive, the preemptive effect of federal law as to the Company.

## **16. DISADVANTAGED BUSINESS ENTERPRISE**

[INTENTIONALLY DELETED.]

## **17. AMENDMENTS, WAIVER, MERGER, AND COUNTERPARTS**

Any amendments to this Agreement must be in writing and executed by the same parties who executed the original Agreement, or their successors in office. Failure of a party to enforce any provision of this Agreement will not constitute or be construed as, a waiver of such provision or of the right to enforce such provision. This Agreement contains all prior negotiations and agreements between the Company and the State. No other understandings, whether written or oral, regarding the subject matter of this Agreement will be deemed to exist or to bind either or both of the parties. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same Agreement.

## **18. PLAN REVIEW (BRIDGE)**

[INTENTIONALLY DELETED.]

## **19. CONTRACT LETTING**

The State agrees to let a contract pursuant to law for the construction of the highway Project referred to in this Agreement, in accordance with said plans and specifications referred to in this Agreement.

## **20. COMPLIANCE WITH PLANS & SPECIFICATIONS**

The State agrees that all work performed by the State on the right-of-way of the Company shall be performed and completed in accordance with said plans and specifications in a manner satisfactory to the Chief Engineer of the Company, or his or her authorized representative. The State agrees that any contract let by it, for the performance of any construction work contemplated by this Agreement, will require the contractor to comply with all of the provisions relating to work on railroad right-of-way contained in MnDOT Standard Specifications for Construction, 2020 Edition, to furnish to the Company a Railroad Protective Liability Insurance Policy and to carry regular Contractor’s Public Liability and Property Damage Insurance, both as specified in the Federal-Aid Policy Guide, Chapter 1, Subchapter G, Part 646, Subpart A, and having limits of liability, as specified in the specifications and special provisions referred to in this Agreement; provided that if the Company’s risk manager requires additional or different insurance coverages or amounts, then any such State contractor must comply with the Company’s requirements. The Railroad Protective Liability Policy and evidence of the Contractor’s Public Liability and Property Damage Insurance, executed by an insurer qualified to write such policies in the State of Minnesota, must be delivered to the Company prior to the entry upon or use of the Company’s property by the contractor.

## **21. PLAN CHANGES**

The State reserves the right to make such changes in the plans or character of the work, as the work under the contract progresses, as will, in the Commissioner of Transportation's judgment, be reasonably necessary to cause the agreed highway Project to be in all things constructed and completed in a satisfactory manner, and to that end, and as supplemental to any contract let for the construction of said Project, to enter into any supplemental agreement with the contractor for the performance of any extra work or work occasioned by any necessary, advantageous or desirable change in the plans. Any such changes in plan or the character or work, involving the Company's facilities or property, will be subject to the assent of the Company.

## **22. LEGAL RIGHTS**

The State will pay up to the limit of the amount encumbered by State, the entire cost of the work to be performed under the contract to be let by the State, including the State's supervision of the contract work, provided, however:

- (1) that nothing herein contained will prevent the State from pursuing and enforcing any of its common-law and statutory rights, which it may have against any tortfeasor, including any contractor and the Company except that nothing herein is intended to or shall waive the preemptive effect of federal law as to the Company.
- (2) that when the Company has liability or obligation to the United States or the State for any portion of the railway-highway Project, the Company will pay its share of the railway-highway Project in the manner and to the extent set forth elsewhere in the Agreement.

## **23. CONSTRUCTION DELAY**

In the event that the State does not enter into a contract for construction of the Project contemplated by this Agreement on or before a day 12 months after the effective date of this Agreement, then either party may, at any time thereafter, serve notice of cancellation upon the other party, by registered mail, and this Agreement will immediately be canceled; provided, however, that the Company will be reimbursed in full by the State for all reimbursable costs incurred after this Agreement is effective and prior to the cancellation.

*The remainder of this page intentionally blank.*

## APPENDIX A

### Non-Discrimination Provisions of Title VI of the Civil Rights Act of 1964

Subject to the disclaimers set forth in Section 15 of the Agreement above, during the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the “contractor”), agrees as follows:

- (1) **Compliance with Regulations:** The Contractor will comply with Regulations of the Department of Transportation relative to nondiscrimination in federally-assisted programs of the Federal Highway Administration (Title 49, Code of Federal Regulation, Part 21, hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- (2) **Nondiscrimination:** The contractor, with regard to the work performed by it after award and prior to completion of the contract work, will not discriminate on the ground of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix “A”, “B” and “C”.
- (3) **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor’s obligation under this contract and the Regulations relative to discrimination on the ground of race, color or national origin.
- (4) **Information and Reports:** The contractor will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify the Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.
- (5) **Sanctions for noncompliance:** In the event of contractor’s noncompliance with the nondiscrimination provisions of this contract, the Department of Transportation shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including but not limited to,
  - (a) withholding of payments to the contractor under the contract until the contractor complies, and/or
  - (b) cancellation, termination or suspension of the contract, in whole or in part.
- (6) **Incorporation of Provisions:** The contractor will include the provisions of paragraph (1) through (5) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, order, or instructions issued pursuant thereto. The contractor will take such action with respect to any subcontract or procurement as the Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the State to enter into such litigation to protect the interests of the State, and in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.



# MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR NEGOTIATED CONSTRUCTION CONTRACT FOR CONCRETE PAVEMENT AND STORM SEWER AT BNSF RAILROAD CROSSING

LOCATED ON TH 68 IN THE CITY OF MARSHALL FROM 99.0 FT SE OF 8TH ST TO 137.8 FT NW OF 7TH ST

STATE PROJ. NO. 4210-61 (TH 68)  
 GROSS LENGTH 69.9 FEET 0.013 MILES  
 BRIDGES-LENGTH FEET MILES  
 EXCEPTIONS-LENGTH FEET MILES  
 NET LENGTH 69.9 FEET 0.013 MILES  
 REF. POINT 38+00.695 TO REF. POINT 38+00.708

CAATS NO. 1059047

## GOVERNING SPECIFICATIONS

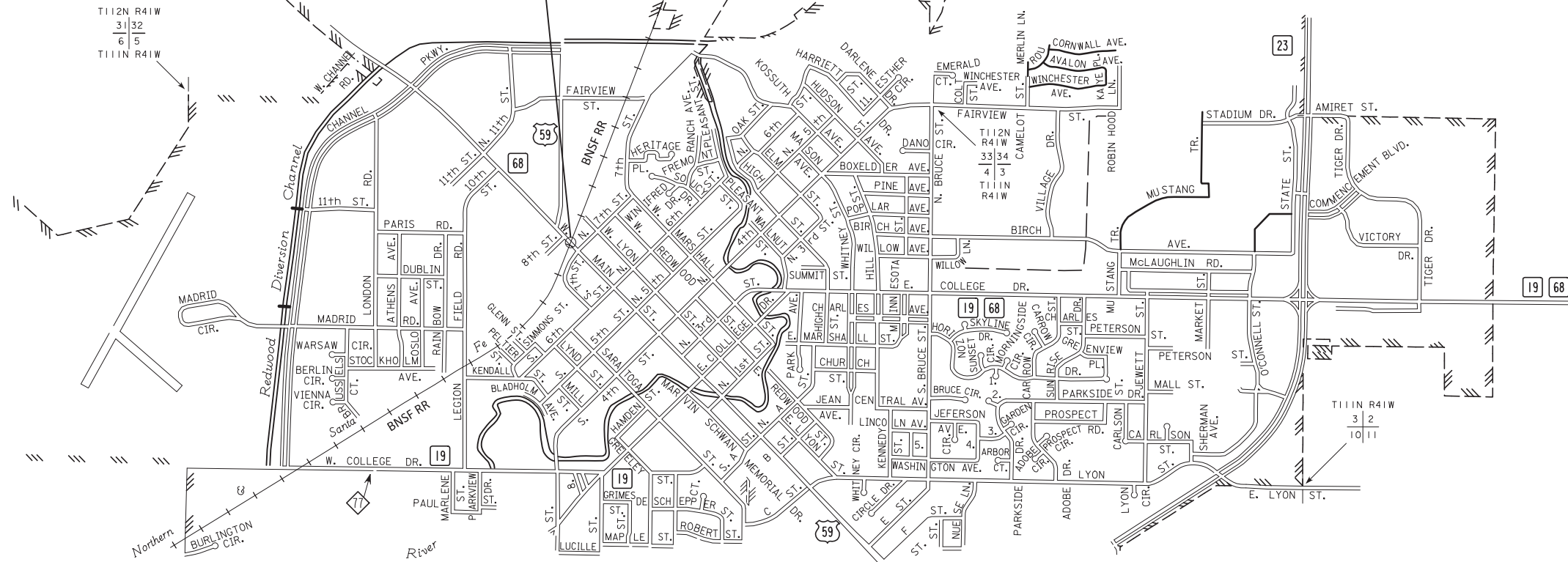
THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION  
 "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

## INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED QUANTITIES
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7-8	TYPICAL SECTIONS
9	DESIGN DETAILS
10-16	STANDARD PLANS
17	REMOVAL PLAN
18	CONSTRUCTION PLAN
19	CONCRETE PAVING PLAN
20	DRAINAGE PLAN
21-22	DRAINAGE TABULATIONS AND PROFILES
23	EROSION CONTROL
TC01-TC05	TRAFFIC CONTROL PLANS

BEGIN S.P. 4210-61 (TH 68)  
 STA. 957+95.78 R.P. 38+00.695  
 END S.P. 4210-61 (TH 68)  
 STA. 958+65.50 R.P. 38+00.708

# MARSHALL



INDEX MAP

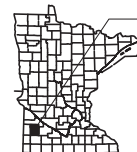


SCALE IN FEET

PLANS



SCALE IN FEET



PROJECT LOCATION

COUNTIES: LYON

DISTRICT: 8

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

STATE PROJ. NO. CHARGE IDENTIFIER

4210-61

THIS PLAN CONTAINS 28 SHEETS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: WIPHAWI S.P. BRUA LICENSE # 62996

DATE: 3-10-2025 SIGNATURE: *Wiphawi Brua* by Wiphawi Brua Date: 2025.03.10

DESIGN SQUAD: T.MCCOY

Exhibit C



TITLE SHEET

STATE PROJ. NO. 4210-61	SHEET NO. 1
TRUNK HWY. (TH 68=68)	TOTAL SHEETS 23

PLOTTED/REVISED: 10-MAR-2025

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d410261\_100tsh.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\General\d410261\_100tsh.dgn

13-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_110est.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\General\d421061\_110est.dgn

STATEMENT OF ESTIMATED QUANTITIES (A)						
TAB LETTER	SHEET NO.	ITEM NO.	DESCRIPTION	NOTES	UNIT	TOTAL ESTIMATED QUANTITIES
		2021.501	MOBILIZATION		LUMP SUM	1
		2051.501	MAINT AND RESTORATION OF HAUL ROADS		LUMP SUM	1
H	21	2104.502	REMOVE MANHOLE	(4)	EACH	1
H	21	2104.502	REMOVE DROP INLET	(5)	EACH	1
B	4	2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH)		LIN FT	92
B	4	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)		LIN FT	50
H	21	2104.503	REMOVE PIPE DRAIN		LIN FT	63
C	4	2104.503	REMOVE CURB AND GUTTER		LIN FT	86
D	4	2104.504	REMOVE CONCRETE PAVEMENT	(6)	SQ YD	105
D	4	2104.504	REMOVE BITUMINOUS PAVEMENT		SQ YD	129
C	4	2104.518	REMOVE CONCRETE WALK		SQ FT	485
A	4	2106.507	EXCAVATION - COMMON		CU YD	49
A	4	2105.507	SELECT GRANULAR EMBANKMENT (CV)		CU YD	10
A	4	2106.507	COMMON EMBANKMENT (CV)		CU YD	46
A	4	2106.607	EXCAVATION SPECIAL		CU YD	74
A	4	2106.607	HAUL AND STOCKPILE CONTAMINATED SOIL	(1)	CU YD	74
A	4	2106.609	HAUL AND DISPOSE OF CONTAMINATED SOIL		TON	119
E, F	4,5	2211.509	AGGREGATE BASE CLASS 5		TON	48
F	5	2301.504	CONCRETE PAVEMENT 7.0"		SQ YD	108
F	5	2301.508	SUPPLEMENTAL PAVEMENT REINFORCEMENT		POUND	784
F	5	2301.602	DRILL AND GROUT DOWEL BAR (EPOXY COATED)		EACH	72
F	5	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (3,B) (SPWEB340B)	(2)	TON	32

STATEMENT OF ESTIMATED QUANTITIES (A)						
TAB LETTER	SHEET NO.	ITEM NO.	DESCRIPTION	NOTES	UNIT	TOTAL ESTIMATED QUANTITIES
H	21	2451.507	FINE FILTER AGGREGATE (CV)		CU YD	10
H	21	2451.507	FINE AGGREGATE BEDDING (CV)		CU YD	10
H	21	2502.503	4" PERF TP PIPE DRAIN		LIN FT	138
H	21	2502.602	4" PVC PIPE DRAIN CLEANOUT		EACH	2
H	21	2503.503	INSTALL PIPE SEWER	(3) (4)	LIN FT	32
H	21	2503.602	CONNECT TO EXISTING STORM SEWER		EACH	2
I	21	2506.502	INSTALL CASTING	(4) (5)	EACH	3
H	21	2506.602	INSTALL CATCH BASIN	(4) (5)	EACH	1
H	21	2506.602	INSTALL MANHOLE	(4) (5)	EACH	2
E	5	2521.518	6" CONCRETE WALK		SQ FT	484
E	5	2521.602	DRILL AND GROUT REINF BAR (EPOXY COATED)		EACH	29
E	5	2531.503	CONCRETE CURB AND GUTTER DESIGN B424		LIN FT	35
E	5	2531.503	CONCRETE CURB AND GUTTER DESIGN B436		LIN FT	14
E	5	2531.503	CONCRETE CURB AND GUTTER DESIGN B624		LIN FT	67
E	5	2531.618	TRUNCATED DOMES		SQ FT	24
		2563.601	TRAFFIC CONTROL		LUMP SUM	1
G	5	2573.502	STORM DRAIN INLET PROTECTION		EACH	5
G	5	2573.503	SEDIMENT CONTROL LOG TYPE COMPOST		LIN FT	158
G	5	2573.503	SEDIMENT CONTROL LOG TYPE ROCK		LIN FT	107

**STATEMENT OF ESTIMATED QUANTITIES NOTES**

- (1) HAUL CONTAMINATED MATERIAL TO MARSHALL MN DOT TRUCK STATION 1800 EAST COLLEGE DRIVE, SEE SPECIAL PROVISIONS.
  - (2) TACK COAT SHALL BE APPLIED AS PER SPEC. 2357 (INCIDENTAL).
  - (3) 30' OF 18" HOBAS PIPE TO BE SUPPLIED BY MN DOT (1 PIECE 20' LONG AND 1 PIECE 10' LONG). 6' OF 12" RCP PIPE CULVERT DESIGN 3006.
  - (4) CONTRACTOR TO PICK UP MATERIALS AT MNDOT TRUCK STATION 1800 EAST COLLEGE DR. MARSHALL MN (INCIDENTAL)
  - (5) DRAINAGE STRUCTURES AND CASTING ASSEMBLIES SUPPLIED BY MN DOT.
  - (6) 41 SQ YD INCLUDES BITUMINOUS OVERLAY 0" TO 1.5"
- (A) THIS PROJECT IS A LUMP SUM CONTRACT. ANY REFERENCE TO PAY ITEMS, QUANTITIES, OR MEASUREMENTS THROUGHOUT THIS PLAN ARE FOR CONVENIENCE OF THE CONTRACTOR TO QUOTE ON THE PROJECT.



Exhibit C

*Wiphawi S.P. Brua*  
 WIPHAWI S.P. BRUA  
 LIC. NO. 62996  
 DATE: 13-MAR-2025  
 LICENSED PROFESSIONAL ENGINEER

WIPHAWI S.P. BRUA  
 LIC. NO. 62996  
 DATE: 13-MAR-2025

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ESTIMATED QUANTITIES

SP 4210-61

(TH 68)

SHEET NO 2

TOTAL SHEETS 23

13-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_115spt.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\General\d421061\_115spt.dgn

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT	
<b>STANDARD PLATES</b>	
PLATE NO.	DESCRIPTION
1070N	SUPPLEMENTAL PAVEMENT REINFORCEMENT
3000M	REINFORCED CONCRETE PIPE (6 SHEETS)
4006L	MANHOLE OR CATCH BASIN PRECAST - DESIGNS G AND H
4010I	CONCRETE ADJUSTING RINGS
4011E	PRECAST CONCRETE BASE
4020J	MANHOLE OR CATCH BASIN (FOR USE WITH OR WITHOUT TRAFFIC LOADS) (2 SHEETS)
4026B	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
4108F	ADJUSTING RINGS FOR CATCH BASINS AND MANHOLES
4132G	CATCH BASIN FRAME CASTING (FOR SQUARE GRATE) - CASTING NO. 805
4140D	SPECIAL GRATE CASTINGS FOR CATCH BASIN (CONVEX AND CONCAVE) - CASTING NO. 720 AND 721
4154B	CATCH BASIN GRATE CASTING - CASTING NO. 816
4180J	MANHOLE OR CATCH BASIN STEP
7038A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
7100H	CONCRETE CURB AND GUTTER (DESIGN B AND DESIGN V)
7113A	CONCRETE APPROACH NOSE DETAIL
8000K	TEMPORARY CHANNELIZERS (3 SHEETS)

**CONSTRUCTION NOTES:**

- ALL MATERIAL NOT UTILIZED ON THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OUTSIDE OF THE RIGHT OF WAY IN ACCORDANCE WITH MNDOT SPEC. 2104.
- PERPETUATE DRAINAGE ON ALL AREAS DISTURBED BY CONSTRUCTION (INCIDENTAL).
- IN AREAS DISTURBED BY CONSTRUCTION, ALL TOPSOIL SHALL BE STRIPPED AND RE-USED AS TOPSOIL.
- BNSF WILL BE RESPONSIBLE FOR REPLACEMENT OF RAILROAD GRADE WITH BALLAST TO A DEPTH OF 35" BENEATH THE TRACKS AT THE HOBAS PIPE CROSSING.
- AS NOTED IN THE PLAN ON SHEET 9, THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING THE RAILROAD GRADE STARTING AT 12" BELOW THE EXISTING TRACKS AT THE HOBAS PIPE CROSSING.
- BNSF WILL DISCONNECT POWER, REMOVE STOP ARM AND POLE FOR CENTER MEDIAN SIGNAL ON THE EAST SIDE OF THE TRACKS.

**UTILITY NOTES**

- THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINES FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES".
- THE FOLLOWING UTILITY OWNERS HAVE EXISTING FACILITIES IN THE AREA OF CONSTRUCTION. BURLINGTON NORTHERN SANTA FE, CENTURYLINK, CITY OF MARSHALL, GREAT PLAINS NATURAL GAS, CHARTER SPECTRUM, MARSHALL MUNICIPAL UTILITIES.
- THE CONTRACTOR IS HEREBY REMINDED OF HIS RESPONSIBILITY UNDER STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THE AREA. THE CONTACT MUST BE MADE THROUGH GOPHER STATE ONE-CALL. UTILITY LOCATES FOR BNSF CONTACT 800-832-5452.
- ALL UTILITY WORK TO BE DONE BY OTHERS UNLESS OTHERWISE NOTED.



Exhibit C

*Wiphawi S.P. Brua*  
 LICENCED PROFESSIONAL ENGINEER

WIPHAWI S.P. BRUA  
 LIC. NO. 62996  
 DATE: 13-MAR-2025

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENCED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

STANDARD PLATES & CONSTRUCTION NOTES

SP 4210-61  
 (TH 68)

SHEET NO	3
TOTAL SHEETS	23



13-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
PLOT NAME: d421061\_130tab-01.dgn  
PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\Tabulations\d421061\_130tab-01.dgn

EARTHWORK TABULATION									A
STATION TO STATION	LOCATION	EXCAVATION - COMMON	SELECT GRANULAR EMBANKMENT	COMMON EMBANKMENT (CV)	EXCAVATION SPECIAL	HAUL AND STOCKPILE CONTAMINATED SOIL	HAUL AND DISPOSE OF CONTAMINATED SOIL (1)	AGGREGATE BASE CLASS 5	REMARKS
		CU YD	CU YD	CU YD	CU YD	CU YD	TON	TON	
958+00 - 958+12	30 LT - 39 LT		1		4	4	6		STR 103 TO 102
958+00 - 958+41	30 LT - 44 LT		8	12	65	65	104	7	STR 102 TO STR 101
958+03 - 958+40	35 LT - 27 RT	22		17					DRAIN TILE OUT OF STR 103
958+52 - 958+38	36 LT - 27 RT	22		17					DRAIN TILE OUT OF STR 101
958+30 - 958+56	31 LT - 34 LT	3	1		5	5	9		CURB
958+06.56 - 958+53.04	4.1 LT - 3.8 RT	1							MEDIAN
958+44.42 - 958+68.95	43.9 RT - 50.0 RT	1							SIDE WALK
958+35.3 - 958+43.45	50.4 LT - 44.2 LT								SIDE WALK
<b>TOTAL</b>		<b>49</b>	<b>10</b>	<b>46</b>	<b>74</b>	<b>74</b>	<b>119</b>	<b>7</b>	

(1) 1.6 CONVERSION FACTOR WAS USED.

SAWING					B
STATION TO STATION	LOCATION	SAWING CONCRETE PAVEMENT (FULL DEPTH)	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	REMARKS	
		LIN FT	LIN FT		
958+02.55 - 958+06.66	30.7 LT - 5.0 LT	30			
958+21.09 - 958+21.70	6.5 RT - 22.5 RT	16			
958+21.7 - 958+21.7	25.4 RT - 29.4 RT		4	BOULEVARD	
958+21.7 - 958+39.0	29.4 RT - 29.3 RT		17	BEHIND CURB	
958+39.0 - 958+44.39	29.3 RT - 44.1 RT		16	BOULEVARD	
958+43.45 - 958+43.84	44.2 LT - 30.8 LT		13	BOULEVARD	
958+60.38 - 958+64.22	33.3 LT - 30.6 LT	6		CURB AND DRIVEWAY FLARE	
958+47.69 - 958+47.50	30.8 LT - 6.5 LT	24			
958+65.23 - 958+65.50	6.5 RT - 22.7 RT	16		INCLUDES CURB AND MEDIAN	
<b>TOTAL</b>		<b>92</b>	<b>50</b>		

REMOVE CURB AND GUTTER AND WALK					C
STATION TO STATION	LOCATION	REMOVE CURB AND GUTTER	REMOVE CONCRETE WALK (2)	REMARKS	
		LIN FT	SQ FT		
957+95.86 - 958+10.70	34.3 LT - 47.1 LT		87		
958+02.60 - 958+12.11	32.3 LT	9			
958+06.57 - 958+23.90	4.5 LT	17		CENTER MEDIAN CURB	
958+06.60 - 958+28.06	4.3 LT - 3.8 RT		140	CENTER MEDIAN	
958+06.80 - 958+29.20	4.7 RT	6		CENTER MEDIAN CURB	
958+21.69 - 958+37.49	24.5 RT	14			
958+44.42 - 958+52.66	44.1 RT - 50.0 RT		33		
958+17.63 - 958+35.23	51.2 LT - 44.4 LT		143		
958+55.94 - 958+64.21	32.7 LT	8			
958+42.63 - 958+51.71	4.7 LT	6		CENTER MEDIAN CURB	
958+43.72 - 958+53.04	4.1 LT - 3.8 RT		49	CENTER MEDIAN	
958+47.29 - 958+65.25	4.5 RT	17		CENTER MEDIAN CURB	
958+55.46 - 958+65.48	24.4 RT	9			
958+60.97 - 958+68.95	43.9 RT - 49.8 RT		32		
<b>TOTAL</b>		<b>86</b>	<b>484</b>		

(2) INCLUDES REMOVAL OF TRUNCATED DOMES. (INCIDENTAL)

PAVEMENT REMOVAL					D
STATION TO STATION	LOCATION	REMOVE CONCRETE PAVEMENT	REMOVE BITUMINOUS PAVEMENT	REMARKS	
		SQ YD	SQ YD		
958+02.57 - 958+23.30	30.7 LT - 6.5 LT	32			
958+21.09 - 958+36.31	6.5 RT - 22.7 RT	20			
957+99.11 - 958+14.91	33.2 LT - 41.7 LT		20	BOULEVARD	
958+11.03 - 958+41.29	32.9 LT - 25.3 RT		25		
958+21.58 - 958+36.58	25.2 RT - 29.4 RT		6	BEHIND CURB	
958+37.49 - 958+49.87	25.3 RT - 44.1 RT		9	BOULEVARD	
982+20.41 - 958+43.87	45.1 LT - 30.8 LT		30	BOULEVARD	
958+26.95 - 958+56.59	30.8 LT - 25.4 RT		27		
958+52.43 - 958+65.17	25.4 RT - 43.9 RT		12	BOULEVARD	
958+31.69 - 958+47.50	30.8 LT - 6.5 LT	29			
958+48.36 - 958+65.48	6.6 RT - 22.7 RT	24			
<b>TOTAL</b>		<b>105</b>	<b>129</b>		



Exhibit C

*Wiphawi S.P. Brui*  
 WIPHAWI S.P. BRUI  
 LIC. NO. 62996  
 DATE: 13-MAR-2025  
 LICENSED PROFESSIONAL ENGINEER

WIPHAWI S.P. BRUI  
 LIC. NO. 62996  
 DATE: 13-MAR-2025

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TABULATIONS

SP 4210-61

(TH 68)

SHEET NO 4

TOTAL SHEETS 23

13-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_130tab-02.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\61\Design\PlanSheets\Tabulations\d421061\_130tab-02.dgn

CONCRETE CURB AND GUTTER AND WALK									E
STATION TO STATION	LOCATION	AGGREGATE	6"	DRILL AND GROUT	CONCRETE	CONCRETE	CONCRETE	TRUNCATED	REMARKS
		BASE CLASS 5	CONCRETE	REINF BAR	CURB AND GUTTER	CURB AND GUTTER	CURB AND GUTTER		
		TON	SQ FT	(EPOXY COATED)	DESIGN B424	DESIGN B436	DESIGN B624	DOMES	
				(1)	LIN FT	LIN FT	LIN FT	SQ FT	
957+95.86 - 958+10.70	34.3 LT - 47.1 LT	4	87	2				12	
958+02.60 - 958+12.16	32.3 LT			2			9		
958+06.60 - 958+12.30	2.4 LT - 6.4 LT			2		6			CENTER MEDIAN CURB
958+12.30 - 958+24.11	4.3 LT				11				CENTER MEDIAN CURB
958+06.56 - 958+27.13	3.6 LT - 3.8 RT		140	2					CENTER MEDIAN
958+21.58 - 958+27.44	4.7 RT			2	6				CENTER MEDIAN CURB
958+21.58 - 958+36.66	24.5 RT			2			15		
958+44.42 - 958+52.66	44.1 RT - 50.0 RT		33	2					
958+18.16 - 958+43.45	50.0 LT - 44.0 LT	3	143	2				12	
958+30.44 - 958+64.21	32.7 LT			2			34		
958+43.26 - 958+51.71	4.5 LT			2	8				CENTER MEDIAN CURB
958+43.57 - 958+52.68	3.7 LT - 3.8 RT		49	3					CENTER MEDIAN
958+47.32 - 958+57.17	4.4 RT				10				CENTER MEDIAN CURB
958+57.17 - 958+65.23	4.4 RT - 3.2 RT			2		8			CENTER MEDIAN CURB
958+55.55 - 958+65.48	24.4 RT			2			9		
958+60.97 - 958+68.95	43.9 RT - 49.8 RT		32	2					
<b>TOTAL</b>		<b>7</b>	<b>484</b>	<b>29</b>	<b>35</b>	<b>14</b>	<b>67</b>	<b>24</b>	

(1) SEE TABULATION ON SHEET 19 FOR SPECIFIC APPLICATIONS

TEMPORARY EROSION CONTROL					G
STATION TO STATION	LOCATION	STORM	SEDIMENT	SEDIMENT	REMARKS
		DRAIN INLET	CONTROL	CONTROL	
		PROTECTION	LOG TYPE	LOG TYPE	
		EACH	COMPOST	ROCK	
			LIN FT	LIN FT	
957+80 - 957+98	39.6 LT - 61.4 LT		31		
957+82 - 957+84	32.4 LT - 0.5 LT			32	
957+85 - 957+85	4.7 RT - 24.4 RT			20	
958+15 - 958+16	24.5 RT - 43.5 RT		19		
958+15 - 958+53	49.9 RT - 59.0 RT		37		
958+05	31.7 LT	1			
958+06	36.7 LT	1			
958+25	56.8 LT	1			
958+33	37.1 LT	1			
959+63	73.1 RT	1			
958+14 - 958+46	61.6 LT - 50.0 LT		34		
958+54 - 968+60	43.6 LT - 34.5 LT		11		
958+81 - 958+89	32.5 LT - 4.4 LT			29	
958+89 - 958+89	0.0 RT - 26.4 RT			26	
958+75 - 958+78	25.0 LT - 44.0 LT		19		
958+69 - 958+75	50.0 LT - 55.4 LT		7		
<b>TOTAL</b>		<b>5</b>	<b>158</b>	<b>107</b>	

SURFACING							F
STATION TO STATION	LOCATION	AGGREGATE	CONCRETE	SUPPLEMENTAL	DRILL AND GROUT	TYPE SP 12.5	REMARKS
		BASE CLASS 5	PAVEMENT 7.0"	PAVEMENT REINFORCEMENT	DOWEL BAR (EPOXY COATED)	WEARING COURSE MIXTURE (3,B) (SPWEB340B)	
		TON	SQ YD	POUND	EACH	TON	
958+02.57 - 958+22.25	30.7 LT - 7.0 LT	1	30	256	21		
958+21.58 - 958+35.74	6.5 RT - 22.7 RT	1	19	133	15		
957+99.11 - 958+14.91	33.2 LT - 41.7 LT	8				1	BOULEVARD
958+09.40 - 958+41.29	33.3 LT - 25.4 RT	10				11	
958+21.58 - 958+36.58	25.2 RT - 29.4 RT	2				1	BEHIND CURB
958+37.49 - 958+49.87	25.3 RT - 44.1 RT					2	BOULEVARD
982+20.41 - 958+43.87	45.1 LT - 30.8 LT					4	BOULEVARD
958+26.95 - 958+56.59	30.8 LT - 25.4 RT	10				11	
958+52.43 - 958+65.17	25.4 RT - 43.9 RT					2	BOULEVARD
958+31.69 - 958+47.50	30.8 LT - 6.5 LT	1	24	234	22		
958+48.36 - 958+65.48	6.6 RT - 22.7 RT	1	35	161	14		
<b>TOTAL</b>		<b>34</b>	<b>108</b>	<b>784</b>	<b>72</b>	<b>32</b>	



Exhibit C

*Wiphaw S.P. Br...*  
 WIPHAWI S.P. BRUA  
 LIC. NO. 62996  
 DATE: 13-MAR-2025  
 LICENSED PROFESSIONAL ENGINEER

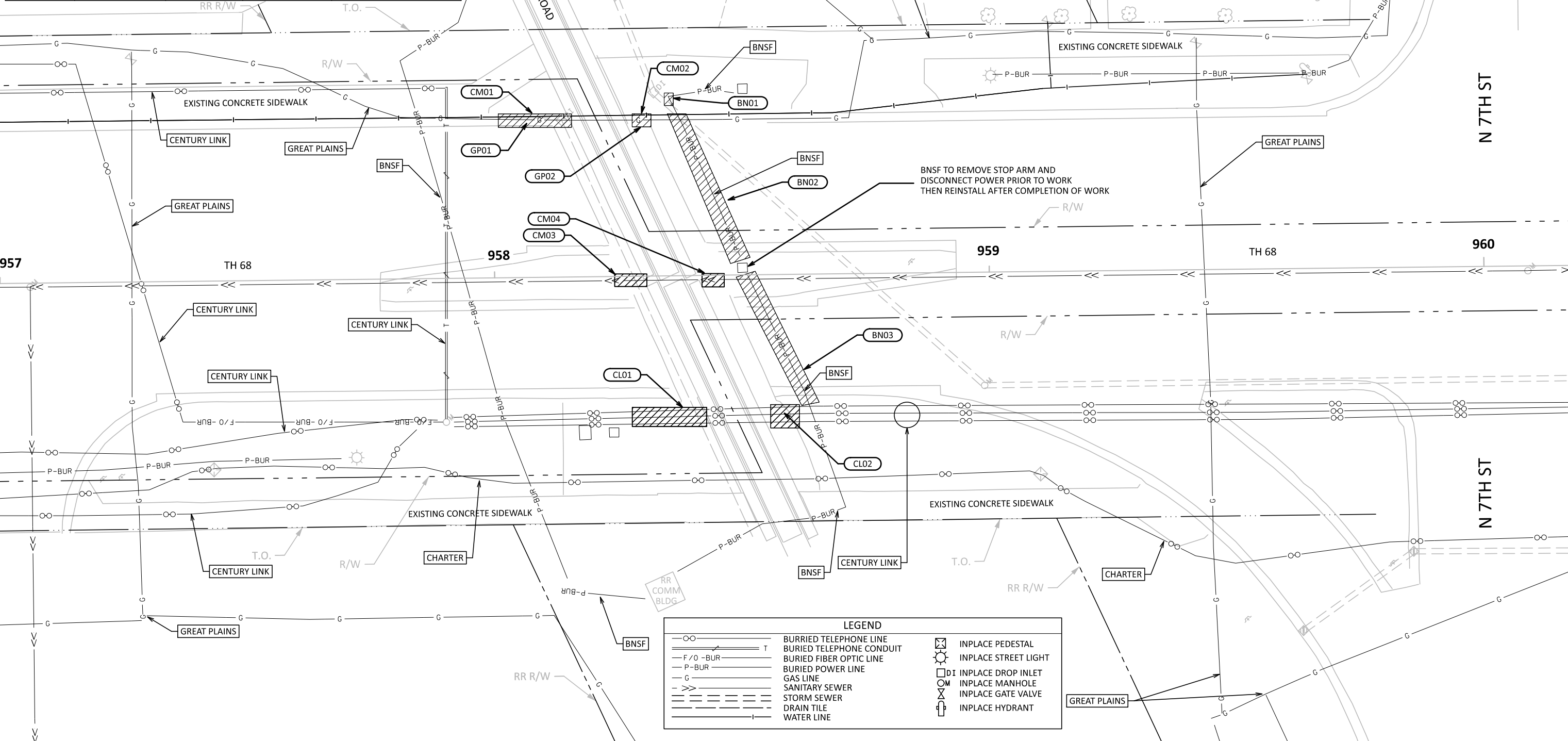
I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TABULATIONS

SP 4210-61  
 (TH 68)

SHEET NO 5  
 TOTAL SHEETS 23

UTILITY LEGEND				
CONFLICT	OWNER	DISCIPTION	ACTION	REMARKS
GP01	GREAT PLAINS	GAS LINE	LEAVE AS IS	
GP02	GREAT PLAINS	GAS LINE	LEAVE AS IS	
BN01	BURLINGTON NORTHERN SANTA FE	ELECTRIC LINE	ADJUST	PROTECT
BN02	BURLINGTON NORTHERN SANTA FE	ELECTRIC LINE	LEAVE AS IS	
BN03	BURLINGTON NORTHERN SANTA FE	ELECTRIC LINE	LEAVE AS IS	
CM01	CITY OF MARSHALL	WATERLINE	LEAVE AS IS	
CM02	CITY OF MARSHALL	WATERLINE	LEAVE AS IS	
CM03	CITY OF MARSHALL	SEWER LINE	LEAVE AS IS	
CM04	CITY OF MARSHALL	SEWER LINE	LEAVE AS IS	
CL01	CENTURYLINK	COMM. LINE	ADJUST	PROTECT
CL02	CENTURYLINK	COMM. LINE	ADJUST	PROTECT



LEGEND			
—○—	BURIED TELEPHONE LINE	⊠	INPLACE PEDESTAL
—T—	BURIED TELEPHONE CONDUIT	⊙	INPLACE STREET LIGHT
—F/O-BUR—	BURIED FIBER OPTIC LINE	⊠ DI	INPLACE DROP INLET
—P-BUR—	BURIED POWER LINE	⊙ M	INPLACE MANHOLE
—G—	GAS LINE	⊠	INPLACE GATE VALVE
—S—	SANITARY SEWER	⊠	INPLACE HYDRANT
—SS—	STORM SEWER		
—DT—	DRAIN TILE		
—W—	WATER LINE		

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_135ute.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\61\Design\PlanSheets\Utilities\d421061\_135ute.dgn  
 PLOTTED/REVISED: 13-MAR-2025

# TYPICAL SECTION 1

## CONCRETE MAINLINE PAVEMENT

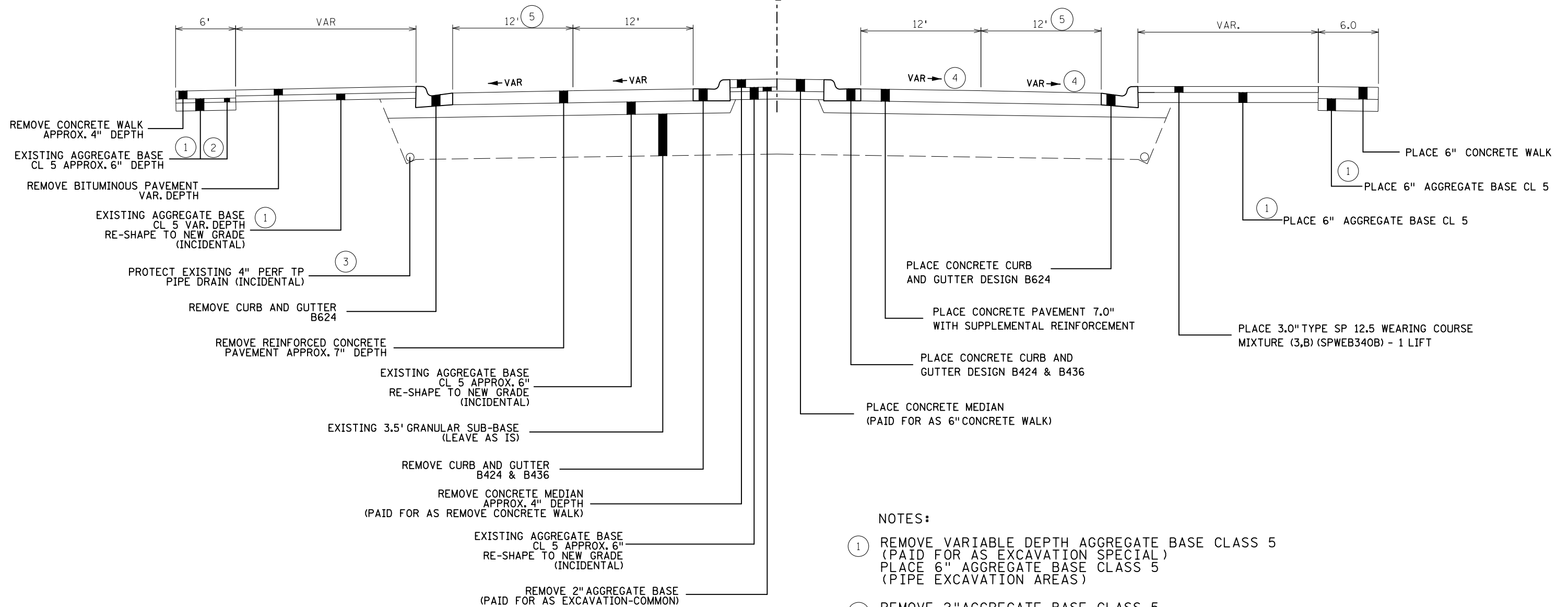
S.P. 4210-61 (TH 68)  
 STA. 957+95.78 TO STA. 958+26.19 (WEST SIDE OF R.R. TRACKS)  
 STA. 958+45.58 TO STA. 958+65.50 (EAST SIDE OF R.R. TRACKS)

S.P. 4210-61 (TH 68)  
 STA. 957+95.78 TO STA. 958+25.30 (WEST SIDE OF R.R. TRACKS)  
 STA. 958+45.30 TO STA. 958+65.50 (EAST SIDE OF R.R. TRACKS)

EXISTING

PROPOSED

TH 68



NOTES:

- ① REMOVE VARIABLE DEPTH AGGREGATE BASE CLASS 5 (PAID FOR AS EXCAVATION SPECIAL) PLACE 6" AGGREGATE BASE CLASS 5 (PIPE EXCAVATION AREAS)
- ② REMOVE 2" AGGREGATE BASE CLASS 5 (PAID FOR AS EXCAVATION-COMMON) (NON PIPE EXCAVATION AREAS)
- ③ NO EXISTING PIPE DRAINS FROM STA. 957+95.78 TO STA. 958+26.19 (WEST SIDE OF R.R. TRACKS)
- ④ SEE CONCRETE PAVEMENT PLAN FOR ELEVATIONS
- ⑤ 4' WIDE ON TH 68 EAST BOUND LANE

ALL SLOPES ARE FT/FT.

13-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_145typ-1.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\61\Design\PlanSheets\Typicals\d421061\_145typ-1.dgn



Exhibit C

*Wiphaw S.P. Br.*  
 WIPHAWI S.P. BRUA  
 LIC. NO. 62996  
 DATE: 13-MAR-2025  
 LICENSED PROFESSIONAL ENGINEER

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TYPICAL SECTIONS

SP 4210-61  
 (TH 68)

SHEET NO 7  
 TOTAL SHEETS 23

# TYPICAL SECTION 2

BITUMINOUS MAINLINE PAVEMENT

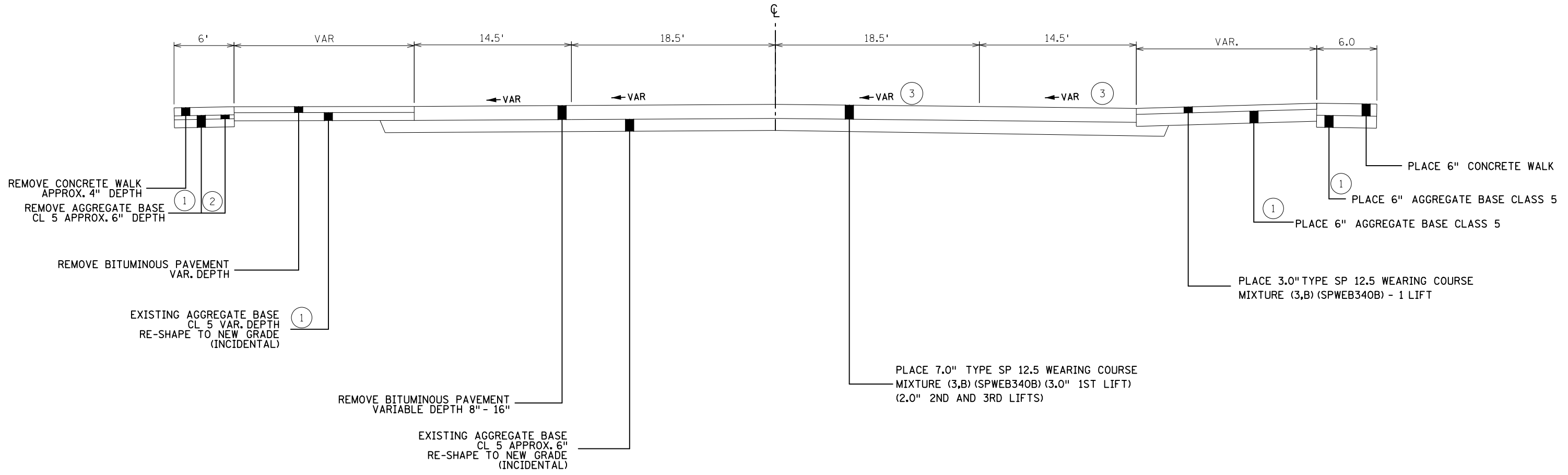
S.P. 4210-61 (TH 68)  
 STA. 958+26.19 TO STA. 958+29.90 (WEST SIDE OF R.R. TRACKS)  
 STA. 958+40.86 TO STA. 958+45.58 (EAST SIDE OF R.R. TRACKS)

S.P. 4210-61 (TH 68)  
 STA. 958+25.30 TO STA. 958+29.90 (WEST SIDE OF R.R. TRACKS)  
 STA. 958+40.86 TO STA. 958+45.30 (EAST SIDE OF R.R. TRACKS)

EXISTING

TH 68

PROPOSED



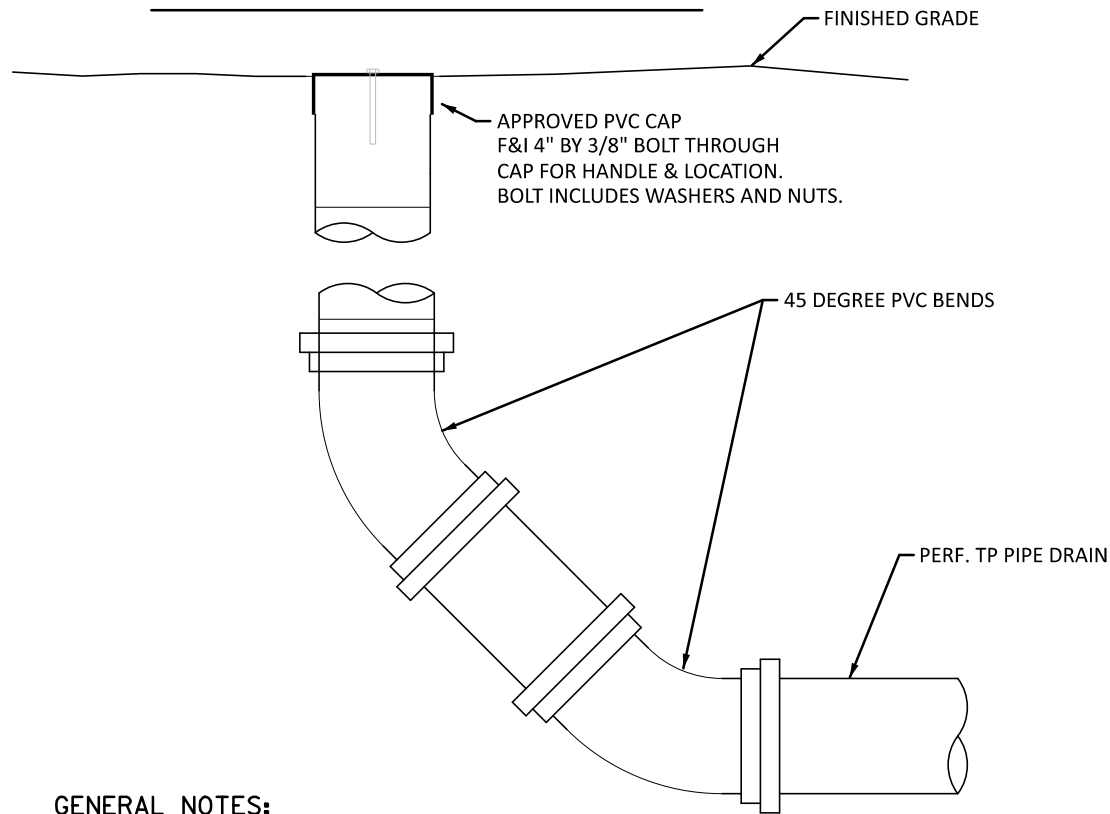
NOTES:

- (1) REMOVE VARIABLE DEPTH AGGREGATE BASE CLASS 5 (PAID FOR AS EXCAVATION SPECIAL) PLACE 6" AGGREGATE BASE CLASS 5 (PIPE EXCAVATION AREAS)
- (2) REMOVE 2" AGGREGATE BASE CLASS 5 (PAID FOR AS EXCAVATION-COMMON) (NON PIPE EXCAVATION AREAS)
- (3) SEE SHEET 19 FOR ELEVATIONS

ALL SLOPES ARE FT/FT.

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_145typ-2.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\Typicals\d421061\_145typ-2.dgn  
 PLOTTED/REVISED: 13-MAR-2025

PVC PIPE DRAIN CLEANOUT

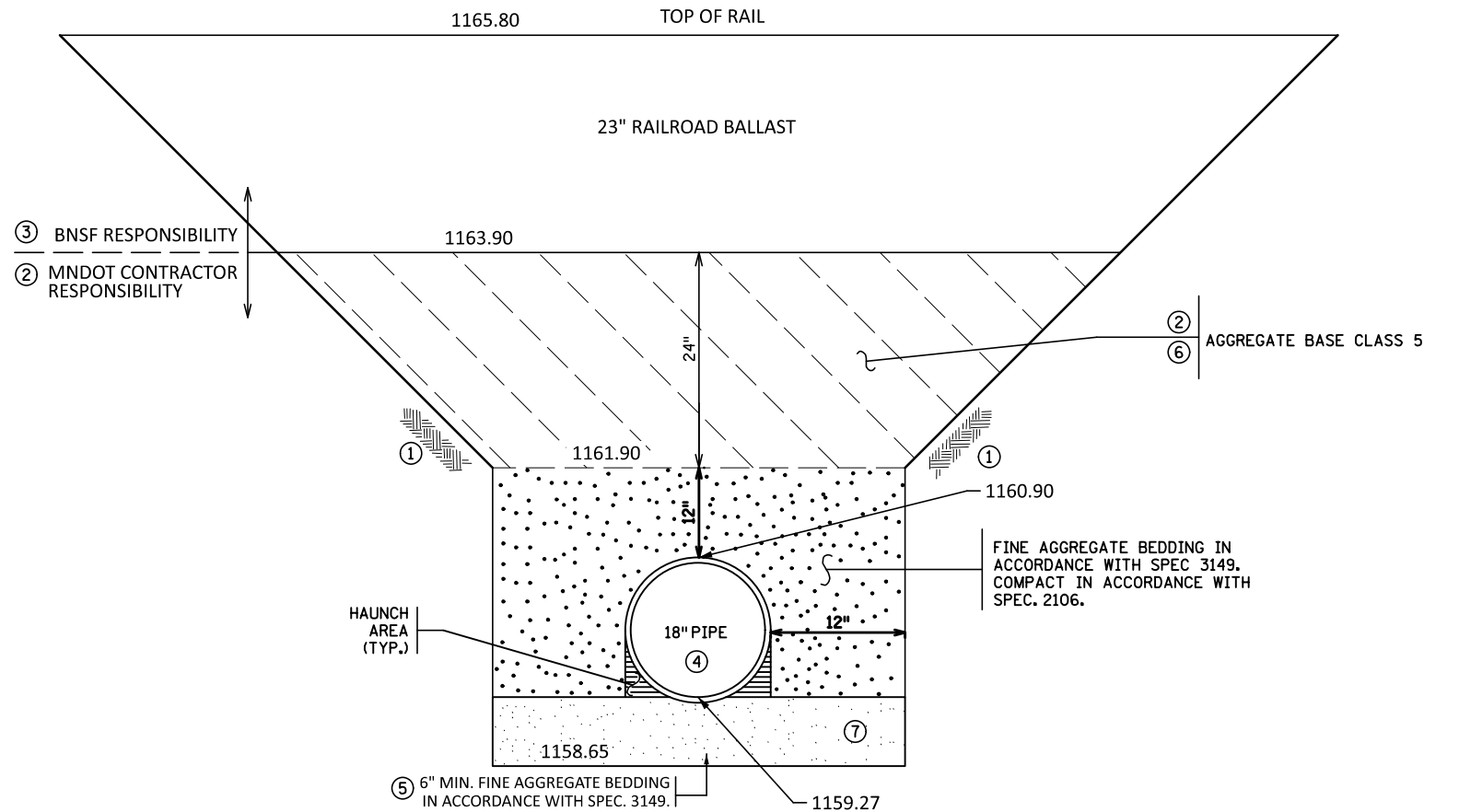


GENERAL NOTES:

1. SEE DRAINAGE PLANS FOR LOCATIONS.
2. FIRMLY COMPACT EARTH AROUND BENDS.
3. CAP OPEN END OF EXISTING DRAIN TILE WHERE APPLICABLE, (INCIDENTAL).

NOT TO SCALE

STORM SEWER PIPE BEDDING OVER RAILROAD GRADE



CONSTRUCTION SEQUENCE

1. PLACE 6" OF FINE AGGREGATE BEDDING MATERIAL TO GRADE.
2. FOR PIPES WITH BELL, REMOVE MATERIAL IN BELL AREA PRIOR TO PLACEMENT.
3. INSTALL PIPE TO GRADE.
4. AFTER PLACEMENT OF THE PIPE, PLACE ADDITIONAL BEDDING AND COMPACT THE FULL LENGTH ON BOTH SIDES OF THE PIPE UNDERNEATH THE HAUNCH AREA BY FIRST SHOVEL SLICING (MANUALLY SHOVE THE BLADE END OF A SHOVEL AT AN ANGLE DOWN THE ENTIRE LENGTH OF THE HAUNCH UNDER THE PIPE) THEN COMPACT THE HAUNCH AT AN ANGLE USING A POWERED MECHANICAL OR PNEUMATIC DEVICE (I.E. POLE TAMPER, JUMPING JACK, OR SIMILAR). COMPACT THE REMAINING MATERIAL OUTSIDE THE HAUNCH AREA TO THE REQUIREMENTS OF THE APPLICABLE MATERIAL TYPE ENSURING THAT THE ENTIRE LENGTH OF PIPE IS SUPPORTED UNIFORMLY BY BEDDING.
5. PLACE AND COMPACT BACKFILL EVENLY AND SIMULTANEOUSLY IN 6" LIFTS ON EACH SIDE OF THE PIPE TO 12" ABOVE TOP OF PIPE WHEN COMPACTED.
6. COMPLETE REMAINING BACKFILL PER THE APPROPRIATE TREATMENT REQUIREMENTS.
7. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, WEIGHTING OR OTHER APPROVED METHODS IN ORDER TO HELP MAINTAIN GRADE AND ALIGNMENT.

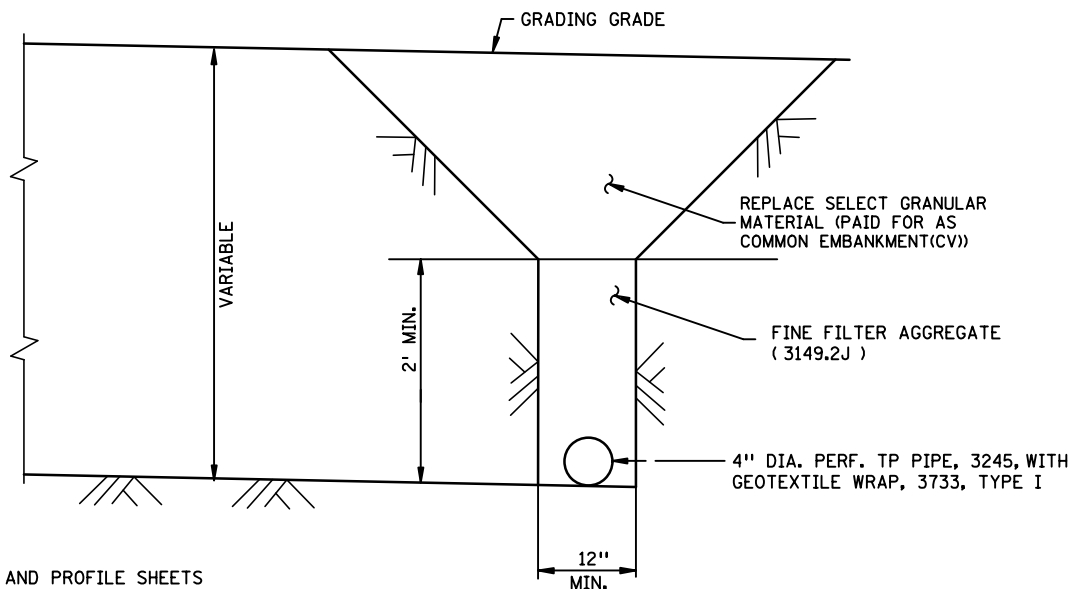
NOTES

EXCAVATE & CONSTRUCT ALL TRENCHES AND SLOPES PER OSHA REQUIREMENTS. ALL SLOPES SHOWN AS (V) : (H)  
 PIPE SIZE IS BASED ON THE NOMINAL INSIDE DIAMETER.  
 PROTECT ALL PIPE DURING CONSTRUCTION IN ACCORANCE WITH SPEC. 2503.  
 ELEVATIONS ARE APPROXIMATE, SEE PROFILE SHEET 21 FOR PIPE ELEVATIONS.

- ① OVER EXCAVATION BENEATH TAPERS IS NOT PERMITTED UNLESS REQUIRED BY OSHA. (TYP.)
- ② AREAS OUTSIDE OF RAILROAD BALLAST FILL TO GRADING GRADE WITH SELECT GRANULAR EMBANKMENT (CV).
- ③ BNSF WILL REMOVE THE RAILROAD TRACKS, CONCRETE RAILROAD CROSSING AND 12" OF EXISTING BALLAST. AFTER PIPE IS INSTALLED AND AGGREGATE BASE CLASS 5 IS PLACED, BNSF WILL BACKFILL THE RAILROAD BALLAST WITHIN THE LIMITS OF THE RAILROAD GRADE.
- ④ THE FINE AGGREGATE BEDDING PART OF THIS DETAIL WILL ALSO APPLY TO INSTALLATION OF THE 12" RC PIPE SEWER.
- ⑤ TRENCH BED SHOULD PROVIDE FIRM, UNIFORM, AND CONTINUOUS SUPPORT FOR THE PIPES ENTIRE LENGTH, AND SHOULD BE COMPACTED AS REQUIRED TO PROVIDE FIRM SUPPORT.
- ⑥ PLACE IN 6" LIFTS AND COMPACT TO 95% MODIFIED PROCTOR.
- ⑦ IN WET CONDITIONS THE CONTRACTOR MAY SUBSTITUTE 12" OF COARSE FILTER AGGREGATE PER 3149.2.H COMPACTED TO THE QUALITY COMPACTION REQUIREMENTS OF SPEC. 2106. WRAP WITH GEOTEXTILE FABRIC TYPE 4 PER SPEC 3733. SEAM ALL FABRIC SIDES AND ENDS PER SPEC TABLE 3733-1 INCLUDING FOOTNOTE (e) OR OVERLAP A MINIMUM OF 3 FT. ALL AT NO ADDITIONAL COST.

NOT TO SCALE

SUBSURFACE DRAIN



NOTES

SEE DRAINAGE PLAN AND PROFILE SHEETS FOR LOCATION AND DEPTHS.  
 EXCAVATE & CONSTRUCT ALL TRENCHES AND SLOPES PER OSHA REQUIREMENTS. ALL SLOPES SHOWN AS (V) : (H)  
 PROTECT ALL PIPE DURING CONSTRUCTION IN ACCORANCE WITH SPEC. 2503.

NOT TO SCALE

DRAINAGE DETAILS

13-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_150ddt-1.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\Details\d421061\_150ddt-1.dgn



Exhibit C

*Wiphaw S.P. Brua*  
 LICENSED PROFESSIONAL ENGINEER

WIPAWI S.P. BRUA  
 LIC. NO. 62996  
 DATE: 13-MAR-2025

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

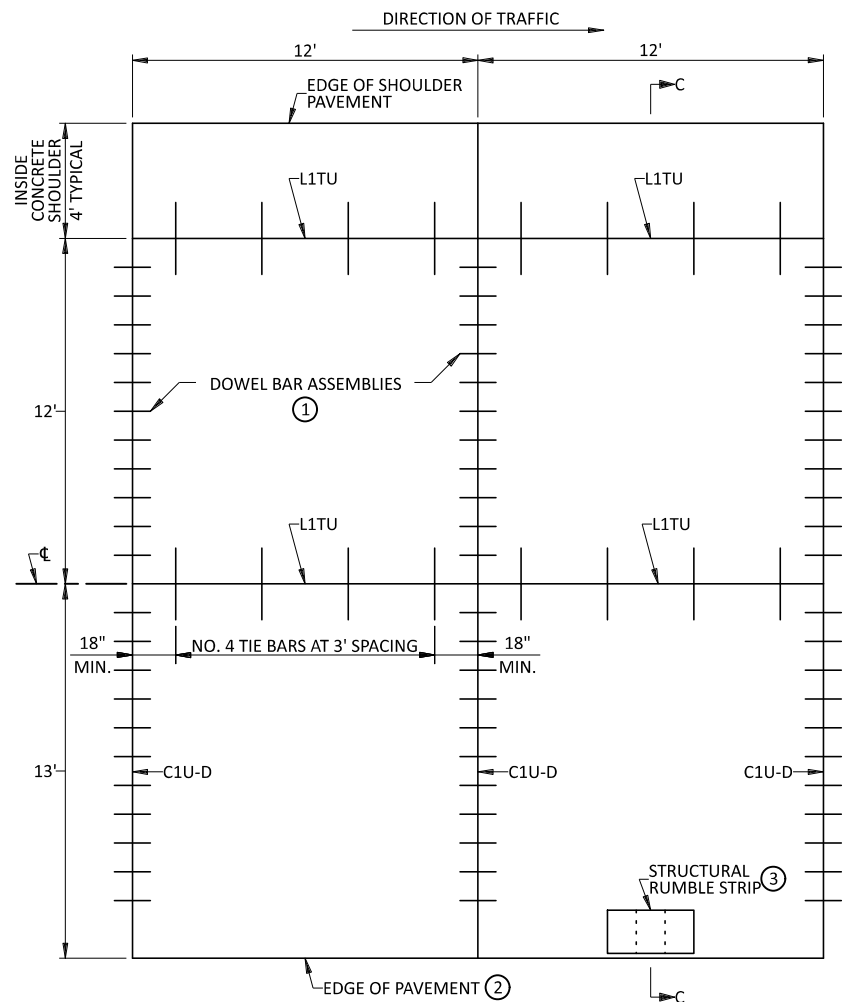
DESIGN DETAILS

SP 4210-61  
 (TH 68)

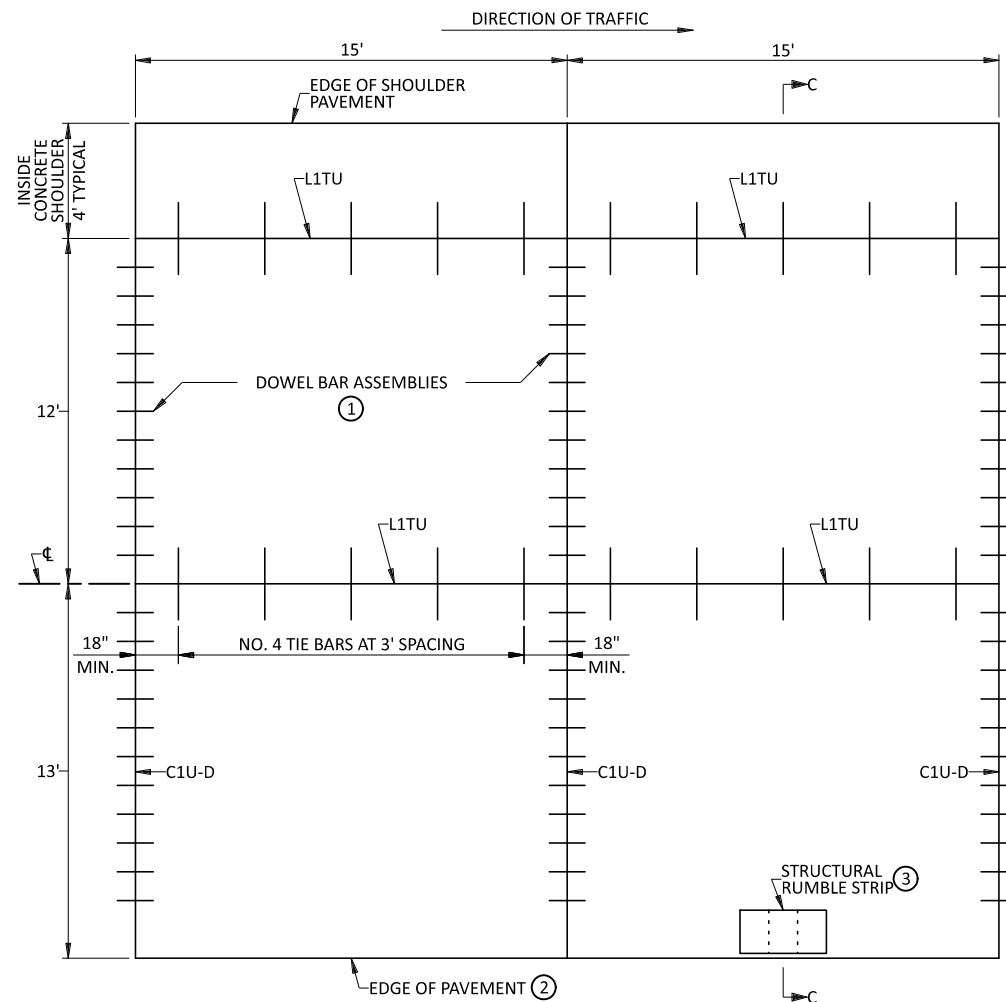
SHEET NO 9  
 TOTAL SHEETS 23

PLOTTED/REVISED: 13-MAR-2025

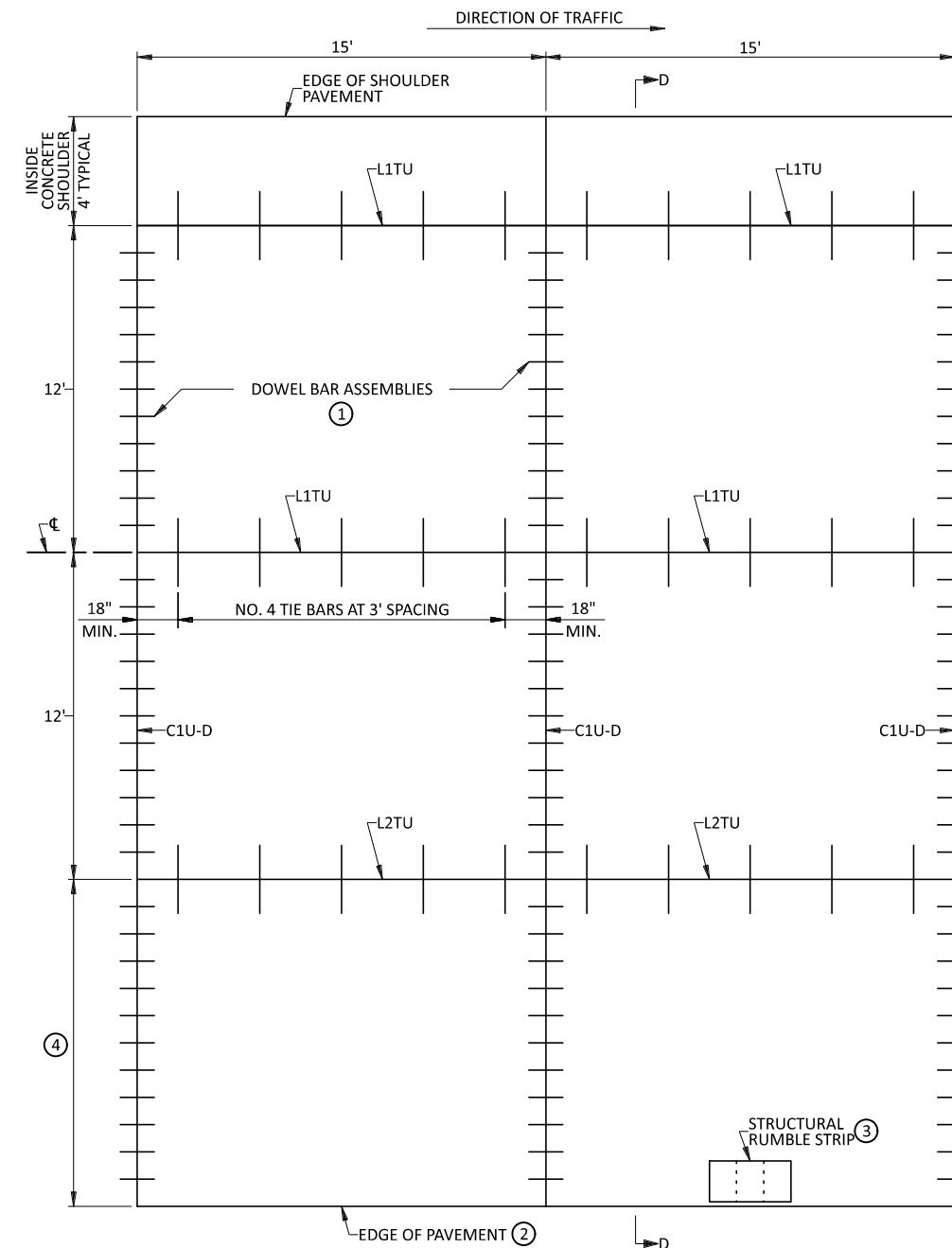
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 PLOT NAME: d421061\_155sprn-01.dgn  
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**MAINLINE PAVEMENT WITH INSIDE CONCRETE SHOULDERS  
 (4 LANE DIVIDED)  
 DOWELED  
 (PAVEMENT THICKNESS FROM 7" TO 7½")**



**MAINLINE PAVEMENT WITH INSIDE CONCRETE SHOULDERS  
 (4 LANE DIVIDED)  
 DOWELED  
 (PAVEMENT THICKNESS 8" AND GREATER)**

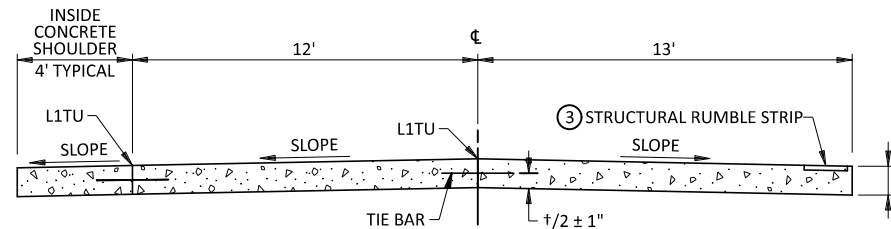


**MAINLINE PAVEMENT  
 (MULTIPLE LANE DIVIDED)  
 DOWELED**

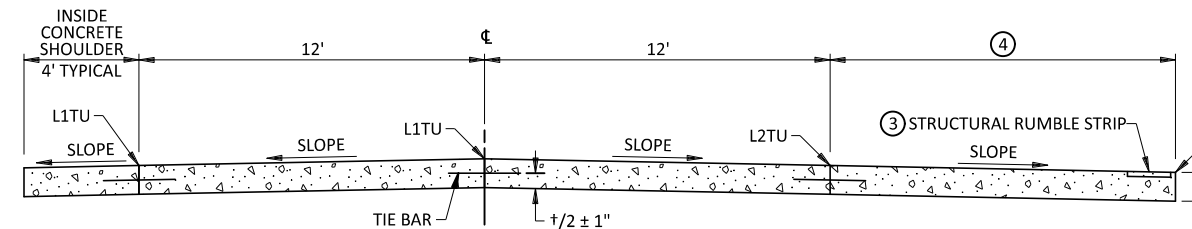
**NOTES:**

- SEE TYPICAL SECTIONS AND PLAN SHEETS FOR CROSS SLOPES, LANE WIDTHS AND PAVEMENT THICKNESS.
- PROVIDE EPOXY COATED TIE BARS COMPLYING WITH SPEC. 3301.
- FOR SUPPLEMENTAL PAVEMENT REINFORCEMENT, SEE STANDARD PLATE1070.
- FOR DOWEL BAR ASSEMBLIES, SEE STANDARD PLATE 1103.
- FOR SAFETY EDGE DETAILS, SEE STANDARD PLAN 5-297.220.
- FOR PAVEMENT JOINT DETAILS, SEE STANDARD PLAN 5-297.221.

- ① PROVIDE 11 DOWEL BARS PER BASKET ASSEMBLY FOR NEW/RECONSTRUCTED PAVEMENTS. PROVIDE 8 WHEEL PATH DOWEL BARS PER BASKET ASSEMBLY FOR CONCRETE OVERLAYS.
- ② PROVIDE AN L1TU OR L2TU JOINT WHEN ADDING AN OUTSIDE CONCRETE SHOULDER.
- ③ SEE PLANS FOR RUMBLE STRIP DETAILS. CONSTRUCT STRUCTURAL RUMBLE STRIPS (INCIDENTAL) IN THE PLASTIC CONCRETE WHEN THERE IS NO OUTSIDE CONCRETE SHOULDER OR CURB AND GUTTER ADDED.
- ④ 13'-WIDE LANE WHEN HMA SHOULDERS ARE USED, OTHERWISE 12'-WIDE LANE.



**SECTION C-C**



**SECTION D-D**

**LEAD EXPERT OFFICE**  
 CURT TURGEON  
 DIRECTOR  
 OFFICE OF MATERIALS  
 & ROAD RESEARCH

**CONCRETE MAINLINE PAVEMENT**  
 DIVIDED ROADWAY

APPROVED:  
 01-30-2025

*Thomas Styrbicki*  
 THOMAS STYRBICKI  
 STATE DESIGN ENGINEER

**STANDARD PLAN**  
 5-297.217

2 OF 2

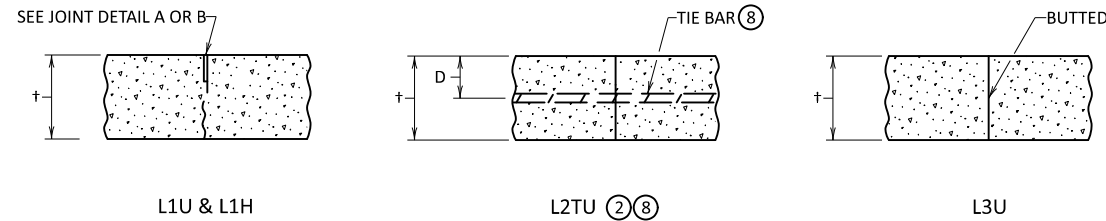


Exhibit C

STANDARD PLANS

SP 4201-61  
 (TH 14)

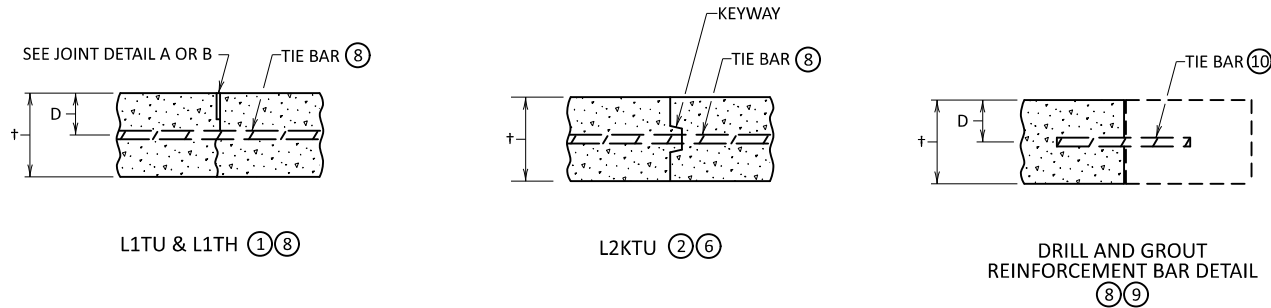
SHEET NO 10  
 TOTAL SHEETS 23



L1U & L1H

L2TU (2)(8)

L3U



L1TU & L1TH (1)(8)

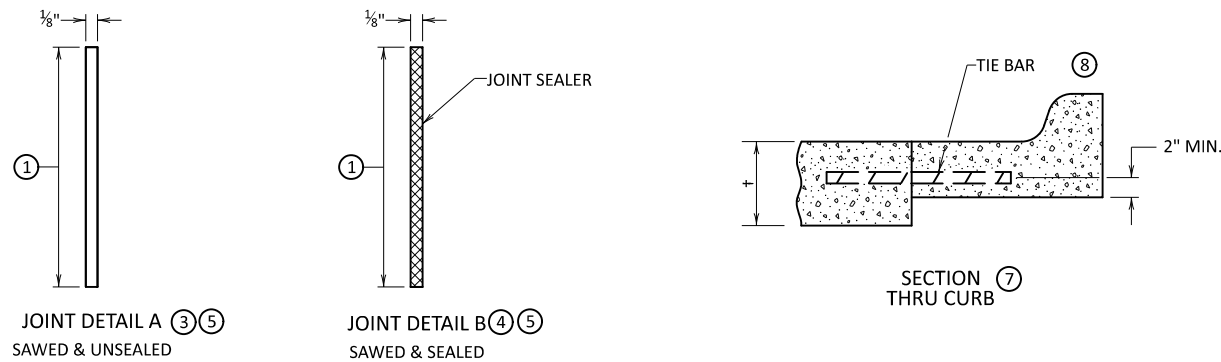
L2KTU (2)(6)

DRILL AND GROUT REINFORCEMENT BAR DETAIL (8)(9)

LONGITUDINAL JOINT REFERENCE, DETAIL & SEALER SPECIFICATION TABLE					
JOINT REFERENCE			JOINT DETAIL	JOINT SEALER SPEC	JOINT WIDTH
WITHOUT TIE BARS	WITH TIE BARS	WITH KEYWAY & TIE BARS			
L1U	L1TU		A	UNSEALED	3/8"
L1H	L1TH		B	3725	3/8"
	L2TU	L2KTU	NONE	UNSEALED	
	L3U		NONE	UNSEALED	

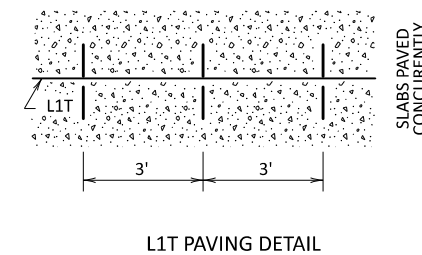
LEGEND		EXAMPLE	
L	= LONGITUDINAL JOINT		L2KTU
NO.	= JOINT REFERENCE		
1	= PAVED CONSTRUCTION JOINT		
2	= TIED CONSTRUCTION JOINT		
3	= BUTTED CONSTRUCTION JOINT		
K	= KEYWAY		
T	= TIE BARS		
U	= UNSEALED		
H	= HOT POURED		



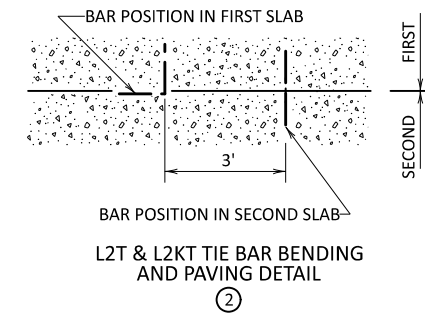
JOINT DETAIL A (3)(5)  
SAWED & UNSEALED

JOINT DETAIL B (4)(5)  
SAWED & SEALED

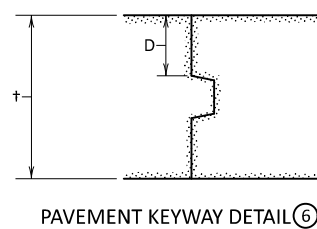
SECTION THRU CURB (7)



L1T PAVING DETAIL



L2T & L2KT TIE BAR BENDING AND PAVING DETAIL (2)



PAVEMENT KEYWAY DETAIL (6)

FIXED FORM KEYWAY TABLE (6)	
† PAVEMENT THICKNESS	D (MINIMUM DEPTH)
< 7"	2 1/2"
7" TO 7 1/2"	3"
8" TO 9 1/2"	4"
≥ 10"	5"

SLIPFORM KEYWAY TABLE (6)	
† PAVEMENT THICKNESS	D (MINIMUM DEPTH)
< 10"	NO KEYWAY
≥ 10"	5"

NOTES:

- PROVIDE EPOXY-COATED TIE BARS COMPLYING WITH SPEC. 3301.
- FURNISH AND INSTALL ALL JOINT SEALER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- SEE STANDARD PLANS 5-297.217 AND 5-297.219 FOR CONCRETE MAINLINE AND RAMP PAVEMENT.
- SEE PAVING LAYOUTS IN THE PLANS FOR JOINT CLASS DESIGNATION TO USE AND SPECIAL REINFORCEMENT REQUIRED.
- FOR LONGITUDINAL JOINTS SAWED WIDER THAN 1/8", CONTACT THE CONCRETE UNIT FOR SEALING RECOMMENDATIONS.

- (6) CONTRACTOR'S OPTION TO USE KEYWAY WHEN:
  - PLACING FIXED FORM CONSTRUCTION.
  - PLACING SLIPFORM CONSTRUCTION WHEN  $t \geq 10"$ .
 USE OF KEYWAY FOR ANY OTHER APPLICATION REQUIRES APPROVAL BY THE ENGINEER. OTHER KEYWAY SHAPES MAY BE USED WITH THE APPROVAL OF THE CONCRETE ENGINEER.
- (7) WHEN CURB AND GUTTER IS NOT CONSTRUCTED AT THE SAME DEPTH AS ADJACENT CONCRETE, PLACE TIE BAR A MINIMUM OF 2" ABOVE THE CURB AND GUTTER GRADE.
- (8) PROVIDE NO. 4 TIE BAR, 30" LONG, SPACED AT 3' ON CENTER AT A DEPTH (D) BETWEEN  $t/2$  AND  $t/2$  PLUS 1".
- (9) DRILL THE HOLE 1/8" WIDER THAN THE NOMINAL OUTSIDE DIAMETER OF THE REINFORCEMENT BAR TO A DEPTH OF 9". INJECT A MnDOT-APPROVED EPOXY OR NON-SHRINK GROUT IN THE BACK OF THE DRILL HOLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- (10) PROVIDE NO. 4 TIE BAR, 18" LONG, SPACED AT 3' ON CENTER AT A DEPTH (D) BETWEEN  $t/2$  AND  $t/2$  PLUS 1".

- (1) JOINT DEPTH AND TOLERANCE:  $t/3 \pm 1/4"$ .
- (2) BEND TIE BARS 90 DEGREES WHEN INSERTED IN THE L2 JOINTS, EXCEPT WHEN NOTED OTHERWISE IN THE PLANS.
- (3) CLEAN JOINT FACES WITH WATER DURING THE SAW CUTTING OPERATION OR BY WATER BLASTING AFTER SAWING.
- (4) CLEAN AND DRY JOINT FACES BY SANDBLASTING AND AIR BLASTING WHEN SEALING IS REQUIRED.
- (5) JOINT WIDTH TOLERANCE IS  $+1/16"$  TO  $-1/32"$ .

13-MAR-2025 PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
PLOT NAME: d421061\_155spr-02.dgn  
PATH & FILENAME: Projects\D8\_WIL\068\421061\Design\PlanSheets\StandardPlans\d421061\_155spr-02.dgn

LEAD EXPERT OFFICE  
CURT TURGEON  
DIRECTOR  
OFFICE OF MATERIALS & ROAD RESEARCH

PAVEMENT JOINTS  
LONGITUDINAL (DESIGN L)

APPROVED:  
01-30-2025

THOMAS STYRBICKI  
STATE DESIGN ENGINEER

STANDARD PLAN  
5-297.221

3 OF 5



Exhibit C

STANDARD PLANS

SP 4210-61

SHEET NO 11

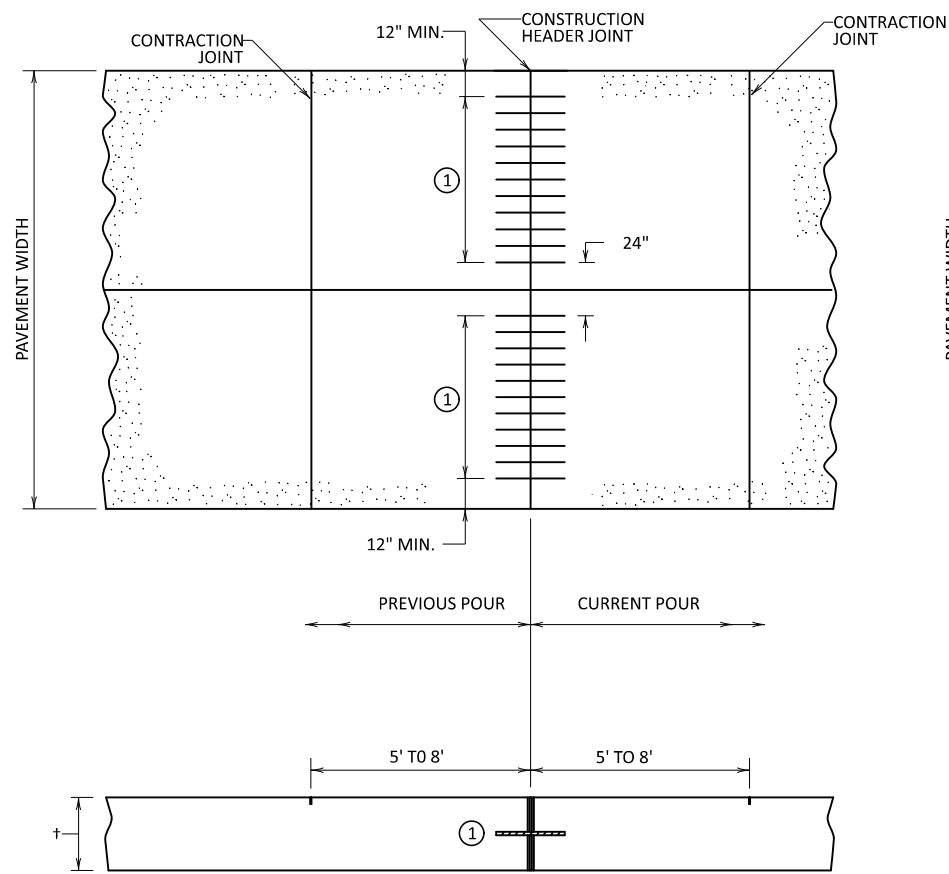
(TH 68)

TOTAL SHEETS 23

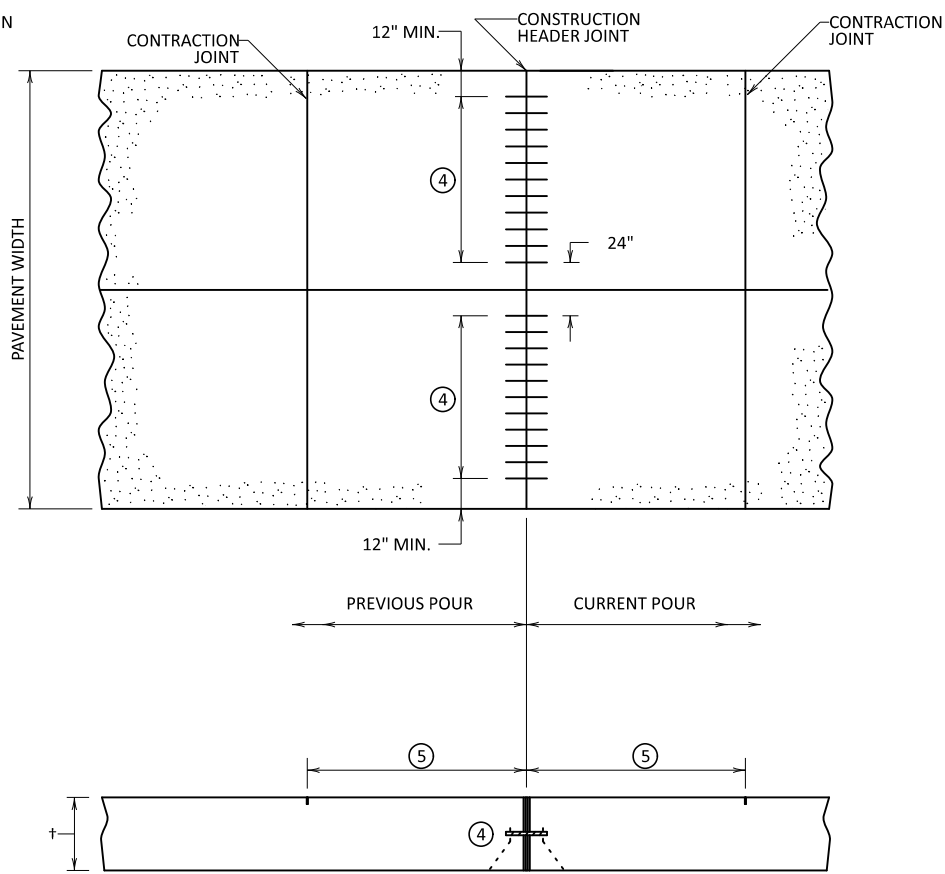


PLOTTED/REVISED: 13-MAR-2025

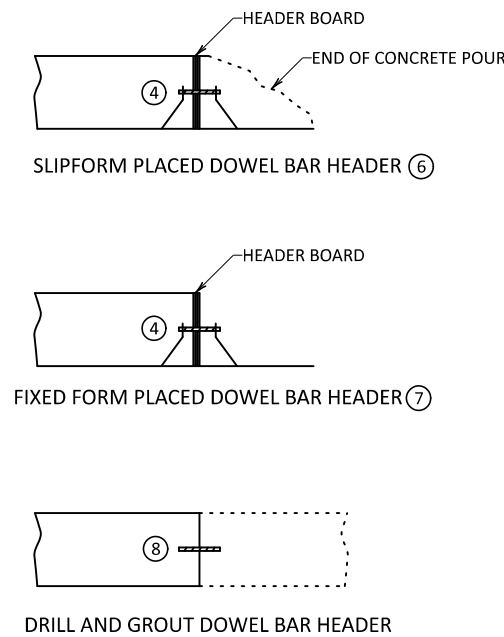
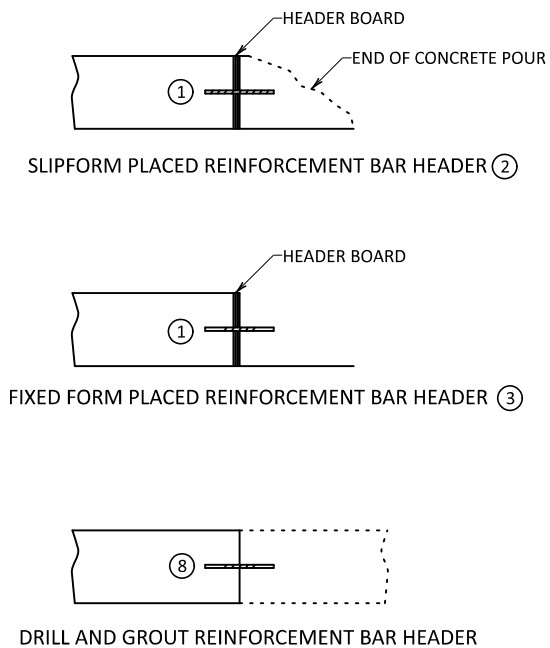
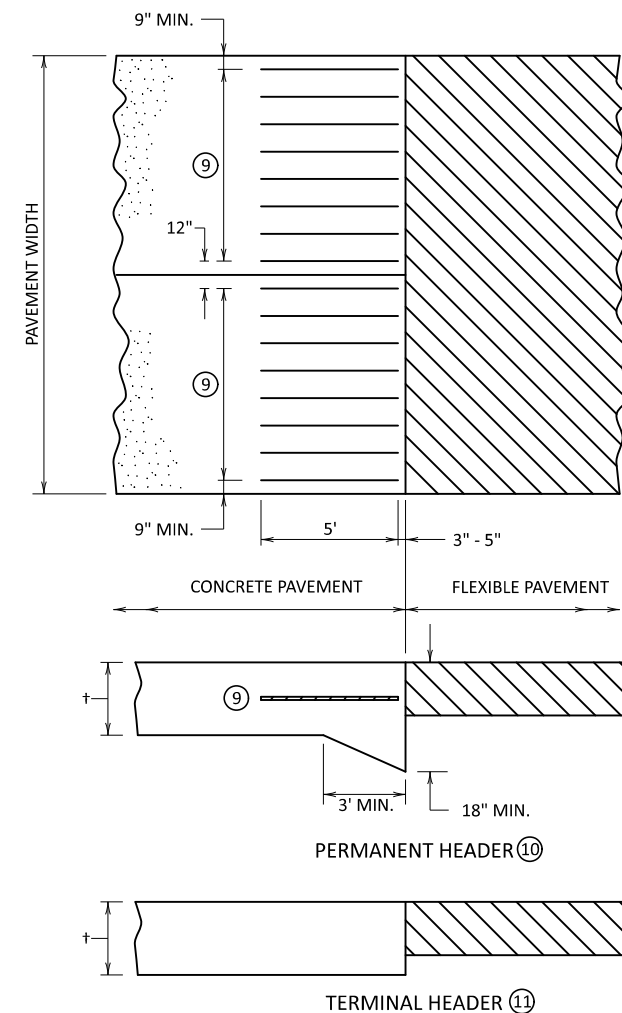
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REINFORCEMENT BAR CONSTRUCTION HEADERS



DOWEL BAR CONSTRUCTION HEADERS



**NOTES:**

PROVIDE EPOXY-COATED TIE BARS COMPLYING WITH SPEC. 3301.

- ① PROVIDE NO. 4 REINFORCEMENT BARS, 30" LONG, SPREAD 12" ON CENTER AT DEPTH OF  $\frac{1}{2} \pm 1"$ .
- ② PAVE PAST THE HEADER LOCATION. REMOVE END OF CONCRETE POUR. SET HEADER BOARD SHAPED TO PAVEMENT CROSS SECTION AND SLOTTED OR DRILLED FOR REINFORCEMENT BARS. INSERT THE REINFORCEMENT BARS AND FINISH THE CONCRETE BEHIND THE BOARD.
- ③ SET HEADER BOARD SHAPED TO PAVEMENT CROSS SECTION AND SLOTTED OR DRILLED FOR REINFORCEMENT BARS. PLACE THE CONCRETE BEHIND THE BOARD AND INSERT THE REINFORCEMENT BARS. CONSOLIDATE AND FINISH THE CONCRETE BEHIND THE HEADER BOARD.
- ④ PROVIDE DOWEL BARS IN ACCORDANCE WITH SPEC. 3302 AND THE CONTRACT.
- ⑤ DISTANCE EQUAL TO OR LESS THAN THE DESIGNED CONTRACTION JOINT SPACING IN ACCORDANCE WITH THE CONTRACT.
- ⑥ PLACE DOWEL BAR BASKET AT DESIRED HEADER LOCATION. SET HEADER BOARD SHAPED TO PAVEMENT CROSS SECTION ABOVE AND BELOW THE DOWELS. PAVE PAST THE HEADER LOCATION AND FINISH CONCRETE BEHIND THE HEADER BOARD. THOROUGHLY REMOVE ALL CONCRETE FROM THE EXPOSED DOWELS.
- ⑦ PLACE DOWEL BAR BASKET AT DESIRED HEADER LOCATION. SET HEADER BOARD SHAPED TO PAVEMENT CROSS SECTION ABOVE AND BELOW THE DOWELS. PLACE, CONSOLIDATE, AND FINISH THE CONCRETE BEHIND THE HEADER BOARD.
- ⑧ DRILL AND GROUT 18" LONG DOWEL OR REINFORCEMENT BARS SPACED AT 12" ON CENTER AT A DEPTH OF  $\frac{1}{2} \pm 1"$ . DRILL THE HOLE  $\frac{1}{8}"$  GREATER THAN THE NOMINAL OUTSIDE DIAMETER OF THE BAR BEING PLACED TO A DEPTH OF 9". INJECT A MnDOT-APPROVED EPOXY OR NON-SHRINK GROUT IN THE BACK OF THE DRILL HOLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
  - FOR DOWEL BAR HEADERS, USE DOWEL BARS HAVING A DIAMETER IN ACCORDANCE WITH SPEC. 3302 AND THE CONTRACT.
  - FOR REINFORCEMENT BAR HEADERS, USE NO. 4 REINFORCEMENT BARS.
- ⑨ PROVIDE NO. 7 REINFORCEMENT BARS, 5' LONG, SPACED 18" ON CENTER AT DEPTH OF  $\frac{1}{2} \pm 1"$ .
- ⑩ USE PERMANENT HEADER WHEN LONG SECTIONS OF CONCRETE (400' OR GREATER) ABUT BITUMINOUS. CONTACT THE CONCRETE UNIT WHEN FUTURE CONCRETE IS BEING CONSTRUCTED ADJACENT TO AN EXISTING PERMANENT HEADER.
- ⑪ USE TERMINAL HEADER WHEN SHORT SECTIONS OF CONCRETE (LESS THAN 400') ABUT BITUMINOUS (ON SIDE STREETS, FOR EXAMPLE).

LEAD EXPERT OFFICE  
CURT TURGEON  
DIRECTOR  
OFFICE OF MATERIALS & ROAD RESEARCH

PAVEMENT JOINTS  
HEADERS

APPROVED:  
01-30-2025

*Thomas Styrbicki*  
THOMAS STYRBICKI  
STATE DESIGN ENGINEER

STANDARD PLAN  
5-297.221

4 OF 5

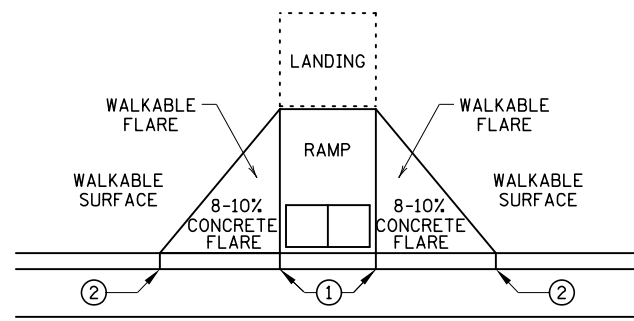


Exhibit C

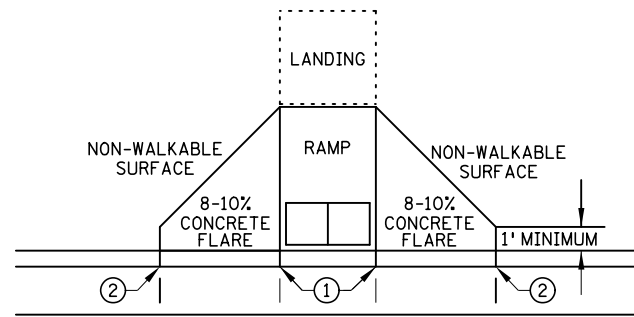
STANDARD PLANS

SP 4210-61  
(TH 68)

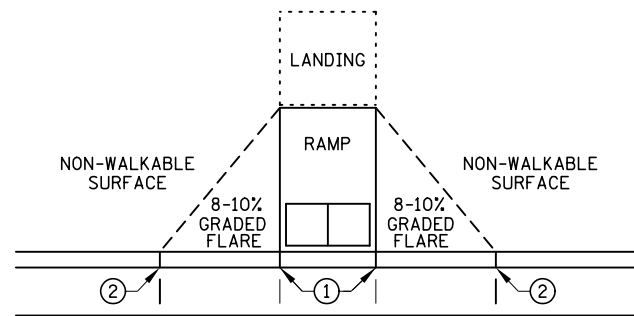
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TOTAL SHEETS 23



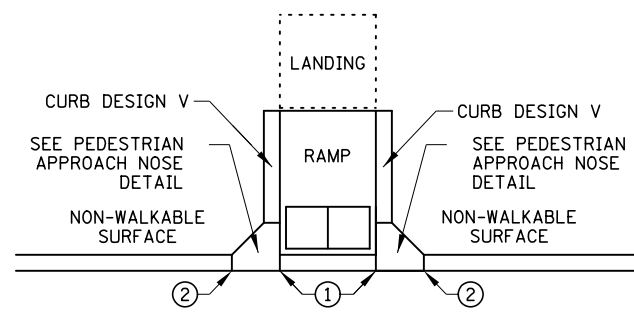
PAVED FLARES  
ADJACENT TO WALKABLE SURFACE



PAVED FLARES  
ADJACENT TO NON-WALKABLE SURFACE

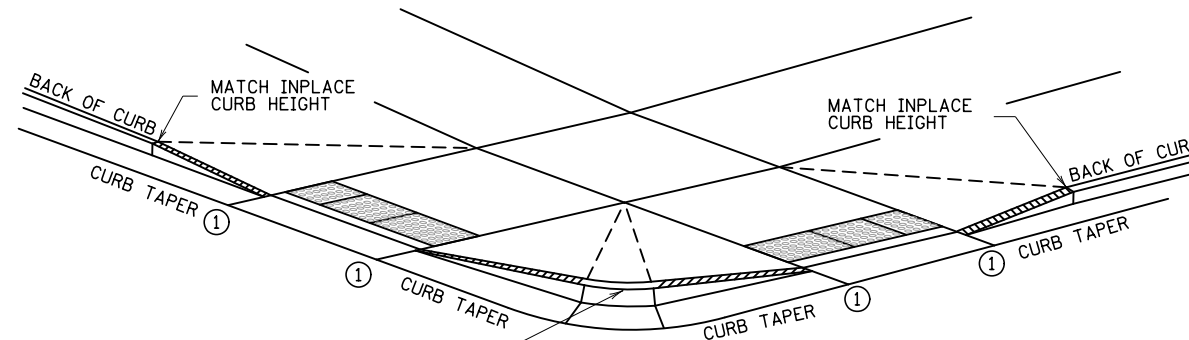


GRADED FLARES



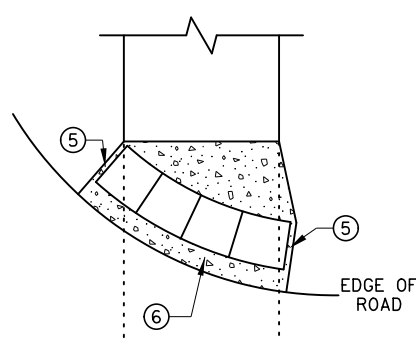
RETURNED CURB ④

TYPICAL SIDE TREATMENT OPTIONS ③ ⑩

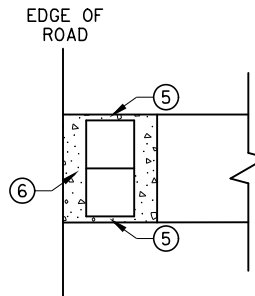


3" MINIMUM CURB HEIGHT, 4" PREFERRED  
(MEASURED AT FRONT FACE OF CURB)  
FOR A MIN. 6" LENGTH (MEASURED ALONG FLOW LINE)

DETECTABLE EDGE WITH CURB AND GUTTER ⑦

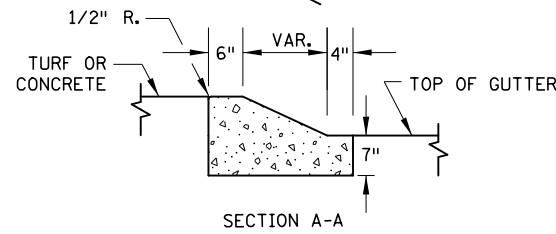
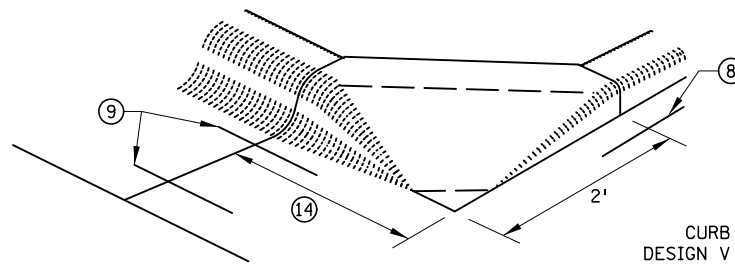


RADIAL DETECTABLE WARNING

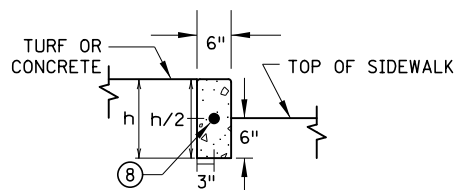


RECTANGULAR DETECTABLE WARNING

DETECTABLE EDGE WITHOUT CURB AND GUTTER

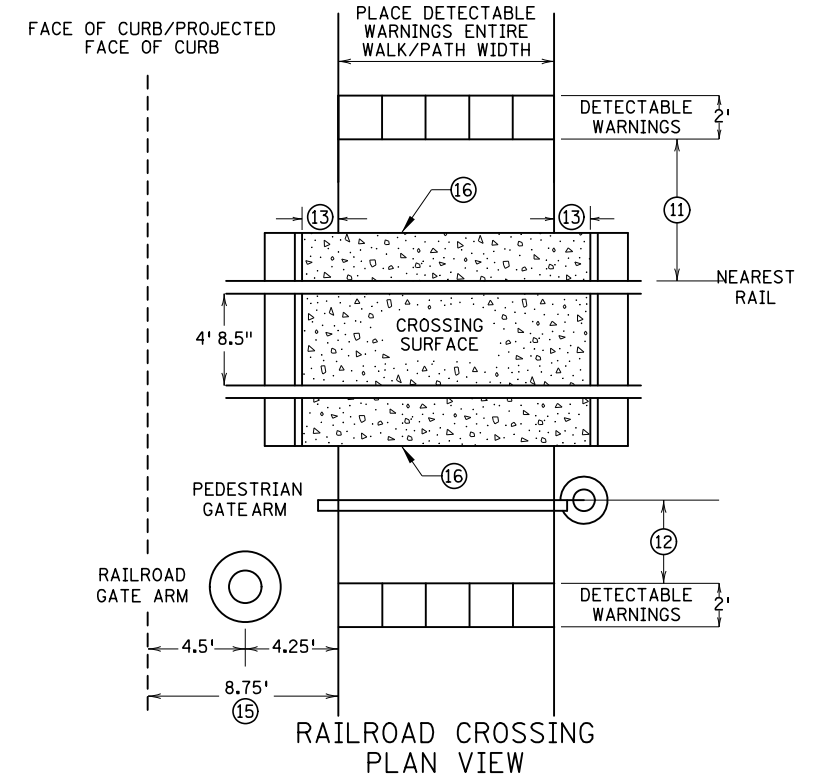


SECTION A-A



SECTION B-B

PEDESTRIAN APPROACH NOSE DETAIL (FOR RETURNED CURB SIDE TREATMENT)



RAILROAD CROSSING PLAN VIEW

NOTES:

- INTERMEDIATE CURB HEIGHTS TAPER SHALL RISE AT 8-10% TO A MINIMUM 3 INCH CURB HEIGHT. INCREASE CURB TAPER LENGTH AT LESS THAN 8% OR REDUCE INTERMEDIATE CURB HEIGHT TO 2+ INCHES IF NECESSARY TO MATCH ADJACENT BOULEVARD OR SIDEWALK GRADES.
- SEE STANDARD PLATE 7038 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.
- A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP WITHOUT RAISED OBSTACLES THAT COULD MISTAKENLY BE TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.
- CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 8' LONG MEASURED ALONG THE RAMPS FROM THE BACK OF CURB.
- ① 0" CURB HEIGHT. SEE INSET A ON SHEET 3 OF 6.
- ② FULL CURB HEIGHT.
- ③ SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALK, ADJACENT PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.
- ④ TYPICALLY USED FOR MEDIANS AND ISLANDS.
- ⑤ WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 3" MAX. BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.
- ⑥ IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS, DETECTABLE WARNINGS SHALL BE PLACED 1' FROM THE EDGE OF BITUMINOUS ROADWAY AND/OR BITUMINOUS SHARED-USE PATH TO PROVIDE VISUAL CONTRAST.
- ⑦ ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNINGS WHEREVER THERE IS ZERO-INCH HIGH CURB. CURB TAPERS ARE CONSIDERED A DETECTABLE EDGE WHEN THE TAPER STARTS WITHIN 3" OF THE EDGE OF THE DETECTABLE WARNINGS, AND UNIFORMLY RISES TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TAPER AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.
- ⑧ DRILL AND GROUT 1 - NO. 4 12" LONG REINFORCEMENT BAR (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE V CURB.
- ⑨ DRILL AND GROUT 2 - NO. 4 12" LONG REINFORCEMENT BARS (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE CURB AND GUTTER.
- ⑩ SIDE TREATMENT EXAMPLES SHOWN ARE WHEN THE INITIAL LANDING IS APPROXIMATELY LEVEL WITH THE FULL HEIGHT CURB (I.E. 6' LONG RAMP FOR 6" HIGH CURB). WHEN THE INITIAL LANDING IS MORE THAN 1" BELOW FULL HEIGHT CURB REFER TO SHEETS 1 & 2 TO MODIFY THE CURB HEIGHT TAPERS AND MAINTAIN POSITIVE BOULEVARD DRAINAGE. CONSTRUCT THESE TAPERS AT 0"-3" AT 8-10%, THEN LESS THAN 5% FROM 3" CURB TO FULL CURB HEIGHT.
- ⑪ NEAREST EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 12' MINIMUM TO 15' MAXIMUM FROM THE NEAREST RAIL. FOR SKEWED RAILWAYS IN NO INSTANCE SHALL THE DETECTABLE WARNING BE CLOSER THAN 12' MEASURED PERPENDICULAR TO THE NEAREST RAIL.
- ⑫ WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL, 2' FROM THE APPROACHING SIDE OF THE GATE ARM. THIS CRITERIA GOVERNS OVER NOTE ⑪.
- ⑬ CROSSING SURFACE SHALL EXTEND 2' MINIMUM PAST THE OUTSIDE EDGE OF WALK OR SHARED-USE PATH.
- ⑭ 3' FOR MEDIANS AND SPLITTER ISLANDS. NOSE CAN BE REDUCED TO 2' ON FREE RIGHT ISLANDS.
- ⑮ SIDEWALK TO BE PLACED 8.75' MIN. FROM THE FACE OF CURB/PROJECTED FACE OF CURB. THIS ENSURES MIN. CLEARANCE BETWEEN THE SIDEWALK AND GATE ARM COUNTERWEIGHT SUPPORTS.
- ⑯ CONSTRUCT WITH EXPANSION MATERIAL PER MNDOT SPECIFICATION 3702 TYPES A-E. EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE.

13-MAR-2025

PLOTTED/REVISED:

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PLOT NAME: d421061\_155spr-04.dgn  
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LEAD EXPERT OFFICE  
JEFFREY PERKINS  
OPERATIONS DIVISION

PEDESTRIAN CURB RAMP DETAILS

APPROVED: 11-04-2021  
REVISED:

*Thomas Styrbicki*  
THOMAS STYRBICKI  
STATE DESIGN ENGINEER

STANDARD PLAN  
5-297.250

4 OF 6



Exhibit C

STANDARD PLANS

SP 4210-61

SHEET NO 13

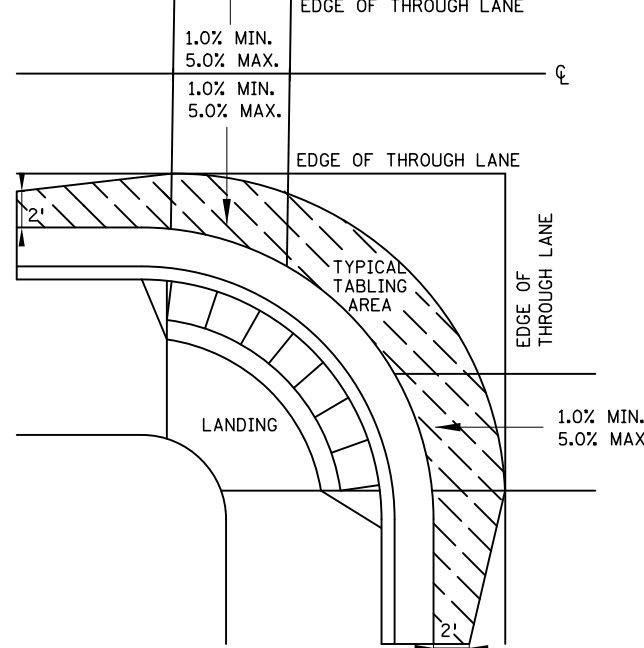
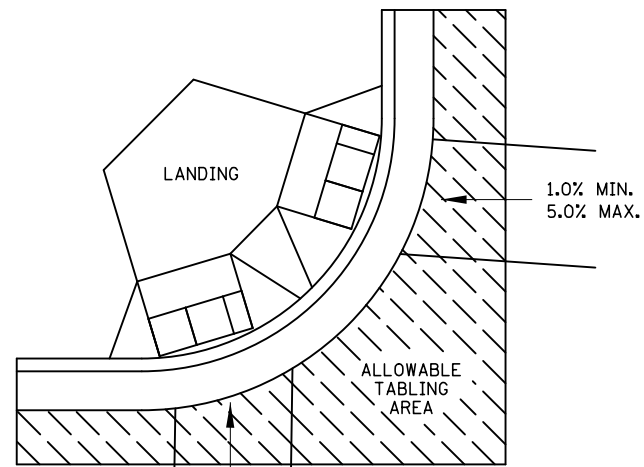
(TH 68)

TOTAL SHEETS 23

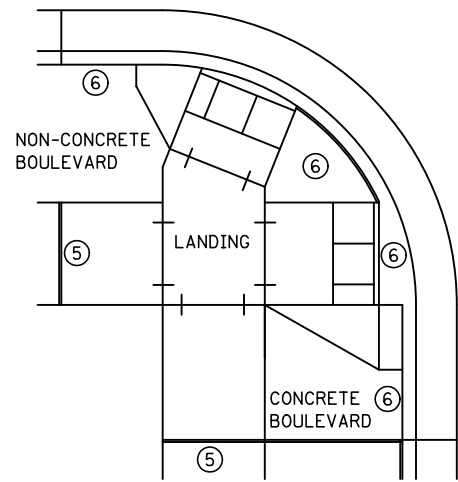
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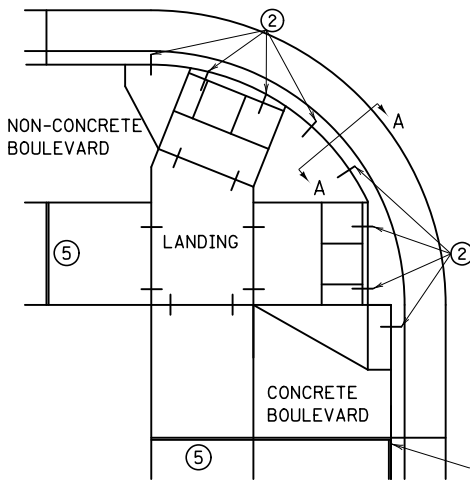
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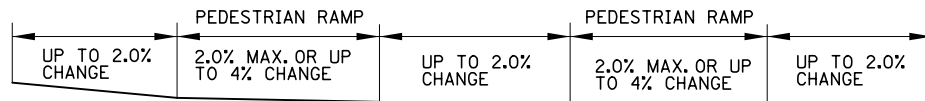
CURB LINE AND ROAD CROSSING ADJUSTMENTS



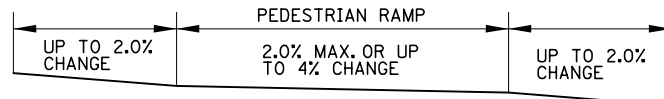
EXPANSION MATERIAL PLACEMENT FOR CONCRETE ROADWAYS



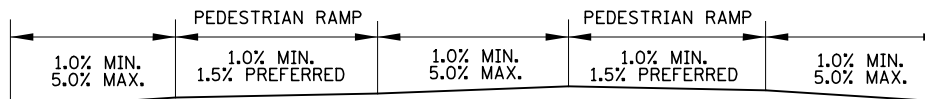
CURB LINE REINFORCEMENT ④ PLACEMENT ON BITUMINOUS ROADWAYS



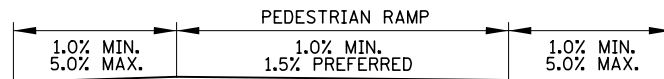
FLOW LINE PROFILE "TABLE" - TWIN PERPENDICULARS



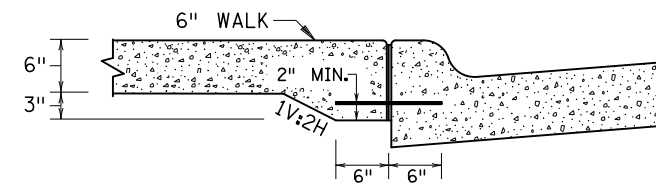
FLOW LINE PROFILE "TABLE" - FAN



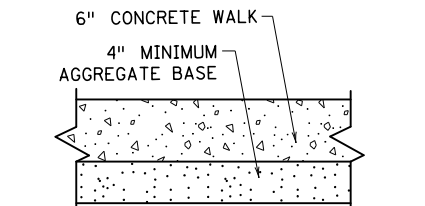
FLOW LINE PROFILE RAISE - TWIN PERPENDICULARS



FLOW LINE PROFILE RAISE - FAN

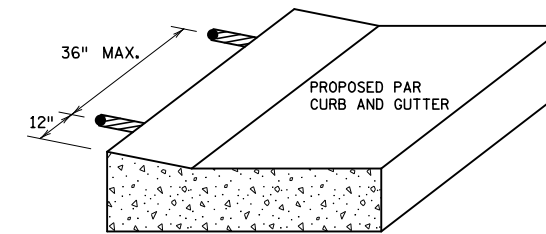


SECTION VIEW A-A THICKENED SECTION THROUGH CURB RAMP FLARES

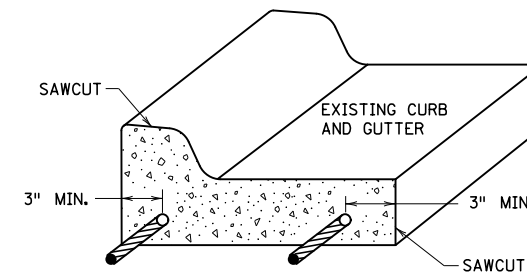


TYPICAL SIDEWALK SECTION WITHIN INTERSECTION CORNER

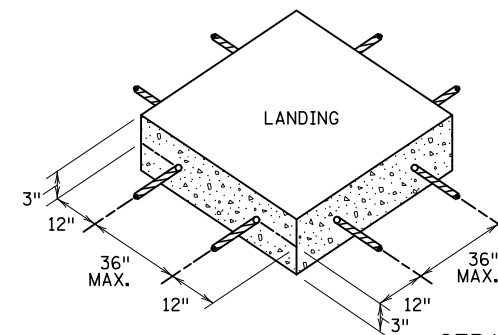
END SILL CURB AT TOP OF CURB RAMP AND DRIVEWAY FLARES.



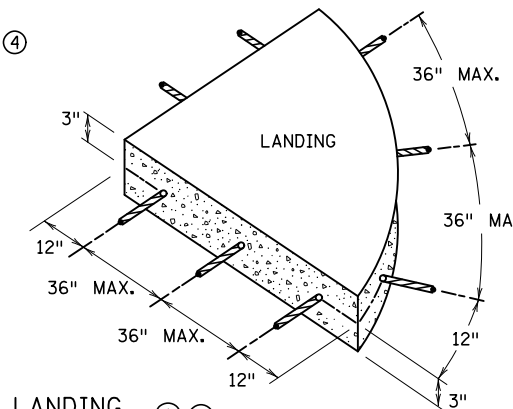
CURB RAMP REINFORCEMENT DETAILS ②④



CURB AND GUTTER REINFORCEMENT ③



SEPARATE LANDING POUR REINFORCEMENT ①②



GENERAL NOTES:

"TABLING" OF CROSSWALKS MEANS MAINTAINING LESS THAN 2% CROSS SLOPE WITHIN A CROSSWALK, IS REQUIRED WHEN A ROADWAY IS IN A STOP OR YIELD CONDITION AND THE PROJECT SCOPE ALLOWS.

RECONSTRUCTION PROJECTS: ON FULL PAVEMENT REPLACEMENT PROJECTS "TABLING" OF ENTIRE CROSSWALK SHALL OCCUR WHEN FEASIBLE.

MILL & OVERLAY PROJECTS: "TABLING" OF FLOW LINES, IN FRONT OF THE PEDESTRIAN RAMP, IS REQUIRED WHEN THE EXISTING FLOW LINE IS GREATER THAN 2%. WARPING OF THE BITUMINOUS PAVEMENT CAN NOT EXTEND INTO THE THROUGH LANE. TABLE THE FLOW LINE TO 2% OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:

- 1) 1.0% MIN. CROSS-SLOPE OF THE ROAD
- 2) 5.0% MAX. CROSS-SLOPE OF THE ROAD
- 3) "TABLE" FLOW LINE UP TO 4% CHANGE FROM EXISTING SLOPE IN FRONT OF PEDESTRIAN RAMP
- 4) UP TO 2% CHANGE IN FLOW LINE FROM EXISTING SLOPE BEYOND THE PEDESTRIAN CURB RAMP

STAND-ALONE ADA RETROFITS: FOLLOW MILL & OVERLAY CRITERIA ABOVE HOWEVER ALL PAVEMENT WARPING IS DONE WITH BITUMINOUS PATCHING ON BITUMINOUS ROADWAYS AND FULL-DEPTH APRON REPLACEMENT ON CONCRETE ROADWAYS.

RAISING OF CURB LINES SHOULD OCCUR IN VERTICALLY CONSTRAINED AREAS. RAISE THE CURB LINES ENOUGH TO ALLOW COMPLIANT RAMPS OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:

- 1) 1.0% MIN. AND 5.0% MAXIMUM CROSS-SLOPE OF THE ROAD
- 2) 1.0% MIN. FLOW LINE (ON EITHER SIDE OF PEDESTRIAN RAMP) TO MAINTAIN POSITIVE DRAINAGE
- 3) 5.0% RECOMMENDED MAX. FLOW LINE
- 4) LONGITUDINAL THROUGH LANE ROADWAY TAPERS SHOULD BE 1" VERTICAL PER 15' HORIZONTAL

NOTES:

- ① TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE (RUNNING SLOPE GREATER THAN 2%) SHALL BE FORMED AND PLACED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET FOR ALL SEPARATELY POURED INITIAL LANDINGS.
- ② DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS (EPOXY COATED) AT 36" MAXIMUM CENTER TO CENTER MINIMUM 12" SPACING FROM CONSTRUCTION JOINTS. BARS TO BE ADJUSTED TO MATCH RAMP GRADE. BARS TO BE PAID BY EACH.
- ③ DRILL AND GROUT 2 - NO. 4 X 12" LONG (6" EMBEDDED) REINFORCEMENT BARS (EPOXY COATED). REINFORCEMENT REQUIRED FOR ALL CONSTRUCTION JOINTS. BARS TO BE PAID BY EACH.
- ④ THIS CURB LINE REINFORCEMENT DETAIL SHALL BE USED ON BITUMINOUS ROADWAYS. FOR CONCRETE ROADWAYS, SEE NOTE 6.
- ⑤ CONSTRUCT WITH EXPANSION MATERIAL PER MNDOT SPECIFICATION 3702 TYPES A-E. EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE.
- ⑥ USE AN APPROVED TYPE F (1/4 INCH THICK) SEPARATION MATERIAL. SEPARATION MATERIAL SHALL MATCH FULL HEIGHT DIMENSION OF ADJACENT CONCRETE.

LEAD EXPERT OFFICE  
 JEFFREY PERKINS  
 OPERATIONS DIVISION

PEDESTRIAN CURB RAMP DETAILS

APPROVED: 11-04-2021  
 REVISED:

*Tom Styrbicki*  
 THOMAS STYRBICKI  
 STATE DESIGN ENGINEER

STANDARD PLAN  
 5-297.250

6 OF 6



Exhibit C

STANDARD PLANS

SP 4201-61

SHEET NO 14

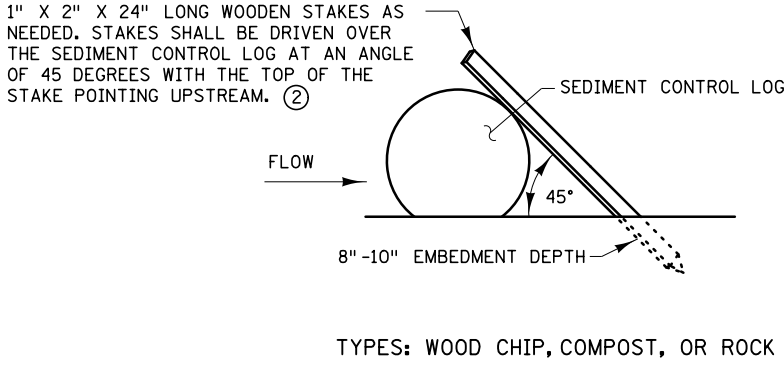
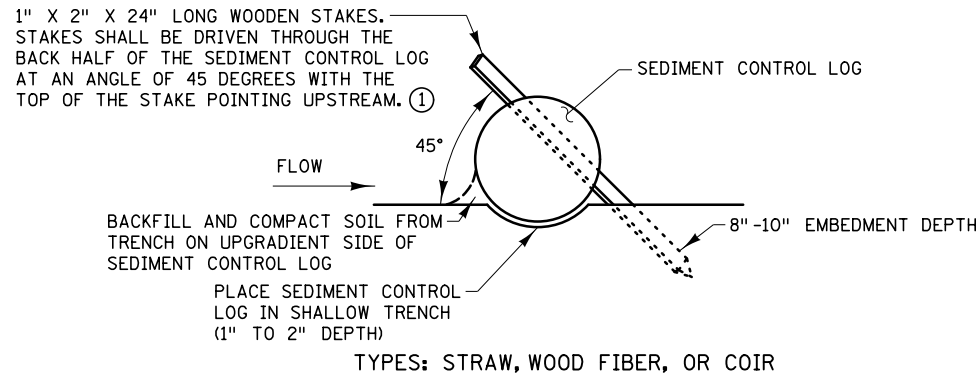
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TOTAL SHEETS 23

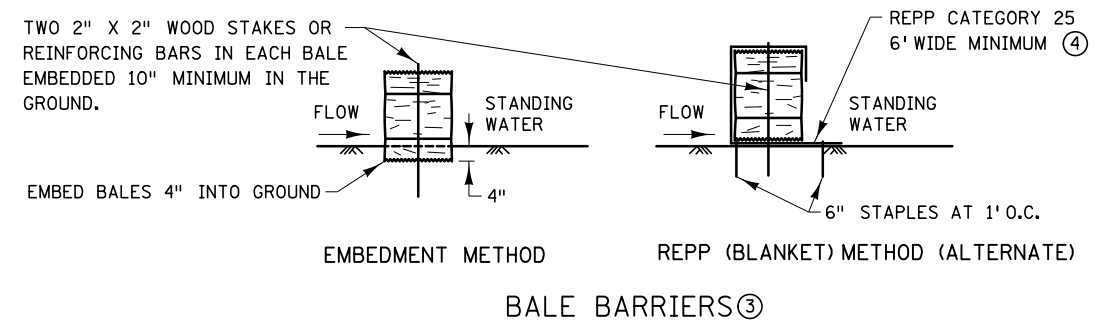
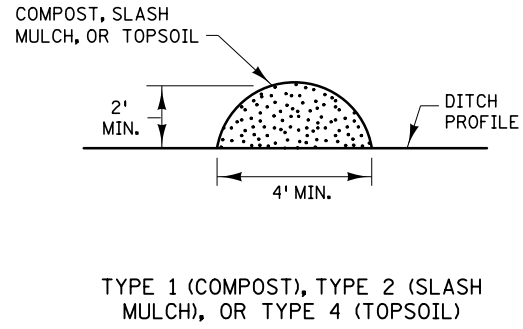
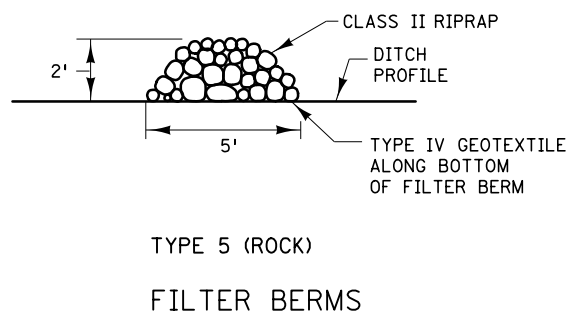
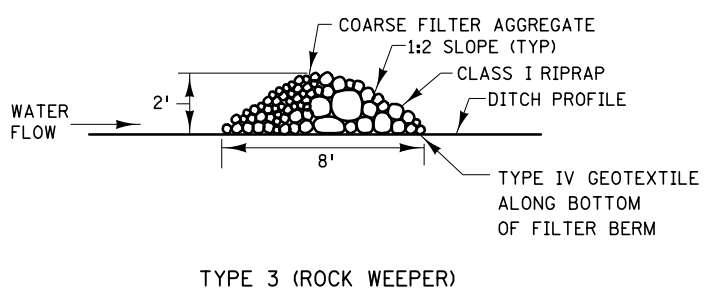
13-MAR-2025

PLOTTED/REVISED:

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SEDIMENT CONTROL LOGS



NOTES:

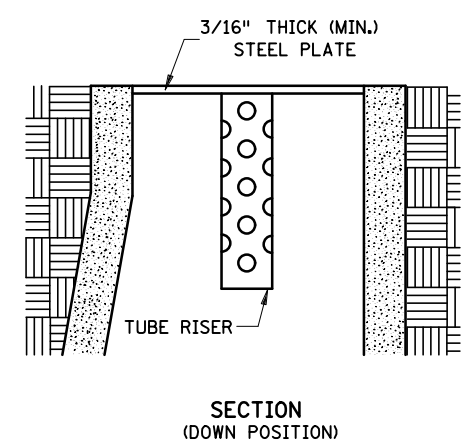
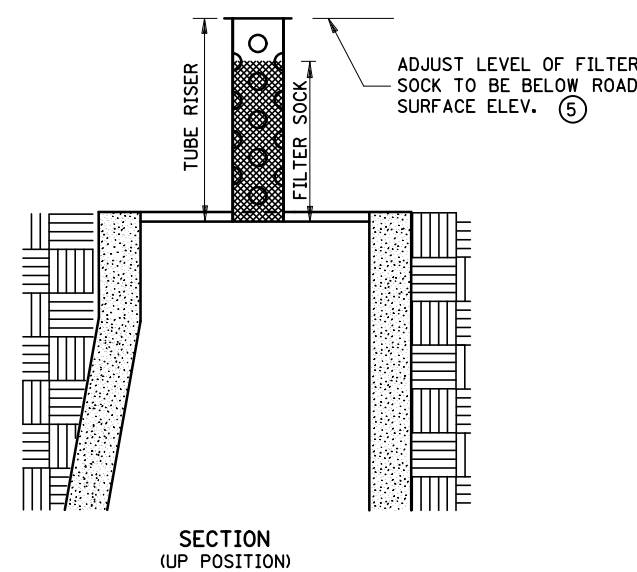
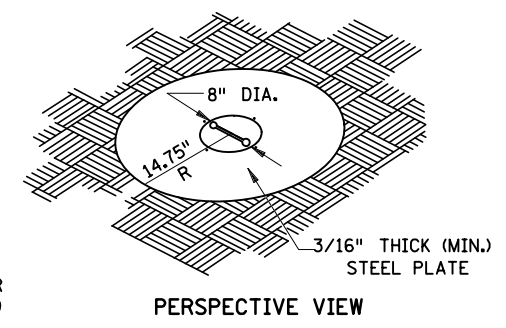
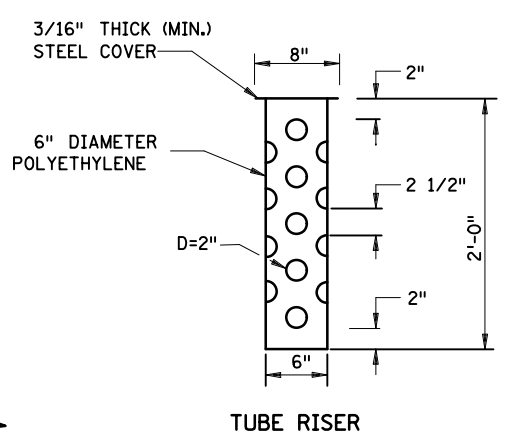
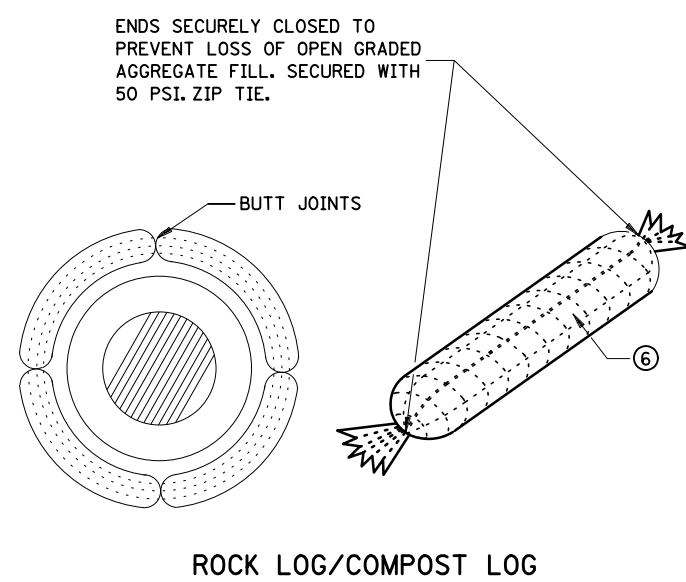
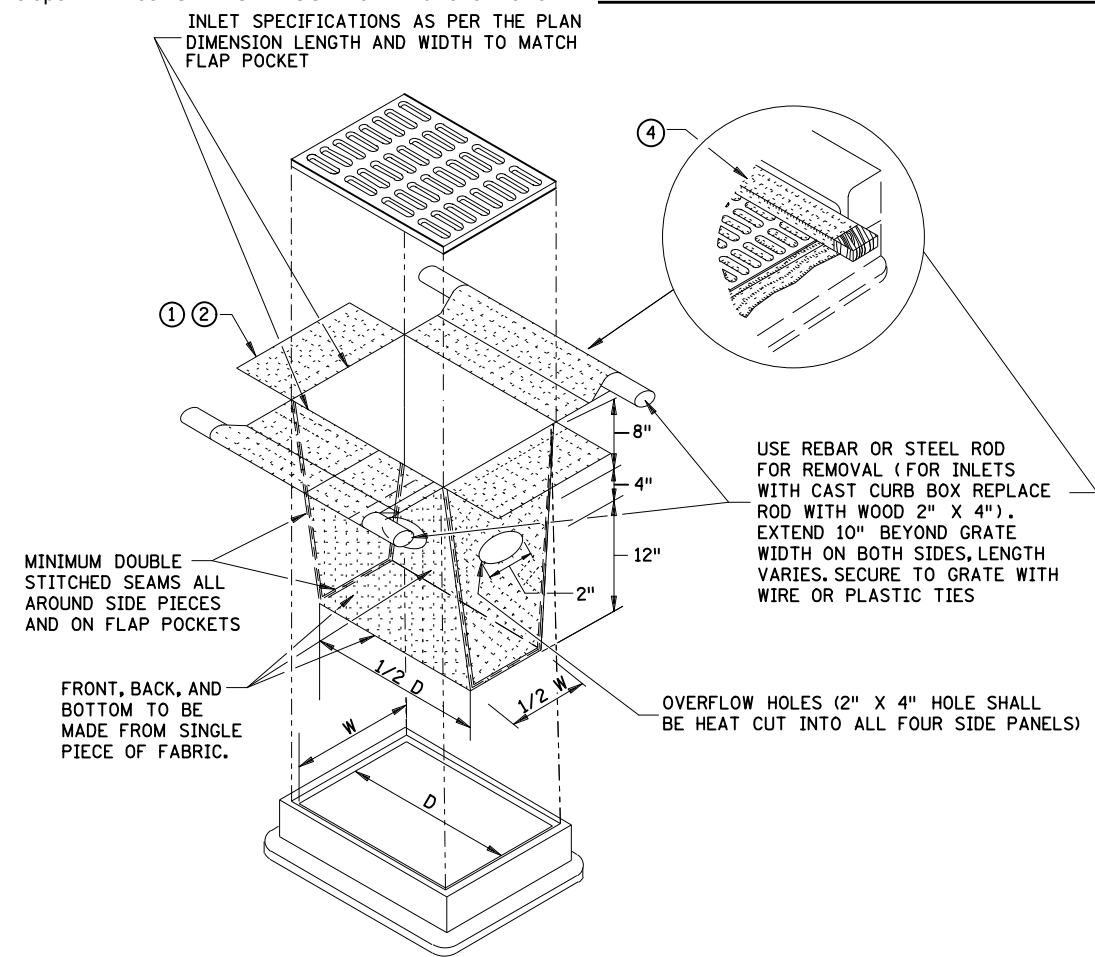
- REPP = ROLLED EROSION PREVENTION PRODUCT.
- SEE SPECS. 2573, 3149, 3874, 3882, 3885, 3886, AND 3897.
- ① SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1' FOR DITCH CHECKS OR 2' FOR OTHER APPLICATIONS.
- ② PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.
- ③ TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS (6" MAXIMUM DEPTH). BALES SHALL CONSIST OF TYPE 1 MULCH OF APPROXIMATELY 14" X 18" X 36" LONG. BALES SHALL BE PLACED ON EDGE AND BUTTED TIGHT TO ADJACENT BALES.
- ④ INSTEAD OF TRENCHING, PLACE BALE ON THE REPP (BLANKET) AND WRAP BLANKET AROUND THE BALE. PLACE STAKE THROUGH BALE AND BLANKET.

LEAD EXPERT OFFICE MARNI KARNOWSKI CHIEF ENVIRONMENTAL OFFICER OFFICE OF ENVIRONMENTAL STEWARDSHIP	TEMPORARY SEDIMENT CONTROL FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS		APPROVED: 01-08-2020 REVISED:	 THOMAS STYRBICKI STATE DESIGN ENGINEER	STANDARD PLAN 5-297.405	2 OF 8
					SP 4210-61 (TH 68)	SHEET NO TOTAL SHEETS

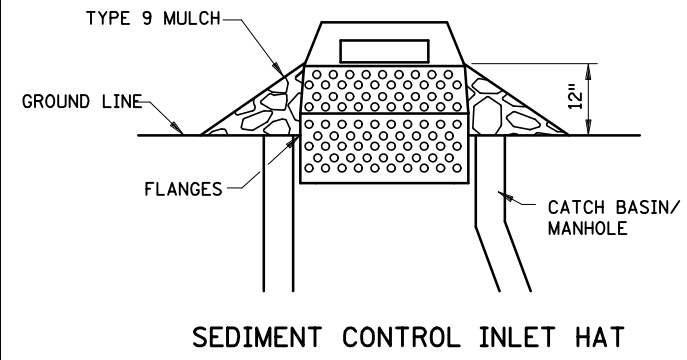
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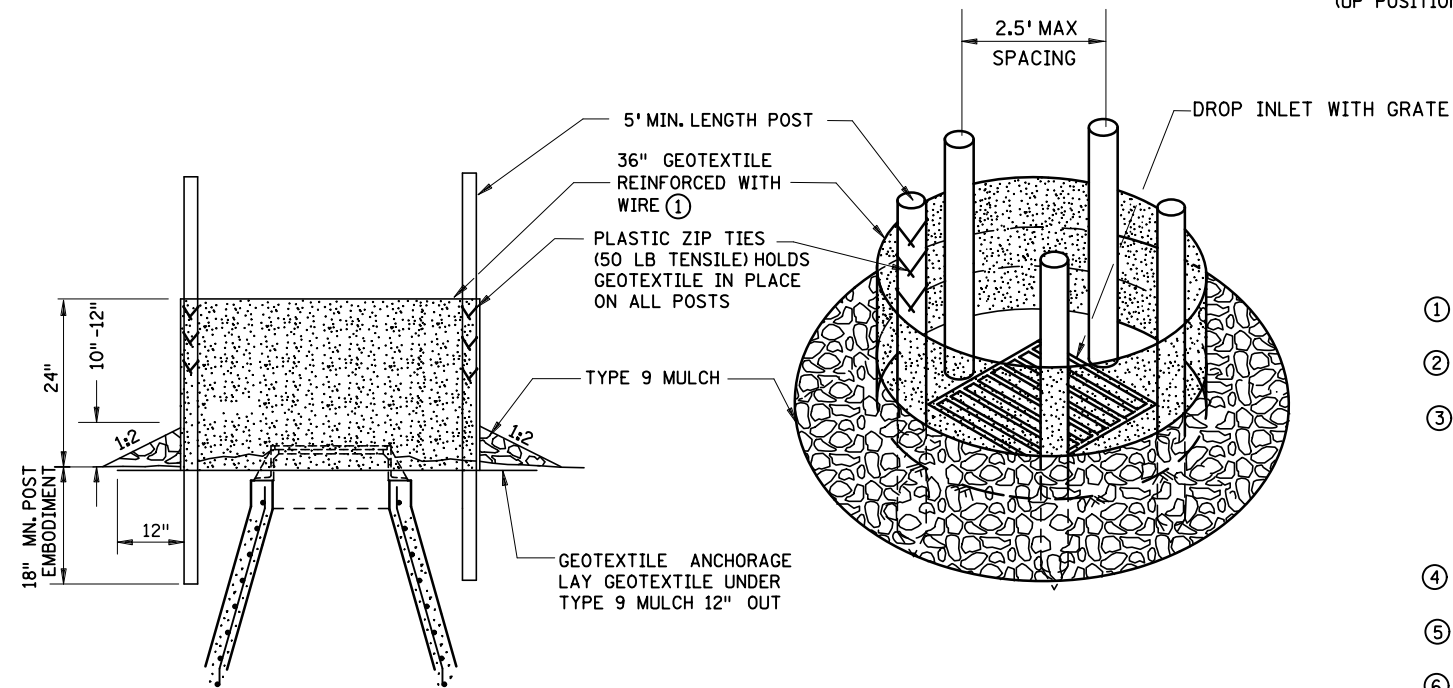
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**FILTER BAG INSERT ③**  
 (CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX)



NOTE:  
 THE SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING, FLANGES AND A LID/COVER.



**SILT FENCE RING AND ROCK FILTER BERM**  
 USE WHERE INLET DRAINS IN AN AREA WITH SLOPES AT 1:3 OR LESS

**POP-UP HEAD**

- NOTES:**  
 SEE SPECS. 2573, 3137, & 3886.
- DEVICES MUST BE ADJUSTED ACCORDINGLY AS TO NOT CAUSE FLOODING ON ROADWAY THAT WOULD IMPEED TRAFFIC FLOW.
- ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886.
  - FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
  - INSTALLATION NOTES:  
 DO NOT PLACE FILTER BAG INSERT IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. THE PLACED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE OF 3 INCHES BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES. WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCH SIDE CLEARANCE.
  - FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH OR USE A ROCK SOCK OR SAND BAGS IN PLACE OF THE FLAP POCKETS.
  - SOCK HEIGHT MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY.
  - GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER. SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A HEAT BONDED SEAM (OR APPROVED EQUIVALENT). FILL ROCK LOG WITH OPEN GRADED AGGREGATE CONSISTING OF SOUND DURABLE PARTICLES OF COARSE AGGREGATE CONFORMING TO SPEC. 3137 TABLE 3137-1; CA-3 GRADATION.

LEAD EXPERT OFFICE LYNN CLARKOWSKI CHIEF ENVIRONMENTAL OFFICER OFFICE OF ENVIRONMENTAL STEWARDSHIP	TEMPORARY SEDIMENT CONTROL STORM DRAIN INLET PROTECTION		APPROVED: 02-28-2017 REVISED:	 THOMAS STYRBICKI STATE DESIGN ENGINEER	STANDARD PLAN 5-297.405	4 OF 8
					SP 4201-61 (TH 14)	SHEET NO TOTAL SHEETS



Exhibit C

STANDARD PLANS

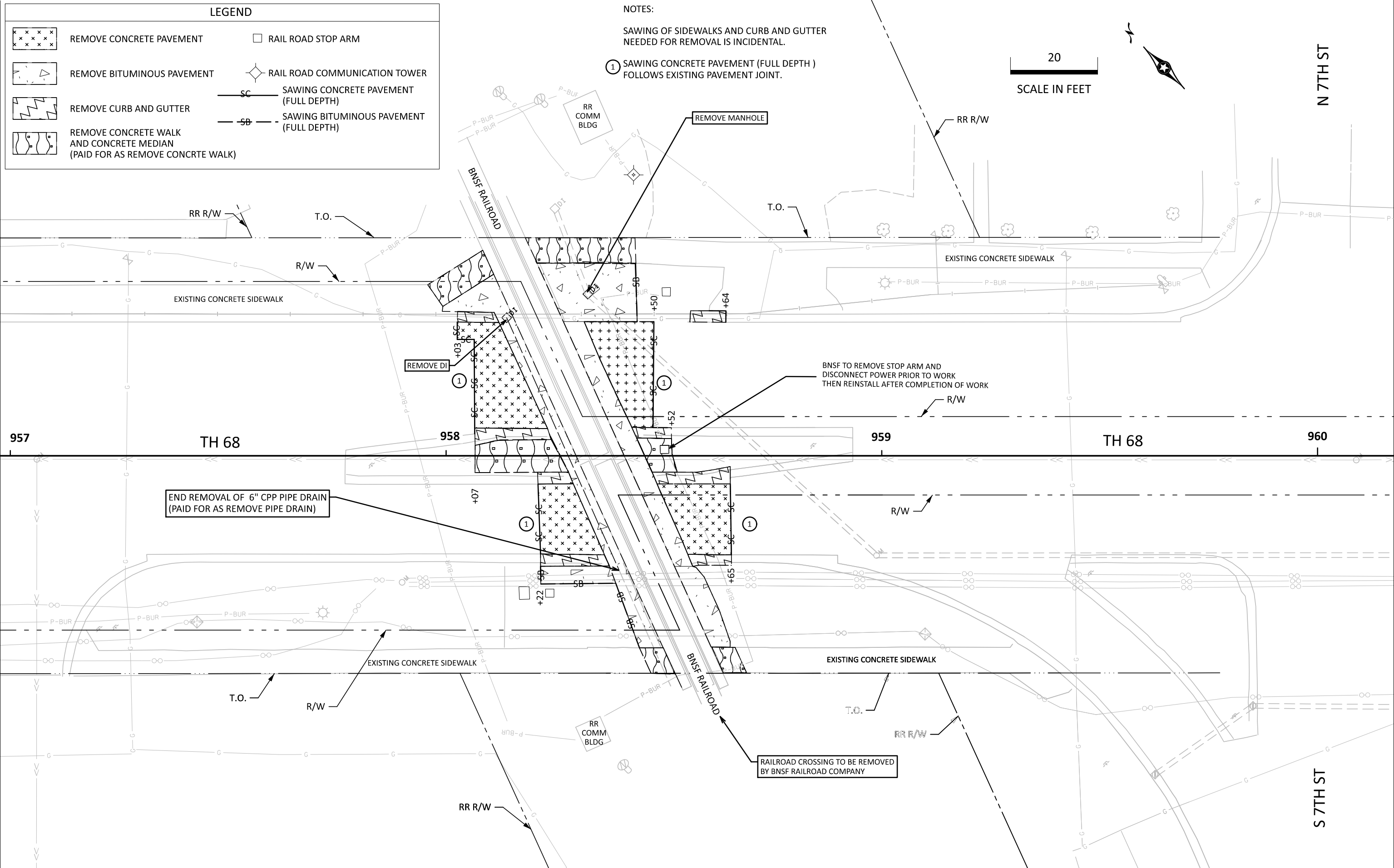
**LEGEND**

	REMOVE CONCRETE PAVEMENT		RAIL ROAD STOP ARM
	REMOVE BITUMINOUS PAVEMENT		RAIL ROAD COMMUNICATION TOWER
	REMOVE CURB AND GUTTER		SAWING CONCRETE PAVEMENT (FULL DEPTH)
	REMOVE CONCRETE WALK AND CONCRETE MEDIAN (PAID FOR AS REMOVE CONCRTE WALK)		SAWING BITUMINOUS PAVEMENT (FULL DEPTH)









**NOTES:**  
 SAWING OF SIDEWALKS AND CURB AND GUTTER NEEDED FOR REMOVAL IS INCIDENTAL.  
 ① SAWING CONCRETE PAVEMENT (FULL DEPTH) FOLLOWS EXISTING PAVEMENT JOINT.

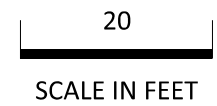


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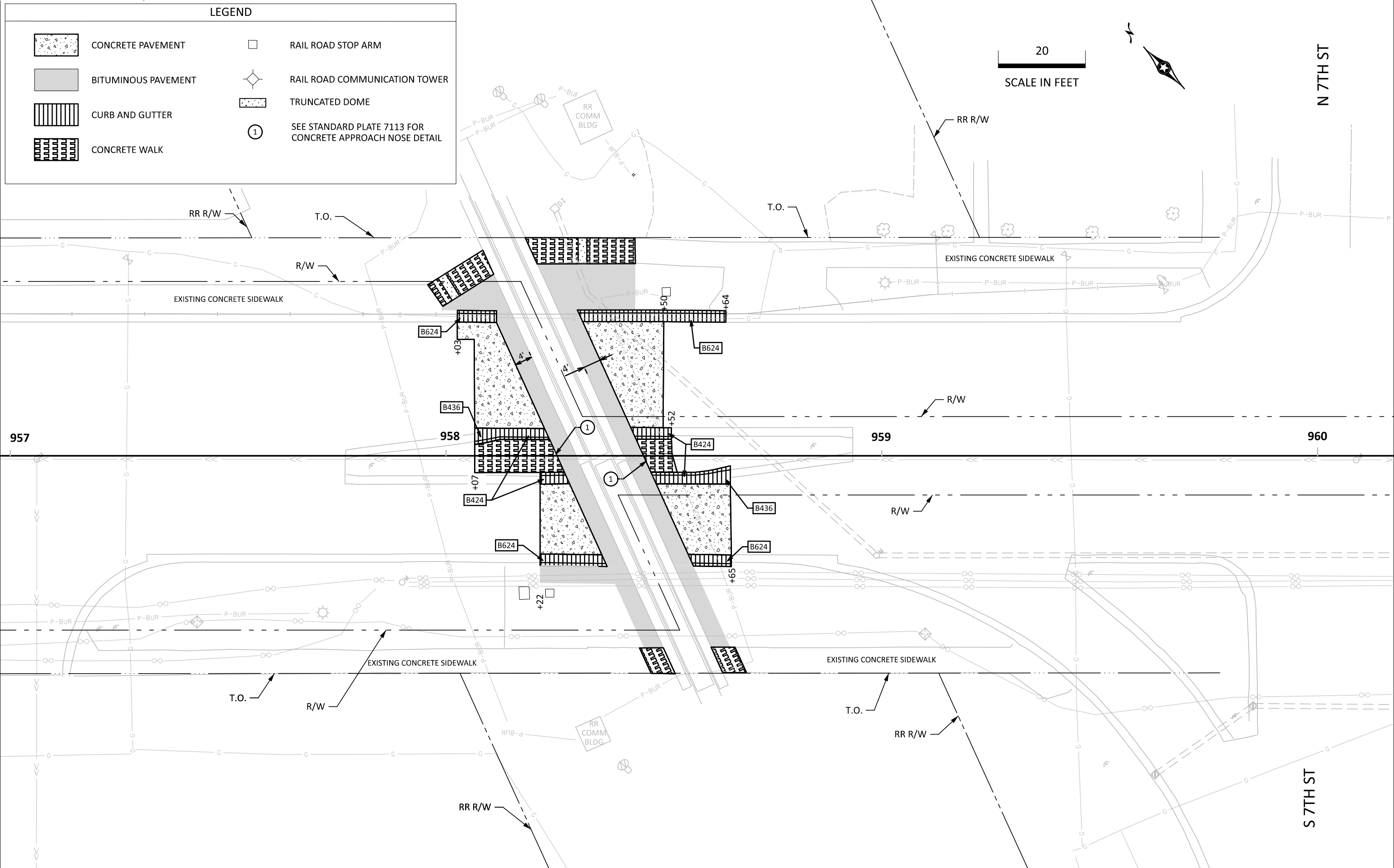


LEGEND

-  CONCRETE PAVEMENT
-  BITUMINOUS PAVEMENT
-  CURB AND GUTTER
-  CONCRETE WALK
-  RAIL ROAD STOP ARM
-  RAIL ROAD COMMUNICATION TOWER
-  TRUNCATED DOME
-  SEE STANDARD PLATE 7113 FOR CONCRETE APPROACH NOSE DETAIL



13-MAR-2025  
 PLOTTED/REVISED:  
 DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_185cpp.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\ConstructionPlan\421061\_185cpp.dgn



INPLACE RAILROAD CONCRETE CROSSING PANEL	
LOC.	ELEV.
1	1165.84
2	1165.87
3	1165.91
4	1165.97
5	1165.97
6	1166.01
7	1165.99
8	1166.00

NOTE:  
PAVEMENT ELEVATIONS DESIGNED USING  
INPLACE RAILROAD CROSSING.  
ELEVATIONS MAY NEED TO BE ADJUSTED  
IN THE FIELD AFTER PLACEMENT OF NEW  
RAILROAD CROSSING.

LEGEND	
	DRILL AND GROUT DOWEL BAR (EPOXY COATED) SEE STANDARD PLAN 5-297.221
	SUPPLEMENTAL STEEL REQUIRED SEE ST. PLATE NO. 1070

20  
SCALE IN FEET

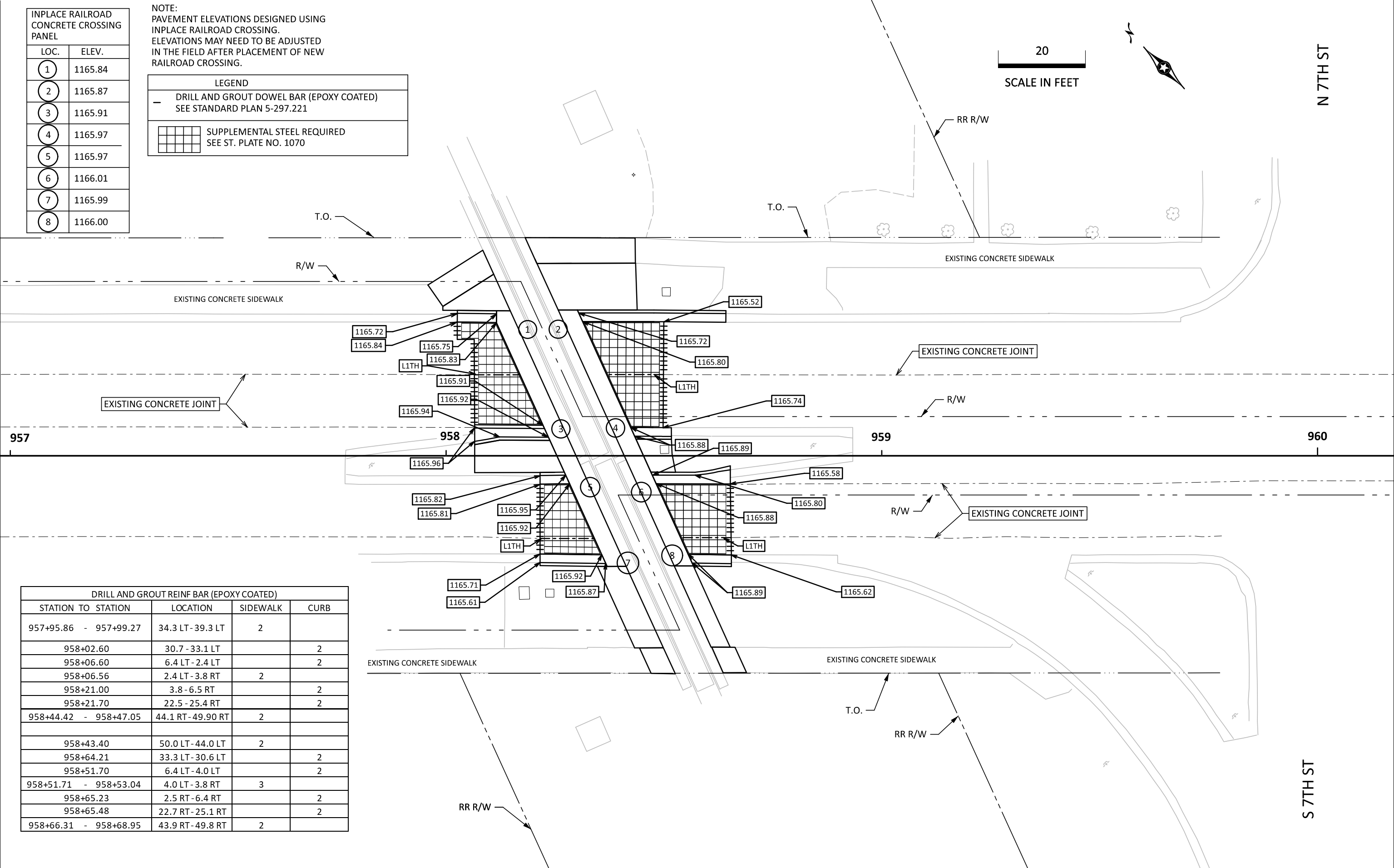


N 7TH ST

13-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
PLOT NAME: d421061\_195cpp.dgn  
PATH & FILENAME: Projects\D8\_WIL\068\421061\Design\PlanSheets\ConstructionPlan\d421061\_195cpp.dgn



DRILL AND GROUT REINF BAR (EPOXY COATED)			
STATION TO STATION	LOCATION	SIDEWALK	CURB
957+95.86 - 957+99.27	34.3 LT - 39.3 LT	2	
958+02.60	30.7 - 33.1 LT		2
958+06.60	6.4 LT - 2.4 LT		2
958+06.56	2.4 LT - 3.8 RT	2	
958+21.00	3.8 - 6.5 RT		2
958+21.70	22.5 - 25.4 RT		2
958+44.42 - 958+47.05	44.1 RT - 49.90 RT	2	
958+43.40	50.0 LT - 44.0 LT	2	
958+64.21	33.3 LT - 30.6 LT		2
958+51.70	6.4 LT - 4.0 LT		2
958+51.71 - 958+53.04	4.0 LT - 3.8 RT	3	
958+65.23	2.5 RT - 6.4 RT		2
958+65.48	22.7 RT - 25.1 RT		2
958+66.31 - 958+68.95	43.9 RT - 49.8 RT	2	

S 7TH ST



Exhibit C

*Wiphawit S.P. Br...*  
WIPHAWI S.P. BRUA  
LIC. NO. 62996  
DATE: 13-MAR-2025  
LICENSED PROFESSIONAL ENGINEER

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

CONCRETE PAVING PLAN

SP 4210-61  
(TH 68)

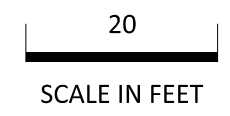
SHEET NO 19  
TOTAL SHEETS 23



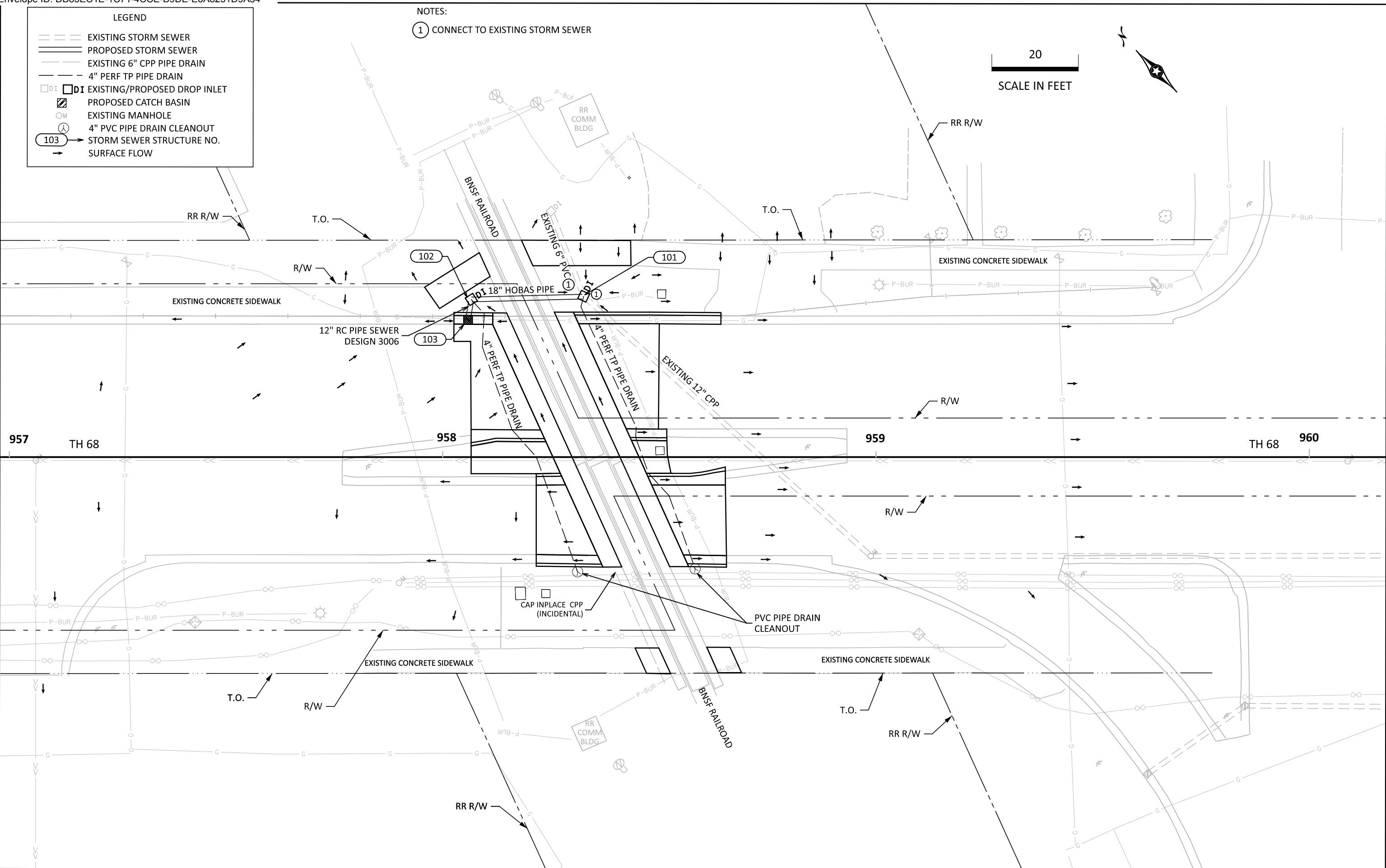
**LEGEND**

- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING 6" CPP PIPE DRAIN
- 4" PERF TP PIPE DRAIN
- EXISTING/PROPOSED DROP INLET
- PROPOSED CATCH BASIN
- EXISTING MANHOLE
- 4" PVC PIPE DRAIN CLEANOUT
- STORM SEWER STRUCTURE NO.
- SURFACE FLOW

**NOTES:**  
 ① CONNECT TO EXISTING STORM SEWER



13-MAR-2025  
 PLOTTED/REVISED:  
 DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_300hyd.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\42101061\Design\PlanSheets\StormSewer\d421061\_300hyd.dgn



DRAINAGE TABULATION																			H			
STRUCTURE NO.	STRUCTURE LOCATION		STRUCTURE OUTLET NO.	REMOVE MANHOLE (1)	REMOVE DROP INLET	REMOVE PIPE DRAIN	NEW STRUCTURE CONSTRUCTION					PIPE UPSTREAM INVERTS ELEVATION	PIPE DOWNSTREAM INVERT ELEVATION	PIPE SEWER			CONNECT TO EXISTING STORM SEWER (3)	PIPE SEWER			NOTES	
	STATION	OFFSET					INSTALL CASTING	INSTALL CATCH BASIN (6)	INSTALL MANHOLE (7)	STEPS REQUIRED (2)	TOP OF CASTING ELEVATION			FINE AGGREGATE BEDDING (CV)	INSTALL PIPE SEWER (5)	FINE FILTER AGGREGATE (CV)		4" PERF TP PIPE DRAIN (4)	4" PVC PIPE DRAIN CLEANOUT			
																				EACH		EACH
103	958+05.85	31.66 LT	102				1	1		N	1165.63	1162.13	1162.05	1	6				12" RC PIPE SEWER DESIGN 3006			
102	958+06.59	36.37 LT	101				1		1	Y	1165.80	1159.31	1159.23	9	26				18" HOBAS			
101	958+32.53	37.11 LT		1			1		1	Y	1164.88	1159.13						2				
	958+13.91	31.69 LT			1														6" X 6" FLOOR DRAIN			
	958+06.59 TO 958+39.55	43.74 LT TO 25.90 RT				63											5	69	1			
	958+32.53 TO 958+55.78	37.1 LT TO 24.5 RT															5	69	1			
<b>DRAINAGE TOTALS</b>							<b>1</b>	<b>1</b>	<b>63</b>						<b>10</b>	<b>32</b>		<b>2</b>	<b>10</b>	<b>138</b>	<b>2</b>	

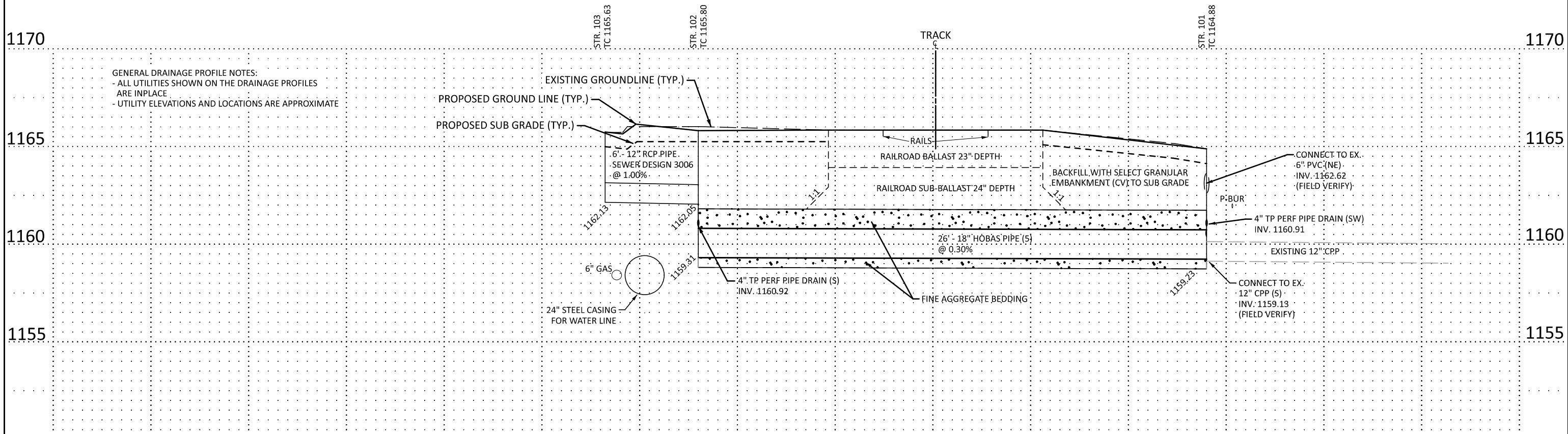
GENERAL NOTES:

STATION AND OFFSETS ARE TO CENTER OF STRUCTURE.  
 CASTING SUMP = 0.10 FT FOR CATCH BASIN CASTINGS AND 0.20 FT FOR DROP INLET CASTINGS.

CONSTRUCTION NOTES:

- (1) INCLUDES REMOVAL OF CASTING
- (2) STEPS REQUIRED WHEN DEPTH FROM TOP OF CASTING TO INVERT IS GREATER THAN 4FT.
- (3) BUILD OVER EXISTING PIPE OR CONNECT TO EXISTING PIPE. FIELD VERIFY.
- (4) INCLUDES BENDS (INCIDENTAL)
- (5) STRUCTURE 102 TO 101 FIELD CUT 18" HOBAS PIPE, CLASS (PN) 25 PSI, STIFFNESS (SN) 72 PSI, (INCIDENTAL).
- (6) DRAINAGE STRUCTURE DESIGN H, 3.5 LF
- (7) DRAINAGE STRUCTURE DESIGN 48-4020, STR. NO. 101 5.7 LF, STR NO 102 6.5 LF

CASTNG ASSEMBLY SUMMARY					
STRUCTURE NUMBER	ASSEMBLY	RING OR FRAME CASTING	CURB BOX	COVER OR GRATE CASTING	QUANTITY
103	B-9	805		816	1
102 & 101	M-2	700-7		721	2
<b>TOTAL</b>					<b>3</b>



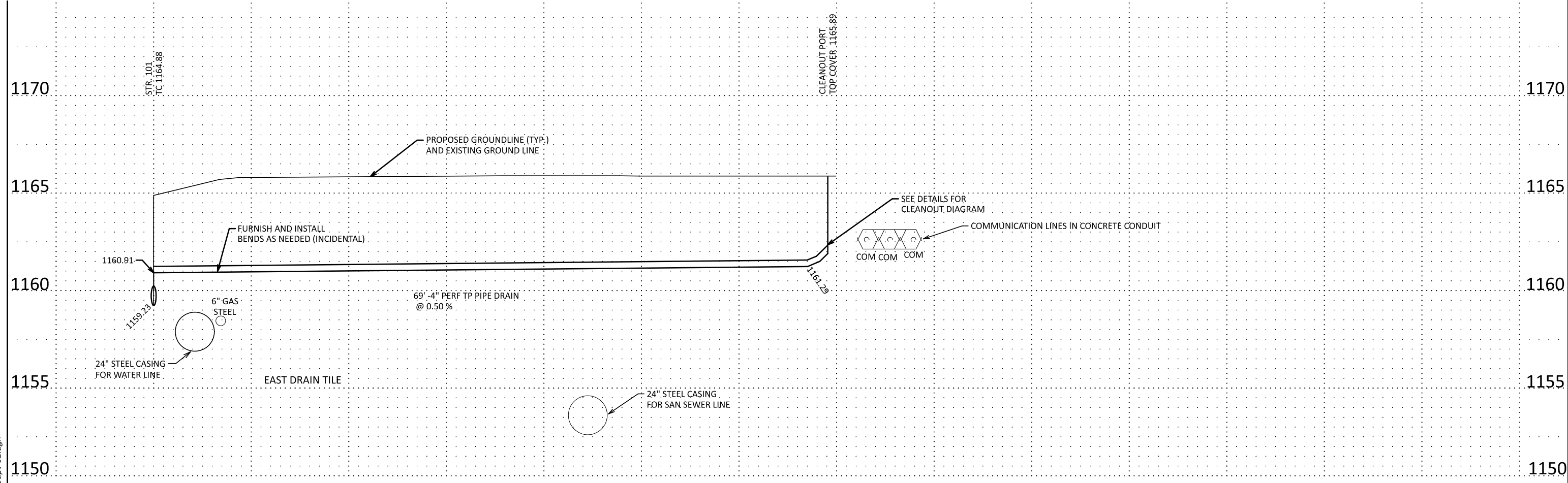
13-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_305dpt-01.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\421061\Design\PlanSheets\StormSewer\d421061\_305dpt-01.dgn

PLOTTED/REVISED: 13-MAR-2025

DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421061\_305dpt-02.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\421061\Design\PlanSheets\StormSewer\d421061\_305dpt-02.dgn



GENERAL DRAINAGE PROFILE NOTES:  
 - ALL UTILITIES SHOWN ON THE DRAINAGE PROFILES ARE IN PLACE  
 - UTILITY ELEVATIONS AND LOCATIONS ARE APPROXIMATE

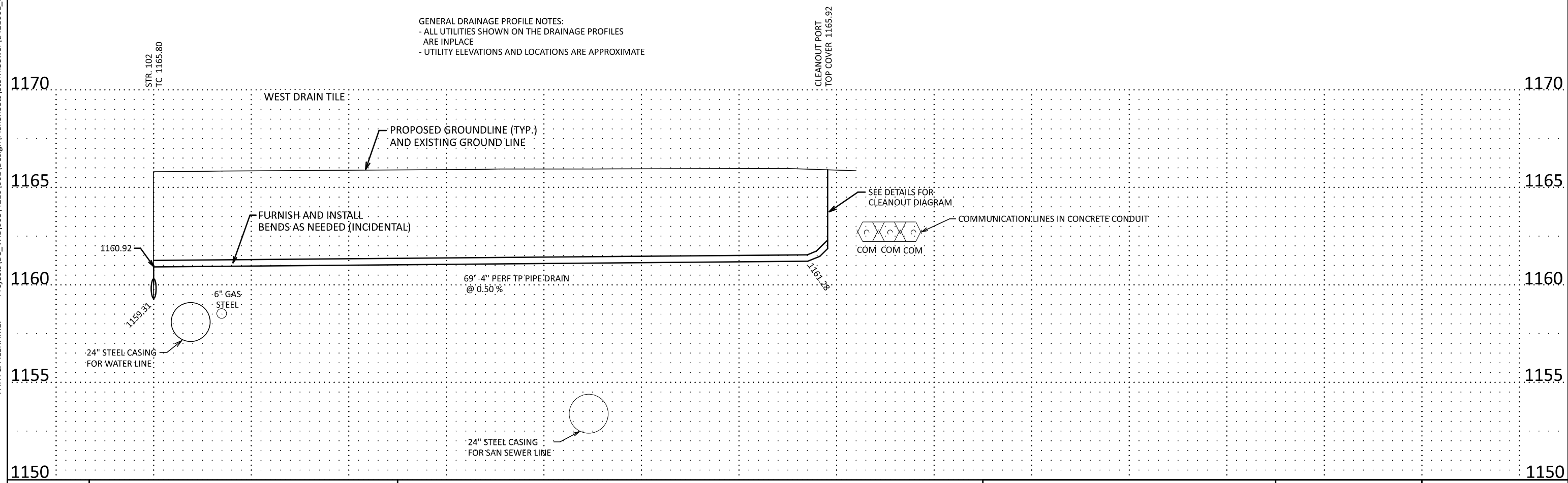





	Exhibit C	WIPHAWI S.P. BRUA LIC. NO. 62996 DATE: 13-MAR-2025 LICENSED PROFESSIONAL ENGINEER	I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	DRAINAGE TABULATIONS AND PROFILES	SP 4210-61	SHEET NO 22
					(TH 68)	TOTAL SHEETS 23

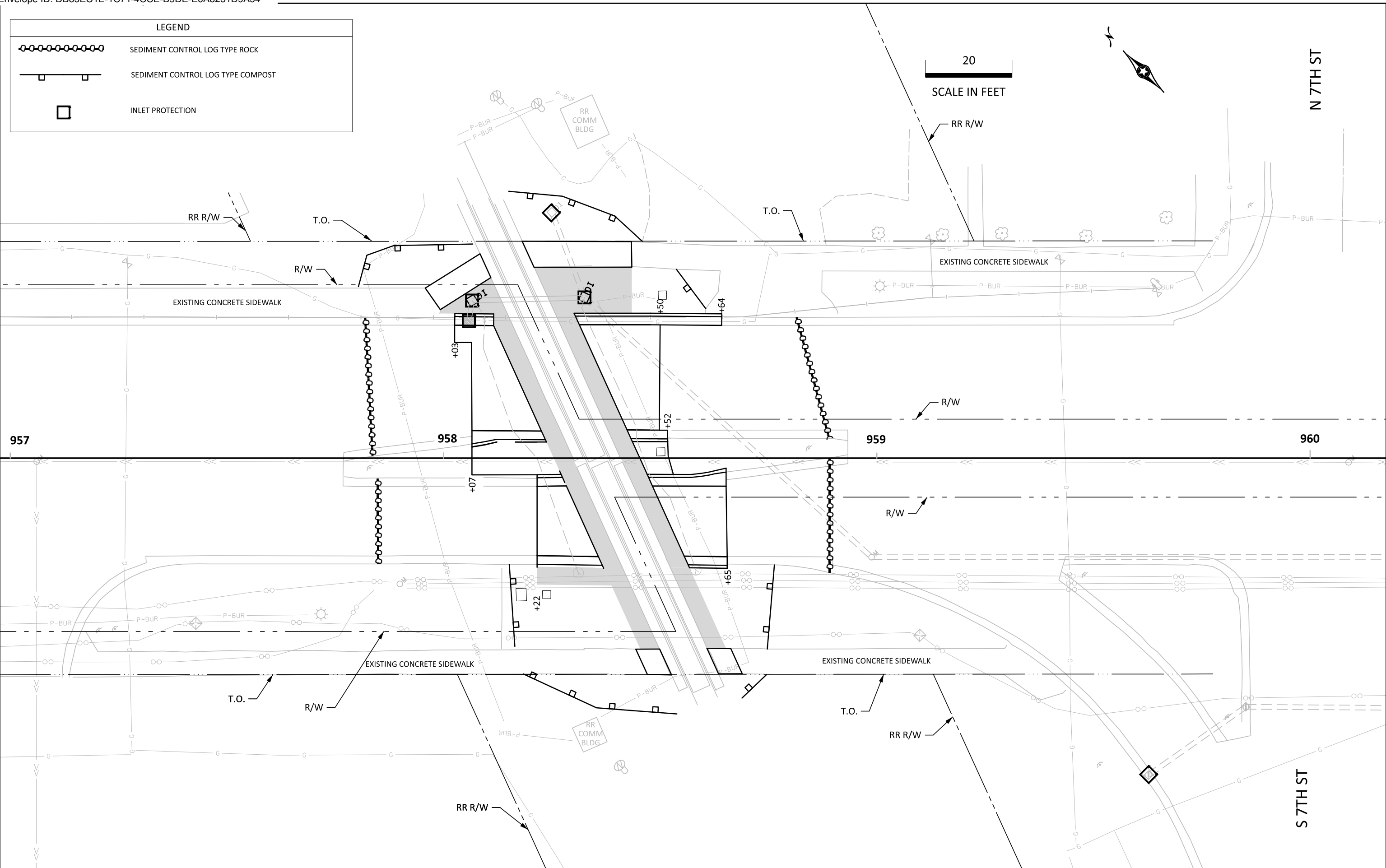
**LEGEND**

-  SEDIMENT CONTROL LOG TYPE ROCK
-  SEDIMENT CONTROL LOG TYPE COMPOST
-  INLET PROTECTION

20  
SCALE IN FEET



DISTRICT #: D8-WILLMAR  
 PLOT NAME: d421060\_325erc.dgn  
 PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\Erosion\d421060\_325erc.dgn  
 PLOTTED/REVISED: 13-MAR-2025



# TEMPORARY TRAFFIC CONTROL PLAN

## NOTES & GUIDELINES

### GENERAL INFORMATION:

1. ALL DISTANCES ARE APPROXIMATE.
2. NOTIFY DISTRICT TRAFFIC OFFICE 2 WEEKS PRIOR TO STARTING CONSTRUCTION.  
JON GUENINGSMAN (320-212-7506)
3. SEE TEMPORARY TRAFFIC CONTROL FIELD MANUAL FOR PROPER SIGN SPACING.

### SIGNING:

1. ALL TEMPORARY SIGNS ARE REQUIRED TO BE CRASHWORTHY PER THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE 2016 (MASH-2016). TEMPORARY SIGN STRUCTURES THAT ARE CRASHWORTHY UNDER THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 (NCHRP-350) MAY BE USED PROVIDED THE DEVICES WERE ACQUIRED BY THE CONTRACTOR PRIOR TO DECEMBER 31ST, 2019. THE MINNESOTA TYPE "C" AND "D" BRACED LEG U-CHANNEL (KNEE BRACE) SIGN SUPPORT IS NOT ALLOWED.
2. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FINAL SIGNS TO ASSURE THAT THE FINAL SIGNS ARE PLACED AS NEEDED, OR PROVIDE TEMPORARY SIGNING UNTIL THE FINAL SIGNING IS PLACED.
3. WHEN MULTIPLE GROUND MOUNTED SIGN STRUCTURES ARE PLACED ADJACENT TO EACH OTHER THERE SHOULD BE NO MORE THAN 2 POSTS WITHIN 84" OF EACH OTHER. WHEN THIS SPACING CAN NOT BE MAINTAINED, THEN SIGN STRUCTURES SHALL BE OFFSET, AND STAGGERED WITH A MINIMUM OF 4' BETWEEN SIGN STRUCTURES BOTH LATERALLY AND LONGITUDINALLY. EXAMPLE SHOWS DETOUR SIGNAGE, BUT THIS REQUIREMENT APPLIES TO ALL SIGNAGE.
4. WHEN A SIGN OR BARRICADE IS ORIENTED SUCH THAT VISIBILITY TO ROAD USERS INCLUDING BIKES AND PEDESTRIANS IS REDUCED ENOUGH TO CAUSE A HAZARD, DELINEATE THE SIGN/BARRICADE WITH APPROPRIATE DEVICES.
5. TEMPORARY SIGNS SHALL BE PLACED SUCH THAT OBSTACLES DO NOT BLOCK THEM FROM BEING VIEWED BY APPROACHING ROAD USERS. OBSTACLES MAY INCLUDE, BUT ARE NOT LIMITED TO, LIGHT POLES, TREES, SIGNS, AND BUILDINGS.
6. TEMPORARY SIGNS SHALL BE PLACED AND ORIENTED APPROXIMATELY AS SHOWN IN THE PLAN, AT RIGHT ANGLES TO DIRECTION OF AND FACING THE TRAFFIC THEY ARE INTENDED TO SERVE, UNLESS OTHERWISE SPECIFIED.
7. LONGITUDINAL DROPOFFS SHALL BE SIGNED AS SHOWN IN THE "MINNESOTA TEMPORARY TRAFFIC CONTROL FIELD MANUAL" PAGES (6K-aJ) THRU (6K-ad) UNLESS OTHERWISE SPECIFIED IN THESE PLANS.
8. AFTER REMOVAL OF SIGN AND/OR SIGN BASE, BACK FILL, COMPACT, AND LEVEL SOIL TO MATCH SURROUNDING SOIL.

### PAVEMENT MARKING:

1. MASK OR REMOVE ANY CONFLICTING PAVEMENT MARKINGS AS SHOWN IN THE PLAN OR APPROVED BY THE ENGINEER.
2. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE WET REFLECTIVE. ALL PAVEMENT MARKINGS IN TAPERS AND TRANSITIONS SHALL BE 6" IN WIDTH.
3. SEE 2582 IN THE SPECIAL PROVISIONS FOR PAVEMENT MARKING SPOTTING RESPONSIBILITIES.

### BARRIER & DELINEATION:

1. PLACE AND MAINTAIN PORTABLE BARRIER DELINEATORS ANY TIME TRAFFIC IS WITHIN 10' OF BARRIER. DELINEATORS WILL EACH HAVE A MINIMUM OF 24 SQ. IN. OF RETROREFLECTIVE SURFACE ON BOTH SIDES PLACED AT 25' SPACING ON TOP OF THE BARRIER. SIDE MOUNTED PORTABLE BARRIER DELINEATORS WILL HAVE A MINIMUM OF 12 SQ. IN. OF RETROREFLECTIVE SURFACE AREA AND BE PLACED AT 12.5' SPACING. IF A SMALLER APPROVED BARRIER DELINEATOR IS USED IT SHALL BE A MINIMUM OF 6 SQ. IN. OF RETROREFLECTIVE SURFACE AREA AND BE PLACED ON BOTH SIDES AT 6.25' SPACING. TEMPORARY BARRIER DELINEATOR COLOR SHALL MATCH APPLICABLE PAVEMENT MARKING.

### CONSTRUCTION INFORMATION SIGNING:


1. THE CONTRACTOR SHALL USE CONSTRUCTION INFORMATION SIGNING AS SHOWN IN THE PLAN WHICH ARE TO BE USED AS FOLLOWS:

IF CONSTRUCTION INFORMATION SIGNING IS NO LONGER VISIBLE TO THE MOTORING PUBLIC ONCE WORK BEGINS, MOVE SAID SIGNING TO A SITE IN ADVANCE OF THE WORK ZONE OR CLOSURE AS SHOWN IN THE PLAN OR APPROVED BY THE ENGINEER.

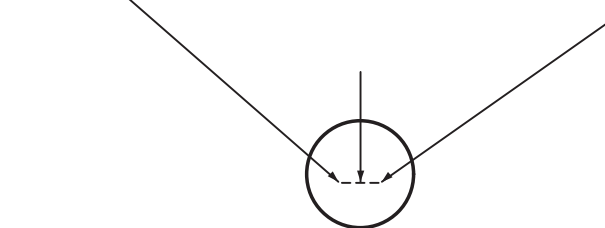
## PAVEMENT MARKING SYMBOLS AND MATERIALS LEGEND


----- SOLID LINE PAVEMENT MARKING WITH TEMPORARY RAISED PAVEMENT MARKERS AT 10' SPACES

 PREFORMED REMOVABLE PAVEMENT MESSAGE STRIPING KEY

 4SW BOX-PREF TAPE

1ST DIGIT WIDTH: 4"  
2ND DIGIT PATTERN: S - SOLID  
3RD DIGIT COLOR: W - WHITE









EXAMPLE:  = 4" SOLID LINE WHITE PREF THERMO GROUND IN, CONTRAST, WET REFLECTIVE

## INDEX

### TRAFFIC CONTROL PLAN SHEET NO. DESCRIPTIONS

TC01	TITLE SHEET
TC02-TC03	DETAILS
TC04-TC05	DETOUR PLAN

### SYMBOL DESCRIPTION

	TRAFFIC CONTROL SIGN
	TYPE III BARRICADE = 
	WARNING LIGHT - TYPE A FLASHER
	CLOSED DURING CONSTRUCTION
	T.H. 59 & TH 68 DETOUR ROUTE

I HEREBY CERTIFY THAT SHEETS TC01-TC13 OF THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: CODY BRAND LICENSE # 55540

DATE: 02/18/2025 SIGNATURE: Cody Brand Digitally signed by Cody Brand Date: 2025.03.11 08:52:31 -05'00'

DESIGN SQUAD: JONATHAN GUENINGSMAN

10-MAR-2025

PLOTTED/REVISED:

DISTRICT #: D8-WILLMAR  
PLOT NAME: 421061\_415tcp-01.dgn  
PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\Traffic\421061\_415tcp-01.dgn

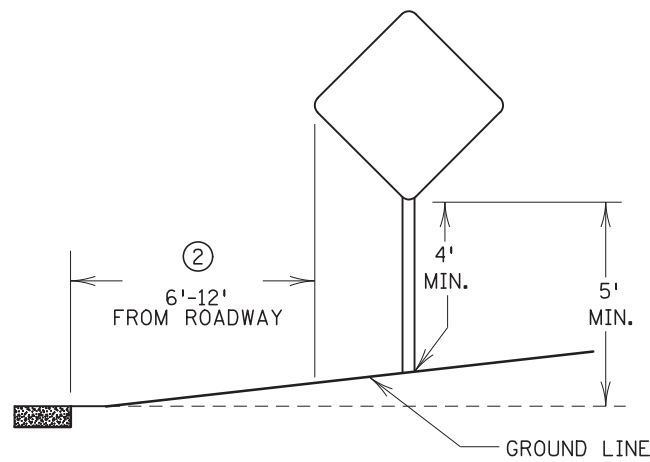
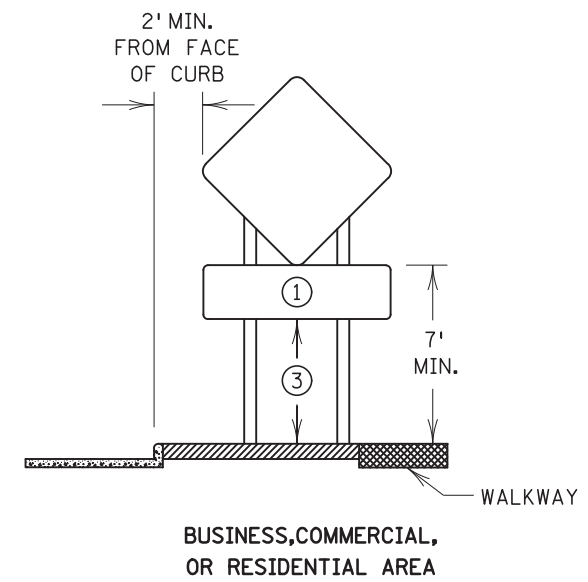
GENERAL NOTES;

1. GROUND MOUNTED SQUARE TUBE SIGN STRUCTURES PLACED WITHIN 50' OF THE RADIUS END OF AN INTERSECTION SHALL BE PLACED ON ONE 2" OR 2-1/2" POST.
2. FOR 2" SQUARE TUBE RISER POST IN SOIL, USE FIN BASE PLACED PER MANUFACTURER'S SPECIFICATIONS. USE A 2" X 2" PRE-PUNCHED, GALVANIZED STEEL, SQUARE TUBE RISER POST. PLACE 3/8" STAINLESS STEEL BOLT THROUGH THE 5TH HOLE DOWN FROM THE TOP OF THE BASE. RISER POST SHALL REST ON THE BOLT.
3. FOR 2-1/2" SQUARE TUBE RISER POST IN SOIL, USE SLIP BASE PLACED PER MANUFACTURER'S SPECIFICATIONS USING A 10 GAUGE, 2-1/2" X 2-1/2" PRE-PUNCHED, GALVANIZED STEEL, SQUARE TUBE RISER POST WITH A 10 GAUGE 2-3/16" X 2-3/16" PRE-PUNCHED, GALVANIZED STEEL, SQUARE TUBE INTERNAL INSERT.

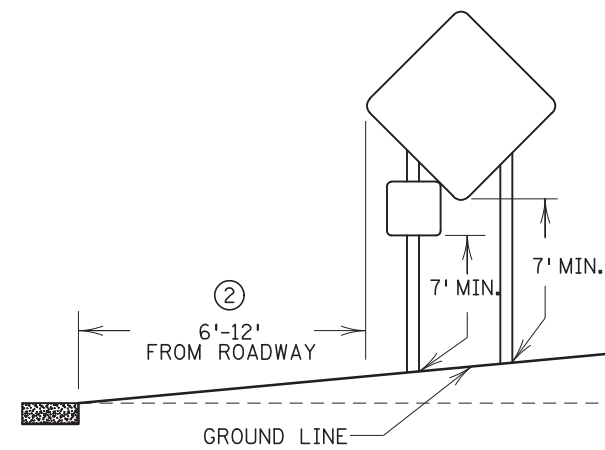
SPECIFIC NOTES;

- ① IF ANY PART OF A SIGN OR SIGN ASSEMBLY EXTENDS MORE THAN 4" INTO THE PEDESTRIAN FACILITY, THE MINIMUM HEIGHT TO BOTTOM OF THE SIGN OR SIGN ASSEMBLY SHALL BE 7'.
- ② 6' - 12' FROM EDGE OF ROADWAY, MUST BE A MINIMUM OF 6' FROM EDGE OF PAVED SHOULDER (WHEN PRESENT).
- ③ IF GROUND MOUNTED TEMPORARY SIGN OR SIGN ASSEMBLY IS PLACED ON 2-1/2" SQUARE TUBE RISER POST(S), THE MINIMUM CLEARANCE FROM THE GROUND LINE TO THE BOTTOM OF THE LOWEST SIGN ON THE ASSEMBLY SHALL BE 7', OR AS SHOWN IN DETAIL, WHICHEVER IS GREATER.
- ④ 5' MINIMUM IN RURAL. 7' MINIMUM IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREAS.

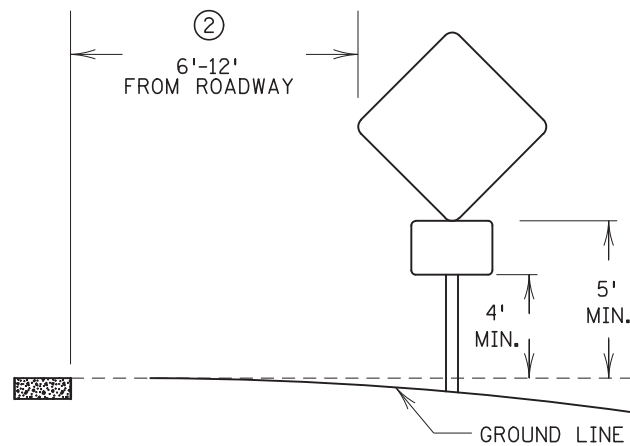
NOT TO SCALE



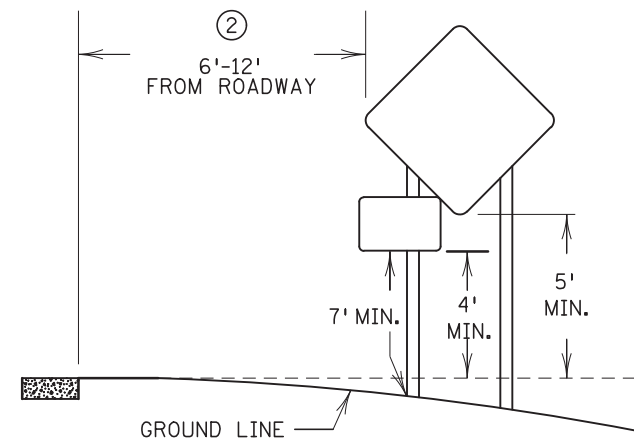
TYPICAL RURAL DESIGN AND 2" RISER POST



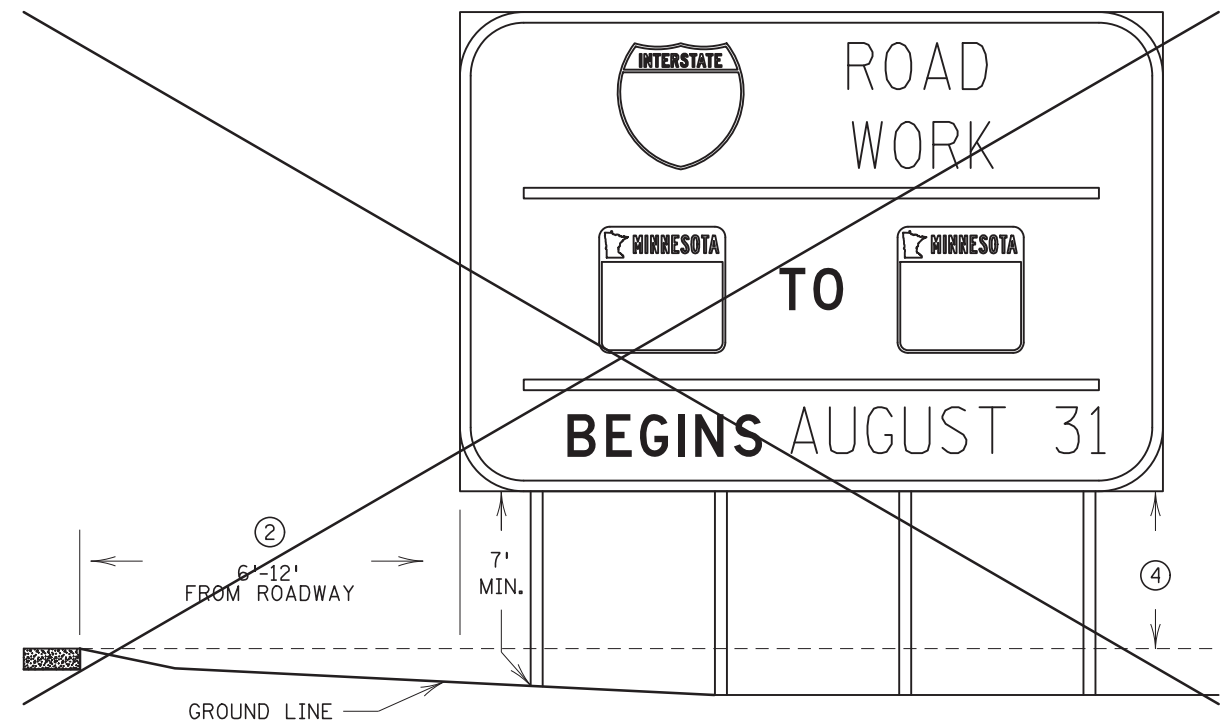
TYPICAL RURAL DESIGN WITH SUPPLEMENTAL PLAQUE AND 2-1/2" RISER POST



TYPICAL RURAL DESIGN WITH SUPPLEMENTAL PLAQUE AND 2" RISER POST



TYPICAL RURAL DESIGN 2-1/2" RISER POST



TYPICAL G20-X2 DESIGN

TYPICAL TEMPORARY SQUARE TUBE GROUND MOUNTED SIGN PLACEMENT

PLOTTED/REVISED: 10-MAR-2025

DISTRICT #: D8-WILLMAR  
PLOT NAME: 421061\_415tcp-02.dgn  
PATH & FILENAME: Projects\D8\_WIL\068\4210\061\Design\PlanSheets\Traffic\421061\_415tcp-02.dgn

Exhibit C



LICENSED PROFESSIONAL ENGINEER

CODY BRAND  
LIC. NO. 55540  
DATE: 10-MAR-2025

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

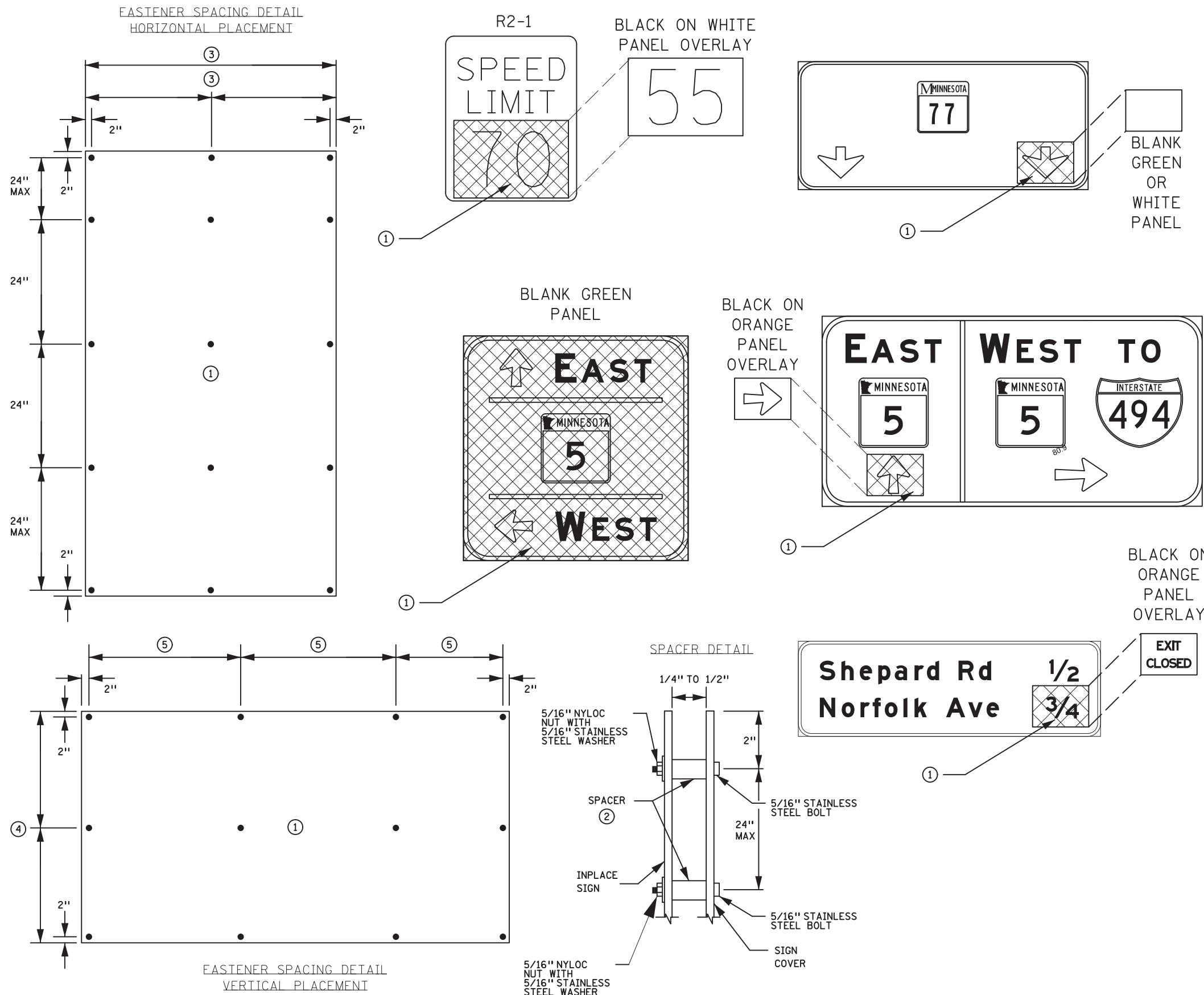
TRAFFIC CONTROL PLANS

STATE PROJ. NO. 4210-61  
TRUNK HWY. (T.H. 68)

SHEET NO. TC 02  
TOTAL SHEETS TC 05

PLOTTED/REVISED: 10-MAR-2025

DISTRICT #: D8-WILLMAR  
PLOT NAME: 421061\_415tcp-03.dgn  
PATH & FILENAME: Projects\DRG\_WIL\068\421061\Design\PlanSheets\Traffic\421061\_415tcp-03.dgn



**GENERAL NOTES:**

1. SIGN COVER PANELS ARE USED TO COVER AN ENTIRE INPLACE SIGN PANEL OR A PORTION THEREOF TO REMOVE OR MODIFY THE SIGN MESSAGE. THEY HAVE NO ADDITIONAL MESSAGE PRINTED ON THEM. SIGN COVER PANELS SHALL BE MADE OF A RIGID MATERIAL (SHEET ALUMINUM, PLYWOOD, CORRUGATED PLASTIC, OR OTHER MATERIAL AS APPROVED BY THE ENGINEER). SIGN COVER PANELS SHALL BE THE SAME COLOR AS THE BACKGROUND COLOR OF THE INPLACE SIGN PANEL AND SHALL COVER THE ENTIRE SIGN PANEL OR MESSAGE ELEMENT.
2. SIGN PANEL OVERLAYS ARE USED TO MODIFY THE MESSAGE OF AN INPLACE SIGN PANEL. THEY INCLUDE A SIGN MESSAGE. SIGN PANEL OVERLAYS SHALL BE MADE OF SHEET ALUMINUM WITH THE APPROPRIATE SHEETING MATERIAL AS SPECIFIED ON THE MNDOT SHEETING FOR RIGID PERMANENT SIGNS, DELINEATORS, AND MARKERS APL OR THE MNDOT SHEETING FOR RIGID TEMPORARY WORK ZONE SIGNS APL. SIGN PANEL OVERLAY MESSAGES SHALL BE BLACK ON FLUORESCENT ORANGE, EXCEPT ON REGULATORY SIGNS WHICH SHALL BE THE PROPER COLOR ON A WHITE BACKGROUND. THE MESSAGE SHALL FOLLOW THE REQUIREMENTS OF THE MNDOT STANDARD SIGNS AND MARKINGS MANUAL OR THE FHWA STANDARD HIGHWAY SIGNS MANUAL (AND SUPPLEMENTS). THE SIGN PANEL OVERLAY SHALL FULLY COVER THE MESSAGE ELEMENT(S) BEING MODIFIED.
3. MINIMIZE DAMAGE TO THE INPLACE SIGN PANEL. DO NOT APPLY TAPE TO THE INPLACE SIGN SHEETING.
4. SPACERS SHALL BE A MATERIAL THAT WILL NOT HARM THE INPLACE SIGN SHEETING FACE (SUCH AS PLASTIC OR RUBBER).
5. ATTACH SIGN COVER PANEL OR PANEL OVERLAY USING HARDWARE SHOWN IN THE SPACER DETAIL.
6. IF SHEET METAL SCREWS ARE USED TO PLACE CORRUGATED PLASTIC AS A SIGN COVER PANEL, PLACE FENDER WASHERS BETWEEN THE SCREW HEADS AND THE CORRUGATED PLASTIC. REMOVE ALL COVERING MATERIAL, MOUNTING HARDWARE, AND FASTENERS WHEN SIGN COVER PANEL OR PANEL OVERLAY IS REMOVED.
8. NO HANDLE OR OTHER LIFTING DEVICE SHALL BE LEFT ATTACHED TO ANY SIGN COVER PANEL AFTER PLACEMENT.

**SPECIFIC NOTES:**

- ① THE SIGN COVER PANEL OR PANEL OVERLAY SHALL FULLY COVER THE MESSAGE BEING COVERED OR MODIFIED.
- ② INSTALL SIGN COVER PANELS AND PANEL OVERLAYS WITH SPACERS THAT PROVIDE A SPACING OF 1/4 IN TO 1/2 IN BETWEEN THE COVER MATERIAL AND THE INPLACE SIGN. THE SPACERS SHALL HAVE AN OUTSIDE DIAMETER BETWEEN 3/8 IN TO 7/8 IN. EACH FASTENER REQUIRES A SPACER.
- ③ IF THE SIGN COVER PANEL OR PANEL OVERLAY IS GREATER THAN 48 IN WIDE, THE FASTENER SPACING SHALL BE NO GREATER THAN 24 IN. IF THE SIGN COVER PANEL OR PANEL OVERLAY IS LESS THAN 24 IN WIDE, DO NOT INSTALL A CENTER FASTENER (UNLESS REQUIRED BY SPECIFIC NOTE ④).
- ④ VERTICAL SPACING FOR FASTENERS IS 50% OF THE SIGN COVER PANEL OR PANEL OVERLAY. IF THE SIGN COVER PANEL OR PANEL OVERLAY IS LESS THAN 24 IN HIGH, DO NOT INSTALL A CENTER FASTENER (UNLESS REQUIRED PER SPECIFIC NOTE ⑤).
- ⑤ HORIZONTAL SPACING FOR FASTENERS SHALL NOT BE LESS THAN 15 IN NOR MORE THAN 24 IN.

**ASSEMBLY STEPS**

1. DRILL 11/32 IN HOLES ON THE SIGN COVER PANEL OR PANEL OVERLAY IN ACCORDANCE WITH THE FASTENER SPACING DETAILS.
2. ATTACH PLASTIC SPACERS TO SIGN COVER PANEL OR PANEL OVERLAY WITH DOUBLE FACED TAPE, CENTERED BEHIND EACH DRILLED HOLE.
3. POSITION THE COVER OR OVERLAY MATERIAL OVER THE SIGN OR MESSAGE TO BE MODIFIED.
4. DRILL ALL THE OUTSIDE HOLES THROUGH THE INPLACE SIGN PANEL AND ATTACH THE COVER OR OVERLAY MATERIAL WITH APPROPRIATE FASTENERS.
5. DRILL ALL THE INNER HOLES THROUGH THE INPLACE SIGN PANEL AND ATTACH WITH APPROPRIATE FASTENERS.

**TEMPORARY SIGN COVERING AND MODIFICATION**

Exhibit C



LICENSED PROFESSIONAL ENGINEER

CODY BRAND  
LIC. NO. 55540  
DATE: 10-MAR-2025

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

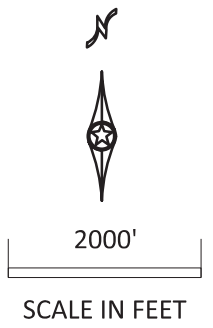
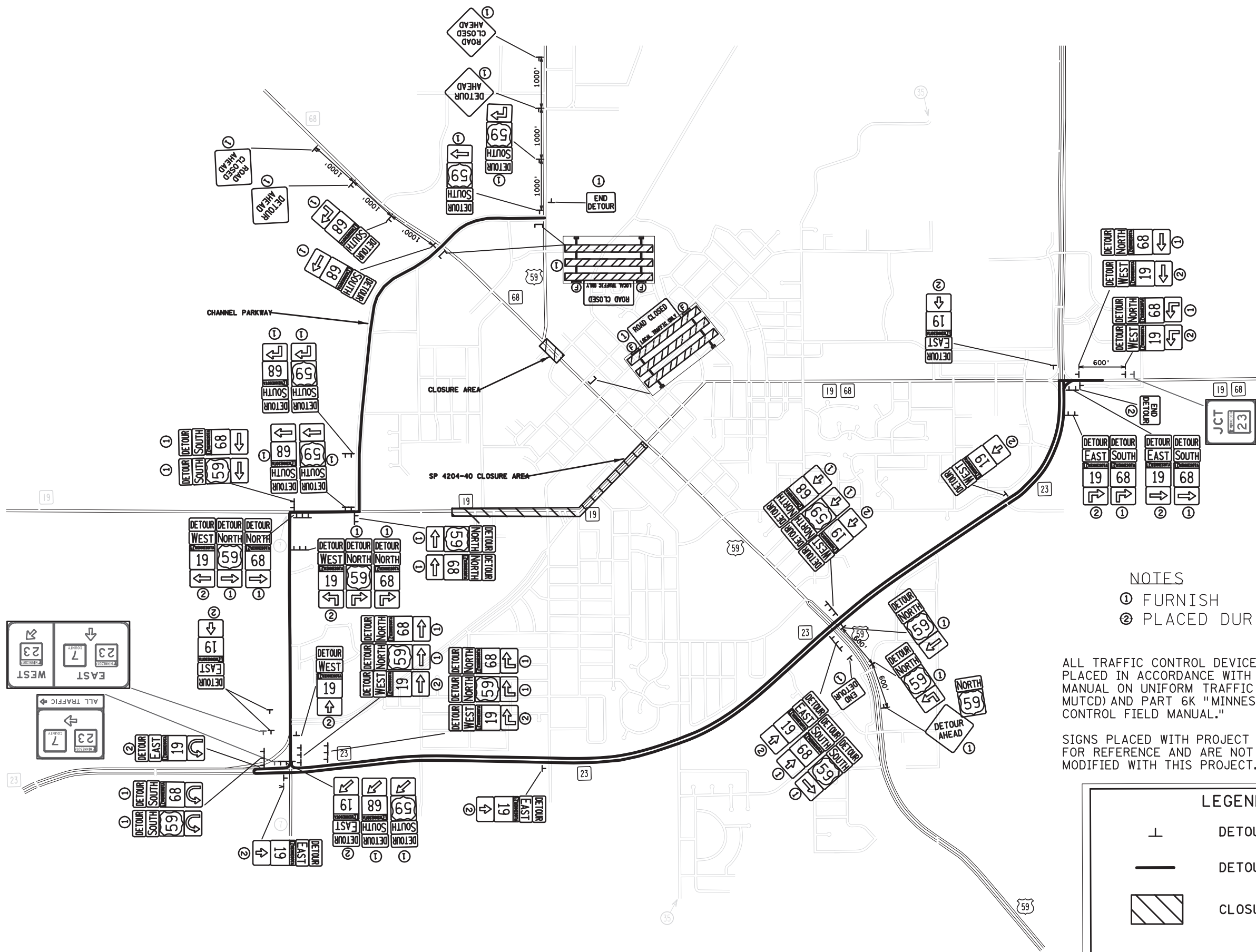
TRAFFIC CONTROL PLANS

STATE PROJ. NO. 4210-61  
TRUNK HWY. (T.H. 68)

SHEET NO. TC 03  
TOTAL SHEETS TC 05

PLOTTED/REVISED: 10-MAR-2025

DISTRICT #: D8-WILLMAR  
 PLOT NAME: 421061\_415tcp-04.dgn  
 PATH & FILENAME: Projects\ID8\_WIL10681421061\Design\PlanSheets\Traffic\421061\_415tcp-04.dgn



- NOTES**
- ① FURNISH
  - ② PLACED DURING SP 4204-40

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE WITH THE CURRENT "MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MN MUTCD) AND PART 6K "MINNESOTA TEMPORARY TRAFFIC CONTROL FIELD MANUAL."

SIGNS PLACED WITH PROJECT SP 4204-40 ARE SHOWN FOR REFERENCE AND ARE NOT TO BE REMOVED OR MODIFIED WITH THIS PROJECT.

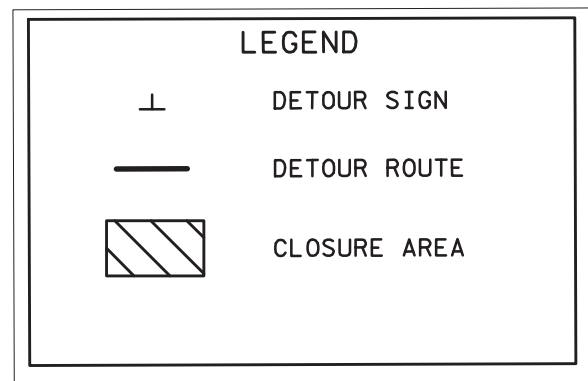


Exhibit C

CODY BRAND  
 LIC. NO. 55540  
 DATE: 10-MAR-2025  
 I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
 LICENSED PROFESSIONAL ENGINEER

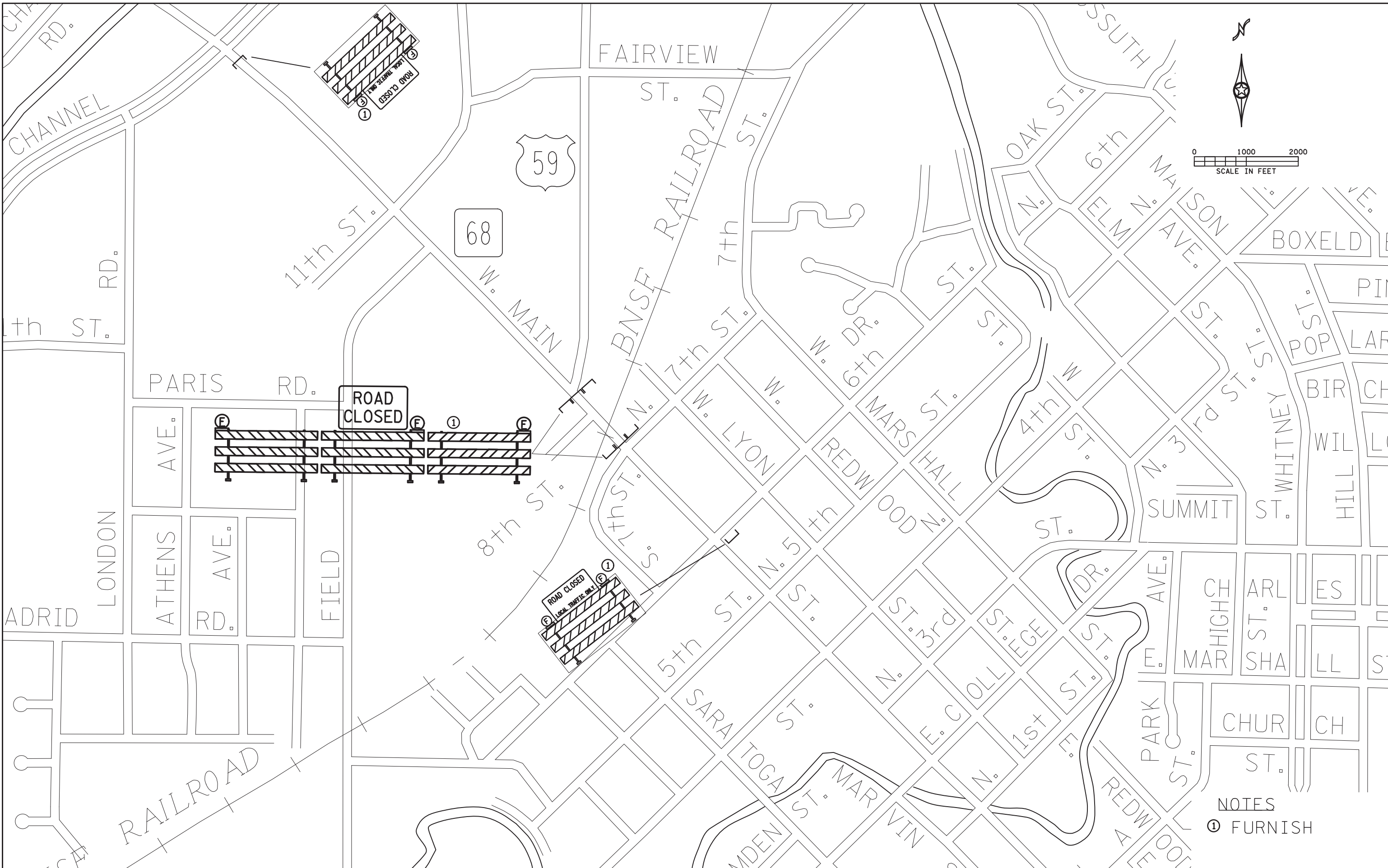
TRAFFIC CONTROL PLANS

SP 4210-61	SHEET NO	TC 04
(TH 68)	TOTAL SHEETS	TC 05



PLOTTED/REVISED: 10-MAR-2025

DISTRICT #: D8-WILLMAR  
PLOT NAME: 421061\_415tcp-05.dgn  
PATH & FILENAME: Projects\08\_WIL\068\421061\Design\PlanSheets\Traffic\421061\_415tcp-05



NOTES  
 ① FURNISH



**Exhibit C**

\_\_\_\_\_  
 LICENSED PROFESSIONAL ENGINEER

CODY BRAND  
 LIC. NO. 55540  
 DATE: 10-MAR-2025

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

TRAFFIC CONTROL

SP 4210-61  
 (TH 68)

SHEET NO TC 05  
 TOTAL SHEETS TC 05

## **DIVISION S**

### **S-1            (1407) FINAL CLEANUP**

Note:    Wherever used in Sections 1407 (FINAL CLEANUP), 1505 (COOPERATION BY CONTRACTORS), 1708 (RAILROAD-HIGHWAY PROVISIONS), and 1717 (AIR, LAND and WATER POLLUTION) of the Special Provisions, the terms “Railway,” “Railroad,” “BNSF” and “Company” mean BNSF Railway Company.

S-1.1            The first paragraph set forth under MnDOT 1407 is supplemented as follows:

BNSF’s property shall be left in a condition at least equal to that existing before the work was started, as determined by the Engineer and BNSF after consultation.

### **S-2            (1505) COOPERATION BY CONTRACTORS**

The provisions of MnDOT 1505 are supplemented with the following:

Note:    Wherever used in Sections 1407 (FINAL CLEANUP), 1505 (COOPERATION BY CONTRACTORS), 1708 (RAILROAD-HIGHWAY PROVISIONS), and 1717 (AIR, LAND and WATER POLLUTION) of the Special Provisions, the terms “Railway,” “Railroad,” “BNSF” and “Company” mean BNSF Railway Company.

The Contractor will be required to make his own arrangements with the Company for coordinating his operations and those of the Company. No compensation in addition to the Contract prices will be made to the Contractor for any costs incurred by him, or because of any delays to his forces or equipment, which may be caused by the operations of the Company.

#### COMPANY ADDRESS and PHONE NUMBER:

BNSF Railway Company  
80 – 44th Ave. NE  
Minneapolis, MN 55421

#### **CONTACT PERSON**

Alex Fiorini  
BNSF Manager Public Projects  
(Phone – 763/782-3476)

Average train traffic per 24-hour period on this route is a combination of 7 freight and 0 passenger trains at a timetable speed of 49 MPH (this information was provided by the Company in 2023 – if additional/current information is necessary, please contact the Company’s Manager of Public Projects.

### **S-3            (1708) RAILROAD-HIGHWAY PROVISIONS**

Note:    Wherever used in Sections 1407 (FINAL CLEANUP), 1505 (COOPERATION BY CONTRACTORS), 1708 (RAILROAD-HIGHWAY PROVISIONS), and 1717 (AIR, LAND and WATER POLLUTION) of the Special Provisions, the terms “Railway,” “Railroad,” “BNSF” and “Company” mean BNSF Railway Company.

All work over, below, or adjacent to the Company’s right of way shall be performed in conformance with the provisions of MnDOT 1708 and the following:

S-3.1            The provisions of MnDOT 1708.3 are modified to the extent that the Contractor shall provide evidence of Insurance, in accordance with the following provisions:

#### INSURANCE REQUIREMENTS:

(A)    Before commencing any work under this contract, the Contractor must provide and maintain in effect insurance, at Contractor's expense, covering all of the work and services to be performed hereunder by the Contractor and each of its subcontractors, as described below.

- (1) Workers' compensation coverage as required by Minnesota law, but if optional under Minnesota law the insurance must cover all employees anyway. THE CERTIFICATE MUST CONTAIN A SPECIFIC WAIVER OF THE INSURANCE COMPANY'S SUBROGATION RIGHTS AGAINST THE BNSF RAILWAY COMPANY.
- (2) Commercial general liability insurance covering liability, including but not limited to public liability, personal injury and property damage, with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. Where explosion, collapse, or underground hazards are involved, the X, C and U exclusions must be removed from the policy;
- (3) Automobile liability insurance, including bodily injury and property damage, with coverage of at least \$1,000,000 combined single limit or the equivalent;
- (4) Railroad protective liability insurance stating BNSF RAILWAY COMPANY is the named insured covering all of the liability assumed by the Contractor under the provisions of this Agreement with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. The form of the Railroad protective liability insurance policy shall be reasonably acceptable to the Company.

All insurance shall be placed with insurance companies licensed to do business in the States in which the work is to be performed, and with current Best's Insurance Guide Ratings of A and Class X, or better.

If any work is to be performed within 50 feet of a railroad track, then insurance must provide coverage of incidents occurring within 50 feet of a railroad track, and any provision to the contrary in the insurance policy must be specifically deleted.

In all cases, the certificate must specifically state that "BNSF RAILWAY COMPANY IS AN ADDITIONAL INSURED"

Any coverage afforded to the Company, the certificate holder, as an additional insured shall apply as primary and not excess to any insurance issued in the name of the Company.

(B) Before commencing any work hereunder, the Contractor shall furnish to the Company a certificate of insurance on a form acceptable to the Company, evidencing the issuance to the Contractor of the policies of insurance providing the types of insurance and limits of liability prescribed above, and certifying that the Company shall be given not less than 30 days' written notice prior to any material change, substitution or cancellation prior to normal expiration dates. Cancellation or expiration of any of said policies of insurance shall not preclude the Company from recovery thereunder for any liability arising under this Agreement.

(C) The purchase of insurance as herein provided shall not in any way limit the liability of the Contractor to the Company.

\*\*\*\*\*  
The following information must appear on the Certificate of General Liability Insurance and entire Railroad Protective Insurance Policies to identify the Project policies are issued to cover:

**Project: Project: S.P. 4210-61 (MNTN 68), Agreement No. 1059392, Construction & Maintenance agreement for Roadway Drainage Project, Marshall, Lyon County, MN**

\*\*\*\*\*  
\*\*\*\*\*

Send Certificate of General Liability Insurance and entire Railroad Protective Insurance Policies for approval to:

[BNSF@certfocus.com](mailto:BNSF@certfocus.com)

Mail:  
BNSF Railway Company  
PO BOX 140528  
Kansas City, MO. 64114

Copy:  
Alex Fiorini  
Manager Public Projects  
BNSF Railway Company  
80 – 44th Ave NE  
Minneapolis, MN 55421

\*\*\*\*\*

S-3.2 The insurance coverage’s as required shall be in full force and effect before any work or operations are commenced on the Railway’s property and shall be kept in full force until all work to be performed under the terms of the Contract has been accepted by the Engineer.

The policy shall provide that, in the event the insurance should be changed or cancelled, such change or cancellation shall not be effective until 15 days after the Director of Railroad Administration has received notice of such change or cancellation from the insurance company. The insurance coverage shall be executed by an insurer qualified to write such policies in the State of Minnesota.

In addition, the Contractor shall furnish either two (2) duplicate original copies or two (2) certified copies of the certificate of insurance at least 10 days in advance of the starting date of the work for which insurance is required. These shall be delivered to the Manager of Railroad Administration, Mail Stop 470, 395 John Ireland Blvd., St. Paul, MN 55155-1899. The Railroad Administration Manager will make the necessary distribution of certificates and policies.

S-3.3 The fourth paragraph set forth under MnDOT 1708.4 is supplemented as follows:

The Contractor is advised that MnDOT and the Railway have entered into MnDOT Agreement Number 1059392, wherein MnDOT and the Railway have agreed that the Railway will provide flagging and protective services at no cost.

**S-4 (1717) AIR, LAND and WATER POLLUTION**

Note: Wherever used in Sections 1407 (FINAL CLEANUP), 1505 (COOPERATION BY CONTRACTORS), 1708 (RAILROAD-HIGHWAY PROVISIONS), and 1717 (AIR, LAND and WATER POLLUTION) of the Special Provisions, the terms “Railway,” “Railroad,” “BNSF” and “Company” mean BNSF Railway Company.

S-4.1 The provisions of MnDOT 1717 are modified with these additional BNSF Requirements:

1717.3 BNSF Requirements:

(A) As used in this subsection 1717.3:

The terms “hazardous waste”, “pollutant”, and “contaminant” will have the meaning given to such terms in the Resource Conservation and Recovery Act (“RCRA”), Minnesota Statutes Chapters 115A and 116, and the regulations promulgated under RCRA and Minnesota Statutes Chapters 115A and 116. The term "Environmental Laws" means all federal and State of Minnesota statutes, regulations, codes, and rules applicable to the contractor’s work and pertaining in any way to the protection of human health or the environment, including, but not limited to, RCRA, the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), the Toxic Substances Control Act, the Clean Air Act, the Clean Water Act, Minnesota Statutes Chapters 115A and 116, and the Minnesota Environmental Response and Liability Act (“MERLA”). The term “Environmental Laws” also includes any lawful order of a federal or State of Minnesota department, agency, or court acting pursuant to applicable Environmental Laws. The term "Hazardous Substance" means (1) hazardous waste (as defined above) and (2) any and every other hazardous, toxic, radioactive, or infectious substance, material, or waste as defined in, listed in, or regulated under any Environmental Law, including, but not limited to, petroleum oil and any of its fractions. The terms “release” and “threatened release” have the meaning given to them in CERCLA and MERLA.

- (B) The contractor and its employees, agents, and subcontractors shall not:
- (1) Treat, store or dispose of any hazardous waste, pollutant, or contaminant in such a way as to subject it to permitting requirements for a treatment, storage, or disposal facility under the RCRA or other applicable Environmental laws; or
  - (2) Knowingly or negligently cause, contribute to, or exacerbate the release of any Hazardous Substance, Pollutant, or Contaminant on BNSF's property or any public right of way traversing BNSF's property.

(C) If the contractor (or any of its employees, agents, or subcontractors) discovers any Hazardous Substance, Pollutant, or Contaminant including but not limited to any non-containerized commodity or material, on BNSF's property or any public right of way traversing BNSF's property while performing the work under this contract, the contractor shall immediately notify BNSF's Resource Operations Center at (800) 832-5452 of such discovery and shall take the actions set forth in subsections 1717.1 and 1717.2. In addition, if such discovery occurs, the contractor will take safeguards necessary to protect its employees, subcontractors, agents, and/or third parties, and exercise due care with respect to the Hazardous Substance, including the taking of all appropriate measures to minimize the impact of the release of such Hazardous Substance, Pollutant, or Contaminant.

**RESOLUTION NUMBER 25-\_\_\_\_\_**

**RESOLUTION APPROVING MNDOT CONSTRUCTION PLANS FOR  
MnDOT PROJECT SP 4210-61 (TH 68)  
AND AUTHORIZING THE CONSTRUCTION TO OCCUR  
ON CITY RIGHT-OF-WAY**

WHEREAS, the City of Marshall has been provided with the design plans for SP 4210-61 (TH68), the "Project";

AND WHEREAS, said Project will include rail crossing enhancements, along with the installation of new drainage intakes and an 18" pipe crossing of the BNSF railroad;

AND WHEREAS, MnDOT will install subgrade drainage beneath TH 68 and the railroad tracks to enhance the long-term durability of the crossing;

AND WHEREAS, said project will include construction of drainage facilities that will be located on City Right-of-Way, as well as MnDOT Right-of-Way;

AND WHEREAS, said Project will require execution of a joint agreement between the City, MnDOT, and BNSF;

AND WHEREAS, the City is not cost participating in this construction Project;

AND WHEREAS MnDOT will acquire Temporary Orders from the City of Marshall to complete the drainage portion of the Project;

AND WHEREAS, the City of Marshall will maintain the proposed storm sewer facilities as outlined in Mn/DOT Agreement No. 90606-R, Article VI, Section D paragraph 1, and as modified by the Project.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF MARSHALL, MINNESOTA:

1. The City of Marshall hereby approves the MnDOT construction plans for MnDOT Project SP 4210-61 (TH 68) and authorizes the construction to occur on City of Marshall Right-of-Way.

Passed and adopted by the City Council this \_\_\_\_ day of \_\_\_\_\_, 2025.

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

This Instrument Drafted by:  
Jason R. Anderson, P.E.  
Director of Public Works/City Engineer