KANDIYOHI COUNTY

BIDDERS PROPOSAL

FOR

SAP 034-602-043 Et al

BITUMINOUS MILLING, FULL DEPTH RECLAMATION, BITUMINOUS SURFACING, BITUMINOUS OVERLAYS, AGGREGATE SHOULDERS, AND ADA IMPROVEMENTS

SAP 034-602-043
SAP 034-602-044
SAP 034-604-035
SAP 034-606-006
SAP 034-607-029
SAP 034-607-030
SAP 034-610-022
SAP 034-624-013
SAP 034-631-007
SAP 034-631-008
SAP 034-639-005
SAP 047-620-013
SAP 034-641-012
LANDFILL-25

INDEX TO SPECIAL PROVISIONS

SAP 034-602-043 Et al

Page#

BID COPY

TO: PLAN HOLDERS FOR **SAP 034-602-043 Et al**

FROM: KANDIYOHI COUNTY PUBLIC WORKS DEPARTMENT

SUBJECT: FORMS FOR SUBMITTING BID

- Bidder's Proposal
- To Kandiyohi County Board of Commissioners
- Non-Collusion Declaration
- Compliance Certification
- Responsible Contractor Verification and Certification of Compliance
- Proposal Back Page

GENERAL INSTRUCTIONS FOR ONLINE BIDDING

1. Proceed to the QuestCDN website at www.questcdn.com . You will be asked to sign into your account or create a free QUESTCDN account by clicking the 'join' link. Contact QUESTCDN at952-233-1632 or info@questcdn.com for assistance in membership registration, downloading theproject and vbid online bid submittal.

2. The QUEST Number for this project is: **9559868**

3. To access the bid form, click the online bidding button at the top of bid advertisement. The on-line bid button will be available when the project is published and open for bidding. There is a fee of **$42.00** to submit your bid.

4. All addendums will be issued through our QUESTCDN electronic bidding site. You must download the bid documents to be a plan holder and receive any addenda. It is the sole responsibility of the contractor, subcontractor, vendor and/or any individual and/or corporation to review all addendums twenty-four (24) hours prior to bid.

5. A bid bond made payable to the Treasurer of Kandiyohi County in the amount of five percent (5%) of the bid must be uploaded for all submitted bids.

6. The County Board reserves the right to accept or reject any or all bids and to waive any defects or technicalities therein and to award the contract to other than the lowest bidder if, in their judgment, the interests of the County will be better served.

KANDIYOHI COUNTY PUBLIC WORKS
1801 EAST HIGHWAY 12
WILLMAR, MN 56201

*************PROPOSAL*************

FOR HIGHWAY CONSTRUCTION
AND MAINTENANCE PROJECTS WITH
BIDS RECEIVED UNTIL 10:00 A.M. ON MARCH 25, 2025

PROPOSAL OF _____
(NAME OF FIRM)

_____
(ADDRESS)

_____
(AREA CODE) TELEPHONE NUMBER

TO FURNISH AND DELIVER ALL MATERIALS AND TO PERFORM ALL WORK IN ACCORDANCE WITH THE CONTRACT, THE PLANS AND THE APPROVED DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION" (USING English UNITS), ON FILE IN THE OFFICE OF THE COMMISSIONER OF TRANSPORTATION EXCEPT AS STATED OTHERWISE IN THE SPECIAL PROVISIONS, WHICH ARE PART OF THIS PROPOSAL, FOR:

COUNTY PROJECT NO. **SAP 034-602-043 Et al**

MINNESOTA PROJECT NO.

LOCATION: **KANDIYOHI COUNTY**

TYPE OF WORK: **BITUMINOUS MILLING, FULL DEPTH RECLAMATION, BITUMINOUS SURFACING, BITUMINOUS OVERLAYS, AGGREGATE SHOULDERS, AND ADA IMPROVEMENTS**

STARTING DATES:
1) **AFTER NOTICE OF CONTRACT APPROVAL**
2) **MAY 27, 2025**
3) **JUNE 23, 2025**

COMPLETION DATES:
1) **JUNE 27, 2025**
2) **AUGUST 1, 2025**
3) **NOVEMBER 7, 2025**

NOTICE TO BIDDERS: In submitting a bid, you must return documents listed on the BID COPY. You acknowledge addenda on the Proposal Guaranty sheet.

I certify that this Proposal was prepared by me or under my direct supervision, and that I am a licensed professional engineer under the laws of the State of Minnesota.

License Number 24962 Date: 2/27/25

****

BID RIGGING IS A SERIOUS CRIME. IF YOU HAVE ANY INFORMATION CONCERNING COLLUSIVE BIDDING, EVEN A REQUEST TO SUBMIT A COMPLIMENTARY BID, PLEASE CALL THE MINNESOTA ATTORNEY GENERAL'S OFFICE AT TELE. NO. 651-296-1796

To Kandiyohi County Board of Commissioners

According to the advertisement of **Kandiyohi County** inviting proposals for the improvement of the section of highway hereinbefore named, and in conformity with the Contract, Plans, Specifications and Special Provisions pertaining thereto, all on file in the office of the Auditor of **Kandiyohi County**:

(I)(We) hereby certify that (I am)(we are) the only person(s) interested in this proposal as principal(s); that this proposal is made and submitted without fraud or collusion with any other person, firm or corporation at all; that an examination has been made of the site of the work and the Contract form, with the Plans, Specifications and Special Provisions for the improvement.

(I)(We) understand that the quantities of work shown herein are approximate only and are subject to increase or decrease; that all quantities of work, whether increased or decreased within the limits specified in MnDOT 1903 and 1402, are to be done at the unit prices shown on the attached schedule; that, at the time of opening bids, totals only will be read, but that comparison of bids will be based on the correct summation of item totals obtained from the unit prices bid, as provided in MnDOT 1301.

(I)(We) propose to furnish all necessary machinery, equipment, tools, labor and other means of construction and to furnish all materials specified, in the manner and at the time prescribed, all according to the terms of the Contract and Plans, Specifications, and the Special Provisions forming a part of this.

(I)(We) further propose to do all Extra Work that may be required to complete the contemplated improvement, at unit prices or lump sums to be agreed upon in writing before starting such work, or if such prices or sums cannot be agreed upon, to do such work on a Force Account basis, as provided in MnDOT 1904.

(I)(We) further propose to execute the form of Contract within 7 days after receiving written notice of award, as provided in MnDOT 1306.

(I)(We) further propose to furnish a Payment Bond and a Performance Bond each equal to the Contract Amount as required by MN Statute § 574.26, as security for the construction and completion of the improvement according to the Plans, Specifications and Special Provisions as provided in MnDOT 1305.

(I)(We) further propose to do all work according to the Plans, Specifications and Special Provisions, and to renew or repair any work that may be rejected due to defective materials or workmanship, before completion and acceptance of the Project by **Kandiyohi County**.

(I)(We) agree to all provisions of Minnesota Statutes, Section 181.59.

(I)(We) further propose to begin work and to prosecute and complete the same according to the time schedule set forth in the Special Provisions for the improvement.

(I)(We) assign to **Kandiyohi County** all claims for overcharges as to goods and materials purchased in connection with this Project resulting from antitrust violations that arise under the antitrust laws of the United States and the antitrust laws of the State of Minnesota. This clause also applies to subcontractors and first tier suppliers under this Contract.

NON-COLLUSION AFFIDAVIT

The following Non-Collusion Affidavit shall be executed by the bidder:

State Project No. _____

Federal Project No. _____

State of Minnesota _____)

) ss

County of _____)

I, _____, do state under penalty of
(name of person signing this affidavit)

perjury under 28 U.S.C. 1746 of the laws of the United States:

(1) that I am the authorized representative of _____

_____
(name of person, partnership or corporation submitting this proposal)

and that I have the authority to make this affidavit for and on behalf of said bidder;

(2) that, in connection with this proposal, the said bidder has not either directly or indirectly entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding;

(3) that, to the best of my knowledge and belief, the contents of this proposal have not been communicated by the bidder or by any of his/her employees or agents to any person who is not an employee or agent of the bidder or of the surety on any bond furnished with the proposal and will not be communicated to any person who is not an employee or agent of the bidder or of said surety prior to the official opening of the proposal, and

(4) that I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Signed: _____
(bidder or his authorized representative)

SAP 034-602-043 Et al

KANDIYOHI COUNTY
CERTIFICATE OF COMPLIANCE FOR PUBLIC CONTRACTS

I hereby certify that I am in compliance with Minnesota Statutes Section 363.073 as amended and/or (check one below, as applicable):

( ) Have a current and valid Certificate of Compliance issued by the Minnesota Department of Human Rights.

( ) Have applied for a Certificate of Compliance to the Commissioner of the Minnesota Department of Human Rights and it is pending.

( ) Employ fewer than 40 full-time employees in the last 12 months, and do not anticipate employing more than 40 full-time employees during the performance of the contract listed above.

( ) That the contract for the project listed above does not have a total dollar value exceeding $100,000.

_____
Signature of Bidder

_____
Position

_____
Name of Firm

_____
Date

ATTACHMENT A
PRIME CONTRACTOR RESPONSE

RESPONSIBLE CONTRACTOR VERIFICATION AND CERTIFICATION OF COMPLIANCE

STATE PROJECT NUMBER: _____

This form includes changes by statutory references from the Laws of Minnesota 2015, chapter 64, sections 1-9. This form must be submitted with the response to this solicitation. A response received without this form, will be rejected.

Minn. Stat. § 16C.285, Subd. 7. **IMPLEMENTATION.** … any prime contractor or subcontractor or motor carrier that does not meet the minimum criteria in subdivision 3 or fails to verify that it meets those criteria is not a responsible contractor and is not eligible to be awarded a construction contract for the project or to perform work on the project…	
Minn. Stat. § 16C.285, Subd. 3. **RESPONSIBLE CONTRACTOR, MINIMUM CRITERIA**. "Responsible contractor" means a contractor that conforms to the responsibility requirements in the solicitation document for its portion of the work on the project and verifies that it meets the following minimum criteria:	
(1)	The Contractor: (i) is in compliance with workers' compensation and unemployment insurance requirements; (ii) is in compliance with Department of Revenue and Department of Employment and Economic Development registration requirements if it has employees; (iii) has a valid federal tax identification number or a valid Social Security number if an individual; and (iv) has filed a certificate of authority to transact business in Minnesota with the Secretary of State if a foreign corporation or cooperative.
(2)	The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 177.24, 177.25, 177.41 to 177.44, 181.03, 181.101, 181.13, 181.14, or 181.722, and has not violated United States Code, title 29, sections 201 to 219, or United States Code, title 40, sections 3141 to 3148. For purposes of this clause, a violation occurs when a contractor or related entity: (i) repeatedly fails to pay statutorily required wages or penalties on one or more separate projects for a total underpayment of $25,000 or more within the three-year period, provided that a failure to pay is “repeated” only if it involves two or more separate and distinct occurrences of underpayment during the three-year period; (ii) has been issued an order to comply by the commissioner of Labor and Industry that has become final; (iii) has been issued at least two determination letters within the three-year period by the Department of Transportation finding an underpayment by the contractor or related entity to its own employees; (iv) has been found by the commissioner of Labor and Industry to have repeatedly or willfully violated any of the sections referenced in this clause pursuant to section 177.27; (v) has been issued a ruling or findings of underpayment by the administrator of the Wage and Hour Division of the United States Department of Labor that have become final or have been upheld by an administrative law judge or the Administrative Review Board; or (vi) has been found liable for underpayment of wages or penalties or misrepresenting a construction worker as an independent contractor in an action brought in a court having jurisdiction. Provided that, if the contractor or related entity contests a determination of underpayment by the Department of Transportation in a contested case proceeding, a violation does not occur until the contested case proceeding has concluded with a determination that the contractor or related entity underpaid wages or penalties;*

(3)	The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 181.723 or chapter 326B. For purposes of this clause, a violation occurs when a contractor or related entity has been issued a final administrative or licensing order;*
(4)	The contractor or related entity has not, more than twice during the three-year period before submitting the verification, had a certificate of compliance under section 363A.36 revoked or suspended based on the provisions of section 363A.36, with the revocation or suspension becoming final because it was upheld by the Office of Administrative Hearings or was not appealed to the office;*
(5)	The contractor or related entity has not received a final determination assessing a monetary sanction from the Department of Administration or Transportation for failure to meet targeted group business, disadvantaged business enterprise, or veteran-owned business goals, due to a lack of good faith effort, more than once during the three-year period before submitting the verification;*
	* Any violations, suspensions, revocations, or sanctions, as defined in clauses (2) to (5), occurring prior to July 1, 2014, shall not be considered in determining whether a contractor or related entity meets the minimum criteria.
(6)	The contractor or related entity is not currently suspended or debarred by the federal government or the state of Minnesota or any of its departments, commissions, agencies, or political subdivisions that have authority to debar a contractor; and
(7)	All subcontractors and motor carriers that the contractor intends to use to perform project work have verified to the contractor through a signed statement under oath by an owner or officer that they meet the minimum criteria listed in clauses (1) to (6).

Minn. Stat. § 16C.285, Subd. 5. **SUBCONTRACTOR VERIFICATION**.

A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.

If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors.

A prime contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier pursuant to subdivision 3, clause (7). A prime contractor and subcontractors shall not be responsible for the false statements of any subcontractor with which they do not have a direct contractual relationship. A prime contractor and subcontractors shall be responsible for false statements by their first-tier subcontractors with which they have a direct contractual relationship only if they accept the verification of compliance with actual knowledge that it contains a false statement.

Subd. 5a. **Motor carrier verification.** A prime contractor or subcontractor shall obtain annually from all motor carriers with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each motor carrier. A prime contractor or subcontractor shall require each such motor carrier to provide it with immediate written notification in the event that the motor carrier no longer meets one or more of the minimum criteria in subdivision 3 after submitting its annual verification. A motor carrier shall be ineligible to perform work on a project covered by this section if it does not meet all the minimum criteria in subdivision 3. Upon request, a prime contractor or subcontractor shall submit to the contracting authority the signed verifications of compliance from all motor carriers providing for-hire transportation of materials, equipment, or supplies for a project.

Minn. Stat. § 16C.285, Subd. 4. **VERIFICATION OF COMPLIANCE.**
A contractor responding to a solicitation document of a contracting authority shall submit to the contracting authority a signed statement under oath by an owner or officer verifying compliance with each of the minimum criteria in subdivision 3, with the exception of clause (7), at the time that it responds to the solicitation document. A contracting authority may accept a signed statement under oath as sufficient to demonstrate that a contractor is a responsible contractor and shall not be held liable for awarding a contract in reasonable reliance on that statement. A prime contractor, subcontractor, or motor carrier that fails to verify compliance with any one of the required minimum criteria or makes a false statement under oath in a verification of compliance shall be ineligible to be awarded a construction contract on the project for which the verification was submitted. A false statement under oath verifying compliance with any of the minimum criteria may result in termination of a construction contract that has already been awarded to a prime contractor or subcontractor or motor carrier that submits a false statement. A contracting authority shall not be liable for declining to award a contract or terminating a contract based on a reasonable determination that the contractor failed to verify compliance with the minimum criteria or falsely stated that it meets the minimum criteria. A verification of compliance need not be notarized. An electronic verification of compliance made and submitted as part of an electronic bid shall be an acceptable verification of compliance under this section provided that it contains an electronic signature as defined in section 325L.02, paragraph (h).

CERTIFICATION	
By signing this document I certify that I am an owner or officer of the company, and I certify under oath that: **1) My company meets each of the Minimum Criteria to be a responsible contractor as defined herein and is in compliance with Minn. Stat. § 16C.285, and** **2) if my company is awarded a contract, I will submit Attachment A-1 prior to contract execution, and** **3) if my company is awarded a contract, I will also submit Attachment A-2 as required.**	
Authorized Signature of Owner or Officer:	**Printed Name:**
Title:	**Date:**
Company Name:	

NOTE: Minn. Stat. § 16C.285, Subd. 2, (c) If only one prime contractor responds to a solicitation document, a contracting authority may award a construction contract to the responding prime contractor even if the minimum criteria in subdivision 3 are not met.

ATTACHMENT A-1

FIRST-TIER SUBCONTRACTORS LIST

SUBMIT PRIOR TO EXECUTION OF A CONSTRUCTION CONTRACT

STATE PROJECT NUMBER: _____

Minn. Stat. § 16C.285, Subd. 5. A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.

FIRST TIER SUBCONTRACTOR NAMES* (Legal name of company as registered with the Secretary of State)	**Name of city where company home office is located**

*Attach additional sheets as needed for submission of all first-tier subcontractors.

SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-1	
By signing this document I certify that I am an owner or officer of the company, and I certify under oath that: **All first-tier subcontractors listed on attachment A-1 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. § 16C.285.**	
Authorized Signature of Owner or Officer:	**Printed Name:**
Title:	**Date:**
Company Name:	

ATTACHMENT A-2

ADDITIONAL SUBCONTRACTORS LIST

PRIME CONTRACTOR TO SUBMIT AS SUBCONTRACTORS ARE ADDED TO THE PROJECT

STATE PROJECT NUMBER: _____

This form must be submitted to the Project Manager or individual as identified in the solicitation document.

Minn. Stat. § 16C.285, Subd. 5. … If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors. …

ADDITIONAL SUBCONTRACTOR NAMES* (Legal name of company as registered with the Secretary of State)	**Name of city where company home office is located**

*Attach additional sheets as needed for submission of all additional subcontractors.

SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-2	
By signing this document I certify that I am an owner or officer of the company, and I certify under oath that: **All additional subcontractors listed on Attachment A-2 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. § 16C.285.**	
Authorized Signature of Owner or Officer:	**Printed Name:**
Title:	**Date:**
Company Name:	

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SAP 034-602-043

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2123.510	Motor Grader	HR	20
2123.610	Skid Loader	HR	40
2221.509	Shoulder Base Aggregate, Class 1	Ton	1288
2231.604	Bituminous Patch Special (0" To 12")	Sq Yd	2145
2232.504	Mill Bituminous Surface (2.0")	Sq Yd	135
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	1475
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	2915
2563.601	Traffic Control	LS	1
2574.508	Fertilizer Type 3	LB	32
2574.609	Common Topsoil Borrow	Ton	80
2575.608	Seed Southern Boulevard	LB	15
2575.508	Hydraulic Bonded Fiber Matrix	LB	525
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	1700
2582.503	4" Solid Line Paint	Lin Ft	3060
2582.503	4" Double Solid Line Paint	Lin Ft	6000
2582.503	6" Solid Line Paint	Lin Ft	18800

SAP 034-602-044

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2123.510	Motor Grader	HR	10
2123.610	Skid Loader	HR	15
2221.509	Shoulder Base Aggregate, Class 1	Ton	210
2231.604	Bituminous Patch Special (0" To 12")	Sq Yd	133
2232.504	Mill Bituminous Surface (2.0")	Sq Yd	135
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	370
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	620
2563.601	Traffic Control	LS	1
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	436
2582.503	4" Solid Line Paint	Lin Ft	900
2582.503	4" Double Solid Line Paint	Lin Ft	105
2582.503	6" Solid Line Paint	Lin Ft	4360

SAP 034-604-035

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2123.510	Motor Grader	HR	30
2123.610	Skid Loader	HR	30
2221.509	Shoulder Base Aggregate, Class 1	Ton	1140
2231.604	Bituminous Patch Special (0" To 12")	Sq Yd	250
2232.504	Mill Bituminous Surface (2.0")	Sq Yd	125930
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	5685
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	17255
2563.601	Traffic Control	LS	1
2574.508	Fertilizer Type 3	LB	53
2574.609	Common Topsoil Borrow	Ton	105
2575.508	Hydraulic Bonded Fiber Matrix (BFM)	LB	625
2575.608	Seed Southern Boulevard	LB	22
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	7543
2582.503	4" Solid Line Paint	Lin Ft	7775
2582.503	4" Double Solid Line Paint	Lin Ft	3150
2582.503	6" Solid Line Paint	Lin Ft	67400
2582.503	24" Solid Line Paint	Lin Ft	220
2582.518	Pavement Message Multi-Component	Sq Ft	88

SAP 034-606-006

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.503	Sawing Bituminous Pavement (Full Depth)	Lin Ft	20
2104.518	Remove Bituminous Pavement	Sq Ft	505
2112.604	Subgrade Preperation	Sq Yd	1000
2123.510	Motor Grader	HR	30
2123.610	Skid Loader	HR	20
2130.523	Water	M-Gal	10
2215.504	Full Depth Reclamation	Sq Yd	41246
2221.509	Shoulder Base Aggregate, Class 1	Ton	914
2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	Ton	12621
2521.618	Concrete Walk	Sq Ft	585
2531.618	Truncated Domes	Sq Ft	32
2563.601	Traffic Control	LS	1
2574.508	Fertilizer Type 3	LB	8
2574.609	Common Topsoil Borrow	Ton	15
2575.508	Hydraulic Bonded Fiber Matrix (BFM)	LB	90
2575.602	Site Restoration	Each	2
2575.608	Seed Southern Boulevard	LB	5
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	2563
2582.503	4" Solid Line Paint	Lin Ft	3265
2582.503	4" Double Solid Line Paint	Lin Ft	125
2582.503	6" Solid Line Paint	Lin Ft	24480
2582.503	24" Solid Line Paint	Lin Ft	120
2582.518	Pavement Message Multi-Component	Sq Ft	44

SAP 034-607-029

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.503	Sawing Bituminous Pavement (Full Depth)	Lin Ft	170
2104.518	Remove Bituminous Pavement	Sq Ft	175
2123.510	Motor Grader	HR	46
2123.510	Pneumatic Tired Roller	HR	50
2130.523	Water	M-Gal	400
2221.509	Shoulder Base Aggregate, Class 1	Ton	7080
2357.606	Bituminous Material For Shoulder Tack	Gal	2015
2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	Ton	18510
2563.601	Traffic Control	LS	1
2574.508	Fertilizer Type 3	LB	70
2574.609	Common Topsoil Borrow	Ton	125
2575.508	Hydraulic Bonded Fiber Matrix (BFM)	LB	450
2575.608	Seed Southern Boulevard	LB	44
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	3750
2582.503	4" Solid Line Paint	Lin Ft	3150
2582.503	6" Solid Line Paint	Lin Ft	37100

SAP 034-607-030

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.503	Sawing Bituminous Pavement (Full Depth)	Lin Ft	180
2112.604	Subgrade Preparation	Sq Yd	1500
2123.510	Motor Grader	HR	40
2123.610	Skid Loader	HR	30
2130.523	Water	M-Gal	20
2215.504	Full Depth Reclamation	Sq Yd	63937
2221.509	Shoulder Base Aggregate, Class 1	Ton	3255
2232.602	Milled Rumble Strips	Each	1
2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	Ton	13773
2563.601	Traffic Control	LS	1
2574.609	Common Topsoil Borrow	Ton	15
2574.508	Fertilizer Type 3	LB	8
2575.608	Seed Southern Boulevard	LB	5
2575.508	Hydraulic Bonded Fiber Matrix (BFM)	LB	90
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	2651
2582.503	4" Solid Line Paint	Lin Ft	1260
2582.503	6" Solid Line Paint	Lin Ft	27680
2582.503	24" Solid Line Paint	Lin Ft	40
2582.518	Pavement Message Multi-Component	Sq Ft	120

SAP 034-610-022

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2123.510	Motor Grader	HR	30
2123.610	Skid Loader	HR	20
2221.509	Shoulder Base Aggregate, Class 1	Ton	708
2231.604	Bituminous Patch Special (0" To 12")	Sq Yd	300
2232.504	Mill Bituminous Surface (2.5")	Sq Yd	515
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	2751
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	6927
2563.601	Traffic Control	LS	1
2574.508	Fertilizer Type 3	LB	15
2574.609	Common Topsoil Borrow	Ton	30
2575.508	Hydraulic Bonded Fiber Matrix (BFM)	LB	255
2575.608	Seed Southern Boulevard	LB	10
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	2474
2582.503	4" Solid Line Paint	Lin Ft	3170
2582.503	4" Double Solid Line Paint	Lin Ft	1565
2582.503	6" Solid Line Paint	Lin Ft	28250

SAP 034-624-013

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.503	Remove Concrete Curb	LF	345
2104.503	Sawing Bituminous Walk (Full Depth)	LF	104
2104.503	Sawing Bituminous Pavement (Full Depth)	LF	85
2104.503	Saw Concrete Walk (Full Depth)	LF	15
2104.518	Remove Bituminous Pavement	SY	257
2104.518	Remove Bituminous Walk	SF	1300
2104.518	Remove Concrete Walk	SF	350
2104.618	Remove and Replace Bituminous Pavement (ADA	SF	2070
2123.614	Skid Loader	HR	40
2231.604	Bituminous Patch Special (0" To 12")	SY	890
2232.504	Mill Bituminous Surface (0" to 2.0")	SY	8198
2232.504	Mill Bituminous Surface (1.5")	SY	2826
2232.504	Mill Bituminous Surface (3.0")	SY	2895
2232.504	Mill Bituminous Surface (3.5")	SY	28155
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	TON	1773
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	TON	8582
2504.602	Adjust Valve Box	EACH	4
2506.502	Adjust Frame and Ring Casting	EACH	21
2521.618	Concrete Walk (ADA)	SF	1914
2531.603	Concrete Curb and Gutter (ADA)	SF	345
2531.618	Truncated Domes	SF	296
2563.601	Traffic Control	LS	1
2573.502	Storm Drain Inlet Proection	EACH	23
2575.602	Site Restoration	EACH	18
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	LF	1126
2582.503	4" Solid Line Paint	LF	10285
2582.503	4" Double Solid Line Paint	LF	6466
2582.503	6" Solid Line Paint	LF	21477
2582.518	Crosswalk Multi-Componenet	SF	486
2582.518	Pavement Message Multi-Componenet	SF	450

SAP 034-631-007

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.503	Sawing Bituminous Pavement (Full Depth)	Lin Ft	80
2112.604	Subgrade Preperation	Sq Yd	2000
2123.510	Motor Grader	HR	40
2123.610	Skid Loader	HR	30
2130.523	Water	M-Gal	20
2215.504	Full Depth Reclamation	Sq Yd	50549
2221.509	Shoulder Base Aggregate, Class 1	Ton	2120
2232.504	Mill Bituminous Surface (2.0")	Sq Yd	225
2232.602	Milled Rumble Strips	Each	2
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	800
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	3632
2360.509	Type SP 12.5 Wearing Course Mixture (2,C)	Ton	15337
2563.601	Traffic Control	LS	1
2574.508	Fertilizer Type 3	LB	105
2574.609	Common Topsoil Borrow	Ton	215
2575.508	Hydraulic Bonded Fiber Matrix (BFM)	LB	1050
2575.608	Seed Southern Boulevard	LB	50
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	2986
2582.503	4" Solid Line Paint	Lin Ft	6996
2582.503	4" Double Solid Line Paint	Lin Ft	4424
2582.503	6" Solid Line Paint	Lin Ft	39750
2582.503	24" Solid Line Paint	Lin Ft	40

SAP 034-631-008

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.503	Sawing Bituminous Pavement (Full Depth)	Lin Ft	20
2104.518	Remove Bituminous Pavement	Sq Ft	550
2123.610	Skid Loader	HR	30
2221.509	Shoulder Base Aggregate, Class 1	Ton	360
2231.604	Bituminous Patch Special (0" to 12.0")	Sq Yd	200
2232.504	Mill Bituminous Surface (2.0")	Sq Yd	24740
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	890
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	2767
2521.618	Concrete Walk	Sq Ft	550
2531.618	Truncated Domes	Sq Ft	16
2563.601	Traffic Control	LS	1
2574.508	Fertilizer Type 3	LB	35
2574.609	Common Topsoil Borrow	Ton	325
2575.508	Hydraulic Bonded Fiber Matrix (BFM)	LB	385
2575.602	Site Restoration	Each	2
2575.608	Seed Southern Boulevard	LB	20
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	725
2582.503	4" Solid Line Paint	Lin Ft	3125
2582.503	4" Double Solid Line Paint	Lin Ft	5360
2582.503	6" Solid Line Paint	Lin Ft	16800

SAP 034-639-005

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2123.510	Motor Grader	HR	30
2123.610	Skid Loader	HR	40
2221.509	Shoulder Base Aggregate, Class 1	Sq Yd	669
2231.604	Bituminous Patch Special (0" to 12")	Sq Yd	165
2232.504	Mill Bituminous Surface (2.0")	Sq Yd	327
2232.602	Milled Rumble Strips	Each	1
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	3037
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	6895
2563.601	Traffic Control	LS	1
2574.508	Fertilizer Type 3	LB	48
2574.609	Common Top Soil Borrow	Ton	100
2575.508	Hydraulic Bonded Fiber Matrix	LB	675
2575.608	Seed Southern Boulevard	LB	30
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	2431
2582.503	4" Solid Line	Lin Ft	5050
2582.503	4" Double Solid Line Paint	Lin Ft	2230
2582.503	6" Solid Line Paint	Lin Ft	26570

SAP 047-620-013

Item Code	Item Description	U of M	Quantity
2123.510	Motor Grader	HR	4
2221.509	Shoulder Base Aggregate, Class 1	Sq Yd	95
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	498
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	1251
2563.601	Traffic Control	LS	0
2582.503	4" Broken Line Paint	Lin Ft	324
2582.503	4" Solid Line	Lin Ft	900
2582.503	6" Solid Line Paint	Lin Ft	5480

SAP 034-641-012

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.502	Remove Casting	Each	10
2104.502	Salvage Sign	Each	12
2104.503	Remove Concrete Curb	Lin Ft	360
2104.503	Sawing Bituminous Pavement (Full Depth)	Lin Ft	360
2104.504	Remove Concrete Driveway	Sq Yd	397
2104.518	Remove Concrete Walk	Sq Ft	1180
2104.618	Remove and Replace Bituminous Pavement (ADA	Sq Ft	760
2123.610	Skid Loader	Hr	40
2231.604	Bituminous Patch Special (0" to 12")	Sq Yd	50
2232.504	Mill Bituminous Surface (0" to 1.5")	Sq Yd	6320
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	250
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	856
2504.601	Repair Sprinkler System	LS	1
2504.602	Adjust Valve Box	Each	5
2506.502	Adjust Frame and Ring Casting	Each	2
2506.502	Casting Assembly	Each	10
2521.618	Concrete Walk (ADA)	Sq Ft	1315
2531.504	6" Concrete Driveway Pavement	Sq Yd	520
2531.603	Concrete Curb and Gutter (ADA)	Sq Ft	360
2531.618	Truncated Domes	Sq Ft	138
2563.601	Traffic Control	LS	1
2564.502	Install Sign	Each	12
2573.502	Storm Drain Inlet Protection	Each	10
2575.602	Site Restoration	Each	40
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	490
2582.503	6" Solid Line Paint	Lin Ft	3950
2582.503	24" Solid Line Paint	Lin Ft	126
2582.518	Pavement Message Multi-Componenet	Sq Ft	120

SAP 034-641-012

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.502	Salvage Sign	Each	12
2104.503	Remove Concrete Curb	Lin Ft	360
2104.503	Sawing Bituminous Pavement (Full Depth)	Lin Ft	360
2104.504	Remove Concrete Driveway	Sq Yd	397
2104.518	Remove Concrete Walk	Sq Ft	1180
2104.618	Remove and Replace Bituminous Pavement (ADA	Sq Ft	760
2123.610	Skid Loader	Hr	40
2231.604	Bituminous Patch Special (0" to 12")	Sq Yd	50
2232.504	Mill Bituminous Surface (0" to 1.5")	Sq Yd	6320
2360.509	Type SP 4.75 Wearing Course Mixture (2,B)	Ton	250
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	856
2504.601	Repair Sprinkler System	LS	1
2504.602	Adjust Valve Box	Each	5
2506.502	Adjust Frame and Ring Casting	Each	12
2521.618	Concrete Walk (ADA)	Sq Ft	1315
2531.504	6" Concrete Driveway Pavement	Sq Yd	520
2531.603	Concrete Curb and Gutter (ADA)	Sq Ft	360
2531.618	Truncated Domes	Sq Ft	138
2563.601	Traffic Control	LS	1
2564.502	Install Sign	Each	12
2573.502	Storm Drain Inlet Protection	Each	10
2575.602	Site Restoration	Each	40
2580.501	Interim Pavement Marking	LS	1
2582.503	4" Broken Line Paint	Lin Ft	490
2582.503	6" Solid Line Paint	Lin Ft	3950
2582.503	24" Solid Line Paint	Lin Ft	126
2582.518	Pavement Message Multi-Componenet	Sq Ft	120

LANDFILL-25

Item Code	Item Description	U of M	Quantity
2021.501	Mobilization	LS	1
2104.504	Remove Aggregate Material	Sq Yd	982
2104.504	Remove Bituminous Pavement	Sq Yd	130
2123.510	Motor Grader	HR	20
2123.510	Steel Drum Roller	HR	25
2123.610	Skid Loader	HR	30
2211.509	Aggregate Base Class 5	Ton	45
2221.509	Shoulder Base Aggregate, Class 1	Ton	75
2232.504	Mill Bituminous Surface (2.0")	Sq Yd	282
2360.509	Type SP 12.5 Wearing Course Mixture (2,B)	Ton	892
2506.502	Adjust Frame and Ring Casting	Each	1

State Project No. **SAP 034-602-043 Et al**

GRAND TOTAL $_____

The undersigned hereby acknowledges that all requirements included in the hard copy proposal, addenda, amendments, plans, standard specifications, and supplemental specifications are a part of this bid and contract.

Signed: _____

PROPOSAL GUARANTY required by 1208 of the Specifications: "A bond prepared as required by 1208 of the Specifications and payable to the Kandiyohi County Treasurer, in an amount equal to at least 5% of the total amount of the bid is submitted herewith as a proposal guaranty.

NON-COLLUSION AFFIDAVIT: A Non-Collusion Affidavit is found in this proposal which must be signed by each bidder.

RECEIPT OF ADDENDA as required by 1210 of the Specifications:

The undersigned hereby acknowledges receipt of and has considered:

Addendum No. ____ Dated _____ Addendum No. _____ Dated _____

Addendum No. ____ Dated _____ Addendum No. _____ Dated _____

Signed: _____

EXECUTION OF PROPOSAL as required by 1206 of the Specifications:

This proposal dated the ____ day of _____, 2025

Signed: _____, P.O. Address _____ as an individual.

Signed: _____, P.O. Address _____ as an individual.

doing business under the name and style of

Signed: _____, for _____ a partnership.

NAME BUSINESS ADDRESS

_____

Signed: _____, for _____ a corporation,

incorporated under the laws of the State of Minnesota

Name of President _____ Business Address_____

Name of Vice-President _____ Business Address_____

Name of Secretary _____ Business Address_____

Name of Treasurer _____ Business Address_____

(NOTE: Signatures shall comply with 1206 of the Specifications.)

GOVERNING SPECIFICATIONS

The 2020 edition of the Minnesota Department of Transportation "Standard Specifications for Construction" shall apply on this contract except as modified or altered in the following special provisions.

SPECIAL PROVISIONS

1203 ACCESS TO PROPOSAL PACKAGE

MnDOT 1203 is hereby deleted from the MnDOT Standard Specifications.

1206 PREPARATION OF PROPOSAL

The provisions of MnDOT 1206 are supplemented and/or modified with the following:

MnDOT 1206.1 is hereby deleted from the MnDOT Supplemental Specifications and replaced with the following:

The Bidder shall use the electronic submittal process. The bidder shall submit the electronic Proposal in accordance with QUEST vBID software and the "QUEST CDN" website.

The Bidder shall submit its Proposal by the date and time for opening Proposals. QUEST vBID will not accept Proposals past the date and time of the opening of the Proposals.

If a Bidder fails to provide a Unit Price for any Pay Item on the Bid Schedule, except for "Lump Sum" Pay Items, the County will reject the Proposal.

MnDOT 1206.2 is hereby deleted from the MnDOT Standard Specifications.

1208 PROPOSAL GUARANTY

The provisions of Mn/DOT 1208 are hereby deleted and replaced with the following:

The bidder shall upload a completed bid bond file with its Proposal that meets the following requirements:

1. Equal to 5 percent of the total amount of the Proposal;
2. Made payable to Kandiyohi County
3. Issued by a corporation authorized by the Minnesota Department of Commerce to

contract as a surety in the State of Minnesota; and conditioned on execution of the Contract in accordance with 1306, "Execution and Approval of Contract".

The Bidder shall submit the Proposal Guaranty electronically.

1302 AWARD OF CONTRACT

Subsequent elimination of the following projects shall not affect the award of the contract (See 1903):

- LANDFILL-25
- SAP 047-620-013

1305 REQUIREMENT OF CONTRACT BOND

The provisions of MnDOT 1305 are hereby deleted and replaced with the following:

The successful bidder shall furnish a payment bond equal to the contract amount and a performance bond equal to the contract amount as required by Minnesota Statutes, section 574.26. The surety and form of the bonds shall be subject to the approval of the contracting authority.

The contracting authority shall require for all contracts less than or equal to five million dollars ($5,000,000), that the aggregate liability of the payment and performance bonds shall be twice the amount of the contract. All contracts in excess of five million dollars ($5,000,000) shall have an aggregate liability equal to the amount of the contract.

1402 CONTRACT REVISIONS

The second, third and fourth paragraph of 1402.3 shall not apply to this contract. The County will not make a price adjustment in the event of increased or decreased quantities items. The unit price for all bid items shall prevail.

The County reserves the right to eliminate any, all or part of the following projects no later than 30 days after contract award:

- LANDFILL-25
- SAP 047-620-013

No compensation will be considered for eliminating any, all or part of the projects.

1404 MAINTENANCE OF TRAFFIC, 1707 PUBLIC SAFETY AND 2563 TRAFFIC CONTROL

The provisions of 1404 are supplemented as follows:

The highways shall be kept open to traffic at all times.

The Contractor shall furnish, install, maintain, and remove all traffic control devices required to provide safe movement of vehicular and/or pedestrian traffic passing through the work zone during the life of the Contract from the start of Contract operations to the final completion thereof. The Engineer will have the right to modify the requirements for traffic control as deemed necessary due to existing field conditions.

Traffic control devices include, but are not limited to, barricades, warning signs, trailers, flashers, cones, drums, pavement markings and flaggers as required and sufficient barricade weights to maintain barricade stability.

The Contractor shall furnish names, addresses, and phone numbers of at least three (3) individuals responsible for the placement and maintenance of traffic control devices. At least one of these individuals shall be "on call" 24 hours per day, seven days per week during the times any traffic control devices, furnished and installed by the Contractor, are in place. The required information shall be submitted to the Engineer at the Pre-construction Conference. The Contractor shall also furnish the names, addresses, and phone numbers of those individuals to the following:

1.	Kandiyohi County Public Works Department	(320) 235-3266
2.	Kandiyohi County Sheriff's Department	(320) 235-1260
3.	Kandiyohi County Emergency Management	(320) 235-5133
4.	City of Willmar	(320) 235-4202

The Contractor shall designate a Work Zone Safety Coordinator who shall be responsible for safety and traffic control management in the Project work zone. The Work Zone Safety Coordinator shall be either an employee of the Contractor such as a superintendent or a foreman, or an employee of a firm which has a subcontract for overall work zone safety and traffic control management for the Project. The responsibilities of the Work Zone Safety Coordinator shall include, but not be limited to:

- Coordinating all work zone traffic control operations of the Project, including those of the Contractor, subcontractors and suppliers.

- Establishing contact with individuals affected by loss of access, local school district, government, law enforcement, and emergency response agencies affected by construction before work begins.

- Maintaining a record of all known crashes within a work zone. This record should include all available information, such as: time of day, probable cause, location, pictures, sketches, weather conditions, interferences to traffic, etc. These records shall be made available to the Engineer upon request.

The Contractor shall inspect, on a daily basis, all traffic control devices, which the Contractor has furnished and installed, and verify that the devices are placed in accordance with the Traffic Control Layouts, these Special Provisions, and/or the MN MUTCD. Any discrepancy between the placement and the required placement shall be immediately corrected. The person performing the inspection shall be required to make a daily log. This log shall also include the date and time any changes in the stages, phases, or portions thereof go into effect. The log shall identify the location and verify that the devices are placed as directed or corrected in accordance with the Plan. All entries in the log shall include the date and time of the entry and be signed by the person making the inspection. The Engineer reserves the right to request copies of the logs as he deems necessary.

Method of Measurement and Basis of Payment:
No measurement will be made of the various Items that constitute Traffic Control but all such work will be construed to be included in the single Lump Sum payment under Item 2563.601 (Traffic Control).

Table SP2563-2
Traffic Control Partial Payments

Percent of Original Contract Completed	Pay this Percentage of Traffic Control
5	50
10	75
50	95
All Work Completed And All Traffic Control Removed	100

1505 COOPERATION BY CONTRACTORS

SAP 034-607-029 is the paving project for a grading project that is being completed this spring/summer. Different contractors may still be working in the area while these paving projects are active. Coordination between all contractors and Kandiyohi County is required.

1507 UTILITY PROPERTY AND SERVICE

Construction operations in the proximity of utility properties shall be performed in accordance with the provisions of MnDOT 1507, except as modified below:

All utilities that relate to Projects are classified as "Level D," unless the plan specifically states otherwise. This utility quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guidelines for the Collection and depiction of existing subsurface utility data.

The Contractor shall coordinate his/her work and cooperate with the forgoing utility owners and their forces in a manner consistent with the provisions of MnDOT 1507 and the applicable provisions of MnDOT 1505.

1508 CONSTRUCTION STAKES, LINES AND GRADES

The Contractor shall notify the County five (5) days prior to commencing work so the County can stake the projects.

String line used to mark centerline for bituminous paving shall be placed on each lift paved.

All offset string line use for bituminous centerline or shoulder marking shall be removed prior to placing Shoulder Base Aggregate or Common Topsoil Borrow.

1513 RESTRICTIONS ON MOVEMENT OF HEAVY LOADS AND EQUIPMENT

Dual Tire Requirement: For material hauling trucks used on projects under this contract, single tires, other than on a steering axle(s), shall have a minimum section width of 16.6" and a loaded section width of 18.0".

1603.2 SAMPLING AND TESTING

The first paragraph is hereby deleted and replaced with the following:

Sampling and testing of materials for this project will be in accordance with the **2024 State Aid for Local Transportation (SALT) "Schedule of Materials Control – Local Government Agency" (SMC-LGA).** This schedule establishes the size of samples and the minimum rate of testing, but in no way affects Specification requirements for the material.

The Certification of Aggregates shall be sent to the County Engineer 10 days prior to placing Shoulder Base Aggregate.

1708 RAILROAD HIGHWAY PROVISIONS

SAP 034-604-035, SAP 034-606-006, and SAP 034-641-012

The Contractor shall coordinate railroad-highway requirements with each Railroad Company and implement the railroad requirements before beginning Work on Railway property as stated in 1708.1 General Requirements.

The Contractor is responsible for any and all permit and flagging costs associated with the required work.

1710 TRAFFIC CONTROL DEVICES

All traffic control devices and methods shall conform to the Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD), Minnesota Standard Signs Manual Parts I, II and III, the Traffic Engineering Manual and the following:

All Category I and Category II temporary traffic control devices shall meet NCHRP 350 crash testing criteria. This includes all new and used Category I and Category II devices. Category I devices include tube markers, plastic drums and cones, etc. Category II devices include portable sign supports, Type I, II and III barricades, etc.

1801 SUBLETTING OF CONTRACT

REVISED 10/14/22

Delete and replace the second sentence of the first paragraph of MnDOT 1801 with the following:

The Contractor may, with the Engineer's consent, sublet a portion of the Contract as long as the Contractor self-performs Work amounting to at least 30 percent of the total original Contract Amount.

Delete the second paragraph of MnDOT 1801.

1803 PROGRESS SCHEDULES

The provisions of MnDOT 1803 are modified as follows:

This Contract requires the use of a "Bar Chart Schedule" as the Progress Schedule for the Project.

1804 PROSECUTION OF WORK

The provisions of MnDOT 1804.2 are supplemented with the following:

The Contractor shall cut cores only between the hours of 6:30 a.m. and 7:30 p.m., Monday-Saturday.

The Contractors paving and shouldering operation hours shall be between 6:30 a.m. and 7:30 p.m., Monday-Saturday, unless otherwise authorized by the Engineer.

The Contractor shall not perform work on Sundays or legal holidays. The Contractor shall suspend operations at 12:00 noon the day before a legal holiday.

If a legal holiday falls on a Monday, the Contractor shall not work the Saturday prior to the holiday.

The Contractor shall notify the County by 12:00 noon on Thursday if work is planned for that Saturday.

LANDFILL-25

A two-week notice is required to work at the landfill. They will close at noon on a Friday and remain closed on Saturday.

1804 PROSECUTION OF WORK (ADA)
REVISED 01/21/22
Add the following to MnDOT 1804:

1804.3 ADA REQUIREMENTS
Pedestrian facilities on this Project must be constructed according to Public Right of Way Accessibility Guidelines (PROWAG) http://www.dot.state.mn.us/ada/pdf/PROWAG.pdf.The appropriate pedestrian ramp details for each quadrant are included in the Plan. The Engineer may provide additional details to those provided in the Plan that meet PROWAG and MnDOT ADA Standards (http://www.dot.state.mn.us/ada/pdf/MnDOT-ada-standards.pdf) as the need arises and field conditions dictate.

Designate a certified person to assess proposed sidewalk layouts at each site at the preconstruction meeting. Certification is obtained by passing MnDOT's ADA Construction Certification Course, with in the past 3 years. For class dates and locations please refer to the following link at: http://www.dot.state.mn.us/ada/training.html.
A minimum of one person per project must possess a valid ADA Construction Certification card anytime ADA work is being performed on the project. If work on electrical components is the only ADA work taking place on the project the electrician must have in their possession a current MnDOT Signals and Lighting Certification.

ADA work includes: assessment of proposed sidewalk layouts at each site before work begins, determining and marking removal limits for work pertaining to pedestrian facilities, ADA related removals and grading, forming and finishing of concrete at pedestrian facilities, paving pedestrian crossings, placing bituminous pedestrian facilities, final grading, and pavement markings. Any ADA work not listed above can be added at the discretion of the Engineer. An ADA Certified person is not required on site if the only work being performed concerns electrical components such as traffic signals and Accessible Pedestrian Signal (APS) push button installations.

Pedestrian facilities must be constructed to meet the following criteria:
(1) Pedestrian Access Routes (PAR) must be constructed to meet the following:
(a) Minimum 4 feet width.
(b) A maximum cross slope of 2.0%.
(c) Vertical discontinuities must be less than 1/4 inches.
(d) Must provide positive drainage without allowing any ponding and maintain existing drainage flow patterns unless indicated otherwise in the Plan.
(e) All grade breaks shall be constructed perpendicular to the path of travel.
(f) Maximum 5% running slope unless adjacent roadway profile exceeds 5%.
(2) Landings are part of the PAR and must be constructed to meet the following:
(a) 4 feet by 4 feet minimum width and shall match full width of incoming PAR.
(b) Maximum slope of 2.0% in all directions.
(c) Required at all locations where the PAR changes directions or inverse running slopes are greater than 2.0%.
(d) Must be connected to the PAR.
(e) Shall be constructed as a single plane surface having no grade breaks.

(3) Ramps are part of the PAR and must be constructed to meet either of the following criteria:
(a) Longitudinal slopes less than 5% in the direction of travel requires no landing at the top of the ramp (unless the PAR changes direction).
(b) Longitudinal slopes between 5 - 8.3% in the direction of travel require a landing at the top of the ramp.

The Contractor and the Engineer shall work together to construct all pedestrian facilities set forth in the plans and in 1804.3B above.

Before any ADA construction begins the Project Engineer will schedule and facilitate an onsite pre-activity meeting that shall consist of a project walk through with the Prime Contractor and the Concrete Flatwork Contractor's MNDOT ADA Construction Certified person. This pre-activity meeting should discuss and document potential issues, any known plan changes, potential discrepancies, and any modifications to the construction plan. The project team should discuss the ADA construction schedule and incorporate into the requirements of MnDOT 1803 (Progress Schedules) including the 2-week look ahead meetings for ADA activities. The discussion should include the sequence of removals and grading, utility placement and relocations, concrete curb and gutter, curb ramp, sidewalk, driveway placements, signals and lighting, temporary pedestrian access including both commercial and residential access, Temporary Pedestrian Access Routes/Alternate Pedestrian Access Routes, and traffic control staging. The Contractor should discuss what equipment, formwork, and materials are to be utilized on the project and how the pedestrian facilities will be constructed.

Notify the Engineer if the plan or site conditions do not allow PROWAAG and MnDOT ADA standards to be met, the Contractor shall consult with the Engineer to determine a resolution. The Engineer shall respond to the Contractor, in a timely manner (up to 24 hours), with a solution on how to proceed. The Contractor shall mitigate any potential delays by progressing other available work on the project.

Pedestrian facilities constructed that are not in accordance with the Plan, do not meet requirements in 1804.3B above, or do not follow the agreed upon resolution with the Engineer, will be corrected by the Contractor at no expense to the Department.

The following Hold Points will be utilized in the construction of pedestrian facilities:

(1) Removal Limits
The Contractor and the Engineer shall use the appropriate ramp, sidewalk, and driveway details in the Plan, and calculate the removal limits for the sidewalk and curb and gutter. If it is determined that the removal limits will exceed the plan removal limits by more than 10 feet and the plan removal limits are not adequate to meet PROWAG and MnDOT ADA Standards the Contractor shall consult with the Engineer to determine a solution. Once the Engineer and the Contractor reach an agreement on how to proceed, the Contractor may finish the removals.

(2) Curb and Gutter at Quadrants
Prior to pouring the curb and gutter at curb ramps the Contractor and the Engineer must verify:

(a) that the curb and gutter will work with any vertical constraints (doorways, steps, bus stops, outwalks and landing areas).
(b) zero height curb, and curb transitions will be located as shown in the Plans and will provide an adequate detectable edge as shown on Standard Plan 5-297.250 (Sheet 4 of 6).
(c) verify curb tapers are constructed at correct heights so that positive boulevard slopes and drainage is maintained away from landings and sidewalks, to the newly constructed curb and gutter sections.
(d) gutter flow lines shall provide positive drainage, maintain existing drainage patterns including existing gutter inflows/outflows. The curb and gutter shall be constructed as detailed in the Plan with a defined flow line and have no vertical discontinuities over 1/4 inch. For required flow line corrections including curb line raises and curb ramp cross slope "tabling", see Standard Plan 5-297.250 (Sheet 6 of 6). Curb shall be poured at 3 percent inflow around the radius or at a minimum distance of 10 feet from any zero height curb section when machine placed. The Contractor shall consult with the Engineer to determine a resolution if any of these conditions cannot be met. Once the Engineer and the Contractor reach an agreement on how to proceed, the Contractor may proceed with pouring the curb and gutter.

(3) Curb and Gutter at Roadway Sections
Prior to pouring curb and gutter at roadway sections the Contractor must verify:
(a) proposed curb and gutter heights will work with existing roadway and shoulder slopes.
(b) The Contractor shall verify prior to placing the pedestrian facilities that positive drainage is maintained. within public Right of Way (RW), as well as maintaining existing off RW drainage. The Contractor shall check to ensure all top back of curb elevations will allow for adequate boulevard slopes, PAR slopes, and widths as shown on Standard Plan 5-297.254 (Sheet 4 of 4) while maintaining vertically constrained match points (doorways, steps, bus stops, outwalks and landing areas).
(c) The Contractor shall check all driveway locations and widths and conform to construction plans, Sidewalk & Driveway Standard Plan 5-297.254 and Driveway Table for all driveway details including curb heights and curb tapers. Driveway curb sections and aprons shall be constructed to minimize changes in the sidewalk width, alignment, and profile. The Contractor shall consult with the Engineer to determine a resolution if any of these conditions cannot be met. Once the Engineer and the Contractor reach agreement on how to proceed, the Contractor may proceed with pouring the curb and gutter.
(d) When curb ramps are adjacent to bituminous roadways the concrete curb and gutter and curb ramps including concrete flares shall be tied. Drill and grout of tie bars will be required as per MNDOT 2321 and in accordance with the details shown in Standard Plan 5-297.250 (Sheet 6 of 6).

(4) Grading, Forming and Finishing
Foundation Preparation work shall consist of constructing all necessary Subgrade Preparation, Aggregate Base, and Grading as indicated in MNDOT 2106, 2112, 2211, MNDOT Standard Plans 5-297.250 (Sheet 6 of 6), and project plans. The testing for pedestrian facilities grading shall be in accordance with the Schedule of Materials Control.
After the curb and gutter has been correctly poured, and the Contractor has set the sidewalk forms, the Contractor shall verify prior to placing the curb ramps and sidewalks that positive drainage is maintained within public RW, as well as maintaining existing off RW drainage, and

that all the requirements in 1804.3B above will be achieved.

(a) Ramps

In addition, the longitudinal slopes shown in the Construction Plans and the Standard Plan shall be utilized unless these conditions cannot be met. The starting point for setting the forms on the controlling ramp leg, landing, and sidewalk slopes should be the following:

Steep (S) = 7%
Flat (F) = 4%
Landing = 1%
Sidewalk Cross Slope = 1.5%

If any of these requirements cannot be met the Contractor shall meet with the Engineer to determine the best solution. Once the Engineer and the Contractor reach an agreement on how to proceed, the Contractor may proceed with the curb ramp and sidewalk pour.

(b) Landings

An initial landing is the first required landing of a pedestrian ramp. All initial landings required at the top of a ramped sloped surface (greater than 2% longitudinal slope), shall be formed and placed separately in an independent concrete pour. This does not include initial landings placed at roadway grade such as depressed corners, parallel ramps, rural flat landings, or flat cut-throughs. Secondary landings consist of all landings beyond the initial landing. These secondary landings do not require a separate landing pour. The Contractor shall verify initial landing alignments and elevations to ensure ramp slopes are correct prior to placing curb and gutter. At a minimum this must include string line verification or the setting of landing forms

(c) Driveways

Driveways with concrete aprons matching into concrete sidewalks shall form and place the apron independent of the concrete sidewalk placement. The Contractor shall consult with the Engineer if separate concrete placements for specific driveway locations must be placed monolithic to maintain project schedule or maintain usage of commercial driveways.

All subgrade preparation and grading for the driveways, including placement of select grading materials and aggregate base, shall be completed prior to constructing any concrete driveway flatwork including both concrete walk sections and concrete apron sections.

All necessary subgrade preparation and aggregate base placement for the entire ramp construction limit shall be done before the initial landing is constructed at each location.

It shall be the responsibility of the Contractor, or Contractor's Surveyor if applicable, to lay out all proposed work at each intersection in accordance with the Plan and requirements listed in this Special Provision. The Contractor may confer with the Engineer for guidance in laying out the proposed work, but it will be the Contractor's responsibility to ensure the proposed work meets all the requirements of this Special Provision. This layout includes, but is not limited to placement of grade breaks, curb transitions, gutter flow lines, truncated dome placement, crosswalk marking placement, flares, landing limits, removal limits, driveway tie in limits, and ramp limits. It is important that the Contractor lay out this work properly to achieve the construction of a compliant pedestrian facility. The Department's surveyor will only stake points and elevations provided in the Plan. For custom designs, other than specific dimensions provided in the Plan, the Contractor shall be expected to scale dimensions from the Plan as needed to construct the facility. If scaled dimensions do not allow for a facility to be constructed to meet the requirements of this Special Provision, the Contractor shall follow the process listed in1804.3C above. This layout work shall be incidental.

The Contractor shall utilize measures and methods when working near existing buildings that

will avoid damaging the building's face or structure. The contractor will be responsible for any damage to the building's face or structure, both below and above ground. Any damage resulting from Contractor's operations will be repaired at the Contractor's expense to the satisfaction of the Engineer.

The Contractor shall sawcut all concrete curb ramp, sidewalk, and driveway contraction joints. The only exception to the saw cutting contraction joints requirements will be for tooling relief joints on large driveway placements, and long sidewalk placements to prevent random cracks, and for tooling joints on minor repairs.

The Contractor shall snap chalk lines for contraction joint layouts and discuss with the Engineer the locations of all saw cutting, tooled contraction relief joints, and any modifications to Standard Plans.
The Contractor and Engineer shall coordinate and agree on all expansion joint layouts before any concrete placements.

The Contractor shall saw cut curb and gutter contraction joints within the PAR including contraction joints at zero-inch height curb locations.

The Contractor will round all joints and edges with a 1/4 inch radius grooving or edging tool within the PAR where minor tooling is permitted. This requirement includes all curb and gutter joints at zero inch height curb sections at curb ramps. Contraction joints shall extend to at least 30 percent of walk thickness. The Contractor shall also have the option of providing saw cuts to construct the sidewalk joints. If saw cutting, provide 1/8 inch wide contraction joints within the PAR, including all curb and gutter joints at zero inch height curb sections. When greater than 50 feet of continuous sidewalk runs are constructed the Contractor shall saw cut all joints. This work shall be incidental.

The top grade break of walkable flares needs a visual joint to indicate a change in grade. To eliminate the use of excessive contraction joints in the quadrant the visual joint shall meet MnDOT 2521.3D.2, except the depth requirement is reduced to 1/4 inch.

All saw cutting, tooling, expansion joint material, and separation joint material shall be incidental to payment of curb and gutter, sidewalks, driveways, curb ramps, and landings.
The Contractor shall use an approved ¼ inch Separation Material Type F at back of curb in sections where there is concrete boulevard or driveways as per Standard Plans 5-297.254 (Sheet 3 of 4). Separation material shall match the full height dimension of adjacent concrete.

The Contractor shall use an approved 1/2 inch expansion material meeting MNDOT Specification 3702 type A- E between the outside edge of sidewalk and existing building or structures. No expansion or separation material shall not be placed in the longitudinal joint between the sidewalk and boulevard joint, unless it is necessary to provide expansion at fixed structures.

At locations where sidewalk is adjacent to existing buildings, extend walk up to the edge of building and place 1/2 inch preformed joint filler 1/2 inch lower than top of walk whenever

possible. Furnish and install Backer Rod of appropriate diameter when joints are 1/4 inch wide or greater, clean surfaces and apply approved Silicone Joint Sealant to flush with top of walk. If the transverse sidewalk and boulevard joint layouts cannot be aligned, use approved preformed joint filler with a maximum 1/8 inch width and place between the sidewalk and boulevard to prevent contraction joints from migrating into the adjacent concrete panels.

The minimum continuous and unobstructed clear width of a Pedestrian Access Route shall be 4.0 feet. All new or reconstructed sidewalk widths shall match or exceed in place sidewalk and in no case shall it be less than 5.0 feet in width except at locations where obstructions cannot be moved or at driveways where slopes exceed the maximum allowable grades. The cross slope of the sidewalk or shared use path shall not exceed 2%, and shall be measured perpendicular to the path of travel across the entire surface width of the sidewalk or shared use path. Curb ramps should match proposed sidewalk PAR width and shall match full shared use path widths. Whenever possible, the entire landings should be placed in a single concrete placement. If this is not possible due to construction staging, follow requirements for reinforcement bar placement and tie adjacent landings together.

In areas where the sidewalk is to be constructed around fixed structures and the grade has been changed, the sidewalk shall be finished around these structures to the satisfaction of the Engineer at no additional cost.
Longitudinal joint reinforcement- Concrete sidewalks and trails with one or more unrestricted edges that are greater than 7 ft. wide for 4-inch concrete walk, and greater than 10 ft. wide for 6-inch concrete walk shall be constructed according to Concrete Walk Adjacent to Turf detail per Standard Plan 5-297.254 (Sheet 3 of 4).

4-inch concrete walk that requires longitudinal joint reinforcement shall be constructed monolithic as a full width concrete placement using cast in place tie bars.

6-inch concrete walk that requires longitudinal joint reinforcement may use drill and grout or cast in-place tie bars for multiple adjacent concrete placements.

Place tie bar steel to the depth and location shown on the plans. Do not place tie bars within 1’ of transverse joint over transverse contraction joints.

Architectural elements such as brick pavers, concrete stamping, and multiple colored concrete placements shall be kept outside the curb ramps and landing areas. Any architectural elements that do not maintain a consistent flat smooth surface shall not be used within the PAR.

1805 METHODS AND EQUIPMENT

The provisions of MnDOT 1805 are supplemented with the following:

Skid loaders shall be used on all road projects. Front end loaders and/or box tractors are not allowed on the road to shape, clean, or load material.

The Contractor shall at all times have a Motor Grader, Power Broom, Pneumatic Tired Roller (Tractor Drawn), Tracked Skid Loader and Water Truck on site while performing aggregate shouldering operations.

The Contractor shall at all times have a Power Broom and Tracked Skid Loader on site while performing earth material shouldering operations.

The Contractor shall at all times have a Skid Loader on site while performing all bituminous work.

The Contractor shall at all times have a Motor Grader, two Pneumatic Tired Rollers (Tractor Drawn), Skid Loader and Water Truck on site while performing shaping operations.

All bituminous pavement placed on entrances, side roads and shoulders shall be done with a separate paver (not the mainline paver).

All milled mainline must be complete before paving operations can begin. "Mill and Fill" operations are not allowed.

1806 DETERMINATION AND EXTENSION OF CONTRACT TIME

The Contract Time will be determined in accordance with the provisions of MnDOT l806 and the following:

Construction operations shall not commence prior to Notice of Contract Approval.

The following project shall not begin before **May 27, 2025**:

- **SAP 034-624-013**

The following project shall not begin before **June 23, 2025**:

- **SAP 034-641-012**

All work, including shouldering, turf establishment, and striping, shall be completed by **June 27, 2025** for the following projects:

- **SAP 034-607-029**

All work, including shouldering, turf establishment, and striping, shall be completed by **August 1, 2025** for the following projects:

- **SAP 034-624-013**
- **SAP 034-641-012**

All work, including shouldering, turf establishment, and striping, shall be completed by **November 7, 2025** for the following projects:

- **SAP 034-602-043**
- **SAP 034-602-044**
- **SAP 034-604-035**
- **SAP 034-606-006**
- **SAP 034-607-030**
- **SAP 034-610-022**
- **SAP 034-631-007**
- **SAP 034-631-008**
- **SAP 034-639-005**
- **SAP 047-620-013**
- **LANDFILL-25**

1807 FAILURE TO COMPLETE THE WORK ON TIME
Table 1807.1-1 does not apply to this contract as a whole.
1807.1 ASSESSMENT OF LIQUIDATED DAMAGES

The County will deduct from money due to the Contractor a daily charge, not as a penalty but as liquidated damages, for each calendar day that the Work remains incomplete within the specific time constraints specified in the Time Schedule above. The daily charges per project are as follows:

SAP 034-602-043	$900
SAP 034-602-044	$900
SAP 034-604-035	$2,500
SAP 034-606-006	$1,500
SAP 034-607-029	$1,500
SAP 034-607-030	$1,500
SAP 034-610-022	$1,200
SAP 034-624-013	$1,500
SAP 034-631-007	$1,500
SAP 034-631-008	$900
SAP 034-639-005	$1,200
SAP 047-620-013	$900
SAP 034-641-012	$900
LANDFILL-25	$900

The liquidated damages as set forth above apply separately and may be assessed concurrently.

1906 PARTIAL PAYMENTS
Partial payments in excess of ninety-five percent (95%) of the value of the completed work will not be made under this contract.

2051 MAINTENANCE AND RESTORATION OF HAUL ROADS
Maintenance, dust control and restoration of haul roads shall be included in the price bid for all material hauled to and from the project. The Contractor shall submit to the County for approval

a map indicating all haul routes for specific project activities prior to starting work.

2104 REMOVAL ITEMS

Abandoned structures and other obstructions shall be removed from the Right of Way and disposed of in accordance with the provisions of Mn/DOT 2104, except as modified below:

Measurement and payment for the removal and disposal of materials will be made only for those Items of removal work specifically included for payment as such in the Proposal and as listed in the Plans. The removal of any unforeseen obstruction requiring in the opinion of the Engineer equipment or handling substantially different from that employed in excavation operations, will be paid for as Extra Work as provided in MnDOT 1402.5.

Once removed, all 2104 "Remove" items are the property of the Contractor.

Disposal will not be allowed within the right of way. Suitable disposal sites shall be arranged for and secured by the Contractor and he/she will assume full responsibility for acceptable disposition of the material.

Determination of the actual thickness of the bituminous as it may affect removal cost is the responsibility of the bidder. No adjustment in unit price will be considered for variation in thickness.

2104 REMOVE AND REPLACE BITUMINOUS PAVEMENT (ADA)

REVISED 03/29/24

SP2020-95

S-1.1 DESCRIPTION

This Work consists of removing, and replacing bituminous pavement in accordance with MnDOT 2104, MnDOT 2211, MnDOT 2360, and 1804 PROSECUTION OF WORK (ADA).

S-1.2 MATERIALS

A Plant Mixed Asphalt Pavement.....MnDOT 2360.2

S-1.3 CONSTRUCTION REQUIREMENTS

A General

Radially sawcut bituminous pavement full depth a minimum 2 feet from the proposed front of gutter as shown on Standard Plan 2-597.250 (Sheet 3 of 6) Pavement Treatment Options in Front of Curb & Gutter.

Remove and dispose of the bituminous in accordance with MnDOT 2104.3.

Compact the existing aggregate base in accordance with MnDOT 2211.3D.2.b, "Quality Compaction".

Place bituminous pavement in accordance with Standard Plan 5-297.250 (Sheet 3 of 6) Pavement Treatment Options in Front of Curb & Gutter detail.

Compact the bituminous courses in accordance with MnDOT 2360.3D.2, "Ordinary Compaction,". Use self-propelled steel wheeled compacting equipment on the final course or mechanical tampers in areas inaccessible to conventional rolling equipment.

B Bituminous Surface

Bituminous patch in front of curb ramp openings must not exceed 5 percent slope measured perpendicular to the gutter flow line or edge of roadway.

Bituminous surface must be flush or slightly higher within 1/4 inch of curb and gutter and adjacent bituminous tie ins. Any deviations greater than 1/4 inch within the curb ramp opening or crosswalk must be a diamond ground finished surface and in accordance with MnDOT 2360.3E.

C Additional Minor Pavement Removal and Replacement

If the Engineer determines that additional pavement removal is necessary, this pay item can be utilized to complete additional minor Roadway Work beyond the initial 2-foot width. This Work could consist of replacing damaged pavements or accommodating the construction of minor curb alignment changes in order to complete the ADA Work.

S-1.4 METHOD OF MEASUREMENT

The Engineer will measure the surface area of pavement replaced.

S-1.5 BASIS OF PAYMENT

The Contract Unit Price for Remove and Replace Bituminous Pavement is compensation in full for Equipment, Materials and labor required to complete the Work.

The Department will pay for Remove and Replace Bituminous Pavement on the basis of the following schedule:

Item No.	Item	Unit
2104.618	Remove and Replace Bituminous Pavement	square foot

2112 SUBGRADE PREPARATION

Subgrade Preparation shall be in accordance with the provisions of MnDot Spec. 2112 and the following;

This work consists of shaping, mixing, and compacting the subgrade up to a foot in depth from the top of subgrade.

MnDot Spec 2112.3C are hereby deleted and replaced with the following:

Compaction shall be achieved by the "Quality Compaction Method" described in

MnDOT Specification 2106.3G.2

2211 AGGREGATE BASE

Aggregate base courses shall be constructed in accordance with the provisions of MnDOT 2211 except as modified below:

The Certification of Aggregates shall be sent to the County Engineer 10 days prior to placing Aggregate Base Class 5.

Compaction shall be achieved by the "Quality Compaction Method" described in MnDOT 2211.3D2. Additional methods such as Specified Density Method, Penetration Index Method, or Light Weight Deflectometer Method may be used as well if determined necessary by the Engineer.

The Contractor shall use a double pull behind rubber tire rollers when placing and compacting Aggregate Base Class 5. A pneumatic tired roller shall be used to compact all entrance aggregate.

The following table shall be added to 2211.5 Basis of Payment:

Aggregate Gradation Monetary Price Adjustment Schedule
Based on Average of Two or More Samples

		% Passing Outside Specified Limits for Sieves		
2 in, 1 ½ in, 1 in, 3/4 in, 3/8 in, & No. 4	**No. 10**	**No. 40**	**No. 200**	**Monetary Price Adjustment %**
1.0 – 3.0	0.5 – 2.0	0.3 – 1.0	0.1 - 0.5	5% price reduction
3.1 – 6.0	2.1 – 3.0	1.1 – 2.0	0.6 – 1.0	10% price reduction
6.1 – 8.0	3.1 – 5.0	2.1 – 4.0	1.1 – 2.0	15% price reduction
> 8.0	> 5.0	> 4.0	> 2.0	Corrective Action Required

2215 FULL DEPTH RECLAMATION

This work consists of pulverizing and blending the in-place bituminous pavement with a portion of the underlying material to produce a uniformly mixed aggregate base.

The work includes spreading, watering, compacting, shaping, and maintaining the blended reclaim material to the specified profile and cross-section.

The provisions of MnDOT 2215 are modified with the following:

Table 2215.3-1 shall be deleted and replaced with the following:

Table 2215.3-1 FDR Gradation Requirements	
Sieve Size	**Percent Passing**
2 inch	99-100
1 ½ inch	90-100

MnDOT 2215.3A is hereby modified with the following:
Remove all reclaimed pavement pieces that would be retained on a 2" sieve, from the right of way.

MnDOT 2215.3E.3 is hereby modified with the following:
Reclaimed material compaction shall be obtained by the 2106.3G.2 "Quality Compaction".

2221 SHOULDER BASE AGGREGATE

The Certification of Aggregates shall be sent to the County Engineer 10 days prior to placing **Shoulder Base Aggregate, Class 1.**

All shouldering operations shall be kept within a one mile work zone. All equipment used to place, shape, water, dump, or broom the shoulder base aggregate shall stay within the work zone until the shoulder has been completed. This includes entrances and side roads.

The Shoulder Base Aggregate, Class 1 shall be completed within 10 calendar days after the final Wearing Course lift. Failure to complete the Shoulder Base Aggregate, Class 1 within the specified 10 calendar days will result in a Liquidated Damage of $250.00/day.

A **shouldering machine** designed to perform this work shall place all shoulder base aggregate. Trucks will not be allowed to windrow aggregate in front of the shouldering machine.

Shoulder Base Aggregate, Class 1 compaction shall be obtained by the 2211.3.D.2.b "Quality Compaction Method".

Water shall be applied to the shouldering material during the mixing and spreading operations to obtain at the time of compaction a moisture, content of not less than 5 percent of the dry weight.

After compaction of the finished shoulder, if so directed by the Engineer, it shall be reshaped using a motor grader with an attachment capable of controlling shoulder width.

"Low Shoulder" signs shall be erected at the end of each days operation after the placement of any base or surface course where shoulder drop off is 1.5 inches. Shoulder drop offs of 1.5 inches to 4.0 inches or greater shall be signed and protected as per Field Manual Section 6, Figure 6k-4, in the February 2014 Temporary Traffic Control Zone Layout portion of the (MN

MMUTCD).

2221.5 BASIS OF PAYMENT
Quantities resulting from excess aggregate placement not in conformance with the plans will not be accepted for payment.

2231 BITUMINOUS PATCH SPECIAL (0" TO 12")
All saw cutting, bituminous removal, excavation, fabric (if required) and new bituminous pavement shall be included in the square yard bid price for BITUMINOUS PATCH SPECIAL (0" TO 12").

The excavated material in conjunction with the bituminous patch special operation shall become the property of the contractor. Disposal will not be allowed within the right of way. Suitable disposal sites shall be arranged for and secured by the Contractor and he/she will assume full responsibility for acceptable disposition of the material.

2232 MILL BITUMINOUS SURFACE
SAP 034-604-035
The MILL BITUMINOUS SURFACE (2.0") quantity will not become property of the contractor. All millings shall be hauled and unloaded at a designated area in a pit located at 18350 30th Ave SE, Atwater, MN 56209.

SAP 034-624-013
The MILL BITUMINOUS SURFACE (0" to 12")(1.5")(3.0")(3.5") quantities will not become property of the contractor. All millings shall be hauled and unloaded at a designated area in a pit located at 18901 Hwy 23 NE, New London, MN 56273.

SAP 034-631-008
The MILL BITUMINOUS SURFACE (2.0") quantity will not become property of the contractor. Millings shall be hauled and unloaded at a designated area in a pit located at 18901 Hwy 23 NE, New London, MN 56273.

All other projects the milled bituminous surface shall become the property of the Contractor. Disposal will not be allowed within the right of way. Suitable disposal sites shall be arranged for and secured by the Contractor and he/she will assume full responsibility for acceptable disposition of the material. Disposal of the milled bituminous material shall be included in the bid price for MILL BITUMINOUS SURFACE with no direct compensation being made therefore.

2232 MILLED RUMBLE STRIPS
Each stop condition is a bid quantity of 1 EACH, which consists of a set of 3 rumble strips as shown in the typical.

2357 BITUMINOUS TACK COAT

MnDOT 2357 is modified and/or supplemented with the following:

All costs of furnishing and applying bituminous tack coat material will be included in the bid price for Wearing Course Mixtures with no direct compensation being made therefore. Mainline, Centerline Joints, Entrances and Side Road tack coats shall have 100% coverage.

2357 BITUMINOUS MATERIAL FOR SHOULDER TACK

This Work consists of treating Aggregate Shoulders with bituminous material, in accordance with the provisions of MnDOT 2357.

MATERIALS

A Emulsified Asphalt.....MnDOT 3151
Use CSS-1 or CSS-1h diluted 1:1. Dilution of the emulsion is allowed only at the place of manufacture. No field dilution is allowed.

B Water.....MnDOT 2130.2

C Granular Material..... MnDOT 3149.2.J

CONSTRUCTION REQUIREMENTS

Water shall be applied to the ground surface immediately in advance of placing the asphalt emulsion. The rate and quantity of water to be applied shall be as directed by the Engineer. In general, the soil shall be moistened to a depth of at least 1 inch. Application of water shall be in accordance with MnDOT 2130. The asphalt emulsion shall be applied at a rate of 0.18 – 0.25 gallons per square yard. During placement, take every effort to obtain uniform distribution over the area specified. Distributor spray bars shall be used to the fullest extent possible and handheld nozzles are to be used only in inaccessible areas.

Furnish and apply granular material on newly tacked surfaces at pedestrian crossings.

S-1.6 METHOD OF MEASUREMENT

The Engineer will measure the Bituminous Material for Shoulder Tack by volume at 60°F. The granular material for pedestrian crossings is included in bituminous material.

S-1.7 BASIS OF PAYMENT

The Contract Unit Price for Bituminous Material for Shoulder Tack is compensation in full for Equipment, Materials and labor required to complete the Work.

The Department will pay for Bituminous Material for Shoulder Tack on the basis of the following schedule:

Item No.	Item	Unit
2357.606	Bituminous Material for Shoulder Tack	gallon

2360 PLANT MIXED ASPHALT PAVEMENT

MnDOT 2360 is modified and/or supplemented with the following:

Mix Designations Numbers for the bituminous mixtures on this Project are as follows:
Type SP 4.75 Wearing Course Mixture (2,B) SPWED240B
Type SP 4.75 Wearing Course Mixture (3,B) SPWED340B
Type SP 12.5 Wearing Course Mixture (2,B) SPWEB240B
Type SP 12.5 Wearing Course Mixture (3,B) SPWEB340B
Type SP 12.5 Wearing Course Mixture (2,C) SPWEB240C

All RAP (Recycled Asphalt Pavement) material used for Wear courses shall be crushed. RAP material shall pass 100% of the maximum aggregate size of gradation Table 3139.2-2 No reduction of the gradation broadband for the maximum aggregate size of 97% is allowed.

All entrances and side roads shall have a hot joint paved with the mainline operation.

A small steel roller shall be used on all entrances and side roads.

All bituminous material not used during the workday shall be removed that same workday and disposed of off the project. All bituminous excess from entrance and side road paving shall be removed and cleaned off the road prior to mainline paving.

All road projects shall be cleaned with a Power Broom prior to paving, including entrances and side roads. This includes all milled mainlines, side roads, and driveways.

To ensure greater control and uniformity in the preparation of the test samples, the contractor is required to use a mechanical splitter in the bituminous plant.

The first paragraph of 2360.3.D.1 is hereby deleted and replaced with the following:
D.1 Maximum Density
Compact the pavement to at least the minimum required maximum density values in accordance with Table 2360.3-1, "Required Minimum Lot Density (Mat)".

MnDOT 2360.3.D.1.n. Longitudinal Joint Density is hereby deleted.

MnDOT 2360.3.D.1.p Shoulders is hereby deleted

MnDOT Table 2360.5-4 Incentive and Disincentive Schedule for Maximum Mat Density.
The following % Densities and Percent Payment is hereby deleted from the table:

SP Wear % Density	SP Non-wear % Density	Percent Payment
93.6 and above	94.6 and above	103
93.1-93.5	94.1-94.5	102

MnDOT Table 2360.5-6 Incentive and Disincentive Schedule for Longitudinal Joint Density, 4 percent Design Void is hereby deleted.

MnDOT Table 2360.5-6 Incentive and Disincentive Schedule for Longitudinal Joint Density, 3 percent Design Void is hereby deleted.

MnDOT 2360.5.B.13.b Monetary Adjustment Factor Determination is hereby deleted.

2399 PAVEMENT SURFACE SMOOTHNESS

MnDOT 2399 is hereby deleted.

The requirements of MnDOT 2399.3.E Corrective Work will apply.

2461 STRUCTURAL CONCRETE

REVISED 06/28/24

SP2020-145

Delete and replace the second sentence of MnDOT 2461.2E.1.e with the following:
Use "EX" for exposed Aggregate mixes, "CO" for colored concrete mixes, and "FRC" for fiber reinforced concrete mixes.
Delete and replace Table 2461.2-5 of MnDOT 2461.2E.2.a(2) with the following:

Table 2461.2-5
Concrete Mix Design Requirements for Grout and Lean Mix Backfill Mixes

Mix Number	Maximum W/C Ratio	Water Content (pounds)	Cement Content (pounds)	Fly Ash Content (pounds)	Fine Aggregate Calculation (pounds)	Coarse Aggregate Calculation (pounds)	Percent Air Content	Slump Range	Minimum 28-Calendar Day Compressive Strength, f'c
1A Grout*	0.50	379	758	0	100 percent †	0	3.0	As needed	4000 psi
3A Grout*	0.44	379	865	0	100 percent †	0	10.0	As needed	4000 psi
Lean Mix‖	1.00	375	125	250	50 percent†	50 percent† ǂ	N/A	10 inches ± 1 inch	#

* Do not provide 1A or 3A grout containing coarse Aggregate or fly ash.
‖ Coarse Aggregate quality meets requirements of 3137.2D.1, "Coarse Aggregate for General Use."
† After adding the specified quantities of cement, fly ash, and water, provide the remaining Aggregate to an absolute volume 27.00 – 27.27 cubic feet.
ǂ Meeting #67 gradation as shown in Table 3137.2-4.
Maximum 28-Calendar Day compressive strength of 1500 psi.

Delete and replace the first sentence of MnDOT 2461.2E.2 with the following:

Acceptance of concrete is contingent on meeting all specification requirements, including but not limited to requirements related to field placement and performance.

Delete and replace the second paragraph of 2461.2E.2.b with the following:

The Contractor assumes full responsibility for the concrete mix design and performance of the concrete, including meeting all specification requirements.

Delete and replace Table 2461.2-6 of MnDOT 2461.2E.2.b(1) with the following:

Table 2461.2-6
Concrete Mix Design Requirements (Not applicable to High-Performance Concrete or Mass Concrete)

Concrete Grade	Mix Number	Intended Use *	Maximum W/C Ratio ‖	Maximum Cementitious Content (pounds/ cubic yard)	Maximum percent SCM (Fly Ash/ Slag/Ternary)	Design Slump Range (inches)	Minimum 28-day Compressive Strength, f'c	3137, "Coarse Aggregate for Portland Cement Concrete."
B Bridge Substructure	3B52	Abutment, stems, wingwalls, paving brackets, pier columns, pier caps, pier struts	0.45	750	30/35/40	2 - 5	4000 psi	2D.1
F Flatwork	3F32	Curb and gutter	0.42	750	30/35/0	1/2 - 3 #	4500 psi	2D.1
	3F52 3F57EX † 3F52CO ‡	Sidewalk, curb and gutter, slope paving, median Sidewalk, driveway entrances, ADA pedestrian Sidewalk	0.45	750	25/30/0	2 – 5	4500 psi	2D.1
G General Concrete	1G52	Footings and pilecap	0.55	750	30/35/40	2 - 5	4500 psi	2D.1
	3G52	Footings, pilecap, walls, cast-in-place manholes and catch basins, fence posts, signal bases, Light Pole foundations, erosion control Structures, cast-in-place box culverts, Culvert headwalls, open flumes, cast-in-place wall stems	0.45	750	30/35/40	2 - 5	4500 psi	2D.1
M Median Barrier	3M12	Slipform barrier, Median barrier, non-bridge	0.42	750	30/35/40	1/2 - 1 #	4500 psi	2D.1
	3M52	Barrier, Median barrier, non-bridge	0.45	750	30/35/40	2 – 5	4500 psi	2D.1

Concrete Grade	Mix Number	Intended Use *	Maximum W/C Ratio ‖	Maximum Cementitious Content (pounds/ cubic yard)	Maximum percent SCM (Fly Ash/ Slag/Ternary)	Design Slump Range (inches)	Minimum 28-day Compressive Strength, f'c	3137, "Coarse Aggregate for Portland Cement Concrete."
P Piling	1P42	MSE and gravity wall leveling pad	0.63	750	30/35/40	2 – 4	3000 psi	2D.1
	1P62	Piling, spread footing leveling pad	0.63	750	30/35/40	3 – 6	3000 psi	2D.1
R Pavement Rehabilitation	3R52	CPR – Full-depth concrete repairs, concrete base	0.45	750	30/35/40	2 – 5	4000 psi	2D.3
S Bridge Superstructure	3S12	Slipform Bridge barrier, parapets, end post	0.42	750	30/35/40	1/2 - 1 #	4000 psi	2D.2
	3S52	Median barrier, raised median, pilaster, curb, Sidewalk, approach panel, formed Bridge barrier, parapet, end post, collar	0.45	750	30/35/40	2 - 5	4000 psi	2D.2
X Miscellaneous Bridge	1X62	Cofferdam seals, rock sockets, drilled shafts	0.45	750	30/35/40	3 – 6	5000 psi	2D.1
	3X62	Drilled shafts above the frost line	0.45	750	30/35/40	3 – 6	5000 psi	2D.1
Y Bridge Deck	3Y42-M § 3Y42-S §	Bridge decks, integral abutment diaphragms, pier continuity diaphragms, expansion joint replacement mix	0.45	750	30/35/40	2 - 4	4000 psi	2D.2
	3Y47 **	Deck patching mix	0.45	750	30/35/40	2 – 4	4000 psi	2D.2

If the intended use is not included elsewhere in the Specification or Special Provisions, use mix 3G52, unless otherwise directed by the Engineer.
‖ The minimum Water/Cement (W/C) ratio is 0.30.
† Mix 3F57EX requires the use of Coarse Aggregate Designation "7", "2" or "3" for the 4th digit in accordance with Table 2461.2-3.
‡ Identify the specific color used on the Certificate of Compliance. Colored concrete is only allowed when specified in the Plans or the Contract.

Concrete Grade	Mix Number	Intended Use *	Maximum W/C Ratio ‖	Maximum Cementitious Content (pounds/ cubic yard)	Maximum percent SCM (Fly Ash/ Slag/Ternary)	Design Slump Range (inches)	Minimum 28-day Compressive Strength, f'c	3137, "Coarse Aggregate for Portland Cement Concrete."
# Adjust slump in accordance with 2461.3G.7.a, "Concrete Placed by the Slip-Form Method," for slip-form concrete placement. § The "-S" indicates a Bridge deck with a structural slab and "-M" indicates a monolithic Bridge deck. ** Mix 3Y47 requires the use of Coarse Aggregate Designation "7" or "3" for the 4th digit in accordance with Table 2461.2-3.								

Delete and replace the first sentence of MnDOT 2461.2E.2.b(2) with the following:

Design High-early (HE) concrete to achieve the minimum design strength and time required in accordance with Table 2461.2-7.

Delete and replace Table 2461.2-7 of MnDOT 2461.2E.2.b(2) with the following:

Table 2461.2-7
High-Early (HE) Concrete Requirements
(Not applicable to Bridge Superstructure or Mass Concrete)

Mix Number	Concrete Grades Allowed	Minimum Design Time	Maximum W/C Ratio	Maximum Cementitious Content (pounds/ cubic yard)*	Slump Range	Minimum Design Strength	Minimum 28-Calendar Day Compressive Strength, f'c	3137 "Coarse Aggregate for Portland Cement Concrete"
1PHE62 ‖	P	-	0.63	750	3 – 6 inches	-	3000 psi	2.D.1
3HE32	F	48 hours	0.42	750	1/2 – 3 inches †	2000 psi	4500 psi	2.D.1
3HE52	F	48 hours	0.42	750	2 – 5 inches	2000 psi	4500 psi	2.D.1
3HE52	B and G	48 hours	0.42	750	2 – 5 inches	3000 psi	4500 psi	2.D.1
3YHE52	Y (Repairs Only)	48 hours	0.42	750	2 – 5 inches	3000 psi	4000 psi	2.D.2
3RHE52	R (Repairs Only)	48 hours	0.42	750	2 – 5 inches	2000 psi	4000 psi	2.D.3

* Supplementary cementitious Materials allowed.
‖ Used only for placing concrete in piles during freezing temperatures, provide 30 percent additional cement to the concrete mix for concrete 10 feet below the ground line or water line in accordance with 2451.3D.6, "Cast-in-Place Concrete Piles."
† Adjust slump in accordance with 2461.3G.7.a, "Concrete Placed by the Slip-Form Method."

Delete and replace Table 2461.2-8 of MnDOT 2461.2E.2.b(3) with the following:

Table 2461.2-8
Project Specific Contractor Designed Mixes

Concrete Grade	**Intended Use**	**Specification**	**3137 "Coarse Aggregate for Portland Cement Concrete"**
A	Concrete Pavement	2301, "Concrete Pavement"	2.D.3
M, V, W, Z	Precast Concrete	2462, "Precast Concrete"	Varies
HPC	High Performance Concrete	2401, "Concrete Bridge Construction"	2.D.2
MC	Mass Concrete	Special Provision 2401	Varies
SCC	Self-consolidating Concrete	Special Provision 2401	Varies
CLSM, LCCF	Cellular Concrete Grout	2519, "Cellular Concrete"	None
Non-MnDOT Designated	Per Contract	Per Contract	Per Contract
All concrete grades	Delivery Time is > 90 minutes	2461.3G.3.a, "Delivery Time Beyond 90 minutes"	Varies

Delete and replace the first, second, and third paragraphs of MnDOT 2461.2E.3 with the following:

At least 21 Calendar Days before initial placement of the concrete, submit the appropriate General concrete mix design form to the Concrete Engineer for review. Use the most current forms, specific gravity, and absorption data available from the MnDOT Concrete Engineering website.

Design the concrete mix to an absolute volume of 27.00 – 27.27 cubic feet.

MnDOT will review the Contractor's proposed mixture design solely for compliance with applicable mix design properties in 2461.2. The Department makes no guaranty or warranty, either express or implied, that compliance with mix design properties ensures compliance with any other requirements.

Delete and replace Table 2461.2-11 of MnDOT 2461.2E.4 with the following:

Table 2462.2-11
Mix Design Adjustments/Requirements

	Type of Change or Adjustment	**Mix Design Resubmittal Requirements**
Level 1 mixes	Cementitious Sources Admixture Sources Admixture Dosage Rate	No resubmittal required

	Type of Change or Adjustment	Mix Design Resubmittal Requirements
	Aggregate Sources Aggregate Proportions Any cementitious proportion (≤ 15% max fly ash)	Resubmittal of Mix Design
	Any cementitious proportion (> 15% max fly ash)	Resubmittal in accordance with 2461.2E.3.a, "Preliminary Test Data Requirements for Level 2 Mixes"
Level 2 mixes	Cementitious Sources Admixture Dosage Rate	No resubmittal required
	Aggregate Source, no change in Aggregate Class ≤ 5% Total Cementitious ≤ 10% Individual Aggregate Weights	Resubmittal of Mix Design
	Aggregate Source and Class of Coarse Aggregate Supplementary Cementitious Proportion > 5% Total Cementitious > 10% Individual Aggregate Weights Admixture Sources	Resubmittal in accordance with 2461.2E.3.a, "Preliminary Test Data Requirements for Level 2 Mixes"
* Only one (1) increase in total cementitious allowed per mix design, next adjustment requires resubmittal in accordance with 2461.2E.3.a, "Preliminary Test Data Requirements for Level 2 Mixes"		

Delete and replace MnDOT 2461.2E.5 with the following:

E.5 MnDOT Review of Continual Acceptance of Contractor Mix Designs

The Concrete Engineer will review test results relating to each individual Contractor concrete mix design. The Concrete Engineer will review the following test results:

(1) Plant and Field Test Results
(2) Compressive Strength at 28 Calendar Days
(3) Monthly Aggregate Quality Testing

Provided the concrete continues to meet specification requirements, the Contractor will have that mix design available for future use.

Add the following to MnDOT 2461.3D.1:

D.1.g Fiber Proportioning

Do not incorporate fiber packaging materials into the Concrete. The Engineer considers the following fiber addition methods acceptable on all jobs:

1. Open bag and distribute fibers on Aggregate belt at Ready-mix Concrete plant
2. Open bag, break apart any fiber clumps, and introduce fibers into Ready-mix Concrete truck in a well-distributed manner

Any alternate methods to add fibers to the concrete mix must be submitted for acceptance by the Engineer and demonstrated by a successful trial placement.

Ensure fibers are uniformly dispersed in the Concrete to avoid balling. Balling of fibers is defined as a 2 inch diameter or greater conglomerate of fibers at the point of placement. The Engineer will consider any balling more prevalent than 1 per load of Concrete as unacceptable and may reject the load of concrete.

Delete and replace MnDOT 2461.3D.1.b with the following:

D.1.b Weighing Equipment and Tolerances

Weigh or measure concrete mixture ingredients using load cells or meters for Ready-mix and paving concrete to within the targeted batch weight in accordance with the following:

(1) Water – 1 percent
(2) Cement – 1 percent or 30 pounds, whichever is greater
(3) Other cementitious Materials – 3 percent or 30 pounds, whichever is greater
(4) Aggregates – 2 percent
(5) Admixtures – 3 percent

In accordance with 1503, the Producer will make plant adjustments when out of tolerance values are reoccurring on the same day or over a period of 7 calendar days.

Delete and replace MnDOT 2461.3F.1.a(7) with the following:

(7) Supply a working email address, including an active internet connection with availability for Department use, at the certified ready-mix plant.

Delete and replace the second sentence of MnDOT 2461.3F.2 with the following:

If the computer that generates the Certificate of Compliance malfunctions, the Engineer may allow the Contractor to finish any pours in progress if the Producer issues a handwritten or computer-generated Department Form 0042, *Certificate of Compliance* with each load. The Engineer will not allow the Producer to begin new pours without a working computerized Certificate of Compliance.

Add the following to MnDOT 2461.3F.2:

(22) Fibers, brand, and dosage per cubic yard

(23) Ready-Mix Sheet Number (RMX###-###), JMF Sheet Number (JMF##-###), or PS Sheet Number (PS##-###)

(24) MnDOT Designation Plant/Unit Number (RM###)

S-1.13 Delete and replace MnDOT 2461.3F.3.c with the following:

Place concrete meeting the aggregate gradation requirements in the Work.

Identify QC companion gradation samples with the following information:

(1) Date
(2) Test number
(3) Time
(4) Type of Material
(5) Plant
(6) Sampling Location

If any gradation fails, immediately take second gradation. If the second gradation passes, resume testing as required. The Engineer will not allow the second gradation as a substitute for the next required QC gradation. If the second gradation fails, refer to Table 2461.5-1 for additional requirements. The Engineer will not allow a verification companion gradation as a substitute for a QC gradation.

Delete the second paragraph of MnDOT 2461.3F.3.d.

Delete and replace the first and second paragraphs of MnDOT 2461.3F.3.e with the following:

The Producer will complete and maintain the Concrete Ready-mix Plant QC Workbook in Real Time for all materials and sources incorporated into the concrete mix, using their full name for the diary and each test performed.

Add the following to MnDOT 2461.3G.2:

The Contractor and Engineer will perform random sampling and testing in accordance with ASTM C172, Standard Practice for Sampling Freshly Mixed Concrete; ASTM C1064, Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete; and the Schedule of Materials Control.

Add the following to MnDOT 2461.3G.5:

For all cast-in-place concrete as specified in 2461, including HE concrete, place concrete meeting the strength requirements of Table 2461.2-6 and Table 2461.2-7 unless otherwise specified in the Contract into the Work. Unless otherwise included in the Plans, HE concrete requires approval of the Engineer before incorporation into the Work.

Delete 2461.3G.5.b(2) and replace with the following:

(2) Mark cylinder for identification of the represented unit or section of concrete

Delete and replace Table 2461.3-3 of MnDOT 2461.3G.6.a(1) with the following:

Table 2461.3-3
Chronological Testing Ages of Strength Specimens

Type of Concrete	**Testing Ages***
Concrete Pavement as defined in 2301, "Concrete Pavement"	Test at least 2 sets of strength specimens before and the remaining sets after the anticipated opening strength
Normal Strength Concrete as defined in 2461, "Structural Concrete"	1, 3, 7, 14, and 28-Calendar Days
High-early (HE) Concrete as defined in 2461, "Structural Concrete"	12 hours, 1, 2, 7, and 28-Calendar Days
Ultra High-Early (UHE) Concrete as defined in 2302, Concrete Pavement Rehabilitation"	3, 4, and 8 hours, 1 and 14-Calendar Days
* The Contractor may adjust the testing ages if approved by the Engineer, in conjunction with the Concrete Engineer.	

Delete and replace the second sentence of MnDOT 2461.3G.7 with the following:

The Contractor and Engineer will perform random sampling and testing in accordance with ASTM C172, Standard Practice for Sampling Freshly Mixed Concrete; ASTM C143, Standard Test Method for Slump of Hydraulic-Cement Concrete; ASTM C1611, Standard Test Method for Slump Flow of Self-Consolidating Concrete; and the Schedule of Materials Control.

Delete and replace the second sentence of MnDOT 2461.3G.8 with the following:

The Contractor and Engineer will perform random sampling and testing in accordance with *ASTM C172, Standard Practice for Sampling Freshly Mixed Concrete*; *ASTM C231, Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method*; and the Schedule of Materials Control.

S-1.22 Delete and replace the fourth paragraph of MnDOT 2461.3G.8 with the following:

Test the air content at the point of delivery (eg., end of concrete chute) unless otherwise specified in the Contract.

Delete and replace MnDOT 2461.5A.2.d with the following:

A.2.d Moving Average Below f'c

If the moving average of 3 consecutive strength tests is less than the required f'c, the Concrete Engineer will review the strength test results and determine if a new mix design is required in accordance with Table 2461.2-6 or Table 2461.2-7.

The Concrete Engineer in conjunction with the Engineer will remove any strength test results from the moving average if the following occurs:

(1) After investigation, the cause for the deficient concrete strength is due to improper handling, curing, or testing of the cylinder
(2) Cylinders kept in the field longer than 7-Calendar Days that negatively impact the moving average calculation
(3) The suspect concrete was removed and replaced
(4) Dispute resolution coring identified the concrete acceptable to remain in place

For the quantity of non-conforming concrete not meeting the moving average of 3 consecutive strength tests, the Engineer will make determinations regarding the disposition, payment, or removal of the concrete in accordance with Table 2461.5-5.

Table 2461.5-5
All Concrete Grades

Moving average of 3 consecutive strength tests	**Monetary Deductions for Moving Average Failure ***
> 96.0 percent of f'c	No deductions for the Materials placed as approved by the Engineer.
91.0 percent to 96.0 percent of f'c	$20.00 per cubic yard or 10 percent of the Contractor-provided invoice for quantity represented by test that brought moving average into non-conformance.
≥ 87.5 percent and ≤ 91.0 percent of f'c	$50.00 per cubic yard or 25 percent of the Contractor-provided invoice for quantity represented by test that brought moving average into non-conformance.
< 87.5 percent of f'c	Remove and replace concrete in accordance with 1503, "Conformity with Contract Documents," and 1512, "Unacceptable and Unauthorized Work," as directed by the Engineer. If the Engineer, in conjunction with the Concrete Engineer, determines the concrete can remain in-place, the Engineer will adjust the concrete at a reduction of $100.00 per cubic yard or 50 percent of the Contractor-provided invoice for quantity represented by test that brought moving average into non-conformance.

2504 REPAIR SPRINKLER SYSTEM

SAP 034-641-012

This work includes the repair/relocation of any and all sprinkler systems that may be encountered or damaged during the construction of sidewalk, pedestrian curb ramps, curb and gutter, concrete driveways, etc. Exact locations, if any, are unknown.

2504 ADJUST VALVE BOX AND 2506 ADJUST FRAME & RING CASTING

At the time of paving the Contractor shall adjust each of the gate valves and manhole frame & ring castings when required to fit the proper height of the wearing course or finished grade elevation. Adjusting ring inserts will not be allowed.

2521 CONCRETE WALK (ADA)

REVISED 12/20/24

SP2020-171.1

S-1.1 DESCRIPTION

This Work consists of constructing Concrete Walk, including necessary Subgrade Preparation, Aggregate Base and Grading in accordance with MnDOT 2104, MnDOT 2521, MnDOT 2106, MnDOT 2112, MnDOT 2211, and 1804 PROSECUTION OF WORK (ADA).

S-1.2 MATERIALS– See Standard Specifications for Construction

Aggregate for Surface and Base Course .....MnDOT 3138

S-1.3 CONSTRUCTION REQUIREMENTS

Grade and compact the subgrade in accordance with the plan details, MnDOT 2112 and MnDOT 2106.3G.2, "Quality Compaction". Dispose of excess material in accordance with 2104.3D.

Grade and compact the aggregate base in accordance with MnDOT 2211 and MnDOT 2106.3G.2, "Quality Compaction".

Prior to initial landing construction ensure the subgrade is prepared and the aggregate base is placed for the entire curb ramp construction.

Construct Concrete Walk in accordance with Standard Plan Sheet No. 5-297.250 and MnDOT 2521.3D.3.

Sawcut contraction joints.

See separate landing pour requirements and reinforcement details on Standard Plan Sheet No. 5-297.250, sheet 6 of 6.

S-1.4 METHOD OF MEASUREMENT

The Engineer will measure Concrete Walk by top surface area, which consists of 6 inch thick concrete at the quadrants including ramps, landings, flares, paved boulevards and thickness transitions until the sidewalk typical section meets full curb height. Refer to Standard Plan No. 5-297.250 (Sheets 1 and 2) curb ramp details and bubble note 1.

In areas where directional curb is constructed, the triangular area that is behind the projected back of curb line will be measured as Concrete Walk.

The area under the truncated domes will be measured as Concrete Walk.

S-1.5 BASIS OF PAYMENT

The Contract Unit Price for Concrete Walk is compensation in full for Equipment, Materials and labor required to complete the Work.

No payment will be made for excavation or borrow, including hauling or disposal, that is necessary to meet the walk grades unless specifically provided for in the Plans.

Drill and Grout Reinforcing Bars will be paid for separately.

The Department will pay for Concrete Walk on the basis of the following schedule:

Item No.	Item	Unit
2521.618	Concrete Walk	square foot

2574 COMMON TOPSOIL BORROW

The common topsoil borrow shall be constructed in accordance with 3877.2A and the provisions as follows:

This work shall consist of constructing earth shoulders adjacent to bituminous surfacing.

The topsoil shoulder shall be completed within 10 calendar days after the final wearing course lift. Failure to complete the common topsoil borrow within the specified 10 calendar days will result in a Liquidated Damage of $250.00/day.

All common topsoil borrow shall be placed using a shouldering machine. Entrances that require topsoil shall be placed with a tracked skid loader to avoid damaging the bituminous mat.

The common topsoil borrow placed shall be compacted over its full width by two passes of a roller over each strip the width of the roller. The roller may be a tamping roller as specified in 2123.3 or a pneumatic-tired roller with a weight of not less than 200 pounds/inch of roller width.

The material shall be placed, compacted and finished to the required grade and cross-section in accordance with the embankment construction, quality compaction method, as specified in 2106.3F. No materials shall be placed or stockpiled in such a manner as to restrict free surface drainage of the roadway. Before operations are suspended each night, all material shall be struck off at least down to the elevation of the pavement or bituminous surfacing and sloped to drain.

Common topsoil borrow will be measured by the volume (vehicular measure) of material furnished and placed. Any material displaced by weather prior to seeding/erosion control operations shall be replaced at the contractor's expense.

Payment for the accepted quantity of common topsoil borrow at the Contract price per unit of measure will be compensation in full for all costs of the preparatory work and for furnishing and placing the material as specified.

2573 EROSION CONTROL SUPERVISOR

Section 2573.5G is deleted and replaced by the following:

G Erosion Control Supervisor

Providing the Erosion Control Supervisor for this Contract shall be considered incidental work for which no direct payment will be made.

G.1 Reductions

The County will withhold from monies owed to the Contractor for failure to provide a certified erosion control supervisor or failure to perform erosion control supervisor duties. The amounts to be withheld on each partial estimate will be the product of **$1,000** per day and the amount of days the County has determined the Contractor failed to perform erosion control duties as specified under 2573.3A.1 Erosion Control Supervisor and the following:

The Erosion Control Supervisor shall ensure all quantities are correct and obtain all tickets pertaining to the operation each day and provide them to the County Engineer.

2574 & 2575 FERTILIZER, SEED & BFM

The Fertilizer, Seed & BFM shall be completed within 7 calendar days after the placement of Common Topsoil Borrow. Failure to complete the Fertilizer, Seed & BFM within the specified 7 calendar days will result in a Liquidated Damage of $250.00/day.

2575 SITE RESTORATION (ADA)

REVISED 03/29/24

SP2020-220

S-1.1 DESCRIPTION

This Work consists of site grading and establishment of a perennial vegetative cover in accordance with MnDOT 2575, MnDOT 1717, MnDOT 2574, MnDOT 3876, MnDOT 3877, MnDOT 3878, MnDOT 3881, MnDOT 3882 and 1804 PROSECUTION OF WORK (ADA). Site restoration pertains to grading, topsoil placement and turf establishment in areas where pedestrian ramps, sidewalks, shared use paths, driveways, and curb & gutter, are being constructed, and in Boulevard Drainage Restoration areas required to restore positive sidewalk drainage to the roadway as designated in the Plan.

S-1.2 MATERIALS – See Standard Specifications for Construction

S-1.3 CONSTRUCTION REQUIREMENTS

A Site Grading

Grade disturbed areas flush with the top of walk, top of curb, driveways or utilities while maintaining positive drainage. Exclude areas where damage to tree roots may occur and protect trees from Contractor operations.

Place stockpiled topsoil within the same area where it was stripped. Supplement the stockpiled topsoil with Sandy Clay Loam Topsoil Borrow in accordance with 3877.2C to provide the required minimum depth of topsoil.

Grade cut section side slopes flush from the top of concrete surface at a maximum 1:6 slope up to 5 feet from the edge of walk. If 1:6 slope does not daylight within 5 feet from edge of walk, straight line grade topsoil surface up to a 1:3 slope. With Engineer's approval, Concrete Curb Design V may be utilized along with the above stated grading techniques to reduce excessive ground slopes and better match adjacent surface terrain within the 5-foot grading area.

Provide a 4-inch minimum topsoil depth and grade boulevard drainage restoration areas with a straight-line grade from top of walk to top back of curb.

Restore sites to a condition similar or better to the preconstruction condition, to the satisfaction of the Engineer.

B Turf Establishment

Establish vegetation, provide fertilizer, and BFM for disturbed areas in accordance with the Plans. Stabilize each site in accordance with MnDOT 1717. Prepare seed bed in accordance with MnDOT 2574. Seed mix shall be Seed Southern Boulevard.

S-1.4 METHOD OF MEASUREMENT

The Engineer will measure the number of sites restored.

S-1.5 BASIS OF PAYMENT

The Contract Unit Price for Site Restoration is compensation in full for Equipment, Materials and labor required to complete the Work.

Schedule

The Department will pay for Site Restoration on the basis of the following schedule:

Item No.	Item	Unit
2575.602	Site Restoration	each

2580 INTERIM PAVEMENT MARKING

The Interim Pavement Marking shall consist of temporary raised pavement markings placed at 100' intervals along the centerline longitudinal joint after the final bituminous wear lift.

2582 PAVEMENT MARKING S

The provisions of MnDOT 2582 are hereby modified and/or supplemented with the following:

The beginning and ending of all paint markings shall be marked by the Engineer. Paint shall only be applied on dry, clean pavement surfaces.

Pavement markings shall be completed within 10 calendar days of final completion of the aggregate shoulders and/or boulevard topsoil borrow. Failure to complete the pavement markings within the specified time will result in a liquidated damage of $500.00/day.

The contractor shall provide signs for the beginning, end, and all side roads of the project indicating "No Permanent Pavement Markings". All signing shall be included in the bid price for Traffic Control.

3113 ADMIXTURES FOR CONCRETE

RESTORED 06/30/23

Delete and replace MnDOT 3113.2A with the following:

Provide Class I admixtures from the Approved Products List meeting the requirements of *ASTM C494, Standard Specification for Chemical Admixtures for Concrete*.

Department identifies the following as Class I admixtures:

(1) Type A — Water reducing
(2) Type B — Retarding
(3) Type C — Accelerating
(4) Type D — Water reducing and retarding
(5) Type E — Water reducing and accelerating
(6) Type F — Water reducing, high range
(7) Type G — Water reducing, high range and retarding
(8) Type S — Specific performance admixtures

Provide Class II air-entraining admixtures from the Approved Products List meeting the requirements of *AASHTO M 154, Standard Specification for Air-Entraining Admixtures for Concrete,* except the tests for bleeding, bond strength, and volume change are not required.

Provide Class III corrosion inhibiting chloride admixtures from the Approved Products List meeting the requirements of *ASTM C1582, Standard Specification for Admixtures to Inhibit Chloride-Induced Corrosion of Reinforcing Steel in Concrete*.

3115 FLY ASH FOR USE IN PORTLAND CEMENT CONCRETE

NEW 03/29/24

SP2020-226.1

Delete and replace MnDOT 3115 with the following:

3115 FLY ASH FOR USE IN PORTLAND CEMENT CONCRETE

3115.1 SCOPE

Provide fly ash or coal ash for use in concrete and other applications.

3115.2 REQUIREMENTS

Provide fly ash or coal ash from the certified source listed on the Approved/Qualified Products List.

Provide materials meeting the requirements of ASTM C618, "Standard Specification for Coal Ash and Raw or Calcined Natural Pozzolan for Use in Concrete."

Ensure the following standardized Certification Statement is included with delivery invoices: "(insert company name) certifies that the (material name) produced at (insert plant and location) conforms to MnDOT Specification 3115 for Class (insert class) coal ash."

3115.3 SAMPLING AND TESTING

Provide samples for testing meeting the requirements of the Schedule of Materials Control.

3116 NATURAL POZZOLAN

NEW 06/28/24

S-1.1 SCOPE

Provide natural pozzolan for use in concrete and other applications.

S-1.2 REQUIREMENTS

Provide raw or calcined natural pozzolan material listed on the *Approved/Qualified Products List,* meeting the requirements of *ASTM C618*, *Standard Specification for Coal Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.*

Include the following standardized Certification Statement with delivery invoices: "(insert company name) certifies that the (material name) produced at (insert plant and location) conforms to MnDOT 3116 for Class N Natural Pozzolan."

S-1.3 SAMPLING AND TESTING

Provide samples for testing meeting the requirements of fly ash in the *Schedule of Materials Control*.

3131 INTERMEDIATE AGGREGATE FOR PORTLAND CEMENT CONCRETE

NEW 09/29/23

S-1.4 Add the following to the first paragraph of MnDOT 3131.2D:

If the CIA is <15 percent of the total aggregate in the mix, Table 3137.2-3(b) is modified to a maximum of 50.0 percent by weight of Carbonate in Class C aggregate.

3137 COARSE AGGREGATE FOR PORTLAND CEMENT CONCRETE

NEW 03/29/24

S-1.1 Delete MnDOT 3137.2C and replace with the following:

C Washing

Wash Class B, Class C, Class D, and Class R coarse Aggregate to comply with the requirements of Table 3137.2-1(i). Wash Class A aggregate as needed to comply

with the requirements of Table 3137.2-1(i), except always wash Class A aggregate for use in Concrete Pavement.

S-1.2 In Table 3137.2-1, delete the "#" footnote and replace with the following:

Each individual fraction at the point of placement consists of dust from fracture and free of soil (eg., clay and silt) and shale.

RESPONSIBLE CONTRACTOR

The Department cannot award a construction contract in excess of $50,000 unless the Bidder is a "responsible contractor" as defined in Minnesota Statutes §16C.285, subdivision 3. A Bidder submitting a Proposal for this Project must verify that it meets the minimum criteria specified in that statute by submitting the "Responsible Contractor Verification and Certification of Compliance" form. A company owner or officer must sign the "Responsible Contractor Verification and Certification of Compliance" form under oath verifying compliance with each of the minimum criteria. THE COMPLETED FORMS MUST BE SUBMITTED WITH THE BID PROPOSAL.

A bidder must obtain a verification from each subcontractor it will have a direct contractual relationship with. At the Department's request, a bidder must submit signed subcontractor verifications. A contractor or subcontractor must obtain an annual verification from each motor carrier it has a direct contractual relationship with. A motor carrier must give immediate written notice if it no longer meets the minimum responsible contractor criteria. The requirement for subcontractor verifications does not apply to:

- Design professionals licensed under Minnesota Statutes §326.06; and
- A business or person that supplies materials, equipment, or supplies to a subcontractor on the Project, including performing delivering and unloading services in connection with the supply of materials, equipment, and supplies. But, a business or person must submit a verification if it delivers mineral aggregate such as sand, gravel, or stone that will be incorporated into the Work by depositing the material substantially in place, directly or through spreaders, from the transporting vehicle.

A bidder or subcontractor who does not meet the minimum criteria specified in the statute, or who fails to verify compliance with the criteria, is not a "responsible contractor" and is ineligible to be awarded the Contract for this Project or to work on this Project. Submitting a false verification makes the bidder or subcontractor ineligible to be awarded a construction contract for this Project. Additionally, submitting a false statement may lead to contract termination. If only one bidder submits a bid, the Department may, but is not required to, award a contract even if that bidder does not meet the minimum criteria.

EQUAL EMPLOYMENT OPPORTUNITY SPECIAL PROVISIONS

NEW WRITE-UP 08/08/22

The Equal Employment Opportunity (EEO) Special Provisions contain the EEO rules and regulations for federal and/or state funded highway construction Projects in Minnesota.

The source of funding determines which EEO regulations and workforce participation goals apply to a specific Project:

- If the Project contains any federal funding, and has a total dollar value exceeding $10,000, federal EEO regulations and workforce participation goals apply. The Minnesota Department of Transportation's Office of Civil Rights (MnDOT's Office of Civil Rights) monitors and reviews these Projects on behalf of the Federal Highway Administration (FHWA), under federal law (23 U.S.C. § 140) and its accompanying rules (23 C.F.R. § 230). The FHWA allows MnDOT's Office of Civil Rights to apply the state's workforce participation goals to federally funded construction Contracts.
- If the Project contains any state funding, and has a total dollar value exceeding $100,000, state EEO regulations and workforce participation goals apply. MnDOT's Office of Civil Rights monitors and reviews these Projects in conjunction with the Minnesota Department of Human Rights under state law (Minn. Stat. § 363A.36) and its accompanying rules (Minn. R. 5000.3520 - .3530).
- If the Project contains any state and federal funding, and meets the total dollar value thresholds outlined above, both federal and state EEO regulations, and workforce participation goals apply. MnDOT's Office of Civil Rights monitors and reviews these Projects via a single review and monitoring process that meets federal and state requirements.

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
23 U.S.C. § 140, 23 C.F.R. § 230, 41 C.F.R. § 60, Minn. Stat. § 363A.36, Minn. R. 5000.3520 - .3530

A. The Contractor's attention is directed to the following:

1. Required Contract Provisions: Federal-Aid Construction Contracts Attachment (FHWA 1273) can be found here: https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=19624648
2. Equal Employment Opportunity (EEO) State and Federal Laws, Policies and Rules Attachment: Minnesota Affirmative Action Requirements (Pages 1-2); Violence-Free and Respectful Workplace (Pages 3-7); Specific Federal Equal Employment Opportunity Responsibilities (Pages 8-11); Standard Federal and State Equal Employment Construction Contract Specifications (Pages 12-15); Equal Opportunity Clause (Pages 16-17) can be found here: https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=19624471

B. The Contractor's compliance with 41 C.F.R. § 60-4, and Minn. Stat. § 363A.36 and its accompanying rules shall be based on the following: implementation of the Equal Opportunity Clause (Pages 16-17); adherence to the specific affirmative action obligations of the state and federal authorities outlined in these EEO Special Provisions and the Equal Employment Opportunity (EEO) State and Federal Laws, Policies and Rules Attachment; and good faith efforts to meet the applicable workforce participation goals detailed below.

C. Highway construction Contracts in excess of $100,000 in state funds and/or $10,000 in federal funds are subject to the workforce participation goals for minorities and women established by the Commissioner of the Minnesota Department of Human Rights (MDHR) under Minn. R. 5000.3520. The FHWA allows MnDOT's Office of Civil Rights to apply the state's workforce participation goals to federally funded construction Contracts. The Contractor's attention is directed to the following:

1. Workforce participation goals are percentages of total labor hours that minorities and women should perform in each trade on the Project. Compliance is measured against the total labor hours performed. The Contractor must ensure that labor hours for minorities and women remain substantially uniform in each trade for the duration of the Project.
2. Workforce participation goals are applied on a county-by-county basis.
3. For Projects spanning more than one county, the workforce participation goals of the assigned county apply. For statewide Projects, the highest workforce participation goals of any county located within the covered work area apply.
4. If the applicable workforce participation goals will not be met, the Contractor and any Subcontractor with estimated labor hours on the Project (except independent trucking operators) must demonstrate that specific and significant actions to recruit, hire, and retain minorities and women are being taken. The Contractor is responsible for ensuring Subcontractors are making these requisite good faith efforts.

D. The transfer of minorities and/or women, including employees and trainees, from different Projects or among Contractors for the sole purpose of meeting the workforce participation goals violates 41 C.F.R. § 60-4, and Minn. Stat. § 363A.36 and its accompanying rules. Such action is a breach of Contract.

E. The Contractor is directed to the following written notification requirements concerning Subcontracts:

1. <u>If the Project is federally funded</u>: The Office of Federal Contract Compliance Programs must receive written notification of any construction Subcontract over $10,000 executed at any tier within ten (10) working days of the Contract award.
2. <u>If the Project is state funded</u>: The Office of Equity and Inclusion for Minnesota Businesses, a division of MDHR, must receive written notification of any construction Subcontracts over $100,000 executed at any tier within ten (10) working days of the Contract award.

The written notification must provide the following information: Name, address, telephone number, and employee identification number of the Subcontractor; estimated amount of the Subcontract; Project location; and estimated start and end dates.

<u>NOTICE TO CONTRACTOR AND SUBCONTRACTORS: REPORTING REQUIREMENTS</u>

23 U.S.C. § 140, 23 C.F.R. § 230, Minn. Stat. § 363A.36, Minn. R. 5000.3520 - .3530

Workforce participation goals are applied on a county-by-county basis. For Projects spanning more than one county, the workforce participation goals of the assigned county apply. For statewide Projects, the highest workforce participation goals of any county located within the covered work area apply.

The workforce participation goals for this Project are:

Minority: 15%

Women: 12%

PRE-AWARD

A. The Contractor must complete and submit a Workforce Plan if the low bid amount is $5,000,000 or more.

B. The Workforce Plan includes the following documents:

1. Project Information Form: To be completed by the Contractor;
2. Contractor Workforce Commitment Form: To be completed by the Contractor and any Subcontractors with estimated labor hours on the Project;
3. Workforce Hours – Project Overview Form: To be completed by the Contractor; and
4. Total Company Workforce Report: To be completed by the Contractor and any Subcontractors upon request.
    a. The Total Company Workforce Report can be found here: mndot.gov/civilrights/forms.html.

The Contractor must select the regional Workforce Plan template that corresponds with Project location. The Workforce Plan templates can be found here: mndot.gov/civilrights/bid-results.html.

C. Approval of the Workforce Plan by MnDOT's Office of Civil Rights (OCR) is a condition of Contract award.

D. Approval is contingent upon the following:

1. Completion and submission of the Workforce Plan within five (5) business days of the bid opening. The five-day (5) period begins the first full business day after the bid opening date;
2. Completion and submission of all responses to specific Workforce Plan inquiries made by MnDOT's Office of Civil Rights of the Contractor or any of its Subcontractors with estimated labor hours on the Project; and
3. Ability of the Contractor or any of its Subcontractors with estimated labor hours on the Project to demonstrate that specific and significant actions to recruit, hire, and retain minorities and/or women are being taken if the applicable workforce participation goals will not be met.

E. Failure to complete and submit the Workforce Plan will result in the bid being rejected for failure to meet a condition precedent.

F. The execution of a collective bargaining agreement granting a union exclusive referral rights does not preclude compliance with the requirements of this section. As such, the inability of a union to provide candidates for employment relieves neither the Contractor nor any of its Subcontractors with estimated labor hours on the Project of the requirement to demonstrate that specific and significant actions to recruit, hire, and retain minorities and/or women are being taken if the applicable workforce participation goals will not be met.

POST-AWARD

A. The Contractor is directed to the following requirements concerning payroll submission:

1. The Contractor and its Subcontractors must complete and submit payroll weekly via the Civil Rights Labor Management System (CRL). Workforce participation goals are percentages of total labor hours captured through Contractor payroll submission.
2. All Contractors working on federal-aid highway construction Contracts of at least $10,000 during the last week of July must report their workforce by job category, gender, and ethnicity. MnDOT's Office of Civil Rights compiles this data into a single report for the FHWA. Information on how to submit the required data can be found here: mndot.gov/civilrights/federal-aid-highway-construction-contractors-annual-eeo-report.html.

Failure to meet these post-award reporting requirements may result in the imposition of Contract sanctions, including withholding of progress payments.

B. MnDOT's Office of Civil Rights determines whether Contractors on highway construction Projects are meeting state and federal laws, rules, and regulations relating to EEO by conducting annual compliance reviews. Accordingly, it reserves the right to audit the Contractor or any of its Subcontractors.

C. Information concerning specific reporting requirements for On-the-Job Training and Tribal Employment is accessible via reference to the Index for Division S.

FINAL CLEARANCE

Pursuant to MnDOT Standard Specifications for Construction, Section 1516.3, "Completion of the Work, note (7), the Contractor must notify the Engineer and MnDOT Office of Civil Rights when work is complete. MnDOT's Office of Civil Rights will issue a Final Clearance letter under MnDOT Standard Specifications for Construction, Section 1516.3, "Completion of the Work, note (7).

WORKER'S COMPENSATION INSURANCE COVERAGE

The successful bidder shall provide evidence of worker's compensation insurance meeting Minnesota statutory requirements on all employees.

GENERAL LIABILITY AND AUTO INSURANCE COVERAGE

The following minimum limits of insurance coverage shall be required:

Commercial General Liability Coverage

- $1,500,000 Each Occurrence
- $3,000,000 General Aggregate
- $3,000,000 Products and Completed Operations Aggregate

Auto Liability Coverage

- $1,5000,000 Combined Single Limit basis

An Excess or Umbrella Liability policy may be used in conjunction with primary coverage limits to meet the minimum limit requirements.

Kandiyohi County and the City of Willmar shall be named as additionally insured for the project under this contract.

Kandiyohi County and the City of Willmar shall be held harmless from any claim for damages as a result of any operation conducted under this Contract for either personal injury or property damage on or outside of Kandiyohi County or City of Willmar property. A copy of the Certificate of Insurance and policy endorsement for additionally insured shall be provided to the Public Works Director's Office prior to commencement of operations.

LABOR COMPLIANCE

The Contractor shall submit Request to Sublet forms to the County prior to any subcontractor performing work on the project.

All contractors, subcontractors, independent truck operators (ITO), and multiple truck operators (MTO) must be registered in MnDOT's Contractor (Vendor) System located at: https://www.dot.state.mn.us/const/labor/civil-rights-labor.html

The Contractor shall submit all prevailing wage compliance forms, contractor/subcontractors weekly certified payrolls, and all month-end trucking reports to the County. Weekly certified payrolls are to be received no later than 14 days after a pay period. Month-end trucking reports are to be received no later than 10 days after the end of the month.

All labor compliance items are required to be submitted to the County within 30 days of project completion. Failure to do so will result in the Contractor being in non-compliance.

CERTIFICATION OF AGGREGATES AND GRANULAR MATERIALS

Project No:	Contractor's Tester Name:	Tester Certification No (If Required):

Submitted By: (Prime Contractor)	Submitted To: (Project Engineer)
Source or Stockpile Location:	Pit #:

I certify that these materials to be delivered to this project conform to the appropriate specification requirements. (Type/Print Name)

Certified by: (Contractor's Authorized Representative Signature)	Date:

Item Number	Class or Type of Aggregate	Quantity	Gradation Tests (If required)	
			Required	Attached

Tests (If Required)		Quality Tests (If Requied) (LAR, Shale, Bitumen, IR, etc.)	
Required	Attached	Required	Attached

Note:

NOTE: Attach Required test results (gradations, crushing, bitumen content, qualities, etc.), per the Schedule of Materials Control, plan or proposal, etc. Send copy to Project Engineer.

Complete below if salvaged/recycled materials are being used:

Type or Class of Aggregate _____ **Bitumen content of the composite mixture:** _____ **%**

Bituminous (RAP) _____ **%** **Concrete** _____ **%** **Glass** _____ **%**

Specification Gradation Table for 3138.2
Based upon the percentage of recycled material specified above _____

STATE FUNDED ONLY CONSTRUCTION CONTRACTS
SPECIAL PROVISIONS DIVISION A - LABOR

I. INTRODUCTION

A. **Policy Statement.** It is in the public interest that public buildings and other public works projects be constructed and maintained by the best means and the highest quality of labor reasonably available and that persons working on public works projects be compensated according to the real value of the services they perform.[1]

B. **State Regulations Govern.** This Contract is subject to the Minnesota Prevailing Wage Act[2], Minnesota Fair Labor Standards Act[3], Minnesota Rules[4], Minnesota Department of Labor and Industry (MnDLI) Wage Decision(s), and the MnDLI Truck Rental Rate Schedule.

C. **Purpose.** These provisions: (1) outline your obligations under state and federal laws, rules and regulations; (2) explain the requirements necessary to demonstrate compliance; and (3) explain the processes that the Department will undertake to ensure compliance.

D. **Questions or Resources.** Please visit the Minnesota Department of Transportation (MnDOT) Labor Compliance Unit (LCU) website at: www.dot.state.mn.us/const/labor.

II. DEFINITIONS

Many of the terms used in these provisions are defined in MnDOT's Standard Specifications for Construction,[5] unless defined below.

A. **Apprentice.** A Worker at least 16 years of age who is employed to learn an apprenticeable trade or occupation in a registered apprenticeship program.[6]

B. **Bona Fide.** Made or carried out in good faith; authentic.[7]

C. **Certified Payroll Report (CPR).** A report comprised of two components; (1) a payroll report, and (2) a statement of compliance report.[8]

D. **Contractor.** An individual or business entity that is engaged in construction or construction service-related activities including trucking activities either directly or indirectly through a Contract, or by Subcontract with the Prime Contractor, or by a further Subcontract with any other person or business entity performing Work.[9]

E. **Employer.** An individual, partnership, association, corporation, business trust, or other business entity that hires a Worker.[10]

F. **Fringe Benefit.** An employment benefit given in addition to a Worker's wages or salary.[11]

G. **Independent Truck Owner/Operator (ITO).** An individual, partnership, or principal stockholder of a corporation who owns or holds a vehicle under lease and who contracts that vehicle and the owner's services to an entity which provides construction services to a public works project.[12]

[1] Minn. Stat. 177.41
[2] Minn. Stat. 177.41 to 177.44
[3] Minn. Stat. 177.21 to 177.35
[4] Minn. R. 5200.1000 to 5200.1120
[5] MnDOT Standard Specifications for Construction, Section 1103
[6] Minn. Stat. 178.011, Subdivision 2
[7] The American Heritage College Dictionary, Third Edition, 2000
[8] Minn. R. 5200.1106, Subpart 10
[9] Minn. R. 5200.1106, Subpart 2(D)
[10] Minn. Stat. 177.42, Subdivision 7
[11] The American Heritage College Dictionary, Third Edition, 2000
[12] Minn. R. 5200.1106, Subpart 7(A)

H. **Journeyworker.** A person who has attained a level of skill, abilities, and competencies recognized within and industry as having mastered the skills and competencies required for the trade or occupation.[13]

I. **Prime Contractor.** An individual or business entity that enters into a Contract with the Department.[14]

J. **Subcontract.** A Contract that assigns some obligations of a prior Contract to another party.[15]

K. **Substantially In Place.** Mineral aggregate is deposited on the project site directly or through spreaders where it can be spread from or compacted at the location where it was deposited.[16]

L. **Total Prevailing Wage Rate.** The sum of the prevailing hourly "basic" and "fringe" rate that is established in a Wage Decision.

M. **Trucking Broker (Broker).** An individual or business entity, the activities of which include, but are not limited to: contracting to provide trucking services in the construction industry to users of such services, contracting to obtain such services from providers of trucking services, dispatching the providers of the services to do Work as required by the users of the services, receiving payment from the users in consideration of the trucking services provided, and making payment to the providers for the services.[17]

N. **Trucking Firm/Multiple Truck Owner (MTO).** Any legal business entity that owns more than one vehicle and hires the vehicles out for services to Trucking Brokers or Contractors on public works projects.[18]

O. **Truck Rental Rate Schedule.** A document prepared by the MnDLI through a Contractor survey process that identifies the required hourly Total Prevailing Wage Rate and operating cost for various types of trucks that perform hauling activities (Work) under a Contract that is funded in whole or in part with state funds.[19]

P. **Wage Decision.** A document prepared by the MnDLI through a Contractor survey process that identifies the required hourly basic rate of pay and hourly Fringe Benefits for various labor classifications that perform Work under a Contract that is funded in whole or in part with state funds.[20]

Q. **Work (Work).** All construction activities associated with a public works project, including any required hauling activities on-the-site-of or to-or-from a public works project and conducted pursuant to a Contract, regardless of whether the construction activity or Work is performed by the Prime Contractor, subcontractor, Trucking Broker, Trucking Firm (MTO), ITO, independent contractor, or employee or agent of any of the foregoing entities.[21]

R. **Worker (Laborer or Mechanic).** A Worker in a construction industry labor class identified in or pursuant to Minnesota Rules 5200.1100, Master Job Classifications.[22]

III. APPLICATION & UNDERSTANDING

A. **Provisions & Prevailing Wage Rates Apply.** These provisions, along with the prevailing Wage Decision(s) that are incorporated into the Contract, apply to all Contractors contracting to do all or part of the Work.[23]

[13] Minn. Stat. 178.011, Subdivision 9
[14] Minn. R. 5200.1106, Subpart 2(C)
[15] The American Heritage College Dictionary, Third Edition, 2000
[16] Minn. R. 5200.1106, Subpart 5(C)
[17] Minn. R. 5200.1106, Subpart 7(C)
[18] Minn. R. 5200.1106, Subpart 7(B)
[19] Minn. R. 5200.1105
[20] Minn. R. 5200.1020 to 5200.1060
[21] Minn. R. 5200.1106, Subpart 2(A)
[22] Minn. R. 5200.1106, Subpart 5(A)
[23] Minn. Stat. 177.44, Subdivision 1

B. **Truck Rental Rates Apply.** The Truck Rental Rate Schedule incorporated into the Contract applies to all hired trucking entities that perform covered hauling activities related to the project.[24]

C. **Prevailing Wage Terms Must Be Included in All Contracts.** The Prime Contractor is required to ensure that all subcontractors performing Work receive the Contract Wage Decision(s), Truck Rental Rate Schedule, and a copy of these provisions with their written Subcontracts, agreements and/or purchase orders.[25]

D. **Responsible for Understanding All Requirements.** Each Contractor is responsible for understanding all laws, rules, regulations, plans, and specifications that are incorporated physically, or by reference, into the Contract.[26]

E. **E-Verify.** For services valued in excess of $50,000, the Contractor certifies that as of the date of services performed on behalf of State, the Contractor will have implemented or be in the process of implementing the federal E-Verify program for all newly hired employees in the United States who will perform work under the contract. The Prime Contractor is responsible to collect all subcontractor certifications and may do so utilizing the E-Verify Subcontractor Certification Form available at http://www.mmd.admin.state.mn.us/doc/EverifySubCertForm.doc. All subcontractor certifications must be kept on file with the Prime Contractor and made available to the State upon request.

IV. VENDOR REGISTRATION

Vendor Registration Required. A Contractor that performs Work, supplies material, or product must be registered with MnDOT. The Contractor must complete and submit a vendor form[27] to the MnDOT LCU[28], along with all applicable documentation that is required. This registration process is separate and distinct from other state agency requirements.

V. LABOR CLASSIFICATIONS

A. **Labor Classification Assignment.** A Worker must be paid at least the Total Prevailing Wage Rate in the same or most similar trade or occupation.[29] To determine the appropriate labor classification for a Worker, a Contractor must refer to the Wage Decision(s) incorporated into the Contract, the labor classification descriptions for laborers and special crafts established in Minnesota Rules or the United States Department of Labor's Dictionary of Occupational Titles.[30]

B. **Labor Classification Clarification & Disputes.** A Contractor needing assistance in determining a labor classification must submit a Classification Clarification Request[31] to the MnDOT LCU for a written decision. If the Contractor chooses to contest the classification assignment, it must provide written notice to the MnDOT LCU. The MnDOT LCU will forward the matter to the MnDLI for a final ruling.

C. **Performing Work in Multiple Labor Classifications.** For Workers performing Work in multiple labor classifications, the Contractor must compensate at a minimum the Total Prevailing Wage Rate, and report the hours worked, in each applicable labor classification.[32]

VI. WAGE DECISION(S) & WAGE RATE(S)

A. **Applicability of a Highway and Heavy Wage Decision.** A highway and heavy Wage Decision applies to a Worker that is engaged in a construction activity or performing Work to construct or maintain a highway or other public works project, such as a road, street, airport runway, bridge,

[24] Minn. Stat. 177.44, Subdivision 3
[25] MnDOT Standard Specifications for Construction, Section 1801
[26] MnDOT Standard Specifications for Construction, Section 1701
[27] www.dot.state.mn.us/const/labor/documents/forms/contractorform2016.pdf or www.dot.state.mn.us/const/labor/documents/forms/truckvendorform2016.pdf
[28] lcusupport.dot@state.mn.us
[29] Minn. Stat. 177.44, Subdivision 1
[30] Minn. R. 5200.1101 and 1102 and US DOL Dictionary of Occupational Titles
[31] http://www.dot.state.mn.us/const/labor/documents/forms/classification-clarification-request.pdf
[32] Minn. Stat. 177.44, Subdivision 1

power plant, dam or utility[33] that is external to a sheltered enclosure (structure). This includes, but is not limited to, the following Work: site clearing; grading; excavating backfilling; paving; curbs; gutters; sidewalks; culverts; bridges; lighting systems; traffic management systems; installing of utilities out from an exterior meter; fuel islands; communication towers; or other activities similar to highway and/or heavy Work.

B. **Applicability of a Commercial Wage Decision.** A commercial Wage Decision applies to a Worker that is engaged in a construction activity or performing Work to construct a sheltered enclosure (structure) with walk-in access for the purpose of housing persons, machinery, equipment or supplies.[34] This includes, but is not limited to, the following Work: constructing foundations, aprons, stoops; framing walls; installing windows, doors, tiling, plumbing, electrical, HVAC systems; roofing; installing utilities into the building from an exterior meter.

C. **Pay According to Wage Decision(s).**

1. **Contract with One Wage Decision.** If the Contract contains one Wage Decision, the Contractor must examine the Wage Decision and compensate the Worker at a minimum the Total Prevailing Wage Rate for the appropriate labor classification(s).

2. **Contract with Multiple Highway/Heavy Wage Decisions.** If the Contract contains multiple Highway/Heavy Wage Decisions, the Contractor must examine each Wage Decision and compensate the Worker, at a minimum, the Total Prevailing Wage Rate that is the greatest[35] for the appropriate labor classification(s).

3. **Contract with Highway/Heavy and Commercial Wage Decision(s).** If the Contract contains a Highway/Heavy and Commercial Wage Decision(s), the Contractor must first determine which Wage Decision is applicable to the Worker. The Contractor must then compensate the Worker, at a minimum, the Total Prevailing Wage Rate for the appropriate labor classification(s).

D. **Must Pay Total Prevailing Wage Rate.** A Contractor must compensate each Worker, at a minimum, the Total Prevailing Wage Rate(s) for all hours worked on the project for the appropriate labor classification(s).[36]

E. **Missing Wage Rate.** If a Wage Decision fails to include a wage rate for a labor classification(s) that will be utilized on a project, the Contractor must obtain a wage rate prior to furnishing an estimate, quote or bid.[37]

1. **Wage Rate Request.** A Contractor must complete a Request for Rate Assignment form[38] and submit it to the MnDOT LCU[39] for processing.

2. **No Contract Price Adjustment for Missing Wage Rate.** If MnDLI determines that a higher wage rate applies, the Department will not reimburse the Contractor.

F. **Salaried Worker.** A salaried Worker is not exempt from these Provisions. A Contractor must convert the Worker's salary to an average hourly rate of pay by dividing the Worker's salary by the total number of hours Worked (government and non-government) during the pay period.[40] A salaried Worker must be included on a CPR.

G. **Reduction in Standard (Private) Contractual Regular Rate of Pay Prohibited.** A Contractor must not reduce a Worker's standard, contractual regular rate of pay when the prevailing wage rate(s) certified by the MnDLI is less.[41]

[33] Minn. R. 5200.1010, Subdivision 3
[34] United States Department of Labor All Agency Memorandum #130
[35] Minn. Stat. 177.44, Subdivision 4
[36] Minn. Stat. 177.44, Subdivision 1
[37] Minn. R. 5200.1030, Subpart 2a(C)
[38] http://www.dot.state.mn.us/const/labor/documents/forms/request-for-rate-assignment.doc
[39] lcusupport.dot@state.mn.us
[40] Refer to Appendix A
[41] Minn. Stat. 181.03, Subdivision 1(2)

H. **Prohibited Payment Practices.** A Contractor is prohibited from taking (accepting) a rebate for the purpose of reducing or otherwise decreasing the value of the compensation paid.

I. **Prohibited Deductions.** No deductions, direct or indirect, may be made for the items listed below which when subtracted from wages would reduce the wages below Minnesota's minimum wage rate as established in section 177.24[42]

1. **Uniforms.** Purchased or rented uniforms or specifically designed clothing that is required by the Employer, by the nature of employment, or by statute, or as a condition of employment, which is not generally appropriate for use except in that employment.

2. **Equipment.** Purchased or rented equipment used in employment, except tools of a trade, a motor vehicle, or any other equipment which may be used outside the employment. The cost of the Worker's use of equipment used outside of employment, such as tools, a motor vehicle, cell phone, may be deducted only if an agreement between the Employer and employee existed prior to the deduction.

3. **Supplies.** Consumable supplies required in the course of employment.

4. **Travel Expenses.** Travel expenses in the course of employment except those incurred in traveling to and from the employee's residence and place of employment.

VII. HOURS OF WORK

A. **Work Performed Under the Contract.** A Worker performing Work is subject to prevailing wage for all hours associated with the Contract[43], unless the Worker is exempt under state law.[44]

B. **Wait Time Subject to Prevailing Wage.** A Worker who is required to remain on the project and is waiting to Work because of the fault of the Contractor is considered "engaged to wait" and subject to prevailing wage for the time spent, unless the Worker is completely relieved of duty and free to leave the project for a defined period of time.

VIII. FRINGE BENEFITS

A. **Funded Fringe Benefit Plan Criteria.** In order for a funded Fringe Benefit (e.g., health/medical insurance, disability insurance, life insurance, pension, etc.) to be considered and creditable towards the Total Prevailing Wage Rate it must be:[45]

1. a contribution irrevocably made by a Contractor on behalf of an Worker to a financially responsible trustee, third person, fund, plan, or program;

2. carried out under a financially responsible plan or program;

3. legally enforceable;

4. communicated in writing to the Worker; and

5. made available to the Worker once he/she has met all eligibility requirements.

B. **Unfunded Fringe Benefit Plan Criteria.** In order for a unfunded Fringe Benefit (e.g., vacation, holiday, sick leave, etc.) to be considered and creditable towards the Total Prevailing Wage Rate it must be:[46]

1. reasonably anticipated to provide a benefit;

2. a commitment that can be legally enforced;

[42] Minn. Stat. 177.24, Subdivision 4(1-4)
[43] Minn. Stat. 177.44, Subdivision 1
[44] Minn. Stat. 177.44, Subdivision 2 or Minn. R. 5200.1106, Subpart 4
[45] Minn. Stat. 177.42, Subdivision 6
[46] Minn. Stat. 177.42, Subdivision 6

3. carried out under a financially responsible plan or program;

4. communicated in writing to the Worker; and

5. made available to the Worker once he/she has met all eligibility requirements.

C. **Fringe Benefit Contributions for Hours Worked.** A Contractor that provides Fringe Benefits to a Worker must make contributions, not less than quarterly[47], for all hours worked,[48] including overtime hours, unless it's a defined benefit or contribution plan that provides for immediate participation and immediate or essentially immediate vesting **(see subpart D2 of this section)**.

D. **Hourly Fringe Benefit Credit.** An hourly Fringe Benefit credit toward the Total Prevailing Wage Rate must be determined separately for each Worker based on one or more of the following methods:

1. **Monthly, Quarterly or Annual Computation Methods.** A Contractor must compute its monthly, quarterly or annual cost of a particular Fringe Benefit and divide that amount by the estimated total number of hours worked (government and non-government) during the time frame used.[49] Typical plans that require monthly, quarterly or annual computations include but are not limited to: health/medical insurance, disability insurance, life insurance, vacation, holiday, sick leave and defined benefit or contribution pension plans that do not provide for immediate participation and immediate or essentially immediate vesting.

2. **Fringe Benefit Credit not Requiring Monthly, Quarterly or Annual Computation Methods.** A defined benefit or contribution pension plan that allows for a higher hourly rate of contribution for government work (prevailing wage) than non-government (non-prevailing wage) will be fully credited only if the plan provides for immediate participation and immediate or essentially immediate vesting.

E. **Wages In Lieu of Fringe Benefits.** A Contractor that does not provide full Fringe Benefits must compensate a Worker the difference between the Total Prevailing Wage Rate and the rate actually paid for the appropriate labor classification(s). The compensation paid is considered wages and subject to tax liabilities.

1. **Overtime**. The cash equivalent (wages paid) made in lieu of Fringe Benefits is excluded from the overtime calculation requirement, unless the cash equivalent (wages paid) is part of the Worker's standard straight time wage.

F. **Administrative Costs Not Creditable.** Administrative expenses incurred by a Contractor in connection with the administration of a Bona Fide Fringe Benefit plan are not creditable towards the Total Prevailing Wage Rate.

G. **Federal, State & Local Fringe Benefit Credit Prohibited.** No credit is allowed for benefits required by federal, state or local law, such as: worker's compensation, unemployment compensation, and social security contributions.[50]

IX. OVERTIME

A. **Overtime after 8 Hours per Day or 40 Hours per Week.** A Contractor must not permit or require a Worker to work longer than the prevailing hours of labor unless the Worker is paid for all hours in excess of the prevailing hours at a rate of at least 1.5 times the hourly basic rate of pay.[51] The prevailing hours of labor is defined as not more than 8 hours per day and more than 40 hours per week.[52]

[47] 29 CRF, Part 5.5(a)(1)(i)
[48] Government and non-government Work
[49] Refer to Appendix B
[50] Minn. Stat. 177.42, Subdivision 6
[51] Minn. Stat. 177.44, Subdivision 1 and Refer to Appendix D
[52] Minn. Stat. 177.42, Subdivision 4

B. **Wages in Lieu of Fringe Benefits Overtime.** Wages paid in Lieu of Fringe Benefits must be paid for all hours worked under the contract.

C. **Multiple Labor Classifications and Overtime.** A Worker employed in multiple labor classifications throughout a workweek must be compensated at the applicable labor classification overtime rate in effect during the hours worked in excess of 8 hours per day or 40 hours per week.

D. **Federal Fair Labor Standards Act (FLSA) and Overtime.** A Contractor subject to the FLSA may be subject to additional overtime compensation requirements.

X. PAYROLLS AND STATEMENTS

A. **Reporting.** Each Contractor that is performing Work must submit a CPR(s) to the Department.

1. **Payroll Report (Paper).** Each Contractor performing Work must submit a paper (written) payroll report to the Department. The payroll report is available on the MnDOT LCU website.[53]

2. **Statement of Compliance (Paper).** Each Contractor's paper (written) payroll report must include a paper (written) "Statement of Compliance Form". The "Statement of Compliance Form" must: (1) state whether or not Fringe Benefits are provided to a Worker; (2) provide a description of each benefit, the hourly contribution made on behalf of each Worker, along with fund/plan information; and (3) a signature attesting that the payroll and Fringe Benefit information provided is truthful and accurate.[54]

3. **Electronic Reporting.** If the Contract is subject to electronic reporting, each Contractor performing Work must submit a CPR(s) using the AASHTOWare, Civil Rights Labor (CRL) system. Refer to the **Special Provisions Division S – "Electronic Submission of Payrolls and Statements"** which is incorporated into and found elsewhere in the Contract for detailed requirements.

B. **Biweekly Payroll Reporting and Payment of Wages.** A CPR(s) must be submitted no later than 14 calendar days after the end of each Contractor's pay period[55] to the Department. A Contractor must pay its employees at least once every 14 calendar days.[56]

C. **Payroll Report Data.** Each payroll report must include all Workers that performed Work and provide at a minimum the following information:[57]

1. Contractor's name, address, and telephone number.

2. State project number.

3. Contract number (if applicable).

4. Project number.

5. Payroll report number.

6. Project location.

7. Workweek end date.

8. Each Worker's name, home address, and social security number.[58]

9. Labor classification(s) title(s) and optional three-digit code for each Worker.

[53] www.dot.state.mn.us/const/labor/certifiedpayroll.html
[54] Minn. R. 5200.1106, Subpart 10
[55] Minn. Stat. 177.43, Subdivision 3
[56] Minn. Stat. 177.30 (a)(4)
[57] Minn. Stat. 177.30 (a)(1-4) and Minn. R. 5200.1106, Subpart 10
[58] Minn. R. 5200.1106, Subpart 10A & Minn. Stat. 13.355, Subdivision 1

10. Hours worked daily and weekly in each labor classification, including overtime hours, for each Worker.

11. Wage rate paid to each Worker for straight time and overtime.

12. Authorized legal deductions for each Worker.

13. Project gross amount, weekly gross amount, and net wages paid to each Worker.

D. **Prime Contractor to Ensure Compliance.** The Prime Contractor must review the CPR(s) submitted by each lower tier Contractor and sign the "Statement of Compliance Form".[59] The Prime Contractor must ensure that each lower tier Contractor's CPR(s) include all Workers that performed Work and accurately reflect labor classifications, hours worked, regular and overtime rates of pay, gross earnings for the project and Fringe Benefits.[60]

E. **Retention of CPR(s).** The Prime Contractor must keep its written CPR(s), including those of all lower tier Contractors, for three (3) years after the final payment is issued.[61]

F. **Retention of Employment-Related Records.** Each Contractor must keep employee records, including, but not limited to: Fringe Benefit statements, time cards, payroll ledgers, check registers and canceled checks[62] for at least three (3) years after the final payment is issued.[63] Other laws may have longer retention requirements.

G. **Detailed Earning Statement.** At the end of each pay period, each Contractor must provide every Worker, in writing or by electronic means, an accurate, detailed earnings statement.[64]

H. **Reports and Records Request.** Upon a request from the Department, the Prime Contractor must promptly furnish copies of CPR(s) for its Workers and those of all lower tier Contractors, along with employment-related records, documents, and agreements that the Department considers necessary to determine compliance.[65]

XI. APPRENTICES, TRAINEES AND HELPERS

A. **Apprentice.** An Apprentice will be permitted to Work at less than the prevailing basic hourly rate only if the Apprentice is:

1. Registered with the U.S. Department of Labor (DOL), Bureau of Apprenticeship and Training or MnDLI Division of Voluntary Apprenticeship.[66]

2. Performing Work of the trade, as described in the apprenticeship agreement.

3. Compensated according to the rate specified in the program for the level of progress.[67]

4. Supervised by a Journeyworker from the same company, in accordance with the program ratio requirements.[68]

B. **Ratio Requirement.** If an approved apprenticeship program fails to define a ratio allowance, the first Apprentice must be supervised by a Journeyworker within the same trade or occupation. Any subsequent Apprentice must be supervised by an additional three Journeyworkers.[69]

[59] MnDOT Standard Specifications for Construction, Section 1701
[60] MnDOT Standard Specifications for Construction, Section 1801
[61] Minn. Stat. 177.30 (a)(5)
[62] Minn. R. 5200.1106, Subpart 10
[63] Minn. Stat. 177.30 (a)(5)
[64] Minn. Stat. 181.032
[65] Minn. Stat. 177.44, Subdivision 7; Minn. Stat. 177.33(a)(5)
[66] Minn. R. 5200.1070, Subpart 1
[67] Minn. R. 5200.1070, Subpart 1 and Refer to Appendix C
[68] Minn. Stat. 178.036, Subdivision 5
[69] Minn. Stat. 178.036, Subdivision 5

C. **Failure to Comply with Apprenticeship Requirements.** If a Contractor fails to demonstrate compliance with the terms established in this section, the Contractor must compensate the Apprentice not less than the applicable Total Prevailing Wage Rate for the actual classification of labor performed.[70]

D. **Trainee and Helper.** A trainee or helper is not exempt from prevailing wage under state law. The Contractor must assign the trainee or helper a labor classification that is the "same or most similar"[71] and compensate the trainee or helper for the actual Work performed regardless of the trainee's or helper's skill level.

XII. INDEPENDENT CONTRACTORS, OWNERS, SUPERVISORS, AND FOREMAN

A. **Independent Contractor.** An independent contractor (IC) that is not an Independent Truck Owner/Operator (ITO), who is performing Work must be properly classified and compensated.[72] The IC must submit a CPR(s) to the Department. If the IC does not receive an hourly wage, but instead a weekly, biweekly, monthly or quarterly distribution for performance, the IC must calculate its hourly rate of pay by dividing the weekly, biweekly, monthly, or quarterly company distribution by all hours worked during that time frame and report the information on a CPR. If necessary, the Department may request documentation from the IC to determine how the hourly wage rate was calculated.[73]

B. **Owners, Supervisors and Foreman.** An owner, supervisor, or foreman performing Work is subject to prevailing wage and must be properly classified, compensated and reported.[74]

XIII. TRUCKING

A. **Covered Hauling Activities.** A Contractor must ensure that all Workers, including hired Trucking Brokers, MTOs and ITOs are paid the applicable Total Prevailing Wage Rate or truck rental rate for the following Work:

1. The hauling of any or all stockpiled or excavated materials on the project work site to other locations on the same project even if the truck leaves the work site at some point.[75]

2. The delivery of materials from a non-commercial establishment to the project and the return haul to the starting location either empty or loaded.[76]

3. The delivery of materials from another construction project site to the public works project and the return haul, either empty or loaded. Construction projects are not considered commercial establishments.[77]

4. The hauling required to remove any materials from the project to a location off the project site and the return haul, either empty or loaded from other than a commercial establishment.[78]

5. The delivery of materials or products by trucks hired by a Contractor, subcontractor, or agent thereof, from a commercial establishment.[79]

6. The delivery of sand, gravel, or rock, by or for a commercial establishment, which is deposited "substantially in place," either directly or through spreaders from the transporting vehicles is work under the contract. In addition, the return haul to the off-site facility empty or loaded is also considered work under the contract.[80]

[70] Minn. R. 5200.1070, Subpart 3
[71] Minn. Stat. 177.44, Subdivision 1
[72] Minn. Stat. 177.44, Subdivision 1
[73] Minn. Stat. 177.30(a)(5); Minn. Stat. 181.723
[74] Minn. Stat. 177.44, Subdivision 1
[75] Minn. R. 5200.1106, Subpart 3B(1)
[76] Minn. R. 5200.1106, Subpart 3B(2)
[77] Minn. R. 5200.1106, Subpart 3B(3)
[78] Minn. R. 5200.1106, Subpart 3B(4)
[79] Minn. R. 5200.1106, Subpart 3B(5)
[80] Minn. R. 5200.1106, Subpart 3B(6)

B. **Hauling Activities Not Subject to Prevailing Wage or Truck Rental Rates.** A Contractor may exclude a Worker, including hired Trucking Brokers, MTOs and ITOs from prevailing wage or truck rental rates for the Work described in (1-2) of this section. However, this Work may be considered hours worked and subject to standard compensation pursuant to the Minnesota Fair Labor Standards Act.

1. The delivery of processed or manufactured goods to a public works project by the employees of a commercial establishment including truck owner-operators hired by and paid by the commercial establishment, unless it is the delivery of mineral aggregate that is incorporated into the work under the contract by depositing the material substantially in place.[81]

2. The delivery of oil offsite, as an example, to a Prime Contractor's permanent (commercial) asphalt mixing facility that is not to, from, or on the project Work site.[82]

C. **Repair, Maintenance & Waiting to Load Time.** An ITO and MTO must be paid the truck rental rate for time spent repairing or maintaining the truck owner-operator's equipment, and for waiting to load or unload if the repair, maintenance, or wait time is the fault of the Trucking Broker, Contractor, its agent or employees.[83]

D. **Month End Trucking Report.** A Contractor that acquires the services of an ITO or MTO must submit a "MnDOT – MTO and/or ITO Month-End Trucking Report", and a "MnDOT – Month-End Trucking Statement of Compliance Form" to the Department for each month hauling activities are performed under the Contract.[84] The forms are available on the MnDOT LCU website.[85]

E. **Broker Fee.** A truck broker contracting to provide trucking services directly to a prime contractor or subcontractor is allowed to assess a broker fee.

XIV. OFF-SITE FACILITIES

A. **Off-Site Facility Activities Subject to Prevailing Wage.** A Contractor must ensure that all Workers performing Work at a covered off-site facility are paid the applicable Total Prevailing Wage Rate for the following Work:

1. The processing or manufacturing of material at a Prime Contractor's off-site facility that is not a separately held commercial establishment.[86]

2. The processing or manufacturing of material at an off-site facility that is not considered a commercial establishment.[87]

B. **Off-Site Facility Activities Not Subject to Prevailing Wage.** A Contractor may exclude a Worker from prevailing wage for the following work:

1. The processing or manufacturing of material or products by or for a commercial establishment.[88]

2. The work performed by Workers employed by the owner or lessee of a gravel or borrow pit that is a commercial establishment, even if the screening, washing or crushing machines are portable.[89]

XV. SUBCONTRACTING PART OF THE CONTRACT

[81] Minn. R. 5200.1106, Subpart 4(C)
[82] J.D. Donovan, Inc. vs. Minnesota Department of Transportation, 878 N.W.2d 1 (2016)
[83] Minn. R. 5200.1106, Subpart 8(A)(1)
[84] Minn. R. 5200.1106, Subpart 10
[85] http://www.dot.state.mn.us/const/labor/forms.html
[86] ALJ Findings of Fact, Conclusions of Law, and Recommendation, Conclusions (7), Case #12-3000-11993-2
[87] Minn. R. 5200.1106, Subpart 3(A)
[88] Minn. R. 5200.1106, Subpart 4(A)
[89] Minn. R. 5200.1106, Subpart 4(B)

The Prime Contractor must include the Contract Special Provisions, Wage Decision(s) and Truck Rental Rate Schedule in all Subcontracts, agreements and purchase orders with lower tier Contractors.[90] This requirement also applies to all lower tier subcontractors.

XVI. SITE OF WORK REQUIREMENTS

A. **Poster Board.** The Prime Contractor must construct and display a poster board containing all required posters. The poster board must be accurate, legible, and accessible to all project Workers from the first day of Work until the project is one hundred percent (100%) complete.[91] A poster board at an off-site location, or inside a construction trailer, does not meet this requirement.

B. **How to Obtain a Poster Board.** The Prime Contractor may obtain the required posters and the necessary contact information that is required to be inserted on each poster by visiting the MnDOT LCU website.[92]

C. **Employee Interviews.** The Contractor must permit representatives from the Department or other governmental entities[93] to interview Workers at any time during working hours on the project.[94]

XVII. CHILD LABOR

A. **No Worker under the Age of 18.** No Worker under the age of 18 is allowed to perform Work on a Project Site, except pursuant to Section XVII B below.[95]

B. **Parental Supervision.** A Worker under the age of 18 may perform Work on a Project Site if all of the following criteria are met:

1. The Contractor (Employer) is not subject to FLSA.
2. The Worker is employed in a corporation owned solely by one or both parents.
3. The Worker is supervised by the parent(s).
4. The Worker is not working in a hazardous occupation.[96]

C. **Removal of Minor from Project.** The Engineer or inspector may remove a Worker that appears to be under the age of 18 from the Project Site until the Contractor or Worker can demonstrate proof of age and compliance with all applicable federal and state regulations.[97]

XVIII. NON-COMPLIANCE AND ENFORCEMENT

A. **Case-by-Case Enforcement.** The Department has the authority to enforce the prevailing wage law on a case-by-case.[98]

B. **Prime Contractor Responsible for Unpaid Wages.** The Prime Contractor will be held liable for any unpaid wages to its Workers or those of any lower tier Contractor.[99]

C. **Enforcement Options.** If evidence shows that a Contractor has violated prevailing wage requirements, or these Special Provisions, the Department may, after written notice, implement one or more of the following:

[90] MnDOT Standard Specifications for Construction, Section 1801
[91] Minn. Stat. 177.44, Subdivision 5
[92] www.dot.state.mn.us/const/labor/posterboards
[93] MnDLI, U.S. DOL, , U.S. Department of Transportation, Federal Highways Administration
[94] MnDOT Standard Specifications for Construction, Section 1511
[95] Minn. R. 5200.0910, Subpart F; 29 CFR Part 570.2(a)(ii)
[96] Minn. R. 5200.0930, Subpart 4
[97] Minn. Stat. 181A.06, Subdivision 4; MnDOT Standard Specifications for Construction, Section 1701
[98] *See* International Union of Operating Engineers, Local 49 v. MnDOT, No. C6-97-1582, 1998 WL 74281, at *2 (Minn. App. Feb. 24, 1998)
[99] MnDOT Standard Specifications for Construction, Section 1801

1. **Withholding Payment.** The Department may withhold from the Prime Contractor payments relating to prevailing wage underpayments.[100]

2. **Non-Responsible Contractor.** The Department may reject a bid from a Prime Contractor that has received two (2) or more Determination Letters within a three (3) year period from the Department finding an underpayment by the Contractor to its own employees.[101]

3. **Default.** The Department may take the prosecution of the Work out of the hands of the Prime Contractor, place the Contractor in default, and terminate the Contract for failure to comply.[102]

4. **Suspension or Debarment.** The Department may refer violations and matters of non-compliance by a Contractor to the Minnesota Department of Administration for suspension or debarment proceedings.[103]

5. **County Attorney.** The Department may refer suspected criminal violations by Contractor to the appropriate local county attorney for prosecution.[104]

6. **Financial Penalties.** Any Contractor who violates the state prevailing wage law is guilty of a misdemeanor and may be fined not more than $300 or imprisoned not more than 90 days or both. Each day that the violation continues is a separate offense.[105] A Contractor may be fined up to $1,000 for each failure to maintain records.[106]

7. **False Claims Act Violation.** All required payroll and certification reports are legal documents; knowing falsification of the documents by a Contractor may result in civil action and/or criminal prosecution[107] and may be grounds for debarment proceedings.[108]

8. **Compliance Order.** The Department may request that MnDLI issue a compliance order to a Contractor for violations of the state prevailing wage law. If the Contractor is found to have committed a violation, liquidated damages and other costs may be assessed against the Employer.[109]

9. **Private Right of Action.** The Department may direct an employee to pursue a civil action in district court against its Employer for failure to comply with the proper payment of wages.[110] If the Employer is found to have committed a violation, liquidated damages and other costs may be assessed against the Employer.[111]

10. **Fringe Benefits; Misdemeanor.** A Contractor that is obligated to deposit Fringe Benefit contributions on behalf of a Worker into a financially responsible trustee, third person, fund, plan, or program and fails to make timely contributions is guilty of a gross misdemeanor or other violations under federal law.[112]

[100] MnDOT Standard Specifications for Construction, Section 1906
[101] Minn. Stat. 16C.285
[102] MnDOT Standard Specifications for Construction, Section 1808
[103] Minn. R. 1230.1150, Subpart 2(A)(4)
[104] Minn. Stat. 177.44, Subdivision 7
[105] Minn. Stat. 177.44, Subdivision 6
[106] Minn. Stat. 177.30(b)
[107] Minn. Stat. 15C.02; , Minn. Stat. 161.315; Minn. Stat. 177.32; Minn. Stat. 177.43, Subdivision 5, Minn. Stat. 609.63
[108] Minn. Stat. 161.315 and Minn. Stat. 609.63
[109] Minn. Stat. 177.43, Subdivision 6a
[110] Minn. Stat. 177.27, Subdivision 8
[111] Minn. Stat. 177.27, Subdivision 10
[112] Minn. Stat. 181.74, Subdivision 1

THE FOLLOWING APPENDICES ARE FOR EXPLANATORY PURPOSES ONLY. FOR SPECIFIC QUESTIONS, PLEASE CONTACT LCU.[113]

APPENDIX A — SALARIED WORKER WAGE COMPUTATION

Salaried Workers. In order to convert the Worker's salary into an hourly rate of pay, divide the employee's weekly, bi-weekly or monthly earnings by the total number of hours Worked (government and non-government), including overtime hours for the time period used.[114]

$800.00 (weekly salary) / 40 (total weekly hours) = $20.00

$1,600.00 (bi-weekly salary) / 80 (total bi-weekly hours) = $20.00

$3,200.00 (monthly salary) / 160 (total monthly hours) = $20.00

APPENDIX B — FRINGE BENEFIT CREDIT

Fringe Benefit Credit Calculation. The Employer contributes monthly ($600.00) for medical insurance on behalf of a Worker. In order to calculate the projected hourly credit that the Employer can take, the Employer should: (1) add the monthly contributions for each Worker, (2) multiply by twelve (12) months, and (3) divide the total cost of the benefit by the total hours worked (government and non-government)[115] (see annual example below). Quarterly and monthly examples are also provided.

Annual: **($600.00) x (12 months) = $7,200.00**
($7,200.00) / (2080 hours) = $3.46 per hour credit

Quarterly: **($600.00) x (3 months) = $1,800.00**
($1,800.00) / (520 hours) = $3.46 per hour credit

Monthly: **($600.00) x (1 month) = $600.00**
($600.00) / (173 hours) = $3.47 per hour credit

End of Year Self-Audit. At the end of the calendar year, the Contractor must conduct an audit to determine if the hourly fringe benefit credit taken for each Worker was accurate. The Contractor must calculate the total annual fringe benefits paid on behalf of each Worker and divide that amount by the total number of hours worked (government and non-government) by that Worker. If the hourly fringe benefit credit was less than what was reported on a CPR, the contractor must compensate the Worker the hourly difference, multiplied by the total hours worked under the Contract.

APPENDIX C — APPRENTICE RATE OF PAY

State Requirements. The Apprentice must be compensated according his/her level of progress, which is expressed as a percentage of the Journeyworker wage that is established in the program.

Journeyworker Wage Established in Program = $25.00

Apprentice Level of Progress = 60%

($25.00) * (.60) = $15.00

[113] lcusupport.dot@state.mn.us or (651) 366-4238
[114] United States Department of Labor Field Operation Handbook, Section 15f08
[115] United States Department of Labor Field Operation Handbook, Section 15f12

Overtime Hourly Rate of Pay. Here is the formula to calculate the required minimum overtime.[116]

OT = (PW * .5) + (HW) + (RF) + (F)

Definition of OT Acronyms

OT: overtime.
PW: the basic hourly prevailing wage rate established in a federal and/or state prevailing Wage Decision.
HW: hourly wage rate paid to a Worker.
RF: remaining fringe, which means the difference between the Contract hourly Fringe Benefit rate and the actual hourly Fringe Benefit rate paid by the Contractor to a third party on behalf of a Worker.
F: Fringe Benefit contributions that are bona-fide and contributed by an Employer to a third party on behalf of a Worker.

The Total Prevailing Wage Rate for a Worker is $30.00, which is comprised of an hourly basic rate of $20.00 and an hourly fringe rate of $10.00. The table below includes various hourly basic and Fringe Benefit payments that a Contractor could potentially make to a Worker.

OT CALCULATION FORMULA AND EXAMPLES
OT = (PW * .5) + (HW) + (RF) + (F)

Hourly Wage Paid	Fringe Benefits Paid	Payment To Employee (PW * .5) + (HW) + (RF)	Fringe Payment + (F)	Total Payment = OT
$ 20.00	$ 10.00	($ 20.00 * .5) + ($ 20.00) + ($ 0.00) = $ 30.00	+ $ 10.00	= $ 40.00
$ 18.00	$ 12.00	($ 20.00 * .5) + ($ 18.00) + ($ 0.00) = $ 28.00	+ $ 12.00	= $ 40.00
$ 22.00	$ 8.00	($ 20.00 * .5) + ($ 22.00) + ($ 0.00) = $ 32.00	+ $ 8.00	= $ 40.00
$ 30.00	$ 0.00	($ 20.00 * .5) + ($ 30.00) + ($ 0.00) = $ 40.00	+ $ 0.00	= $ 40.00
$ 24.00	$ 4.00	($ 20.00 * .5) + ($ 24.00) + ($ 2.00) = $ 36.00	+ $ 4.00	= $ 40.00

Regarding the last example the Contractor would be required to pay an additional $2.00 to the Worker, which is wages in lieu of fringe for a straight time hourly rate of $26.00 not $24.00.

A Contractor subject to the Fair Labor Standards Act (FLSA) may be subject to additional overtime compensation requirements.

[116] United States Department of Labor Field Operation Handbook, Section 15k

NOTICE TO BIDDERS

Minnesota Statutes require prompt payment to subcontractors:

Minn. Stat. § 471.425 PROMPT PAYMENT OF LOCAL GOVERNMENT BILLS.

Subdivision 1. **Definitions.** For the purposes of this section, the following terms have the meanings here given them.

. . . (d) "Municipality" means any home rule charter or statutory city, county, town, school district, political subdivision or agency of local government. "Municipality" means the Metropolitan Council or any board or agency created under chapter 473.

. . . Subd. 4a. **Prompt payment to subcontractors**. Each contract of a municipality must require the prime contractor to pay any subcontractor within ten days of the prime contractor's receipt of payment from the municipality for undisputed services provided by the subcontractor. The contract must require the prime contractor to pay interest of 1-1/2 percent per month or any part of a month to the subcontractor on any undisputed amount not paid on time to the subcontractor. The minimum monthly interest penalty payment for an unpaid balance of $100 or more is $10. For an unpaid balance of less than $100, the prime contractor shall pay the actual penalty due to the subcontractor. A subcontractor who prevails in a civil action to collect interest penalties from a prime contractor must be awarded its costs and disbursements, including attorney's fees, incurred in bringing the action.

Minn. Stat. § 15.72 PROGRESS PAYMENTS ON PUBLIC CONTRACTS; RETAINAGE.

. . . Subd. 2. **Retainage.** . . . (c) A contractor on a public contract for a public improvement must pay all remaining retainage to its subcontractors no later than ten days after receiving payment of retainage from the public contracting agency, unless there is a dispute about the work under a subcontract. If there is a dispute about the work under a subcontract, the contractor must pay out retainage to any subcontractor whose work is not involved in the dispute, and must provide a written statement detailing the amount and reason for the withholding to the affected subcontractor.

MINNESOTA DEPARTMENT OF TRANSPORTATION
NOTICE TO BIDDERS:
SUSPENSIONS/DEBARMENTS
THIS NOTICE APPLIES TO STATE-FUNDED AND FEDERALY-FUNDED PROJECTS

Do not use suspended or debarred parties as subcontractors or material suppliers on this project!
Both the federal government and the State of Minnesota suspend and debar vendors. Review the list of suspended and debarred vendors before submitting a bid or a request to sublet. If your bid is based on using a suspended or debarred vendor, you will not be entitled to additional compensation for replacing the suspended or debarred vendor with a qualified vendor.

State Suspensions and Debarments
The State of Minnesota's list of suspended and debarred vendors is maintained by the Minnesota Department of Administration, Office of State Procurement, and can be found at this link: https://mn.gov/admin/osp/government/suspended-debarred/index2.jsp . This list includes parties suspended and debarred by the Minnesota Department of Transportation and the Minnesota Department of Administration.

Federal Suspensions and Debarments
The federal government maintains a searchable database of suspensions and debarments, called the System for Award Management (SAM), which is found at this link: https://www.sam.gov/SAM/ . You can use the "Search Records" function without registering for an account.

September 29, 2023

MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY PREVAILING WAGES FOR STATE FUNDED CONSTRUCTION PROJECTS

THIS NOTICE MUST BE POSTED ON THE JOBSITE IN A CONSPICUOUS PLACE

Construction Type: Highway and Heavy

Region Number: 08

Counties within region:

- CHIPPEWA-12
- KANDIYOHI-34
- LAC QUI PARLE-37
- LINCOLN-41
- LYON-42
- MCLEOD-46
- MEEKER-47
- MURRAY-51
- PIPESTONE-59
- REDWOOD-64
- RENVILLE-65
- YELLOW MEDICINE-87

Effective: 2024-11-18 Revised: 2024-12-09

This project is covered by Minnesota prevailing wage statutes. Wage rates listed below are the minimum hourly rates to be paid on this project.

All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at a rate of one and one half (1 1/2) times the basic hourly rate. *Note: Overtime pay after eight (8) hours on the project must be paid even if the worker does not exceed forty (40) hours in the work week.*

Violations on MnDOT highways and road projects should be reported to:

Department of Transportation
Office of Construction
Transportation Building MS650
John Ireland Blvd
St. Paul, MN 55155
(651) 366-4209

All other prevailing wage violations and questions should be sent to:

Department of Labor and Industry
Prevailing Wage Section
443 Lafayette Road N
St Paul, MN 55155
(651) 284-5091
DLI.PrevWage@state.mn.us

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
LABORERS (101 - 112) (SPECIAL CRAFTS 701 - 730)					
101	LABORER, COMMON (GENERAL LABOR WORK)	2024-11-18	36.64	24.68	61.32
		2025-05-01	39.01	26.01	65.02

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
102	LABORER, SKILLED (ASSISTING SKILLED CRAFT JOURNEYMAN)	2024-11-18	36.64	24.68	61.32
		2025-05-01	39.01	26.01	65.02
103	LABORER, LANDSCAPING (GARDENER, SOD LAYER AND NURSERY OPERATOR)	2024-11-18	30.04	21.53	51.57
		2025-05-01	31.66	22.78	54.44
104	FLAG PERSON	2024-11-18	36.64	24.68	61.32
		2025-05-01	39.01	26.01	65.02
105	WATCH PERSON	2024-11-18	16.25	12.94	29.19
106	BLASTER	2024-11-18	39.64	24.24	63.88
107	PIPELAYER (WATER, SEWER AND GAS)	2024-11-18	40.14	24.68	64.82
		2025-05-01	42.51	26.01	68.52
108	TUNNEL MINER	2024-11-18	38.14	24.24	62.38
109	UNDERGROUND AND OPEN DITCH LABORER (EIGHT FEET BELOW STARTING GRADE LEVEL)	2024-11-18	38.14	24.68	62.82
		2025-05-01	40.51	26.01	66.52
110	SURVEY FIELD TECHNICIAN (OPERATE TOTAL STATION, GPS RECEIVER, LEVEL, ROD OR RANGE POLES, STEEL TAPE MEASUREMENT; MARK AND DRIVE STAKES; HAND OR POWER DIGGING FOR AND IDENTIFICATION OF MARKERS OR MONUMENTS; PERFORM AND CHECK CALCULATIONS; REVIEW AND UNDERSTAND CONSTRUCTION PLANS AND LAND SURVEY MATERIALS). THIS CLASSIFICATION DOES NOT APPLY TO THE WORK PERFORMED ON A PREVAILING WAGE PROJECT BY A LAND SURVEYOR WHO IS LICENSED PURSUANT TO MINNESOTA STATUTES, SECTIONS 326.02 TO 326.15.	2024-11-18	35.00	11.50	46.50
111	TRAFFIC CONTROL PERSON (TEMPORARY SIGNAGE)	2024-11-18	21.49	14.80	36.29

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
112	QUALITY CONTROL TESTER (FIELD AND COVERED OFF-SITE FACILITIES; TESTING OF AGGREGATE, ASPHALT, AND CONCRETE MATERIALS); LIMITED TO MN DOT HIGHWAY AND HEAVY CONSTRUCTION PROJECTS WHERE THE MN DOT HAS RETAINED QUALITY ASSURANCE PROFESSIONALS TO REVIEW AND INTERPRET THE RESULTS OF QUALITY CONTROL TESTERS. SERVICES PROVIDED BY THE CONTRACTOR.	2024-11-18	16.04	0.00	16.04
SPECIAL EQUIPMENT (201 - 204)					
201	ARTICULATED HAULER	2024-11-18	42.49	25.00	67.49
202	BOOM TRUCK	2024-11-18	31.16	23.45	54.61
203	LANDSCAPING EQUIPMENT, INCLUDES HYDRO SEEDER OR MULCHER, SOD ROLLER, FARM TRACTOR WITH ATTACHMENT SPECIFICALLY SEEDING, SODDING, OR PLANT, AND TWO-FRAMED FORKLIFT (EXCLUDING FRONT, POSIT-TRACK, AND SKID STEER LOADERS), NO EARTHWORK OR GRADING FOR ELEVATIONS	2024-11-18	30.04	21.53	51.57
		2025-05-01	31.66	22.78	54.44
204	OFF-ROAD TRUCK	2024-11-18	41.29	23.45	64.74
205	PAVEMENT MARKING OR MARKING REMOVAL EQUIPMENT (ONE OR TWO PERSON OPERATORS); SELF-PROPELLED TRUCK OR TRAILER MOUNTED UNITS.	2024-11-18	33.91	23.49	57.40
HIGHWAY/HEAVY POWER EQUIPMENT OPERATOR					
GROUP 2		2024-11-18	45.61	26.90	72.51
		2025-05-05	47.24	29.40	76.64
302	HELICOPTER PILOT (HIGHWAY AND HEAVY ONLY)				
303	CONCRETE PUMP (HIGHWAY AND HEAVY ONLY)				
304	ALL CRANES WITH OVER 135-FOOT BOOM, EXCLUDING JIB (HIGHWAY AND HEAVY ONLY)				

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
305	DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR OTHER SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS THREE CUBIC YARDS AND OVER MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)				
306	GRADER OR MOTOR PATROL				
307	PILE DRIVING (HIGHWAY AND HEAVY ONLY)				
308	TUGBOAT 100 H.P. AND OVER WHEN LICENSE REQUIRED (HIGHWAY AND HEAVY ONLY)				
GROUP 3		2024-11-18	45.01	26.90	71.91
		2025-05-05	46.61	29.40	76.01
309	ASPHALT BITUMINOUS STABILIZER PLANT				
310	CABLEWAY				
311	CONCRETE MIXER, STATIONARY PLANT (HIGHWAY AND HEAVY ONLY)				
312	DERRICK (GUY OR STIFFLEG)(POWER)(SKIDS OR STATIONARY) (HIGHWAY AND HEAVY ONLY)				
313	DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS, UP TO THREE CUBIC YARDS MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS (HIGHWAY AND HEAVY ONLY)				
314	DREDGE OR ENGINEERS, DREDGE (POWER) AND ENGINEER				
315	FRONT END LOADER, FIVE CUBIC YARDS AND OVER INCLUDING ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)				
316	LOCOMOTIVE CRANE OPERATOR				
317	MIXER (PAVING) CONCRETE PAVING, ROAD MOLE, INCLUDING MUCKING OPERATIONS, CONWAY OR SIMILAR TYPE				
318	MECHANIC . WELDER ON POWER EQUIPMENT (HIGHWAY AND HEAVY ONLY)				
319	TRACTOR . BOOM TYPE (HIGHWAY AND HEAVY ONLY)				
320	TANDEM SCRAPER				
321	TRUCK CRANE . CRAWLER CRANE (HIGHWAY AND HEAVY ONLY)				
322	TUGBOAT 100 H.P AND OVER (HIGHWAY AND HEAVY ONLY)				
GROUP 4		2024-11-18	44.67	26.90	71.57
		2025-05-05	46.25	29.40	75.65
323	AIR TRACK ROCK DRILL				
324	AUTOMATIC ROAD MACHINE (CMI OR SIMILAR) (HIGHWAY AND HEAVY ONLY)				
325	BACKFILLER OPERATOR				
326	CONCRETE BATCH PLANT OPERATOR (HIGHWAY AND HEAVY ONLY)				
327	BITUMINOUS ROLLERS, RUBBER TIRED OR STEEL DRUMMED (EIGHT TONS AND OVER)				
328	BITUMINOUS SPREADER AND FINISHING MACHINES (POWER), INCLUDING PAVERS, MACRO SURFACING AND MICRO SURFACING, OR SIMILAR TYPES (OPERATOR AND SCREED PERSON)				
329	BROKK OR R.T.C. REMOTE CONTROL OR SIMILAR TYPE WITH ALL ATTACHMENTS				
330	CAT CHALLENGER TRACTORS OR SIMILAR TYPES PULLING ROCK WAGONS, BULLDOZERS AND SCRAPERS				
331	CHIP HARVESTER AND TREE CUTTER				
332	CONCRETE DISTRIBUTOR AND SPREADER FINISHING MACHINE, LONGITUDINAL FLOAT, JOINT MACHINE, AND SPRAY MACHINE				

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
333	CONCRETE MIXER ON JOBSITE (HIGHWAY AND HEAVY ONLY)				
334	CONCRETE MOBIL (HIGHWAY AND HEAVY ONLY)				
335	CRUSHING PLANT (GRAVEL AND STONE) OR GRAVEL WASHING, CRUSHING AND SCREENING PLANT				
336	CURB MACHINE				
337	DIRECTIONAL BORING MACHINE				
338	DOPE MACHINE (PIPELINE)				
339	DRILL RIGS, HEAVY ROTARY OR CHURN OR CABLE DRILL (HIGHWAY AND HEAVY ONLY)				
340	DUAL TRACTOR				
341	ELEVATING GRADER				
342	FORK LIFT OR STRADDLE CARRIER (HIGHWAY AND HEAVY ONLY)				
343	FORK LIFT OR LUMBER STACKER (HIGHWAY AND HEAVY ONLY)				
344	FRONT END, SKID STEER OVER 1 TO 5 C YD				
345	GPS REMOTE OPERATING OF EQUIPMENT				
346	HOIST ENGINEER (POWER) (HIGHWAY AND HEAVY ONLY)				
347	HYDRAULIC TREE PLANTER				
348	LAUNCHER PERSON (TANKER PERSON OR PILOT LICENSE)				
349	LOCOMOTIVE (HIGHWAY AND HEAVY ONLY)				
350	MILLING, GRINDING, PLANNING, FINE GRADE, OR TRIMMER MACHINE				
351	MULTIPLE MACHINES, SUCH AS AIR COMPRESSORS, WELDING MACHINES, GENERATORS, PUMPS (HIGHWAY AND HEAVY ONLY)				
352	PAVEMENT BREAKER OR TAMPING MACHINE (POWER DRIVEN) MIGHTY MITE OR SIMILAR TYPE				
353	PICKUP SWEEPER, ONE CUBIC YARD AND OVER HOPPER CAPACITY(HIGHWAY AND HEAVY ONLY)				
354	PIPELINE WRAPPING, CLEANING OR BENDING MACHINE				
355	POWER PLANT ENGINEER, 100 KWH AND OVER (HIGHWAY AND HEAVY ONLY)				
356	POWER ACTUATED HORIZONTAL BORING MACHINE, OVER SIX INCHES				
357	PUGMILL				
358	PUMPCRETE (HIGHWAY AND HEAVY ONLY)				
359	RUBBER-TIRED FARM TRACTOR WITH BACKHOE INCLUDING ATTACHMENTS (HIGHWAY AND HEAVY ONLY)				
360	SCRAPER				
361	SELF-PROPELLED SOIL STABILIZER				
362	SLIP FORM (POWER DRIVEN) (PAVING)				
363	TIE TAMPER AND BALLAST MACHINE				
364	TRACTOR, BULLDOZER (HIGHWAY AND HEAVY ONLY)				
365	TRACTOR, WHEEL TYPE, OVER 50 H.P. WITH PTO UNRELATED TO LANDSCAPING (HIGHWAY AND HEAVY ONLY)				
366	TRENCHING MACHINE (SEWER, WATER, GAS) EXCLUDES WALK BEHIND TRENCHER (HIGHWAY AND HEAVY ONLY)				
367	TUB GRINDER, MORBARK, OR SIMILAR TYPE				
368	WELL POINT DISMANTLING OR INSTALLATION (HIGHWAY AND HEAVY ONLY)				
GROUP 5		2024-11-18	41.36	26.90	68.26

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
		2025-05-05	42.77	29.40	72.17
369	AIR COMPRESSOR, 600 CFM OR OVER (HIGHWAY AND HEAVY ONLY)				
370	BITUMINOUS ROLLER (UNDER EIGHT TONS)				
371	CONCRETE SAW (MULTIPLE BLADE) (POWER OPERATED)				
372	FORM TRENCH DIGGER (POWER)				
373	FRONT END, SKID STEER UP TO 1C YD				
374	GUNITE GUNALL (HIGHWAY AND HEAVY ONLY)				
375	HYDRAULIC LOG SPLITTER				
376	LOADER (BARBER GREENE OR SIMILAR TYPE)				
377	POST HOLE DRIVING MACHINE/POST HOLE AUGER				
378	POWER ACTUATED AUGER AND BORING MACHINE				
379	POWER ACTUATED JACK				
380	PUMP (HIGHWAY AND HEAVY ONLY)				
381	SELF-PROPELLED CHIP SPREADER (FLAHERTY OR SIMILAR)				
382	SHEEP FOOT COMPACTOR WITH BLADE . 200 H.P. AND OVER				
383	SHOULDERING MACHINE (POWER) APSCO OR SIMILAR TYPE INCLUDING SELF-PROPELLED SAND AND CHIP SPREADER				
384	STUMP CHIPPER AND TREE CHIPPER				
385	TREE FARMER (MACHINE)				
GROUP 6		2024-11-18	38.06	25.00	63.06
387	CAT, CHALLENGER, OR SIMILAR TYPE OF TRACTORS, WHEN PULLING DISK OR ROLLER				
388	CONVEYOR (HIGHWAY AND HEAVY ONLY)				
389	DREDGE DECK HAND				
390	FIRE PERSON OR TANK CAR HEATER (HIGHWAY AND HEAVY ONLY)				
391	GRAVEL SCREENING PLANT (PORTABLE NOT CRUSHING OR WASHING)				
392	GREASER (TRACTOR) (HIGHWAY AND HEAVY ONLY)				
393	LEVER PERSON				
394	OILER (POWER SHOVEL, CRANE, TRUCK CRANE, DRAGLINE, CRUSHERS, AND MILLING MACHINES, OR OTHER SIMILAR HEAVY EQUIPMENT) (HIGHWAY AND HEAVY ONLY)				
395	POWER SWEEPER				
396	SHEEP FOOT ROLLER AND ROLLERS ON GRAVEL COMPACTION, INCLUDING VIBRATING ROLLERS				
397	TRACTOR, WHEEL TYPE, OVER 50 H.P., UNRELATED TO LANDSCAPING				
TRUCK DRIVERS					
GROUP 1		2024-11-18	36.00	11.50	47.50
601	MECHANIC . WELDER				
602	TRACTOR TRAILER DRIVER				
603	TRUCK DRIVER (HAULING MACHINERY INCLUDING OPERATION OF HAND AND POWER OPERATED WINCHES)				

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
GROUP 2		2024-11-18	33.00	11.50	44.50
604	FOUR OR MORE AXLE UNIT, STRAIGHT BODY TRUCK				
GROUP 3		2024-11-18	31.00	11.50	42.50
605	BITUMINOUS DISTRIBUTOR DRIVER				
606	BITUMINOUS DISTRIBUTOR (ONE PERSON OPERATION)				
607	THREE AXLE UNITS				
GROUP 4		2024-11-18	23.70	6.91	30.61
608	BITUMINOUS DISTRIBUTOR SPRAY OPERATOR (REAR AND OILER)				
609	DUMP PERSON				
610	GREASER				
611	PILOT CAR DRIVER				
612	RUBBER-TIRED, SELF-PROPELLED PACKER UNDER 8 TONS				
613	TWO AXLE UNIT				
614	SLURRY OPERATOR				
615	TANK TRUCK HELPER (GAS, OIL, ROAD OIL, AND WATER)				
616	TRACTOR OPERATOR, UNDER 50 H.P.				
SPECIAL CRAFTS					
701	HEATING AND FROST INSULATORS	2024-11-18	17.50	2.79	20.29
702	BOILERMAKERS	2024-11-18	46.00	31.93	77.93
		2025-01-01	48.35	31.93	80.28
703	BRICKLAYERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
704	CARPENTERS	2024-11-18	37.65	27.08	64.73
		2025-01-01	37.65	27.08	64.73
		2025-05-01	42.85	27.08	69.93
705	CARPET LAYERS (LINOLEUM)	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
706	CEMENT MASONS	2024-11-18	43.00	23.72	66.72
707	ELECTRICIANS	2024-11-18	41.00	23.10	64.10

LABOR CODE AND CLASS		EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
711	GROUND PERSON	2024-11-18	16.63	6.38	23.01
712	IRONWORKERS	2024-11-18	46.00	34.11	80.11
713	LINEMAN	2024-11-18	50.86	23.06	73.92
714	MILLWRIGHT	2024-11-18	38.23	29.18	67.41
715	PAINTERS (INCLUDING HAND BRUSHED, HAND SPRAYED, AND THE TAPING OF PAVEMENT MARKINGS)	2024-11-18	33.91	23.49	57.40
716	PILEDRIVER (INCLUDING VIBRATORY DRIVER OR EXTRACTOR FOR PILING AND SHEETING OPERATIONS)	2024-11-18	45.71	29.73	75.44
		2025-01-01	45.71	29.73	75.44
		2025-05-01	49.46	30.23	79.69
717	PIPEFITTERS . STEAMFITTERS	2024-11-18	41.97	25.92	67.89
719	PLUMBERS	2024-11-18	51.04	30.58	81.62
		2025-05-01	54.79	30.58	85.37
721	SHEET METAL WORKERS	2024-11-18	40.88	25.10	65.98
723	TERRAZZO WORKERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
724	TILE SETTERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
725	TILE FINISHERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
727	WIRING SYSTEM TECHNICIAN	2024-11-18	41.42	18.16	59.58
728	WIRING SYSTEMS INSTALLER	2024-11-18	29.02	16.46	45.48
729	ASBESTOS ABATEMENT WORKER	2024-11-18	39.86	24.61	64.47
		2025-01-01	41.23	25.99	67.22
730	SIGN ERECTOR				

LABOR CODE AND CLASS	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			

DEPARTMENT OF LABOR AND INDUSTRY

Dec. 18, 2023

Notice of truck rental rate certification and effective date

The Department of Labor and Industry (DLI) commissioner has certified the minimum truck rental rates for state-funded highway projects effective Dec. 18, 2023. This certification follows the publication of the Notice of Truck Rental Rate Determination in the State Register on Nov. 27, 2023, and the informal conference held pursuant to Minnesota Rules, part 5200.1105 on Dec. 11, 2023.

According to Minnesota Rules, part 5200.1105, the purpose of the informal conference was for DLI to obtain further input regarding the determined rates prior to the certification. No written input regarding the determination was received by DLI prior to the informal conference.

The truck rental rate is determined for each equipment type by adding the average hourly cost of operating the vehicle to the certified prevailing-wage rate for the driver. The average hourly operating costs are determined by voluntary survey of truck owner operators, trucking contractors and trucking firms. Cost data used in DLI's analysis must be representative of five trucking firms of various size and five independent truck owner operators for each type of truck.

The determination of the minimum truck rental rates by region are as follows.

Three-axle units

Region	Effective date	607 driver rate	Operating cost	Truck rental rate
Region 1	Certification date	$58.61	$37.35	$95.96
	Increase May 1, 2024	$61.54	$37.35	$98.89
Region 2	Certification date	$51.97	$37.35	$89.32
	Increase May 1, 2024	$54.57	$37.35	$91.92
Region 3	Certification date	$45.02	$37.35	$82.37
Region 4	Certification date	$51.97	$37.35	$89.32

Region	Effective date	607 driver rate	Operating cost	Truck rental rate
	Increase May 1, 2024	$54.57	$37.35	$91.92
Region 5	Certification date	$39.50	$37.35	$76.85
Region 6	Certification date	$54.16	$37.35	$91.51
Region 7	Certification date	$46.65	$37.35	$84.00
Region 8	Certification date	$32.16	$37.35	$69.51
Region 9	Certification date	$56.36	$37.35	$93.71
Region 10	Certification date	$55.96	$37.35	$93.31

Four or more axle units

Region	Effective date	604 driver rate	Operating cost	Truck rental rate
Region 1	Certification date	$58.71	$51.50	$110.21
	Increase May 1, 2024	$61.65	$51.50	$113.15
Region 2	Certification date	$52.11	$51.50	$103.61
	Increase May 1, 2024	54.72	$51.50	$106.22
Region 3	Certification date	$38.51	$51.50	$90.01
Region 4	Certification date	$53.73	$51.50	$105.23
Region 5	Certification date	$44.00	$51.50	$95.50
Region 6	Certification date	$54.26	$51.50	$105.76

Region 7	Certification date	$46.20	$51.50	$97.70
Region 8	Certification date	$43.75	$51.50	$95.25
Region 9	Certification date	$56.46	$51.50	$107.96
Region 10	Certification date	$56.06	$51.50	$107.56

Tractor

Region	Effective date	602 driver rate	Operating cost	Tractor-only truck rental rate	Plus trailer operating cost	Tractor trailer rental rate
Region 1	Certification date	$59.29	$54.96	$114.25	$11.46	$125.71
	Increase May 1, 2024	$62.25	$54.96	$117.21	$11.46	$128.67
Region 2	Certification date	$52.66	$54.96	$107.62	$11.46	$119.08
	Increase May 1, 2024	$55.29	$54.96	$110.25	$11.46	$121.71
Region 3	Certification date	$48.35	$54.96	$103.31	$11.46	$114.77
Region 4	Certification date	$38.30	$54.96	$93.26	$11.46	$104.72
Region 5	Certification date	$42.00	$54.96	$96.96	$11.46	$108.42
Region 6	Certification date	$39.50	$54.96	$94.46	$11.46	$105.92
Region 7	Certification date	$45.40	$54.96	$100.36	$11.46	$111.82
Region 8	Certification date	$48.45	$54.96	$103.41	$11.46	$114.87
Region 9	Certification date	$48.75	$54.96	$103.71	$11.46	$115.17

Region 10	Certification date	$48.45	$54.96	$103.41	$11.46	$114.87

The current operating costs and truck rental rates may be reviewed by accessing DLI's website at https://dli.mn.gov/business/employment-practices/prevailing-wage-minimum-truck-rental-rates. Questions about the truck rental rates or the informal conference notice below can be answered by calling 651-284-5192.

The minimum truck rental rate for these four types of trucks in the State's 10 highway and heavy construction areas will be effective for all highway and heavy construction projects financed in whole or part with state funds advertised for bid on or after the day the notice of certification is published in the *State Register*.

Sincerely,

Nicole Blissenbach

DLI commissioner

Equal Employment Opportunity (EEO) State and Federal Laws, Policies and Rules

Minnesota Affirmative Action Requirements

Minn. Stat. § 363A.36, Minn. R. 5000.3520 - .3530

General

A. The Contractor agrees that Minn. Stat. § 363A.36 and its accompanying rules are incorporated into any Contract executed with the Minnesota Department of Transportation (MnDOT) based on these specifications or any modification thereof. Upon request, MnDOT will provide the Contractor with a copy of Minn. Stat. § 363A.36 and its accompanying rules.

B. MnDOT intends to execute its responsibility to require affirmative action by the Contractor. This includes providing the Minnesota Department of Human Rights (MDHR) with information indicating that the Contractor is not in compliance with Minn. Stat. § 363A.36 and its accompanying rules.

Contractor Responsibilities

A. The Contractor must take affirmative action to employ and advance in employment qualified minorities and women at all levels of employment, including the executive level. This applies to all employment practices, including, but not limited to, the following:

1. Hiring, upgrading, demotion, or transfer
2. Recruitment, or recruitment advertising
3. Layoff, or termination
4. Rates of pay, or other forms of compensation; and selection for training, including apprenticeship

B. The Contractor must demonstrate that specific and significant actions to recruit, hire, and retain minorities and/or women are being taken if the applicable workforce participation goals will not be met.

C. The Contractor must comply with the affirmative action requirements of Minn. Stat. § 363A.36 and its accompanying rules, as well as any subsequent rules and relevant orders issued by MDHR pursuant to this same law.

Notice

1. The Contractor must post notices in a form stipulated by the Commissioner of MDHR in conspicuous places. These notices must outline the following:

1. The rights of employees and applicants
2. The legal obligation to take affirmative action to employ and advance in employment employees and applicants who are minorities and women. The notices can be found here: http://www.dot.state.mn.us/const/labor/posterboards.html

Noncompliance

A. The Contractor's failure to implement or make a good faith effort to implement an affirmative action plan approved under Minn. Stat. § 363A.36 and its accompanying rules may result in the suspension or revocation of its certificate of compliance. Should either of these consequences occur, MnDOT may abridge or terminate the Contract awarded.

B. The Contractor's failure to take specific and significant actions to recruit, hire, and retain minorities and/or women if the workforce participation goals will not be met may result in the suspension or revocation of its certificate of

compliance. Should either of these consequences occur, MnDOT may abridge or terminate the Contract awarded.

VIOLENCE-FREE AND RESPECTFUL WORKPLACE

(INCLUDES GENERAL HARASSMENT, RETALIATION, AND WEAPONS)

POLICY HR014, EFFECTIVE 2015-07-17

POLICY STATEMENT

The Minnesota Department of Transportation (MnDOT) is committed to providing a safe and respectful workplace free from inappropriate behaviors for all employees. MnDOT employees, contractors and vendors (third parties) conducting business with MnDOT must:

- Understand the **Workplace Violence Continuum** and the behaviors that constitute a violation of this policy;
- Report any persons who violate this policy;
- Take appropriate action in situations that involve policy violation.

MnDOT fully adopts the **MMB Respectful Workplace** policy, to build and maintain a workplace that is respectful and professional toward all employees and third parties.

MnDOT's Violence-Free and Respectful Workplace policy addresses only behavior and communication that do not involve protected class status. The **MnDOT Discrimination Policy** addresses harassment based on race, color, creed, religion, national origin, sex, marital status, disability, sexual orientation, age, genetic information, or status with regard to public assistance.

REASON FOR POLICY

- Identify the types of behavior that constitute workplace violence
- Define roles and responsibilities of all MnDOT employees and third parties
- Clarify reporting procedure for policy violation.

WHO NEEDS TO KNOW THIS POLICY?

- All MnDOT employees
- All third parties conducting business with MnDOT

DEFINITIONS

Formal Complaint
A formal complaint is a written statement of workplace concern that alleges violation of this policy by an employee or third party.

SENIOR OFFICER

Tracy Hatch
Deputy Commissioner/CFO/COO

POLICY OWNER

Karin van Dyck
Director, Office of Human Resources

POLICY CONTACT

Jodi Mathiason
Labor Relations Manager
Office of Human Resources
Jodi.Mathiason@state.mn.us
651-366-3404

POLICY HISTORY

2015-07-17, Established

MnDOT Policy Website

General Harassment
Conduct that has the effect of unreasonably interfering with the employee's work performance, behavior made with the intent to cause fear, or creating an intimidating, hostile, or offensive work environment. Legitimate job-related efforts of a supervisor to direct or evaluate an employee or to have the employee improve his or her performance are not general harassment.

Professionalism
Professionalism is a display of good judgment and proper behavior expected in the workplace from employees and third parties.

Respectful Behavior
Positive interactions with employees and third parties, in a manner that a reasonable person finds appropriate.

Retaliation
Adverse action response to an employee's participation in a complaint, report, investigation, or lawsuit about workplace violence (protected activity).

Third Party
A third party is a contractor or vendor conducting business with MnDOT.

Weapon
Weapon is anything intended to harm or intimidate another person. Examples may include, but are not limited to, all firearms, non-firearms such as knives, martial arts devices, explosives, combustible devices, and chemical substances.

Workplace Violence Continuum
Violence or inappropriate behaviors that range from bullying, verbal abuse, arguments, property damage, vandalism, sabotage, pushing, theft, physical assaults, rape, and arson, to murder. Workplace violence can occur while on state property or while performing work for MnDOT at any location, by a state employee, third party, or the public.

PROCEDURES

Obligation to Report Workplace Violence
In a life-threatening situation, call 9-1-1 or other emergency contact at the work location, if making the call does not pose a risk to the well-being of the employee.

Any employee who is the subject of, or who witnesses workplace violence must immediately report the incident in one or all of the following ways:

- Report the behavior to his/her supervisor, manager or Human Resources office;
- Submit a completed **Violent Incident Report Form** to the Human Resources Office;
- Report by using the **Report Wrongdoing/Questionable Activity Form**; the information reported must include the details of the situation.

Any employee who violates this policy or is found to have witnessed an act of workplace violence and did not report it may be subject to discipline, up to and including discharge. Violation of this policy by third parties conducting business for MnDOT may jeopardize their contractual relationship with the agency.

Informal Resolution
Any employee can choose to explore options with Human Resources to address concerns.

- The employee subjected to inappropriate behavior should have a conversation with the other individual(s) involved whenever possible, if it does not pose a risk to the well-being of the employee;
- The employee is encouraged to speak with his/her supervisor, Human Resources, union representative, or Employee Assistance Program (EAP) for assistance or guidance on how to resolve the situation;
- If the concern is about a supervisor or manager, employees may contact Human Resources, union representative or EAP to discuss options for resolution.

Formal Complaints

A formal complaint must be submitted in writing to Human Resources and include the details of the situation. As with all investigations alleging employee misconduct, investigations related to this policy will occur in a timely, fair, and objective manner. ***This process does not supersede any applicable grievance or dispute resolution process under a collective bargaining agreement or plan*.**

- Complaints must be submitted to the Human Resources Office, and include the details of the situation;
- The person receiving a complaint must acknowledge receipt of the complaint in writing;
- A prompt review of the complaint will be conducted and addressed;
- All data associated with a complaint, including any investigation and any outcome is government data, **Minnesota Statutes Chapter 13,** Government Data Practices Act governs the release or non-release of data.

Retaliation

Any employee who perceives retaliation because he or she filed a complaint about workplace violence should immediately contact the Human Resources Office, Labor Relations.

RESPONSIBILITIES

Employees

- Conduct one's self in a manner that demonstrates professionalism and respect for all others while working for and representing MnDOT;
- Be familiar with this policy and understand the meanings and definitions included;
- Document and report all behaviors or incidents that may violate this policy to a manager, supervisor, or Human Resources Office;
- Fulfill all mandatory training requirements:
  - Respectful Workplace *(MnDOT employees)*
  - Workplace Violence Prevention *(MnDOT employees)*
- Cooperate in investigations of alleged violations of this policy, including investigations of general harassment, inappropriate behaviors, weapons, and retaliation.

Managers/Supervisors *In addition to the responsibilities of Employees (as described above)*

- Be familiar with this policy to achieve and maintain compliance with this policy;
- Document and take timely and appropriate action when a complaint is made alleging violations of this policy and collaborate with Human Resources in the process;
- Ensure employees fulfill mandatory training requirements:
  - Respectful Workplace *(MnDOT employees)*
  - Workplace Violence Prevention *(MnDOT employees)*

Human Resources Offices

- Assist with the resolution and investigation of inappropriate behaviors that may violate this policy;
- Provide consultation to employees, supervisors, and managers on options and the appropriate course of action, to including guidance regarding resources for alternative solutions;
- Provide consultation to employees, supervisors, and managers on applicable rules, policies, procedures, and learning opportunities;
- Design and provide mandatory training, offer resources and/or training to assist employees in dealing with situations that may lead to potential violence.

Third Parties (contractor or vendor)

- Conduct one's self in a manner that demonstrates professionalism and respect for all others while working with MnDOT and the public;
- Refer to the **MnDOT Policies** webpage to become familiar with all of MnDOT policies;
- Document and report all behaviors or incidents that may violate this policy;
- Cooperate in investigations of alleged violations of this policy including investigations of general harassment, inappropriate behaviors, weapons, and retaliation.

FORMS/INSTRUCTIONS

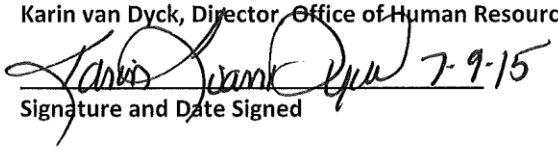
Violent Incident Report Form
Report Wrongdoing/Questionable Activity Form

RELATED INFORMATION

MnDOT Violent Incident Advisory Team (VIAT)
MnDOT Discrimination Policy
Minnesota Statutes §609.02, Subd.6 *Dangerous Weapons*
Employee Assistance Program (EAP)

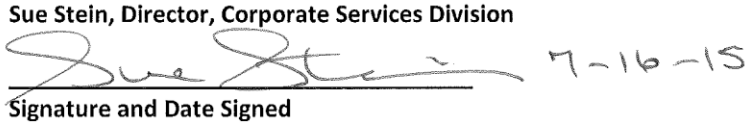
POLICY OWNERSHIP AND AUTHORIZATION

Policy Owner
Karin van Dyck, Director, Office of Human Resources



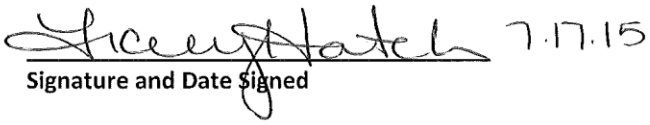
Signature and Date Signed

Governance Council
Sue Stein, Director, Corporate Services Division



Signature and Date Signed

Responsible Senior Officer
Tracy Hatch, Deputy Commissioner/CFO/COO



Signature and Date Signed

SPECIFIC FEDERAL EQUAL OPPORTUNITY RESPONSIBILITIES

(23 CFR 230, Subpart A, Appendix A, FAPG June 6, 1996)

1. General.

a. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required contract Provisions (Form PR-1273 or 1316, as appropriate) and these Special Provisions which are imposed pursuant to Section 140 of title 23, U.S.C., as established by Section 22 of the Federal-Aid Highway Act of 1968. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.

b. The contractor will work with the State highway agencies and the Federal Government in carrying out equal employment opportunity obligations and in their review of his/her activities under the contract.

c. The contractor and all his/her subcontractors holding subcontracts not including material suppliers, of $10,000 or more, will comply with the following minimum specific requirement activities of equal employment Opportunity: (The equal employment opportunity requirements of Executive Order 11246, as set forth in volume 6, Chapter 4, Section 1, Subsection 1 of the Federal-Aid Highway program Manual, are applicable to material suppliers as well as contractors and subcontractors.) The contractor will include these requirements in every subcontract of $10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

2. Equal Employment Opportunity Policy.

The contractor will accept as his operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote their full realization of equal employment through a positive continuing program:

It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre apprenticeship, and/or on-the-job training.

3. Equal Employment Opportunity Officer.

The contractor will designate and make known to State highway agency contracting officers an equal employment opportunity officer (hereinafter referred to as the EEO Officer) who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

4. Dissemination of Policy.

a. All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action will be made fully cognizant of, and will implement, the contractor's equal employment opportunity policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

(1) Periodic meetings of supervisory and personnel office staff will be conducted before the start of work and then not less often than once every six months, at which time the contractor's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

(2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official, covering all major aspects of the contractor's equal employment opportunity obligations within thirty days following their reporting for duty with the contractor.

(3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO officer or appropriate company official in the contractor's procedures for locating and hiring minority group employees.

b. In order to make the contractor's equal employment policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the contractor will take the following actions:

(1) Notices and posters setting forth the contractor's equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

(2) The contractor's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

5. Recruitment.

a. When advertising for employees, the contractor will include in all advertisements for employees the notation "An Equal Opportunity Employer." All such advertisements will be published in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

b. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, State employment agencies, schools, colleges and minority group organizations. To meet this requirement, the contractor will, through their EEO Officer, identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with equal employment opportunity contract provisions. (The U.S. Department of Labor has held that where the implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.

6. Personnel Actions. Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, or national origin. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his/her obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all his avenues of appeal.

7. Training and Promotion.

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees and applicants for employment.
b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor must make full use of training programs, i.e. apprenticeship, and on-the- job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event the Training Special Provision is provided under this contract, this subparagraph will be superseded as indicated in Attachment 2.
c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
d. The Contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

8. Unions.

If a contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group members and women so that they may qualify for higher paying employment.
b. The contractor will use best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, or national origin.
c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the State highway department and shall set forth what efforts have been made to obtain such information.
d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, or national origin; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the State highway agency.

9. Subcontracting.

a. The contractor will use his best efforts to solicit bids from and to utilize minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of minority-owned construction firms from State highway agency personnel.
b. The contractor will use his best efforts to ensure subcontractor compliance with their equal employment opportunity obligations.

10. Records and Reports.

a. The contractor shall keep such records as necessary to determine compliance with the contractor’s equal employment opportunity obligations. The records kept by the contractor will be designed to indicate:
    (1) The number of minority and non minority group members and women employed in each work classification on the project.

(2) The progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractor's who rely in whole or in part on unions as a source of their work force),

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees, and

(4) The progress and efforts being made in securing the services of minority group subcontractors with meaningful minority and female representation among their employees.

b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State highway agency and the FHWA.

c. The contractors will submit an annual report to the State highway agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form PR-1391. If on-the-job training is being required by a "Training Special Provision", the contractor will be required to furnish Form FHWA 1409.

STANDARD FEDERAL AND STATE EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

(41 CFR 60-4.3 and Minnesota Statute §363A.36)

Unless noted, the following apply to both Federal/federally assisted projects and State/state assisted projects. Item 3 applies to Federal/federally assisted projects only.

1. As used in these specifications:
   (a) "Covered area" means the geographical area described in the solicitation from which this contract resulted;
   (b) "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
   (c) "Employer Identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
   (d) "Minority" includes:
      (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
      (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
      (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
      (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 ($100,000 for State projects) the provisions of these specifications and the Notice which contains the applicable goals for minority and women participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4, 5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work on the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7(a) to (p) of these specifications (itemized as 4 [a] to [o], Minnesota Rules 5000.3535). The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minorities and utilization the Contractor should (shall, for State or state assisted projects) reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor shall make substantially uniform progress toward its goals in each craft during the period specified. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Federal goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any office of Federal Contract Compliance programs or from Federal procurement contracting officers. State goals are published periodically in the State Register in notice form, and may be obtained from the Minnesota Department of Human Rights or the Minnesota Department of Transportation Office of Civil Rights. The Contractor is expected to

make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union, with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications and Executive Order 11246 and its associated rules and regulations for Federal or federally assisted projects, and Minnesota Statutes, Section §363A.36 of the Minnesota Human Rights Act, or the rules adopted under the Act for State or state assisted projects.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained according to training programs approved by the Minnesota Department of Human Rights, the Minnesota Department of Labor and Industry, or the United States Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications must be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following (referred to in Minnesota Rules 5000.3535 as items 4(a) to (o):
   (a) Ensure and maintain, or for State or state assisted projects make a good faith effort to maintain, a working environment free of harassment, intimidation, and coercion at all sites and in all facilities at which the Contractor's employees are assigned to work. For Federal or federally assisted projects, the Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or women individuals working at such sites or in such facilities.
   (b) Establish and maintain a current list of minority and women recruitment sources, provide written notification to minority and women recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
   (c) Maintain a current file of the names, addresses, and telephone numbers of each minority and woman off-the-street applicant and minority or woman referral from a union, a recruitment source, or community organization and of what action was taken with respect to each individual. If the individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.
   (d) Provide immediate written notification to the commissioner of the Minnesota Department of Human Rights for State or state assisted projects, or the director of the Office of Federal Contract Compliance for Federal or federally assisted projects, when the union, or unions with which the Contractor has a collective bargaining agreement, has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
   (e) Develop on-the-job training opportunities and/or participate in training programs for the areas which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the State of Minnesota for State or state assisted projects or the Department of Labor, for Federal or federally assisted projects. The Contractor shall provide notice of these programs to the sources compiled under (b).
   (f) Disseminate the Contractor's equal employment opportunity policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its equal employment opportunity obligations; by including it in any policy manual and collective bargaining agreement;

by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and women employees at least once a year; and by posting the company equal employment opportunity policy on bulletin boards accessible to all employees at each location where construction work is performed.

(g) Review, at least annually, the company's equal employment opportunity policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions; including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the first day of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(h) Disseminate the Contractor's equal employment opportunity policy externally by including it in any advertising in the news media, specifically including minority and women news media, and providing written notification to and discussing the Contractor's equal employment opportunity policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.

(i) Direct its recruitment efforts, both oral and written, to minority, women, and community organizations; to schools with minority and women students; and to minority and women recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(j) Encourage present minority and women employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and women youth, both on the site and in other areas of a Contractor's work force.

(k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3. (This requirement applies only to Federal and federally assisted projects.)

(l) Conduct, at least annually, an inventory and evaluation at least of all minority and women personnel for promotional opportunities; and encourage these employees to seek or to prepare for, through appropriate training, such opportunities. (This is Item 4(k) in Minnesota Rules.)

(m) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the equal employment opportunity policy and the Contractor's obligations under these specifications are being carried out. (This is item 4(l) in Minnesota Rules.)

(n) Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes. (This is item 4(m) in Minnesota Rules.)

(o) Document and maintain a record of all solicitations or offers for subcontracts from minority and women construction contractors and suppliers, including circulation of solicitations to minority and women contractor associations and other business associations. (This is item 4(n) in Minnesota Rules.)

(p) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment opportunity policies and affirmative action obligations. (This is item 4(o) in Minnesota Rules.)

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7(a) to (p) for Federal or federally assisted projects, and 4(a)-(o) for State or state assisted projects). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7(a) to (p) or 4(a) to (o) of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and women work force participation, makes a good faith effort to meet its individual goals and timetables, and can

provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor however, is required to provide equal employment opportunity and to take affirmative action for all minority groups both male and female, and all women both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order for Federal or federally assisted projects, or Minnesota Rules for State or state assisted projects, if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order or Minnesota Rules part 5000.3520 if a specific minority group is under-utilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, creed, religion, sex, or national origin. Minnesota Statutes §363A.36, part 5000.3535 (Subp. 7) also prohibits discrimination with regard to marital status, status with regard to public assistance, disability, age, or sexual orientation.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from government contracts under the federal Executive Order 11246 or a local human rights ordinance, or whose certificate of compliance has been suspended or revoked pursuant to Minnesota Statutes, Section §363A.36.

12. The Contractor shall carry out such sanctions for violation of these specifications and of the equal opportunity clause, including suspension, termination, and cancellation of existing contracts as may be imposed or ordered pursuant to Minnesota Statutes, Section §363A.36, and its implementing rules for State or state assisted projects, or Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs for Federal or federally assisted projects. Any contractor who fails to carry out such sanctions shall be in violation of these specifications and Minnesota Statutes, Section §363A.36, or Executive Order 11246 as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications (paragraph 4 in Minnesota Rules 5000.3535), so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of these Specifications or Minnesota Statutes, Section §363A.36 and its implementing rules, or Executive Order 11246 and its regulations, the commissioner or the director shall proceed in accordance with Minnesota Rules part 5000.3570 for State or state assisted projects, or 41 CFR 60-4.8 for Federal or federally assisted projects.

14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company equal employment opportunity policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Minnesota Department of Human Rights or the Government, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (for example, mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing provided in this part shall be construed as a limitation upon the application of other state or federal laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

EQUAL OPPORTUNITY CLAUSE

(41 CFR Part 60-1.4 b, 7-1-96 Edition)

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoffs or termination; rates of pay or other forms of compensation; and, selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Highway Agency (SHA) setting forth the provisions of this nondiscrimination clause.
b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
c. The Contractor will send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
d. The Contractor will comply with all provisions of Executive Order 11246, Equal Employment Opportunity, dated September 24, 1965, and of the rules, regulations (41 CFR Part 60), and relevant orders of the Secretary of Labor.
e. The Contractor will furnish all information and reports required by Executive Order 11246 and by rules, regulations, and orders of the Secretary of Labor, pursuant thereto, and will permit access to its books, records, and accounts by the Federal Highway Administration (FHWA) and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
f. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract, or with any of such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts or federally-assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
g. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraph (1) through (7) in every subcontract or purchase order so that such provisions will be binding upon each subcontractor or vendor, unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246. The Contractor will take such action with respect to any subcontract or purchase order as the Secretary of Labor, SHA, or the Federal Highway Administration (FHWA) may direct as a means of enforcing such provisions, including sanctions for noncompliance. In the event a contractor becomes a party to litigation by a subcontractor or vendor as a result of such direction, the contractor may request the SHA to enter into such litigation to protect the interest of the State. In addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that if the applicant so

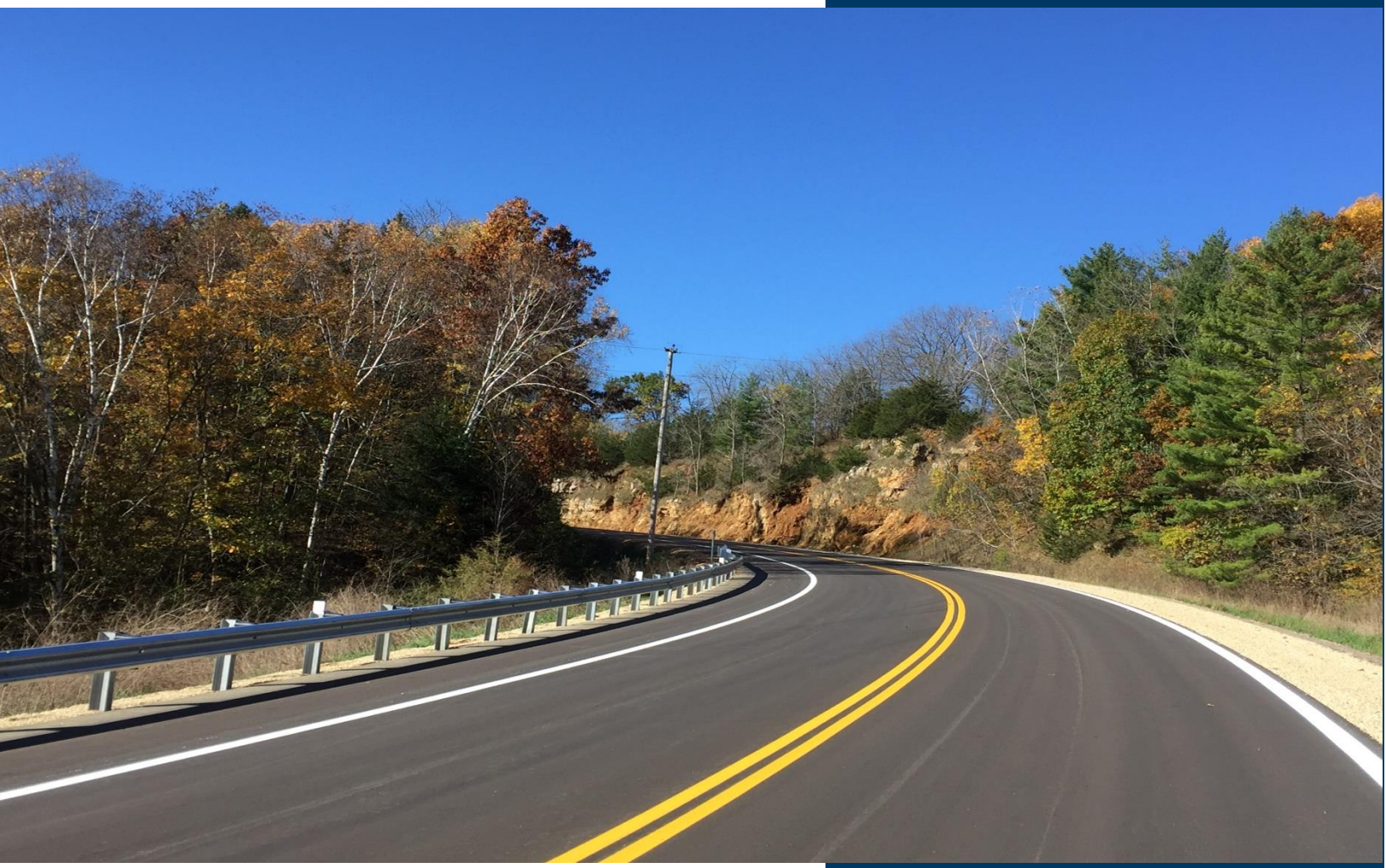
participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

2024

SALT Schedule of Materials Control



Contents

Introduction

This Schedule of Materials Control (SMC) outlines the **MINIMUM** testing requirements for State Aid Funded and/or Federal Aid Projects **OFF** the National Highway and Trunk Highway System. Optional to this SMC is the MnDOT Materials Control Schedule. Usage of either schedule must be defined in the project proposal.

The SMC – LGA serves as a guide for material testing with allowable acceptance "as directed by the Engineer" detailed in Specification 1501.1(1) – Authority of the Engineer. These testing rates are a minimum and additional test may be taken at the Engineer's discretion. A minimal testing rate does not always ensure a quality product; field observations and attention to detail is crucial. Materials not listed on an approved products list may be sampled and tested as directed by the Engineer. Materials listed on a Qualified Products list may be accepted or tested at the discretion of the Engineer.

Federal Aid projects require Independent Assurance Inspection. Contact the MnDOT District IA Inspector when the job starts to provide the proper servicing of your project.

*****Agencies using MnDOT Metro Inspection Services will be sampled at the current MnDOT Schedule of Materials Control rates and will be billed accordingly.**

*****Contact the MnDOT District IA Inspector to provide servicing for your federal aid project.**

Definitions

Schedule of Materials Control

Schedule of Materials Control (SMC) are inserted into project proposals to direct how materials are to be sampled and tested. The SMC is updated yearly. Each SMC is project specific. Therefore, one needs to refer to their specific proposal.

Approved/ Qualified Products List

Products are "approved" when they have been found to routinely meet all applicable standards and specifications. The product is placed on the list based upon established successful manufacturer's quality control and warranties, but the listing may expire or require periodic renewal to verify the product has not changed over time. The approval process for the individual product should specify any expiration requirement. Testing may still be on at the Engineers discretion.

Certified Sources

Certified Sources must comply with each individual product's defined "certification procedure". Acceptance of products from certified sources follows the same sampling and testing as "approved/ qualified" products.

Quality control (QC): The activities performed by the **Contractor/Producer** that have to do with making sure the quality of a product or process meets the relevant contract requirements. All testing shall be performed by a certified tester.

Quality assurance (QA): The activities performed by the **Department/Agency** that have to do with making sure the quality of a product or process meets the relevant contract requirements. All testing shall be performed by a certified tester.

Verification Testing: Sampling and testing performed as called out herein to validate the quality of the product(s). **Part of QA.**

Material Acceptance Summary Instructions

STATE AID FOR LOCAL TRANSPORTATION
MATERIAL ACCEPTANCE SUMMARY

Rev. February 2019

SP/SAP(s)

Bid Item/ Spec No.	Item Description	Approved/ Qualified Product List (date checked)	Certificate of Compliance (date rec'd)	Accepted by Engineer* (date)
2105.604	Geotextile Fabric	5/26/18	5/26/18	6/6/18
2105.604	Soil Stabilized Geogrid	5/30/18	5/30/18	6/6/18
2357.506	Bituminous Material for Tack Coat	6/6/18	6/6/18	6/6/18
2573.503	Silt Fence, Type MS	5/14/18	5/14/18	6/6/18
2582.503	Epoxy Pavement Marking	7/30/18	7/30/18	7/31/18
3592	Drop-on Glass Beads	7/30/18	7/30/18	7/31/18
2574.508	Fertilizer Type 3	---	8/6/18	8/6/18
2575.508	Seed Mixture 22-111	8/6/18	8/6/18	8/6/18

Example Project

Date checked the Approved/Qualified product list. Print and file copy of approved list on acceptance date.

Date the certification was received. See specification 1603.3

Date accepted by the engineer.

* This item is hereby accepted by the Engineer as materially compliant for use on this project per the terms of specification 1501.1, subset (1).

Approved by Project Engineer: _____ Date: _____

Print Name: _____

Material Acceptance Summary

STATE AID FOR LOCAL TRANSPORTATION
MATERIAL ACCEPTANCE SUMMARY

Rev. February 2019

SP/SAP(s)

Bid Item/ Spec No.	Item Description	Approved/ Qualified Product List (date checked)	Certificate of Compliance (date rec'd)	Accepted by Engineer* (date)

* This item is hereby accepted by the Engineer as materially compliant for use on this project per the terms of specification 1501.1, subset (1).

Approved by Project Engineer: _____ Date: _____
Print Name: _____ Phone: _____

For an electronic Word version of this form, please visit the State Aid Construction webpage at:
https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=19623193

Bituminous Quality Management

The Contractor shall provide and maintain a quality control program as detailed in Specification 2360.2.G. The Engineer shall review the quality control program for compliance. This shall be provided at the precon.

	Type of Test	Spec Section (1)	Contractor / Producer – QC Testing Rates	Agency – QA Testing Rates
Start-Up Testing Rates for the 1st 2000 tons (2)	Bulk Specific Gravity	2360.2.G.7.b	1 test per 500 tons 55 lb. sample 3 full cylinder molds **(7)**	**(3) (10)** 1 Verification Mixture Sample test per day, all Verification samples are from a split (QC/QA) sample.
	Maximum Specific Gravity	2360.2.G.7.c		
	Air Voids (calculated)	2360.2.G.7.d		
	Asphalt Content	2360.2.G.7.a		
	Adj. Asphalt Film Thickness (AFT)	2360.2.E.7.e		
	Gradation	2360.2.G.7.f		
	Fines to Effective Asphalt Ratio (calculated)	2360.2.G.7.a/f		
	Coarse Aggregate Angularity (CAA)	2360.2.G.7.g	1 test per 1000 tons **(4) (5) (6) (7)**	
	Fine Aggregate Angularity (FAA)	2360.2.G.7.h		
	Added AC/Total AC Ratio (calculated)	2360.2.G.7.a		
Production Testing Rates	Bulk Specific Gravity	2360.2.G.7.b	1 test per 1000 tons 55 lb. sample 3 full cylinder molds **(7)**	**(3) (10)** Verification Mixture Sample test per day/ mix type, submit companion to the QC – CAA & FAA test results.
	Maximum Specific Gravity	2360.2.G.7.c		
	Air Voids (calculated)	2360.2.G.7.d		
	Asphalt Content	2360.2.G.7.a		
	Adj. Asphalt Film Thickness (AFT)	2360.2.E.7.e		
	Gradation (minimum of 1 per day)	2360.2.G.7.f		
	Added AC/Total AC Ratio (calculated)	2360.2.G.7.a		
	Coarse Aggregate Angularity (CAA)	2360.2.G.7.g	**(4) (5) (7)**	
	Fine Aggregate Angularity (FAA)	2360.2.G.7.h	**(4) (6) (7)**	
	TSR	2360.2.G.7.i	When directed by the Engineer	
	Aggregate Specific Gravity	2360.2.G.7.j		
	Mixture Moisture Content	2360.2.G.7.k	As directed by the Engineer	
	Asphalt Binder (QA ONLY)	2360	**(8)** 1 qt. steel container for asphalt binder	
	Asphalt Emulsion (QA ONLY)	2357	**(9)** ½ gal plastic container for asphalt emulsion. (Tack)	
	Compaction / Density Requirements	2360.3.D	Review special provisions	
	Small Quantity Requirements	< 500 tons per project may be accepted by the Engineer without testing.		

NOTES: Testing rates are minimum rates; additional testing is encouraged to ensure a quality product.

(1) Review Special Provisions & 2360.2G Mixture Quality Management.

(2) The testing rates apply only to mixtures that have not been tested on previous projects in the current year.

(3) The Agency shall witness a minimum of 1 (one) complete QC mixture sampling, splitting and test per day. The Agency shall take possession of all split QA samples immediately. The Agency shall randomly submit one QA split sample to the District Lab for Verification testing and inform with contractor the following day of test number. Additional verification samples can be taken at any time or location. When additional verification samples are taken, the contractor must test the Verification Companion split of this sample and include the results in the QC program.

(4) The Contractor will retain the extracted gradation samples in containers with field identification numbers for a period of 10 calendar days. The Engineer will identify which extracted gradation sample is the Verification Companion Sample and whether it is to be tested for coarse and fine aggregate angularity.

(5) **At start-up or new Mix Design**: 2 tests/ day for a minimum of 2 days, then 1/day if CAA is met. If CAA > 8% of requirement, 1 sample/ day but test 1/ week. No testing required for Class A and B Aggregates.

(6) **At start-up or new Mix Design**: 2 tests per day for a minimum of 2 days, then 1/day if FAA is met. If FAA > 5% of requirement, 1 sample/ day but test 1/week.

(7) Random number generation and determination of random sample location shall be consistent with Section 5 of ASTM D3665. The Engineer may approve alternate methods of random number generation.

(8) **During Asphalt Mixture Production (Field Verification):** Shall be from a certified supplier. Obtain asphalt binder samples from a sampling valve located between the pump and the drum. Contractor personnel shall obtain samples, under the observation of a department representative, by random selection from shipments of material at the project site. The samples shall be taken from the first load and subsequently 1 per 1000 tons of liquid asphalt binder for each supplier and grade of asphalt binder per contract. For contracts with less than approximately 25 tons (one truck transport) of asphalt binder, sampling may be waived. A minimum of 1 gallon of binder must be drawn and wasted from the sampling valve before the actual sample is drawn. Sample shall be sent in for verification testing.

(9) **During Mixture Production (Field Verification):** Shall be from a certified supplier. The Contractor shall sample first shipment, then submit 1 per 50,000 gallons. Sample emulsified asphalt in clean ½ gallon plastic container with wide screw top and send to MnDOT Chemical Lab within 7 days of sampling. Sample all emulsified asphalt from the distributor. Sample shall be sent in for verification testing. No Samples required unless directed by the Engineer.

(10) Conduct random belt samples and test for aggregate quality as directed by the Engineer.

Bituminous Specialty Items

Type of Test	Spec	Contractor/Producer – QC Testing Rates	Agency- QA Testing Rates
Gradation	2363 3139.3	1 per 1,000 Ton with a minimum 1 per day.	1 per day. 35 lbs.
PASSRC & PASB			
Micro-Surfacing	2354 3139.5	Stockpile: 1/1,500 Tons (min 1/day) Machine Hopper: 1/500 Ton (min 1/day)	Machine Hopper: 1/day, 30 lbs.
Seal Coat, Underseal & Otta Seal	2356 3137.2B	Stockpile: 1/1,500 Tons (min 1/day) Chip Spreader Hopper: 1/day	1/day from Hopper. 30 lbs.
% Crushing – CAA	2363 3139.3	1 per 1,000 Ton with a minimum 1 per day.	1 per day from gradation test. 35 lbs.
PASSRC & PASB			
Moisture / Aggregate	2354 3139.5	Machine Hopper: 1/500 Tons (min 3/day)	1/day 2lbs
Micro-Surfacing			
Sand Equivalence	2354	1/day	Test at Engineer discretion, 25 lbs.
Micro-Surfacing			
Flakiness Index	2356	Sample taken from first load on first day, submit to Agency: 30 lbs.	Agency will test at their discretion, see Lab Manual 1223
Bituminous Seal Coat & Bituminous Underseal			
Bituminous Mixture	2353 3151.2G	1/500 Tons, min 1/day. %AC, Gradation, Max SpG, Adj.AFT	1/day, 20 lbs. 1 cylinder from truck box.
UTBWC			
PASSRC & PASB	3151 2363	Asphalt spot check: min 1/day	-
Stone Matrix Asphalt – SMA Lab Manual 1203, 1204, 1205, 1211, 1214, 1806, 1807, 1808, 1813, 1853, 1854, 1855, AI SP-2 AASHTO T305	2365	**Tests**, %AC,gradation, Gmm, Gmb, Voids, VMA, CAA, Draindown, VCA, fines/effective asphalt. Rate, (1/1000 tons, min.1/day) Agg SpG, mix moisture, TSR to be tested as directed by Engineer. Submit companion 1 per day to agency: 3 full 6" by 12" cylinders	Tests: %AC, Gradation, Gmm, Gmb, Voids, VMA, CAA, VCA, fines/effective asphalt. Agency is not required to do drain down. Copy MDR to Project Engineer and Grading & Base Engineer.
Asphalt Binder Tests		Asphalt Emulsion List	Asphalt Binder List
UTBWC	2353 3151	**Asphalt Binder:** Sample first load, then 1/250,000 gallons. Sample size of 1 quart metal container. **Emulsified Asphalt:** Sample first load, then 1/50,000 gallons. Sample size of ½ gallon wide screw top plastic container.	
Micro-Surfacing	2354		
Seal Coat, Underseal & Otta Seal	2356		
Tack Coat	2357		
PASSRC & PASB	3151		
Asphalt Binder Rate	2354	Verify Application Rate 3/day	Verify Application Rate 1/day
Micro-Surfacing			
Fog Seal	2355	Verify Application Rate 1/day	Verify Application Rate 1/day
Seal Coat, Underseal & Otta Seal	2356		
Bit Tack Coat	2357		

Specification 2215 – Cold Inplace Recycling (CIR), Stabilized Full Depth Reclamation (SFDR) and Cold Central Plant Recycling Bituminous (CCPR)

Test Type	Contractor/Producer QC Testing Rates	Agency QA Testing Rates	Grading & Base Manual/Form
Gradation SFDR (Simple) Pre-ground un-stabilized material	1 per mile – report sieves 2" & 3"	Run gradation at the discretion of the Engineer	.215 / 101 report sieve 2" & 3"
Gradation (Entire) (Material to be stabilized)	One per day, give split sample to the Engineer	Run gradation at the discretion of the Engineer	.215 / 101 report sieve 2", 1.5", 1.25", 1", ¾", 3/8",#4, #10, #30.
Gradation (Simple) (Material to be stabilized)	1 per mile for SFDR & CIR. 1 per 2,000 ton for CCPR.	Run gradation at the discretion of the Engineer	.215 & .293 / 101 report sieve 2" & 1.5" for SFDR, 1.5" and 1.25" for CIR
CIR & SFDR Depth Check – Unstabilized and Stabilized	None	1 per day	.284 / 401
SFDR & CCPR Moisture – before injecting with bituminous.	1 per mile of anticipated daily production and after rain. 1 per mile for SFDR after mechanical drying.	Run moisture at the discretion of the Engineer	.245 Speedy tester not allowed.
Penetration Index (DCP) – SFDR only Unstabilized.	2 per mile	1 per mile	.255 / 205
Calibrate: mineral stabilizing agent application rate.	Once using design rate per vane feeder.	Observe contractor calibration	.286 or .287
Moisture: before injecting liquid bituminous material	1 per mile of daily anticipated SFDR & one after rain or mechanical drying out (disking, etc.).	none	.281 / 105
Yield: Mineral Stabilizing Agent and/or Liquid Bituminous Material	1 per transport load each type	1 per day each type	.286 & .287 / 402 & 403
Compaction: Nuclear density for SFDR stabilized and CIR	10 per lane mile, (**see note below**).	Observe the Contractor.	.282
Control Strip: SFDR Stabilized and CIR	Minimum of once per project	Observe the Contractor.	
Bituminous Material Samples		. 1 per 50,000 gallons; sample first load	1 quart each sample
Mineral Stabilizing Agent Samples	None	1 sample	none
Foaming asphalt checks expansion ratio & half life	1 per load	Observe the Contractor.	.285
Moisture (stabilized) – before placement of next layer during curing.	2 per day until moisture stabilizes & placement of HMA.	None	Grading & Base Manual

Note: The Engineer may require a Contractor to perform additional nuclear density tests in areas that the Engineer believes are failing density requirements.

Grading and Base Construction Items (1 of 4)

	Material Type	Spec.	Contractor / Producer QC Testing Rates	Minimum Required Agency QA Testing Rates	Verification Testing Sample
Gradation Testing (2) (3)	Aggregate Surfacing	3138	1 / 1,000 CY (CV) stockpile gradation only required for material on hand.	> 250 yd^3 (CV) or 500 Tons and < 2000 yd^3 (CV) or 4000 tons. Material is a minimum of one lot **(5)**. Test two random samples from each lot and average. > 2000 yd^3 (CV) or 4000 Tons. Divide into lots with lot size **(5)** no greater than 2000 yd^3 (CV) or 4000 Tons. Test two random samples from each lot and average.	1/source 30 lb.
	Aggregate Base	3138			
	Shoulder Base Aggregate	3138			
	Drainable Aggregate Base (OGAB & DSB)	3136			
	Granular and Select Granular Material (borrow/embankment)	3149.2B	1/10,000 CY (CV) only required for material on hand.	1/40,000 yd^3 (CV)	1/source 30 lb.
	Stabilizing Aggregate	3149.2C			
	Reclamation FDR	3135.2B	None	Test at Engineer's discretion. Inspect for oversize chunks (+3"), after the motor grader has overturned the material	None
	Granular Filter	3601.2B	1/source – before delivery on the project. Only required for materials on hand. Spec 1906.2	1/ source	1/source 30 lb.
	Backfill Materials	3149.2D			
	Granular Bedding	3149.2F			
	Aggregate Bedding	3149.2G			
	Coarse Filter Agg.	3149.2H			
	Filter Aggregate	3149.2J			
	Sand Cover	3149.2K			
Sand Cone, Nuclear Density or LWD / **Proctor**	Non-Granular Material Used to determine optimum moisture & maximum density.	2106 3149	None	1 per major soil, subgrade prep specified density requires 100% of proctor density.	1 sample 25 lb.
Sand Cone, Nuclear Density or LWD / **Specified Density ***	Non-Granular Material For non-granular material, i.e., material that does not meet 3149.2B.1		**AGENCY TESTING**: **Roadway Embankment**: One test per 4,000 yd3 (CV) or if test rolled, One test per 10,000 yd3 (CV) **Transverse culverts & abutments:** 1 test per every 2 feet of fill. **Structures and Longitudinal Trenches:** One test per 300 feet of each structure per 2 feet per fill. **Sidewalks and Trails**: 1 per 500 feet. **Subgrade Preparation:** One per 25 road stations.		

Grading and Base Construction Items (2 of 4)

Material Type		Spec.	Contractor / Producer QC Testing Rates	Minimum Required Agency QA Testing Rates	Verification Testing Sample
Penetration Index Method (DCP) or LWD *	Aggregate Base	3138 2211.3C	None	1 DCP tests per 500 yd^3 (CV) or 1 per 1000 Tons. If test rolled, 1 test / 1,500 yd3 (CV) or 3000 Tons.	None
	Shoulder Base Aggregate				
	Reclamation FDR	3135.2B 2215.2C		1 DCP test per 3,000 yd^2. If test rolled, 1 test / 10,000 yd^2	
	Walks & Trails	2521		1 per 500 feet of Sidewalk or Trail	
	Granular Materials Subgrade Preparation (for materials meeting 3149.2B1)	3149.2B	**AGENCY TESTING:** **Roadway Embankment:** One test per 2,000 yd3 (CV) or if test rolled, One test per 6,000 yd3 (CV) **Transverse culverts & abutments:** 1 test per every 2 feet of fill. **Structures and Longitudinal Trenches:** One test per 300 feet of each structure per 2 feet per fill. **Sidewalks and Trails**: 1 per 500 feet. **Subgrade Preparation:** One per 25 road stations.		
Moisture Content Test During All Compaction Methods (4)	Aggregate Base, Shoulder, Surfacing & Walks	3138	None	**For 2118, 2211,2221, and 2521:** 1 / 1,000 yd3 up to 10 Maximum **For 2451:** 1 per structure, for multiple adjacent structures, may test once, use judgement **For Quality Compaction:** Test as directed by Engineer.	None
	Drainable Aggregate Base (OGAB & DSB)				
	Reclamation FDR	3135.2B	None	1 / 20,000 yd^2	
	All Embankment Materials	2106 3149	None	1/10,000 yd3 up to 10 Maximum **For Quality Compaction:** Test as directed by Engineer.	
	Subgrade Preparation	2106 3149		1 per 25 road stations **For Quality Compaction:** Test as directed by Engineer.	
Percent Crushing	Particle Count **(1)**	1906.2	1 required for Material on hand	1/source unless directed by Engineer, (required for 3138.2B & C, 3149.2C & G1, 3136.2B).	1 / source
Quality	Aggregate Quality Tests	3138 3149 3601	1 required for material on hand, Spec 1906.2	1/ source unless directed by Engineer	1 / source 30lb
Depth Check	Reclamation FDR	3135.2B	1/Mile.	1 per day unless directed by Engineer	

Material Type		Spec.	Contractor / Producer QC Testing Rates	Minimum Required Agency QA Testing Rates	Verification Testing Sample
Test Rolling	Test Rolling (as directed in the special provisions)	2111	As directed by the Engineer the contractor will perform test rolling at the top of all • Subgrade • Base layers (2211) • Non-Stabilized FDR (2215) • Granular layers not meeting the requirements of 3149.2B2 (2106) • Minimum 12’ width and 300’ length. Agency to observe test rolling.		

Verification Testing Samples are companion split samples to the QA sample:

- Companion gradation, proctor, QA crushing, aggregate quality samples not required 1,000 tons or less.
- Include the laboratory companion with the first field sample.
- Include the field sample results with the laboratory sample.
- Laboratories with AMRL Accreditation are not required to submit laboratory companion samples.
- Carbonate aggregate materials require 50 lb. samples for the laboratory testing.

NOTES:

(1) Percent crushing test is not required when the material is crushed from a quarry or contains 25% or greater recycled materials.

(2) Submit a laboratory companion to the first Acceptance Gradation sample for a bituminous extraction, see 3138.2C. Full Depth Reclamation samples are not required.

(3) The Certification of Aggregates and Granular Materials procedure and documentation of testing locations is at the discretion of the Engineer.

(4) For quality compaction per spec 2106.3G.2, test at Engineer's discretion.

(5) Lot sizes may be adjusted by the Engineer. This may be good practice if parts of the project are taking place in separate areas or at separate times, such as many turn lane or excavation areas or separate project stages.

* Review the Special Provisions. The Grading and Base Manual allows the nuclear density gauge, see pages 60 and 65.

NOTES:

Conversions: 1 ton = 0.55 yd3 (CV), 1 ton = 0.7 yd3 (LV), 1 yd3 (CV) = 1.8 tons.

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

Less than 500 tons (250 CY) may be accepted by the Engineer without testing.

Grading and Base Construction Items (4 of 4)

Guidelines for Required Crushing & Aggregate Quality Tests

	3149 Granular Materials	**3138** Aggregate for Surface and Base	**3136** Drainable Bases
Crushing	Yes, for Stabilizing Aggregate, Fine Aggregate Bedding and Medium Filter Aggregate. Test waived if material contains recycled at twice the minimum crushing requirement. Not required for quarried sources.	**Yes**, for Class 5, 5Q & 6. Test waived if material contains recycled at twice the minimum crushing requirement. Not required for quarried sources. Class 2 must contain 100% crushed quarry rock.	**Yes.** Not required for quarried sources.
Bitumen Content	**At the discretion of the Engineer**	**At the discretion of the Engineer**	Not applicable
LAR	Not applicable	**Yes**, if source is carbonate quarry and does not contain bitumen.	**Yes**
Insoluble Residue	**Yes**, if source is carbonate quarry and does not contain bitumen.	**Yes**, if source is carbonate quarry and does not contain bitumen.	**Yes**, if source is carbonate quarry.
Litho Exam & Shale Float Test	**Yes**, for Medium Filter Aggregate	**Yes**, for Class 3, 4, 5, 5Q & 6, when not from quarried rock, and does not contain bitumen.	**Yes**, when not from a quarried source.

Testing procedures in the Grading & Base Manual.

Forms and worksheets at the Grading & Base website.

Gradation worksheets at the SALT Construction website.

****MAKE SURE TO FILL OUT THE REQUIRED PRELIMINARY AND FINAL GRADING AND BASE REPORTS AND SUBMIT TO PROJECT ENGINEER.****

http://www.dot.state.mn.us/materials/gradingandbasedocs/Forms/form001_08_043019.xlsx

Certified Ready-Mix Concrete (1 of 3)

The Prime Contractor is responsible to assure that all ready-mix concrete used is produced by an annually Certified Ready-Mix plant as detailed in Specification 2461.3F.

Material Spec.	Concrete Plant Production Testing Rates *	Test Type (Concrete Manual)	Contractor / Producer QC Testing Rates				Form
bridge 2406.2 2411.2 2461.2 2461.3 general 2301** 2452.2 2461.2 2461.3 2506.2 2511.2 2514.2 2520.2 2521.2 2531.2 2533.2 2545.2 2554.2 2557.2 2564.2 2565.2		Gradation (5-694.145) (5-694.148) 3126, 3131, 3137	**For all JMF's & Bridge Deck Mix Designs** **Daily Concrete Quantity**: 1 per fraction per source per day between **20 – 400 yd³**. If over 400 yd3 per day, take a second gradation after the **DAILY** total exceeds 400 yd3. **Bridge Deck Concrete** must have passing gradations prior to mixing.				Concrete Agg. Work sheet, Agg. Grad. Control Charts, R-M Plant QC workbook. R-M Plant QA Workbook
			For all other mix designs, **Weekly Concrete Quantity**: 1 per fraction per source per week between **20 – 400 yd³**. If over 400 yd3 produced per week, take a second gradation after the **WEEKLY** total exceeds 400yd3.				
			Department Plant Monitor Testing Rates: Verification only **Verification Sample**: When weekly concrete quantity is ≥ 20 yd³: 1 per fraction per source per week, split and tested by both Agency and Contractor				
		Moisture Content (5-694.142)	**QC rates:**	1 every 4 hours When Daily Concrete Quantity ≥ 20 yd³	**QA rates:**	None	
		Test Type	**Agency QA Testing Rates (1)**				
		Aggregate Quality (5-694.146)	Minimum of 1 per each fraction - use of MnDOT test results for the same 30-day time period is acceptable. For all bridge deck concrete poured during the month: Test monthly quality to 3137.2D2 for each coarse aggregate fraction. Designate 3137.2D2 on the sample card. Gradation results will be included with the monthly quality tests.				
		Coarse Aggregate (% Passing 200) (5-694.146)					
		Minimum Aggregate Sample Size All Aggregate Gradation and Quality samples require companions, double sample size					2410 Sample ID Card
		Aggregate Size	Gradation	Quality	Moisture	% -200 Course.Agg.	
		3/4" Plus, #4	30 lb.	50 lb.	2000 g	5000 g	
		3/4" Minus, #67	10 lb.	30 lb.	2000 g	2500 g	
		#7, CA-70	6 lb.	20 lb.	2000 g	2500 g	
		CIA to meet #67	6 lb.	20 lb.	500 g	500 g	
		CIA to meet JMF, FIA, CS, FS	500 g	20 lb.	500 g	500 g	
		CA-80, #89	1.1 lb. (500 g)	20 lb.	500 g	500 g	
		Fine Aggregate	1.1 lb. (500 g)	20 lb.	500 g	-	

Certified Ready-Mix Concrete (2 of 3)

Spec.		Test Type	Agency QA Testing Rates (1)	Form
bridge 2406.2 2411.2 2461.2 2461.3 general 2301** 2452.2 2461.2 2461.3 2506.2 2511.2 2514.2 2520.2 2521.2 2531.2 2533.2 2545.2 2554.2 2557.2 2564.2 2565.2	**Concrete Field-Testing Rates**	<u>Sampling Locations for Air, Slump (when required), Temperature and Cylinder Testing</u> First load each day per mix - Take sample after discharging approximately 1/4 yd3, stop further discharge until both slump and air content test are completed. The first load of concrete <u>must have passing air content and slump prior to placement.</u> Cast strength specimens from the same load as the air content and slump test. Test whenever adjustments are made to the mix. Take all tests at the point of placement. Subsequent tests - Sample from the middle portion of the load.		
		Air Content - Type 3 Concrete (5-694.541)	1 test per 100 yd3. Test first load each day per mix. Test when adjustments are made to the mix.	
		Slump (5-694.531)	Test first load each day per mix, then as necessary to verify passing slump. For Bridge Concrete: 1 test per 100 yd3. No testing required for slip form placement.	
		Air and Concrete Temperature (5-694.550)	Record temperature each time air content, slump or compressive strength specimen is performed/fabricated.	
		Compressive Strength (5-694.511) Standard cylinder size is 4 x 8, use 6 x 12 with aggregate greater than 1 1/4". Review 2461.3G.5 Test Methods and Specimens.	<u>General Concrete Grades F, G, M, P, and R:</u> 1 set of 3 cylinders per 300 yd3 per mix per day.	**2409** Concrete Cylinder ID Card
			<u>Bridge Concrete Grades B, S, and Y</u>: 1 set of 3 cylinders per 100 yd3, then 1 set of 3 cylinders per 300 yd3 per mix per day	
			Agency will break 1 set of 3 cylinders at 28 days. Agency will cast up to 3 control cylinders, any additional control cylinders are the responsibility of the Contractor.	
			Cellular Concrete: 1 set of 4 cylinders (28 days) per day, fill in 2 equal lifts, <u>*do not rod*</u>, lightly tap the sides, cover and move to area with no vibration. Do not disturb for 24 hours.	

NOTES:

(1) Review the requirements of 2461.3F Certified Ready-Mix Concrete, 2461.3G Concrete Placement and 5-694.010 Inspector's Checklist in the Concrete Manual.

***Small Quantity Requirements** are for less than 20 yd3 per day, Plant Monitoring is not required but **<u>Concrete Field Testing is required</u>**.

****Concrete Pavement:** Use Certified Ready-Mix Concrete testing rates when: a) The entire concrete paving project is less than 3,500 cu. yd. b) When a secondary plant is used to provide minor work.

Certified Ready-Mix Concrete (3 of 3)

The Prime Contractor is responsible to assure that all ready-mix concrete used is produced by an annually Certified Ready-Mix plant as detailed in Specification 2461.3F.

Guidelines

- The testing rates shown in this Schedule of Materials Control are minimums. Take as many tests as necessary to ensure quality concrete. Should circumstances arise on a project which makes the testing rate impractical, contact the Concrete Engineering Unit.
- All samples shall be taken in a random manner using an appropriate number generator.
- The first load of concrete for any pour must have passing air content and slump results, prior to placing.
- If batching or field adjustments are made, test the adjusted load for air content and if suspect, slump, before it gets into the work. The Engineer will determine if additional testing is required after each water adjustment made during slip form placement. Continue to test for air content and slump, if suspect, when test results are inconsistent or marginal.
- If any field test fails, reject the concrete or if the Producer adjusts the load to meet requirements, record the adjustments on the Certificate of Compliance. Retest the air content of the load, slump if required, and record the adjusted test results. Test the next load for air content and slump, if required, before it gets into the work.
- Material not meeting requirements shall not knowingly be placed in the work. If failing concrete inadvertently gets placed in the work, review either the MnDOT Standard Specifications for Construction or contact the Concrete Engineering Unit for monetary deduction recommendations.

Best practices

- It is recommended that the Agency Plant Monitor be present during critical pours, such as superstructure or paving concrete (i.e., 3A21, S mixes, JMF mixes).
- It is recommended that the Agency representative continually monitor the progress of all concrete pours in the field and review Certificate of Compliances. It is not a recommended practice to only perform minimum testing requirements and leave the pour.
- It is recommended to make standard strength cylinders after the first load of concrete unless that is the only load of concrete for that mix that day.
- The Agency is responsible for verification sampling. For safety and consistency in sampling and splitting of the sample, it is recommended that the agency and the producer/contractor obtain the verification sample in tandem. This will allow the producer/contractor to witness the sampling process and take possession of the verification companion.

Concrete Plant and Field Materials

All materials must come from certified or qualified sources. All certified sources must state so on the delivery invoices. The most current list of certified/approved sources can be found at MnDOT Material website. Materials listed on the Approved/Certified Products List are not required to be sampled but need to be listed on the Material Acceptance Summary detailed in the SALT SMC. Samples can be submitted as directed by the Engineer.

	Material	Spec. No.	Agency QA Field Sampling Rate	Form No.
Concrete Plant Batching Materials	Portland Cement	3101	Shall be a Certified Supplier - For certified ready-mix and concrete paving sample rates: 1 sample when the plant is certified. Take additional samples f the plant changes sources or as the contract requires. The producer obtains a 5 lb. sample and stores the sample in a sealed container provided by the Agency and includes the supplier's delivery invoice from which the sample is obtained.	24300 ID Card Cement Samples
	Slag	3102		
	Blended Cement	3103		
	Fly Ash	3115		24308 Fly Ash
	Admixtures (Acceleration, Retarding, Water-Reducing, Air-Entraining, etc.)	3113	For all concrete: 1 sample of Air Entrainment and Type A Water Reducer in a 1/2-pint plastic container provided by the Agency when the plant is certified. Take additional samples if the plant changes sources or as the contract requires. The Producer should agitate the admixture tank prior to obtaining samples form dispensing tubes and store the samples in sealed plastic containers provided by the Agency.	2410 Sample ID Card
	Water	3906	1 Non-Potable Water sample in a 1-gallon clean glass or plastic container from a questionable source. Clarified Water: 1 per month during Department production	
Concrete Field Materials	Preformed Joint Filler	3702	Visual Inspection	2410 Sample ID Card
	Preformed Elastomeric Type	3721	1 per lot. Only materials from a qualified source. Link to Approved Products List.	
	Silicone Joint Sealer	3722		
	Hot Poured Elastomeric Type	3723 3725		
	Burlap	3751	Visual Inspection	
	Colored Concrete Membrane Curing Compound	3752	Visual Inspection - Use only from qualified source.	
	Membrane Curing Compound	3753 3754 3755	Visual Inspection - Use only pre-approved curing compounds.	
	Plastic	3756	Visual Inspection - Must be white opaque and free from holes.	
	Refer to the "Metals" schedule for sampling requirements for concrete reinforcement.			

Concrete Pavement – Agency (1 of 2)

Test Type (concrete manual)	Spec.	Concrete Paving Batch Plant Agency QA Testing	Certified Ready-Mix Plant Agency QA Testing	Form
Gradation (1) (5-694.145) (5-694.148)	3126 3131 3137	Daily Concrete Quantity ≥ 500 **Agency QA Testing Rates: Verification only** **Verification Sample**: -, *1 per fraction per source per day, split and tested by both Agency and Contractor	Daily Concrete Quantity ≥ 100 yd3 **Agency QA Testing Rates: Verification only** **Verification Sample**: -, *1 per fraction per source per week, split and tested by both Agency and Contractor	JMF Concrete Aggregate Workbook
Aggregate Moisture - QC Verification **(2)** (5-694.142)	2301	If w/c incentives apply: 1 per 1000 yd3 or every 4 hours, whichever is greater. Take initial sample within the first 250 yd3.	If w/c incentives apply: 1 per 200 yd^3 or every 4 hours, whichever is greater. Take initial sample within the first 100 yd^3.	Concrete W/C Ratio Work sheet
Water Content, Microwave Oven Verification **(3)** (5-694.532)	2301	Take initial sample within the first 250 yd^3. At least one additional verification test should be taken if more than 1000 yd^3 is produced in a day.	Take initial sample within the first 100 yd^3. At least one additional verification test should be taken if more than 400 yd^3 is produced in a day.	
Coarse Aggregate, -200 sieve (5-694.146)	3131 3137	Test Verification sample on the first day of production and each time the Contractor mobilizes the plant, changes the aggregate sources, or the cleanliness of the coarse aggregate is in question, then 1 per week randomly thereafter. -200 test may be performed at the lab instead at the plant at the discretion of the Engineer.		JMF Concrete Aggregate Workbook
Coarse and Fine Aggregate Quality **(4)**	3126 3131 3137	During concrete production: 1 randomly selected test each fraction every 20,000 yd^3 of production. Split the Quality sample 4 ways: 1) Provide 2 quarters of the sample to the producer/contractor. 2) Submit the remaining sample to the lab for quality testing including testing the -200 sieve on the coarse aggregate.		2410 Sample ID Card
Alkali Silica Reactivity (ASR) Testing	2301	1 per paving project per sand source. Provide one 5 lb. sample of: cement, supplementary cementitious material (fly ash or slag), and sand. Write "Project Specific ASR Testing" on all 3 sample cards. **ASR Testing is not required if the entire project is less than 3,500 cubic yards.**		2410 24300 24308
Coarse Aggregate Quality Testing of Incentive / Disincentive	3137	**If coarse aggregate quality incentives apply:** Test the Class B aggregates for % absorption and Class C aggregates for % carbonate including any other test necessary to make those determinations. Sample the 2 largest fractions in accordance with the following table and 2301:		Coarse Agg Quality Incentive / Disincentive Work sheet 2410 Sample ID Card

Coarse Aggregate Quality Incentive/Disincentive Sampling Rates	
Plan Concrete Cubic Yards	Samples per fraction
3,500 - 7,500	3
7,501 - 10,000	5
10,001 - 25,000	10
25,001 - 50,000	15
50,001 +	20

*Use Certified Ready-Mix Concrete testing rates when: a) The entire concrete paving project is less than 3,500 cu. yd. b) When a secondary plant is used to provide minor work.

Concrete Pavement – Agency (2 of 2)

Test Type	Spec.	Concrete Field Testing - Agency QA Testing	Form
Air Content before consolidation	Review Concrete Manual Website	1 correlation air test per day	
Concrete Temperature		Record temperature each time air content, slump or strength test specimen is performed/fabricated by the Agency.	
Flexural Strength		Supply beam boxes or cylinder molds. Cure and test beams and cylinders MnDOT standard beam box size is 6" x 6" x 20" unless others are approved by the Concrete Engineer.	2162 Test Beam Data
Opening to Traffic Strength		Supply beam boxes or cylinder molds for field control testing. Cure and test beams and cylinders.	
Concrete Pavement Texture		Determine texture testing locations using random numbers. Observe Contractor Testing when possible.	Probing, Coring, Texture and MIT-Scan T2 Report
Thickness		**Determine probing and coring locations using random numbers. Initial pavement at core locations and re-initial the sides of specimens after coring to clearly verify their authenticity**. Field measure cores to the nearest 1/8". Transport to the MnDOT Office of Materials and Road Research for final thickness determination	
Surface Smoothness/ Dowel and Tie Bar Steel Location		Observe Contractor Testing when possible	

NOTES:

(1) All gradation samples shall be taken in the presence of the Agency, unless otherwise authorized by the Engineer. All samples shall be taken off the belt leading to the weigh hopper unless otherwise approved by the Engineer. **All gradations and quality tests require companion samples.** If Coarse Aggregate Quality Incentive / Disincentives apply: The Agency may also use the QA samples for incentive / disincentive testing. Notify the Contractor/Producer to double the QC/QA sample size. If well-graded aggregate incentives apply: Use the Contractor's gradation results for well-graded aggregate incentive calculations as verified by Agency testing. Use the Well-graded Concrete Agg. Worksheet.

(2) If w/c incentives apply: Use aggregate moisture results for determining the water content to calculate the w/c incentive/disincentive. Use the Concrete W/C Ratio Calculation Worksheet and do not leave sample unattended. Microwave oven verification testing to verify the w/c ratio is completed in conjunction with Agency aggregate moisture testing. Do not leave samples unattended.

(3) If w/c incentives apply: Microwave oven verification testing to verify the w/c ratio is completed in conjunction with Agency aggregate moisture testing. Do not leave samples unattended.

(4) Prior to concrete production: Obtain pre-production samples for quality testing at least 16 hours prior to concrete production. Samples may be taken from the stockpile and -200 test may be performed at the lab instead at the plant at the discretion of the Engineer. If the entire project is <3,500 yd3, pre-production sampling is not required.

Minimum Aggregate Sample Size *companion required, double sample				
Aggregate Size	**Gradation***	**Quality***	**Moisture**	**% -200 C.Agg**
3/4" Plus, #4	30 lb.	50 lb.	2000 g	5000 g
3/4" Minus, #67	10 lb.	30 lb.	2000 g	2500 g
#7, CA-70	6 lb.	20 lb.	2000 g	2500 g
CIA to meet #67	6 lb.	20 lb.	500 g	500 g
CIA to meet JMF	500 g	20 lb.	500 g	500 g
FIA, CS, FS	500 g	20 lb.	500 g	-
CA-80, #89	500 g	20 lb.	500 g	500 g
Fine Aggregate	500 g	20 lb.	500 g	-

Concrete Pavement – Producer/Contractor (1 of 2)

Test Type (concrete manual)	**Spec.**	**Concrete Paving Batch Plant Contractor/Producer QC Testing**	**Certified Ready-Mix Plant Contractor/Producer QC Testing**
Gradation **(1)** (5-694.145) (5-694.148)	3126 3131 3137	When > 250 yd^3 produced/ day: 1 per 2500 yd^3 per fraction per source. Take initial samples for aggregate gradation testing within the first 500 yd3. Test the verification companion sample on the day the sample was taken.	When 20-400yd^3 produced/ day: 1 per fraction per source. If over 400 yd3 per day, take a second gradation after the total exceeds 400 yd3. Test the verification companion sample on the day the sample was taken.
Coarse Aggregate -200 sieve (5-694.146)	3131 3137	Test the verification companion sample. Test these samples at the plant.	
Aggregate Moisture QC Verification **(2)** (5-694.142)	2301	If w/c incentives do not apply: 1 per 1000 yd^3, or 1 completed every 4 hours, whichever is the higher sampling rate.	If w/c incentives do not apply: 1 completed every 4 hours.
Water Content, Microwave Oven Verification	Review Concrete Manual 2301	If w/c incentives apply: Obtain the plastic concrete sample at the plant. See Concrete Manual (5-694.532)	
Unit Weight QC		Test one load of concrete per day at the plant. See Concrete Manual (5-694.542)	
Air Content QC (5-694.541)		Test the first load of concrete at the plant	
Coarse Aggregate Quality	3126 3131 3137	Test at Producer/Contractor Discretion	
Unit Weight		Test 1 load of concrete per day at the plant.	
Air Content for Type 3 Concrete (QC)		Test the first load of concrete at the plant.	
Coarse Aggregate Quality Testing for Incentive / Disincentive	3137	Test at the Contractor's discretion.	

* Use Certified Ready-Mix Concrete testing rates when: a) The entire concrete paving project is less than 3,500 cu. yd. b) When a secondary plant is used to provide minor work.

Concrete Pavement – Producer/Contractor (2 of 2)

NOTES:

(1) Performing testing on representative material at the end of the most recent day of production is allowed. If well-graded aggregate incentives apply: Use the Contractor's gradation results for well-graded aggregate incentive calculations as verified by Agency testing. Washing the fine aggregate gradation (QC) sample is not required when the result on the -#200 sieve of the unwashed sample is less than 1.0%. Wash all fine aggregate Verification Companion samples.

(2) Complete the initial moisture content and adjust the batch water prior to the start of concrete production each day. If weather conditions allow, performing moisture testing on representative material at the end of production the prior evening is allowed. Enter results into the batching system in real time.

Test Type	Spec.	Concrete Field Testing - Contractor QC Testing
Air Content before consolidation for Type 3 concrete	Review Concrete Manual Website	1 per 300 yd^3 or 1 per hour, whichever is less. Test first load each day per mix.
Slump		Test slump if concrete is suspected to be outside of required slump range as directed by the Engineer.
Concrete Temperature		Record temperature each time air content, slump or strength test specimen is performed/fabricated by the Contractor.
Flexural Strength		For information only: 1 beam (28-day) per week per mix. 1 cylinder (28-day) per week per mix may be substituted at the discretion of the Engineer. Provide moist curing environments, fabricate beams or cylinders, deliver to curing site, and clean beam boxes
Opening to Traffic		For opening to traffic: Make field control beams within the last hour of concrete poured each day. Substitute field control cylinders for field control beams at the discretion of the Engineer. Maturity testing is allowed in lieu of field control cylinders or beams. Fabricate beams or cylinders, deliver to curing site, and clean beam boxes.
Concrete Pavement Texture		Perform texture testing at locations determined by the Engineer in accordance with the Contract
Thickness		Probe, scan and core at locations determined by the Engineer in accordance with the Contract
Surface Smoothness		Measure smoothness of the final concrete as required by the Contract. Perform all profiling in the presence of the Engineer unless otherwise approved by the Engineer.
Dowel Bar and Tie Bar Steel Location		For Concrete projects greater than 3500 yd3. On the first day and each day of slip form pavement: (1) Verify the adequacy of the dowel bar anchoring by scanning seven random doweled contraction joints in each sublot. (2) Verify the presence and alignment of tie bar steel by scanning 75 lin. Ft. in each sublot. If the Engineer determines the first day's dowel bar anchoring and tie bar placement processes are acceptable, the Engineer may allow a reduction in scanned joints in each sublot as follows: (1) Verify the adequacy of the dowel bar anchoring by scanning four random doweled contraction joints per sublot. (2) Verify the presence and alignment of tie bar steel by scanning 25 lin. ft. out of every sublot.

Concrete Wearing Course for Bridges

Test Type (Concrete Manual)	**Spec.**	**Contractor/Producer QC Testing**	**Agency QA Testing**	**Form**
Gradation, Quality, Coarse Agg -200 QC/Verification (5-694.145) (5-694.146) (5-694.148)	3126 3137	**Prior to production**: The Contractor shall provide the Agency with: Aggregate pit numbers, 1 passing gradation result per fraction per source. Test Agency companion samples are Contractor's discretion. No quality tests are required.	Prior to production and each time aggregate is delivered to site: 1 gradation and quality per fraction prior to concrete production and each time aggregate is delivered to the site. Identify quality samples with a "Q" on the Sample ID Card and the Quality companion sample.	2410 Sample ID Card
Air Content - Type 3 Concrete (Verification) (5-694.541)	2431	None	1 per 15 yd^3, Test at beginning of pour each day.	Weekly Report of Low Slump Concrete
Slump (Verification) (5-694.531)		None	1 per 15 yd^3 Test at beginning of pour each day. For concrete from a concrete mobil, allow mix to hydrate 5 minutes before slump test to assure all cement is saturated.	
Compressive Strength (5-694.511)		None	1 cylinder (28 day) per 30 yd^3, standard cylinder mold size is 4 x 8 inch.	2409 Cyl. ID Card
Cement	3101	None	Each time cement is delivered to site. Obtain a 5 lb. sample. Store sample in a sealed container and include the supplier's delivery invoice from which the sample is obtained.	2430 Sample ID Card
Admixtures	3113	None	Each time new lot/batch admixture is delivered to site: Obtain a ½ pint sample. Store the sample in a sealed plastic container.	2410 Sample ID Card

Test	**Minimum Sample Size** **All gradation and aggregate quality tests require companion samples, double sample size. Samples taken at location identified on Contact Report located at plant.**	
Gradation	6 lb. for # 7, 500 g for CA-80	500 g for Sand
Quality	30 lb. for Coarse Aggregate	20 lb. Fine Aggregate

Concrete Pavement Repair – CPR for 3U18

Test Type	Spec.	Contractor/Producer QC Testing	Agency QA Testing For volumetric batching only.	Forms
Gradation, Quality, Coarse Agg -200	3126 3137	**Prior to production**: The Contractor shall provide the Agency with: Aggregate pit numbers, 1 passing gradation result per fraction per source. No quality test results are required. Test companion samples at Contractor's discretion.	**Gradation:** Prior to concrete production and each time aggregate is delivered to the site. 1 per aggregate fraction prior to production and each time aggregate is delivered to the site. **Quality Testing & Coarse Agg -200:** 1 test per aggregate fraction per source. The Agency may use the gradation results for the Quality Samples as a substitute for 1 required field gradation. Identify quality samples with a "Q" on the Sample ID Card and the Quality companion sample.	2410 Sample ID Card
Air Content - Type 3 Concrete (Verification)	Review Concrete Manual Website	None	1 per 15 yd^3or 1 per 4 hours whichever results in the highest sampling rate. Test at beginning of pour each day.	21412 Weekly Report of Low Slump Concrete
Slump (Verification)		None	1 per 15 yd^3, Test at beginning of pour each day. Allow mix to hydrate 5 minutes before slump test to assure all cement is saturated. Test slump if concrete is suspected to be outside of required slump range.	
Compressive Strength		None	1 set of 3 cylinders (28 day) per 30 yd^3. The Agency will cast up to three (3) field control cylinders, standard cylinder mold size is 4 x 8 inch.	2409 Cyl. ID Card
Type 1 Cement	3101	None	**For Volumetric batching only:** Each time cement is delivered to site. Obtain a 5 lb. sample. Store sample in a sealed container and include the supplier's delivery invoice from which the sample is obtained.	2430 Sample ID Card
Admixtures	3113	None	Each time new lot/batch admixture is delivered to site: Obtain a ½ pint sample. Store the sample in a sealed plastic container.	2430 Sample ID Card

Test	**Minimum Sample Size** **All gradation and aggregate quality tests require companion samples, double sample size. Samples taken at location identified on Contact Report located at plant.**	
Gradation	6 lb. for # 7, 500 g for CA-80	500 g for Sand
Quality	30 lb. for Coarse Aggregate	20 lb. Fine Aggregate

Dowel Bar Retrofit – (DBR)

Test Type	Spec.	Contractor/Producer QC Testing	Agency QA Testing	Form
Gradation Testing (Verification), Quality Testing including, Coarse Agg -200	3137	**Prior to production:** The Contractor shall provide the Agency with: Aggregate pit numbers, 1 passing gradation result per fraction per source. No quality test results are required. Test companion samples are Contractor's discretion.	**Gradation:** Prior to concrete production and each time aggregate is delivered to the site. 1 per aggregate fraction prior to production and each time aggregate is delivered to the site. **Quality Testing & Coarse Agg -200:** 1 test per aggregate fraction per source. The Agency may use the gradation results for the Quality Samples as a substitute for 1 required field gradation. Identify quality samples with a "Q" on the Sample ID Card and the Quality companion sample.	2410 Sample ID Card

Test Type	Spec.	Agency QA Testing	Form
DBR Material Compressive Strength	Review Concrete Manual	**Contractor Testing: Any additional field control cylinders are the responsibility of the Contractor.** **Agency Testing:** 1 set of 3 cylinders (28 day) The Agency will cast up to three (3) field control cylinders, standard cylinder mold size is 4 x 8 inch.	2409 Cylinder ID Card

Test	Minimum Sample Size **All gradation and quality tests require companion samples, double sample size. Samples taken at location identified on Contact Report locates at plant.**	
Gradation	500 g for # 89 & Sand	
Quality	30 lb. Coarse Aggregate	20 lb. Fine Aggregate

Landscaping and Erosion Control Items

Kind of Material	Spec. #	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Manufactured Topsoil Borrow, Salvaged Topsoil (stockpiled)	3877.2	As directed by the Engineer
Plant Stock & Landscape Materials	3861 and 2571.2A1	Materials must be in accordance with the Inspection and Contract Administration Guidelines for MnDOT Landscape Projects of which determines the minimum and maximum criteria thresholds. Certificate of Compliance, Nursery stock certificate registered with MN Dept. of Agriculture. Out of state products subject to pest quarantines must accompanied by documentation certifying all products are free of regulated pests.
Erosion Control Blanket	3885	Visual Inspection and Check approved products or approved vendors list - As directed by the Engineer.
Erosion Control Netting	3885	
Silt Fence	3886	
Erosion Stabilization Mat	3885	
Flotation Silt Curtain	3887	Accepted, based on manufacturers certification of compliance. Check weight of fabric.
Filter Logs	3897	Visual Inspection
Flocculants	3898	Obtain copy of Certificate of Compliance and MSDS
Fertilizer	3881	Obtain copy of invoice of blended material stating analysis.
Agricultural Lime	3879	Contractor must supply amount of ENP (Equivalent Neutralizing Power) for each shipment.
Mulch - Type 3	3882	Certified Weed Free (Certified sources only) Check for Certified Vendor tag from Minnesota Crop Improvement Association (MCIA).
Mulch - Type 6 - Woodchips		All wood chips supplied by a supplier outside the Emerald Ash Borer quarantine area or have an Emerald Ash Borer Compliance Agreement with the MDA
Seeds	3876	(Certified Vendors Only) (Mixes 100-299) Check for Certified Vendor tag from Minnesota Crop Improvement Association (MCIA).
Native Seed		(Mixes 300-399) certified seed only. Check for Certified Vendor tag from Minnesota Crop Improvement Association (MCIA).
Sod	3878	Visual Inspection - Check approved products list - As directed by the Engineer. Check for Certified Vendor tag from Minnesota Crop Improvement Association (MCIA) for salt tolerant sod.
Compost (from Certified Source)	3890	
Compost (from Non-Certified Source)		Visual Inspection - As directed by the Engineer.
Hydraulic Soil Stabilizer	3884	Check Approved/Qualified Products List - As directed by the Engineer.

Chemical Items

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Asphalt Plank	3204	Visual Inspection - As directed by the Engineer.
Calcium Chloride	3911	Review the percentage required as per specification. Check for listing on Qualified Products website.
Magnesium Chloride	3912	
Hot-Pour Crack Sealant (for Crack Sealing/Filling)	3719 3723 3725	Retain Certification of Compliance. Check for listing on Qualified Products website.
Pavement Joint Adhesive	Special Provisions	Retain Certification of Compliance
Waterproofing Materials		
Membrane Waterproofing System	3757	Visual Inspection - Check qualified products list.
Waterproofing Materials - Three Ply System		
Asphalt Primer	3165	Verify supplied material meets ASTM D 41
Waterproofing Asphalt	3166	Verify supplied material meets ASTM D 449
Fabric	3201	Verify supplied material meets ASTM D 41
Paints		
Waterborne Latex - Traffic Paint	3591	Visual Inspection - Check qualified products list - retain Certificate of Compliance.
Epoxy Traffic Paint	3590	
Traffic Marking Paint	Special Provisions	
Non-Traffic Striping Paints	3500 Series	Retain Certification of Compliance
Bridge Structural Steel Paint	3520	Visual Inspection - Check approved products list - retain Certificate of Compliance.
Exterior Masonry Paint	3584	
Noise Wall Stain	Special Provisions	
Drop-on Glass Beads	3592	Visual Inspection - Check qualified products list. Retain Certificate of Compliance.
Pavement Marking Tape	3354	Visual Inspection - Check qualified products list. Retain Certificate of Compliance.
	3355	
	Special Provisions	
Signs and Markers	3352	Visual Inspection - Check qualified products list.

Metals (1 of 2)

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate) *
Guard Rail		
Fittings - Splicers, Bolts, Posts etc.	3381	Visual Inspection - Materials shall be approved before use. Call MnDOT inspector at 218-846-3613 to see if material has been approved.
Structural Plate Beam	3382	
Non-High Tension Guard Rail Cable	3381	
High Tension Guard Rail Cable	Special Provisions	
Steel Posts		
Steel Signposts	3401	Visual Inspection - As directed by the Engineer. Retain Certificate of Compliance in Project file.
Fence Posts, Brace Bars, Rails and others	3403	Visual Inspection - As directed by the Engineer. Retain Certificate of Compliance and certified mill analysis in project file.
	3406	
	3379	
Fence		
Barbed Wire	3376	Visual Inspection Retain Certification of Compliance, As directed by the Engineer.
Woven Wire		
Chain Link Fabric		
Components: cup, cap, nut, bolt, end clamp, tension band, truss rod tightener, hog ring, tie wire, tension stretcher bar, truss rod, clamp & tension wire		
Gates	3379	
Pipe		
Water Pipe and other Piping Materials	3364, 3365, 3366 & Special Provisions	Visual Inspection - As directed by the Engineer.
Reinforcing Steel - Inspected by MnDOT & will be charged back to the Local Agency.		
Uncoated Bars	3301	Retain Certificate of Compliance & Certified Mill Analysis
Epoxy Coated Bars	3301	For Epoxy-Coated bars, steel will be tagged "Inspected" when it has been sampled and tested by Mn/DOT prior to shipment, & it will be tagged "Sampled" when testing has not been completed prior to shipment. If the Epoxy-Coated bars are not tagged "Sampled" or "Inspected", submit samples (1 bar 3ft long for each size for each day's coating production), Certificate of Compliance, & Certified Mill Analysis for testing. Maintain original Cert. of Compliance & Certified Mill Analysis in project file.
Spirals	3305	
Stainless Steel Bars	Special Provisions	Visual Inspection Testing as directed by the Engineer (2 bars 3 ft. long per heat per bar size). Certified Mill Test Reports to be filed.

Metals (2 of 2)

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate) *	
Reinforcing Steel - Inspected by MnDOT & will be charged back to the Local Agency.			
Steel Fabric	3303	2 sq. ft. if epoxy coated.	Visual Inspection - Retain Certificate of Compliance.
Dowel Bars	3302	One dowel bar and basket from each shipment.	
Prestress/Post Tension Strands	3348 Spec Prov	One sample of 2 strands by 6 ft. from each heat/production lot.	
Castings			
Drainage Castings	3321	Visual Inspection - Check approved / qualified list.	
	2471		
Electrical	2565		
Anchor Rods (Cast in Place) and Structural Fasteners	3385 3391	Visual Inspection - Check approved / qualified list. Testing as directed by the Engineer (see notes below)	
Notes: Manufacturer must have one yearly passing test from the Department for each anchor rod or bolt type. Prior to installation, obtain copy of MnDOT passing test report from supplier. Specs 3385.2 A, B, & C require anchor rod markings per ASTM F 1554 S3. The end of each anchor bolt intended to project from the concrete must be die stamped with the grade identification as follows: Grade 36 = AB36, Grade 55 = AB55, Grade 105 = AB105.			
Anchorages (Drilled In)	Special Provisions	Visual Inspection - Check qualified products list.	
Structural Steel	Inspected by MnDOT & will be charged back to the Local Agency.		
Steel Bridge - Beams, Girders, Diaphragms, etc.	2471	Structural Metals Inspection Tag and field inspection for damage/defects, check dimensions for contract compliance. Review approved products list as directed by the Engineer. Note: Structural metals products will be inspected at the plant and will be shipped with a Structural Metals Inspection Tag. An inspection confirmation report will be completed by Structural Metals Inspection staff and sent to the field personnel. Only approved suppliers are allowed to supply Structural Metals products. A list of approved suppliers can be found on the Bridge Office website.	
Concrete Girders-Diaphragms and sole plates			
Expansion Joints			
Steel Bearings			
Railing-Structural tube and ornamental			
Drainage Systems			
Protection Angles			
Overhead Sign structures	2564 2471		
High Mast Lighting Structures	2545 2471		
Monotube Signal Structures	2565 2471		

*Check domestic steel requirement under 1601 Special Provision.

Geosynthetics, Pipe, Tile, Precast/ Prestressed Concrete

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Corrugated Metal Products		
Culvert Pipe Under Drains Erosion Control Structures	3225 thru 3229, 3351, 3399	Make certain pipe is Certified on Invoice, retain certificate of compliance and certified mill analysis in project file.
Structural Plate	3231	
Aluminum Structural Plate	3233	Retain the Certificate of Compliance and mill analysis in project file.
Pipe		
Clay Pipe	3251	Visual Inspection
Reinforced Concrete Pipe and Arches, Precast Cattle Pass Units, Sectional Manhole Units	3236	Field Inspection: Check for damage and defects. Check dimensions and class as required.
Non-Reinforced Concrete Pipe	3253	
Drain Tile (Clay or Concrete)	3276	Visual Inspection - Acceptance as directed by the Engineer.
Thermoplastic (TP) Pipe ABS and PVC	3245	Obtain Certificate of compliance. Check for approved marking printed on pipe. Field Inspect for damage or defects.
Corrugated Polyethylene Pipe	3278	Check for markings (AASHTO M 252) Certificate of Compliance. Field Inspect for damage or defects.
Corrugated Polyethylene Pipe - Dual Wall 12"-48"	3247	Visual Inspection - Check approved products list. Obtain Certificate of Compliance.
Precast/Prestressed Concrete Structures - Inspected by MnDOT & will be charged back to the Local Agency.		
Reinforced Precast Box Culvert	3238	Field Inspection: Check for damage and defects. Check dimensions as required. Check for the "MnDOT" stamp and signature on the certification document.
Precast/Prestressed Concrete Structure (beams, posts, etc.)	2405	
Manholes and Catch Basins	2506 3622	
Sewer Joint Sealing Compound	3724	Visual Inspection - Acceptance as directed by the Engineer.
Preformed Plastic Sealer for Pipe	3726 Type b	Visual Inspection - Acceptance as directed by the Engineer.
Bituminous Mastic Joint Sealer for Pipe	3728	
EPS Geofoam	Special Provisions	Visual Inspection - Acceptance as directed by the Engineer. Check for yellow aged material, uniformity and dimensions.
Geotextile Fabric and Geogrid Reinforcement	3733 and Special Provisions	Obtain Certificate of Compliance stating minimum average roll values (MARV). MARV must meet Project requirements. Fabric must be listed on Geotextile Small Quantity Acceptance List.
Geotextile Small Quantity Acceptance List		
Silt Fence	3886	Visual Inspection - Check approved products list.

Electrical and Signal Equipment Items (1 of 2)

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Lighting Standards (Aluminum or Steel)	3811	Visual Inspection - Obtain Certificate of Compliance. The Fabricator will submit "Certificate of Compliance," on a per project basis, to the Project Engineer.
Hand Holes (Precast, PVC, and LLDPE)	2545 2550 2565	Visual Inspection - Check approved/qualified products list. Traffic signal and street lighting projects require hand holes to be listed on the MnDOT Signals Approved Products List (APL). For cast iron frame and cover: see Metals - Drainage and Electrical Castings
Foundation	2545	Slump as needed, 1 cylinder per 25 cu. yds. Rebar is required in concrete foundations as specified in the Contract documents for all traffic control signals and roadway lighting projects.
Steel Screw In Foundations	2545 2565	See Approved/Qualified Products List for Roadway Lighting and Signals.
Conduit and Fittings		
Metallic	3801 3802	Visual Inspection - Conduit shall be labeled as being listed by a National Recognized Testing Laboratory (NRTL). For traffic signal and street lighting projects, specific requirements are contained in the Special Provisions for each project.
Non-Metallic (Rigid and HDPE)	3803 Special Provisions	
Anchor Rods and Bolts (Cast in Place)	3385	Visual Inspection - Manufacturer must have one yearly passing test from the Department for each anchor rod or bolt type. Prior to installation, obtain copy of Mn/DOT passing test report from supplier. Specs 3385.2 A, B, & C require anchor rod markings per ASTM F 1554 S3. The end of each anchor bolt intended to project from the concrete must be die stamped with the grade identification as follows: Grade 36 = AB36, Grade 55 = AB55, Grade 105 = AB105.
Anchorages (Drilled In)	Special Provision	Visual Inspection - Check qualified products list.
Miscellaneous Hardware	2545 2565	Visual Inspection - Check approved products list. Will carry "Inspected" tag if sampled and tested prior to shipment. No sample necessary if "Inspected". Do not use if not tested. Field sample at sampling rate for laboratory testing. For traffic signal and street light lighting projects, various miscellaneous hardware is required to be listed on the MnDOT Signals and Lighting Approved Products Lists (APL). The Contract documents indicate, which items must be on the Signals and/or Lighting APL.

Electrical and Signal Equipment Items (2 of 2)

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Cable and Conductors		
Power Conductors	3815.2B1	Visual Inspection - Make certain the conductors are the type specified. Submit Field Inspection report showing type and quantities used. Shall be labeled as being listed by a National Recognized Testing Laboratory (NRTL) and type where applicable.
Loop Detector Conductors (No Tubing)	3815.2B2 (a)	
Electrical Cables and Single Conductors with Jacket	3815.2B2(b) 3815.2B3	Visual Inspection - Usually inspected at the distributor. Documentation showing project number, reel number(s), & MnDOT test number(s) will be included with each project shipment. If such documentation is not received from Contractor, submit sample for testing along with material certification from manufacturer. Do not use if not tested. Pre-inspected materials will not be tagged; an inspection report will be sent by the MnDOT inspector for each shipment. Project inspectors should verify that the shipping documents agree with this inspection report. Call Steve Grover at 651-366-5540 or Cindy Schellack at 651-366-5543 with questions. For traffic signal and street lighting projects, the Special Provisions for each project contain electrical cable and conductor specifications.
	3815.2B5	
	3815.2C1 thru .2C8	
	3815.2C14	
	Special Provisions	
Fiber Optic Cables	3815.2C13	Visual Inspection - Check approved products list for Traffic Management Systems.
Ground Rods	2545	Visual Inspection - Check approved products list. Shall be labeled as being listed by a National Recognized Testing Laboratory (NRTL). Detail materials on Materials Acceptance Summary.
	2565	
Luminaires and Lamps	3810	Visual Inspection - Check approved products list. Traffic signal and street lighting projects require luminaries and lamps to be listed on the MnDOT Lighting Approved/Qualified Products List (APL). The conductors shall be labeled as being listed by a National Recognized Testing Laboratory (NRTL) and type, where applicable.
Electrical Systems	2565	Electrical Systems are to be reported as a "System" using the LIGHTING, SIGNAL AND TRAFFIC RECORDER INSPECTION REPORT. To be certified by the Project Engineer.
Traffic Signal Systems	2565	Traffic Signal Systems are to be reported as a "System" using the LIGHTING, SIGNAL AND TRAFFIC RECORDER INSPECTION REPORT. To be certified by the Project Engineer.

Brick, Stone, and Masonry Units

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Brick		
Sewer (clay) and Building	3612 to 3615	Visual Inspection - Acceptance as directed by the Engineer.
Sewer (Concrete)	3616	Visual Inspection - Acceptance as directed by the Engineer. Air entrainment required. Obtain air content statement from supplier.
Concrete Masonry Units		
Sewer Construction	3621	Visual Inspection - Acceptance as directed by the Engineer. Air entrainment required. Obtain air content statement from supplier.
Modular Block Retaining Walls	Review Current Special Provisions	Visual Inspection - Note: All lots of blocks upon delivery shall have Manufacturer or Independent laboratory test results to verify passing both compression and freeze-thaw requirements. * Wall units and cap units are considered separate block types.
Reinforced Concrete Cribbing	3661	Visual Inspection - Acceptance as directed by the Engineer. Will be stamped when inspected prior to shipment.
Stone for Masonry or Rip-Rap	2511, 3601 and Special Provisions	Visual Inspection - Acceptance as directed by the Engineer.

Remarks: each source shall be approved by Project Engineer or supervisor for quality, prior to use. For questions on quality, contact District Materials or Geology Unit.

Miscellaneous Materials

Kind of Material	Spec. No.	Minimum Required Agency QA Acceptance Testing (Field Testing Rate)
Timber, Lumber Piling & Posts	3412 to 3471 & 3491	Visual Inspection - Acceptance as directed by the Engineer. Untreated materials shall be inspected in the field. Treated materials shall be Certified on the Invoice or Shipping Ticket. Material is inspected and stamped by an Independent Agency as per Specification 3491. Contact Laboratory for additional information.
Miscellaneous pieces and Hardware (Galvanized)	3392 3394	Visual Inspection - Acceptance as directed by the Engineer.
Insulation Board	3760	
Elastomeric Bearing Pads - Plain or Laminated	3741 and Special Provisions	Check dimensions. Check repair of tested pad. Obtain copy of Certificate of Compliance. DO NOT USE ANY PADS THAT ARE NOT CERTIFIED.
Cotton Duck Bearing Pads		

Approved/Qualified Products & Resources

Approved/Qualified Products

- Asphalt Products
- Bridge Products
- Concrete Products
- Crack and Joint Material Products
- Drainage
- Erosion Control and Landscaping Products
- Geosynthetic
- Maintenance Shop Supplies
- Paint/Stain/Coating Systems (Non-Pavement)
- Pavement Markings
- Precast Concrete
- Roadside Barriers
- Roadway Lighting Products
- Signals Products
- Signing Products
- Snow and Ice Chemical Products
- Temporary Traffic Control Devices
- Traffic Management Systems/ITS
- Truncated Domes
- Vehicle Safety Lighting
- Walls (Retaining/Noise)

Additional Resources

- SALT Construction webpage
- Bituminous Engineering
    - Asphalt Binder Certified Supplier
    - Asphalt Emulsion Certified Supplier
- Concrete Engineering
    - MnDOT Concrete Manual
    - QC & QA RM Plant Workbooks
    - MnDOT Certified Ready-Mix Program
- Grading & Base Engineering
    - Testing procedures in the Grading & Base Manual
    - Forms and worksheets at the Grading & Base website
    - Gradation worksheets on the SALT Construction website

Contacts

MnDOT Construction and Materials State Aid Contacts

Districts 1, 2, 3, 4
Ross Hendrickson, State Aid Construction Specialist
ross.hendrickson@state.mn.us
218-766-3745

Districts 6, 7, 8
Rollin Larson, State Aid Construction Specialist
rollin.larson@state.mn.us
507-205-6403

Metro

Michael Pretel, State Aid Construction Engineer
michael.pretel@state.mn.us
651-755-3346

MnDOT Specialty Offices Contacts

Grading & Base

Terry Beaudry terry.beaudry@state.mn.us	Grading & Base Engineer	651-366-5456
John Bormann john.bormann@state.mn.us	Grading & Base Specialist	651-366-5596

*Bituminous**

John Garrity john.garriy@state.mn.us	Bituminous Engineer	651-366-5577
Greg Johnson Greg.johnson@state.mn.us	Asst. Bituminous Engineer	651-366-5464
Chelsea Bennett chelsea.bennett@state.mn.us	Asst. Bituminous Engineer	651-366-5482
Joel Ulring joel.ulring@state.mn.us	Pavement Preservation	651-366-5432
Mike Skurdalsvold	Bituminous Mix Design Specialist	612-499-2998
Ray Betts ray.betts@state.mn.us	Bituminous Trial Mix Lab Tech	651-366-5469
Rich Kane richard.kane@state.mn.us	Bituminous Plant & Lab Testing	612-437-3005

*See website for the contact list by topic

*Concrete**

Maria Masten maria.masten@state.mn.us	Concrete Engineer	651-334-4015
Jacob Gave jacob.gave@state.mn.us	Asst. Concrete Engineer	612-554-9289
Rob Golish robert.golish@sate.mn.us	Asst. Concrete Engineer	651-216-0516
Matt Herbst	Concrete Engineering Specialist	651-283-7127

Matt.herbst@state.mn.us		
Brad Swenson brad.swenson@state.mn.us	Concrete Engineering Specialist	218-232-1012
Gordy Bruhn gordon.bruhn@state.mn.us	Concrete Field Engineering Specialist	651-398-9597
Mike Daniels michael.daniels@state.mn.us	Concrete Engineering Specialist	320-293-9421

*See website for the contact list by topic

Contacts for other materials can be found on the Materials and Road Research Contacts webpage.

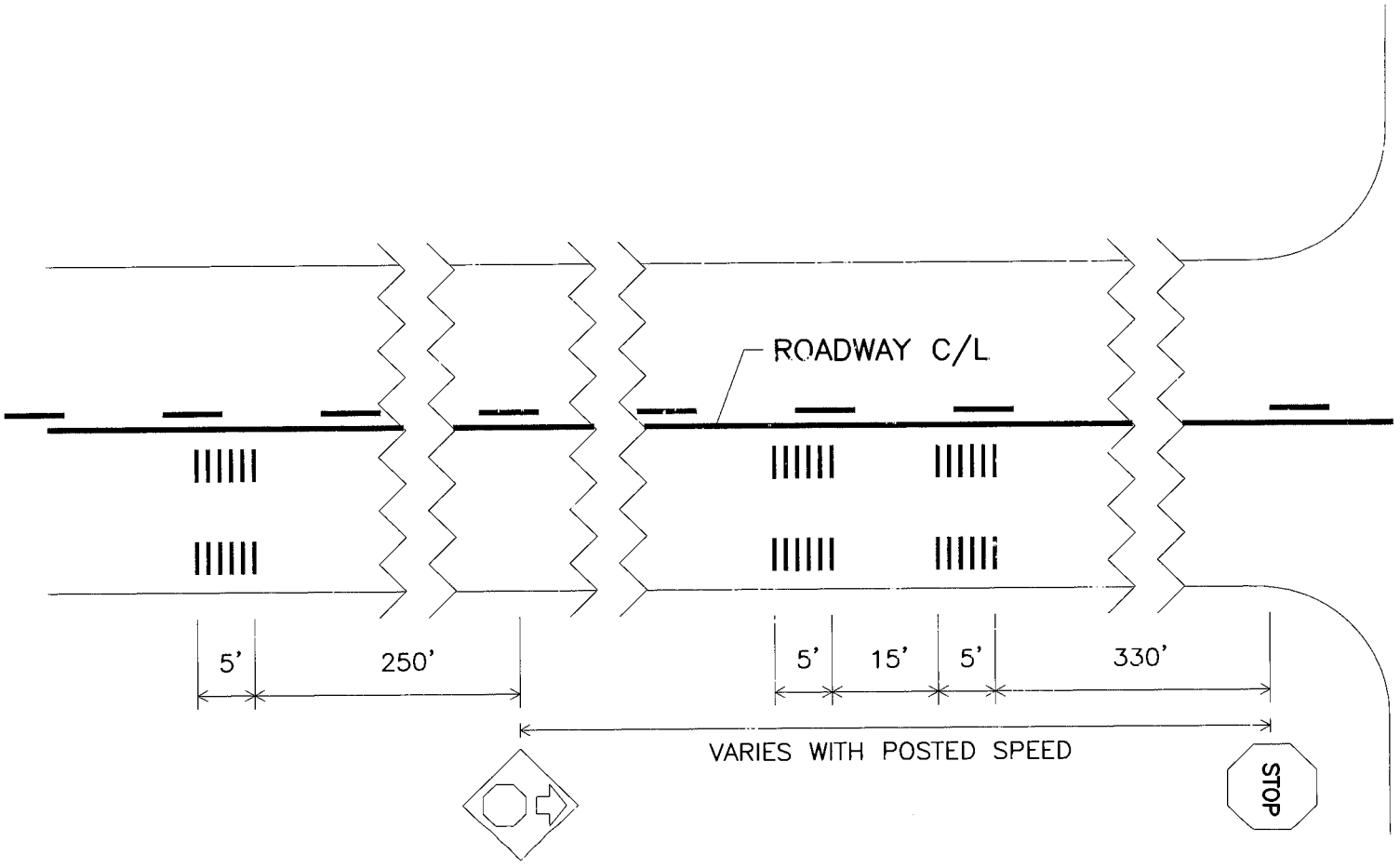
Contacts for Approved Products can be found at the Approved/Qualified Products Contact webpage.

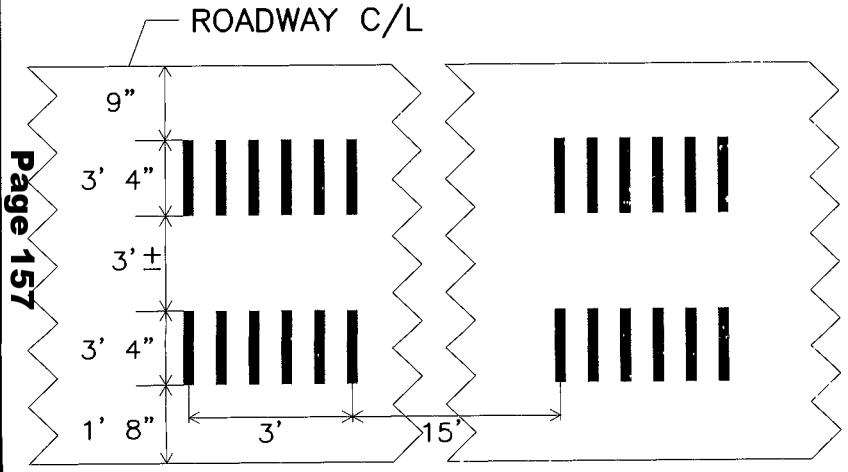
Materials Lab. Contacts	Independent Assurance
District 1, Duluth Leila DeLuca Phone: 218-725-2738 D1.duluth.lab.dot@state.mn.us	 Nadine Miller Phone: 218-725-2737 Cell: 218-348-6297 nadine.miller@state.mn.us
District 2, Bemidji Jason Kissel Phone: 218-755-6542 jason.kissel@state.mn.us Mike Murphy (Concrete & Aggregates) Phone: 218-755-6593 mike.murphy@state.mn.us Dustin Reese (Bituminous) Phone: 218-755-6593 dustin.reese@state.mn.us	 Ray Wesley Cell: 218-766-6949 raymond.wesley@state.mn.us
District 3A, Baxter Tom Boser Phone: 218-828-5755 tom.boser@state.mn.us	 Matt Miles Cell: 218-232-6748 matt.miles@state.mn.us
District 3B, Saint Cloud Nick Fisher Phone: 320-2236500 nicholas.fisher@state.mn.us Andy Kostreba Phone: 320-223-6554 andy.kostreba@state.mn.us	 Travis Erickson Cell: 320-291-3582 travis.erickson@state.mn.us
District 4, Detroit Lakes Bruce Bryngelson Phone: 218-846-3614 bruce.bryngelson@state.mn.us Wayne Koons	Casey Clarke Cell: 218-849-7393

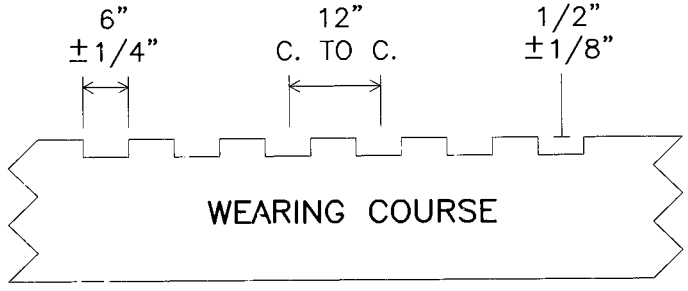
Phone: 218-846-3617 wayne.koons@state.mn.us	casey.clarke@state.mn.us
Metro District, Maplewood Lab Brent Sculley Phone 651-366-5409 brent.scolley@state.mn.us	**Waters Edge** Phone: 651-234-7356 West Zachary Lyrek-Hanks Phone: 651-775-1018 zachary.Lyrek-Hanks@state.mn.us Karl Sinclair Phone: 651-775-0998 karl.sinclair@state.mn.us East Kris Westerbur Phone: 651-755-1151 kristopher.westerbur@state.mn.us Kaleb Kollmann Phone: 651-478-0339 kaleb.kollmann@state.mn.us
District 6, Rochester Scott Swanson Phone: 507-286-7580 scott.a.swanson@state.mn.us Jeff Bale (Aggregates) Phone: 507-286-7586 jeff.bale@state.mn.us Joe Drees (Bituminous) Phone: 507-286-7582 joe.drees@state.mn.us Gary Vinge Phone: 507-286-7585 gary.vinge@sate.mn.us	Dennis Hayes Cell: 507-251-0138 dennis.hayes@state.mn.us
District 7, Mankato Lee McLaughlin Phone: 507-304-6189 lee.mclaughlin@state.mn.us	Mitch Jordahl Cell:507-380-9619 mitch.jordahl@state.mn.us
District 8, Willmar and Marshall Jon Vlaminck Phone: 320-214-6348 Cell: 320-894-7409 jon.vlaminck@state.mn.us **District 8B, Marshall** Matt Steinbronn Phone: 507-537-2068 matthew.steinbronn@state.mn.us	Paul Janke Cell: 320-212-5739 paul.janke@state.mn.us

Sample Sizes

	Lbs.	
Bituminous	35	Aggregate for Gradation QC/QA
	80	for each plus #4 Aggregate Type for Quality Testing
	35	for each minus #4 Aggregate Type for Quality Testing
	80	for each RAP material for Quality Testing
	10	RAS (shingles) for Processed Gradation and Quality Testing
	65	for Mix Properties (QC/QA) 3 full 6" by 12”-cylinder molds for QA
	90	for TSR (QC/QA) 4 full 6" by 12”-cylinder molds for QA
	90	for Aggregate Specific Gravity QC/QA
	-	1 quart of Asphalt Binder QA
	-	1/2 gallon for Asphalt Emulsion QA
Grading & Base	30	Aggregate for Gradation (Companion sample from 60 lb. split).
	25	Moisture Density Test – Proctor (Companion from 50 lb. split).
	30	Aggregate Quality/Percent Crushing Test - 1 per source
Ready-Mix Concrete	25	Gradation 3/4" plus
	10	Gradation 3/4" minus
	6	Gradation CA 70 & #7
	1	Gradation - Sand (500 g), CA 80, #89.
	4.4	Moisture Test Coarse Aggregate (2000 g)
	1.1	Moisture Test Fine Aggregate (500 g)
	50	Quality 3/4" plus - lab sample
	30	Quality 3/4" minus - lab sample
	30	Fine Aggregate - lab sample
	10	3/4" Plus for the -200 Coarse Aggregate Test (5000 grams)
	6	3/4" Minus for the -200 Coarse Aggregate Test (2500 grams)
	5	Cement, Blended Cement, Fly Ash
	-	1/2-pint plastic container for admixtures.







MILLED AREA

CERTIFIED BY E. Klein Calvert LIC. No. 24962

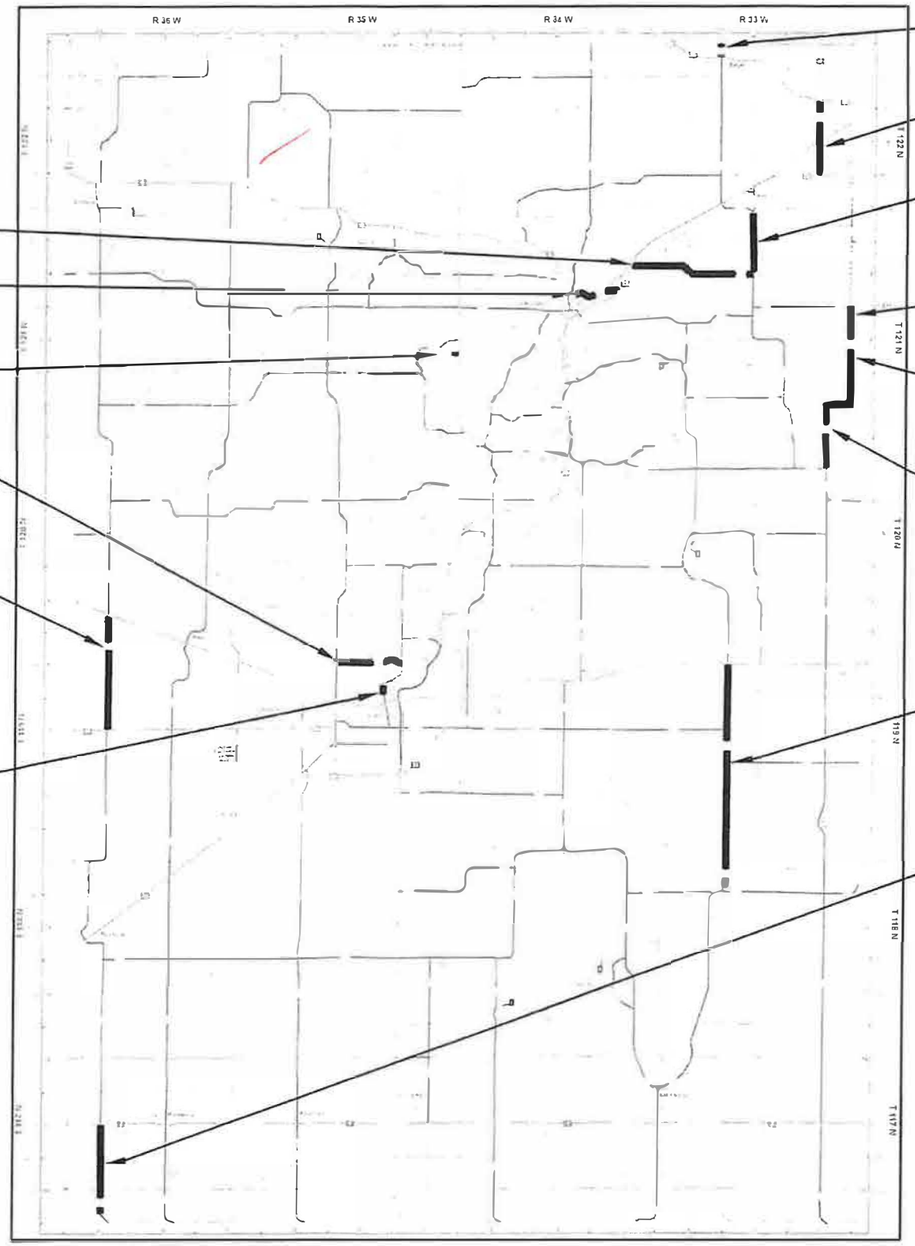
MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF **KANDIYOHI**

CONSTRUCTION PLANS FOR BITUMINOUS MILLING, FULL DEPTH RECLAMATION, BITUMINOUS SURFACING, BITUMINOUS OVERLAYS, AGGREGATE SHOULDERS AND ADA IMPROVEMENTS

SCALES

INDEX MAP 1:1,700



SAP 034-602-044
CSAH 2

SAP 034-606-006
CSAH 6

SAP 034-602-043
CSAH 2

SAP 034-631-007
CSAH 31

SAP 034-631-008
CSAH 31

SAP 047-620-013
CSAH 20

LANDFILL-25
LANDFILL-25

SAP 034-639-005
CSAH 39

SAP 034-624-013
CSAH 24

SAP 034-610-022
CSAH 10

SAP 034-607-029
CSAH 7

SAP 034-604-035
CSAH 4

SAP 034-641-012
CSAH 41

SAP 034-607-030
CSAH 7

COUNTY KANDIYOHI

DISTRICT 8

MN. PROJ. NO.

GOVERNING SPECIFICATIONS

The 2020 edition of the Minnesota Department of Transportation "Standard Specifications for Construction" Shall Govern.

INDEX

THIS PLAN CONTAINS 63 SHEETS

STATE PROJ. NO. SAP 034-602-043		
GROSS LENGTH	9150.00 ft	1.733 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	9150.00 ft	1.733 miles

STATE PROJ. NO. SAP 034-602-044		
GROSS LENGTH	2180.00 ft	0.413 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	2180.00 ft	0.413 miles

STATE PROJ. NO. SAP 034-604-035		
GROSS LENGTH	33700.00 ft	6.382 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	33700.00 ft	6.382 miles

STATE PROJ. NO. SAP 034-606-006		
GROSS LENGTH	12162.00 ft	2.300 miles
BRIDGES-LENGTH	80.00 ft	0.015 miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	12082.00 ft	2.288 miles

STATE PROJ. NO. SAP 034-607-029		
GROSS LENGTH	18541.00 ft	3.511 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	18541.00 ft	3.511 miles

STATE PROJ. NO. SAP 034-607-030		
GROSS LENGTH	13255.00 ft	2.510 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	13255.00 ft	2.510 miles

STATE PROJ. NO. SAP 034-610-022		
GROSS LENGTH	14100.00 ft	2.670 miles
BRIDGES-LENGTH	65.00 ft	0.012 miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	14100.00 ft	2.670 miles

STATE PROJ. NO. SAP 034-624-013		
GROSS LENGTH	11179.00 ft	2.117 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	11179.00 ft	2.117 miles

STATE PROJ. NO. SAP 034-631-007		
GROSS LENGTH	19835.00 ft	3.756 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	19835.00 ft	3.756 miles

STATE PROJ. NO. SAP 034-631-008		
GROSS LENGTH	8300.00 ft	1.571 miles
BRIDGES-LENGTH	65.00 ft	0.012 miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	8300.00 ft	1.571 miles

STATE PROJ. NO. SAP 034-639-005		
GROSS LENGTH	13265.00 ft	2.512 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	13265.00 ft	2.512 miles

STATE PROJ. NO. SAP 047-620-013		
GROSS LENGTH	2730.00 ft	0.517 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	2730.00 ft	0.517 miles

STATE PROJ. NO. SAP 034-641-012		
GROSS LENGTH	2445.00 ft	0.463 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	230.00 ft	0.043 miles
NET LENGTH	2215.00 ft	0.419 miles

STATE PROJ. NO. LANDFILL-25		
GROSS LENGTH	1000.00 ft	0.189 miles
BRIDGES-LENGTH	ft	miles
EXCEPTIONS-LENGTH	ft	miles
NET LENGTH	1000.00 ft	0.189 miles

PLAN PREPARATION: ERIC HAGEN

ASSISTANT ENGINEER: JEREMY PFEIFER

DESIGN ENGINEER: 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.

Melvin W. Odens PE: Kandiyohi County Engineer — LIC. NO. 24962 — DATE 2-26-25

Approved: Kandiyohi County Engineer — DATE 2-26-25

Approved: Meeker County Engineer — DATE 2-26-2025

STATE AID APPROVALS:

District State Aid Engineer: Reviewed for Compliance with State-Aid Rules/Policy — DATE

State Aid Engineer: Approved for State-Aid Funding — DATE

KANDIYOHI COUNTY, MN. SAP 034-602-043, SAP 034-602-044, SAP 034-604-035, SAP 034-606-006, SAP 034-607-029, SAP 034-607-030, SAP 034-610-022, SAP 034-624-013
SAP 034-631-007, SAP 034-631-008, SAP 034-639-005, SAP 047-620-013, SAP 034-641-012, LANDFILL-25

STATEMENT OF ESTIMATED QUANTITIES

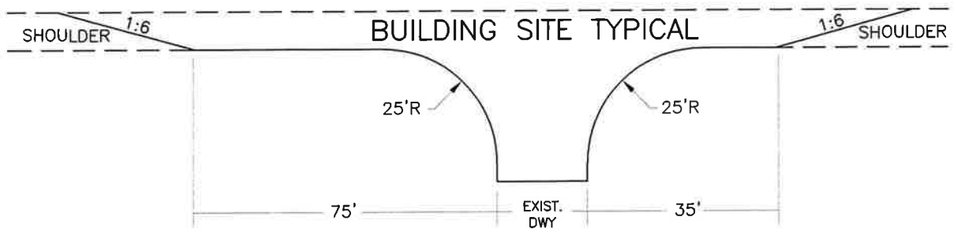
SPECIFICATION NO.	ITEM	UNIT	SAP 034-602-043	SAP 034-602-044	SAP 034-604-035	SAP 034-606-006	SAP 034-607-029	SAP 034-607-030	SAP 034-610-022	SAP 034-624-013	SAP 034-631-007	SAP 034-631-008	SAP 034-639-005	SAP 047-620-013	SAP 034-641-012	LANDFILL 25	TOTAL ESTIMATED QUANTITIES
2021.501	MOBILIZATION	LS	1	1	1	1	1	1	1	1	1	1	1		1	1	13
2104.502	SALVAGE SIGN	EACH													12		12
2104.503	REMOVE CONCRETE CURB	LIN. FT								345					360		705
2104.503	SAW BITUMINOUS PAVEMENT (FULL DEPTH)	LIN. FT				20	170	180		85	80	20			360		915
2104.503	SAW BITUMINOUS WALK (FULL DEPTH)	LIN. FT								104							104
2104.503	SAW CONCRETE WALK (FULL DEPTH)	LIN. FT								15							15
2104.504	REMOVE AGGREGATE MATERIAL	SQ YD														982	982
2104.504	REMOVE CONCRETE DRIVEWAY	SQ YD													397		397
2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD				505	175			257		550				130	1617
2104.518	REMOVE BITUMINOUS WALK	SQ FT								1300							1300
2104.518	REMOVE CONCRETE WALK	SQ FT								350					1180		1530
2104.618	REMOVE AND REPLACE BITUMINOUS PAVEMENT	SQ FT								2070					760		2830
2112.604	SUBGRADE PREPARATION	SQ YD				1000		1500			2000						4500
2123.510	MOTOR GRADER	HR	20	10	30	30	46	40	30		40		30	4		20	300
2123.510	PNEUMATIC TIRED ROLLER	HR					50										50
2123.510	STEEL DRUM ROLLER	HR														25	25
2123.610	SKID LOADER	HR	40	15	30	20		30	20	40	30	30	40		40	30	365
2130.523	WATER	M-GAL				10	400	20			20						450
2211.509	AGGREGATE BASE CLASS 5	TON														45	45
2215.504	FULL DEPTH RECLAMATION	SQ YD				41246		63937			50549						155732
2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	1288	210	1140	914	7080	3255	708		2120	360	669	95		75	17914
2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	2145	133	250				300	890		200	165		50		4133
2232.504	MILL BITUMINOUS SURFACE (0" TO 1.5")	SQ YD													6320		6320
2232.504	MILL BITUMINOUS SURFACE (0" TO 2.0")	SQ YD								8198							8198
2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD								2826							2826
2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	135	135	125930						225	24740	327			282	151774
2232.504	MILL BITUMINOUS SURFACE (2.5")	SQ YD							515								515
2232.504	MILL BITUMINOUS SURFACE (3.0")	SQ YD								2895							2895
2232.504	MILL BITUMINOUS SURFACE (3.5")	SQ YD								28155							28155
2232.602	MILLED RUMBLE STRIPS	EACH						1			2		1				4
2357.606	BITUMINOUS MATERIAL FOR SHOULDER TACK	GAL					2015										2015
2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	1475	370	5685				2751		800	890	3037	498	250		15756
2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (3,B)	TON								1773							1773
2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	2915	620	17255				6927		3632	2767	6895	1251	856	892	44010
2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,C)	TON				12621	18510	13773			15337						60241
2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (3,B)	TON								8582							8582
2504.601	REPAIR SPRINKLER SYSTEM	LS													1		1
2504.602	ADJUST VALVE BOX	EACH								4					5		9
2506.502	ADJUST FRAME AND RING CASTING	EACH								21					12	1	34
2521.618	CONCRETE WALK	SQ FT				585				1914		550			1315		4364
2531.503	CONCRETE CURB AND GUTTER	LF								345					360		705
2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD													520		520
2531.618	TRUNCATED DOMES	SQ FT				32				296		16			138		482
2563.601	TRAFFIC CONTROL	LS	1	1	1	1	1	1	1	1	1	1	1		1		12
2564.502	INSTALL SIGN	EACH													12		12
2573.502	STORM DRAIN INLET PROTECTION	EACH								23					10		33
2574.508	FERTILIZER TYPE 3	LB	32		53	8	70	8	15		105	35	48				374
2574.609	COMMON TOPSOIL BORROW	TON	80		105	15	125	15	30		215	325	100				1010
2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	525		625	90	450	90	255		1050	385	675				4145
2575.602	SITE RESTORATION	EACH				2				18		2			40		62
2575.608	SEED SOUTHERN BOULEVARD	LB	15		22	5	44	5	10		50	20	30				201
2580.501	INTERIM PAVEMENT MARKING	LS	1	1	1	1	1	1	1	1	1	1	1		1		12
2582.503	4" BROKEN LINE PAINT	LIN FT	1700	436	7543	2563	3750	2651	2474	1126	2986	725	2431	324	490		29199
2582.503	4" SOLID LINE PAINT	LIN FT	3060	900	7775	3265	3150	1260	3170	10285	6996	3125	5050	900			48936
2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	6000	105	3150	125			1565	6466	4424	5360	2230				29425
2582.503	6" SOLID LINE PAINT	LIN FT	18800	4360	67400	24480	37100	27680	28250	21477	39750	16800	26570	5480	3950		322097
2582.503	24" SOLID LINE PAINT	LIN FT			220	120		40			40				126		546
2582.518	CROSSWALK MULTI-COMPONENT	SQ FT								486							486
2582.518	PAVEMENT MESSAGE MULTI-COMPONENT	SQ FT			88	44		120		450					120		822

SAP 034-602-043, SAP 034-602-044, SAP 034-604-035, SAP 034-606-006, SAP 034-607-029, SAP 034-607-030, SAP 034-610-022, SAP 034-624-013, SAP 034-631-007

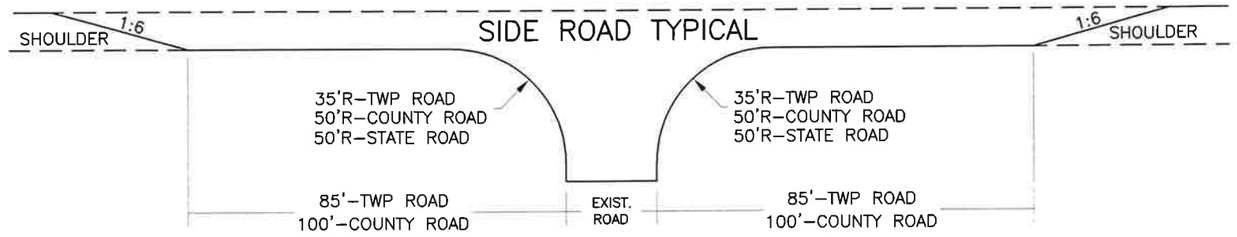
SAP 034-631-008, SAP 034-639-005, SAP 047-620-013, SAP 034-641-012, LANDFILL-25

CERTIFIED BY _____ LIC. NO. 24962 2/26 20 25

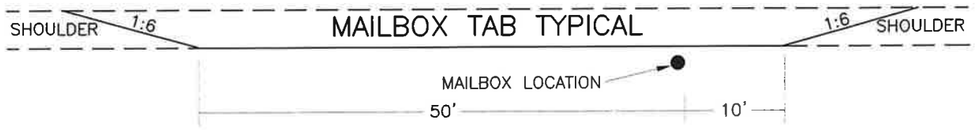
BUILDING SITE TYPICAL



SIDE ROAD TYPICAL

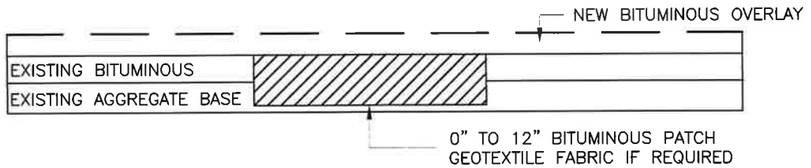


MAILBOX TAB TYPICAL



TYPICAL RADIUS CONSTRUCTION	
ENTRANCE	RADIUS
TRUNK HIGHWAY	50'
COUNTY ROAD	50'
TOWNSHIP ROAD	35'
ENTRANCES	25'

BITUMINOUS PATCH SPECIAL (0" TO 12")



STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
4108 F	ADJUSTING RINGS
4129 G	CATCH BASIN FRAME CASTING
4154 B	CATCH BASIN GRATE CASTING
7020 K	CONCRETE CURB
7038 A	DETECTABLE WARNING SURFACE TRUNCATED DOMES
7100 H	CONCRETE CURB & GUTTER
7102 K	CONCRETE CURB & GUTTER
8000 K	CHANNELIZERS TEMPORARY

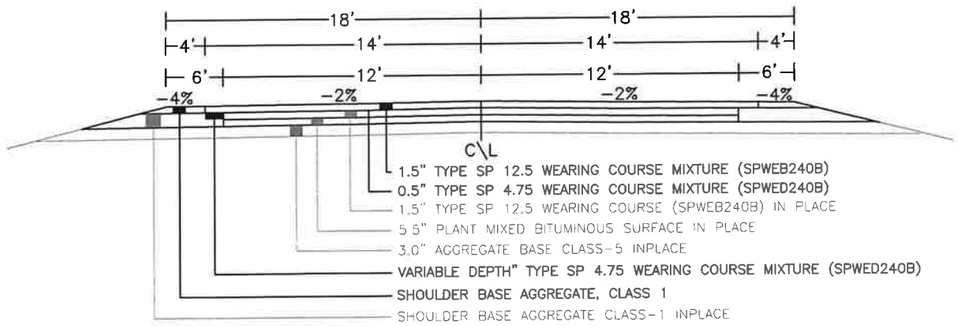
ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST MMUTCD, INCLUDING THE LATEST FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

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"

BASIS OF COMPUTATION FOR ESTIMATED QUANTITIES
BITUMINOUS AT 110 LBS./SQ YD./INCH
AGGREGATE BASE COMPACTED DENSITY 140 LBS/SQ YD/INCH
FERTILIZER TYPE 3 350 LBS./ACRE
SEED SOUTHERN BOULEVARD 160 LBS./ACRE
HYDRAULIC BONDED FIBER MATRIX 3500 LBS./ACRE

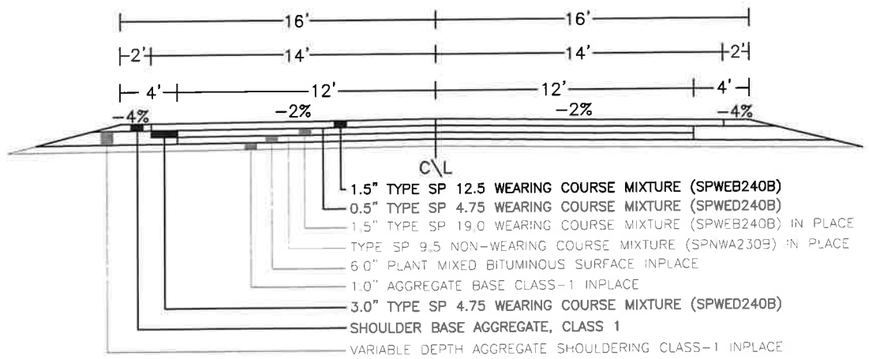
SAP 034-602-043

STA. 0+00 TO STA. 91+50



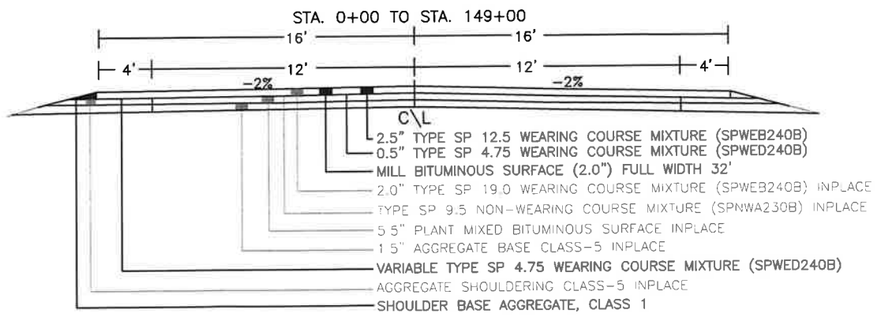
SAP 034-602-044

STA. 0+00 TO STA. 21+80



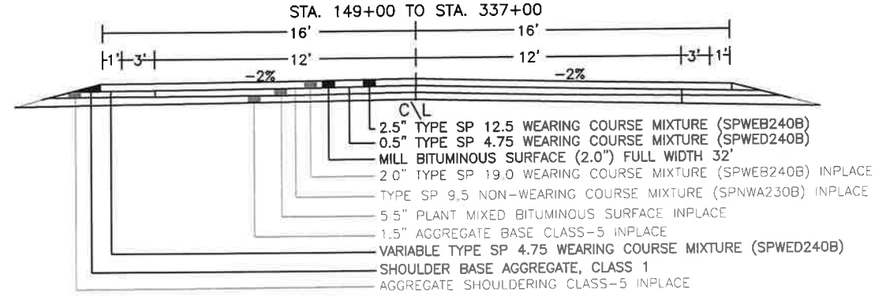
SAP 034-604-035

STA. 0+00 TO STA. 149+00



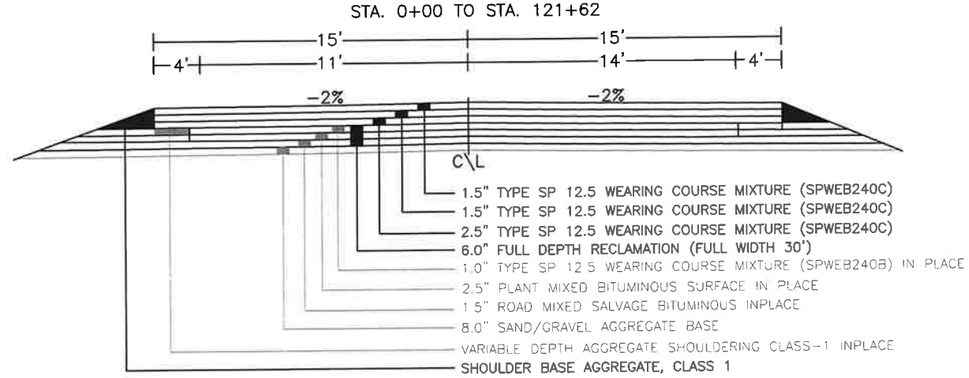
SAP 034-604-035

STA. 149+00 TO STA. 337+00



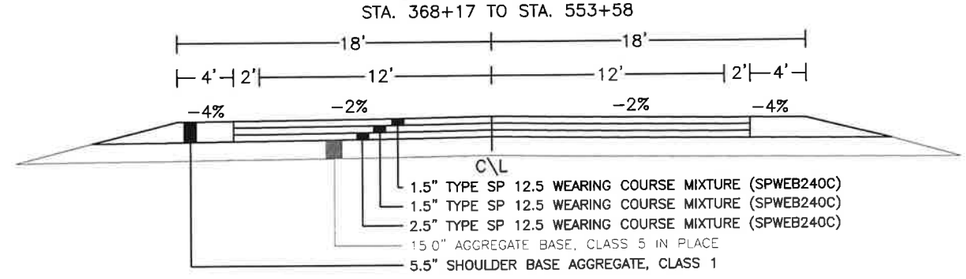
SAP 034-606-006

STA. 0+00 TO STA. 121+62



SAP 034-607-029

STA. 368+17 TO STA. 553+58



TYPICAL SECTIONS

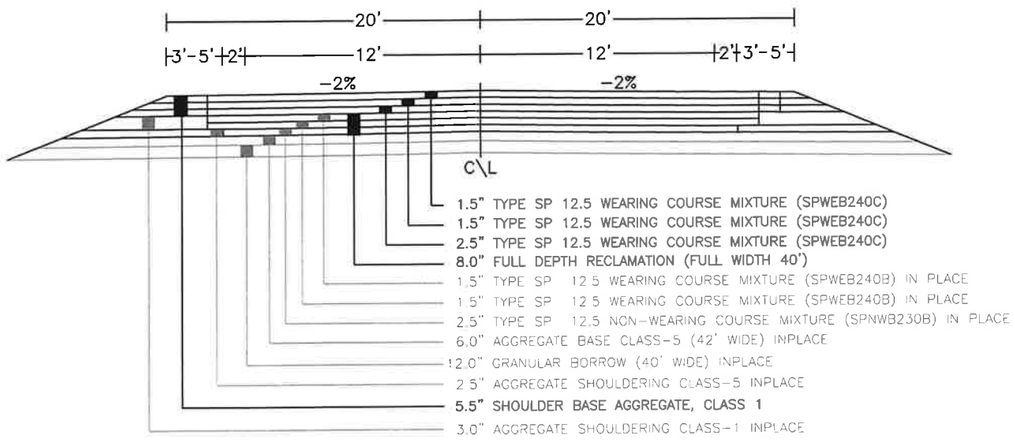
SAP 034-602-043, SAP 034-602-044, SAP 034-604-035, SAP 034-606-006, SAP 034-607-029, SAP 034-607-030, SAP 034-610-022, SAP 034-624-013, SAP 034-631-007

SAP 034-631-008, SAP 034-639-005, SAP 047-620-013, SAP 034-641-012, LANDFILL-25

CERTIFIED BY _____ LIC. NO. 24962 2/25 2025

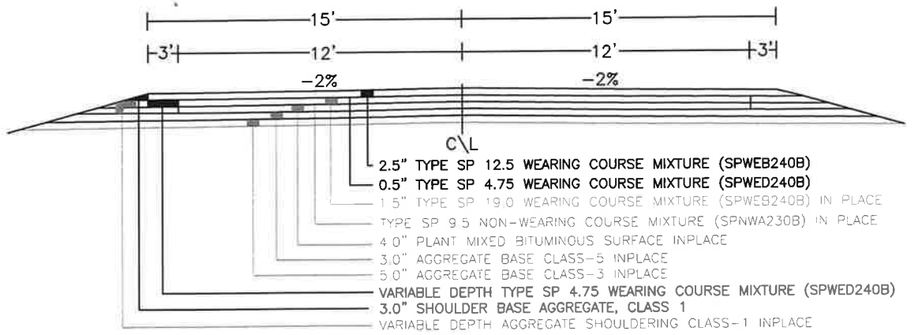
SAP 034–607–030

STA. 0+00 TO STA. 132+55



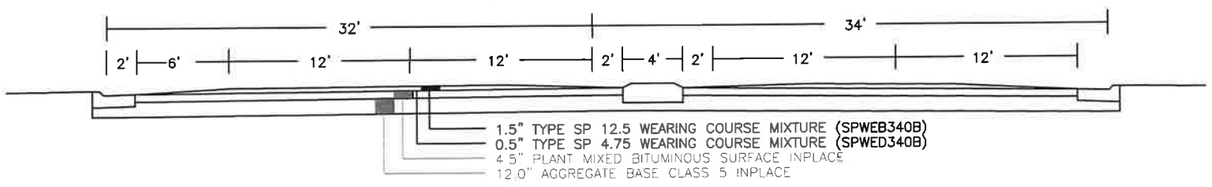
SAP 034–610–022

STA. 0+00 TO STA. 141+00



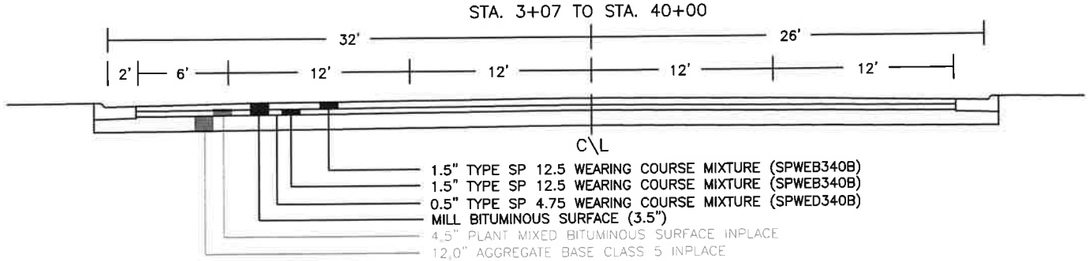
SAP 034–624–013

STA. 0+31 TO STA. 3+07



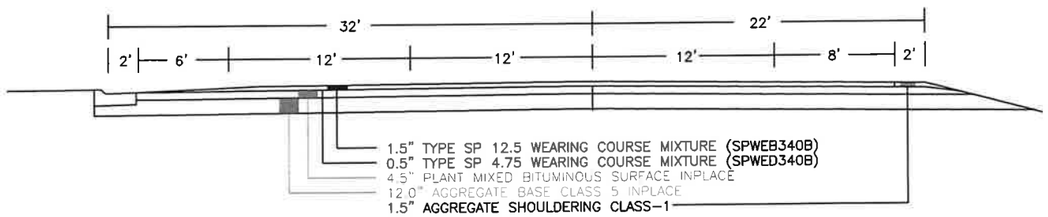
SAP 034–624–013

STA. 3+07 TO STA. 40+00



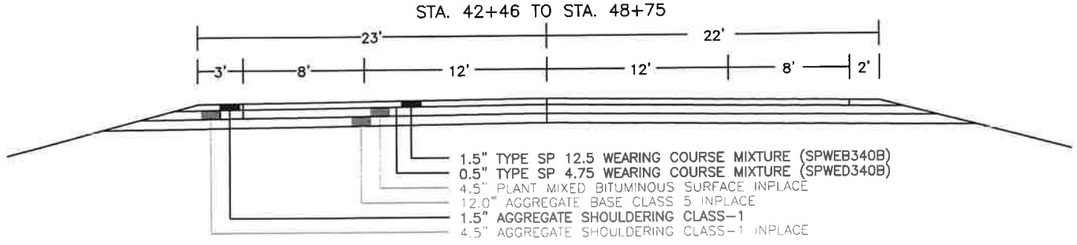
SAP 034–624–013

STA. 40+00 TO STA. 42+46



SAP 034–624–013

STA. 42+46 TO STA. 48+75



TYPICAL SECTIONS

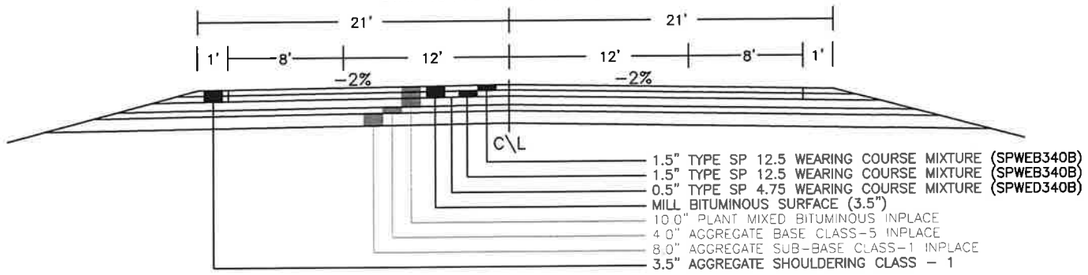
SAP 034–602–043, SAP 034–602–044, SAP 034–604–035, SAP 034–606–006, SAP 034–607–029, SAP 034–607–030, SAP 034–610–022, SAP 034–624–013, SAP 034–631–007

SAP 034–631–008, SAP 034–639–005, SAP 047–620–013, SAP 034–641–012, LANDFILL–25

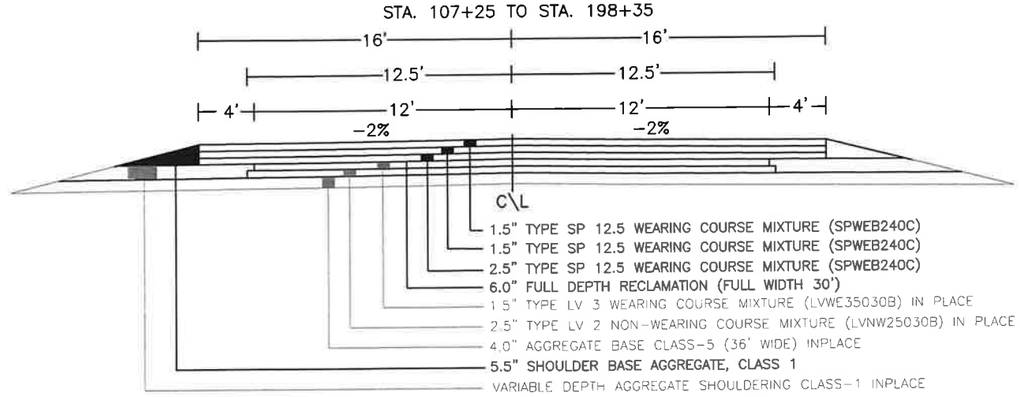
CERTIFIED BY E. Dennis Dent LIC. NO. 24962 2/25 2025

Sheet No. 5 of 62 Sheets

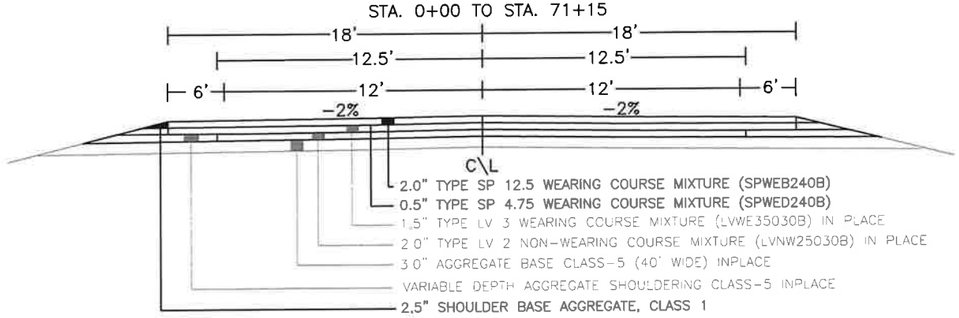
SAP 034-624-013
STA. 48+75 TO STA. 112+10



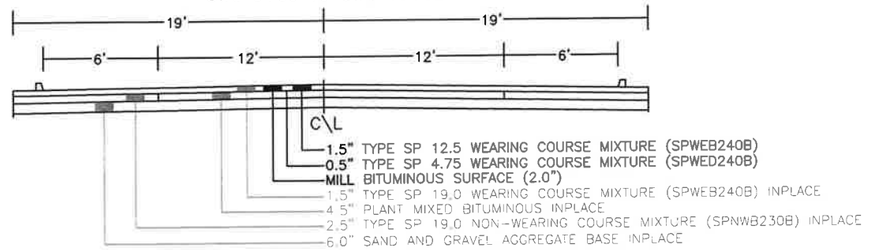
SAP 034-631-007
STA. 107+25 TO STA. 198+35



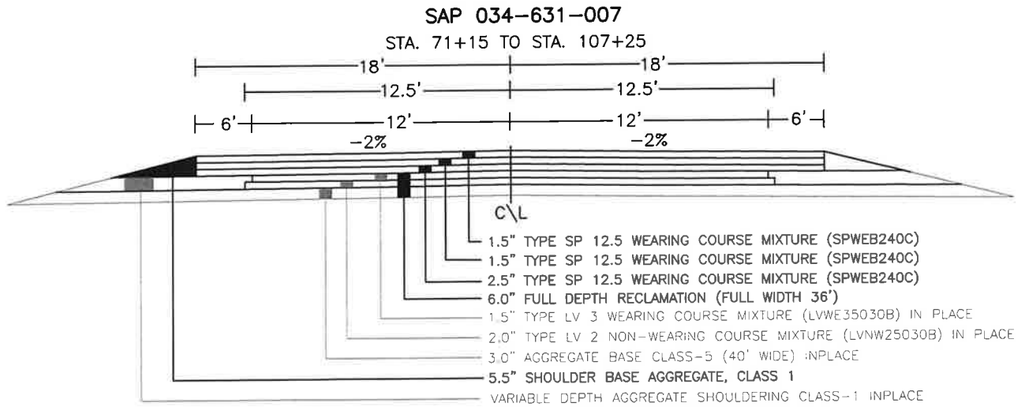
SAP 034-631-007
STA. 0+00 TO STA. 71+15



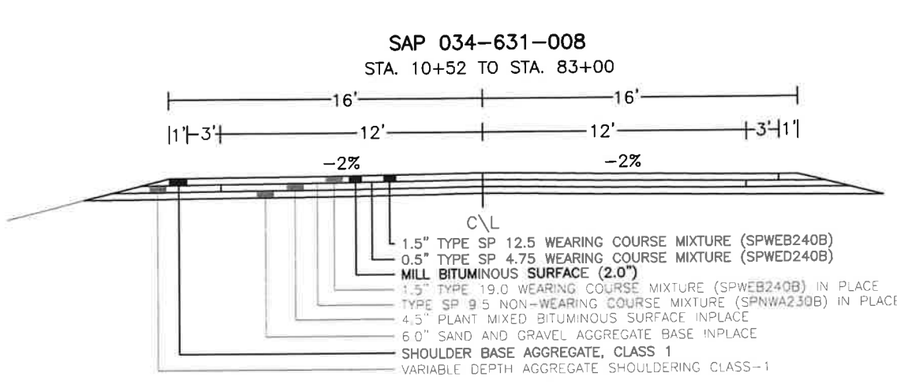
SAP 034-631-008
STA. 0+00 TO STA. 10+52



SAP 034-631-007
STA. 71+15 TO STA. 107+25



SAP 034-631-008
STA. 10+52 TO STA. 83+00



TYPICAL SECTIONS

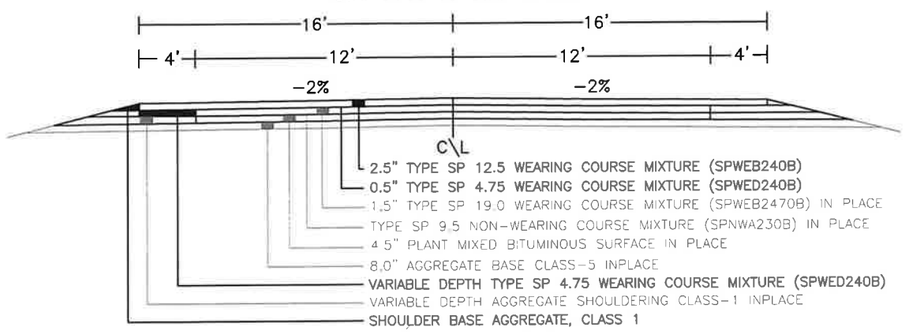
SAP 034-602-043, SAP 034-602-044, SAP 034-604-035, SAP 034-606-006, SAP 034-607-029, SAP 034-607-030, SAP 034-610-022, SAP 034-624-013, SAP 034-631-007

SAP 034-631-008, SAP 034-639-005, SAP 047-620-013, SAP 034-641-012, LANDFILL-25

CERTIFIED BY _____ LIC. NO. 24962 2/25 2025

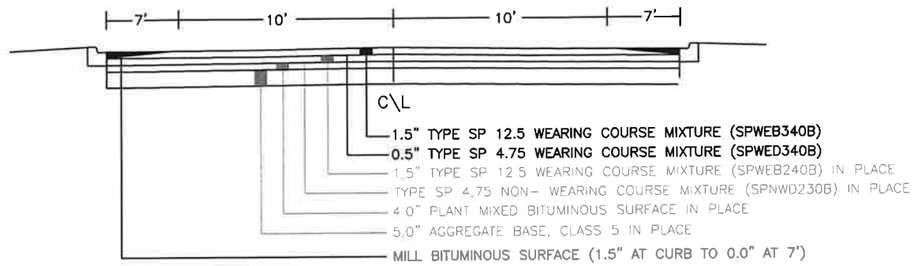
SAP 034-639-005

STA. 0+00 TO STA. 132+65



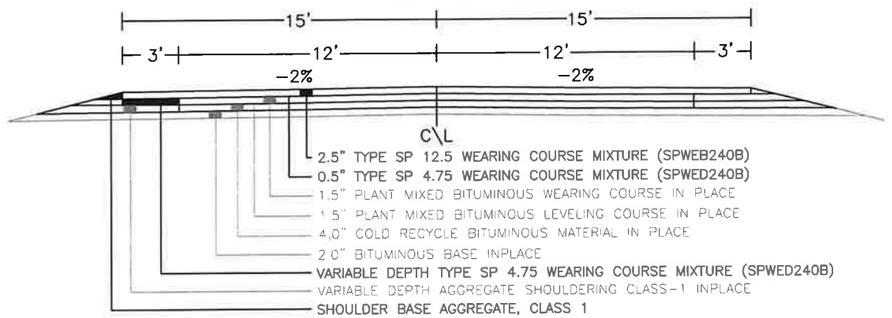
SAP 034-641-012

STA. 10+10 TO STA. 24+45



SAP 047-620-013

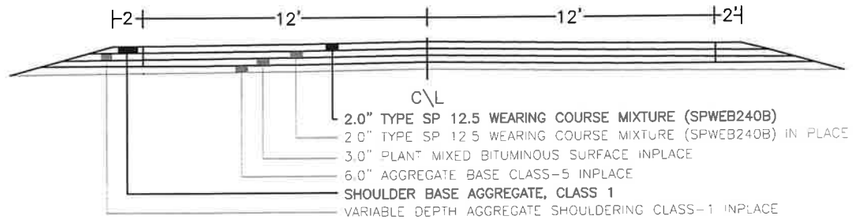
STA. 0+00 TO STA. 27+30



LANDFILL-25

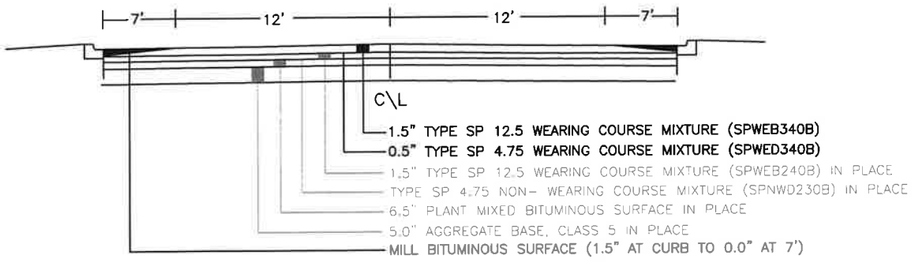
LANDFILL ENTRANCE

STA. 0+00 TO STA. 6+00

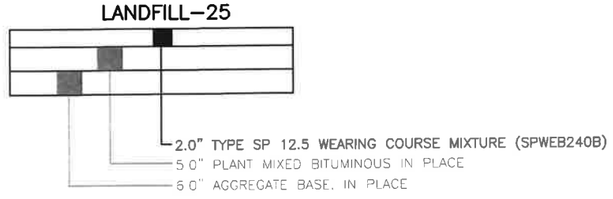


SAP 034-641-012

STA. 0+00 TO STA. 7+80



LANDFILL-25



TYPICAL SECTIONS

SAP 034-602-043, SAP 034-602-044, SAP 034-604-035, SAP 034-606-006, SAP 034-607-029, SAP 034-607-030, SAP 034-610-022, SAP 034-624-013, SAP 034-631-007

SAP 034-631-008, SAP 034-639-005, SAP 047-620-013, SAP 034-641-012, LANDFILL-25

CERTIFIED BY _____ LIC. NO. 24962 2/25 2025

ESTIMATED QUANTITIES

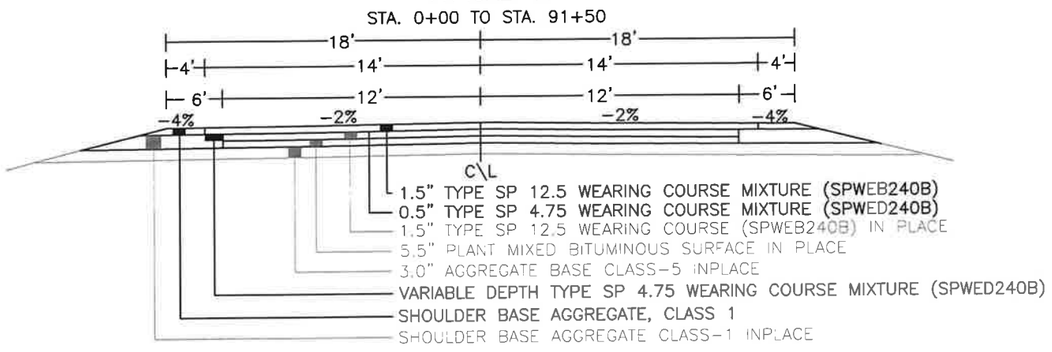
	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
(1)	2123.510	MOTOR GRADER	HR	20
(2)	2123.610	SKID LOADER	HR	40
(3)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	1288
(4)	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	2145
(5)	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	135
(6)	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	1475
(7)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	2915
	2563.601	TRAFFIC CONTROL	LS	1
(8)	2574.508	FERTILIZER TYPE 3	LB	32
(8)	2574.609	COMMON TOPSOIL BORROW	TON	80
(8)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	525
(8)	2575.608	SEED SOUTHERN BOULEVARD	LB	15
(9)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(10)	2582.503	4" BROKEN LINE PAINT	LIN FT	1700
(10)	2582.503	4" SOLID LINE PAINT	LIN FT	3060
(10)	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	6000
(10)	2582.503	6" SOLID LINE PAINT	LIN FT	18800

(1) EQUIPMENT HOURS USED FOR NOTCHING THE 2' X 3" AREA STATIONS 0+00 TO 91+50.
(2) EQUIPMENT HOURS USED TO SHAPE MISCELLANEOUS.
(3) 150 TON PROVIDED FOR INTERSECTIONS AND ENTRANCES.
(4) QUANTITY IS FOR PATCHING PRIOR TO PAVING OPERATIONS. THE LOCATIONS, LENGTHS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD. (FABRIC INCLUDED IN BID PRICE)
(5) PROVIDED FOR MILLING AT JOINT 2" AND TAPER TO 0.0" AT 40'.
(6) PROVIDED FOR PAVER LEVELING AND FILLING 2' X 3" NOTCHED AREA STATIONS 0+00 TO 91+50.
(7) 465 TONS PROVIDED FOR INTERSECTION AND ENTRANCES.
(8) PROVIDED FOR PAVED ENTRANCES ONLY.
(9) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.
(10) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW) AND 6" SOLID LINE (WHITE).

GROSS LENGTH 9150.00 FT 1.733 MILES
BRIDGE LENGTH FT MILES
EXCEPTIONS LENGTH FT MILES
NET LENGTH 9150.00 FT 1.733 MILES

TYPICAL "A"

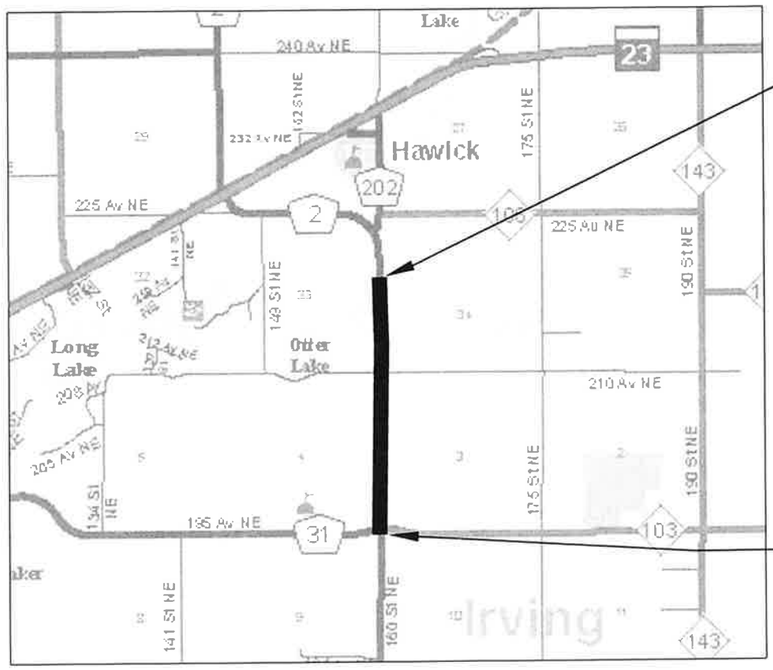
STA. 0+00 TO STA. 91+50



CONSTRUCTION PLAN FOR BITUMINOUS SURFACING AND AGGREGATE SHOULDERING

LOCATED ON CSAH 2 FROM CSAH 31 TO 1.16 MILES SOUTH OF TH 23, 0.5 MILES SW FROM HAWICK (GEOGRAPHIC DESCRIPTION)

FROM 85' N OF THE NE COR. OF SEC. 9 T121N, R33W IRVING TWP. TO 1349.26' S & 64.16' W OF THE NW COR. OF SEC. 34 T122N, R33W. ROSEVILLE TWP. (LEGAL DESCRIPTION)



END PROJ. SAP 034-602-043
STA. 91+50

BEG. PROJ. SAP 034-602-043
STA. 0+00

RURAL DESIGN DESIGNATION

≤N20 172,000 R Value 18
Pres. ADT 510 (2025) Proj. ADT 580 (2045)
Proj. HCADT 52 (2045) Shoulder Width 6
10 TON Design
Graded In 1994 Under SAP 34-602-18
Surfaced In 1995 Under SAP 34-602-20
Functional Classification MAJOR COLLECTOR
No. Of Traffic Lanes 2 No. Of Parking Lanes
Design Speed 55 MPH
Based On Stopping Sight Distance
Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY [signature] LIC. NO. 24962 7/26 2025

KANDIYOHI COUNTY, MINN. SAP 034-602-043 Sheet No. 8 of 62 Sheets

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
(1)	2123.510	MOTOR GRADER	HR	10
(2)	2123.610	SKID LOADER	HR	15
(3)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	210
(4)	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	133
(5)	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	135
(6)	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	370
(7)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	620
	2563.601	TRAFFIC CONTROL	LS	1
(8)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(9)	2582.503	4" BROKEN LINE PAINT	LIN FT	436
(9)	2582.503	4" SOLID LINE PAINT	LIN FT	900
(9)	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	105
(9)	2582.503	6" SOLID LINE PAINT	LIN FT	4360

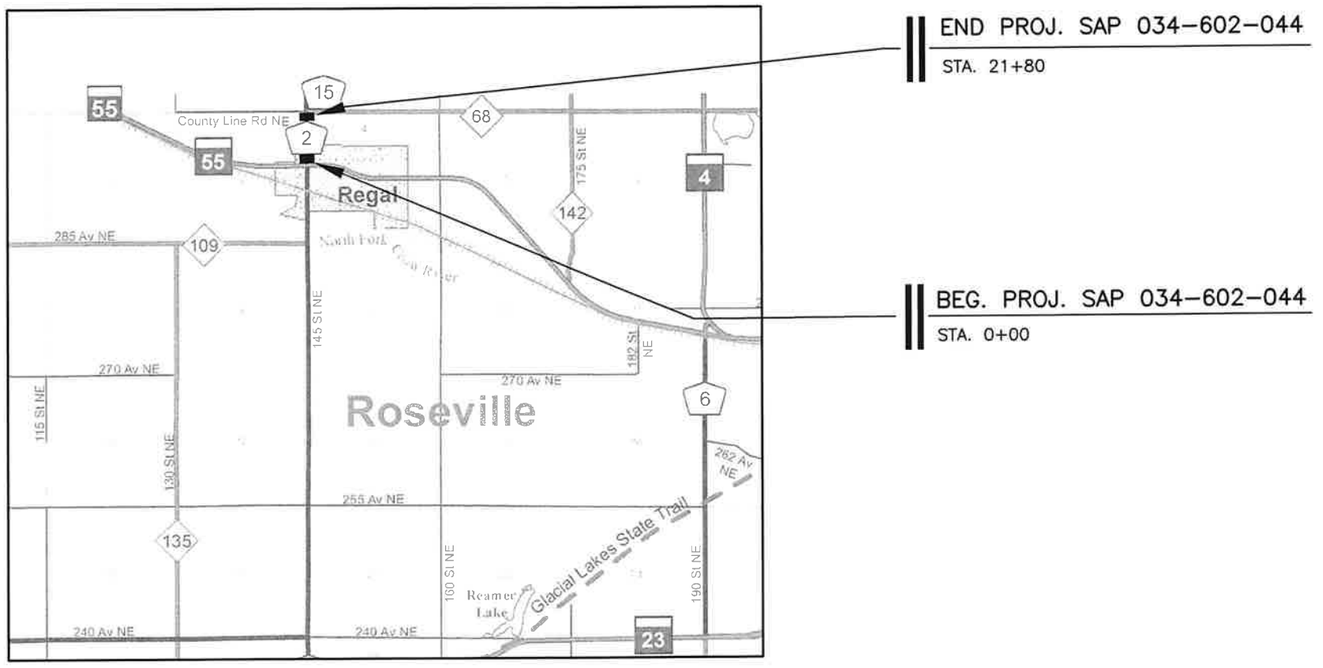
(1) EQUIPMENT HOURS USED FOR NOTCHING THE 2' X 3" AREA STATIONS 0+00 TO 21+80.
(2) EQUIPMENT HOURS USED TO SHAPE MISCELLANEOUS.
(3) 25 TON PROVIDED FOR INTERSECTIONS AND ENTRANCES.
(4) QUANTITY IS FOR PATCHING PRIOR TO PAVING OPERATIONS. THE LOCATIONS, LENGTHS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD.
(5) PROVIDED FOR MILLING AT JOINT 2" AND TAPER TO 0.0" AT 40'.
(6) PROVIDED FOR PAVER LEVELING AND FILLING 3" X 2' NOTCHED AREA STATIONS 0+00 TO 21+80.
(7) 40 TONS PROVIDED FOR INTERSECTIONS AND ENTRANCES.
(8) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.
(9) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW) AND 6" SOLID LINE (WHITE).

GROSS LENGTH 2180.00 FT 0.413 MILES
BRIDGE LENGTH FT MILES
EXCEPTIONS LENGTH FT MILES
NET LENGTH 2180.00 FT 0.413 MILES

CONSTRUCTION PLAN FOR BITUMINOUS MILLING, BITUMINOUS SURFACING AND AGGREGATE SHOULDERING

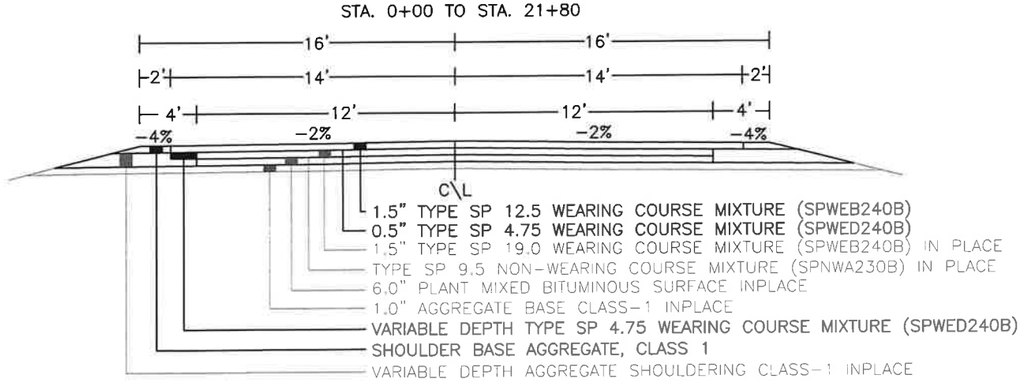
LOCATED ON CSAH 2 FROM TH 55 TO NORTH COUNTY LINE (GEOGRAPHIC DESCRIPTION)

FROM 480' N OF THE W. 1/4 COR. OF SEC. 4 T122N, R33W ROSEVILLE TWP. TO NW. COR. OF SEC. 4 T122N, R33W ROSEVILLE TWP. (LEGAL DESCRIPTION)



TYPICAL "A"

STA. 0+00 TO STA. 21+80



RURAL DESIGN DESIGNATION

≤N20 99,000 R Value 30
Pres. ADT 300 (2025) Proj. ADT 330 (2045)
Proj. HCADT 30 (2045) Shoulder Width 4
10 TON Design
Graded In 1981 Under SAP 34-602-11
Surfaced In 1982 Under SAP 34-602-12
Functional Classification MINOR COLLECTOR
No. Of Traffic Lanes 2 No. Of Parking Lanes
Design Speed 55 MPH
Based On Stopping Sight Distance
Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY [signature] LIC. NO. 24962 2/26 2025

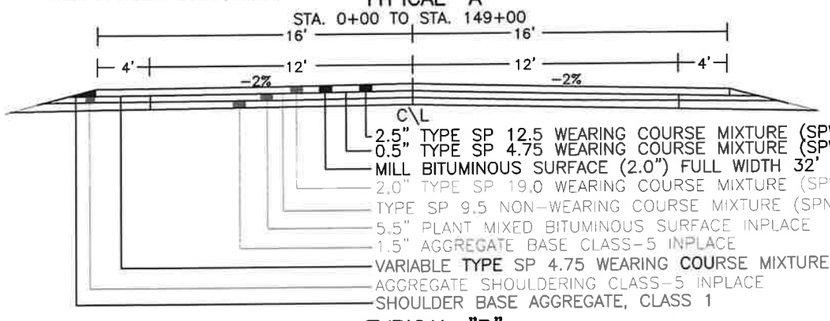
KANDIYOHI COUNTY, MINN. SAP 034-602-044 Sheet No. 9 of 62 Sheets

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
(1)	2123.510	MOTOR GRADER	HR	30
(2)	2123.610	SKID LOADER	HR	30
(3)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	1140
(4)	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	250
(5)	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	125930
(6)	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	5685
(7)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	17255
	2563.601	TRAFFIC CONTROL	LS	1
(8)	2574.508	FERTILIZER TYPE 3	LB	53
(8)	2574.609	COMMON TOPSOIL BORROW	TON	105
(8)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	625
(8)	2575.608	SEED SOUTHERN BOULEVARD	LB	22
(9)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(10)	2582.503	4" BROKEN LINE PAINT	LIN FT	7543
(10)	2582.503	4" SOLID LINE PAINT	LIN FT	7775
(10)	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	3150
(10)	2582.503	6" SOLID LINE PAINT	LIN FT	67400
(10)	2582.503	24" SOLID LINE PAINT	LIN FT	220
	2582.518	PAVEMENT MESSAGE MULTI-COMPONENT	SQ FT	88

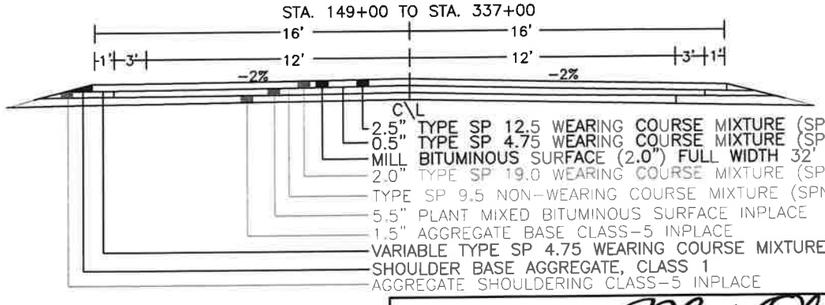
(1) EQUIPMENT HOURS USED FOR NOTCHING THE (4' X VARIABLE) AREA STATIONS 0+00 TO 149+00.
(1) EQUIPMENT HOURS USED FOR NOTCHING THE (1' X VARIABLE) AREA STATIONS 149+00 TO 337+00.
(2) EQUIPMENT HOURS USED TO SHAPE MISCELLANEOUS.
(3) 250 TON PROVIDED FOR INTERSECTION AND ENTRANCES.
(4) QUANTITY IS FOR PATCHING PRIOR TO PAVING OPERATIONS. THE LOCATIONS, LENGTHS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD.
(5) 2.0" MILLING, STATIONS 0+00 TO 337+00 FULL WIDTH 32' INCLUDING INTERSECTIONS AND DRIVEWAYS.
(6) PROVIDED FOR PAVER LEVELING, FILLING (4' X VARIABLE) NOTCHED AREA STATIONS 0+00 TO 149+00. AND FILLING (1' X VARIABLE) NOTCHED AREA STATIONS 149+00 TO 337+00.
(7) 655 TONS PROVIDED FOR ENTRANCE AND INTERSECTION.
(8) PROVIDED FOR PAVED ENTRANCES ONLY.
(9) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.
(10) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW) AND 6" SOLID LINE (WHITE).

TYPICAL "A"
STA. 0+00 TO STA. 149+00



2.5" TYPE SP 12.5 WEARING COURSE MIXTURE (SPWEB240B)
0.5" TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
MILL BITUMINOUS SURFACE (2.0") FULL WIDTH 32'
2.0" TYPE SP 19.0 WEARING COURSE MIXTURE (SPWEB240B) INPLACE
TYPE SP 9.5 NON-WEARING COURSE MIXTURE (SPNWA230B) INPLACE
5.5" PLANT MIXED BITUMINOUS SURFACE INPLACE
1.5" AGGREGATE BASE CLASS-5 INPLACE
VARIABLE TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
AGGREGATE SHOULDERING CLASS-5 INPLACE
SHOULDER BASE AGGREGATE, CLASS 1

TYPICAL "B"
STA. 149+00 TO STA. 337+00

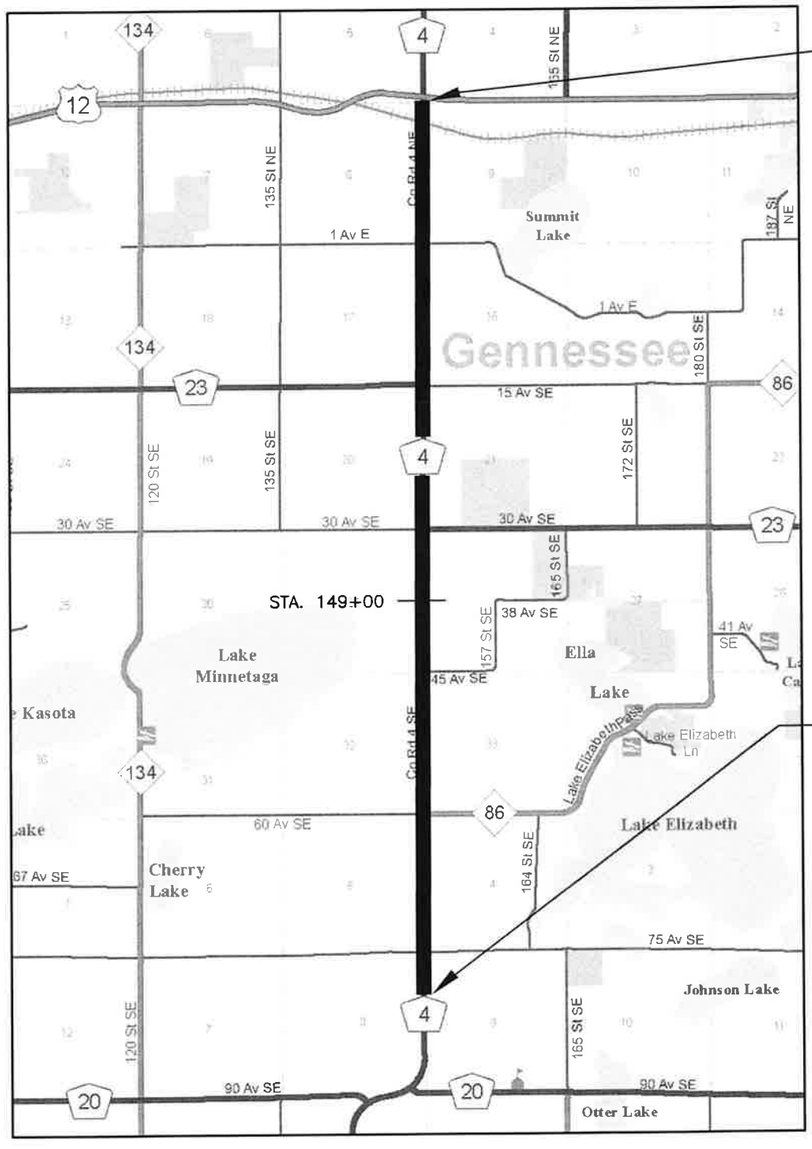


2.5" TYPE SP 12.5 WEARING COURSE MIXTURE (SPWEB240B)
0.5" TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
MILL BITUMINOUS SURFACE (2.0") FULL WIDTH 32'
2.0" TYPE SP 19.0 WEARING COURSE MIXTURE (SPWEB240B) INPLACE
TYPE SP 9.5 NON-WEARING COURSE MIXTURE (SPNWA230B) INPLACE
5.5" PLANT MIXED BITUMINOUS SURFACE INPLACE
1.5" AGGREGATE BASE CLASS-5 INPLACE
VARIABLE TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
SHOULDER BASE AGGREGATE, CLASS 1
AGGREGATE SHOULDERING CLASS-5 INPLACE

CONSTRUCTION PLAN FOR BITUMINOUS SURFACING AND AGGREGATE SHOULDERING

LOCATED ON FROM 0.61 MILES NORTH OF CSAH 20 TO TH 12 (3.0 MILES WEST OF ATWATER) (GEOGRAPHIC DESCRIPTION)

FROM 2000.00' S. OF THE NW COR. SEC. 9, T118N, R33W LAKE ELIZABETH TWP. TO 50.00' N. OF THE NW. COR. SEC. 9, T119N, R33W, GENNESSEE TWP. (LEGAL DESCRIPTION)



GROSS LENGTH 33700.00 FT 6.382 MILES
BRIDGE LENGTH FT MILES
EXCEPTIONS LENGTH FT MILES
NET LENGTH 33700.00 FT 6.382 MILES

RURAL DESIGN DESIGNATION

≤N20 240,000 R Value 6
Pres. ADT 720 (2025) Proj. ADT 792 (2045)
Proj. HCADT 71 (2045) Shoulder Width 4'
10 TON Design
Graded In 1962 Under 34-604-07
Surfaced In 2003 Under CP-4-03
Functional Classification MINOR COLLECTOR
No. Of Traffic Lanes 2 No. Of Parking Lanes
Design Speed 55 MPH
Based On Stopping Sight Distance
Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY [signature] LIC. NO. 24962 3/6 2025

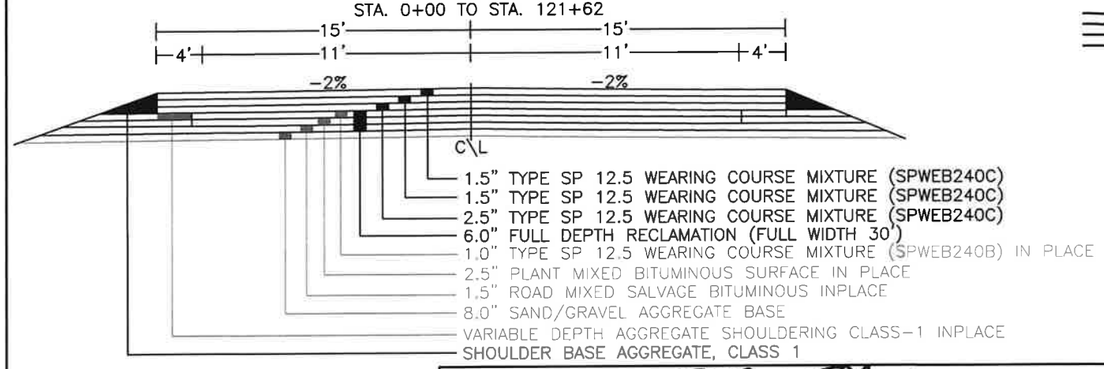
KANDIYOHI COUNTY, MINN. SAP 034-604-035 No. 10 of 62 Sheets

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	20
(11)	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	505
(9)	2112.604	SUBGRADE PREPARATION	SQ YD	1000
(1)	2123.510	MOTOR GRADER	HR	30
(1)	2123.610	SKID LOADER	HR	20
(10)	2130.523	WATER	M-GAL	10
	2215.504	FULL DEPTH RECLAMATION	SQ YD	41246
(2)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	914
(3)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,C)	TON	12621
(4)(5)	2521.618	CONCRETE WALK	SQ FT	585
(4)	2531.618	TRUNCATED DOMES	SQ FT	32
	2563.601	TRAFFIC CONTROL	LS	1
(6)	2574.508	FERTILIZER TYPE 3	LB	8
(6)	2574.609	COMMON TOPSOIL BORROW	TON	15
(6)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	90
(6)	2575.602	SITE RESTORATION	EACH	2
	2575.608	SEED SOUTHERN BOULEVARD	LB	5
(7)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(8)	2582.503	4" BROKEN LINE PAINT	LIN FT	2563
(8)	2582.503	4" SOLID LINE PAINT	LIN FT	3265
(8)	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	125
(8)	2582.503	6" SOLID LINE PAINT	LIN FT	24480
(8)	2582.503	24" SOLID LINE PAINT	LIN FT	120
(8)	2582.518	PAVEMENT MESSAGE MULTI-COMPONENT	SQ FT	44

(1) EQUIPMENT HOURS USED TO SHAPE BRIDGE AREA AND MISCELLANEOUS.
(2) 60 TON PROVIDED FOR INTERSECTIONS AND ENTRANCE.
(3) 270 TONS PROVIDED FOR INTERSECTIONS AND ENTRANCE.
(4) PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MNDOT STANDARD PLAN 5-297.250.
(5) 6" OF AGGREGATE BASE CLASS 5 AND EXCAVATION SHALL BE INCLUDED IN THE BID PRICE FOR CONCRETE WALK.
(6) PROVIDED FOR PAVED ENTRANCES ONLY.
(7) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.
(8) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW), 6" SOLID LINE (WHITE), 24" SOLID LINE AND PAVEMENT MESSAGE MULTI-COMPONENT.
(9) SUBGRADE PREPARATION TO BE USED AT THE DISCRETION OF THE ENGINEER IN THE EVENT THAT UNSTABLE AREAS ARE UNCOVERED. THE LOCATIONS, LENGTHS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD. COMPACTION SHALL BE IN ACCORDANE WITH MNDOT SPEC 2211.3D.2b, QUALITY COMPACTION METHOD.
(10) THIS WORK SHALL CONSIST OF FURNISHING AND APPLYING WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.
(11) FOR STATE TRAIL AND AREA BETWEEN RAILROAD CROSSING AND TH 55.

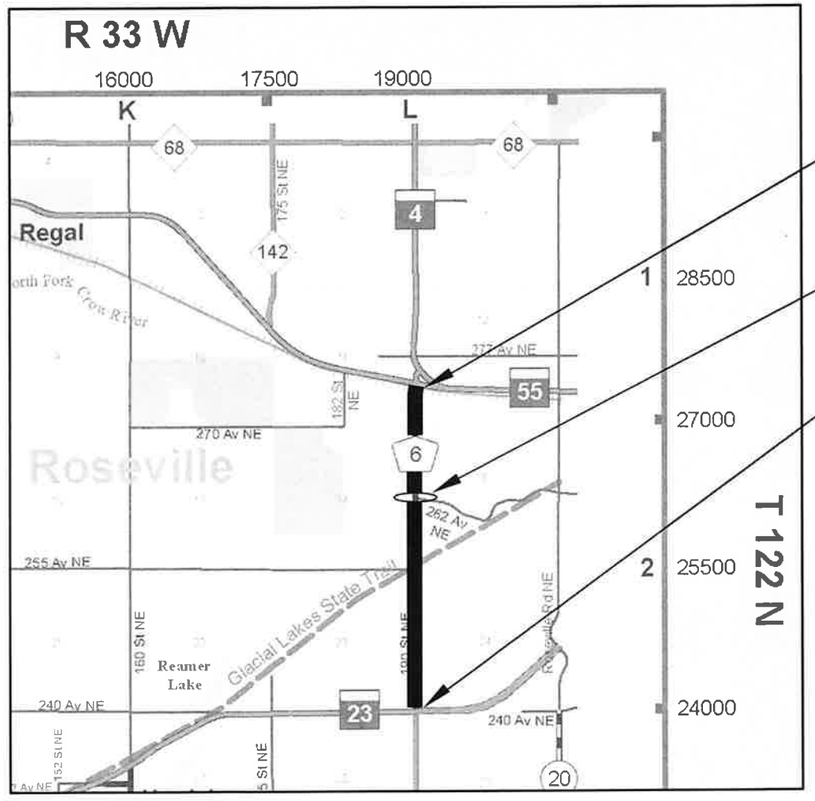
TYPICAL "A"
STA. 0+00 TO STA. 121+62



CONSTRUCTION PLAN FOR FULL DEPTH RECLAMATION, BITUMINOUS SURFACING, AGGREGATE SHOULDERING AND ADA IMPROVEMENTS

LOCATED ON CSAH 6 FROM TH 23 TO TH 55 (2 MILES EAST OF HAWICK) (GEOGRAPHIC DESCRIPTION)

FROM 17.00' N OF SE. COR. SEC. 23 T122N, R33W ROSEVILLE TWP. TO 1627.00' N OF NE COR. SEC. 14, T122N, R33W, ROSEVILLE TWP. (LEGAL DESCRIPTION)



END PROJ. SAP 034-606-006
STA. 121+62

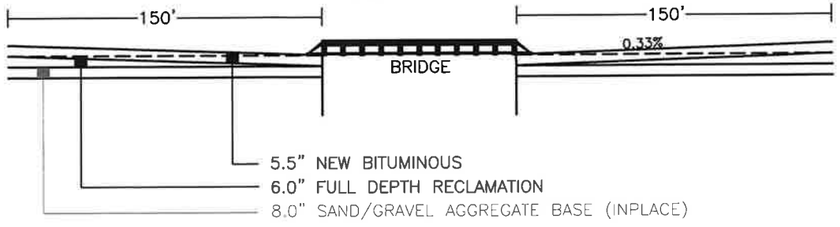
BR 34510 (POSTED 32-40-40)
STA. 76+75 TO STA. 77+55 EXCEPTION

BEG. PROJ. SAP 034-606-006
STA. 0+00

ADA PEDESTRIAN RAMPS		
STATION	LOCATION	QUANTITY
51+40	LT	1
51+45	RT	1
TOTAL		2

GROSS LENGTH 12162.00 FT 2.303 MILES
BRIDGE LENGTH 80.00 FT 0.015 MILES
EXCEPTIONS LENGTH 80.00 FT 0.015 MILES
NET LENGTH 12082.00 FT 2.288 MILES

BRIDGE SHAPING TYPICAL
NOT TO SCALE



RURAL DESIGN DESIGNATION

≤N20 110,000 R Value 30
Pres. ADT 330 (2025) Proj. ADT 320 (2045)
Proj. HCADT 29 (2045) Shoulder Width 2.0'
10 TON Design
Graded In 1963 Under SAP 34-606-03
Surfaced In 2010 Under SAP 34-606-05
Functional Classification MINOR COLLECTOR
No. Of Traffic Lanes 2 No. Of Parking Lanes
Design Speed 55 MPH
Based On Stopping Sight Distance
Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY [signature] LIC. NO. 24962 2/26 2026

KANDIYOHI COUNTY, MINN. SAP 034-606-006 Sheet No. 11 of 62 Sheets

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	170
	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	175
(1)	2123.510	MOTOR GRADER	HR	46
(1)	2123.510	PNEUMATIC TIRED ROLLER	HR	50
(1)	2130.523	WATER	M-GAL	400
(2)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	7080
(3)	2357.606	BITUMINOUS MATERIAL FOR SHOULDER TACK	GAL	2015
(4)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,C)	TON	18510
	2563.601	TRAFFIC CONTROL	LS	1
(5)	2574.508	FERTILIZER TYPE 3	LB	70
(5)	2574.609	COMMON TOPSOIL BORROW	TON	125
(5)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	450
(5)	2575.608	SEED SOUTHERN BOULEVARD	LB	44
(6)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(7)	2582.503	4" BROKEN LINE PAINT	LIN FT	3750
(7)	2582.503	4" SOLID LINE PAINT	LIN FT	3150
(7)	2582.503	6" SOLID LINE PAINT	LIN FT	37100

(1) PROVIDED FOR SHAPING IN PLACE AGGREGATE BASE, CLASS 5 PRIOR TO PAVING.

(2) 1680 TON PROVIDED FOR INTERSECTIONS AND ENTRANCES.

(3) PROVIDED FOR TACKING THE SHOULDER BASE AGGREGATE, CLASS 1 SLOPE 3' WIDE.

(4) 835 TONS PROVIDED FOR ENTRANCES, SIDE ROADS AND MAILBOX TURNOUTS.

(5) PROVIDED FOR PAVED ENTRANCES ONLY.

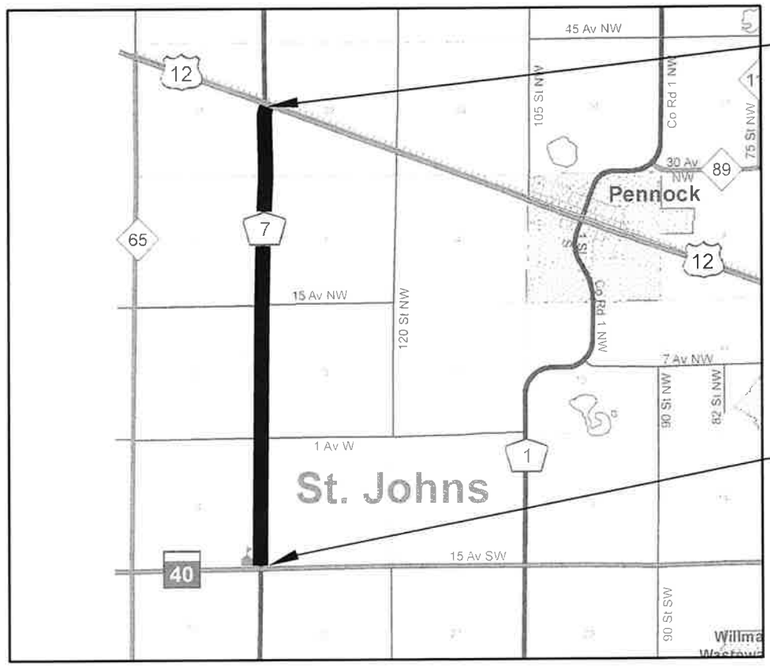
(6) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.

(7) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW) AND 6" SOLID LINE (WHITE).

CONSTRUCTION PLAN FOR BITUMINOUS SURFACING AND AGGREGATE SHOULDERING

LOCATED ON CSAH 7 FROM TH 40 TO TH 12 (2.5 MI. W. OF PENNOCK) (GEOGRAPHIC DESCRIPTION)

FROM 24.54' N. & 0.16' E. OF THE NW COR. 20 T119N, R36W - ST JOHNS TWP. TO 163.80' N & 16.18' E OF THE W ¼ COR. SEC. 32 T120N, R36W - MAMRE TWP. (LEGAL DESCRIPTION)

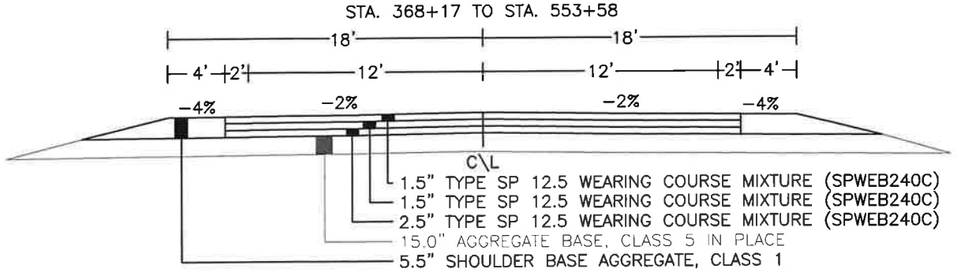


END PROJ. SAP 034-607-029
STA. 553+58

BEG. PROJ. SAP 034-607-029
STA. 368+17

TYPICAL "A"

STA. 368+17 TO STA. 553+58



RURAL DESIGN DESIGNATION

≤N20 454,000 R Value 16

Pres. ADT 520 (2025) Proj. ADT 780 (2045)

Proj. HCADT 140 (2044) Shoulder Width 6

10 TON Design

Graded In 2024 Under SAP 034-607-026

Functional Classification MAJOR COLLECTOR

No. Of Traffic Lanes 2 No. Of Parking Lanes

Design Speed 55 MPH

Based On Stopping Sight Distance

Height Of Eye 3.5' Height Of Object 2.0'

GROSS LENGTH 18541.00 FT 3.511 MILES
BRIDGE LENGTH FT MILES
EXCEPTIONS LENGTH FT MILES
NET LENGTH 18541.00 FT 3.511 MILES

CERTIFIED BY [signature] LIC. NO. 24962 2/26 2025

KANDIYOHI COUNTY, MINN. SAP 034-607-029 Sheet No. 12 of 62 Sheets

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	180
(7)	2112.604	SUBGRADE PREPARATION	SQ YD	1500
(1)	2123.510	MOTOR GRADER	HR	40
(1)	2123.610	SKID LOADER	HR	30
(8)	2130.523	WATER	M-GAL	20
	2215.504	FULL DEPTH RECLAMATION	SQ YD	63937
(2)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	3255
	2232.602	MILLED RUMBLE STRIPS	EACH	1
(3)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,C)	TON	13773
	2563.601	TRAFFIC CONTROL	LS	1
(4)	2574.508	FERTILIZER TYPE 3	LB	8
(4)	2574.609	COMMON TOPSOIL BORROW	TON	15
(4)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	90
(4)	2575.608	SEED SOUTHERN BOULEVARD	LB	5
(5)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(6)	2582.503	4" BROKEN LINE PAINT	LIN FT	2651
(6)	2582.503	4" SOLID LINE PAINT	LIN FT	1260
(6)	2582.503	6" SOLID LINE PAINT	LIN FT	27680
(6)	2582.503	24" SOLID LINE PAINT	LIN FT	40
(6)	2582.518	PAVEMENT MESSAGE MULTI-COMPONENT	SQ FT	120

(1) EQUIPMENT HOURS USED TO SHAPE MISCELLANEOUS.

(2) 355 TONS PROVIDED FOR INTERSECTIONS AND ENTRANCES.

(3) 1273 TONS PROVIDED FOR TURN LANE, INTERSECTIONS AND ENTRANCE.

(4) PROVIDED FOR PAVED ENTRANCES ONLY.

(5) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.

(6) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW), 6" SOLID LINE (WHITE), 24" SOLID LINE AND PAVEMENT MESSAGE MULTI-COMPONENT, (STOP AHEAD) PAVEMENT MESSAGE.

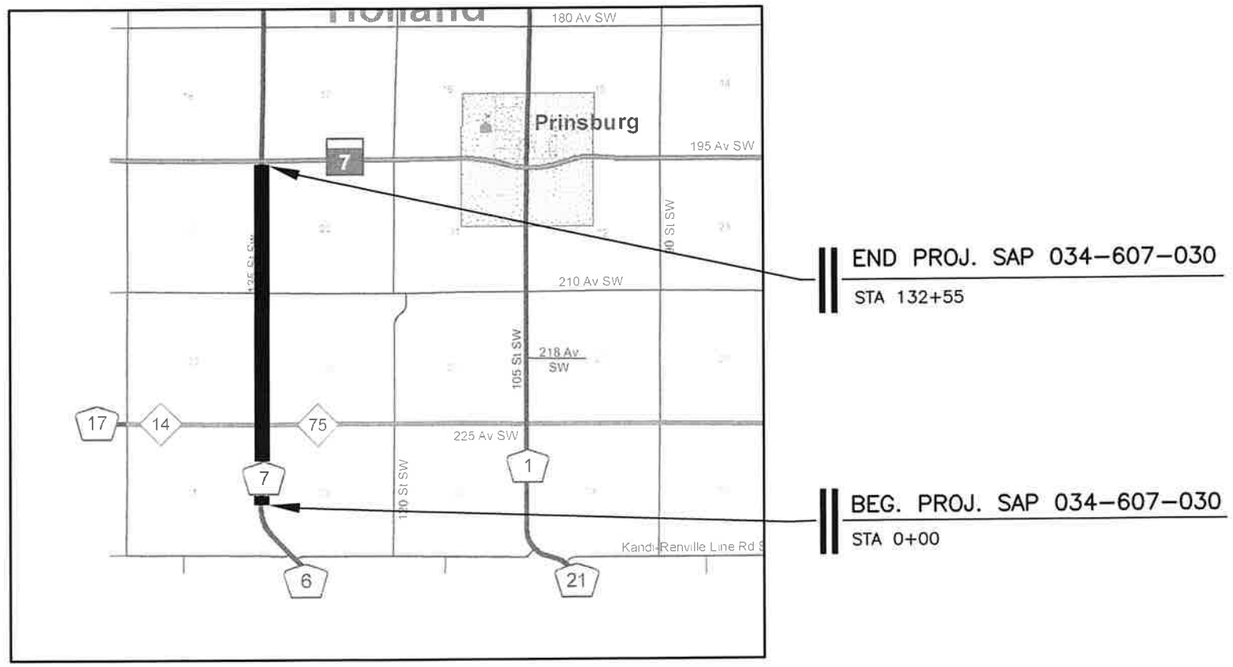
(7) SUBGRADE PREPARATION TO BE USED AT THE DISCRETION OF THE ENGINEER IN THE EVENT THAT UNSTABLE AREAS ARE UNCOVERED. THE LOCATIONS, LENGTHS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD. COMPACTION SHALL BE IN ACCORDANCE WITH MNDOT SPEC 2211.3D.2b, QUALITY COMPACTION METHOD.

(8) THIS WORK SHALL CONSIST OF FURNISHING AND APPLYING WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.

CONSTRUCTION PLAN FOR FULL DEPTH RECLAMATION, BITUMINOUS SURFACING AND AGGREGATE SHOULDERING

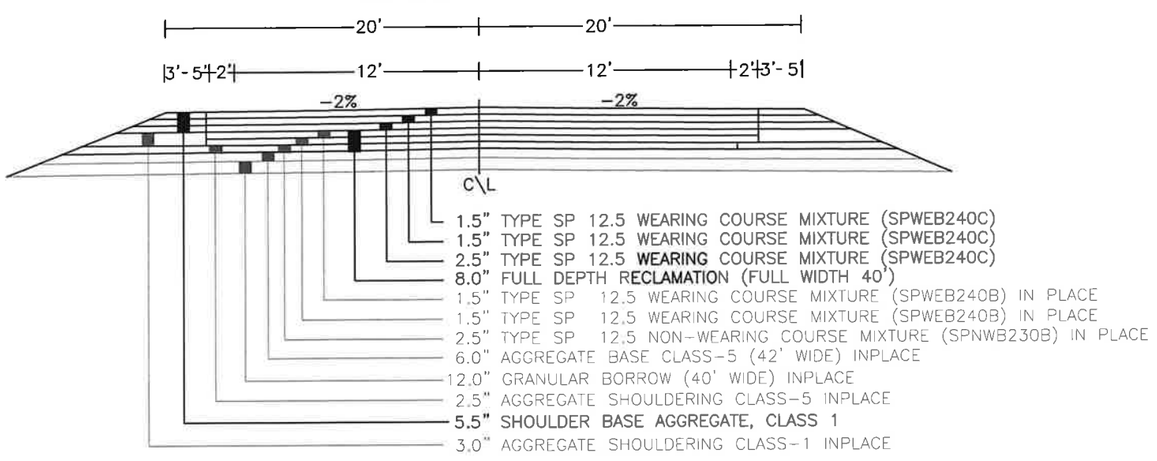
LOCATED ON CSAH 7 FROM 0.53 MI. S. OF CR 14 TO T.H. 7 (2.0 MI. W. OF PRINSBURG) (GEOGRAPHIC DESCRIPTION)

FROM 120.61' S.& 3.89' W. OF THE W. 1/4 COR.SEC. 32 T117N, R36W HOLLAND TWP. TO 21.70' S. & 0.24' W. OF THE N.W. COR. 20 T117N, R36W HOLLAND TWP. (LEGAL DESCRIPTION)



TYPICAL "A"

STA. 0+00 TO STA. 132+55



GROSS LENGTH 13255.00 FT 2.510 MILES
BRIDGE LENGTH FT MILES
EXCEPTIONS LENGTH FT MILES
NET LENGTH 13255.00 FT 2.510 MILES

RURAL DESIGN DESIGNATION

≤N20 535,000 R Value 11

Pres. ADT 840 (2025) Proj. ADT 1150 (2045)

Proj. HCADT 156 (2045) Shoulder Width 5'-7'

10 TON Design

Graded In 1955 2008 Under SAP 34-503-07 SAP 34-607-14

Surfaced In 2008 Under SAP 34-607-14

Functional Classification MAJOR COLLECTOR

No. Of Traffic Lanes 2 No. Of Parking Lanes

Design Speed 55 MPH

Based On Stopping Sight Distance

Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY [signature] LIC. NO. 24962 2/26 2025

KANDIYOHI COUNTY, MINN. SAP 034-607-030 Sheet No. 13 of 62 Sheets

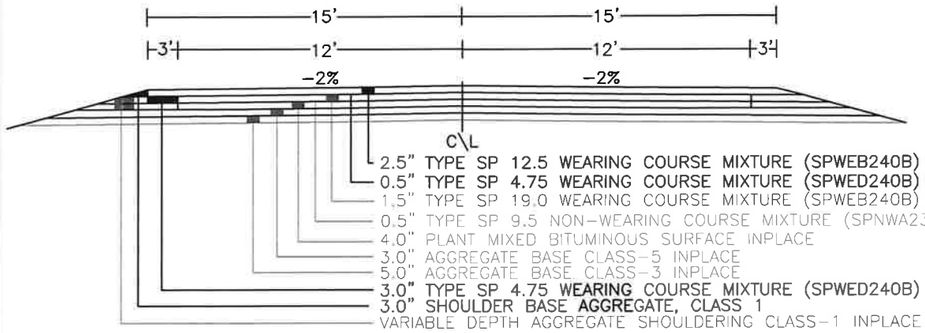
ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
(1)	2123.510	MOTOR GRADER	HR	30
(2)	2123.610	SKID LOADER	HR	20
(3)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	708
(4)	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	300
(5)	2232.504	MILL BITUMINOUS SURFACE (2.5")	SQ YD	515
(6)	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	2751
(7)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	6927
	2563.601	TRAFFIC CONTROL	LS	1
(8)	2574.508	FERTILIZER TYPE 3	LB	15
(8)	2574.609	COMMON TOPSOIL BORROW	TON	30
(8)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	255
(8)	2575.608	SEED SOUTHERN BOULEVARD	LB	10
(9)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(10)	2582.503	4" BROKEN LINE PAINT	LIN FT	2474
(10)	2582.503	4" SOLID LINE PAINT	LIN FT	3170
(10)	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	1565
(10)	2582.503	6" SOLID LINE PAINT	LIN FT	28250

(1) EQUIPMENT HOURS USED FOR NOTCHING THE 3' X 3" AREA STATIONS 0+00 TO 141+00.
(2) EQUIPMENT HOURS USED TO SHAPE MISCELLANEOUS.
(3) 165 TON PROVIDED FOR INTERSECTION AND ENTRANCES.
(4) QUANTITY IS FOR PATCHING PRIOR TO PAVING OPERATIONS. THE LOCATIONS, LENGTHS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD. (FABRIC INCLUDED IN BID PRICE)
(5) PROVIDED FOR MILLING INTERSECTION, MILLING JOINTS AND BRIDGE.
(6) PROVIDED FOR PAVER LEVELING AND FILLING 3' X 3" NOTCHED AREA STATIONS 0+00 TO 141+00.
(7) 465 TON PROVIDED FOR INTERSECTION AND ENTRANCES.
(8) PROVIDED FOR PAVED ENTRANCES ONLY.
(9) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.
(10) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW) AND 6" SOLID LINE (WHITE).

TYPICAL "A"

STA. 0+00 TO STA. 141+00

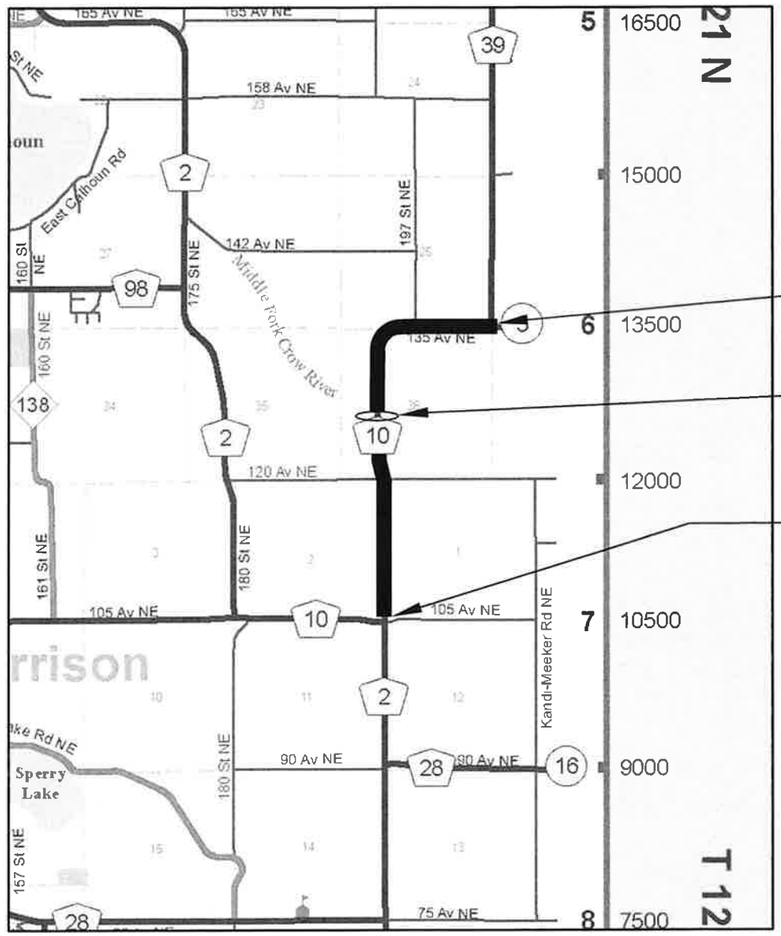


GROSS LENGTH 14100.00 FT 2.670 MILES
BRIDGE LENGTH 65.00 FT 0.012 MILES
EXCEPTIONS LENGTH 65.00 FT 0.012 MILES
NET LENGTH 14035.00 FT 2.658 MILES

CONSTRUCTION PLAN FOR BITUMINOUS MILLING, BITUMINOUS SURFACING AND AGGREGATE SHOULDERING

LOCATED ON CSAH 10 FROM CSAH 2 TO CSAH 39 6.0 MILES NORTH OF ATWATER (GEOGRAPHIC DESCRIPTION)

FROM 0' N. & 1.57 E. OF THE NW. COR. SEC. 12 T120N, R33W HARRISON TWP. TO NE. COR. OF SEC. 36 T121N, R33W IRVING TWP. (LEGAL DESCRIPTION)



END PROJ. SAP 034-610-022
STA 141+00

BR. 34516 (POSTED 36-40-40)
STA 72+50 TO 73+15 EXCEPTION

BEG. PROJ. SAP 034-610-022
STA 0+00

RURAL DESIGN DESIGNATION

≤N20 276,000 R Value 13
Pres. ADT 750 (2025) Proj. ADT 990 (2045)
Proj. HCADT 89 (2045) Shoulder Width 3'
10 TON Design
Graded In 1967 Under SAP 34-610-04
Surfaced In 2003 Under CP-10-03A
Functional Classification MAJOR COLLECTOR
No. Of Traffic Lanes 2 No. Of Parking Lanes
Design Speed 55 MPH
Based On Stopping Sight Distance
Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY [signature] LIC. NO. 24962 2/26 2025

KANDIYOHI COUNTY, MINN. SAP 034-610-022 Sheet No. 14 of 62 Sheets

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
(1)	2104.503	REMOVE CONCRETE CURB	LIN FT	345
	2104.503	SAW BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	85
	2104.503	SAW BITUMINOUS WALK (FULL DEPTH)	LIN FT	104
	2104.503	SAW CONCRETE WALK (FULL DEPTH)	LIN FT	15
	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	257
	2104.518	REMOVE BITUMINOUS WALK	SQ FT	1300
	2104.518	REMOVE CONCRETE WALK	SQ FT	350
	2104.618	REMOVE AND REPLACE BITUMINOUS PAVEMENT	SQ FT	2070
(5)	2123.610	SKID LOADER	HR	40
(3)	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	890
	2232.504	MILL BITUMINOUS SURFACE (0" TO 2.0")	SQ YD	8198
	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	2826
(6)	2232.504	MILL BITUMINOUS SURFACE (3.0")	SQ YD	2895
	2232.504	MILL BITUMINOUS SURFACE (3.5")	SQ YD	28155
	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (3,B)	TON	1773
(7)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (3,B)	TON	8582
(4)	2504.602	ADJUST VALVE BOX	EACH	4
(4)	2506.502	ADJUST FRAME AND RING CASTING	EACH	21
(2)	2521.618	CONCRETE WALK	SQ FT	1914
	2531.503	CONCRETE CURB AND GUTTER	LIN FT	345
	2531.618	TRUNCATED DOMES	SQ FT	296
	2563.601	TRAFFIC CONTROL	LS	1
	2573.502	STORM DRAIN INLET PROTECTION	EACH	23
	2575.602	SITE RESTORATION	EACH	18
	2580.501	INTERIM PAVEMENT MARKING	LS	1
	2582.503	4" BROKEN LINE PAINT	LIN FT	1126
	2582.503	4" SOLID LINE PAINT	LIN FT	10285
	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	6466
	2582.503	6" SOLID LINE PAINT	LIN FT	21477
	2582.518	CROSSWALK MULTI-COMPONENT	SQ FT	486
	2582.518	PAVEMENT MESSAGE MULTI-COMPONENT	SQ FT	450

(1) SAWCUT CURB AND GUTTER SHALL BE INCLUDED IN THE BID PRICE FOR 2104.503 REMOVE CONCRETE CURB.

(2) PEDESTRIAN CURB RAMPS SHALL CONSTRUCTED IN ACCORDANCE WITH MNDOT STANDARD PLAN 5-297.250.

(3) QUANTITIES FOR PATCHING PRIOR TO PAVING OPERATIONS. LOCATION, LENGTHS AND WIDTHS TO BE DETERMINED BY THE ENGINEER.

(4) NO STEEL ADJUSTING INSERTS ALLOWED. FULL FRAME AND RING CASTING ADJUSTMENT REQUIRED.

(5) EQUIPMENT HOURS USED TO FOR MISCELLANEOUS WORK.

(6) QUANTITY FOR MILLING (3.0") FROM STA. 12+00 LT TO 26+40 LT NORTH 18' PRIOR TO PAVING OPERATIONS.

(7) 485 TONS PROVIDED FOR (3.0") PATCH FROM 12+00 LT TO 26+40 LT NORTH 18'. DONE IN 2 (1.5") LIFTS PRIOR TO MAIN LINE PAVING OPERATIONS.

GROSS LENGTH 11179.00 FT 2.117 MILES
BRIDGE LENGTH ..... FT ..... MILES
EXCEPTIONS LENGTH ..... FT ..... MILES
NET LENGTH 11179.00 FT 2.117 MILES

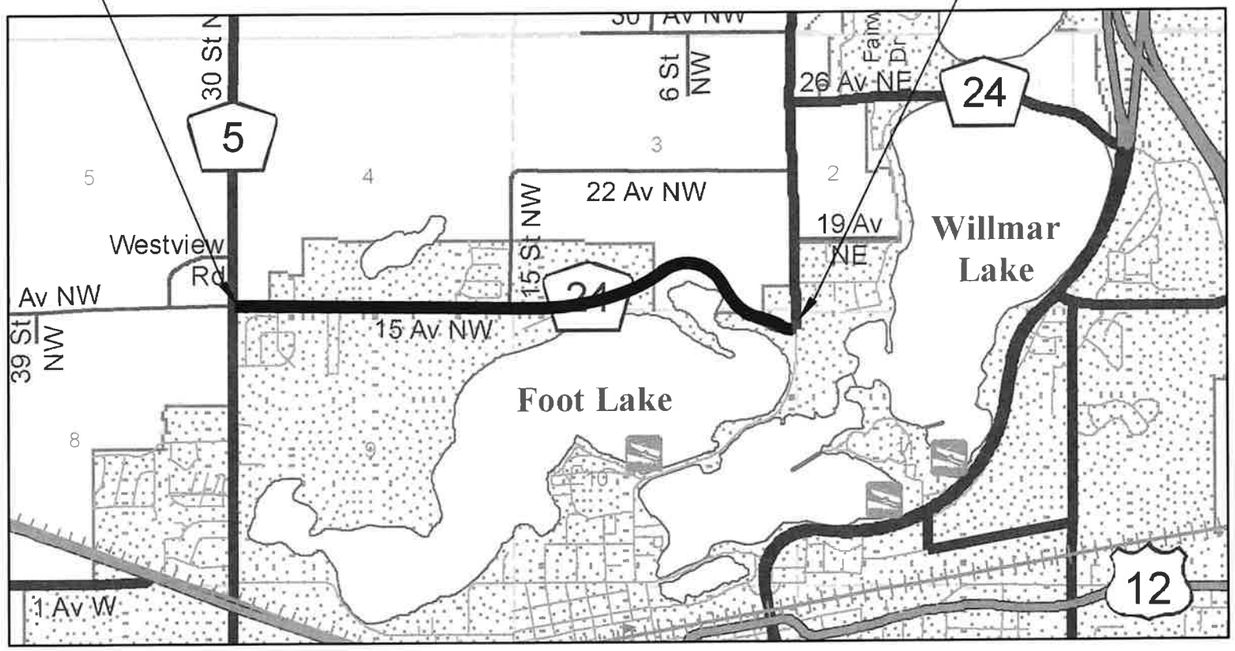
CONSTRUCTION PLAN FOR BITUMINOUS MILLING, BITUMINOUS OVERLAY AND ADA IMPROVEMENTS

LOCATED ON CSAH 24 FROM CSAH 5 TO CSAH 41 (WILLMAR) (GEOGRAPHIC DESCRIPTION)

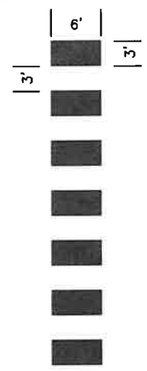
FROM 23.78' E & 6.23' N. OF THE NW. COR. OF SEC. 9 T119N, R35W - WILLMAR TWP. TO 97.13' W & 384.98' S. OF THE NW. COR. OF SEC. 11 T119N, R35W. - WILLMAR TWP. (LEGAL DESCRIPTION)

BEG. PROJ. SAP 034-624-013
STA. 0+31

END PROJ. SAP 034-624-013
STA. 112+10.00



TYPICAL CROSSWALK
STA 28+93, 31+99 AND 34+24



RURAL DESIGN DESIGNATION

≤N20 1,231,000 R Value 17

Pres. ADT 3230 Proj. ADT 3553

Proj. HCADT 332 Shoulder Width 8'-10'

10 TON Design

Graded In 1962 Under 34-624-01

Functional Classification MAJOR COLLECTOR

No. Of Traffic Lanes 2-4 No. Of Parking Lanes .....

Design Speed 45 MPH

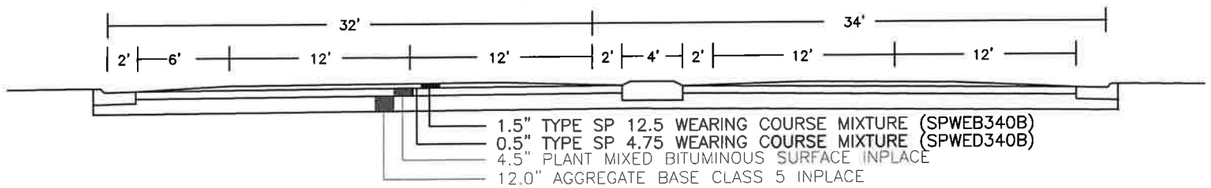
Based On Stopping Sight Distance

Height Of Eye 3.5' Height Of Object 2.0'

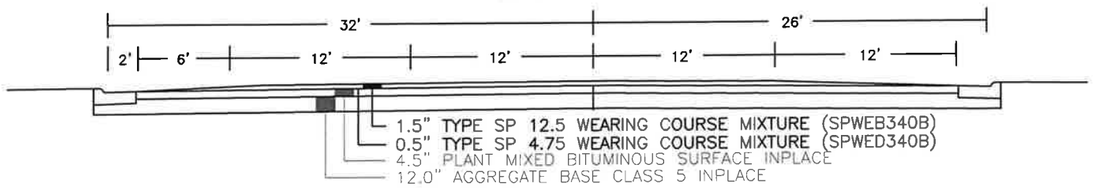
CERTIFIED BY ..... REG. No. 24962 2/26/2025

KANDIYOHI COUNTY, MN SAP 034-624-013

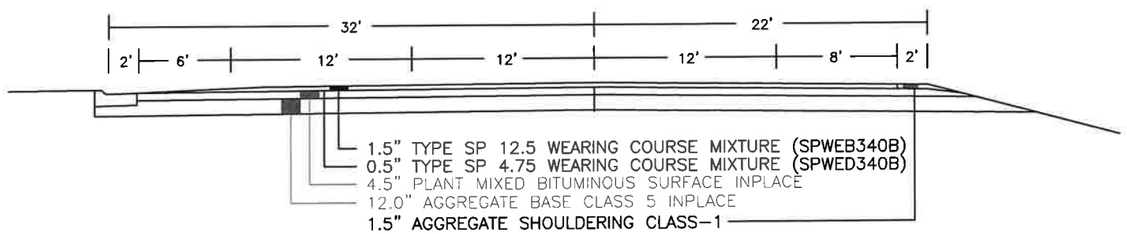
TYPICAL PAVEMENT SECTION
STA 0+31 TO 3+07



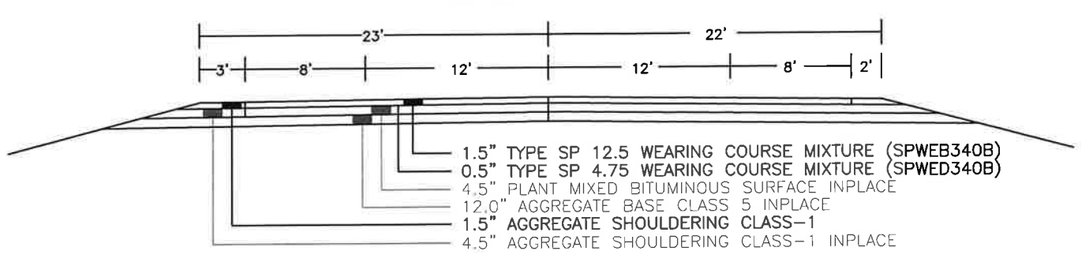
TYPICAL PAVEMENT SECTION
STA 3+07 TO 40+00



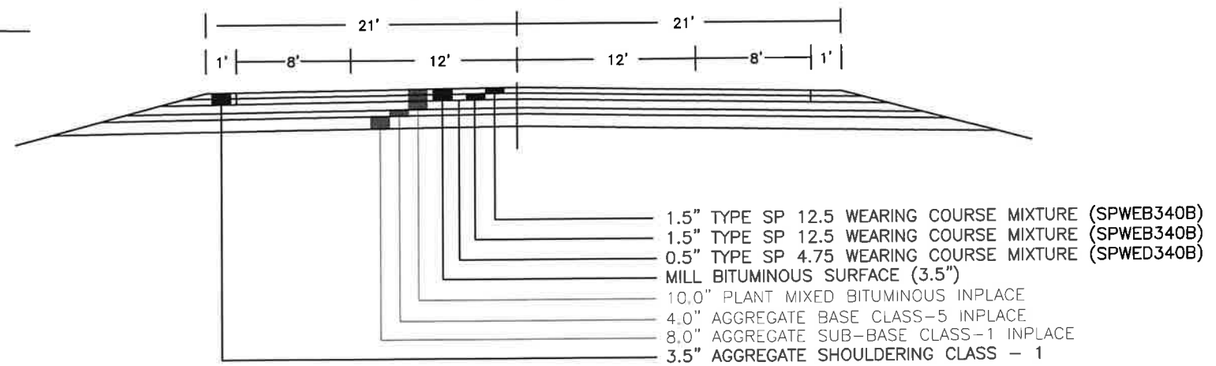
TYPICAL PAVEMENT SECTION
STA 40+00 TO 42+46



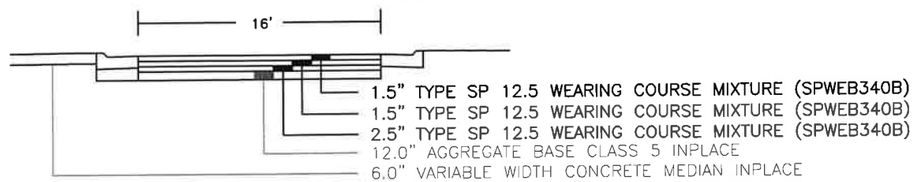
TYPICAL PAVEMENT SECTION
STA 42+46 TO 48+75



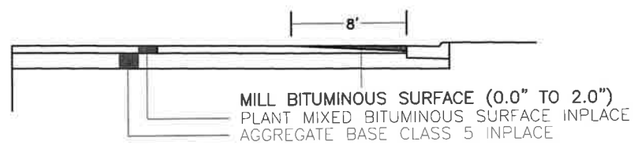
TYPICAL PAVEMENT SECTION
STA 48+75 TO 112+10



TYPICAL FREE RIGHT SECTION



TYPICAL EDGE MILL



CERTIFIED BY E. Kevin Oleson REG. No. 24962 2/25/20 25

TYPICAL SECTIONS

KANDIYOHI COUNTY, MN SAP 034-624-013

MILL BITUMINOUS SURFACE (0.0" TO 2.0")

LINE NO.	STATION	LOCATION	SQ YDS	LINE NO.
1	0+31 – 39+98	RT CURB LINE	3527	1
2	0+33 – 3+15	CENTERLINE MEDIAN	514	2
3	0+62 – 42+16	LT CURB LINE	3707	3
4	42+68 – 45+13	CENTERLINE MEDIAN	450	4
	TOTAL		8198	

MILL BITUMINOUS SURFACE (3.0")

LINE NO.	STATION	LOCATION	TOTAL	LINE NO.
1	12+00 – 26+40	12' LT – 30' LT	2895	1
	TOTAL		2895	

MILL BITUMINOUS SURFACE (3.5")

LINE NO.	STATION	LOCATION	TOTAL	LINE NO.
1	48+75 – 112+10	20' LT – 20' RT	28155	1
	TOTAL		28155	

MILL BITUMINOUS SURFACE (1.5")

LINE NO.	STATION	LOCATION	AREA	SQ YDS	LINE NO.
1	8+56	RT	20' RT TO 50' RT	177	1
2	11+58	LT	20' LT TO 50' LT	200	2
3	11+68	RT	20'RT TO 50' RT	190	3
4	17+97	RT	20' RT TO 50' RT	177	4
5	20+20	RT	20'RT TO 50' RT	147	5
6	26+55	RT	20' RT TO 50' RT	105	6
7	26+62	LT	20' LT TO 50' LT	109	7
8	28+32	RT	20' RT TO 50' RT	124	8
9	30+30	LT	20' LT TO 50' LT	149	9
10	34+46	LT	20' LT TO 50' LT	147	10
11	34+55	RT	20' RT TO 50' RT	164	11
12	39+44	RT	20' RT TO 50' RT	187	12
13	42+27	LT	20' LT TO 50' LT	146	13
14	63+22	RT	20' RT TO 50' RT	52	14
15	64+59	RT	20' RT TO 50' RT	61	15
16	65+80	RT	20' RT TO 50' RT	58	16
17	67+45	RT	20' RT TO 50' RT	47	17
18	68+21	RT	20' RT TO 50' RT	75	18
19	70+28	RT	20' RT TO 50' RT	38	19
20	71+53	RT	20' RT TO 50' RT	54	20
21	72+40	RT	20' RT TO 50' RT	42	21
22	74+17	RT	20' RT TO 50' RT	44	22
23	76+76	RT	20' RT TO 50' RT	36	23
24	104+90	RT	20' RT TO 50' RT	98	24
25	107+26	RT	20' RT TO 50' RT	94	25
26	109+62	RT	20' RT TO 50' RT	105	26
	TOTAL			2826	

CROSSWALK MULTI–COMPONENT

LINE NO.	STATION	SQ FT	LINE NO.
1	28+93	162	1
2	31+99	162	2
3	34+24	162	3
	TOTAL	486	

6" SOLID LINE PAINT(WHITE)

LINE NO.	STATION	LIN FT	LINE NO.
1	0+41 – 8+21	854	1
2	0+41 – 11+30	1089	2
3	8+99 – 11+30	230	3
4	8+99 – 11+30	575	4
5	12+02 – 26+22	1417	5
6	18+42 – 20+02	161	6
7	20+64 – 26+22	559	7
8	26+94 – 28+07	114	8
9	26+94 – 30+53	359	9
10	28+69 – 34+20	553	10
11	31+31 – 34+20	289	11
12	34+84 – 39+15	404	12
13	34+84 – 41+82	697	13
14	39+84 – 112+09	7223	14
15	42+56 – 112+09	6953	15
	TOTAL	21477	

4" DOUBLE SOLID LINE PAINT(YELLOW)

LINE NO.	STATION	LIN FT	LINE NO.
1	407+41 – 112+07	6466	1
	TOTAL	6466	

4" SOLID LINE PAINT

LINE NO.	STATION	LIN FT	LINE NO.
1	0+41 – 1+79	109	1
2	0+41 – 1+55	113	2
3	0+41 – 1+55	162	3
4	0+41 – 5+05	464	4
5	0+41 – 8+21	780	5
6	0+41 – 8+21	780	6
7	7+12 – 8+21	109	7
8	8+99 – 11+29	230	8
9	8+99 – 11+29	230	9
10	8+99 – 11+30	230	10
11	12+02 – 17+76	574	11
12	12+02 – 17+76	574	12
13	16+43 – 17+76	132	13
14	18+42 – 20+02	161	14
15	18+42 – 20+02	161	15
16	18+42 – 20+02	161	16
17	20+64 – 26+22	558	17
18	20+64 – 26+22	558	18
19	24+73 – 26+22	149	19
20	26+94 – 28+07	114	20
21	26+94 – 28+07	114	21
22	26+94 – 28+07	114	22
23	28+69 – 34+20	551	23
24	28+69 – 34+20	551	24
25	32+86 – 34+20	135	25
26	34+84 – 39+15	431	26
27	34+84 – 39+15	431	27
28	38+40 – 39+15	74	28
29	39+84 – 41+82	197	29
30	39+84 – 41+82	197	30
31	42+56 – 44+30	175	31
32	42+56 – 47+41	483	32
33	42+56 – 47+41	483	33
	TOTAL	10285	

PAVEMENT MESSAGE MULTI–COMPONENT

LINE NO.	STATION	LOCATION	ROAD	SQ FT	LINE NO.
1	0+87	C/L	CSAH 24	15	1
2	0+88	LT	CSAH 24	15	2
3	1+33	LT	CSAH 24	15	3
4	4+78	C/L	CSAH 24	15	4
5	7+58	RT	CSAH 24	15	5
6	10+01	C/L	CSAH 24	15	6
7	10+16	C/L	CSAH 24	15	7
8	10+65	RT	CSAH 24	15	8
9	12+63	C/L	CSAH 24	15	9
10	16+76	C/L	CSAH 24	15	10
11	16+76	C/L	CSAH 24	15	11
12	16+99	RT	CSAH 24	15	12
13	19+15	C/L	CSAH 24	15	13
14	19+19	RT	CSAH 24	15	14
15	21+29	C/L	CSAH 24	15	15
16	25+49	C/L	CSAH 24	15	16
17	25+64	C/L	CSAH 24	15	17
18	25+61	RT	CSAH 24	15	18
19	27+56	RT	CSAH 24	15	19
20	29+11	C/L	CSAH 24	15	20
21	29+26	C/L	CSAH 24	15	21
22	33+42	C/L	CSAH 24	15	22
23	33+52	RT	CSAH 24	15	23
24	33+58	C/L	CSAH 24	15	24
25	35+51	C/L	CSAH 24	15	25
26	38+57	C/L	CSAH 24	15	26
27	38+66	RT	CSAH 24	15	27
28	38+73	C/L	CSAH 24	15	28
29	40+77	C/L	CSAH 24	15	29
30	40+92	C/L	CSAH 24	15	30
	TOTAL			450	

4" BROKEN LINE PAINT(YELLOW)

LINE NO.	STATION	LIN FT	LINE NO.
1	8+99 – 11+29	46	1
2	8+99 – 11+29	46	2
3	12+02 – 17+76	115	3
4	12+02 – 17+76	115	4
5	18+42 – 20+02	32	5
6	18+42 – 20+02	32	6
7	20+64 – 26+22	112	7
8	20+64 – 26+22	112	8
9	26+94 – 28+07	23	9
10	26+94 –28+07	23	10
11	28+69 – 34+20	110	11
12	28+69 – 34+20	110	12
13	34+84 – 39+15	86	13
14	34+84 – 39+15	86	14
15	39+84 – 41+82	39	15
16	39+84 – 41+82	39	16
	TOTAL	1126	

CERTIFIED BY E. Nicole Odeen REG. No. 24962 2/25 2025

ITEM TABULATION SHEET 1

KANDIYOHI COUNTY, MN SAP 034–624–013 Sheet No. 17 of 62 Sheets

ADA RAMPS

LINE NO.	STATION	LOCATION	REMOVE AND REPLACE BITUMINOUS	REMOVE BITUMINOUS WALK	REMOVE CONCRETE WALK	CONCRETE CURB AND GUTTER	REMOVE CONCRETE CURB	SAW BITUMINOUS WALK	SAW CONCRETE WALK	CONCRETE WALK	TRUNCATED DOMES	SITE RESTORATION	LINE NO.
			SQ FT	SQ FT	SQ FT	LIN FT	LIN FT	LIN FT	LIN FT	SQ FT	SQ FT	EACH	
1	8+30	RT	80	100		20	20	8		110	16	1	1
2	8+77	RT	80	100		20	20	8		110	16	1	2
3	11+42	RT	80	100		20	20	8		110	16	1	3
4	11+92	RT	80	100		20	20	8		110	16	1	4
5	17+76	RT	80	100		20	20	8		110	16	1	5
6	18+21	RT	80	100		20	20	8		110	16	1	6
7	19+99	RT	80	100		20	20	8		110	16	1	7
8	20+39	RT	80	100		20	20	8		110	16	1	8
9	26+32	RT	80	100		20	20	8		110	16	1	9
10	26+69	RT	80	100		20	20	8		110	16	1	10
11	28+92	LT	60		60	15	15		5	100	12	1	11
12	28+92	RT	60		60	15	15			94	12	1	12
13	31+98	LT	60		55	15	15		5	80	12	1	13
14	31+98	RT	60		55	15	15			80	12	1	14
15	34+20	LT	100		120	25	25		5	120	12	1	15
16	34+34	RT	80	100		20	20	8		120	44	1	16
17	34+73	RT	80	100		20	20	8		110	16	1	17
18	39+22	RT	80	100		20	20	8		110	16	1	18
TOTAL			2070	1300	350	345	345	104	15	1914	296	18	

REMOVE BITUMINOUS PAVEMENT

LINE NO.	STATION	LOCATION	ROAD	SQ YD.	LINE NO.
1	0+41 – 1+49	RT	CSAH 24	257	1
	TOTAL			257	

ADJUST FRAME AND RING CASTING

LINE NO.	STATION	LOCATION	EACH	LINE NO.
1	5+08	RT	1	1
2	8+45	RT	1	2
3	8+51	RT	1	3
4	8+51	RT	1	4
5	11+60	RT	1	5
6	12+17	RT	1	6
7	13+06	RT	1	7
8	17+76	RT	1	8
9	17+95	LT	1	9
10	20+29	RT	1	10
11	22+78	RT	1	11
12	26+45	LT	1	12
13	27+02	RT	1	13
14	30+41	RT	1	14
15	34+01	RT	1	15
16	38+93	RT	1	16
17	41+77	RT	1	17
18	52+64	LT	1	18
19	52+75	LT	1	19
20	77+20	LT	1	20
21	89+30	LT	1	21
	TOTAL		21	

SAW BITUMINOUS PAVEMENT

LINE NO.	STATION	LOCATION	ROAD	LIN FT	LINE NO.
1	0+41	124' RT TO 169' RT	CSAH 24	45	1
2	1+10 TO 1+50	40' RT	CSAH 24	40	2
	TOTAL			85	

ADJUST VALVE BOX

LINE NO.	STATION	LOCATION	EACH	LINE NO.
1	8+72	RT	1	1
2	11+69	RT	1	2
3	11+84	RT	1	3
4	18+07	RT	1	4
	TOTAL		4	

CERTIFIED BY _____ REG. No. 24962 2/24/2025

ITEM TABULATION SHEET 2

KANDIYOHI COUNTY, MN SAP 034-624-013 Sheet No. 18 of 62 Sheets

BOP STA = 0+00.00

0+00

5+00

BEG PROJECT SAP 034-624-013
STA. 0+31.00

10+00

STA 8+30 CONST PED CURB RAMP 39' RT

STA 8+77 CONST PED CURB RAMP 39' RT

STA 11+42 CONST PED CURB RAMP 39' RT

STA 11+92 CONST PED CURB RAMP 39' RT

REMOVE BITUMINOUS PAVEMENT

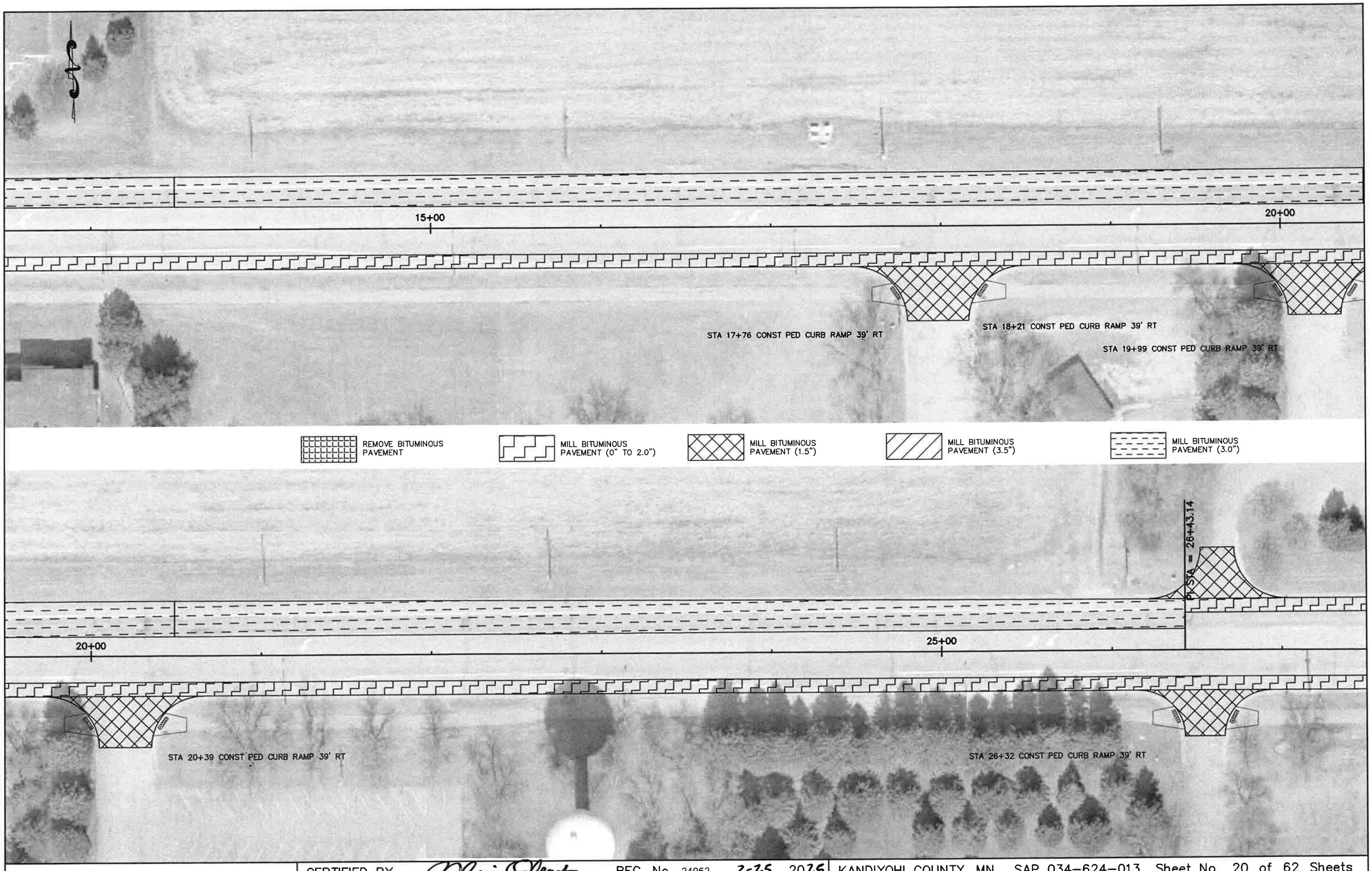
MILL BITUMINOUS PAVEMENT (0" TO 2.0")

MILL BITUMINOUS PAVEMENT (1.5")

MILL BITUMINOUS PAVEMENT (3.5")

MILL BITUMINOUS PAVEMENT (3.0")

CERTIFIED BY E. Nelson Sleat REG. No. 24962 2-25 2025



CERTIFIED BY _____ REG. No. 24962 2-25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 20 of 62 Sheets

STA 28+92 CONST PED CURB RAMP 36' LT

STA 31+98 CONST PED CURB RAMP 38' LT

30+00

STA 26+69 CONST PED CURB RAMP 40' RT

STA 28+92 CONST PED CURB RAMP 28' RT

STA 31+98 CONST PED CURB RAMP 28' RT

REMOVE BITUMINOUS PAVEMENT

MILL BITUMINOUS PAVEMENT (0" TO 2.0")

MILL BITUMINOUS PAVEMENT (1.5")

MILL BITUMINOUS PAVEMENT (3.5")

STA 34+20 CONST PED CURB RAMP 48' LT

35+00

40+00

STA 34+34 CONST PED CURB RAMP 37' RT

STA 34+73 CONST PED CURB RAMP 36' RT

STA 39+22 CONST PED CURB RAMP 38' RT

CERTIFIED BY E. Marie Oleas REG. No. 24962 2/25 2025

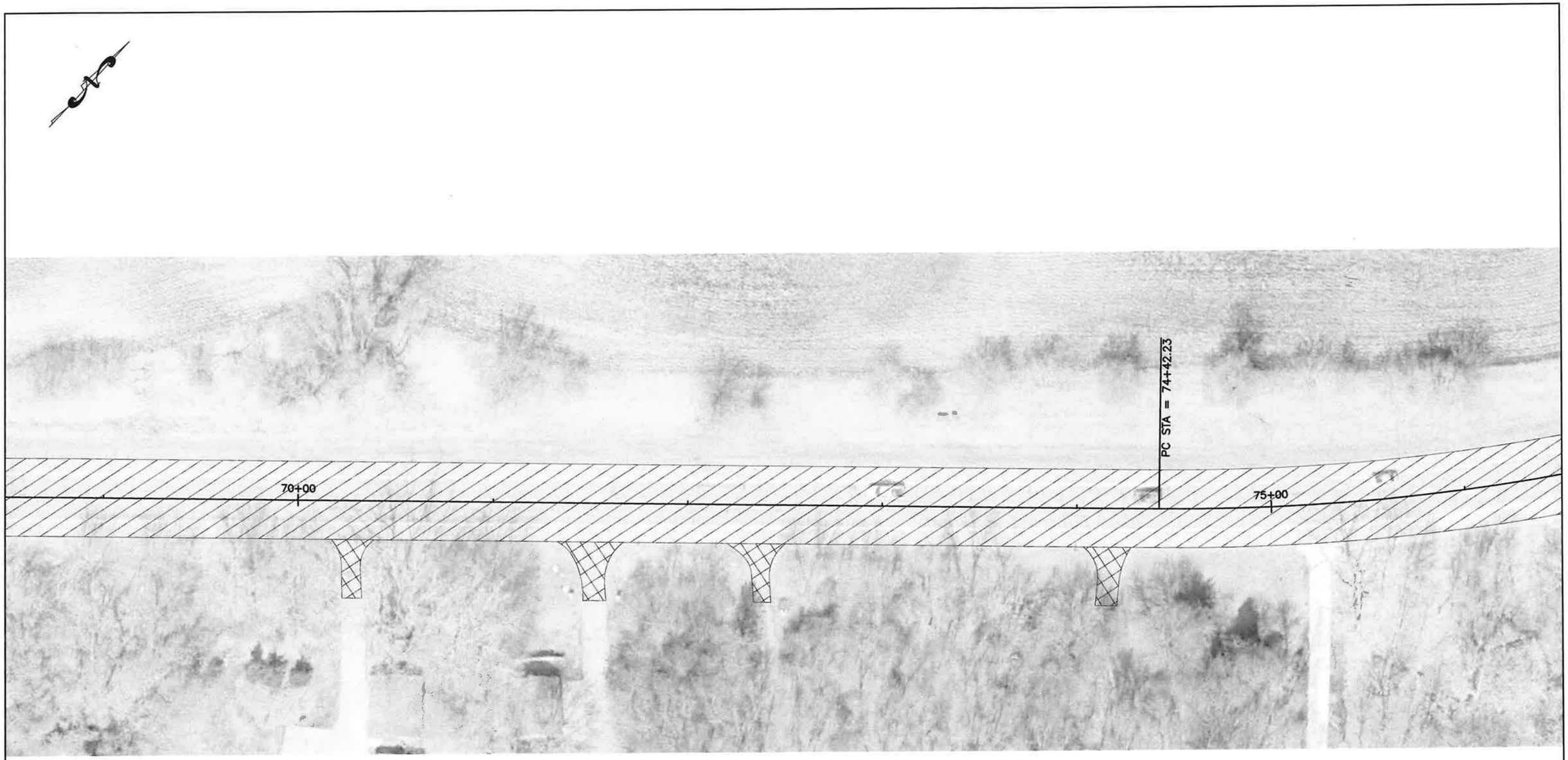
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 21 of 62 Sheets

CERTIFIED BY E. Nelson Olson REG. No. 24962 2/25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 22 of 62 Sheets

CERTIFIED BY E Marie Oleson REG. No. 24962 2/25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 23 of 62 Sheets



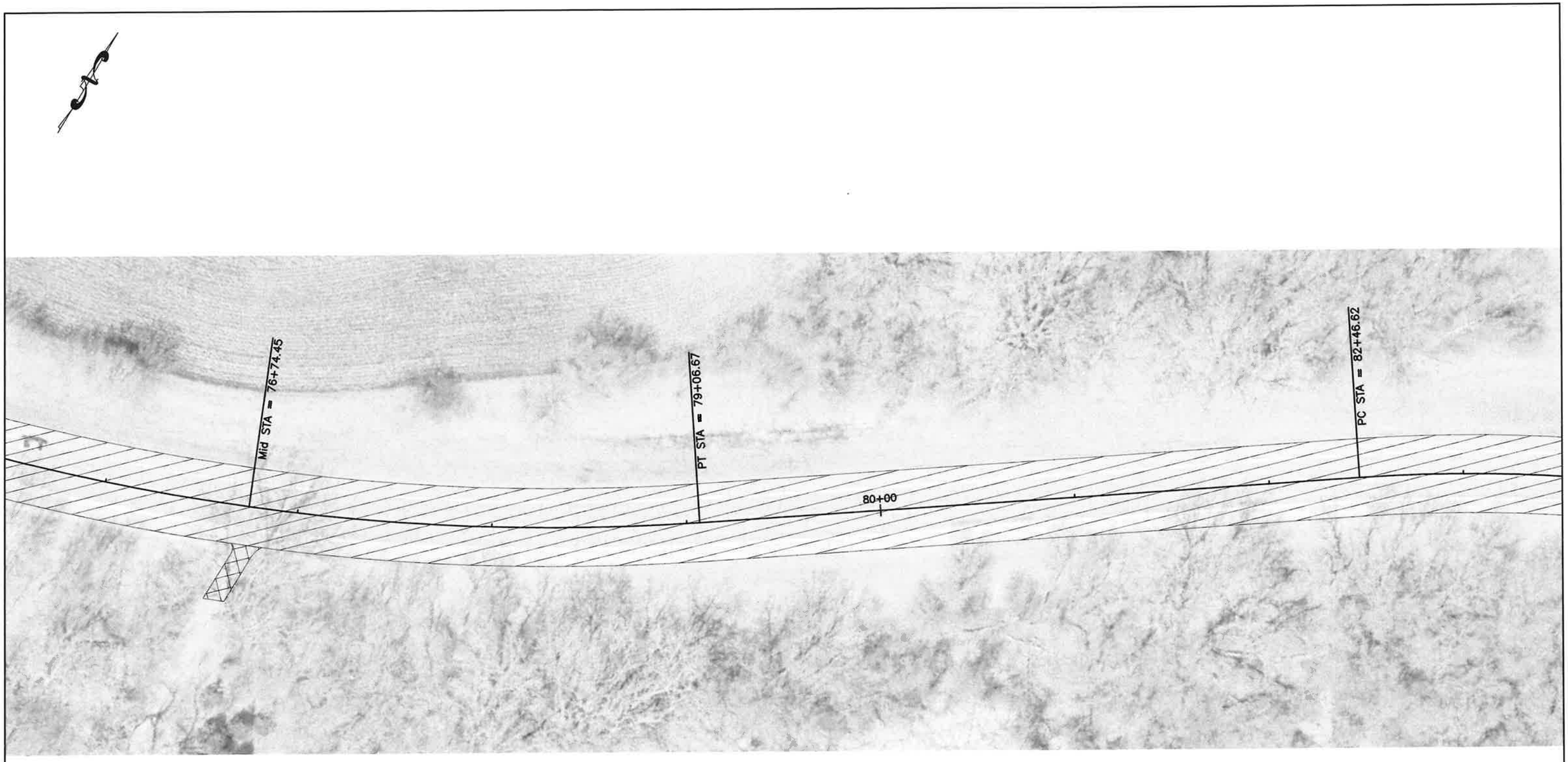
REMOVE BITUMINOUS PAVEMENT

MILL BITUMINOUS PAVEMENT (0" TO 2.0")

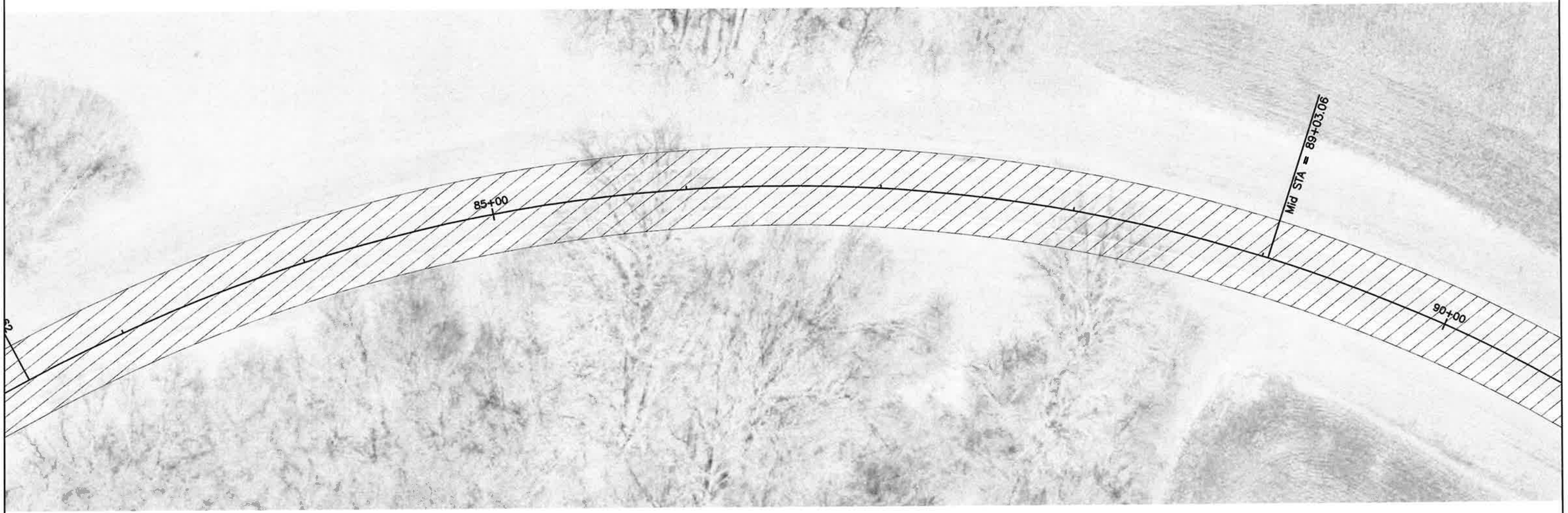
MILL BITUMINOUS PAVEMENT (1.5")

MILL BITUMINOUS PAVEMENT (3.5")

CERTIFIED BY Kevin Odent REG. No. 24962 2/25 2025



CERTIFIED BY ___ REG. No. 24962 2/25 2025 | KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 25 of 62 Sheets



REMOVE BITUMINOUS PAVEMENT

MILL BITUMINOUS PAVEMENT (0" TO 2.0")

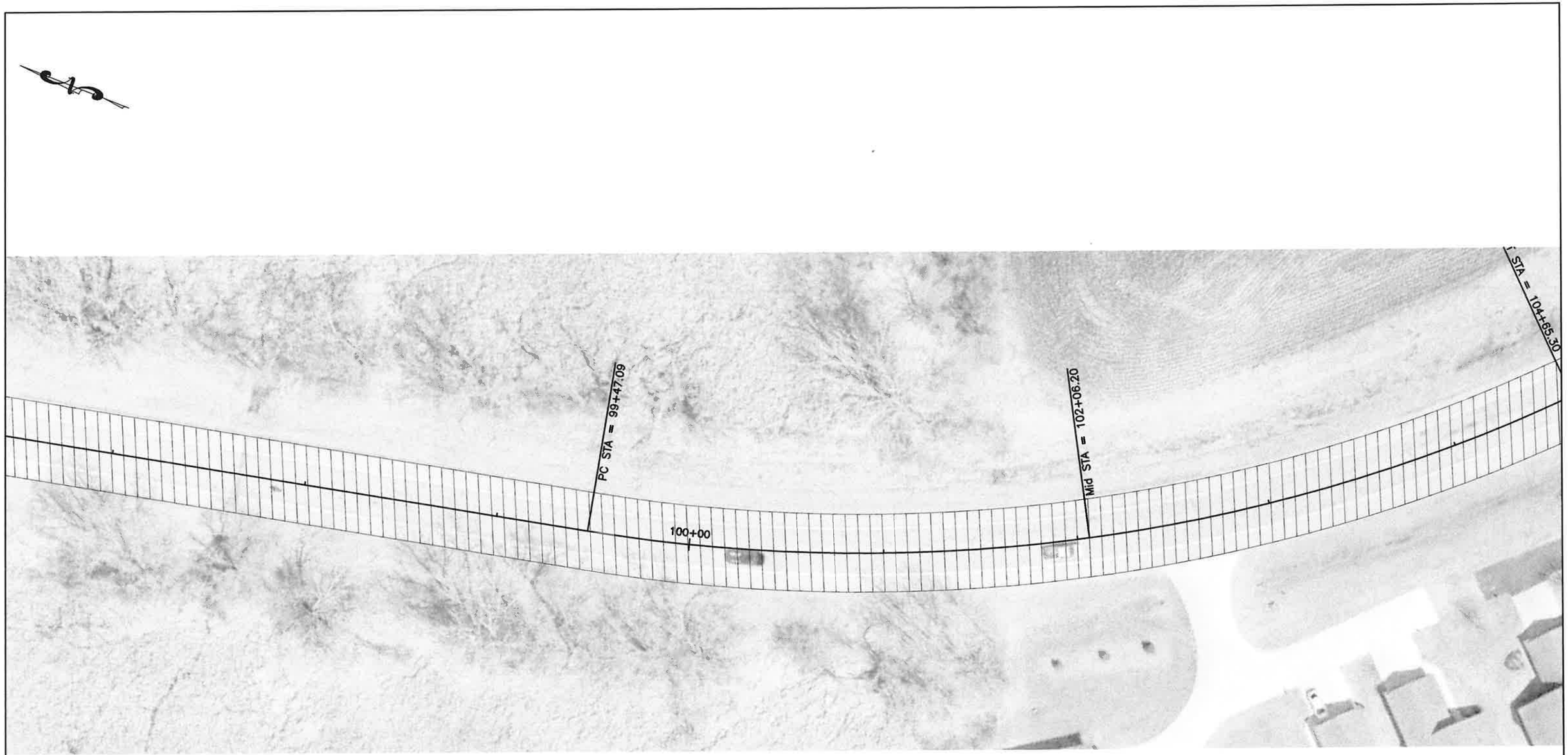
MILL BITUMINOUS PAVEMENT (1.5")

MILL BITUMINOUS PAVEMENT (3.5")

CERTIFIED BY Marvin Olert REG. No. 24962 2/25 2025

CERTIFIED BY E. Nelson Olson REG. No. 24962 2/25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 27 of 62 Sheets



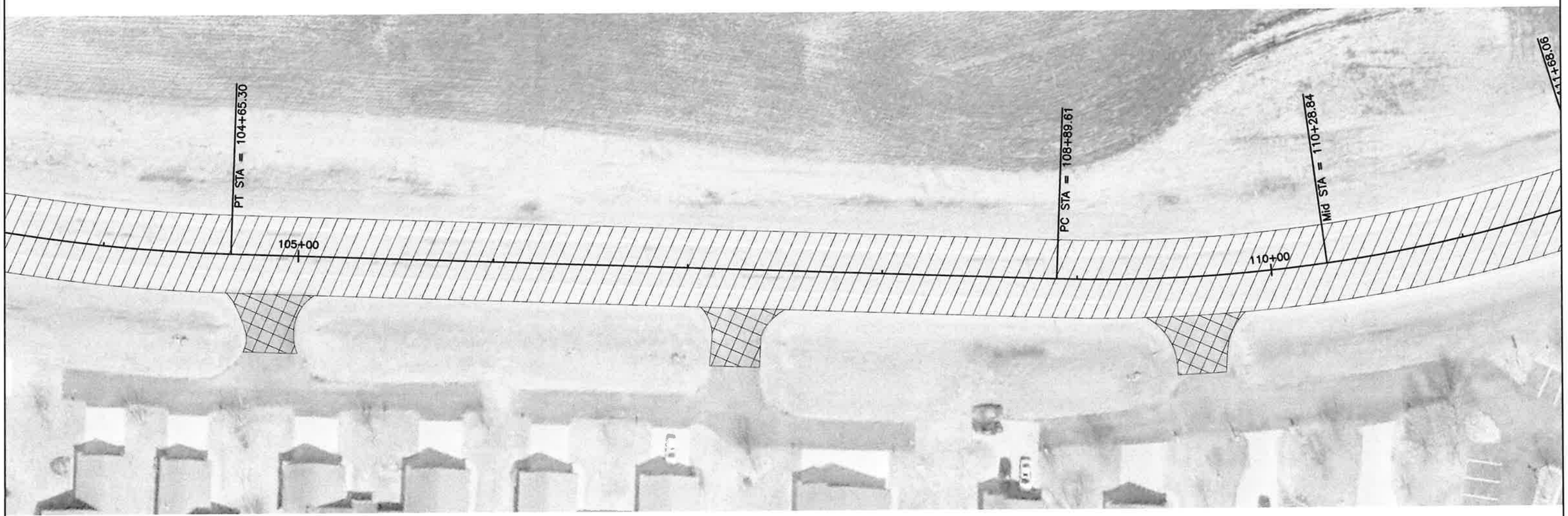
REMOVE BITUMINOUS PAVEMENT

MILL BITUMINOUS PAVEMENT (0" TO 2.0")

MILL BITUMINOUS PAVEMENT (1.5")

MILL BITUMINOUS PAVEMENT (3.5")

CERTIFIED BY Kevin Gleason REG. No. 24962 2/25 2025



REMOVE BITUMINOUS PAVEMENT

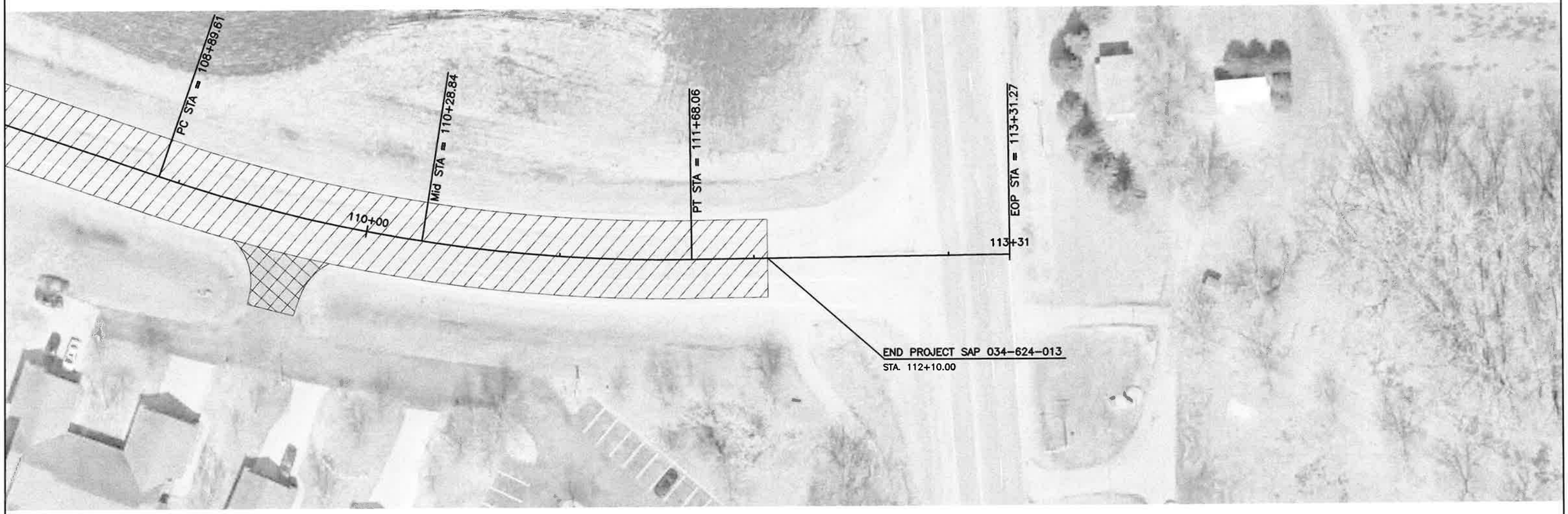
MILL BITUMINOUS PAVEMENT (0" TO 2.0")

MILL BITUMINOUS PAVEMENT (1.5")

MILL BITUMINOUS PAVEMENT (3.5")

CERTIFIED BY _____ REG. No. 24962 2/25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 29 of 62 Sheets



REMOVE BITUMINOUS PAVEMENT

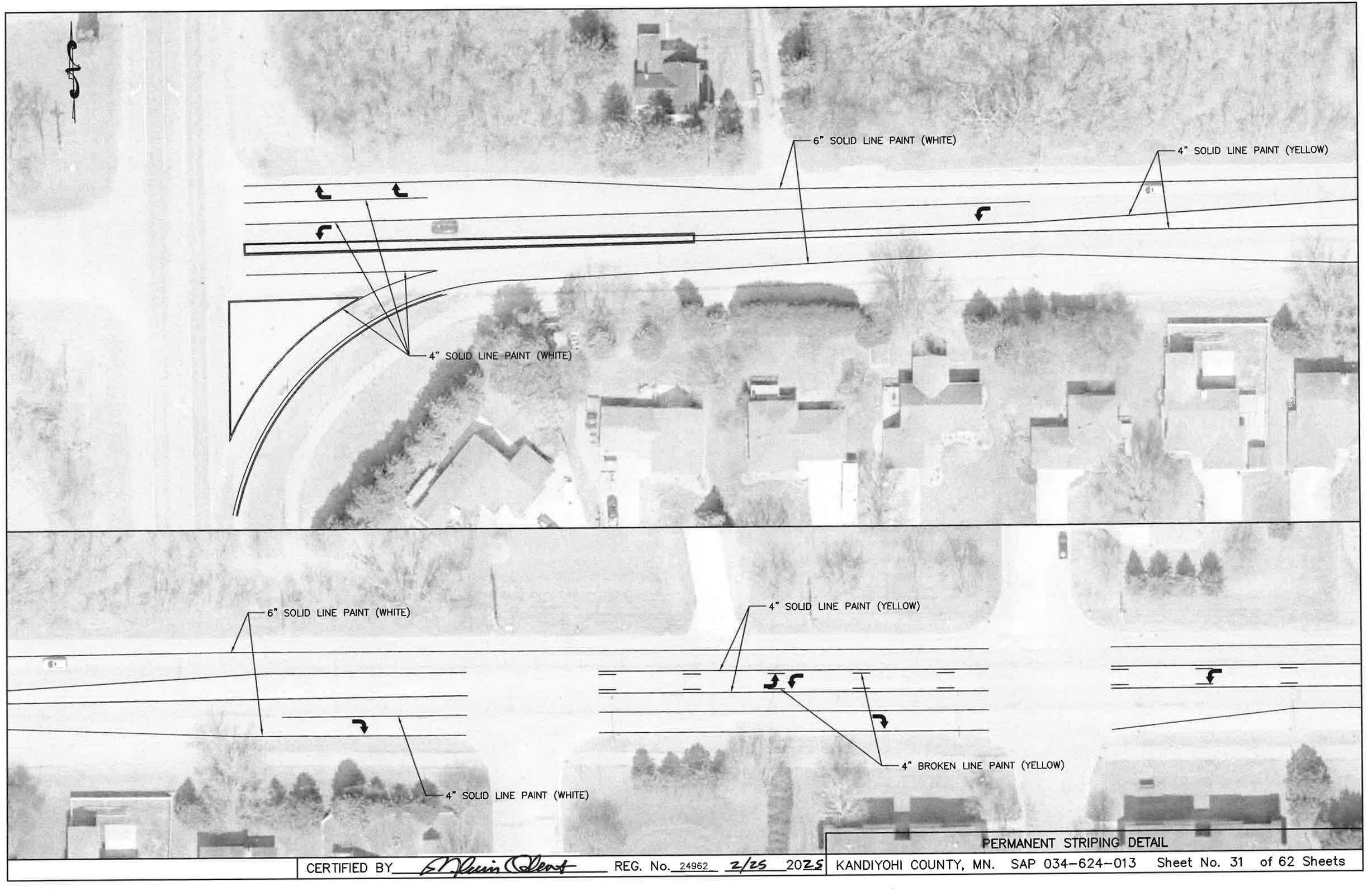
MILL BITUMINOUS PAVEMENT (0" TO 2.0")

MILL BITUMINOUS PAVEMENT (1.5")

MILL BITUMINOUS PAVEMENT (3.5")

CERTIFIED BY Kevin Dent REG. No. 24962 2/25 2025

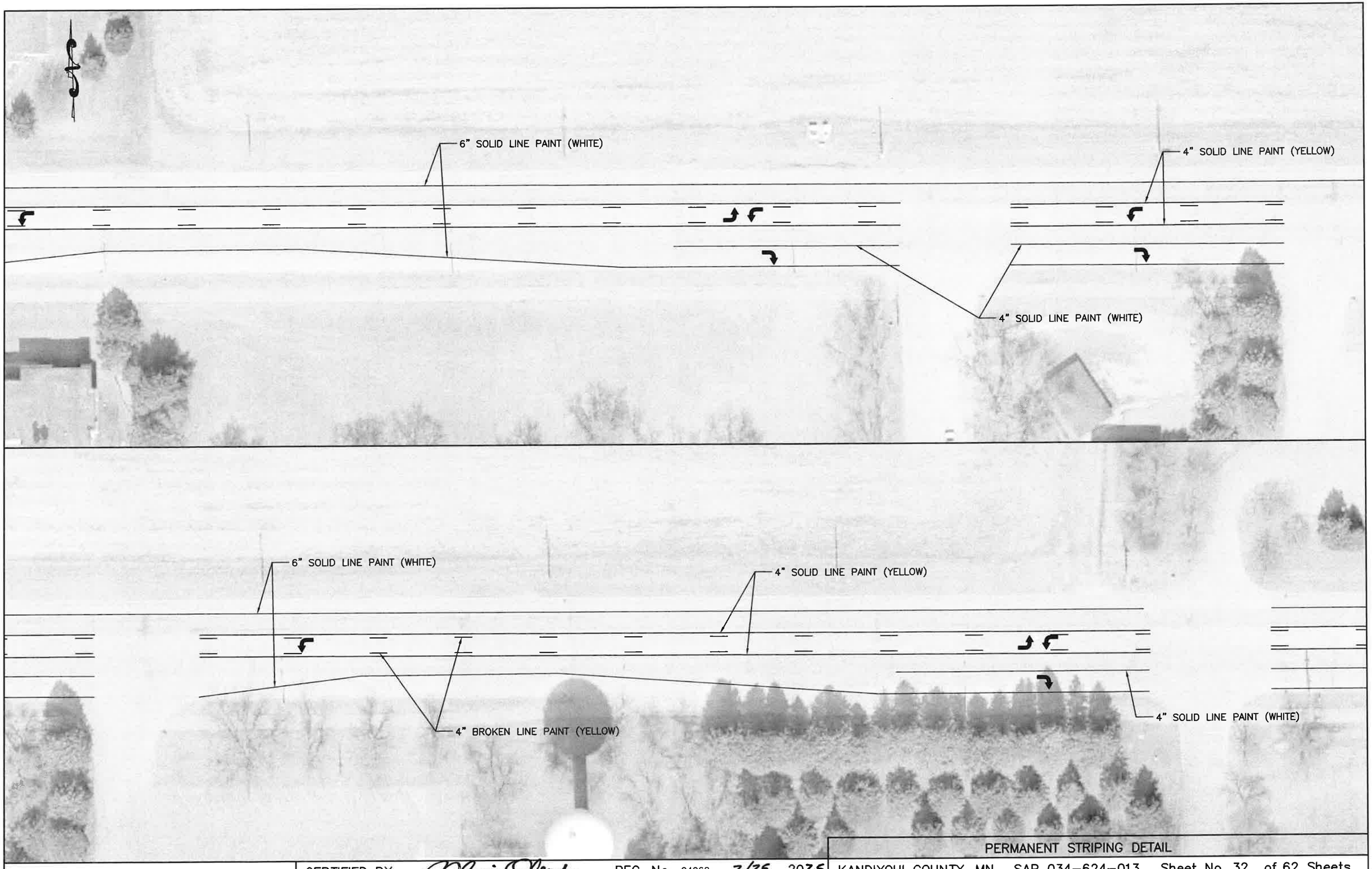
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 30 of 62 Sheets



PERMANENT STRIPING DETAIL

CERTIFIED BY _____ REG. No. 24962 2/25 2025

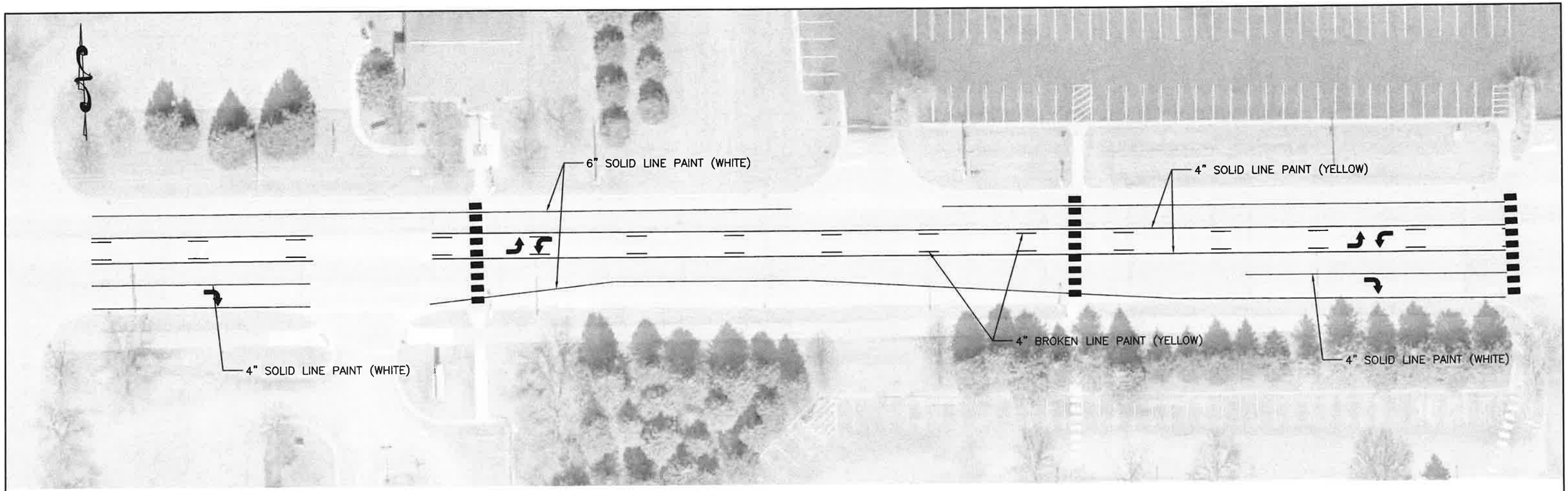
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 31 of 62 Sheets

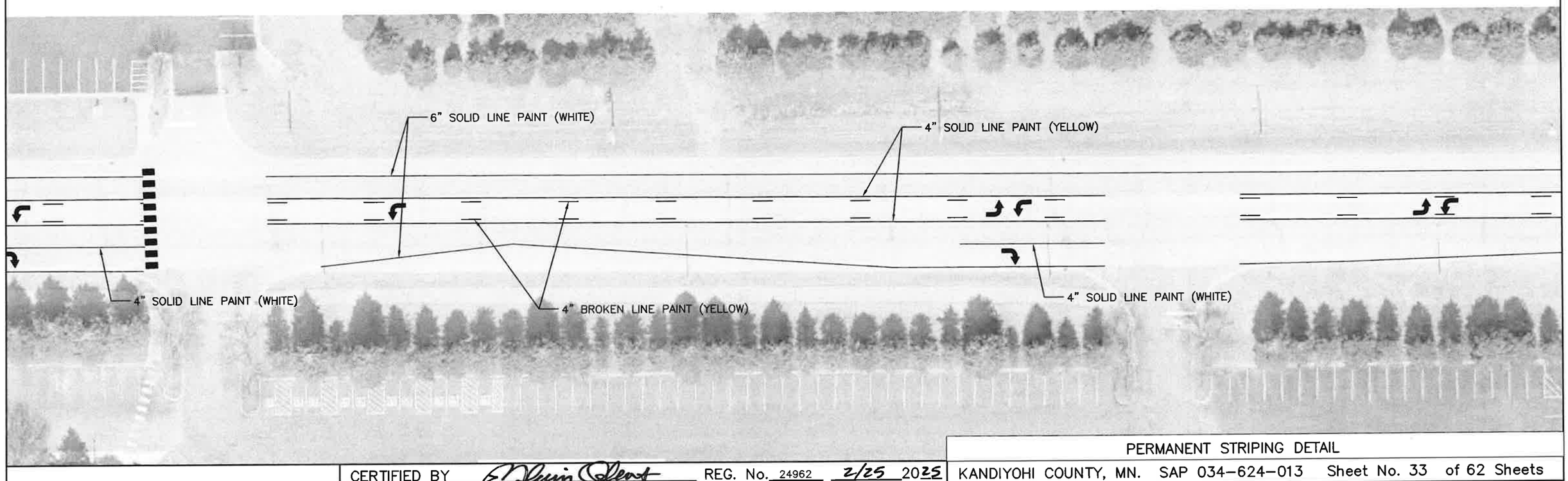


PERMANENT STRIPING DETAIL

CERTIFIED BY _____ REG. No. 24962 2/25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 32 of 62 Sheets

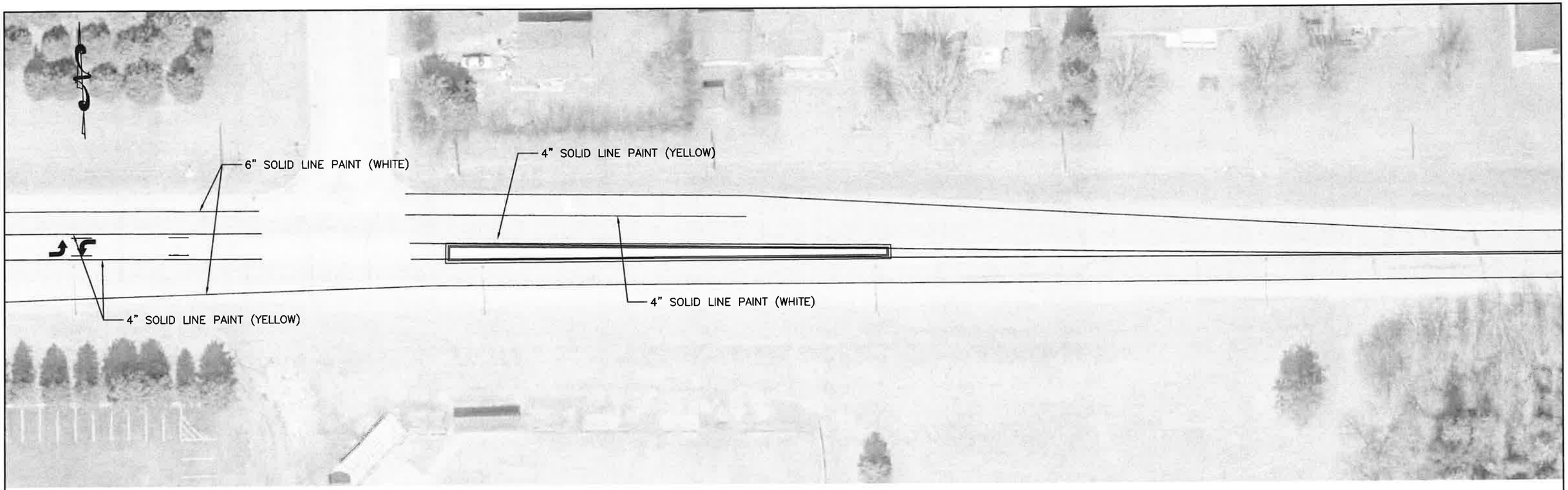


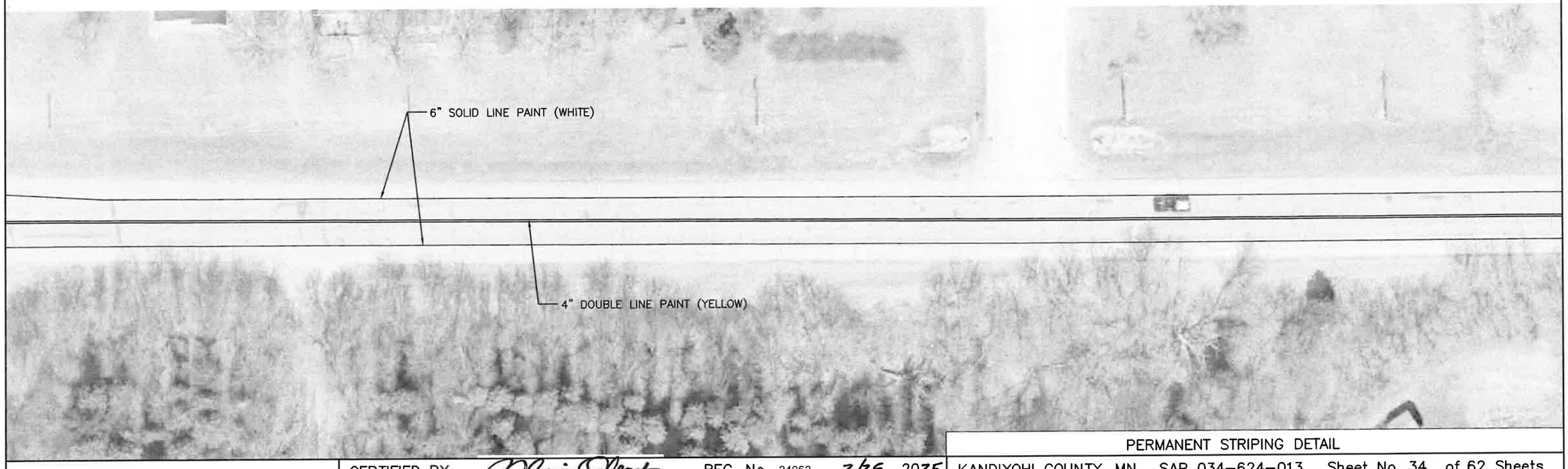


PERMANENT STRIPING DETAIL

CERTIFIED BY E. Nelson REG. No. 24962 2/25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 33 of 62 Sheets

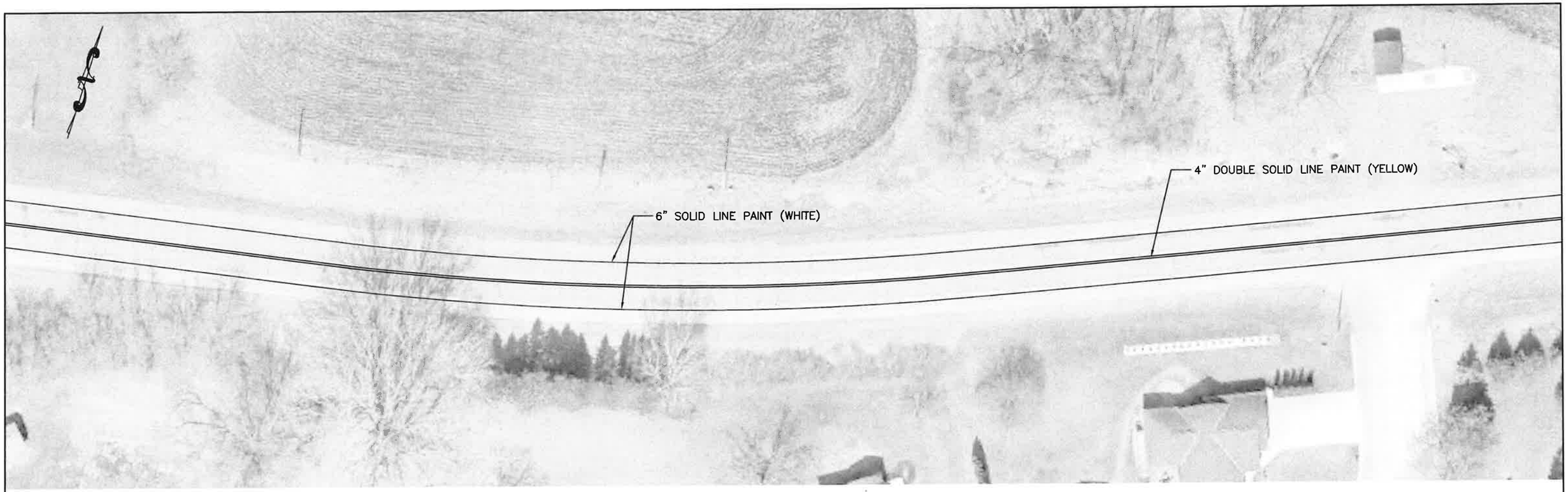


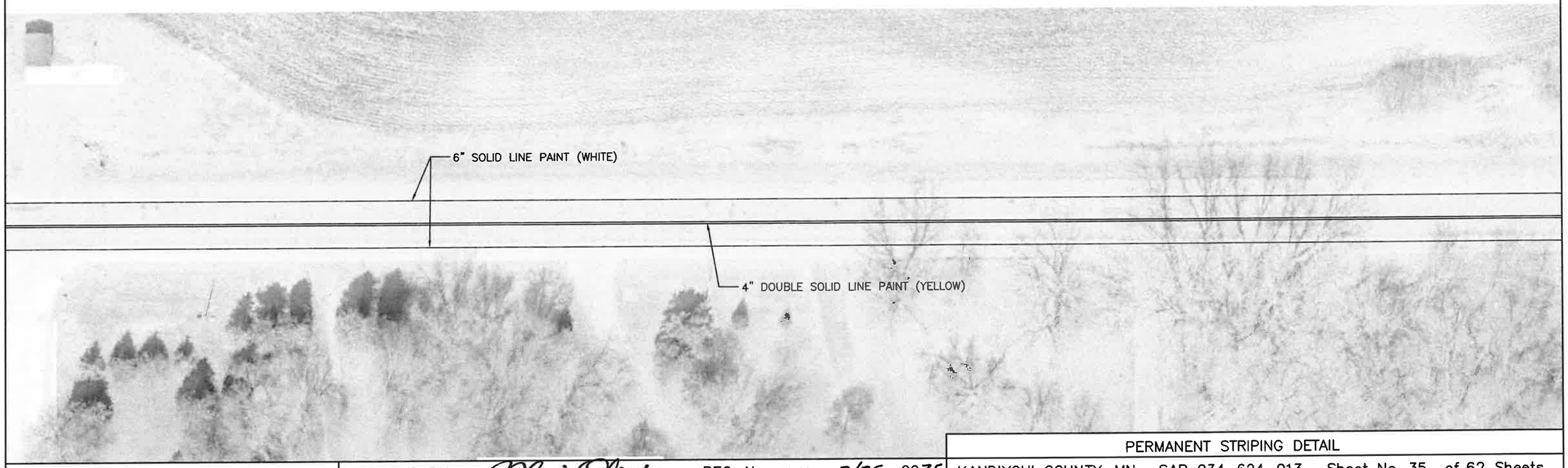


PERMANENT STRIPING DETAIL

CERTIFIED BY [signature] REG. No. 24962 2/25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 34 of 62 Sheets

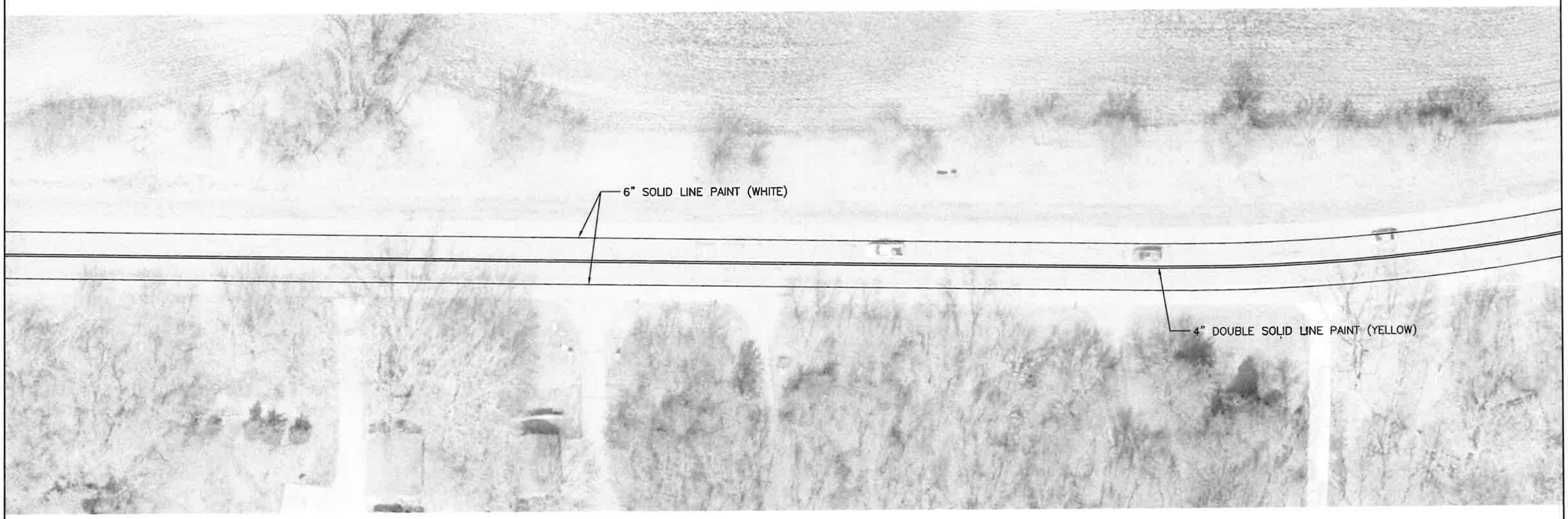




PERMANENT STRIPING DETAIL

CERTIFIED BY _____ REG. No. 24962 2/25 2025

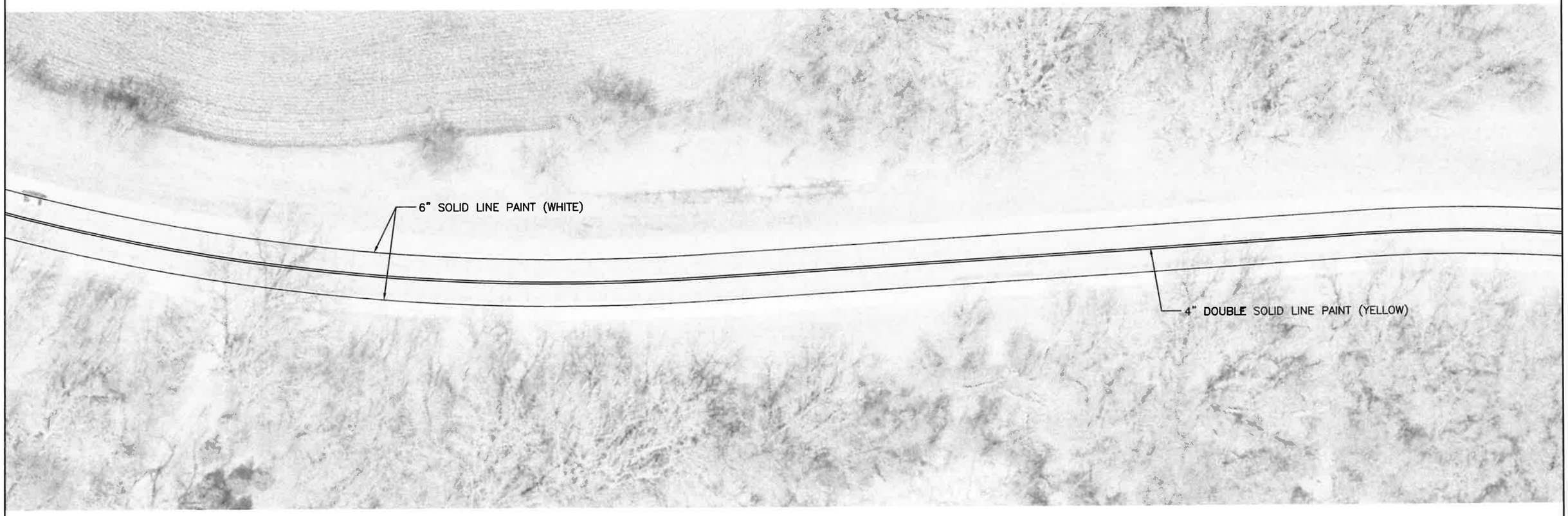
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 35 of 62 Sheets



PERMANENT STRIPING DETAIL

CERTIFIED BY _____ REG. No. 24962 2/25 2025

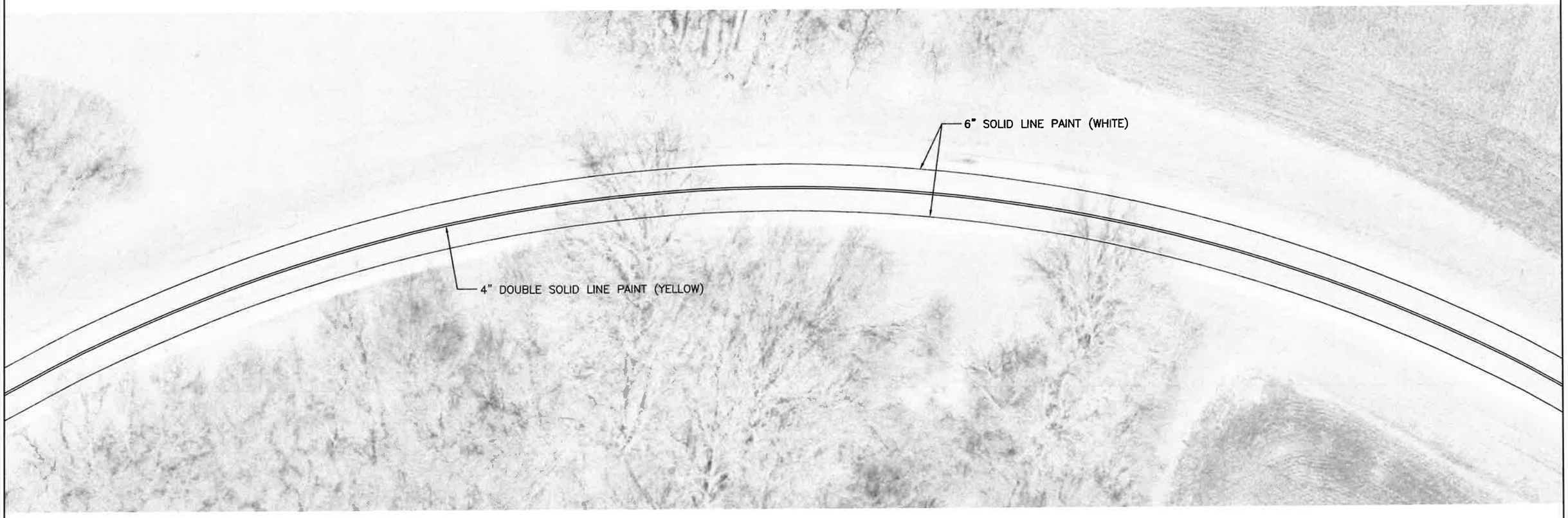
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 36 of 62 Sheets



CERTIFIED BY _____ REG. No. 24962 2/25 2025

PERMANENT STRIPING DETAIL

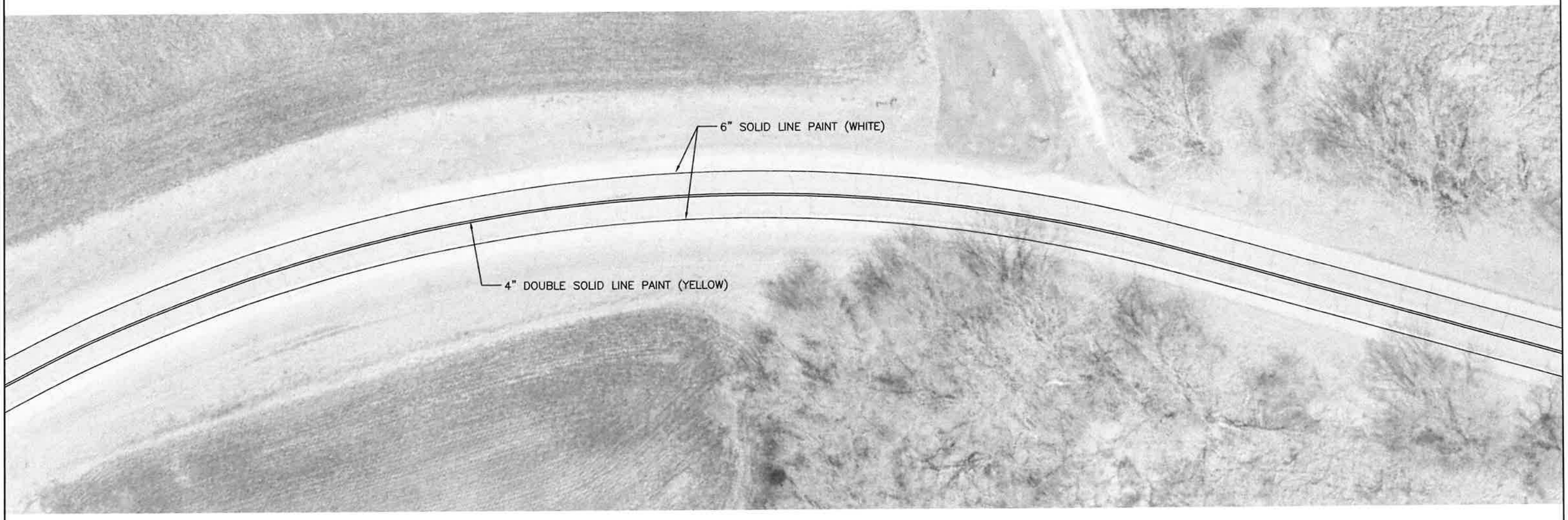
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 37 of 62 Sheets



CERTIFIED BY _____ REG. No. 24962 2/25 2025

PERMANENT STRIPING DETAIL

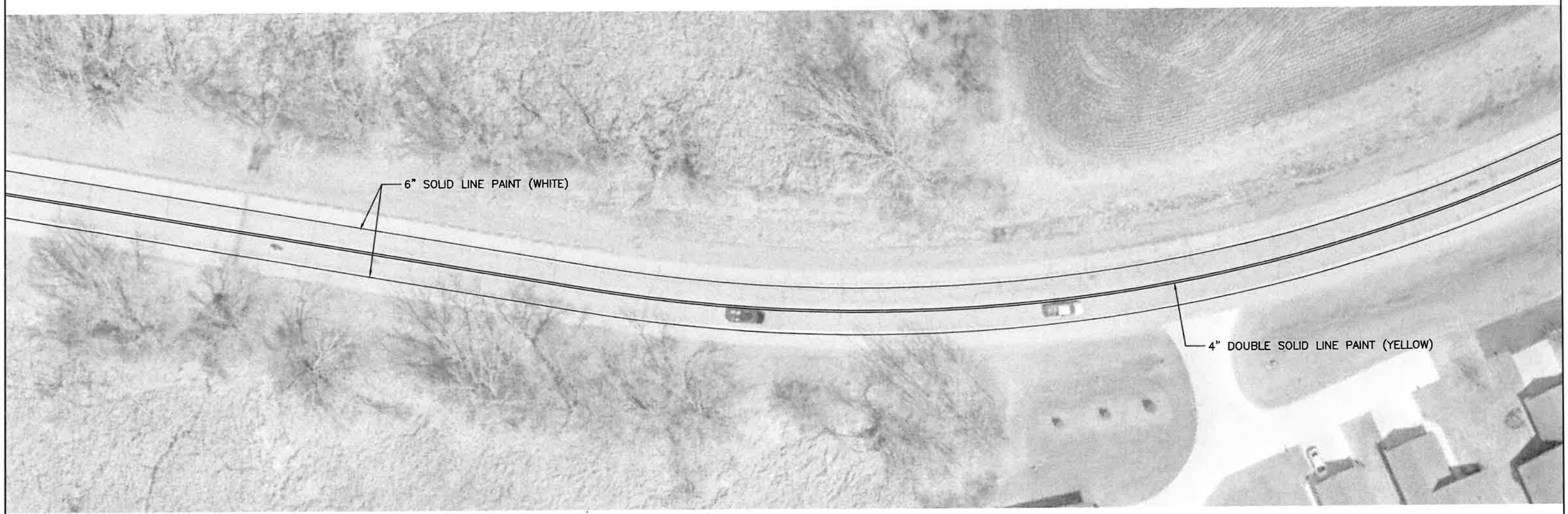
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 38 of 62 Sheets



PERMANENT STRIPING DETAIL

CERTIFIED BY E. Nelson Olson REG. No. 24962 2/25 2025

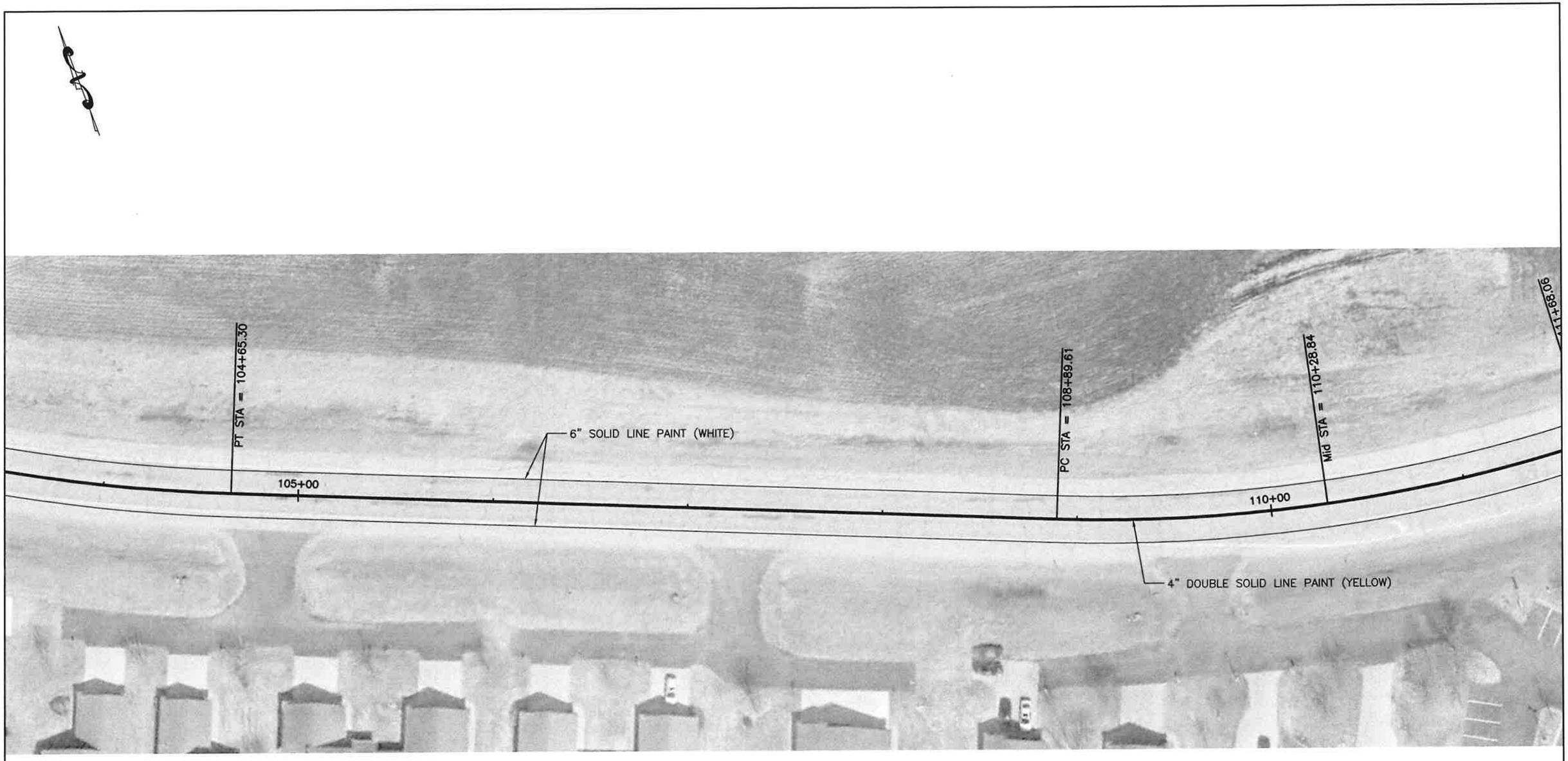
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 39 of 62 Sheets



CERTIFIED BY Marvin Olert REG. No. 24962 2/25 2025

PERMANENT STRIPING DETAIL

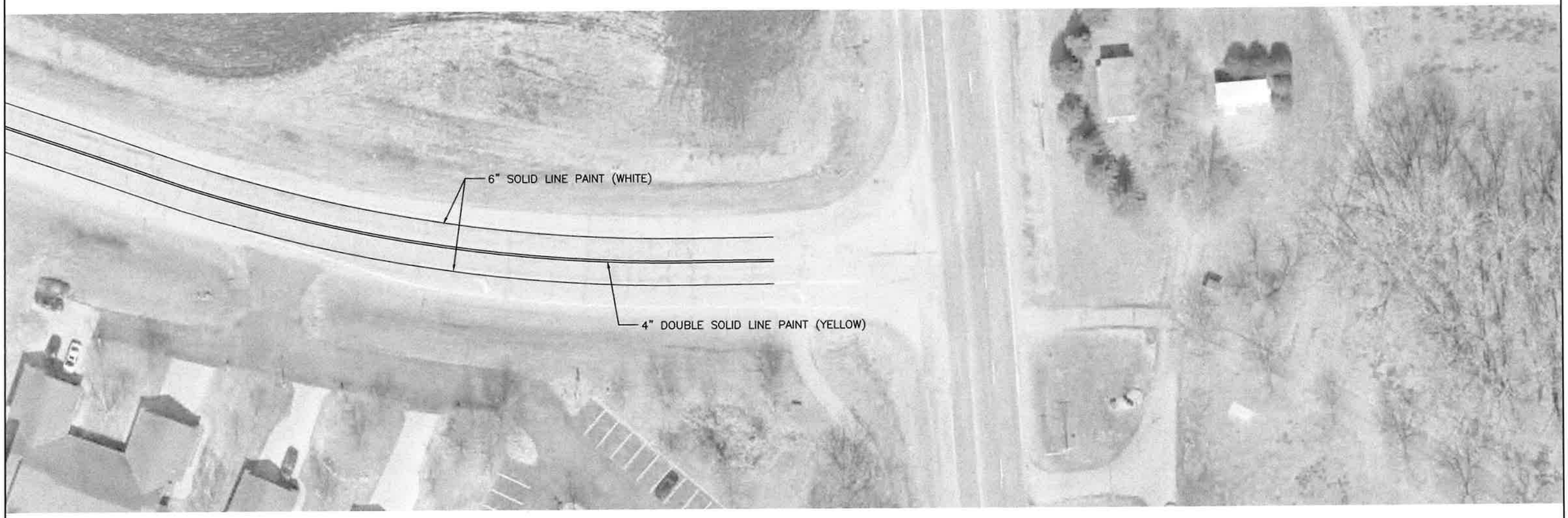
KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 40 of 62 Sheets



CERTIFIED BY [signature] REG. No. 24962 2/25 2025

PERMANENT STRIPING DETAIL

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 41 of 62 Sheets



PERMANENT STRIPING DETAIL

CERTIFIED BY E. Kevin Oleen REG. No. 24962 2/25 2025

KANDIYOHI COUNTY, MN. SAP 034-624-013 Sheet No. 42 of 62 Sheets

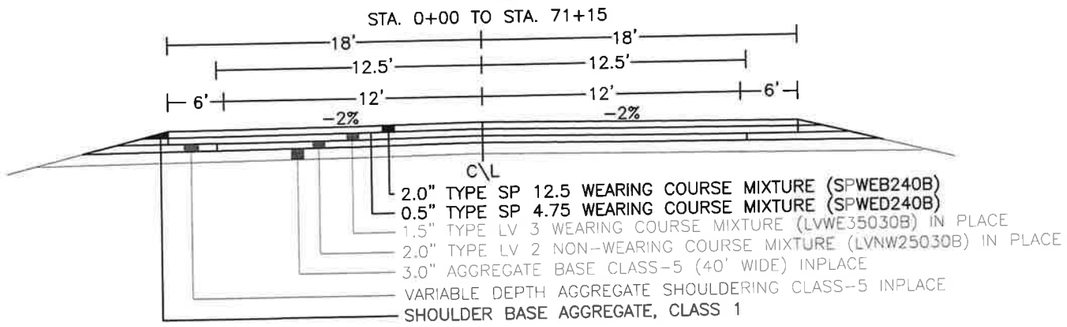
ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	80
(9)	2112.604	SUBGRADE PREPERATION	SQ YD	2000
(1)	2123.510	MOTOR GRADER	HR	40
(1)	2123.610	SKID LOADER	HR	30
(8)	2130.523	WATER	M-GAL	20
	2215.504	FULL DEPTH RECLAMATION	SQ YD	50549
(2)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	2120
(3)	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	225
	2232.602	MILLED RUMBLE STRIPS	EACH	2
	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	800
(4)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	3632
(4)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,C)	TON	15337
	2563.601	TRAFFIC CONTROL	LS	1
(5)	2574.508	FERTILIZER TYPE 3	LB	105
(5)	2574.609	COMMON TOPSOIL BORROW	TON	215
(5)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	1050
(5)	2575.608	SEED SOUTHERN BOULEVARD	LB	50
(6)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(7)	2582.503	4" BROKEN LINE PAINT	LIN FT	2986
(7)	2582.503	4" SOLID LINE PAINT	LIN FT	6996
(7)	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	4424
(7)	2582.503	6" SOLID LINE PAINT	LIN FT	39750
(7)	2582.503	24" SOLID LINE PAINT	LIN FT	40

(1) EQUIPMENT HOURS USED TO SHAPE MISCELLANEOUS.
(2) 358 TONS PROVIDED FOR INTERSECTIONS AND ENTRANCES.
(3) FOR MILLING DRIVEWAYS AND ENDS OF PROJECT.
(4) 462 TONS (2,B) PROVIDED FOR INTERSECTIONS AND ENTRANCES.
1060 TONS (2,C) PROVIDED FOR INTERSECTIONS AND ENTANCES.
(5) PROVIDED FOR PAVED ENTRANCES ONLY.
(6) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.
(7) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW), 6" SOLID LINE (WHITE), 24" SOLID LINE (WHITE).
(8) THIS WORK SHALL CONSIST OF FURNISHING AND APPLYING WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER.

TYPICAL "A"

STA. 0+00 TO STA. 71+15

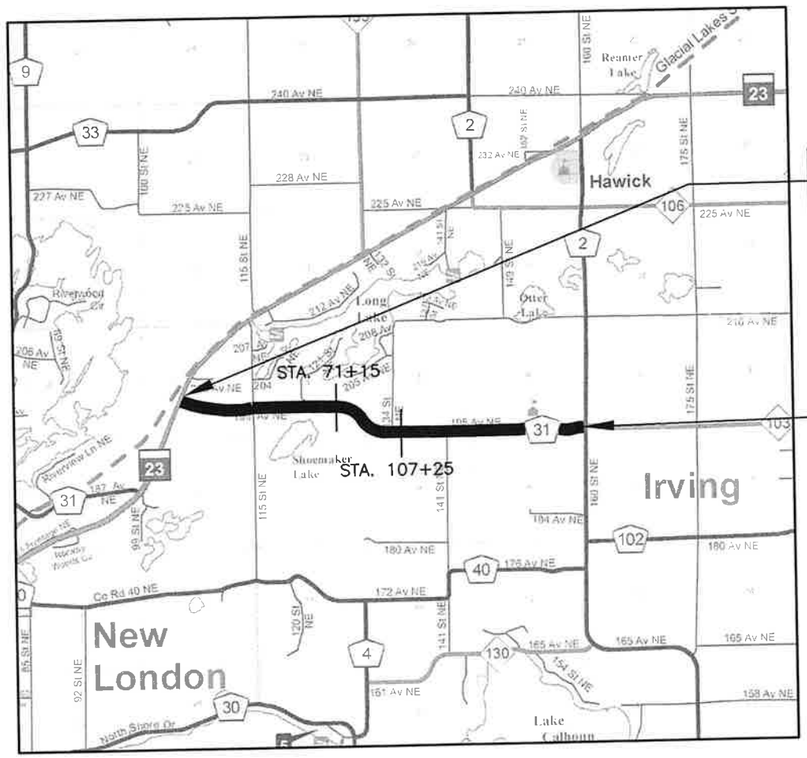


GROSS LENGTH 19835.00 FT 3.756 MILES
BRIDGE LENGTH ..... FT ..... MILES
EXCEPTIONS LENGTH ..... FT ..... MILES
NET LENGTH 19835.00 FT 3.756 MILES

CONSTRUCTION PLAN FOR BIT. MILLING, FULL DEPTH RECLAMATION, BIT. SURFACING AND AGGREGATE SHOULDERING

LOCATED ON CSAH 31 FROM T.H. 23 TO CSAH 2 (2.0 MILES EAST OF NEW LONDON) (GEOGRAPHIC DESCRIPTION)

FROM 1410.43' N. & 3590.00' W. OF THE NW. COR. SEC. 7 T121N, R33W IRVING TWP. TO 160.13' S. OF THE N.W. COR. SEC. 10 T121N, R33W IRVING TWP. (LEGAL DESCRIPTION)



RURAL DESIGN DESIGNATION

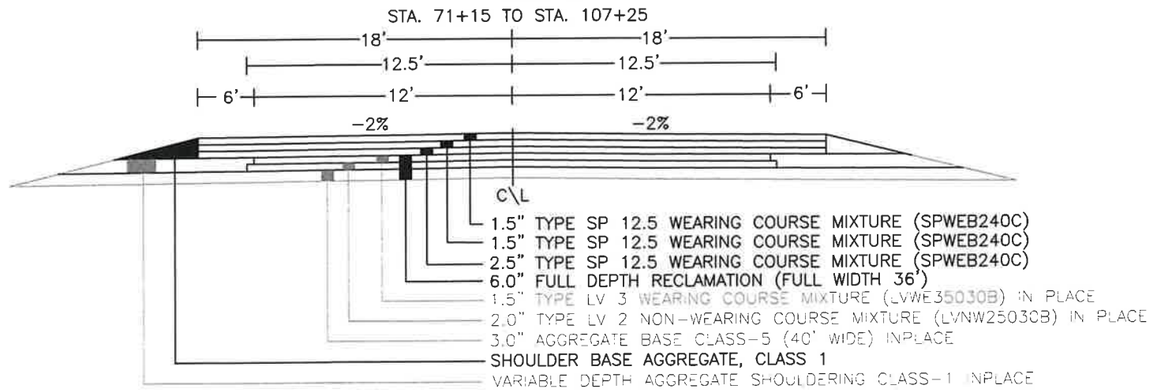
≤N20 231,000 R Value 40
Pres. ADT 680 (2025) Proj. ADT 780 (2045)
Proj. HCADT 70 (2045) Shoulder Width 4'-6'
10 TON Design
Graded In 2000 Under SAP 34-631-04
Functional Classification MINOR COLLECTOR
No. Of Traffic Lanes 2 No. Of Parking Lanes ____
Design Speed 55 MPH
Based On Stopping Sight Distance
Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY [signature] LIC. NO. 24962 2/26 2025

KANDIYOHI COUNTY, MINN. SAP 034-631-007 Sheet No. 43 of 62 Sheets

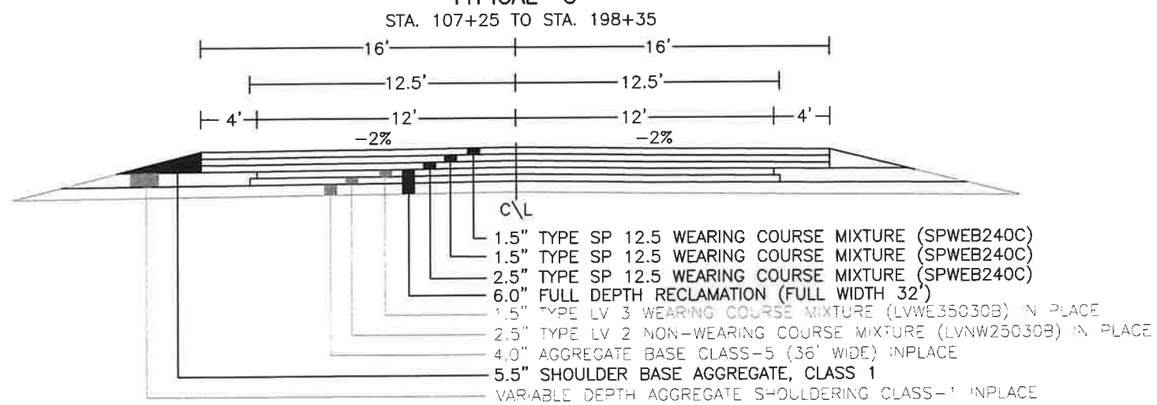
TYPICAL "B"

STA. 71+15 TO STA. 107+25



TYPICAL "C"

STA. 107+25 TO STA. 198+35



ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	20
	2104.518	REMOVE BITUMINOUS PAVEMENT	SQ FT	550
(1)	2123.610	SKID LOADER	HR	30
(2)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	360
	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	200
	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	24740
	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	890
(3)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	2767
	2563.601	TRAFFIC CONTROL	LS	1
(5)(4)	2521.518	CONCRETE WALK	SQ FT	550
(4)	2531.618	TRUNCATED DOMES	SQ FT	16
(6)	2574.508	FERTILIZER TYPE 3	LB	35
(6)	2574.609	COMMON TOPSOIL BORROW	TON	325
(6)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	385
(6)	2575.608	SEED SOUTHERN BOULEVARD	LB	20
	2575.602	SITE RESTORATION	EACH	2
(7)	2580.501	INTERIM PAVEMENT MARKING	LS	1
(8)	2582.503	4" BROKEN LINE PAINT	LIN FT	725
(8)	2582.503	4" SOLID LINE PAINT	LIN FT	3125
(8)	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	5360
(8)	2582.503	6" SOLID LINE PAINT	LIN FT	16800

(1) EQUIPMENT HOURS USED FOR SHAPING MISCELLANEOUS.

(2) 145 TONS PROVIDED FOR INTERSECTIONS AND ENTRANCES.

(3) 386 TONS PROVIDED FOR INTERSECTIONS, ENTRANCES AND BOAT LANDING.

(4) PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MNDOT STANDARD PLAN 5-297.250.

(5) 6" OF AGGREGATE BASE CLASS 5 AND EXCAVATION SHALL BE INCLUDED IN THE BID PRICE FOR CONCRETE WALK.

(6) PROVIDED FOR PAVED ENTRANCES ONLY.

(7) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.

(8) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW), 6" SOLID LINE (WHITE).

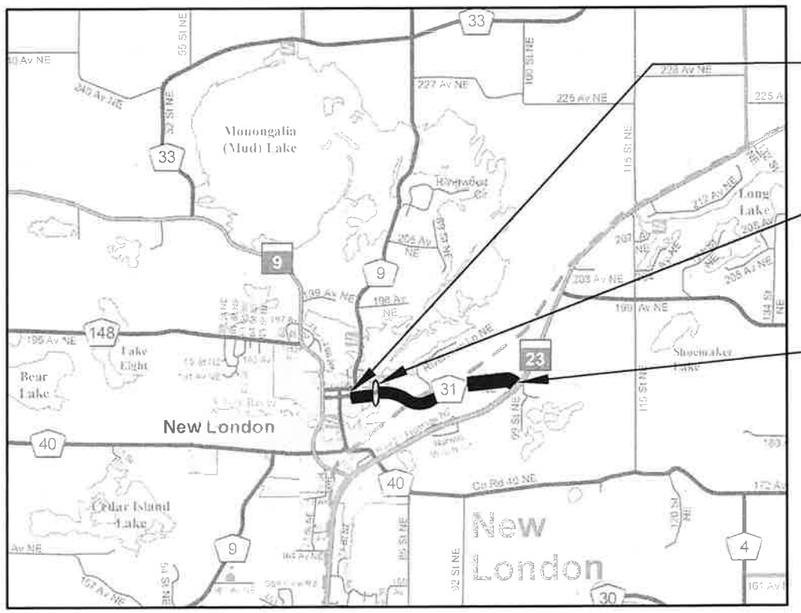
GROSS LENGTH ..... 8300.00 FT 1.572 MILES
BRIDGE LENGTH ..... 65.00 FT 0.012 MILES
EXCEPTIONS LENGTH ..... 65.00 FT 0.012 MILES
NET LENGTH ..... 8235.00 FT 1.559 MILES

ADA PEDESTRIAN RAMPS		
STATION	LOCATION	QUANTITY
28+85	LT	1
28+85	RT	1
TOTAL		2

CONSTRUCTION PLAN FOR BITUMINOUS MILLING, BITUMINOUS SURFACING, AGGREGATE SHOULDERING AND ADA IMPROVEMENTS

LOCATED ON CSAH 31 FROM CHESTNUT ST NE TO TH 23 (GEOGRAPHIC DESCRIPTION)

FROM INTERSECTION CHESTNUT ST NE, CSAH 31 CITY OF NEW LONDON T121N, R34W, NEW LONDON TWP. TO 140' WEST AND 150' SOUTH OF EAST ¼ COR. SEC 11 T121N, R34W, NEW LONDON TWP. (LEGAL DESCRIPTION)



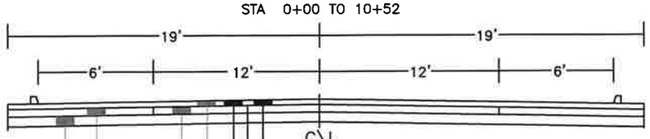
BEG. PROJ. SAP 034-631-008
STA 0+00

BR 34509 (POSTED 20-32-32)
STA 10+90 TO 11+55 EXCEPTION

END PROJ. SAP 034-631-008
STA 83+00

TYPICAL "A"

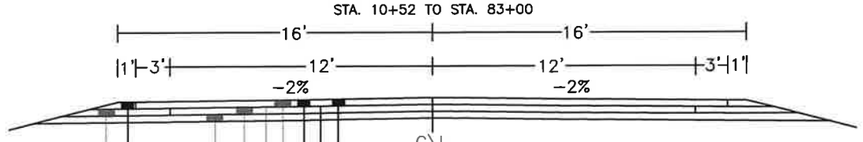
STA 0+00 TO 10+52



1.5" TYPE SP 12.5 WEARING COURSE MIXTURE (SPWEB240B)
0.5" TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
MILL BITUMINOUS SURFACE (2.0")
1.5" TYPE SP 19.0 WEARING COURSE MIXTURE (SPWEB240B) INPLACE
4.5" PLANT MIXED BITUMINOUS INPLACE
2.5" TYPE SP 19.0 NON-WEARING COURSE MIXTURE (SPNWB230B) INPLACE
6.0" SAND AND GRAVEL AGGREGATE BASE INPLACE

TYPICAL "B"

STA. 10+52 TO STA. 83+00



1.5" TYPE SP 12.5 WEARING COURSE MIXTURE (SPWEB240B)
0.5" TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
MILL BITUMINOUS SURFACE (2.0")
1.5" TYPE 19.0 WEARING COURSE MIXTURE (SPWEB240B) IN PLACE
TYPE SP 9.5 NON-WEARING COURSE MIXTURE (SPNWA230B) IN PLACE
4.5" PLANT MIXED BITUMINOUS SURFACE INPLACE
6.0" SAND AND GRAVEL AGGREGATE BASE INPLACE
SHOULDER BASE AGGREGATE, CLASS 1
VARIABLE DEPTH AGGREGATE SHOULDERING CLASS-1

RURAL DESIGN DESIGNATION

≤N20 253,000 R Value 13

Pres. ADT 760 (2025) Proj. ADT 836 (2045)

Proj. HCADT 75 (2045) Shoulder Width 6'

10 TON Design

Graded In 1963 Under SAP 34-631-01

Surfaced In 2003 Under CP-31-03

Functional Classification MINOR COLLECTOR

No. Of Traffic Lanes 2 No. Of Parking Lanes

Design Speed 60 MPH

Based On Stopping Sight Distance

Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY _____ LIC. NO. 24962 2/26 2025

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	SAP 034-639-005 QUANTITY	SAP 047-620-013 QUANTITY	TOTAL QUANTITIES
	2021.501	MOBILIZATION	LS	1		1
(1)	2123.510	MOTOR GRADER	HR	30	4	34
(2)	2123.610	SKID LOADER	HR	40		40
(3)	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	669	95	764
(4)	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	165		165
(5)	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	327		327
	2232.602	MILLED RUMBLE STRIPS	EACH	1		1
(6)	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	3037	498	3535
(7)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	6895	1251	8146
	2563.601	TRAFFIC CONTROL	LS	1		1
(10)	2574.508	FERTILIZER TYPE 3	LB	48		48
(10)	2574.609	COMMON TOPSOIL BORROW	TON	100		100
(10)	2575.508	HYDRAULIC BONDED FIBER MATRIX	LB	675		675
(10)	2575.608	SEED SOUTHERN BOULEVARD	LB	30		30
(8)	2580.501	INTERIM PAVEMENT MARKING	LS	1		1
(9)	2582.503	4" BROKEN LINE PAINT	LIN FT	2431	324	2755
(9)	2582.503	4" SOLID LINE PAINT	LIN FT	5050	900	5950
(9)	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	2230		2230
(9)	2582.503	6" SOLID LINE PAINT	LIN FT	26570	5480	32050

(1) EQUIPMENT HOURS USED FOR NOTCHING THE 4' X 3" AREA STATIONS 0+00 TO 132+65 L & R.
EQUIPMENT HOURS USED FOR NOTCHING THE 3' X 3" AREA STATIONS 0+00 TO 27+30 L & R.

(2) EQUIPMENT HOURS USED TO SHAPE MISCELLANIES.

(3) 135 TON PROVIDED FOR INTERSECTION AND ENTRANCES.

(4) QUANTITY IS FOR PATCHING PRIOR TO PAVING OPERATIONS. THE LOCATIONS, LENGTHS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD.

(5) PROVIDED FOR MILLING AT JOINT 2" AND TAPER TO 0.0" AT 40' AND DRIVEWAYS.

(6) PROVIDED FOR PAVER LEVELING AND FILLING 4' X 3" NOTCHED AREA STATIONS 0+00 TO 132+65 L & R.

(7) 385 TONS PROVIDED FOR ENTRANCE AND INTERSECTION.

(8) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKINGS PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT.

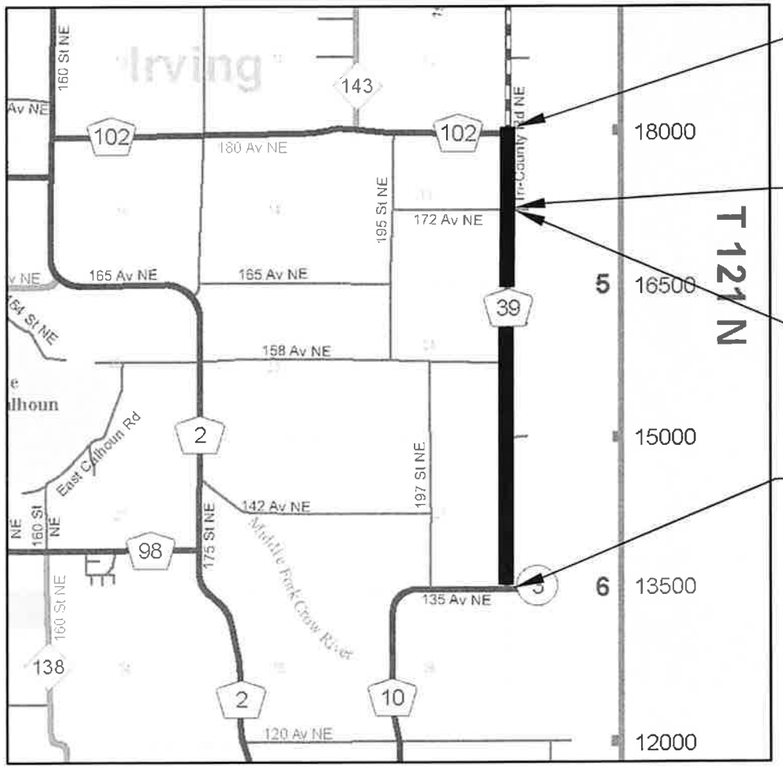
(9) START AND STOP LOCATIONS OF PAINT LINES SHALL BE MARKED BY THE ENGINEER. 4" BROKEN LINE (YELLOW), 4" SOLID LINE (YELLOW), 4" DOUBLE SOLID LINE (YELLOW) AND 6" SOLID LINE (WHITE).

(10) PROVIDED FOR PAVED ENTRANCES ONLY.

CONSTRUCTION PLAN FOR BITUMINOUS SURFACING AND AGGREGATE SHOULDERING

LOCATED ON CSAH 39 AND CSAH 20 FROM CSAH 10 TO 180th AVE NE, 8.5 MILES NORTH FROM ATWATER (GEOGRAPHIC DESCRIPTION)

FROM SE. COR. SEC. 25 T121N, R33W IRVING TWP. TO E. ¼ COR. SEC. 13 T121N, R33W IRVING TWP. (LEGAL DESCRIPTION)



END PROJ. SAP 047-620-013
STA 27+30

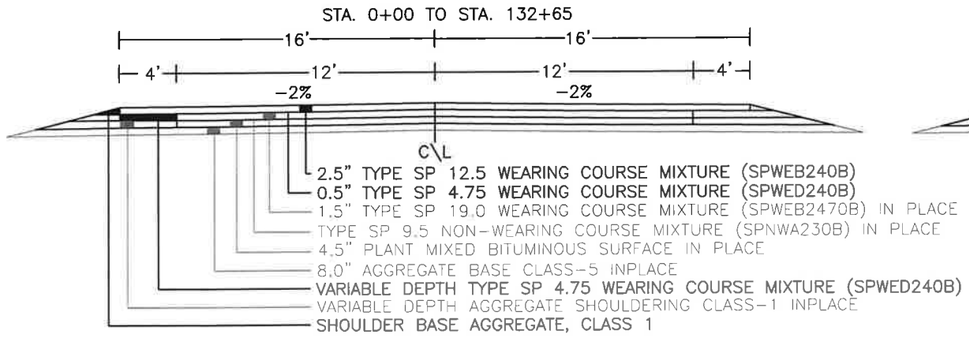
BEG. PROJ. SAP 047-620-013
STA 0+00

END PROJ. SAP 034-639-005
STA 132+65

BEG. PROJ. SAP 034-639-005
STA 0+00

SAP 034-639-005

STA. 0+00 TO STA. 132+65



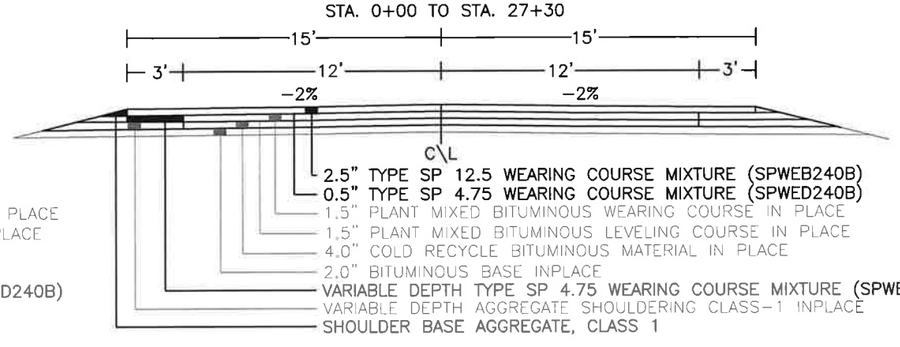
2.5" TYPE SP 12.5 WEARING COURSE MIXTURE (SPWEB240B)
0.5" TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
1.5" TYPE SP 19.0 WEARING COURSE MIXTURE (SPWEB2470B) IN PLACE
TYPE SP 9.5 NON-WEARING COURSE MIXTURE (SPNWA230B) IN PLACE
4.5" PLANT MIXED BITUMINOUS SURFACE IN PLACE
8.0" AGGREGATE BASE CLASS-5 INPLACE
VARIABLE DEPTH TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
VARIABLE DEPTH AGGREGATE SHOULDERING CLASS-1 INPLACE
SHOULDER BASE AGGREGATE, CLASS 1

SAP 034-639-005

GROSS LENGTH 13265.00 FT 2.512 MILES
BRIDGE LENGTH ..... FT ..... MILES
EXCEPTIONS LENGTH ..... FT ..... MILES
NET LENGTH 13265.00 FT 2.512 MILES

SAP 047-620-013

STA. 0+00 TO STA. 27+30



2.5" TYPE SP 12.5 WEARING COURSE MIXTURE (SPWEB240B)
0.5" TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
1.5" PLANT MIXED BITUMINOUS WEARING COURSE IN PLACE
1.5" PLANT MIXED BITUMINOUS LEVELING COURSE IN PLACE
4.0" COLD RECYCLE BITUMINOUS MATERIAL IN PLACE
2.0" BITUMINOUS BASE INPLACE
VARIABLE DEPTH TYPE SP 4.75 WEARING COURSE MIXTURE (SPWED240B)
VARIABLE DEPTH AGGREGATE SHOULDERING CLASS-1 INPLACE
SHOULDER BASE AGGREGATE, CLASS 1

SAP 047-620-013

GROSS LENGTH 2730.00 FT 0.517 MILES
BRIDGE LENGTH ..... FT ..... MILES
EXCEPTIONS LENGTH ..... FT ..... MILES
NET LENGTH 2730.00 FT 0.517 MILES

CSAH 39 AND CSAH 20 RURAL DESIGN DESIGNATION

≤N20 156,000 R Value 10

Pres. ADT 470 (2025) Proj. ADT 517 (2045)

Proj. HCADT 47 (2045) Shoulder Width 3'-4'

10 TON Design

Graded In _____ Under _____

Surfaced In _____ Under _____

Functional Classification MINOR COLLECTOR

No. Of Traffic Lanes 2 No. Of Parking Lanes _____

Design Speed 55 MPH

Based On Stopping Sight Distance

Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY _____ LIC. NO. 24962 2/26 2025

KANDIYOHI COUNTY, MINN. SAP 034-639-005 & SAP 047-620-013

ADDENDUM NO. 1

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
	2104.502	REMOVE CASTING	EACH	10
	2104.502	SALVAGE SIGN	EACH	12
	2104.503	REMOVE CONCRETE CURB	LIN FT	360
	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	360
	2104.504	REMOVE CONCRETE DRIVEWAY	SQ YD	397
	2104.518	REMOVE CONCRETE WALK	SQ FT	1180
	2104.618	REMOVE AND REPLACE BITUMINOUS PAVEMENT	SQ FT	760
(8)	2123.614	SKID LOADER	HR	40
(1)	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	50
(2)	2232.504	MILL BITUMINOUS SURFACE (0" TO 1.5")	SQ YD	6320
	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	250
(9)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	856
	2563.601	TRAFFIC CONTROL	LS	1
	2504.601	REPAIR SPRINKLER SYSTEM	LS	1
(3)	2504.602	ADJUST VALVE BOX	EACH	5
(3)	2506.502	ADJUST FRAME AND RING CASTING	EACH	2
(10)	2506.502	CASTING ASSEMBLY	EACH	10
(6)(4)	2521.518	CONCRETE WALK	SQ FT	1315
	2531.503	CONCRETE CURB AND GUTTER	LIN FT	360
(6)	2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	520
(4)	2531.618	TRUNCATED DOMES	SQ FT	138
	2563.601	TRAFFIC CONTROL	LS	1
	2564.502	INSTALL SIGN	EACH	12
(7)	2573.502	STORM DRAIN INLET PROTECTION	EACH	10
	2575.602	SITE RESTORATION	EACH	40
(5)	2580.501	INTERIM PAVEMENT MARKING	LS	1
	2582.503	4" BROKEN LINE PAINT	LIN FT	490
	2582.503	6" SOLID LINE PAINT	LIN FT	3950
	2582.503	24" SOLID LINE PAINT	LIN FT	126
	2582.518	PAVEMENT MESSAGE MULTI-COMPONENT	SQ FT	120

(1) QUANTITY IS FOR PATCHING PRIOR TO PAVING OPERATIONS. THE LOCATIONS, LENGTHS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD.

(2) QUANTITY INCLUDES MILLING FOR ALL INTERSECTIONS.

(3) NO STEEL ADJUSTING INSERTS ALLOWED. FULL FRAME AND RING CASTING ADJUSTMENT REQUIRED.

(4) PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MNDOT STANDARD PLAN 5-297.250.

(5) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKERS (TRPM) PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT. THE TRPM MARKERS SHALL BE REMOVED PRIOR TO THE PERMANENT STRIPING BEING PLACED.

(6) 6" OF AGGREGATE BASE CLASS 5 AND EXCAVATION SHALL BE INCLUDED IN THE BID PRICE FOR 4" AND 6" CONCRETE WALK.

(7) STORM DRAIN INLET PROTECTION SHALL BE INSTALLED IN CATCH BASINS NEAR ADA IMPROVEMENT / CONCRETE WORK AREAS. SHALL BE INSTALLED IN ACCORDANCE WITH MNDOT STANDARD PLAN 5-297.405

(8) EQUIPMENT HOURS USED TO FOR MISCELLANEOUS WORK.

(9) 113 TONS PROVIDED FOR INTERSECTIONS.

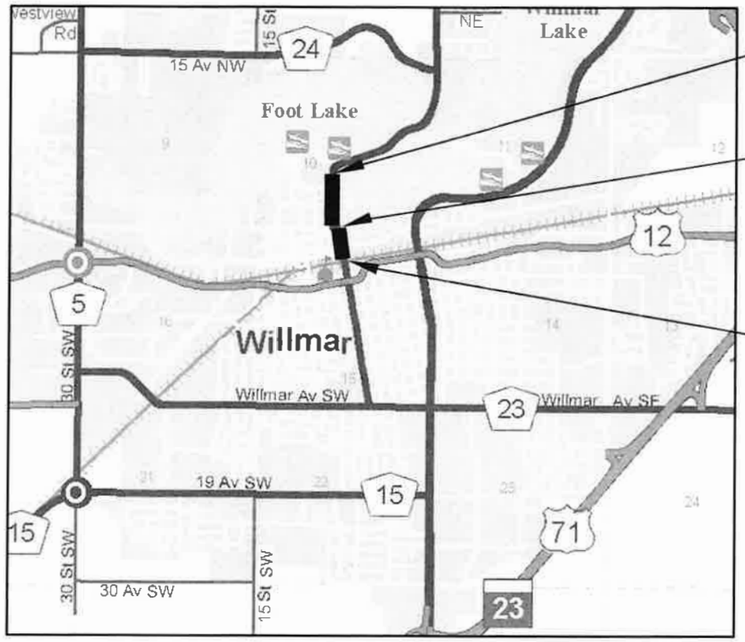
(10) CONSISTS OF RING CASTING NO. 700-7 (STANDARD PLATE NO. 4101D) AND COVER CASTING NO. 716 (STANDARD PLATE NO. 4110F) CONCRETE RINGS SHALL BE REPLACED AND SHALL HAVE FLEX SEAL OR APPROVED EQUAL APPLIED TO RINGS

NOTE: SAW CUTTING OF CONCRETE WALK, CONCRETE DRIVEWAY, AND CURB & GUTTER SHALL BE INCLUDED IN THE BID PRICE FOR REMOVE CONCRETE CURB & GUTTER.

CONSTRUCTION PLAN FOR BITUMINOUS MILLING, BITUMINOUS SURFACING AND ADA IMPROVEMEMENTS.

LOCATED ON CSAH 41 FROM 100.00' SOUTH OF CAMPBELL AVE NORTHWEST TO 100.00' NORTH OF PARK AVE NORTHWEST. (GEOGRAPHIC DESCRIPTION)

FROM 2265.10' W AND 2.84' S OF THE NE. COR. OF SEC. 21 T119N, R35W WILLMAR TWP. TO 1635.00' E OF THE NE. COR. OF SEC. 23 T119N, R35W WILLMAR TWP. (LEGAL DESCRIPTION)



END PROJ. SAP 034-641-012
STA 24+45

EXCEPTION (ELLA AVE. NW)
STA 7+50 TO 10+10

BEG. PROJ. SAP 034-641-012
STA 0+00

GROSS LENGTH 2445.00 FT 0.463 MILES
BRIDGE LENGTH FT MILES
EXCEPTIONS LENGTH 260.00 FT 0.049 MILES
NET LENGTH 2185.00 FT 0.414 MILES

≤N20 522,000 R Value 24

Pres. ADT 3930 (2025) Proj. ADT 5100 (2045)

Proj. HCADT 140 Shoulder Width 8'

10 TON Design

Graded In _____ Under _____

Surfaced In _____ Under _____

Functional Classification MINOR ARTERIAL

No. Of Traffic Lanes 4 No. Of Parking Lanes _____

Design Speed 40 MPH

Based On Stopping Sight Distance

Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY _____ LIC. NO. 24962 3-21 2025

KANDIYOHI COUNTY, MINN. SAP 034-641-012 Sheet No. 47 of 62 Sheets

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
	2104.502	SALVAGE SIGN	EACH	12
	2104.503	REMOVE CONCRETE CURB	LIN FT	360
	2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	360
	2104.504	REMOVE CONCRETE DRIVEWAY	SQ YD	397
	2104.518	REMOVE CONCRETE WALK	SQ FT	1180
	2104.618	REMOVE AND REPLACE BITUMINOUS PAVEMENT	SQ FT	760
(8)	2123.614	SKID LOADER	HR	40
(1)	2231.604	BITUMINOUS PATCH SPECIAL (0" TO 12")	SQ YD	50
(2)	2232.504	MILL BITUMINOUS SURFACE (0" TO 1.5")	SQ YD	6320
	2360.509	TYPE SP 4.75 WEARING COURSE MIXTURE (2,B)	TON	250
(9)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	856
	2563.601	TRAFFIC CONTROL	LS	1
	2504.601	REPAIR SPRINKLER SYSTEM	LS	1
(3)	2504.602	ADJUST VALVE BOX	EACH	5
(3)	2506.502	ADJUST FRAME AND RING CASTING	EACH	12
(6)(4)	2521.518	CONCRETE WALK	SQ FT	1315
	2531.503	CONCRETE CURB AND GUTTER	LIN FT	360
(6)	2531.504	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	520
(4)	2531.618	TRUNCATED DOMES	SQ FT	138
	2563.601	TRAFFIC CONTROL	LS	1
	2564.502	INSTALL SIGN	EACH	12
(7)	2573.502	STORM DRAIN INLET PROTECTION	EACH	10
	2575.602	SITE RESTORATION	EACH	40
(5)	2580.501	INTERIM PAVEMENT MARKING	LS	1
	2582.503	4" BROKEN LINE PAINT	LIN FT	490
	2582.503	6" SOLID LINE PAINT	LIN FT	3950
	2582.503	24" SOLID LINE PAINT	LIN FT	126
	2582.518	PAVEMENT MESSAGE MULTI-COMPONENT	SQ FT	120

(1) QUANTITY IS FOR PATCHING PRIOR TO PAVING OPERATIONS. THE LOCATIONS, LENGHTS AND WIDTHS SHALL BE DETERMINED BY ENGINEER IN FIELD.

(2) QUANTITY INCLUDES MILLING FOR ALL INTERSECTIONS.

(3) NO STEEL ADJUSTING INSERTS ALLOWED. FULL FRAME AND RING CASTING ADJUSTMENT REQUIRED.

(4) PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MNDOT STANDARD PLAN 5-297.250.

(5) SHALL CONSIST OF TEMPORARY RAISED PAVEMENT MARKERS (TRPM) PLACED AT 100' INTERVALS ALONG THE C/L AFTER THE FINAL PAVING LIFT. THE TRPM MARKERS SHALL BE REMOVED PRIOR TO THE PERMANENT STRIPING BEING PLACED.

(6) 6" OF AGGREGATE BASE CLASS 5 AND EXCAVATION SHALL BE INCLUDED IN THE BID PRICE FOR 4" AND 6" CONCRETE WALK.

(7) STORM DRAIN INLET PROTECTION SHALL BE INSTALLED IN CATCH BASINS NEAR ADA IMPROVEMENT / CONCRETE WORK AREAS. SHALL BE INSTALLED IN ACCORDANCE WITH MNDOT STANDARD PLAN 5-297.405

(8) EQUIPMENT HOURS USED TO FOR MISCELLANEOUS WORK.

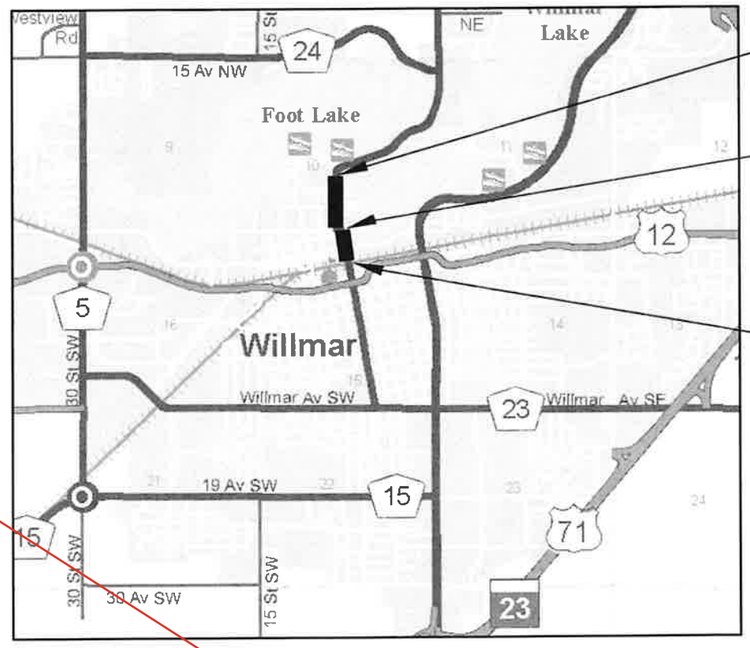
(9) 113 TONS PROVIDED FOR INTERSECTIONS.

NOTE: SAW CUTTING OF CONCRETE WALK, CONCRETE DRIVEWAY, AND CURB & GUTTER SHALL BE INCLUDED IN THE BID PRICE FOR REMOVE CONCRETE CURB & GUTTER.

CONSTRUCTION PLAN FOR BITUMINOUS MILLING, BITUMINOUS SURFACING AND ADA IMPROVEMEMENTS.

LOCATED ON CSAH 41 FROM 100.00' SOUTH OF CAMPBELL AVE NORTHWEST TO 100.00' NORTH OF PARK AVE NORTHWEST. (GEOGRAPHIC DESCRIPTION)

FROM 2265.10' W AND 2.84' S OF THE NE. COR. OF SEC. 21 T119N, R35W WILLMAR TWP. TO 1635.00' E OF THE NE. COR. OF SEC. 23 T119N, R35W WILLMAR TWP. (LEGAL DESCRIPTION)



END PROJ. SAP 034-641-012
STA 24+45

EXCEPTION (ELLA AVE. NW)
STA 7+50 TO 10+10

BEG. PROJ. SAP 034-641-012
STA 0+00

GROSS LENGTH 2445.00 FT 0.463 MILES
BRIDGE LENGTH FT MILES
EXCEPTIONS LENGTH 260.00 FT 0.049 MILES
NET LENGTH 2185.00 FT 0.414 MILES

≤N20 522,000 R Value 24

Pres. ADT 3930 (2025) Proj. ADT 5100 (2045)

Proj. HCADT 140 Shoulder Width 8'

10 TON Design

Graded In Under

Surfaced In Under

Functional Classification MINOR ARTERIAL

No. Of Traffic Lanes 4 No. Of Parking Lanes

Design Speed 40 MPH

Based On Stopping Sight Distance

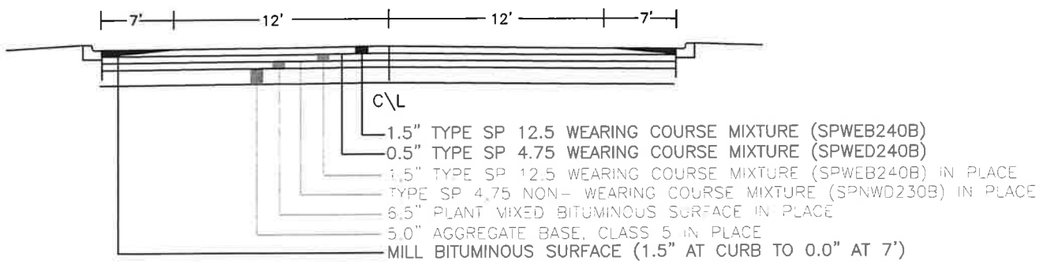
Height Of Eye 3.5' Height Of Object 2.0'

CERTIFIED BY [signature] LIC. NO. 24962 2/26 2025

KANDIYOHI COUNTY, MINN. SAP 034-641-012 Sheet No. 47 of 62 Sheets

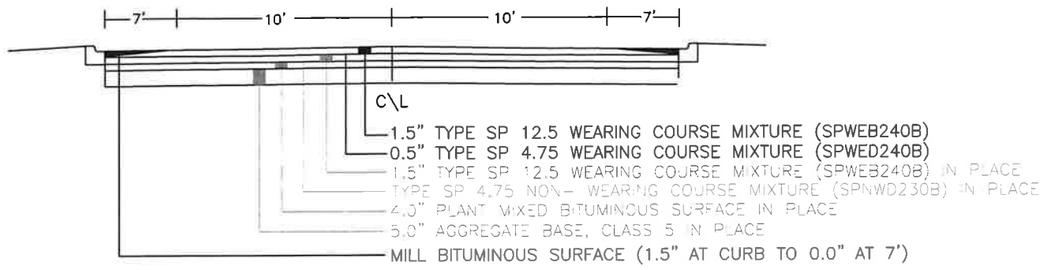
TYPICAL "A"

STA. 0+00 TO STA. 7+80



TYPICAL "B"

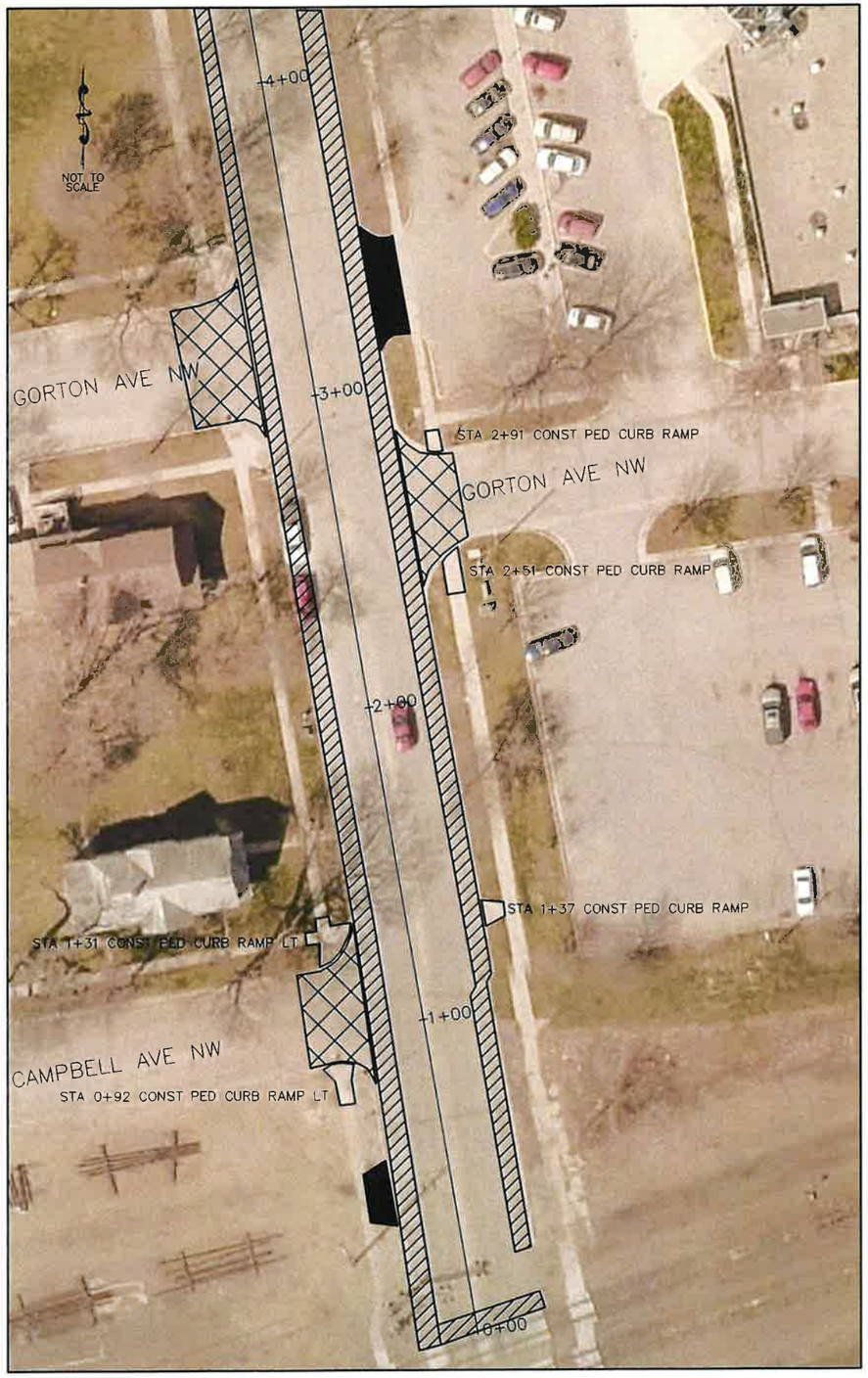
STA. 10+10 TO STA. 24+45



ADA RAMPS

LINE NO.	STATION	LOCATION	REMOVE AND REPLACE BITUMINOUS	REMOVE CONCRETE WALK	REMOVE CONCRETE CURB	CONCRETE CURB	CONCRETE WALK	TRUNCATED DOMES	SITE RESTORATION
			SQ FT	SQ FT	LIN FT	LIN FT	SQ FT	SQ FT	EACH
1	0+92	LT	60	85	30	30	100	8	1
2	1+31	LT	60	100	30	30	110	16	1
3	1+37	RT	20	85	10	10	95	8	1
4	2+51	RT	40	105	20	20	115	16	1
5	2+91	RT	60	85	30	30	100	8	1
6	14+65	RT	60	100	30	30	105	8	1
7	15+05	RT	50	90	30	30	100	8	1
8	16+85	LT	60	100	30	30	110	16	1
9	17+35	LT	60	75	30	30	85	8	1
10	18+20	RT	60	80	30	30	90	8	1
11	18+60	RT	50	100	30	30	110	18	1
12	20+20	RT	60	90	30	30	100	8	1
13	20+60	RT	60	85	30	30	95	8	1
	TOTAL		760	1180	360	360	1315	138	13

LINE NO.	STATION	LOCATION	CONCRETE DRIVEWAY PAVEMENT	SITE RESTORATION
			SQ YD	EACH
1	0+50	LT	14	1
2	1+35	RT	8	1
3	3+40	RT	32	1
4	5+65	RT	36	1
5	6+651	LT	13	1
6	7+15	RT	20	1
7	11+20	LT	40	1
8	11+40	LT	14	1
9	12+25	LT	14	1
10	12+84	RT	12	1
11	12+95	LT	20	1
12	13+12	RT	42	1
13	30+31	LT	15	1
14	31+15	LT	16	1
15	34+65	LT	16	1
16	37+12	LT	13	1
17	37+80	LT	13	1
18	38+71	LT	23	1
19	41+81	LT	14	1
20	44+03	RT	15	1
21	46+70	LT	22	1
22	48+90	LT	15	1
23	49+52	LT	26	1
24	50+79	RT	16	1
25	51+07	LT	15	1
26	62+85	RT	10	1
27	63+79	RT	26	1
	TOTAL		520	27

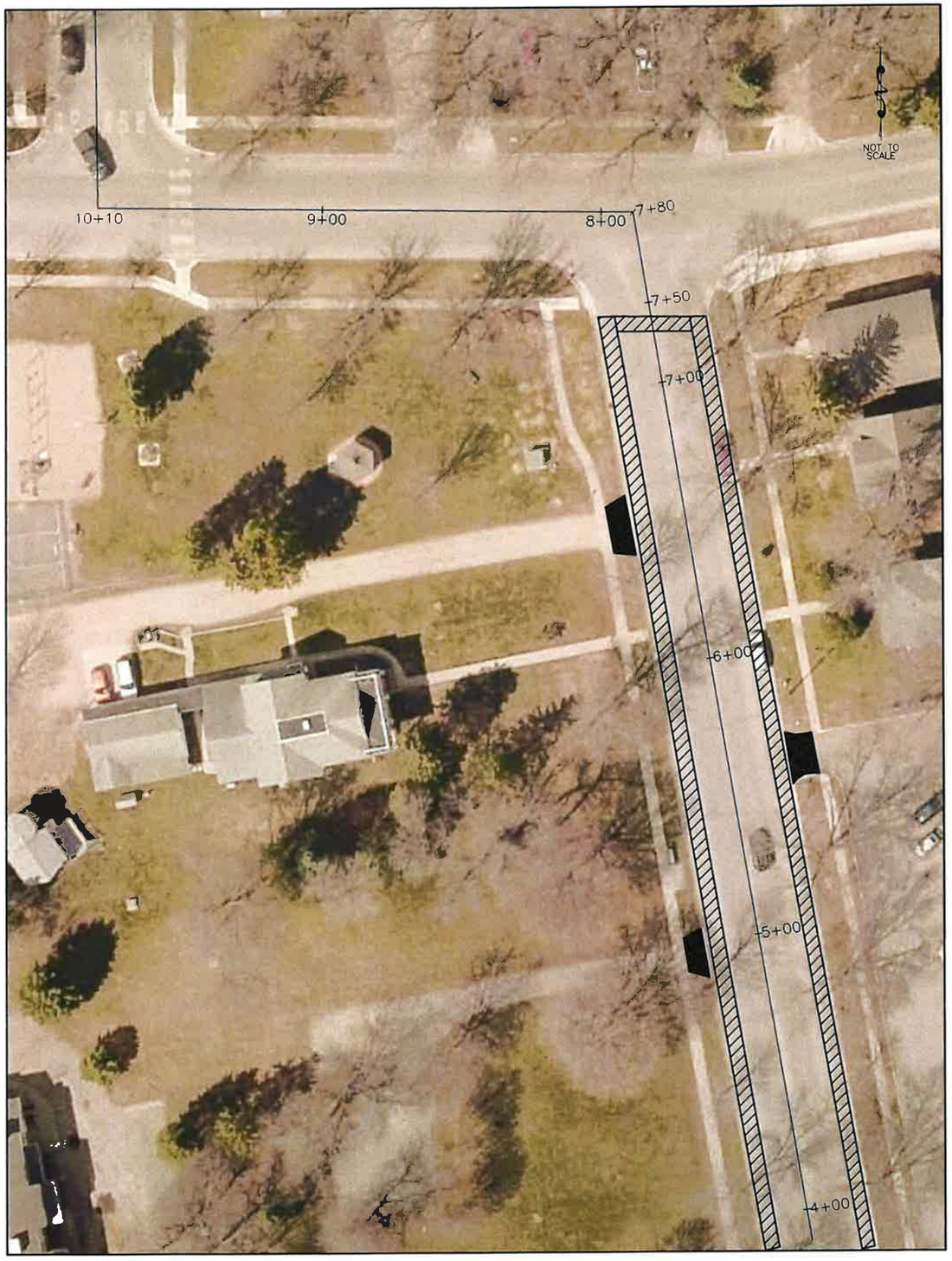


MILL BITUMINOUS PAVEMENT (0" TO 1.5")

MILL BITUMINOUS PAVEMENT (1.5")

ADA RAMPS	
0+92	LT
1+31	LT
1+37	RT
2+51	RT
2+91	RT

REMOVE & REPLACE CONCRETE DRIVEWAY



CERTIFIED BY E. Quinn Odeen REG. No. 24962 2/25/2025

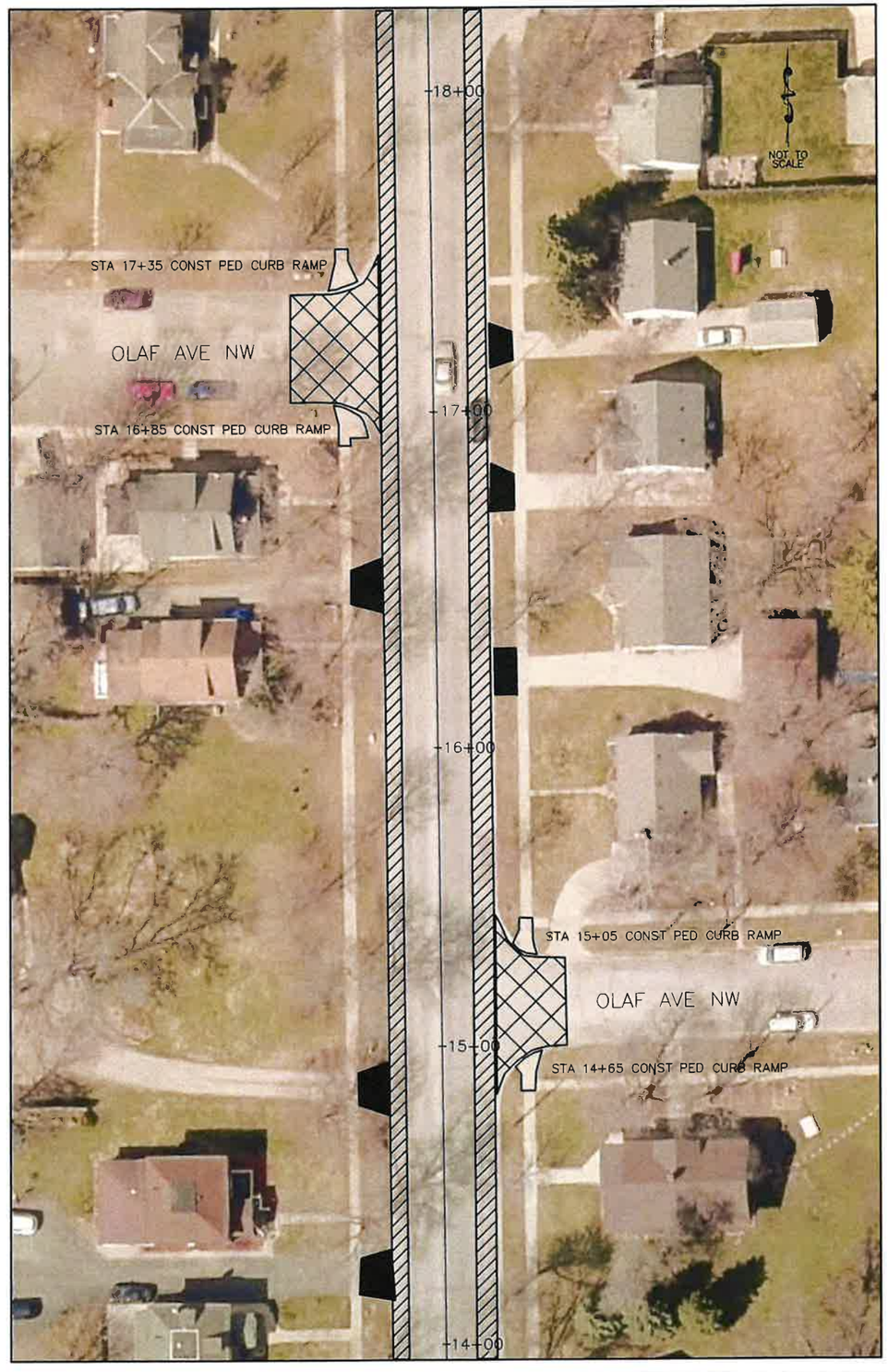
KANDIYOHI COUNTY, MN SAP 034-641-012 Sheet No. 49 of 62 Sheets

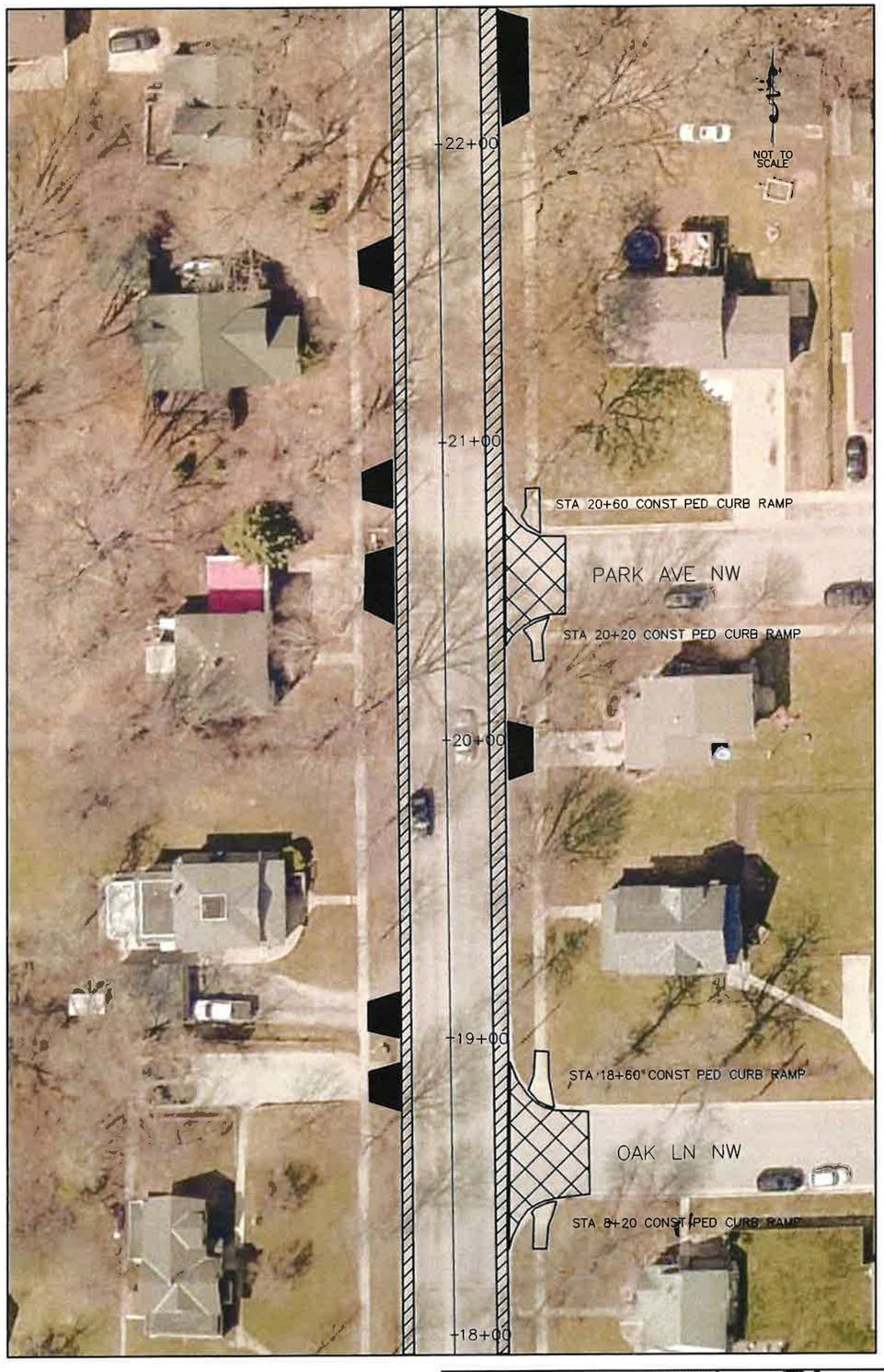
MILL BITUMINOUS PAVEMENT (0" TO 1.5")

MILL BITUMINOUS PAVEMENT (1.5")

ADA RAMPS	
14+65	RT
15+05	RT
16+85	LT
17+35	LT

REMOVE & REPLACE CONCRETE DRIVEWAY



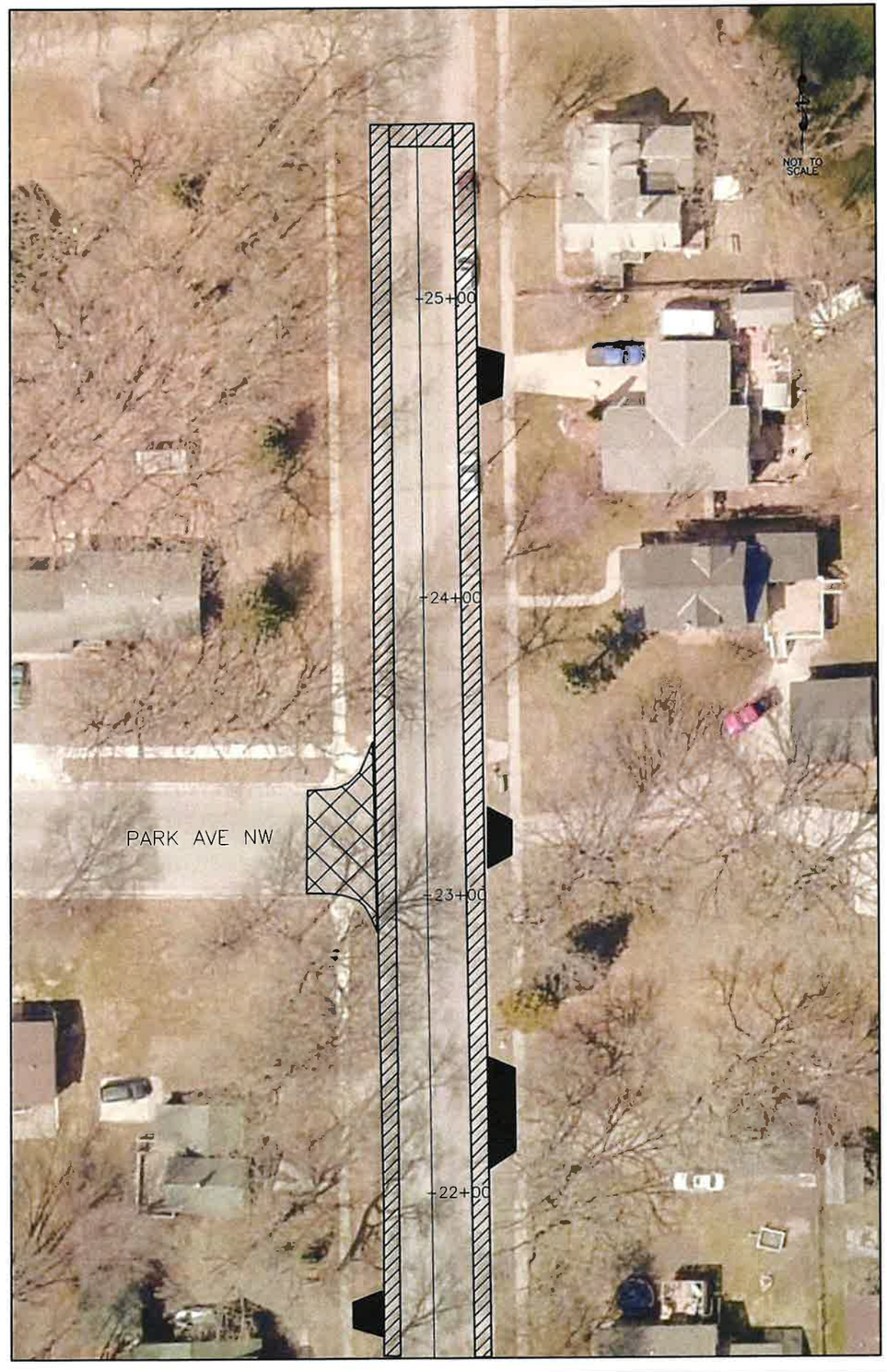


MILL BITUMINOUS PAVEMENT (0" TO 1.5")

MILL BITUMINOUS PAVEMENT (1.5")

ADA RAMPS	
18+20	RT
18+60	RT
20+20	RT
20+60	RT

REMOVE & REPLACE CONCRETE DRIVEWAY



CERTIFIED BY _____ REG. No. 24962 2/25 20 25

KANDIYOHI COUNTY, MN SAP 034-041-012

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	QUANTITY
	2021.501	MOBILIZATION	LS	1
	2104.504	REMOVE AGGREGATE MATERIAL	SQ YD	982
	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	130
(1)	2123.510	MOTOR GRADER	HR	20
(1)	2123.510	STEEL DRUM ROLLER	HR	25
(1)	2123.610	SKID LOADER	HR	30
(2)	2211.509	AGGREGATE BASE CLASS 5	TON	45
	2221.509	SHOULDER BASE AGGREGATE CLASS 1	TON	75
	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	282
(3)	2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B)	TON	892
	2506.502	ADJUST FRAME AND RING CASTING	EACH	1

(1) EQUIPMENT HOURS FOR SHAPING AND ROLLING IN PLACE AGGREGATE BASE CLASS 5 PRIOR TO PAVING.

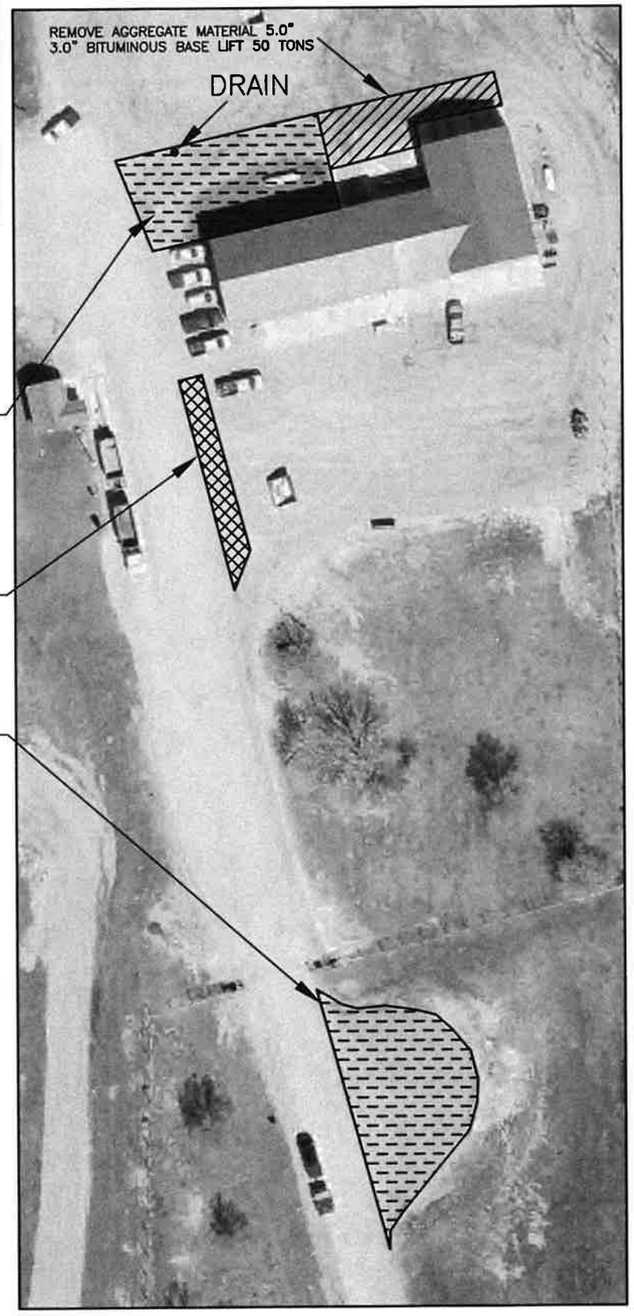
(2) PROVIDED FOR SHAPING AND PATCHING PRIOR TO PAVING. EXACT LOCATIONS, LENGTH AND SIZES SHALL BE DETERMINED AND MARKED BY THE ENGINEER.

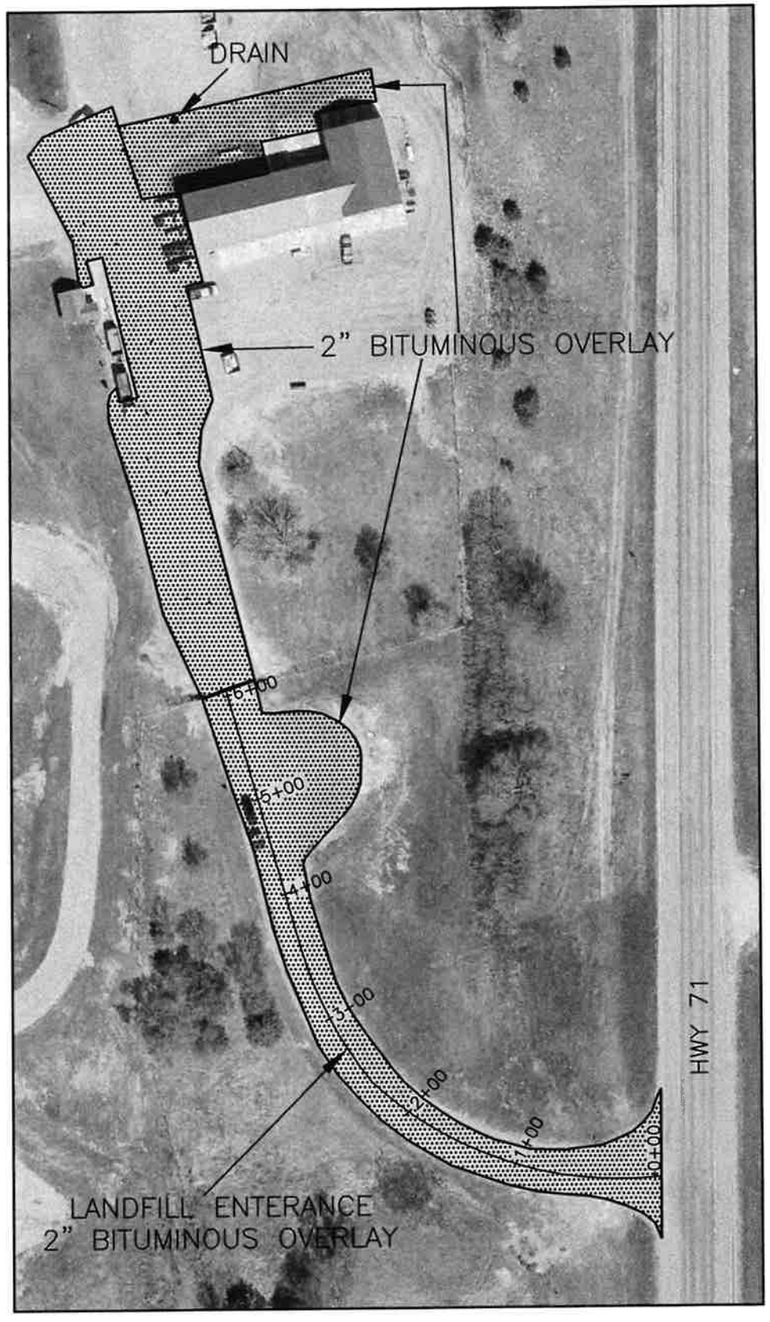
(3) 300 TONS PROVIDED FOR BASE LIFT.

CONSTRUCTION PLAN FOR BITUMINOUS SURFACING AND AGGREGATE SHOULDERING

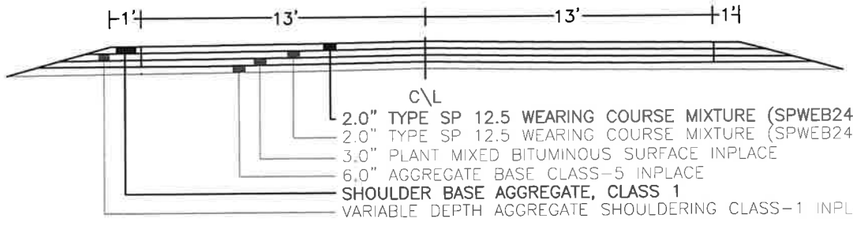
LOCATED ON ..... (GEOGRAPHIC DESCRIPTION)

FROM ..... TO ..... (LEGAL DESCRIPTION)

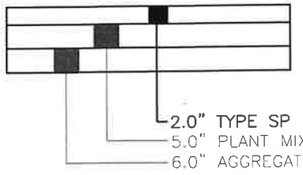




TYPICAL "A"
LANDFILL ENTRANCE
STA. 0+00 TO STA. 6+00

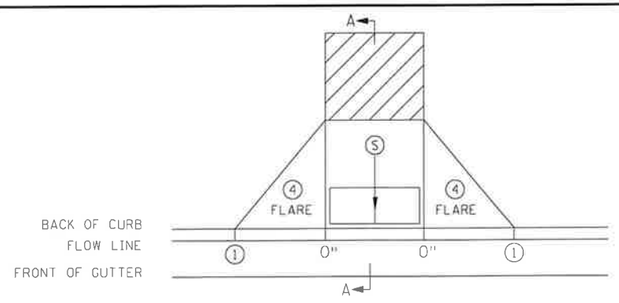


LANDFILL-25

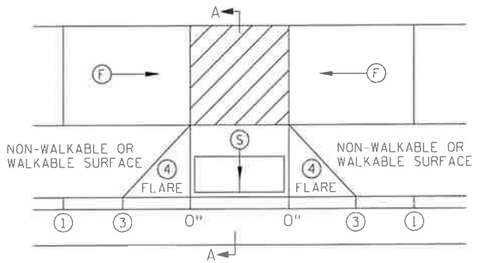


CERTIFIED BY _____ REG. No. 24962 2/25 20 25

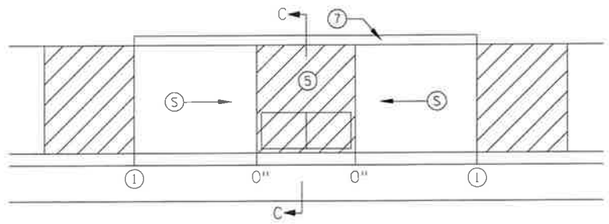
KANDIYOHI COUNTY, MN | LANDFILL-25 | Sheet No. 52 of 62 Sheets



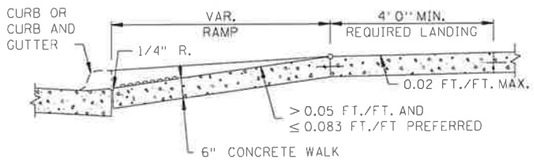
PERPENDICULAR



TIERED PERPENDICULAR

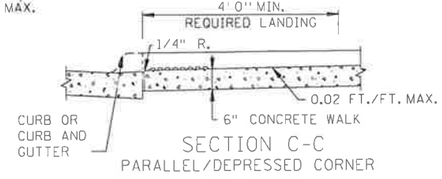


PARALLEL



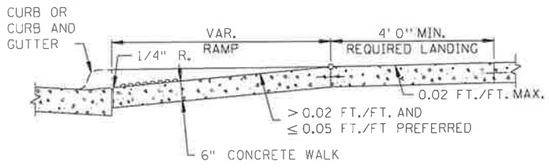
SECTION A-A

PERPENDICULAR/TIERED/DIAGONAL



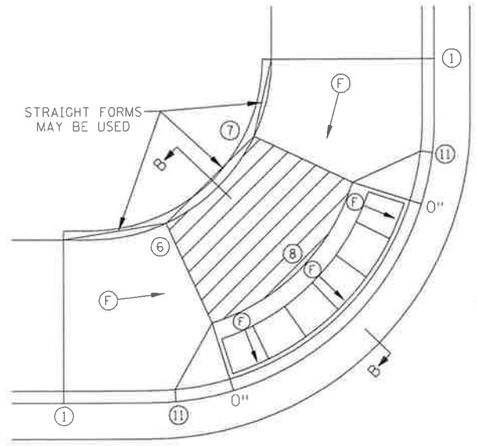
SECTION C-C

PARALLEL/DEPRESSED CORNER

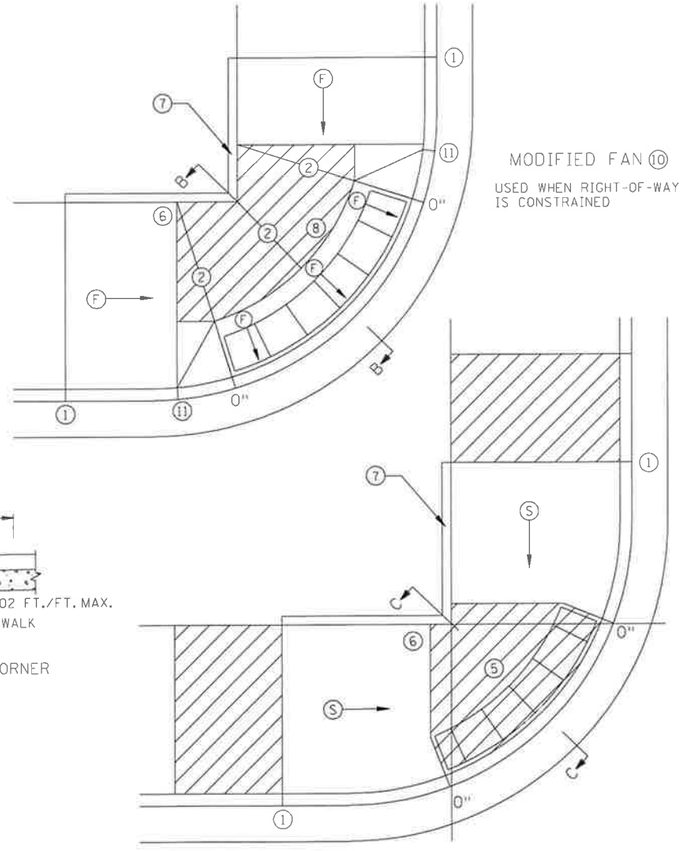


SECTION B-B

FAN



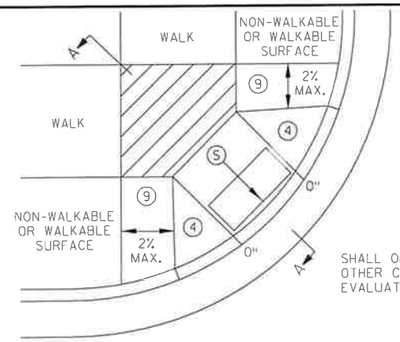
FAN (10)



MODIFIED FAN (10)

USED WHEN RIGHT-OF-WAY IS CONSTRAINED

DEPRESSED CORNER



DIAGONAL

SHALL ONLY BE USED AFTER ALL OTHER CURB RAMP TYPES HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE GREATER THAN 2%.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL, THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH, (EXCEPT AS STATED IN (6) BELOW.

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 SHEET 6 OF 6 FOR ALL SEPARATELY POURED INITIAL LANDINGS.

WHEN SIDEWALK IS AT BACK OF CURB, TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

MAINTAIN POSITIVE BOULEVARD DRAINAGE TO TOP OF CURB.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER THE ENTIRE PAR WIDTH OF SHARED-USE PATHS AND THE ENTIRE PAR WIDTH OF THE WALK WITH THE EXCEPTION OF 3" MAXIMUM ON EACH OUTSIDE EDGE WHICH ENSURES THE DETECTABLE WARNINGS ARE ENCASED IN CONCRETE WHEN ADJACENT TO TURF. WHEN ADJACENT TO CONCRETE FLARES 0" - 3" OFFSET IS ALLOWED.

WHEN DESIGNING OR ORDERING RECTANGULAR DETECTABLE WARNING SURFACES SHOULD BE 6" LESS THAN THE INCOMING PAR. ARC LENGTH OF THE RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.

RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.

(1) MATCH FULL HEIGHT CURB.

(2) 4' MINIMUM DEPTH LANDING REQUIRED ACROSS TOP OF RAMP.

(3) 3" HIGH CURB WHEN USING A 3' LONG RAMP, 4" HIGH CURB WHEN USING A 4' LONG RAMP.

(4) SEE SHEET 4 OF 6, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.

(5) DETECTABLE WARNINGS MAY BE PART OF THE 4' X 4' MIN. LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.

(6) THE GRADE BREAK SHALL BE PERPENDICULAR TO THE BACK OF WALK. THIS WILL ENSURE THAT THE GRADE BREAK IS PERPENDICULAR TO THE DIRECTION OF TRAVEL. (TYPICAL FOR ALL)

(7) WHEN ADJACENT TO GRASS, GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS LESS THAN 5% RUNNING SLOPE SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.

(8) A 7' MIN TOP RADIUS GRADE BREAK IS REQUIRED TO BE CONSTRUCTIBLE.

(9) PAVE FULL WALK WIDTH.

(10) "S" SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.

(11) INTERMEDIATE CURB HEIGHTS TAPER SHALL RISE AT 8-10% TO A MINIMUM 3" CURB HEIGHT. REDUCE INTERMEDIATE CURB HEIGHT TO 2+ INCHES IF NECESSARY TO MATCH ADJACENT BOULEVARD OR SIDEWALK GRADES.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

(S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

(F) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.

X" CURB HEIGHT

REVISION:

APPROVED: 11-04-2021

Jeffrey J. Perkins

JEFFREY J. PERKINS

OPERATIONS DIVISION

DEPARTMENT OF TRANSPORTATION

STANDARD PLAN 5-297.250 | 1 OF 6

APPROVED: 11-04-2021

REVISED:

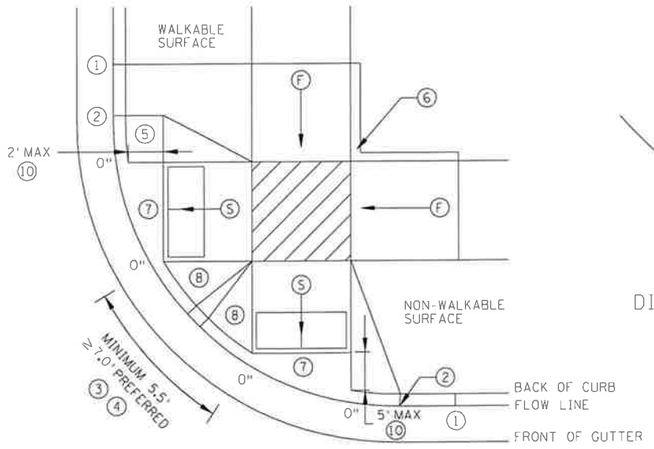
THOMAS STYRBICKI

STATE DESIGN ENGINEER

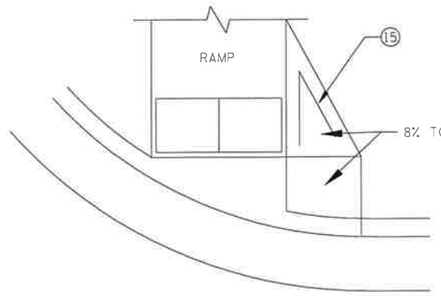
PEDESTRIAN CURB RAMP DETAILS

CERTIFIED BY Kevin Gleason REG. No. 24962 2/25/2025

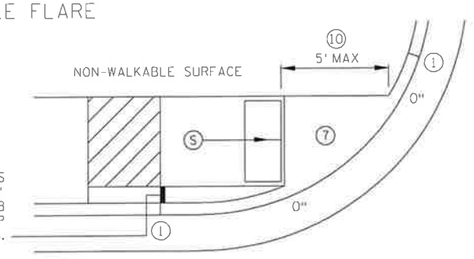
KANDIYOHI COUNTY, MN SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041



COMBINED DIRECTIONAL

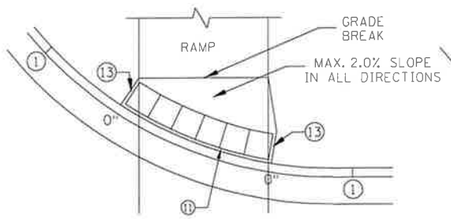


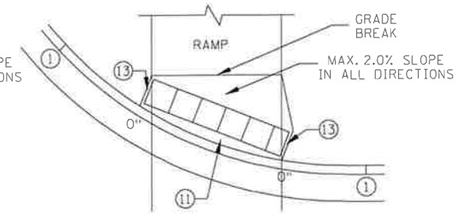
DIRECTIONAL RAMP WALKABLE FLARE



IF NON-CONCRETE BLVD. IS CONSTRUCTED AND IS LESS THAN 2' IN WIDTH AT TOP OF CURB TRANSITION, PAVE CONCRETE RAMP WIDTH TO ADJACENT BACK OF CURB.

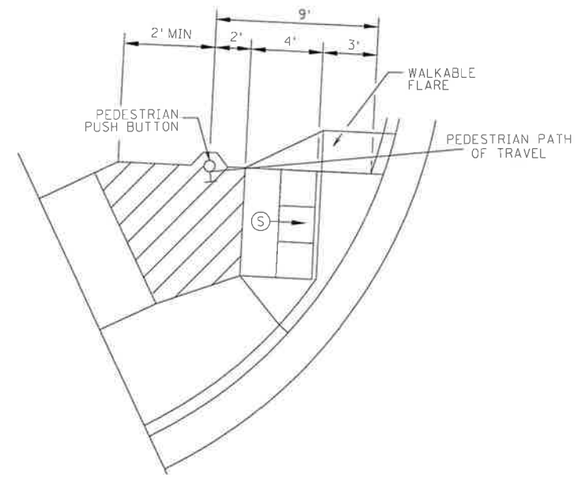
STANDARD ONE-WAY DIRECTIONAL ⑨





DETECTABLE WARNING PLACEMENT WHEN SETBACK CRITERIA IS EXCEEDED ⑫

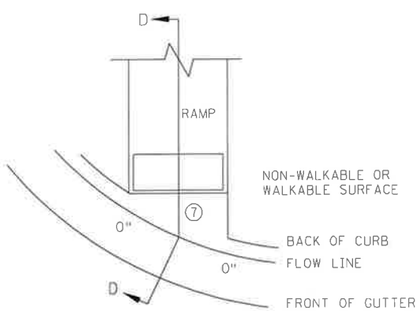
ONE-WAY DIRECTIONAL WITH DETECTABLE WARNING AT BACK OF CURB

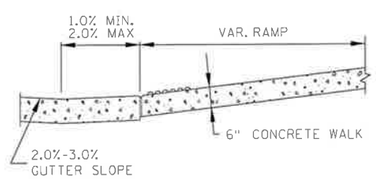


SEMI-DIRECTIONAL RAMP ③④⑨

3' DOME SETBACK, 4' LONG RAMP AND PUSH BUTTON 9' FROM THE BACK OF CURB

PRIMARILY USED FOR APS APPLICATIONS WHERE THE PAR DOES NOT CONTINUE PAST THE PUSH BUTTON (DEAD-END SIDEWALK)





SECTION D-D

CURB FOR DIRECTIONAL RAMPS ⑭

NOTES:

LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS INVERSE GRADE.

INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 6' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.0%.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOP GRADE BREAK OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED, LANDINGS SHALL BE CAST SEPARATELY. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND THE ADA SPECIAL PROVISION (PROSECUTION OF WORK).

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3' LONG RAMP LENGTH.

4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER THE ENTIRE PAR WIDTH OF SHARED-USE PATHS AND THE ENTIRE PAR WIDTH OF THE WALK WITH THE EXCEPTION OF 3" MAXIMUM ON EACH OUTSIDE EDGE WHICH ENSURES THE DETECTABLE WARNINGS ARE ENCASED IN CONCRETE WHEN ADJACENT TO TURF. WHEN ADJACENT TO CONCRETE FLARES 0" - 3" OFFSET IS ALLOWED.

WHEN DESIGNING OR ORDERING RECTANGULAR DETECTABLE WARNING SURFACES SHOULD BE 6" LESS THAN THE INCOMING PAR. ARC LENGTH OF THE RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.

RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB. SEE NOTES ⑩ & ⑪ FOR INFORMATION REGARDING RECTANGULAR DETECTABLE WARNING PLACEMENT.

① MATCH FULL CURB HEIGHT.

② 3" HIGH CURB WHEN USING A 3' LONG RAMP
4" HIGH CURB WHEN USING A 4' LONG RAMP.

③ 3" MINIMUM CURB HEIGHT (5.5' MIN. DISTANCE REQUIRED BETWEEN DOMES)
4" PREFERRED (7' MIN. DISTANCE REQUIRED BETWEEN DOMES).

④ THE "BUMP" IN BETWEEN THE RAMPS SHOULD NOT BE IN THE PATH OF TRAVEL FOR COMBINED DIRECTIONAL RAMPS. IF THIS OCCURS MODIFY THE RAMP LOCATION OR SWITCH RAMP TO A FAN/DEPRESSED CORNER.

⑤ WHEN USING CONCRETE PAVED FLARES ON THE OUTSIDE OF DIRECTIONAL RAMPS, AND ADJACENT TO A WALKABLE SURFACE, DIRECTIONAL RAMP FLARES SHALL BE USED. SEE THE DETAIL ON THIS SHEET.

⑥ GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS, CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.

⑦ MAX. 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. SHALL BE CONSTRUCTED INTEGRAL WITH CURB AND GUTTER.

⑧ 8% TO 10% WALKABLE FLARE.

⑨ PLACE DOMES AT THE BACK OF CURB WHEN ALLOWABLE SETBACK CRITERIA IS EXCEEDED.

⑩ FRONT EDGE OF DETECTABLE WARNING SHALL BE SET BACK 2' MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE, AND 5' MAXIMUM WHEN ADJACENT TO NON-WALKABLE SURFACE WITH ONE CORNER SET 3" FROM BACK OF CURB. 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.

⑪ RECTANGULAR DETECTABLE WARNINGS MAY BE SETBACK UP TO 9" FROM THE BACK OF CURB WITH CORNERS SET 3" FROM BACK OF CURB. IF 9" SETBACK IS EXCEEDED USE RADIAL DETECTABLE WARNINGS.

⑫ FOR DIRECTIONAL RAMPS WITH THE DETECTABLE WARNINGS PLACED AT THE BACK OF CURB, THE DETECTABLE WARNINGS SHALL COVER THE ENTIRE WIDTH OF THE WALK/PATH. THIS ENSURES A DETECTABLE EDGE AND HELPS ELIMINATE THE CURB TAPER OBSTRUCTING THE PATH OF PEDESTRIAN TRAVEL.

⑬ THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE BACK OF CURB. MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.

⑭ TO BE USED FOR ALL DIRECTIONAL RAMPS, EXCEPT WHERE DOMES ARE PLACED ALONG THE BACK OF CURB.

⑮ PLACE 2 NO. 4 BARS 4 INCHES FROM SIDE OF FORMS WITH A MINIMUM 2 INCHES OF CONCRETE COVER ALONG EACH SIDE OF FLARE (INCIDENTAL).

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

(S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

(F) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%.

LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.

X" CURB HEIGHT

REVISION:

APPROVED: 11-04-2021
JEFFREY PERKINS
OPERATIONS DIVISION

DEPARTMENT OF TRANSPORTATION

STANDARD PLAN 5-297.250 | 2 OF 6

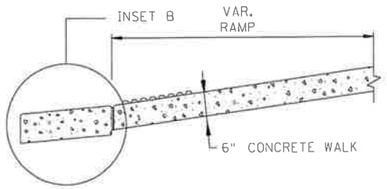
APPROVED: 11-04-2021
REVISED:

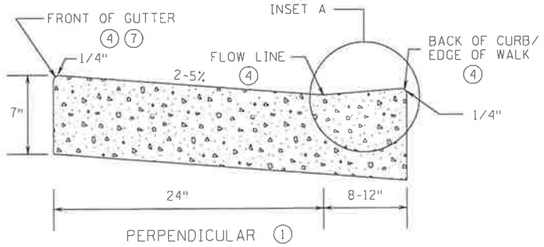
THOMAS STYRBICKI
STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

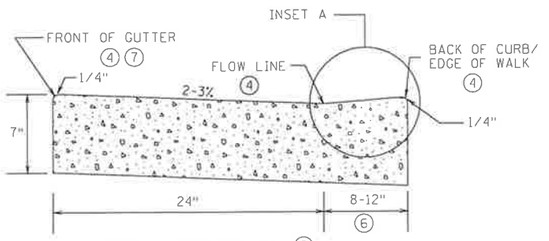
CERTIFIED BY _____ REG. No. 24962 2/25/20 25

KANDIYOHI COUNTY, MN SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041

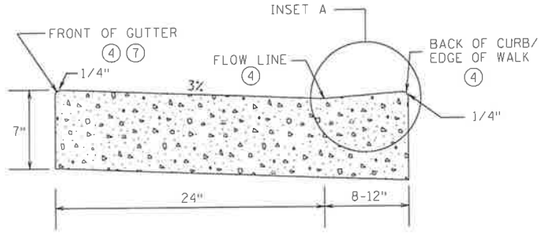




PERPENDICULAR ①

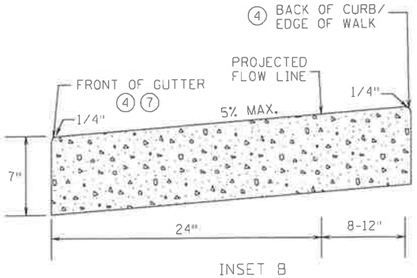


NON PERPENDICULAR ②

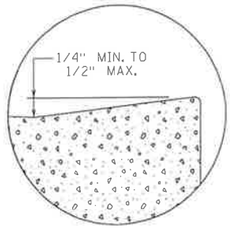


FOR CURB MACHINE PLACEMENT AROUND RADIUS ③
(REGARDLESS OF RAMP TYPE)

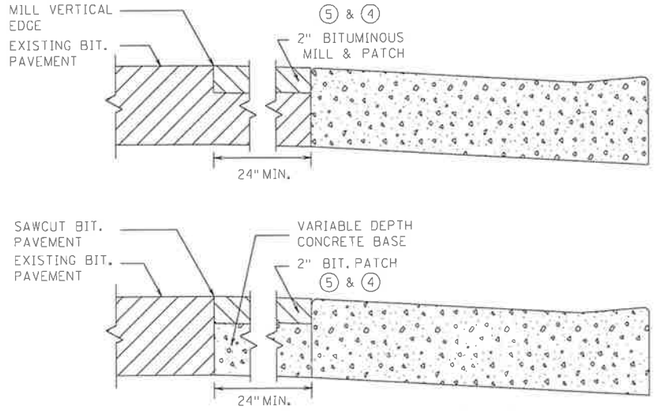
PEDESTRIAN ACCESS ROUTE CURB & GUTTER DETAIL



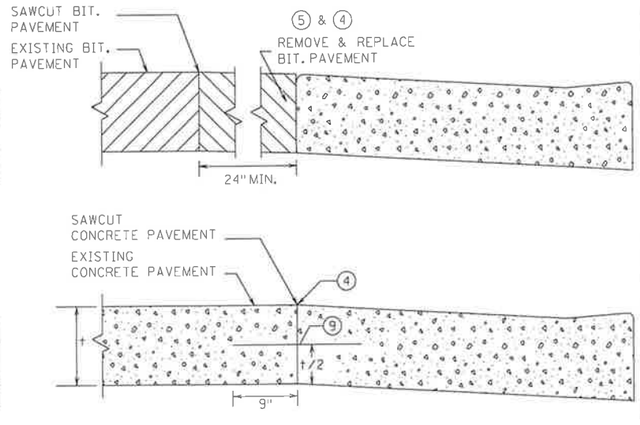
INSET B
OUTFLOW GUTTER ⑧



INSET A

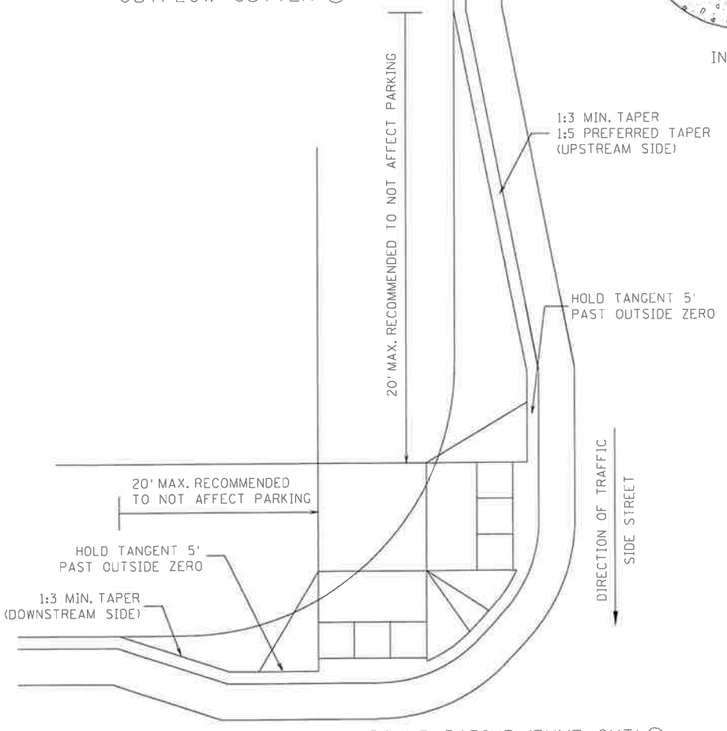


ONLY ALLOWED PER ENGINEER'S APPROVAL

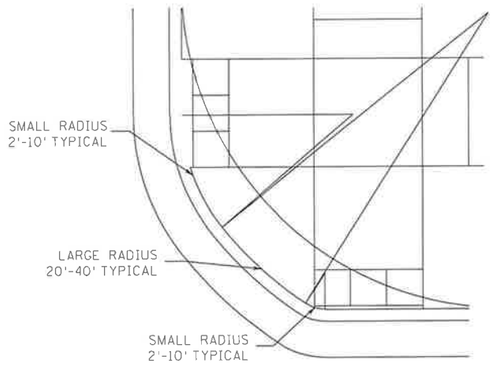


PAVEMENT TREATMENT OPTIONS IN FRONT OF CURB & GUTTER

FOR USE ON CURB RAMP RETROFITS



ADA CURB EXTENSION WITH COMPOUND RADIUS (BUMP OUT) ⑪



COMBINED DIRECTIONAL ⑩
(COMPOUND RADIUS)

NOTES:

POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM.

NO PONDING SHALL BE PRESENT IN THE PAR.

ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4 INCH.

① FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: PERPENDICULAR, TIERED PERPENDICULAR, PARALLEL, AND DIAGONAL RAMPS.

② FOR USE AT CURB RAMPS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED NON PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: FANS & DEPRESSED CORNERS.

③ BEGIN GUTTER SLOPE TRANSITION 10' OUTSIDE OF ALL CURB RAMPS.

④ THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4".

⑤ ELEVATION CHANGE TAKES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH IS USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.

⑥ VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS. SEE SHEET 2 FOR DIRECTIONAL CURB SLOPE REQUIREMENTS.

⑦ TOP FRONT OF GUTTER SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION. TOP 1.5" OF THE GUTTER FACE MUST BE A FORMED EDGE. PAR GUTTER SHALL NOT BE OVERLAID.

⑧ SHOULD BE USED AT VERTICALLY CONSTRAINED AREAS WHEN AT A DRAINAGE HIGH POINT OR SUPER ELEVATED ROADWAY SEGMENTS.

⑨ DRILL AND GROUT NO. 4 EPOXY-COATED 18" LONG TIE BARS AT 30" CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT 1' MINIMUM FROM ALL JOINTS.

⑩ HELPS PROVIDE TWO SEPARATE RAMPS, REDUCES THE DOME SETBACK LENGTH AND MINIMIZES DIRECTIONAL CURB. THIS RADIUS DESIGN CLOSELY FOLLOWS THE TURNING VEHICLE PATH WHILE OPTIMIZING CURB RAMP LENGTH.

⑪ CURB EXTENSIONS SHOULD BE USED IN VERTICALLY CONSTRAINED AREAS, USUALLY IN DOWNTOWN ROADWAY SEGMENTS WHERE ON-STREET PARKING IS AVAILABLE. CURB EXTENSIONS SHOULD BE CONSIDERED FOR APS INTERSECTIONS WHERE SPACE IS LIMITED.
PUSH BUTTONS MUST MEET APS CRITERIA AS DESCRIBED IN THE PUSH BUTTON LOCATION DETAIL SHEET.

REVISION:

APPROVED: 11-04-2021
JEFF PERKINS
OPERATIONS DIVISION

DEPARTMENT OF TRANSPORTATION

STANDARD PLAN 5-297.250 | 3 OF 6

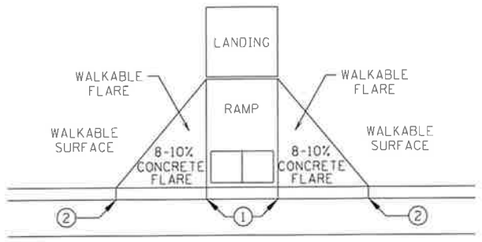
APPROVED: 11-04-2021
REVISED:

THOMAS STYRBICKI
STATE DESIGN ENGINEER

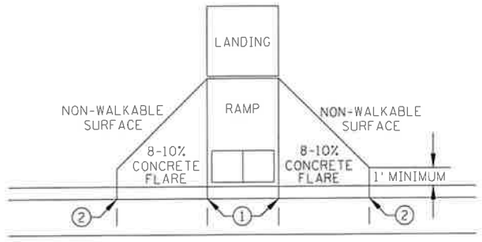
PEDESTRIAN CURB RAMP DETAILS

CERTIFIED BY _____ REG. No. 24962 2/25/20 25

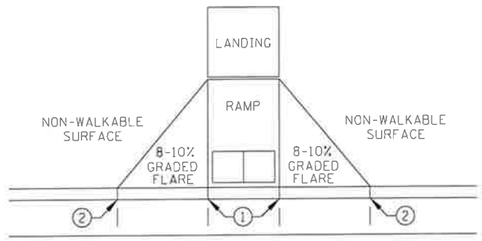
KANDIYOHI COUNTY, MN SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041



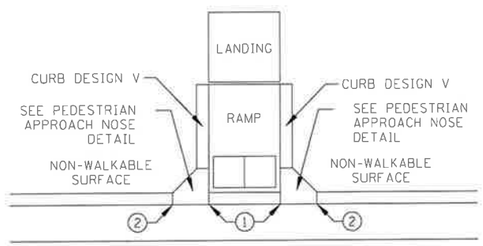
PAVED FLARES
ADJACENT TO WALKABLE SURFACE



PAVED FLARES
ADJACENT TO NON-WALKABLE SURFACE

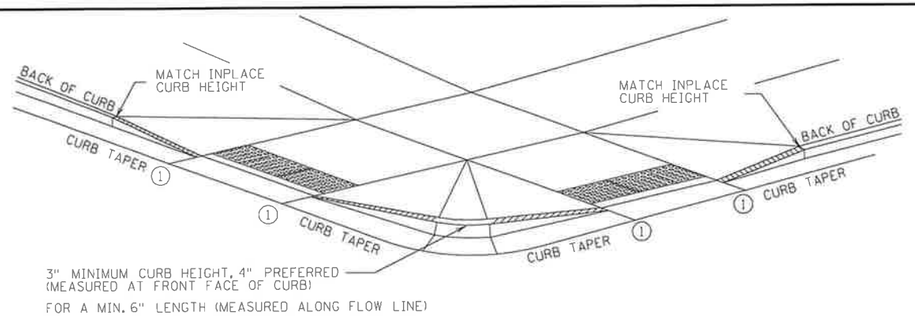


GRADED FLARES

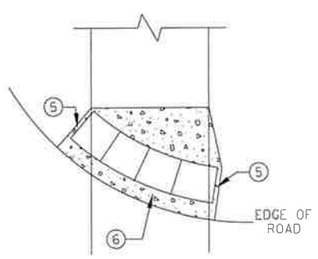


RETURNED CURB ④

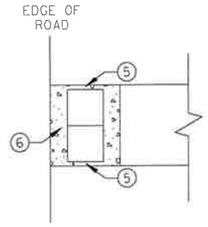
TYPICAL SIDE TREATMENT OPTIONS ③ ⑩



DETECTABLE EDGE WITH ⑦
CURB AND GUTTER

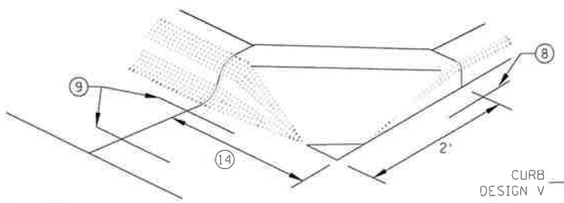


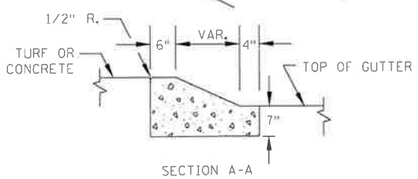
RADIAL DETECTABLE WARNING



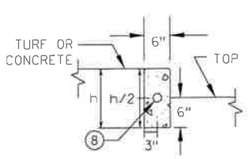
RECTANGULAR DETECTABLE WARNING

DETECTABLE EDGE WITHOUT CURB AND GUTTER

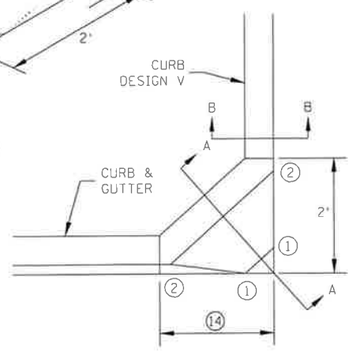




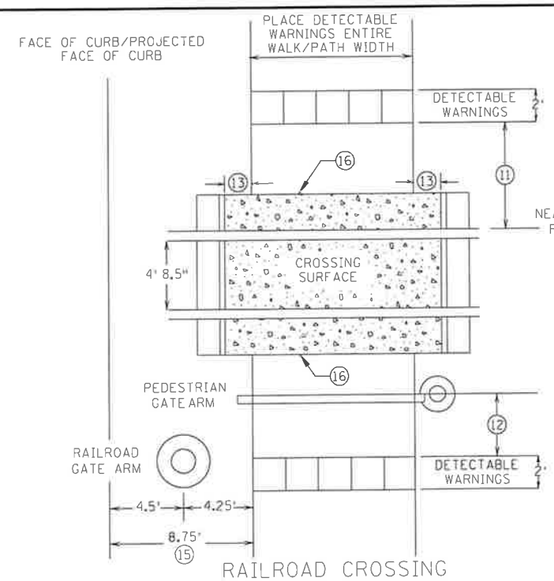
SECTION A-A



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.

REVISION:

APPROVED: 11-04-2021
JEFF PERKINS
OPERATIONS DIVISION

DEPARTMENT OF TRANSPORTATION

THOMAS STYRBICKI
STATE DESIGN ENGINEER

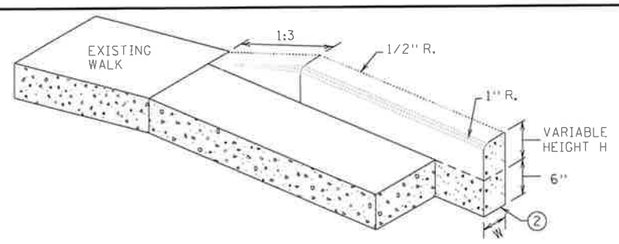
STANDARD PLAN 5-297.250	4 OF 6
APPROVED: 11-04-2021	
REVISED:	

PEDESTRIAN CURB RAMP DETAILS

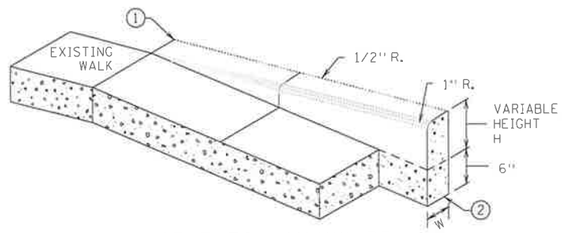
CERTIFIED BY _____ REG. No. 24962 2/25/2021

KANDIYOHI COUNTY, MN

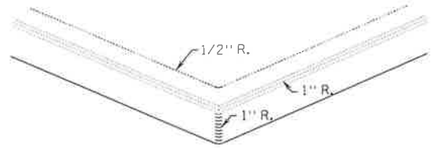
SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041



V CURB ADJACENT TO LANDSCAPE
CURB WITHIN SIDEWALK LIMITS

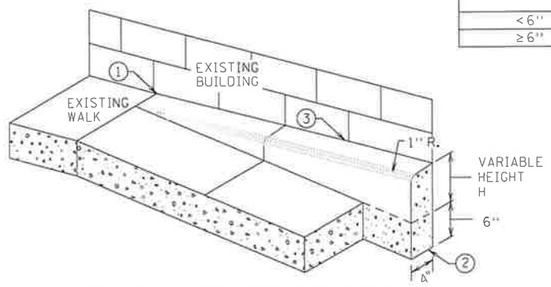


V CURB ADJACENT TO LANDSCAPE
CURB OUTSIDE SIDEWALK LIMITS

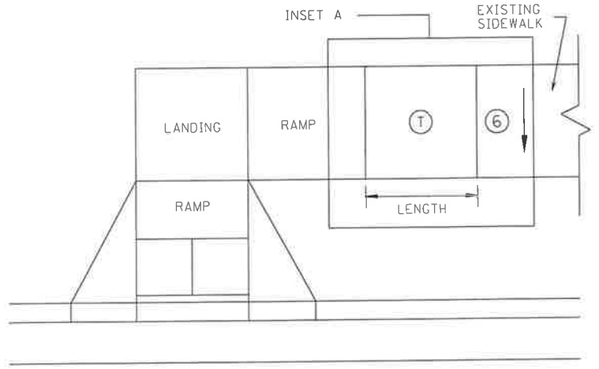


V CURB INTERSECTION

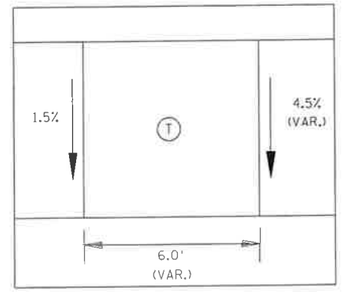
CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
< 6"	4"
≥ 6"	6"



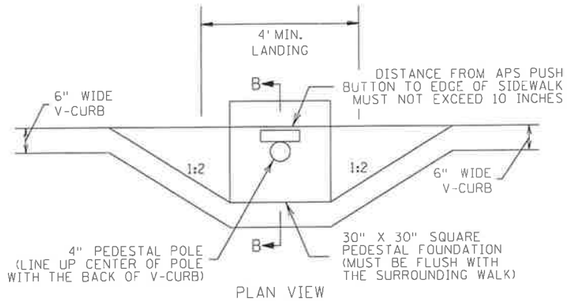
V CURB ADJACENT TO BUILDING OR BARRIER



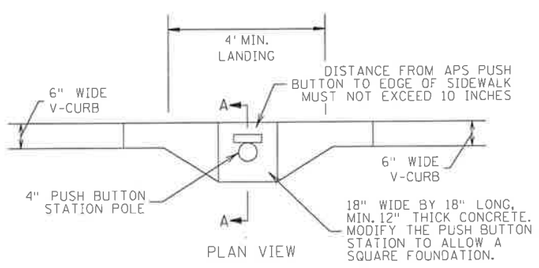
TRANSITION PANEL ④⑤



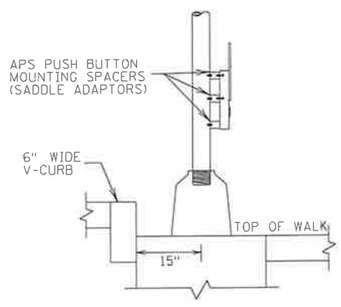
INSET A



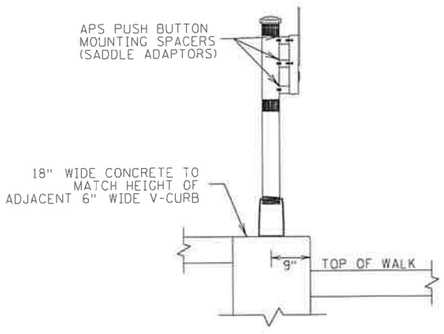
PLAN VIEW



PLAN VIEW



SECTION B-B



SECTION A-A

SIGNAL PEDESTAL & PUSH BUTTON (V-CURB)

PUSH BUTTON STATION (V-CURB)

NOTES:

A WALKABLE FLARE IS AN 8-10% CONCRETE FLARE THAT IS REQUIRED WHEN THE FLARE IS ADJACENT TO A WALKABLE SURFACE, OR WHEN THE PEDESTRIAN PATH OF TRAVEL OF A PUSH BUTTON TRAVERSES THE FLARE.

ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.

WHERE RIGHT-OF-WAY ALLOWS, USE OF V CURB SHOULD BE MINIMIZED. GRADING ADJACENT TURF OR SLOPING ADJACENT PAVEMENT IS PREFERRED.

V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.

V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.

(1) END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.

(2) ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.

(3) CONSTRUCT USING APPROVED EXPANSION MATERIAL PER MNDOT TYPE A-E EXPANSION. LEAVE A MINIMUM ½" TOP GAP AND SEAL WITH MNDOT APPROVED SILICONE PER MNDOT SPEC 3722.

(4) THE MAX. RATE OF CROSS SLOPE TRANSITIONING IS 1' LINEAR FOOT OF SIDEWALK PER HALF PERCENT CROSS SLOPE. WHEN PAR WIDTH IS GREATER THAN 6' OR THE RUNNING SLOPE IS GREATER THAN 5%. DOUBLE THE CALCULATED TRANSITION LENGTH.

(5) TRANSITION PANELS ARE TO ONLY BE USED AFTER THE RAMP, OR IF NEEDED, LANDING ARE AT THE FULL CURB HEIGHT (TYPICAL SECTION).

(6) EXISTING CROSS SLOPE GREATER THAN 2.0%.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

(S) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.

LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.

(T) TRANSITION PANEL(S) - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A RAMP TO THE EXISTING WALK CROSS-SLOPE. RATE OF TRANSITION SHOULD BE 0.5% PER 1 LINEAR FOOT OF WALK. SEE THIS SHEET FOR ADDITIONAL INFORMATION.

REVISION:

APPROVED: 11-04-2021
Jeffrey J. Perkins
JEFFREY PERKINS
OPERATIONS DIVISION

DEPARTMENT OF TRANSPORTATION

STANDARD PLAN 5-297.250 | 5 OF 6

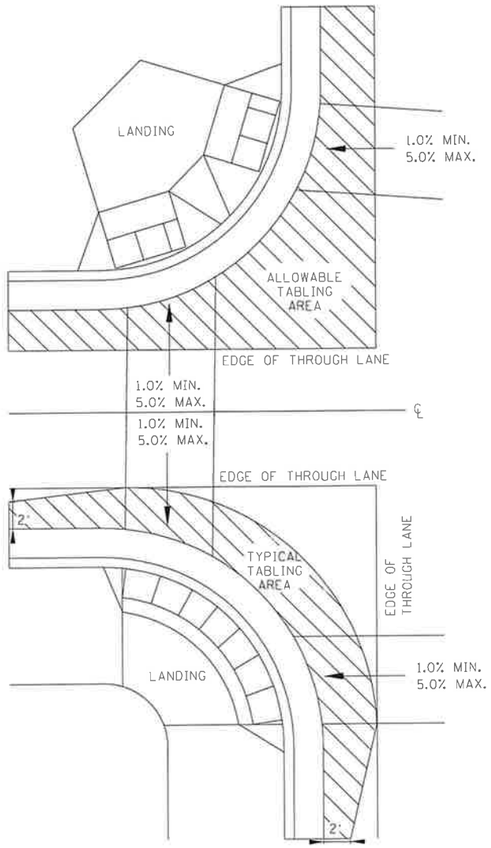
APPROVED: 11-04-2021
REVISED:

THOMAS STYRBICKI
STATE DESIGN ENGINEER

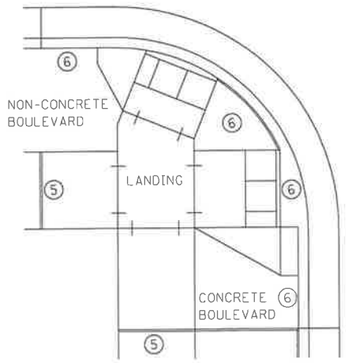
PEDESTRIAN CURB RAMP DETAILS

CERTIFIED BY _____ REG. No. 24962 2/25 2025

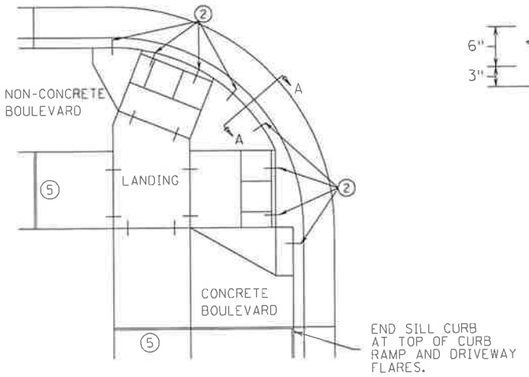
KANDIYOHI COUNTY, MN SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041



CURB LINE AND ROAD CROSSING ADJUSTMENTS



EXPANSION MATERIAL PLACEMENT
FOR CONCRETE ROADWAYS



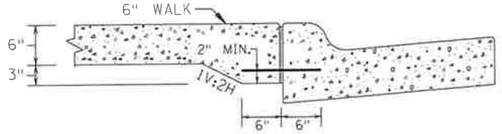
CURB LINE REINFORCEMENT ④
PLACEMENT ON BITUMINOUS ROADWAYS

FLOW LINE PROFILE "TABLE" - TWIN PERPENDICULARS

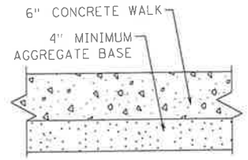
FLOW LINE PROFILE "TABLE" - FAN

FLOW LINE PROFILE RAISE - TWIN PERPENDICULARS

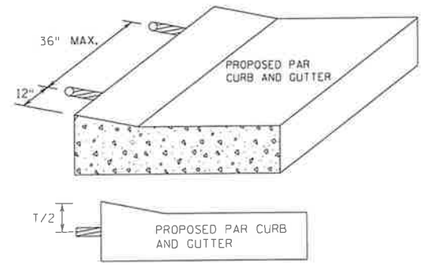
FLOW LINE PROFILE RAISE - FAN



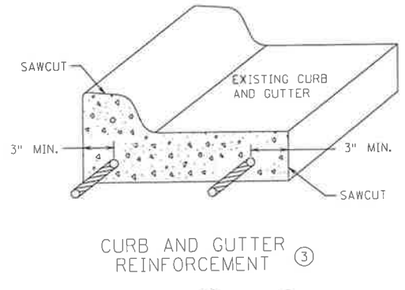
SECTION VIEW A-A
THICKENED SECTION
THROUGH CURB RAMP FLARES



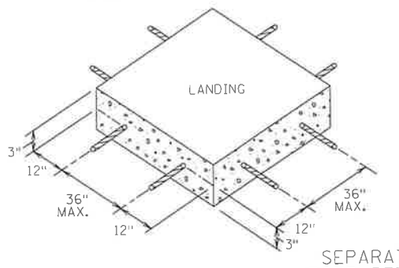
TYPICAL SIDEWALK SECTION
WITHIN INTERSECTION CORNER

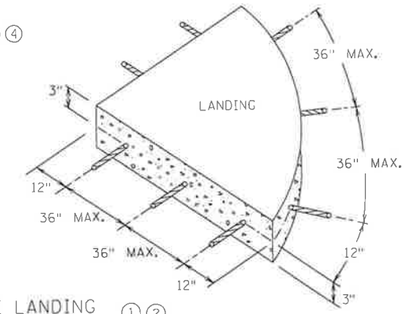


CURB RAMP REINFORCEMENT DETAILS ②④



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.

REVISION:

APPROVED: 11-04-2021
JEFFREY PERKINS
OPERATIONS DIVISION

DEPARTMENT OF TRANSPORTATION

STANDARD PLAN 5-297.250 | 6 OF 6

APPROVED: 11-04-2021
REVISED:

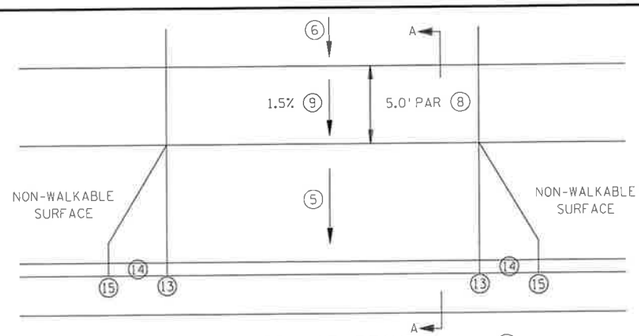
THOMAS STYRBICKI
STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

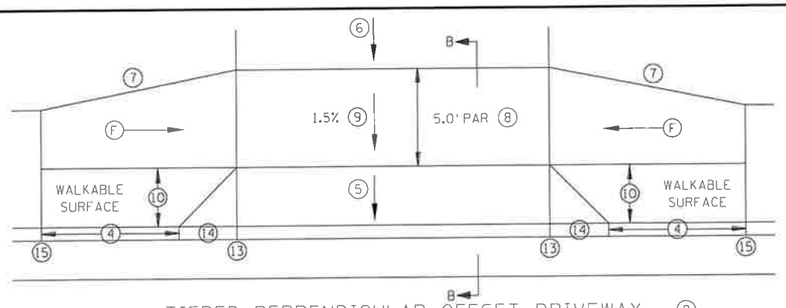
CERTIFIED BY _____ REG. No. 24962 2/25/2025

KANDIYOHI COUNTY, MN

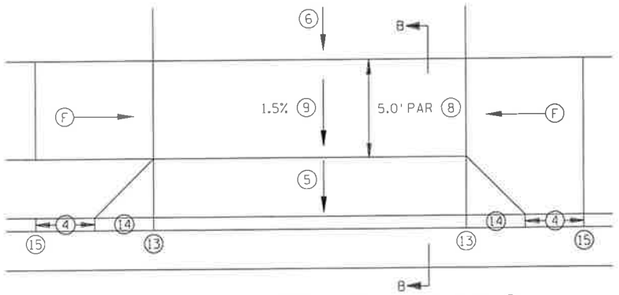
SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041



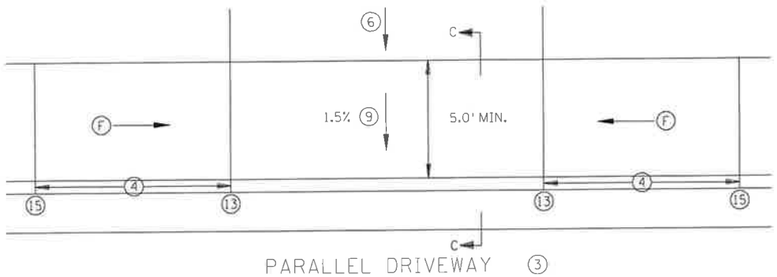
PERPENDICULAR DRIVEWAY ①



TIERED PERPENDICULAR OFFSET DRIVEWAY ②



TIERED PERPENDICULAR DRIVEWAY ②



PARALLEL DRIVEWAY ③

LEGEND	
F	INDICATES DRIVEWAY RAMP - SLOPE SHALL BE GREATER THAN 2.0% AND LESS THAN 5.0% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.0%

NOTES:

ALL SIDEWALK AND BOULEVARD WIDTHS SHALL BE MEASURE FROM BACK OF CURB.

IN URBAN ROADWAY SECTIONS, 6" CURB HEIGHT SHOULD BE USED WHEN 6' OR GREATER BOULEVARD WIDTH IS PROPOSED. WHEN BOULEVARD IS LESS THAN 6' WIDE, 4" CURB HEIGHT SHOULD BE USED.

MAINTAIN EXISTING DRAINAGE PATTERNS FLOWING TO PUBLIC RIGHT OF WAY.

ACQUIRE ADEQUATE L3 TO ALLOW FOR A CONTINUOUS PAR PROFILE (UNIFORM TYPICAL SIDEWALK SECTION) THROUGH THE DRIVEWAY APRON.

IN NO CASE SHALL SIDEWALK PROFILES EXCEED 5.0%, EXCEPT SIDEWALK PROFILES CAN MATCH ROADWAY GRADE IF ROADWAY GRADE IS GREATER THAN 5.0%. RAMPS FOR DRIVEWAYS ARE REQUIRED TO FOLLOW THE ABOVE SIDEWALK CRITERIA.

CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PEDESTRIAN ACCESS ROUTE (PAR). 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

DRIVEWAY TYPES FROM MOST PREFERRED TO LEAST PREFERRED ARE AS FOLLOWS: PERPENDICULAR, TIERED PERPENDICULAR, TIERED PERPENDICULAR OFFSET & PARALLEL.

(1) PERPENDICULAR DRIVEWAYS ARE THE STANDARD AND STARTING POINT FOR ALL DRIVEWAY DESIGN AND CONSTRUCTION. SHOULD BE USED TO ACHIEVE CONTINUOUS PAR PROFILE THROUGH THE DRIVEWAY. OBTAINING A PERPENDICULAR DRIVEWAY DESIGN BECOMES MORE CRITICAL WITH STEEP ROADWAY PROFILES.

(2) TO BE USED WHEN PERPENDICULAR DRIVEWAY DESIGN CANNOT BE ACHIEVED, THE DRIVEWAY PAR IS BELOW ROADWAY CURB HEIGHT. THIS DRIVEWAY TYPE CAN BE USED FOR BOTH PAVED (AS SHOWN) AND GRASS BOULEVARDS.

(3) TO BE USED WHEN PERPENDICULAR AND TIERED PERPENDICULAR DRIVEWAY DESIGN CANNOT BE ACHIEVED. CAN BE USED FOR STEEP NEGATIVE SLOPED DRIVEWAYS. DW CURB TYPE 2 SHOULD BE USED TO RAISE PAR ABOVE GUTTER AND REDUCE "ROLLER COASTER" EFFECT. 4" HIGH ROADWAY CURB SHOULD BE USED TO REDUCE "ROLLER COASTER" EFFECT ESPECIALLY WHEN MULTIPLE DRIVEWAYS ARE PRESENT.

(4) TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

(5) 8% STANDARD, 10% MAX. FOR COMMERCIAL AND 12% MAX. FOR RESIDENTIAL. SEE GENERAL NOTES ON SHEET 2 FOR MORE INFORMATION.

(6) S3 8% MAXIMUM, IF THE SLOPE IS EXCEEDED OR CONTINUED FOR MORE THAN 5', ANALYZE VEHICLE TEMPLATES FOR VERTICAL CLEARANCE. IF EXISTING DRIVEWAY IS NEGATIVELY DRAINING, S3 CAN BECOME SLIGHTLY MORE NEGATIVE TO ACHIEVE PERPENDICULAR DRIVEWAY DESIGN IF THE VERTICAL CLEARANCE IS ACHIEVED IN VEHICLE TEMPLATES.

(7) 1:3 MIN. 1:5 PREFERRED FOR DRIVEWAY RETROFIT PROJECTS. 1:10 PREFERRED FOR SIDEWALK REPLACEMENT PROJECTS.

(8) 5.0' MIN. PAR WIDTH IS THE STANDARD THROUGH DRIVEWAYS. IF FEASIBLE WIDEN DRIVEWAY PAR WIDTH TO MATCH APPROACHING SIDEWALK PAR WIDTHS. IN VERTICALLY CONSTRAINED AREAS PAR WIDTHS CAN INCREMENTALLY BE REDUCED TO 4.5' OR 4' MIN AFTER ALL OTHER OPTIONS HAVE BEEN APPLIED.

(9) THE PEDESTRIAN ACCESS ROUTE, MAY NOT EXCEED 0.02 FT./FT. AS CONSTRUCTED.

(10) SIDEWALK OFFSET TO BE LESS THAN OR EQUAL TO HALF THE APPROACHING SIDEWALK WIDTH.

(11) INTEGRAL DRIVEWAY APRON TO BE POURED MONOLITHICALLY/INTEGRAL WITH THE CURB AND GUTTER. SEE SHEET 2 FOR MORE INFORMATION.

(12) SEE SHEET 2 FOR CURB TYPE INFORMATION.

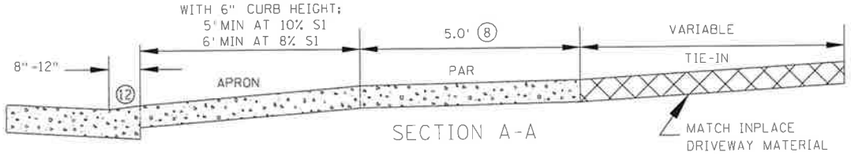
(13) 0" CURB IS AT FLOW LINE. SEE DRIVEWAY TABLE FOR BACK OF CURB HEIGHTS.

(14) 3' LONG AT 8-10% PREFERRED FOR INITIAL CURB TAPER. REDUCE CURB TAPER SLOPE IF NECESSARY TO MATCH ADJACENT SIDEWALK GRADES.

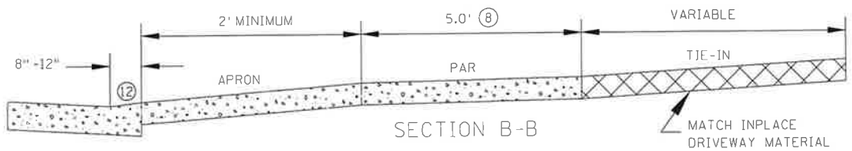
(15) MATCH FULL CURB HEIGHT.

(16) 1:2 TAPER RATE ON INTEGRAL DRIVEWAY APRONS.

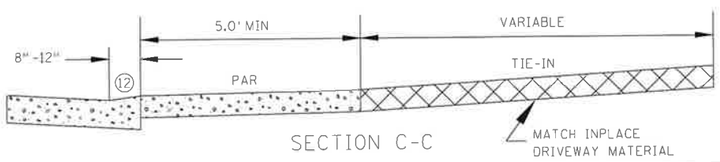
(17) SEE SHEET 4 FOR WHEN 6" WALK IS REQUIRED.



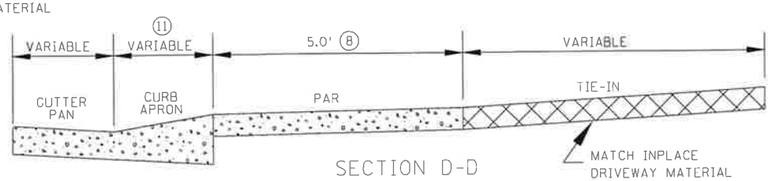
SECTION A-A



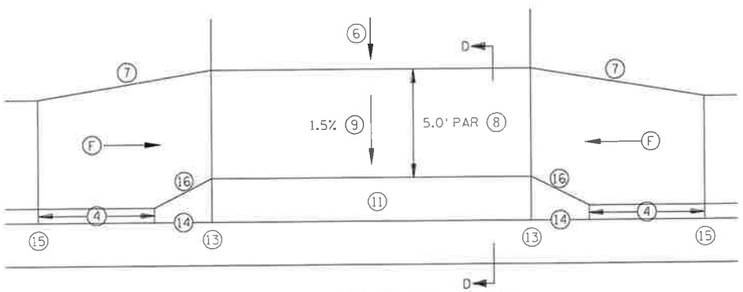
SECTION B-B



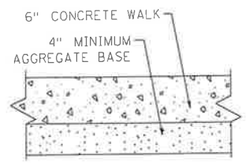
SECTION C-C



SECTION D-D



INTEGRAL DRIVEWAY APRON



TYPICAL SIDEWALK SECTION ⑰

TYPICAL DRIVEWAY SECTIONS

DRIVEWAY AND SIDEWALK DETAILS

APPROVED: 11-04-2021
REVISED:

THOMAS STYRBICKI
STATE DESIGN ENGINEER

STANDARD PLAN 5-297.254

1 OF 4

DEPARTMENT OF TRANSPORTATION

STANDARD PLANS

CERTIFIED BY _____ REG. No. 24962 2/25/20 25

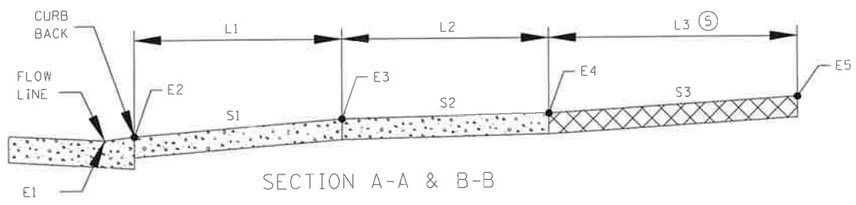
KANDIYOHI COUNTY, MN

SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041

Sheet No. 59 of 62 Sheets

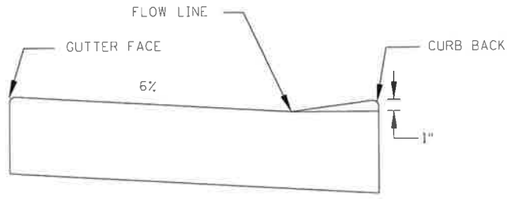
DRIVEWAY TABLE ①

STATION	SIDE	DRIVEWAY TYPE ②	CURB TYPE ③	E1	E2	L1 FT	S1 %	E3	L2 FT	S2 ④ %	E4	L3 ⑤ FT	S3 %	EXISTING ⑥ %	E5	COMMENTS



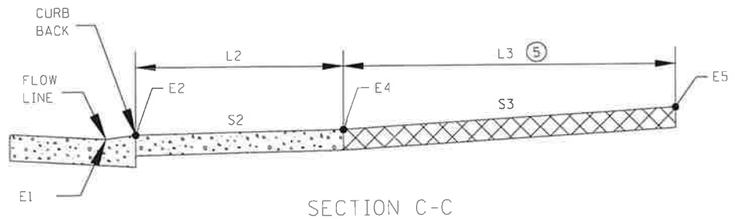
SECTION A-A & B-B

(REFER TO PREVIOUS SHEET)



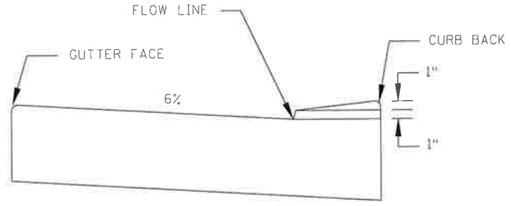
DW CURB TYPE 1

STANDARD CURB AT DRIVEWAY



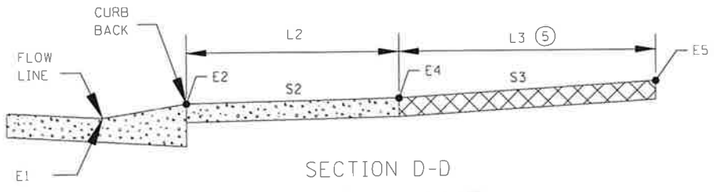
SECTION C-C

(REFER TO PREVIOUS SHEET)



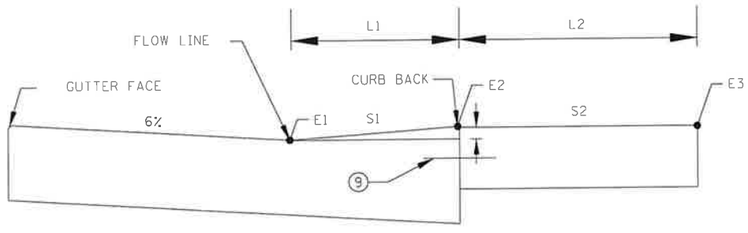
DW CURB TYPE 2

VERTICALLY CONSTRAINED



SECTION D-D

(REFER TO PREVIOUS SHEET)



INTEGRAL DRIVEWAY APRON (IDA)

NOTES:

ALL SIDEWALK AND BOULEVARD WIDTHS SHALL BE MEASURED FROM BACK OF CURB.

DW CURB TYPE 1 SHALL BE USED WHEN THE DRIVEWAY ACTS AS A PEDESTRIAN RAMP. THE MAX. APRON SLOPE MUST ADHERE TO ADA CRITERIA AS WELL. DW CURB TYPE 1 SHOULD BE USED IF THERE IS ON STREET PARKING.

WHERE ROADWAY DRAINAGE IS A CONCERN (NEGATIVE SLOPED APRON) DW CURB TYPE 2 CAN BE USED TO HELP KEEP THE WATER ON PUBLIC RIGHT OF WAY.

S1 8% STANDARD, 10% MAX. COMMERCIAL AND 12% MAX. RESIDENTIAL. IF EXISTING GRADES ARE STEEPER DO NOT MAKE GRADES APPRECIABLY WORSE BY USING BEST PRACTICES SUCH AS DRIVEWAY CURB HEIGHTS, EXTENDING L3 AND/OR STEEPEN S3.

S3 8% MAXIMUM. IF THIS SLOPE IS EXCEEDED OR CONTINUED FOR MORE THAN 5', ANALYZE VEHICLE TEMPLATES FOR VERTICAL CLEARANCE. SEE FACILITY DESIGN GUIDE, CHAPTER 6, FOR GEOMETRIC DESIGNS OF DRIVEWAYS.

① EXAMPLE SHOWN TO BE INCLUDED IN PLAN FOR EACH DRIVEWAY THAT HAS PAR THROUGH IT.

② REFERS TO THE FOLLOWING TYPES; PERPENDICULAR DRIVEWAY, TIERED PERPENDICULAR OFFSET DRIVEWAY, TIERED PERPENDICULAR DRIVEWAY, PARALLEL DRIVEWAY, AND INTEGRAL DRIVEWAY APRON.

③ DW CURB TYPE 1 IS THE STANDARD AND SHALL BE THE STARTING POINT FOR ALL PERPENDICULAR AND TIERED DRIVEWAYS. DW CURB TYPE 2 SHALL ONLY BE USED AFTER UTILIZING BEST PRACTICES SUCH AS MAXIMIZING S1, S3, AND L3.

④ SHOULD BE DESIGNED AT 1.5%.

⑤ ACQUIRE ADEQUATE L3 TO ALLOW FOR CONTINUOUS PAR PROFILE (UNIFORM SIDEWALK SECTION) THROUGH THE DRIVEWAY APRON.

⑥ PROVIDE INPLACE TIE-IN SLOPE INFORMATION AT BACK OF PROPOSED WALK (S3 AREA).

⑦ INFORMATION TO BE INCORPORATED INTO DRIVEWAY TABLE WHEN INTEGRAL DRIVEWAY APRON IS USED. OTHER CURB HEIGHTS & CURB APRON LENGTHS CAN BE USED.

⑧ L1 & S1 FOR INTEGRAL DRIVEWAY APRON IS TO FLOWLINE. 12.5% IS MAXIMUM PREFERRED SLOPE.

⑨ TIE ADJACENT SECTIONS. CONCRETE DRIVEWAY APRON AND CONCRETE DRIVEWAY SIDEWALK SHALL BE CONSTRUCTED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. DRILL AND GROUT OR CAST IN-PLACE THROUGH HOLES IN THE FORMS NO. 4 X 12" LONG TIE BARS (EPOXY COATED). 36" MAXIMUM SPACING WITH 2" MINIMUM CONCRETE COVER PLACED 1' MINIMUM FROM ADJACENT CONSTRUCTION JOINT.

TYPICAL INTEGRAL DRIVEWAY APRON ⑦

CURB TYPE	L1 FT	E2	S1 ⑧ %
IDA 216	1.33	+0.16	12.5
IDA 220	1.67	+0.16	10
IDA 324	2	+0.24	12.5
IDA 432	2.67	+0.33	12.5

DRIVEWAY AND SIDEWALK DETAILS

APPROVED: 11-04-2021
REVISED:

THOMAS STYRBICKI
STATE DESIGN ENGINEER

STANDARD PLAN 5-297.254

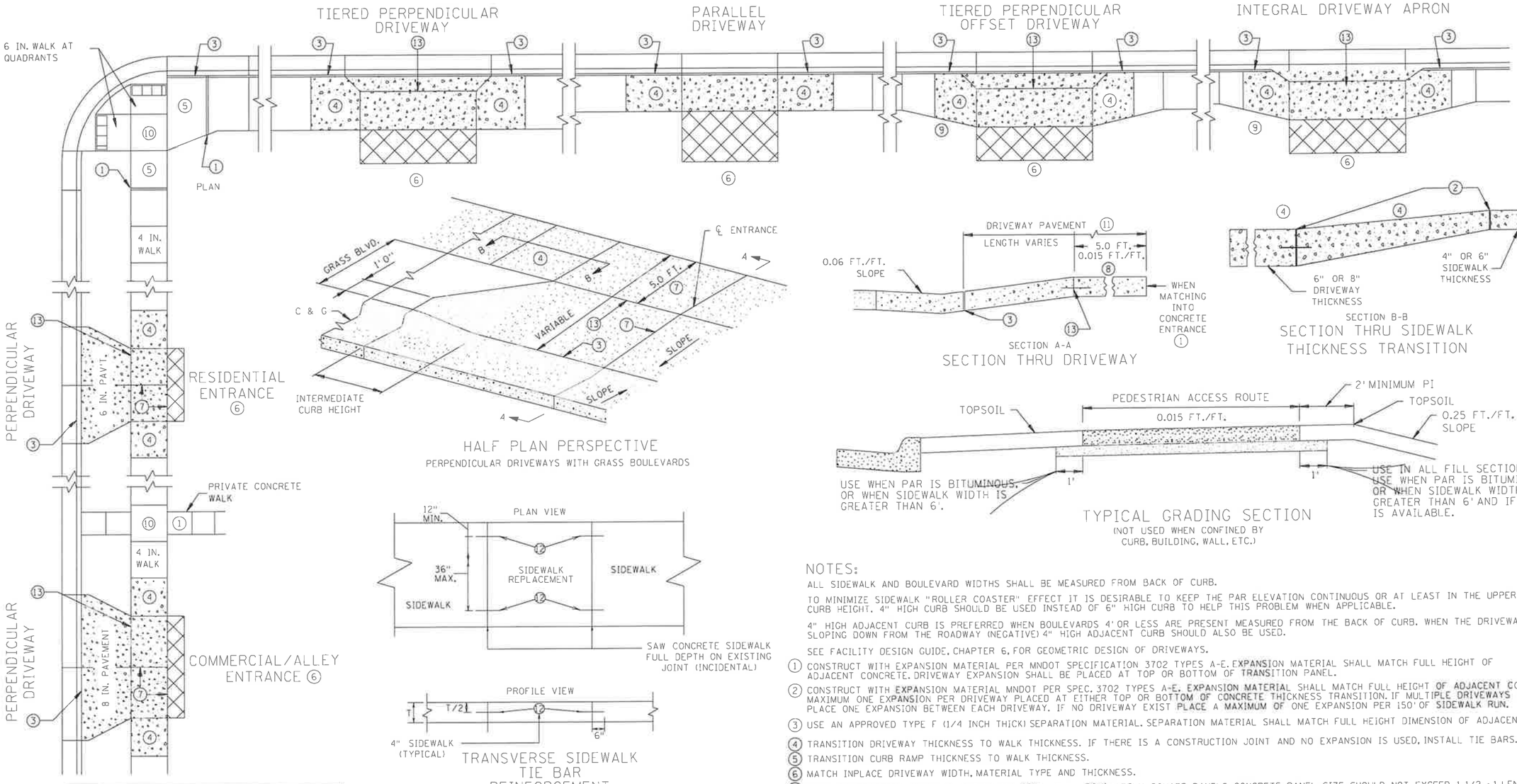
STANDARD PLANS

DEPARTMENT OF TRANSPORTATION

CERTIFIED BY _____ REG. No. 24962 12/15 20 25

KANDIYOHI COUNTY, MN

SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041



SIDEWALK LONGITUDINAL JOINT TIE BAR TABLE				
SIDEWALK WIDTH, W	SIDEWALK THICKNESS, T	TIE BAR SIZE	LENGTH	SPACING
> 7'	4"	No. 4	12"	24"
>10'	6"	No. 4	12"	36"

FOR 4" CONCRETE ONLY: CAST IN PLACE BARS MUST BE SUPPORTED WITH P-STAKES OR REINFORCEMENT BASKETS FOR FULL WIDTH CONCRETE PLACEMENTS.

FOR 6" CONCRETE ONLY: DRILL AND GROUT OR CAST IN PLACE THROUGH HOLES IN THE FORMS REQUIRED FOR STAGED ADJACENT CONCRETE PLACEMENTS.

NOTES:

ALL SIDEWALK AND BOULEVARD WIDTHS SHALL BE MEASURED FROM BACK OF CURB.

TO MINIMIZE SIDEWALK "ROLLER COASTER" EFFECT IT IS DESIRABLE TO KEEP THE PAR ELEVATION CONTINUOUS OR AT LEAST IN THE UPPER HALF OF CURB HEIGHT. 4" HIGH CURB SHOULD BE USED INSTEAD OF 6" HIGH CURB TO HELP THIS PROBLEM WHEN APPLICABLE.

4" HIGH ADJACENT CURB IS PREFERRED WHEN BOULEVARDS 4' OR LESS ARE PRESENT MEASURED FROM THE BACK OF CURB. WHEN THE DRIVEWAY IS SLOPING DOWN FROM THE ROADWAY (NEGATIVE) 4" HIGH ADJACENT CURB SHOULD ALSO BE USED.

SEE FACILITY DESIGN GUIDE, CHAPTER 6, FOR GEOMETRIC DESIGN OF DRIVEWAYS.

① CONSTRUCT WITH EXPANSION MATERIAL PER MNDOT SPECIFICATION 3702 TYPES A-E. EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE. DRIVEWAY EXPANSION SHALL BE PLACED AT TOP OR BOTTOM OF TRANSITION PANEL.

② CONSTRUCT WITH EXPANSION MATERIAL MNDOT PER SPEC. 3702 TYPES A-E. EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE. MAXIMUM ONE EXPANSION PER DRIVEWAY PLACED AT EITHER TOP OR BOTTOM OF CONCRETE THICKNESS TRANSITION. IF MULTIPLE DRIVEWAYS EXIST PLACE ONE EXPANSION BETWEEN EACH DRIVEWAY. IF NO DRIVEWAY EXIST PLACE A MAXIMUM OF ONE EXPANSION PER 150' OF SIDEWALK RUN.

③ USE AN APPROVED TYPE F (1/4 INCH THICK) SEPARATION MATERIAL. SEPARATION MATERIAL SHALL MATCH FULL HEIGHT DIMENSION OF ADJACENT CONCRETE.

④ TRANSITION DRIVEWAY THICKNESS TO WALK THICKNESS. IF THERE IS A CONSTRUCTION JOINT AND NO EXPANSION IS USED, INSTALL TIE BARS.

⑤ TRANSITION CURB RAMP THICKNESS TO WALK THICKNESS.

⑥ MATCH INPLACE DRIVEWAY WIDTH, MATERIAL TYPE AND THICKNESS.

⑦ FORM CONTRACTION JOINT AS NEEDED TO PRODUCE APPROXIMATELY SQUARE PANELS. CONCRETE PANEL SIZE SHOULD NOT EXCEED 1 1/2 : 1 LENGTH X WIDTH. 81 SF FOR 6" CONCRETE DRIVEWAY WITH 9'X9' MAXIMUM PANEL SIZE. 144 SF FOR 8" CONCRETE DRIVEWAY WITH 12'X12' MAXIMUM PANEL SIZE. MATCH DRIVEWAY APRON AND SIDEWALK JOINTS.

⑧ THE PEDESTRIAN ACCESS ROUTE CROSS-SLOPE, SHALL NOT EXCEED 0.02 FT./FT. AS CONSTRUCTED.

⑨ 1:10 MIN. SIDEWALK OFFSET TAPER REQUIRED FOR SIDEWALK REPLACEMENT PROJECTS. 1:3 MIN. AND 1:5 MIN. PREFERRED SIDEWALK OFFSET TAPER FOR DRIVEWAY REPLACEMENT.

⑩ LANDING REQUIRED, SEE NEXT SHEET FOR MORE INFORMATION.

⑪ CONCRETE DRIVEWAY APRON AND CONCRETE DRIVEWAY SIDEWALK SECTIONS SHALL BE CONSTRUCTED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. ENGINEER'S APPROVAL REQUIRED FOR MONOLITHIC PLACEMENTS.

⑫ DRILL AND GROUT NO. 4 X 12" LONG TIE BARS (EPOXY COATED). 36" MAXIMUM SPACING BETWEEN BARS COVER PLACED 1' MINIMUM FROM ADJACENT CONSTRUCTION JOINTS. 1' MINIMUM FROM ADJACENT CONCRETE JOINTS. BARS TO BE ADJUSTED TO MATCH SIDEWALK GRADES. TO BE PAID BY EACH.

⑬ DRILL AND GROUT OR CAST IN-PLACE THROUGH HOLES IN THE FORMS NO. 4 X 12" LONG TIE BARS (EPOXY COATED). 36" MAXIMUM SPACING BETWEEN BARS WITH 2" MINIMUM CONCRETE COVER PLACED 1' MINIMUM FROM ADJACENT CONSTRUCTION JOINTS. 1' MINIMUM FROM ADJACENT CONCRETE JOINTS.

DRIVEWAY AND SIDEWALK DETAILS

APPROVED: 11-04-2021
REVISED:

THOMAS STYRBICKI
STATE DESIGN ENGINEER

STANDARD PLAN 5-297.254

3 OF 4

DEPARTMENT OF TRANSPORTATION

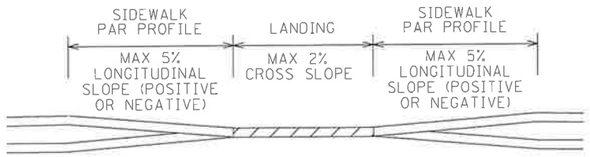
STANDARD PLANS

CERTIFIED BY _____ REG. No. 24962 2/25 20 25

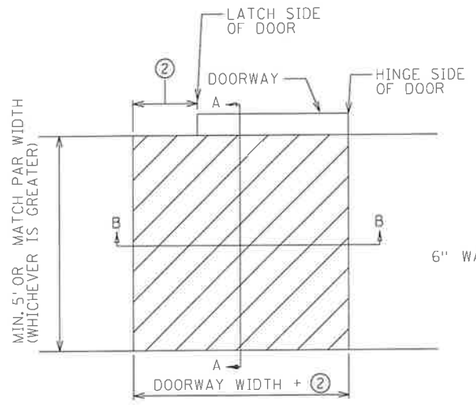
KANDIYOHI COUNTY, MN

SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041

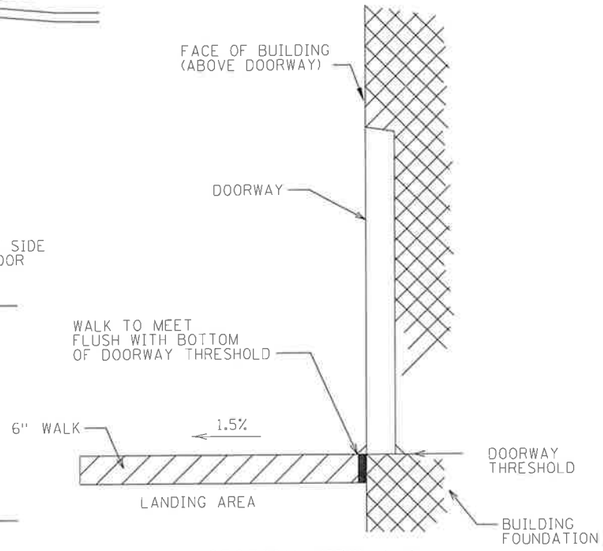
Sheet No. 61 of 62 Sheets



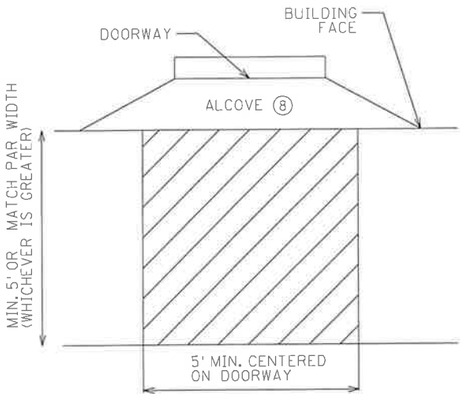
SECTION VIEW B-B



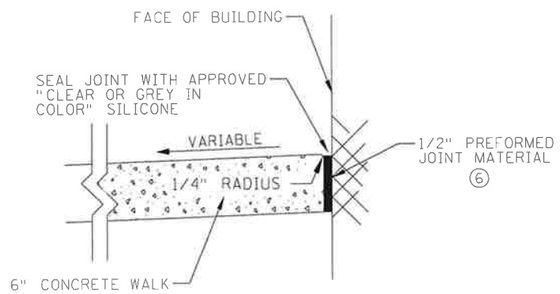
PLAN VIEW DOORWAY



SECTION VIEW A-A

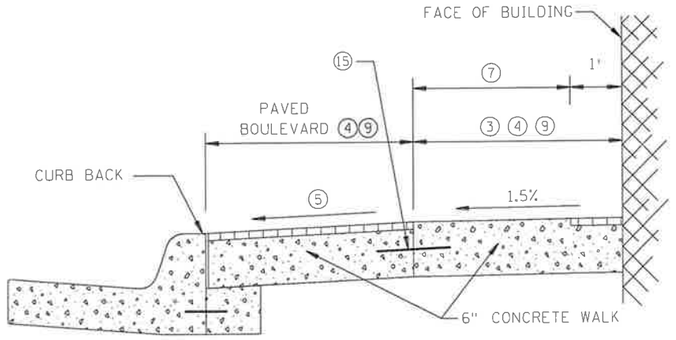


PLAN VIEW DOORWAY WITH ALCOVE

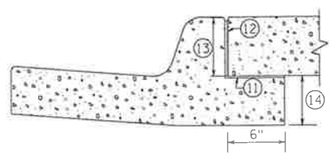


BUILDING JOINT SEAL (INCIDENTAL)

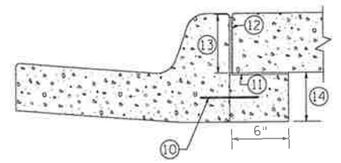
SIDEWALK LANDING REQUIREMENTS 1



DOWNTOWN SIDEWALK TYPICAL SECTION



SLIP FORM SILL



FIXED FORM SILL

SILL CURB SHOULD BE USED AT ALL LOCATIONS WHEN CONCRETE WALK IS AT BACK OF CURB, INCLUDING PAVED BOULEVARD.

SILL CURB SHALL NOT BE USED IN CURB RAMP AND DRIVEWAY AREAS, INCLUDING CONCRETE FLARES.

SILL CURB WITH 4" WALK CAN USE FIXED OR SLIP FORM OPTIONS.

NOTES:

6" WALK IS REQUIRED:
1) IN ALL SIDEWALK LOCATIONS WHERE VARIABLE SLOPED CONCRETE BOULEVARDS ARE PAVED, SUCH AS COMMERCIAL (STORE FRONT, DOWNTOWN) AREAS.
2) ANYTIME DRILL AND REINFORCEMENT IS USED TO TIE LONGITUDINAL JOINTS TOGETHER.
3) TO ELIMINATE LONGITUDINAL JOINT WHEN INCREASING PANEL SIZE OVER 36SF.
4) AT LOCATIONS WHERE MAINTENANCE EQUIPMENT WILL SUBJECT CONCRETE TO HEAVY LOADS.

ALL SIDEWALK AND BOULEVARD WIDTHS SHALL BE MEASURED FROM BACK OF CURB.

FIELD ADJUST SIDEWALK PROFILES TO MEET ALL DOORWAY THRESHOLDS.

SIDEWALK MUST MAINTAIN POSITIVE DRAINAGE AWAY FROM THE BUILDING TO THE ROADWAY.

SEE SPECIAL PROVISIONS FOR SILICONE SPECIFICATIONS.

1. LANDING CRITERIA IS REQUIRED FOR ALL DOORS, STEPS, AND PRIVATE WALKS. FEASIBILITY DECREASES WITH NARROWER BOULEVARDS AND STEEPER SIDEWALK PROFILES.
2. 18" MIN. WHEN DOOR SWINGS OUTWARD FROM BUILDING. 12" MIN WHEN DOOR SWINGS INWARD FROM BUILDING.
3. 6' MIN. PAR REQUIRED WHEN ADJACENT TO BUILDINGS.
4. 2/3 PAR TO 1/3 BOULEVARD SHOULD BE USED WHEN FEASIBLE. HOLD UNIFORM BOULEVARD WIDTH. 4' PREFERRED MINIMUM BOULEVARD.
5. 1%-5% FOR THE MAJORITY OF THE BLOCK, WITH EXCEPTIONS UP TO 8% IN CONSTRAINED AREAS.
6. CONSTRUCT USING APPROVED EXPANSION MATERIAL PER MNDOT TYPE A-E EXPANSION. LEAVE A MINIMUM ½" TOP GAP AND SEAL WITH MNDOT APPROVED SILICONE PER MNDOT SPEC 3722.
7. TO MINIMIZE VIBRATION AND ROLLING RESISTANCE, AREA SHALL BE FREE OF PAVERS, STAMPED CONCRETE, AND/OR EXCESSIVE JOINTING.
8. 2% MAX. PER BUILDING CODE. IF GREATER THAN 2%, FLATTEN AS FEASIBLE.
9. FORM CONTRACTION JOINTS AS NEEDED TO PRODUCE APPROXIMATELY SQUARE PANEL SIZE. CONRETE PANEL SIZE SHOULD NOT EXCEED 1½ : 1 LENGTH X WIDTH.
10. DRILL AND GROUT NO. 4 X 8" LONG TIE BARS (EPOXY COATED), 36" MAXIMUM SPACING BETWEEN BARS WITH 2" MINIMUM CONCRETE COVER PLACED 1' MINIMUM FROM ADJACENT CONSTRUCTION JOINTS. 1' MINIMUM FROM ADJACENT CONCRETE JOINTS. TIE BARS SHALL BE EMBEDDED 4" WITH 2" MINIMUM CONCRETE COVER AND ARE INCIDENTAL TO SILL PLACEMENT.
11. FURNISH AND INSTALL THE FULL WIDTH OF THE TOP OF SILL A MINIMUM 2ML THICK POLYTHENE SHEETING.
12. USE AN APPROVED TYPE F (¼ INCH THICK) SEPARATION MATERIAL. SEPARATION MATERIAL SHALL MATCH FULL HEIGHT DIMENSION OF ADJACENT CONCRETE.
13. DIMENSION TO BE SAME AS SIDEWALK THICKNESS, 4" MIN.
14. 6" WALK: 5" MIN. FOR B424; 7" MIN. FOR B624
    4" WALK: 7" MIN. FOR B424; 9" MIN. FOR B624
15. DRILL AND GROUT NO. 4 X 12" LONG TIE BARS (EPOXY COATED), 36" MAXIMUM SPACING BETWEEN BARS WITH 2" MINIMUM CONCRETE COVER PLACED 1' MINIMUM FROM ADJACENT CONCRETE JOINTS.

DRIVEWAY AND SIDEWALK DETAILS

APPROVED: 11-04-2021
REVISED:

THOMAS STYRBICKI
STATE DESIGN ENGINEER

STANDARD PLAN 5-297.254

4 OF 4

STANDARD PLANS

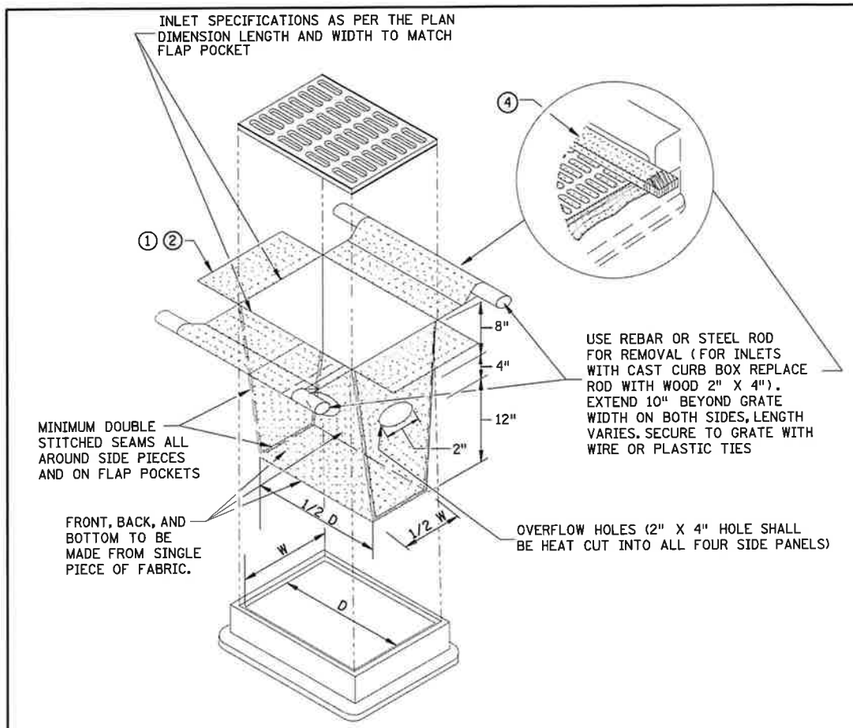
DEPARTMENT OF TRANSPORTATION

CERTIFIED BY _____ REG. No. 24962 2/25 20 25

KANDIYOHI COUNTY, MN

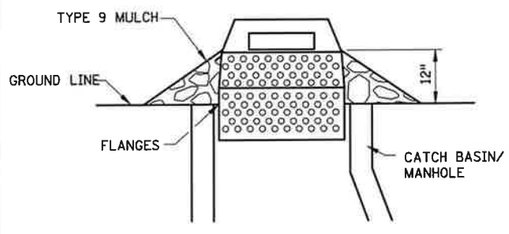
SAP 034-606-006, SAP 034-624-013, SAP 034-631-008, SAP 034-041-041

Sheet No. 62 of 62 Sheets



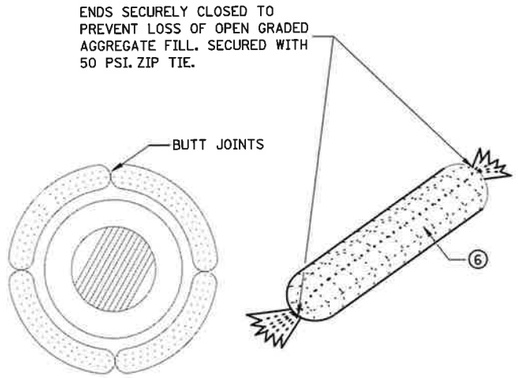
FILTER BAG INSERT ③

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX)

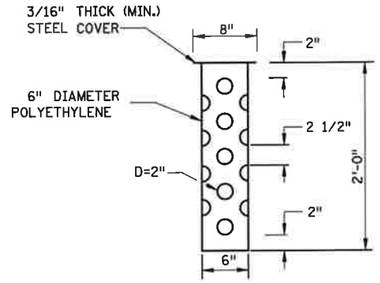


SEDIMENT CONTROL INLET HAT

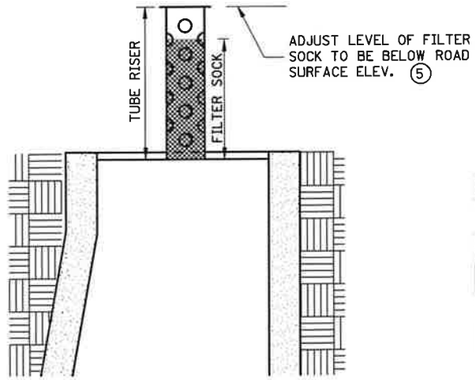
NOTE:
THE SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING, FLANGES AND A LID/COVER.



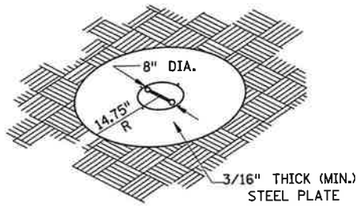
ROCK LOG/COMPOST LOG



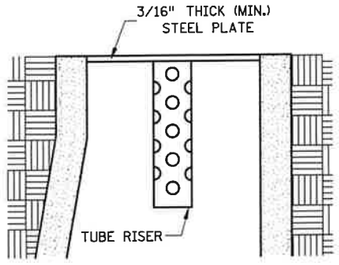
TUBE RISER



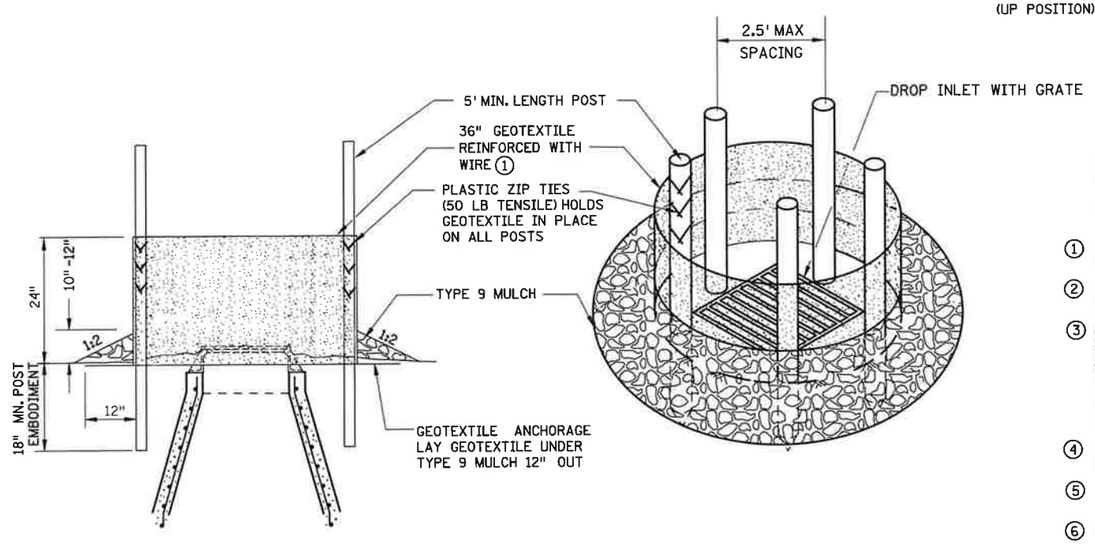
SECTION (UP POSITION)



PERSPECTIVE VIEW

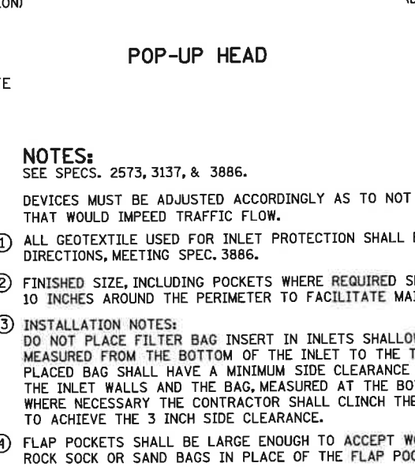


SECTION (DOWN POSITION)



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.

① ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886.

② FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

③ 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.

④ 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.

⑤ SOCK HEIGHT MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY.

⑥ 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.

REVISION:

APPROVED: 2-28-2017
CHIEF ENVIRONMENTAL OFFICER

MINNESOTA DEPARTMENT OF TRANSPORTATION

STANDARD PLAN 5-297.405 | 4 OF 8

APPROVED: 2-28-2017
REVISED:
STATE DESIGN ENGINEER

TEMPORARY SEDIMENT CONTROL

STORM DRAIN INLET PROTECTION

STATE PROJ. NO. (T.H.) SHEET NO. OF SHEETS

CERTIFIED BY E. Marie Oleary REG. No. 24962 2/26/2025

KANDIYOHI COUNTY, MN SAP 034-624-013 SAP 034-641-012 Sheet No. 62A of 62 Sheets