LYON COUNTY HIGHWAY DEPARTMENT
504 FAIRGROUNDS ROAD
MARSHALL, MN 56258

**********PROPOSAL**********
FOR HIGHWAY CONSTRUCTION
AND MAINTENANCE PROJECTS WITH
BIDS RECEIVED UNTIL 10:15 O'CLOCK A.M. ON MARCH 15TH, 2017
Bids accepted by Lyon County Auditor/Treasurer, 607 West Main Street, Marshall, MN 56258

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," 2016 EDITION, EXCEPT AS STATED OTHERWISE IN THE SPECIAL PROVISIONS WHICH ARE PART OF THIS PROPOSAL, FOR

STATE AID PROJECT NO. : **S.A.P. 042-610-040 & S.A.P. 042-610-042**

LYON COUNTY PROJECT NO. :

LOCATION: C.S.A.H. 10, Lyon County, MN

TYPE OF WORK: Surfacing and Aggregate Shouldering

LENGTH:

STARTING DATE: **April 24th, 2017**
COMPLETION DATE: **September 16th, 2017**

NOTICE TO BIDDERS: In submitting a bid, you must return this complete proposal. You must initial changes made in the Schedule of Prices in the Proposal and acknowledge addenda on the back cover 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.

Aaron VanMoer, P.E.

License Number 50428 Date: 2/17/17

****

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

Commonly Overlooked Items

Below is a list of commonly overlooked items. The purpose of this list is to bring attention to some of the items within the proposal package. This list shall not be considered all-inclusive. The contractor shall be responsible to review the entire set of plans and special provisions.

1. Bids must be received by the Lyon County Auditor/Treasured by 10:15 a.m. on March 15th, 2017.
2. Bids will be opened at 10:15 a.m. on Wednesday March 15th, 2017 in the Lyon County administrative conference room located in the Lyon County Court House. Lyon County Court House is located at 607 West Main Street, Marshall, MN 56258.
3. Return the entire proposal package with your bid (see specification 1209).
4. Aggregate base (2211) and Shoulder base aggregate (2221) is modified so 6%-12% shall pass the #200 sieve.
5. The contractor is required to submit a load rating prior to milling (2232) bridge decks to assure the structure can withstand the proposed milling and truck combination.
6. The use of RAP is eliminated for all mix designations that have a Standard Binder Grade designation of "C" (PG 58-34).
7. 6" white paint edge line purposely left out of S.A.P. 042-610-040 bituminous surfacing plan.

To Lyon County Board of Commissioners:

According to the advertisement of Lyon 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 Lyon 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 Mn/DOT 1903, 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 Mn/DOT 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 Mn/DOT 1904.

(I)(We) further propose to execute the form of Contract within 10 days after receiving written notice of award, as provided in Mn/DOT 1306.

(I)(We) further propose to furnish a payment bond equal to the Contract amount, and a performance bond equal to the Contract amount, with the aggregate liability of the bond(s) equal to twice the full amount of the Contract if the contract is less than or equal to five million dollars ($5,000,000.00), or if the contract is in excess of five million dollars ($5,000,000.00) the aggregate liability shall be equal to the amount of the contract, as security for the construction and completion of the improvement according to the Plans, Specifications and Special Provisions as provided in Mn/DOT 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 Lyon 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 Lyon 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.

DIVISION A

I	INTRODUCTION	1-A
II	DEFINITIONS	1-A
III	APPLICATION & UNDERSTANDING	3-A
IV	VENDOR REGISTRATION	3-A
V	LABOR CLASSIFICATIONS	3-A
VI	WAGE DECISION(S) & WAGE RATE(S)	4-A
VII	HOURS OF WORK	5-A
VIII	FRINGE BENEFITS	6-A
IX	OVERTIME	7-A
X	PAYROLLS AND STATEMENTS	8-A
XI	APPRENTICES, TRAINEES AND HELPERS	9-A
XII	INDEPENDENT CONTRACTORS, OWNERS, SUPERVISORS, AND FOREMAN	10-A
XIII	TRUCKING	10-A
XIV	OFF-SITE FACILITIES	11-A
XV	SUBCONTRACTING PART OF THE CONTRACT	12-A
XVI	SITE OF WORK REQUIREMENTS	12-A
XVII	CHILD LABOR	12-A
XVIII	NON-COMPLIANCE AND ENFORCEMENT	12-A
	APPENDIX A – SALARIED WORKER WAGE COMPUTATION	14-A
	APPENDIX B – FRINGE BENEFIT CREDIT	14-A
	APPENDIX C – APPRENTICE RATE OF PAY	14-A
	APPENDIX D – PREVAILING WAGE OVERTIME CALCULATION	15-A

DIVISION S

SPECIAL	DATA	PAGE
S-1	CONTACT INFORMATION	1-S
S-2	MISCELLANEOUS	1-S
S-3	GOVERNING SPECIFICATIONS	1-S
S-4	COMPLIANCE WITH ZOING ORDINANCE	1-S
S-5	AFFIRMATIVE ACTION RESPONSIBILITY	1-S
S-6	RESPONSIBLE CONTRACTOR	2-S
S-7	COMPLIANCE WITH TAX LAW REQUIREMENTS	2-S
S-8	(1103) DEFINITIONS	3-S
S-9	(1203) ACCESS TO PROPOSAL PACKAGE	3-S
S-10	(1206) PREPARATION OF PROPOSAL	3-S
S-11	(1209) DELIVERY OF PROPOSALS	3-S
S-12	(1210) REVISION OF PROPOSAL PACKAGE OR WITHDRAWAL OF PROPOSALS	4-S
S-13	(1212) OPENING OF PROPOSALS	4-S
S-14	(1505) COOPERATION BY CONTRACTORS	4-S
S-15	(1507) UTILITY PROPERTY AND SERVICE	5-S
S-16	(1601) SOURCE OF SUPPLY & QUALITY	5-S
S-17	(1701) LAWS TO BE OBSERVED (WET LANDS)	6-S
S-18	(1712) PROTECTION AND RESTORATION OF PROPERTY	6-S
S-19	(1714) RESPONSIBILITY FOR DAMAGE CLAIMS; INSURANCE	6-S
S-20	(1717) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT	7-S
S-21	(1801) SUBLETTING OF CONTRACT	8-S
S-22	(1806) DETERMINATION AND EXTENSION OF CONTRACT TIME	8-S
S-23	(1901) MEASUREMENT OF QUANTITIES	8-S
S-24	(1903) COMPENSATION FOR ALTERED QUANTITIES	8-S
S-25	(1905) COMPENSATION FOR ELIMINATED ITEMS	9-S
S-26	(1906) PARTIAL PAYMENTS	9-S
S-27	(2011) CONSTRUCTION SURVEYING	9-S

S-28 (2051) MAINTENANCE AND RESTORATION OF HAUL ROADS 13-S
S-29 (2211) AGGREGATE BASE CLASS 5 MOD 14-S
S-30 (2221) SHOULDER BASE AGGREGATE CLASS 5 MOD 14-S
S-31 (2232) MILL BITUMINOUS SURFACE (2.0") 14-S
S-32 (2301) CONCRETE PAVEMENT FOR ALTERNATE BID 14-S
S-33 (2301) CONCRETE PAVEMENT 15-S
S-34 (2301) DOWEL BAR 25-S
S-35 (2357) BITUMINOUS TACK COAT 26-S
S-36 (2360) PLANT MIXED ASPHALT PAVEMENT 26-S
S-37 (2360) PLANT MIXED ASPHALT PAVEMENT FOR ALTERNATE BID 27-S
S-38 (2399) PAVEMENT SURFACE SMOOTHNESS FOR ALTERNATE BID 28-S
S-39 (2406) BRIDGE APPROACH PANELS 32-S
S-40 (2461) STRUCTURAL CONCRETE 32-S
S-41 (2540) MAIL BOX SUPPORT 52-S
S-42 (2540) RELOCATE MAIL BOX SUPPORT 52-S
S-43 (2573) EROSION CONTROL SUPERVISOR 53-S
S-44 (2575) ESTABLISHING TURF AND CONTROLLING EROSION 53-S
S-45 (3126) FINE AGGREGATE FOR PORTLAND CEMENT CONCRETE 54-S
S-46 (3131) INTERMEDIATE AGGREGATE FOR PORTLAND CEMENT CONCRETE 56-S
S-47 (3137) COURSE AGGREGATE FOR PORTLAND CEMENT CONCRETE 58-S
S-48 (3151) BITUMINOUS MATERIALS (MSCR) 59-S
S-49 (3302) DOWEL BARS 59-S
S-50 (3906) WATER FOR CONCRETE AND MORTAR 60-S

Attachments:

Dept. of Labor Prevailing Wage Rates
SALT Schedule of Materials Control
Equal Employment Opportunity (EEO) Special Provisions
Abbreviations
Responsible Contractor
Non-Collusion Affidavit
Affirmative Action Statement
Schedule of Prices

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.

DEPARTMENT OF TRANSPORTATION

NOTICE OF DEBARMENT

NOTICE IS HEREBY GIVEN that MnDOT has ordered that the following vendors be debarred for a period of three (3) years, effective September 17, 2014 until September 17, 2017:

- Jeffrey Plzak and his affiliates, Loretto, MN
- Laurie Plzak and her affiliates, Loretto, MN
- Honda Electric Incorporated and its affiliates, Loretto, MN
- Fibertech, Inc. and its affiliates, Loretto, MN
- Jeffrey and Laurie Plzak doing business as Honda Electric Logistics, and its affiliates, Loretto, MN

NOTICE IS HEREBY GIVEN that MnDOT has ordered that the following vendors be debarred for a period of three (3) years, effective January 12, 2015 until January 12, 2018:

- Marlin Dahl, Granada, MN
- Dahl Trucking, Elmore, MN
- Elmore Truck and Trailer, Inc., Elmore, MN

Minnesota Statute section 161.315 prohibits the Commissioner, counties, towns, or home rule or statutory cities from awarding or approving the award of a contract for goods or services to a person who is suspended or debarred, including:

1) any contract under which a debarred or suspended person will serve as a subcontractor or material supplier,
2) any business or affiliate which the debarred or suspended person exercises substantial influence or control, and
3) 3) any business or entity, which is sold or transferred by a debarred person to a relative or any other party over whose actions the debarred person exercises substantial influence or control, remains ineligible during the duration of the seller's or transfer's debarment.

DEPARTMENT OF ADMINISTRATION

As of the date of this notice and in accordance with Minnesota Rules 1230.1150, the Minnesota Department of Administration has debarred and disqualified the following persons and businesses from entering into or receiving a State of Minnesota contract:

NAME	DATE OF SUSPENSION
Ace Hydro Seeding, Inc. Crystal VanMuyden 909 Central Avenue North #125 Park Rapids, MN 56470-1290	August 30, 2016 through March 1, 2017
Asphalt Recycling Solutions, Inc. Donald Wesley Johnson 2068 Homestead Ave. Oakdale, MN 55128-5330	May 24, 2016 through November 24, 2016
Devos, Ltd. d/b/a Guaranteed Returns Dean Volkes, Donna Fallon & Ronald Carlino 100 Colin Drive Holbrook, NY	December 5, 2014 through December 31, 2099
Wide Open Services, LLC Steve Mittelstaedt 6938 Highway 169 Virginia, MN 55792	March 30, 2016 through September 30, 2016
NAME	**DATE OF DEBARMENT**
Best Electric Thomas Clifton and Earl Standafer 9909 S. Shore Drive #155 Plymouth, MN 55441	May 22, 2015 through May 21, 2018 (eligible for reinstatement on May 21, 2019)
Best Used Trucks of Minnesota, Inc. Jason W. Leas 635 Marin Avenue Crookston, MN 56716	Nov. 20, 2012 through Nov. 20, 2015 (eligible for reinstatement on Nov. 20, 2016)
C & S Electric, Inc. Thomas Clifton and Earl Standafer 9909 S. Shore Drive #155 Plymouth, MN 55441	May 22, 2015 through May 21, 2018 (eligible for reinstatement on May 21, 2019)
Dahl Trucking Marlin Dahl 305 Highway 169 South Elmore, MN 56027	Aug.19, 2014 through January 12, 2018
Elmore Truck and Trailer Repair, Inc. Marlin Dahl 305 Highway 169 South Elmore, MN 56027	Aug.19, 2014 through Jan. 12, 2018 (eligible for reinstatement on Jan. 12, 2019)
Fibertech, Inc. Jeffrey and Laurie Plzak 5075 Nielsen Circle, P.O. Box 236 Loretto, MN 55357	July 24, 2014 through July 23, 2017 (eligible for reinstatement on July 23, 2018)
Glacier, Inc. Joan Niesen 122 Summerfield Drive, PO Box 216 Waverly, MN 55390	May 24, 2016 through November 24, 2016

Groundscape Maintenance, Inc. Rob Sievers 1160 County Road 83 Maple Plain, MN 55359	February 19, 2015 through February 19, 2016 (eligible for reinstatement February 19, 2017)
Guaranteed Returns Ronald Carlino, Donna Fallon, Dean Volkes 100 Colin Drive Holbrook, NY 11741	December 5, 2014 through December 31, 2099
Honda Electric, Inc. Jeffrey and Laurie Plzak 5075 Nielsen Circle, P.O. Box 236 Loretto, MN 55357	July 24, 2014 through July 23, 2017 (eligible for reinstatement on July 23, 2018)
Hunt's Carpet Service, Inc.[1] Robert and Joni Hunt 4102 46th Avenue North Robbinsdale, MN 55422	Sept. 15, 2015 through Sept. 15, 2020
McCaa, Webster & Associates, Inc. Sammie McCaa 2751 Hennepin Avenue South, #301 Minneapolis, MN 55408-1002	May 1, 2014 through April 30, 2015 (eligible for reinstatement on April 30, 2016)
MG Carlson Construction Company, Inc. Martin Gerald Carlson 701 East First Street Fort Worth, TX 76102-3276	Sept. 5, 2014 through October 5, 2015 (eligible for reinstatement on April 5, 2016)
Ocuture, LLC 11930 Camby Park Drive Houston, TX 77047	Dec. 15, 2014 through Dec. 15, 2015 (eligible for reinstatement Dec. 15, 2016)
Ramco Heating and Air Conditioning Mark and Cheryl Ramquist 605 Ash Street Downing, WI 54734	March 11, 2015 through March 11, 2016 (eligible for reinstatement March 11, 2017)
Southwest Paving, Inc. Greg Brakefield 26412 State Highway 29 Deer Creek, MN 56527	March 30, 2016 through March 30, 2017 (eligible for reinstatement March 30, 2018)
St. Cloud Lawn & Landscaping, Inc. Pat Murphy 10602 County Road 2 Brainerd, MN 56401	February 20, 2015 through February 20, 2016 (eligible for reinstatement on Feb. 20, 2017)
TAC Construction Solutions, Inc. Christina Woods 31767 Deacons Way Pequot Lakes, MN 56472	August 19, 2014 through August 19, 2016 (eligible for reinstatement on August 19, 2017)
Watab Hauling Co. Gary Francis Bauerly 9695 Deerwood Rd. NE Rice, MN 56367	Jan. 14, 2013 through Jan. 14, 2016 (eligible for reinstatement on Jan. 14, 2017)

Minnesota Administrative Rule part 1230.1150, subpart 6 requires the Materials Management Division to maintain a master list of all suspensions and debarments. The master list must retain all information concerning suspensions and debarments as a public record for at least three (3) years following the end of a suspension or debarment. Refer to the following website for the master list: http://www.mmd.admin.state.mn.us/debarredreport.asp.

[1] Debarred by Hennepin County from working on any Hennepin County projects as a general contractor or subcontractor at any tier. Minn. Rules Part 1230.1150, subpart 2, item B, subitem (1) provides that any vendor debarred by the federal government, the state of Minnesota, or any of its departments, commissions, agencies, or political subdivisions, is automatically debarred by the (Department of Administration, Materials Management) division under the same terms and limits of the original debarment.

If the project is financed in whole or in part with federal funds, refer to the following website for vendors debarred by federal government agencies: http://sam.gov.

This list does not include preclusion actions taken by cities, counties or local authorities. Consult local authorities to ensure that contractors, subcontractors and materials suppliers are not currently suspended or debarred.

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 and Federal 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), MnDLI Truck Rental Rate Schedule and the Federal Fair Labor Standards Act.[5]

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,[6] 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.[7]

B. **Bona Fide.** Made or carried out in good faith; authentic.[8]

C. **Certified Payroll Report (CPR).** A report comprised of two components; (1) a payroll report, and (2) a statement of compliance report.[9]

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.[10]

E. **Employer.** An individual, partnership, association, corporation, business trust, or other business entity that hires a Worker.[11]

F. **Fringe Benefit.** An employment benefit given in addition to a Worker's wages or salary.[12]

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.[13]

---

[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] 29 U.S.C. 201, et seq.
[6] MnDOT Standard Specifications for Construction, Section 1103
[7] Minn. Stat. 178.011, Subdivision 2
[8] The American Heritage College Dictionary, Third Edition, 2000
[9] Minn. R. 5200.1106, Subpart 10
[10] Minn. R. 5200.1106, Subpart 2(D)
[11] Minn. Stat. 177.42, Subdivision 7
[12] The American Heritage College Dictionary, Third Edition, 2000
[13] 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.[14]

I. **Prime Contractor.** An individual or business entity that enters into a Contract with the Department.[15]

J. **Subcontract.** A Contract that assigns some obligations of a prior Contract to another party.[16]

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.[17]

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 (Contractor) of such services, contracting to obtain such services from providers (ITO/MTO) of trucking services, dispatching the providers (ITO/MTO) of the services to do Work as required by the users (Contractor) of the services, receiving payment from the users (Contractor) in consideration of the trucking services provided, and making payment to the providers (ITO/MTO) for the services.[18]

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.[19] A MTO also includes: (1) a legal business entity that is not primarily owned by the operator of the truck; and (2) a legal business entity that owns one truck that is operated by two or more individuals.

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.[20]

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.[21]

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.[22]

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.[23]

---

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

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.[24]

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.[25]

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.[26]

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.[27]

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[28] to the MnDOT LCU[29], 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.[30] 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.[31]

B. **Labor Classification Clarification & Disputes.** A Contractor needing assistance in determining a labor classification must submit a Classification Clarification Request[32] 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.[33]

---

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

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, power plant, dam or utility[34] 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.[35] 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[36] 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).[37]

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.[38]

1. **Wage Rate Request.** A Contractor must complete a Request for Rate Assignment form[39] and submit it to the MnDOT LCU[40] 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.[41] A salaried Worker must be included on a CPR.

---

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

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.[42]

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.[43]

I. **Prohibited Deductions.** Direct or indirect deductions from a Worker's wages will not be allowed for:[44]

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.

2. **Equipment.** Purchased or rented equipment used in 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 purchase of the equipment.

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.

J. **Permissible Payroll Deductions.** Deduction(s) voluntarily consented to, or authorized, by the Worker in writing, and in advance of the period in which work is done, is allowable, along as the deduction(s) is bona fide and in the best interested of the Worker.[45]

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[46], unless the Worker is exempt under state law.[47]

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.[48]

C. **On-Call Time Subject to Prevailing Wage.** A Contractor that requires a Worker to remain on the project (or so close to the project that the Worker cannot use the time effectively for the Worker's own purposes) the Worker is considered "on-call."[49] On-call time is paid time, unless the Worker is completely relieved of duty and free to leave the project for a defined period of time.[50]

D. **Travel Time (Compensable).** The following examples are considered hours worked and the Employer must compensate the Worker under the Fair Labor Standards Act:

1. **Travel all in a Day's Work.** Time a Worker spends traveling from place-of-work to Project Site, Project Site to place-of-work, or between project sites, during working hours.[51]

2. **Travel Away from Home Community (One Day).** Time a Worker spends traveling to - and returning from - the other city. The Employer is allowed to subtract the time the Worker would normally spend traveling from home to work.[52] **(see Subpart E(1) of this section)**

---

[42] Minn. Stat. 181.03, Subdivision 1(2)
[43] Minn. R. 5200.1106, Subpart 6
[44] Minn. Stat. 177.24, Subdivision 4(1-4); Minn. R. 5200.1106, subpart 4
[45] United States Department of Labor Field Operation Handbook, Section 15f07(b)
[46] Minn. Stat. 177.44, Subdivision 1
[47] Minn. Stat. 177.44, Subdivision 2 or Minn. R. 5200.1106, Subpart 4
[48] United States Department of Labor Fact Sheet #22
[49] Minn. R. 5200.0120, Subpart 2
[50] Minn. R. 5200.0120, Subpart 3
[51] United States Department of Labor Fact Sheet #22
[52] United States Department of Labor Fact Sheet #22

3. **Travel Away from Home Community (Overnight).** Time a Worker spends traveling away from - and back to – their home community. The Employer is allowed to subtract the time the Worker would normally spend traveling from home to work.[53] **(see Subpart E(1) of this section)**

E. **Travel Time (Non-Compensable).** The following examples are not considered hours worked and the Employer does not need to compensate the Worker:

1. **Travel from Home to Work.** Time a Worker spends traveling from home-to-work, or work-to-home, before the workday begins, or after the workday ends.[54]

2. **Passenger in a Vehicle.** Time a Worker spends as a passenger in a vehicle traveling away from home community, outside of regular working hours, on any day of the week. This exemption only applies to a Worker that is not performing any work-related duties during the time as a passenger.[55]

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:[56]

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:[57]

1. reasonably anticipated to provide a benefit;

2. a commitment that can be legally enforced;

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[58], for all hours worked,[59] 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)**.[60]

---

[53] United States Department of Labor Fact Sheet #22
[54] United States Department of Labor Fact Sheet #22
[55] United States Department of Labor Fact Sheet #22
[56] Minn. Stat. 177.42, Subdivision 6
[57] Minn. Stat. 177.42, Subdivision 6
[58] 29 CRF, Part 5.5(a)(1)(i)
[59] Government and non-government Work
[60] United States Department of Labor Field Operation Handbook, Section 15f14(f)(1)

D. **Hourly Fringe Benefit Credit.** An hourly Fringe Benefit credit toward the Total Prevailing Wage Rate must be determined separately for each Worker[61] 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[62] 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.[63] 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.[64]

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).[65] 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.[66]

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.[67]

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.[68]

H. **Transportation, Board and Lodging Costs Not Fringe Benefits.** Payments for the cost of transportation, board and lodging are not Fringe Benefits.[69] A Contractor that sends a Worker away from home to perform work outside the Worker's normal commuting distance so that, as a practical matter, the Worker can return home on the weekend only, must incur the cost of transportation, meals and lodging.[70]

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.[71] The prevailing hours of labor is defined as not more than 8 hours per day and more than 40 hours per week.[72]

---

[61] United States Department of Labor Field Operation Handbook, Section 15f11(c)
[62] United States Department of Labor Field Operation Handbook, Section 15f12(a-d)
[63] Refer to Appendix B
[64] United States Department of Labor Field Operation Handbook, Section 15f14(f)(1)
[65] United States Department of Labor Field Operation Handbook, Section 15f11(c)
[66] 2010 United States Department of Labor Field Operation Handbook, Section 15k06
[67] United States Department of Labor Field Operation Handbook, Section 15f18
[68] Minn. Stat. 177.42, Subdivision 6
[69] Minn. Stat. 177.44, Subdivision 4(4); Minn. R. 5200.0900, Subpart 1; Minn. R. 5200.0700, Subpart 1.
[70] 2010 United States Department of Labor Field Operation Handbook, Section 15f19
[71] Minn. Stat. 177.44, Subdivision 1 and Refer to Appendix D
[72] 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.[73]

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.[74]

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[75] to the Department. A Contractor must pay its employees at least once every 14 calendar days.[76]

C. **Payroll Report Data.** Each payroll report must include all Workers that performed Work and provide at a minimum the following information:[77]

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.[78]
9. Labor classification(s) title(s) and optional three-digit code for each Worker.

---

[73] www.dot.state.mn.us/const/labor/certifiedpayroll.html
[74] Minn. R. 5200.1106, Subpart 10
[75] Minn. Stat. 177.43, Subdivision 3
[76] Minn. Stat. 177.30 (a)(4)
[77] Minn. Stat. 177.30 (a)(1-4) and Minn. R. 5200.1106, Subpart 10
[78] 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".[79] 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.[80]

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.[81]

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[82] for at least three (3) years after the final payment is issued.[83] 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.[84]

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.[85]

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.[86]

2. Performing Work of the trade, as described in the apprenticeship agreement.[87]

3. Compensated according to the rate specified in the program for the level of progress.[88]

4. Supervised by a Journeyworker from the same company, in accordance with the program ratio requirements.[89]

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.[90]

---

[79] MnDOT Standard Specifications for Construction, Section 1701
[80] MnDOT Standard Specifications for Construction, Section 1801
[81] Minn. Stat. 177.30 (a)(5)
[82] Minn. R. 5200.1106, Subpart 10
[83] Minn. Stat. 177.30 (a)(5)
[84] Minn. Stat. 181.032
[85] Minn. Stat. 177.44, Subdivision 7; Minn. Stat. 177.33(a)(5)
[86] Minn. R. 5200.1070, Subpart 1
[87] 29 CFR, Part 29.2(j)
[88] Minn. R. 5200.1070, Subpart 1 and Refer to Appendix C
[89] Minn. Stat. 178.036, Subdivision 5
[90] 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.[91]

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"[92] 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.[93] 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.[94]

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.[95]

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 material to and from a Prime Contractor's material operation that is not a separately owned commercial establishment.[96]

2. 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.[97]

3. The delivery of materials from a non-commercial establishment to the project and the return haul to the starting location either empty or loaded.[98]

4. 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.[99]

5. 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.[100]

6. The delivery of materials or products by trucks hired by a Contractor, subcontractor, or agent thereof, from a commercial establishment.[101]

---

[91] Minn. R. 5200.1070, Subpart 3
[92] Minn. Stat. 177.44, Subdivision 1
[93] Minn. Stat. 177.44, Subdivision 1
[94] Minn. Stat. 177.30(a)(5); Minn. Stat. 181.723; United States Department of Labor Field Operation Handbook, Section 15f08
[95] Minn. Stat. 177.44, Subdivision 1
[96] ALJ Findings of Fact, Conclusions of Law, and Recommendation, Conclusions (7), Case #12-3000-11993-2
[97] Minn. R. 5200.1106, Subpart 3B(1)
[98] Minn. R. 5200.1106, Subpart 3B(2)
[99] Minn. R. 5200.1106, Subpart 3B(3)
[100] Minn. R. 5200.1106, Subpart 3B(4)
[101] Minn. R. 5200.1106, Subpart 3B(5)

7. The delivery of mineral aggregate materials by or for a commercial establishment, which is deposited "Substantially in Place", and the return haul to the off-site facility either empty or loaded.[102]

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 is considered hours worked and subject to standard compensation.

1. The delivery of processed or manufactured goods to a public works project by Workers hired by or employed directly for a commercial establishment, unless it is the delivery of mineral aggregate that is deposited Substantially in Place.[103]

2. The delivery of oil offsite, to a Prime Contractor's permanent (commercial) asphalt mixing facility that is not to, from, or on the project Work site.[104]

C. **Repair, Maintenance & Waiting to Load Time.** An ITO and MTO must be paid the truck rental rate for time spent repairing or maintaining 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.[105]

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.[106] The forms are available on the MnDOT LCU website.[107]

E. **Broker Fee.** A Trucking Broker contracting to provide trucking services to a user (Contractor)[108] must receive payment from the user (Contractor) in consideration of the trucking services provided.[109] Broker fees must not be charged to ITOs and MTOs.[110]

F. **MTO Request to Sublet Form.** A Contractor that hires a MTO must provide a "MTO Request to Sublet Form" to the Department. The form is available on the MnDOT LCU website.[111]

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.[112]

2. The processing or manufacturing of material at an off-site facility that is not considered a commercial establishment.[113]

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.[114]

---

[102] Minn. R. 5200.1106, Subpart 3B(6)
[103] Minn. R. 5200.1106, Subpart 4(C)
[104] J.D. Donovan, Inc. vs. Minnesota Department of Transportation, 878 N.W.2d 1 (2016)
[105] Minn. R. 5200.1106, Subpart 8(A)(1)
[106] Minn. R. 5200.1106, Subpart 10
[107] http://www.dot.state.mn.us/const/labor/forms.html
[108] Minn. R. 5200.1106, Subpart 7(C)(1)
[109] Minn. R. 5200.1106, Subpart 7(C)(4)
[110] Minn. R. 5200.1106, Subpart 6, Minn. R. 5200.1106, Subpart 7(A)(3)
[111] http://www.dot.state.mn.us/const/labor/documents/Contractdocs/mtosubletform.pdf
[112] ALJ Findings of Fact, Conclusions of Law, and Recommendation, Conclusions (7), Case #12-3000-11993-2
[113] Minn. R. 5200.1106, Subpart 3(A)
[114] Minn. R. 5200.1106, Subpart 4(A)

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.[115]

XV. SUBCONTRACTING PART OF THE CONTRACT

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.[116] 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.[117] 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.[118]

C. **Employee Interviews.** The Contractor must permit representatives from the Department or other governmental entities[119] to interview Workers at any time during working hours on the project.[120]

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.[121]

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.[122]

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.[123]

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.[124]

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.[125]

---

[115] Minn. R. 5200.1106, Subpart 4(B)
[116] MnDOT Standard Specifications for Construction, Section 1801
[117] Minn. Stat. 177.44, Subdivision 5
[118] www.dot.state.mn.us/const/labor/posterboards
[119] MnDLI, U.S. DOL, , U.S. Department of Transportation, Federal Highways Administration
[120] MnDOT Standard Specifications for Construction, Section 1511
[121] Minn. R. 5200.0910, Subpart F; 29 CFR Part 570.2(a)(ii)
[122] Minn. R. 5200.0930, Subpart 4
[123] Minn. Stat. 181A.06, Subdivision 4; MnDOT Standard Specifications for Construction, Section 1701
[124] *See* International Union of Operating Engineers, Local 49 v. MnDOT, No. C6-97-1582, 1998 WL 74281, at *2 (Minn. App. Feb. 24, 1998)
[125] MnDOT Standard Specifications for Construction, Section 1801

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:

1. **Withholding Payment.** The Department may withhold from the Prime Contractor payments relating to prevailing wage underpayments.[126]

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.[127]

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.[128]

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.[129]

5. **County Attorney.** The Department may refer suspected criminal violations by Contractor to the appropriate local county attorney for prosecution.[130]

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.[131] A Contractor may be fined up to $1,000 for each failure to maintain records.[132]

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[133] and may be grounds for debarment proceedings.[134]

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.[135]

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.[136] If the Employer is found to have committed a violation, liquidated damages and other costs may be assessed against the Employer.[137]

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. [138]

---

[126] MnDOT Standard Specifications for Construction, Section 1906
[127] Minn. Stat. 16C.285
[128] MnDOT Standard Specifications for Construction, Section 1808
[129] Minn. R. 1230.1150, Subpart 2(A)(4)
[130] Minn. Stat. 177.44, Subdivision 7
[131] Minn. Stat. 177.44, Subdivision 6
[132] Minn. Stat. 177.30(b)
[133] Minn. Stat. 15C.02; , Minn. Stat. 161.315; Minn. Stat. 177.32; Minn. Stat. 177.43, Subdivision 5, Minn. Stat. 609.63
[134] Minn. Stat. 161.315 and Minn. Stat. 609.63
[135] Minn. Stat. 177.43, Subdivision 6a
[136] Minn. Stat. 177.27, Subdivision 8
[137] Minn. Stat. 177.27, Subdivision 10
[138] Minn. Stat. 181.74, Subdivision 1

THE FOLLOWING APPENDICES ARE FOR EXPLANATORY PURPOSES ONLY. FOR SPECIFIC QUESTIONS, PLEASE CONTACT LCU.[139]

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.[140]

$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)[141] (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

---

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

APPENDIX D **PREVAILING WAGE OVERTIME CALCULATION**

Overtime Hourly Rate of Pay. Here is the formula to calculate the required minimum overtime.[142]

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.

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

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: 2016-11-07 Revised: 2016-12-27

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.

Violations should be reported to:

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

Refer questions concerning the prevailing wage rates 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)				

LABOR CODE AND CLASS	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
101 LABORER, COMMON (GENERAL LABOR WORK)	2016-11-07	25.88	16.57	42.45
102 LABORER, SKILLED (ASSISTING SKILLED CRAFT JOURNEYMAN)	2016-11-07	25.88	16.57	42.45
103 LABORER, LANDSCAPING (GARDENER, SOD LAYER AND NURSERY OPERATOR)	2016-11-07	16.50	0.00	16.50
104 FLAG PERSON	2016-11-07	12.89	0.00	12.89
105 WATCH PERSON	2016-11-07	16.25	12.94	29.19
106 BLASTER	2016-11-07	24.39	14.90	39.29
107 PIPELAYER (WATER, SEWER AND GAS)	2016-11-07	23.89	14.90	38.79
108 TUNNEL MINER	2016-11-07	16.69	6.91	23.60
109 UNDERGROUND AND OPEN DITCH LABORER (EIGHT FEET BELOW STARTING GRADE LEVEL)	2016-11-07	22.09	14.90	36.99
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.	2016-11-07	26.00	12.45	38.45
111 TRAFFIC CONTROL PERSON (TEMPORARY SIGNAGE)	2016-11-07	20.50	5.38	25.88
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.	2016-11-07	16.04	0.00	16.04
SPECIAL EQUIPMENT (201 - 204)				
201 ARTICULATED HAULER	2016-11-07	25.11	18.90	44.01
	2017-05-01	25.31	19.70	45.01
202 BOOM TRUCK	2016-11-07	25.11	18.90	44.01
	2017-05-01	25.31	19.70	45.01
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	2016-11-07	20.00	0.00	20.00

LABOR CODE AND CLASS	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
SKID STEER LOADERS), NO EARTHWORK OR GRADING FOR ELEVATIONS				
204 OFF-ROAD TRUCK	2016-11-07	21.96	14.15	36.11
205 PAVEMENT MARKING OR MARKING REMOVAL EQUIPMENT (ONE OR TWO PERSON OPERATORS); SELF-PROPELLED TRUCK OR TRAILER MOUNTED UNITS.	2016-11-07	31.45	17.95	49.40
HIGHWAY/HEAVY POWER EQUIPMENT OPERATOR				
GROUP 2	2016-11-07	26.35	18.90	45.25
	2017-05-01	26.55	19.70	46.25
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)				
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	2016-11-07	25.42	18.90	44.32
	2017-05-01	25.62	19.70	45.32
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	2016-11-07	25.11	18.90	44.01
	2017-05-01	25.31	19.70	45.01
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				

LABOR CODE AND CLASS	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
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				
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	2016-11-07	23.40	18.90	42.30
	2017-05-01	23.60	19.70	43.30
369 AIR COMPRESSOR, 600 CFM OR OVER (HIGHWAY AND HEAVY ONLY)				
370 BITUMINOUS ROLLER (UNDER EIGHT TONS)				
371 CONCRETE SAW (MULTIPLE BLADE) (POWER OPERATED)				

LABOR CODE AND CLASS	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
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	2016-11-07	22.80	18.90	41.70
	2017-05-01	23.00	19.70	42.70
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	2016-11-07	19.25	5.65	24.90
601 MECHANIC . WELDER				
602 TRACTOR TRAILER DRIVER				
603 TRUCK DRIVER (HAULING MACHINERY INCLUDING OPERATION OF HAND AND POWER OPERATED WINCHES)				
GROUP 2	2016-11-07	16.82	0.00	16.82
604 FOUR OR MORE AXLE UNIT, STRAIGHT BODY TRUCK				
GROUP 3	2016-11-07	14.57	0.00	14.57
605 BITUMINOUS DISTRIBUTOR DRIVER				
606 BITUMINOUS DISTRIBUTOR (ONE PERSON OPERATION)				
607 THREE AXLE UNITS				
GROUP 4	2016-11-07	22.51	14.40	36.91
608 BITUMINOUS DISTRIBUTOR SPRAY OPERATOR (REAR AND OILER)				
609 DUMP PERSON				
610 GREASER				

LABOR CODE AND CLASS	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
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	2016-11-07	17.50	2.79	20.29
702 BOILERMAKERS	2016-11-07	35.15	27.02	62.17
703 BRICKLAYERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
704 CARPENTERS	2016-11-07	27.46	16.11	43.57
705 CARPET LAYERS (LINOLEUM)	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
706 CEMENT MASONS	2016-11-07	31.35	20.70	52.05
707 ELECTRICIANS	2016-11-07	32.23	19.59	51.82
	2017-09-01	33.63	20.44	54.07
711 GROUND PERSON	2016-11-07	16.63	6.38	23.01
712 IRONWORKERS	2016-11-07	36.00	24.90	60.90
713 LINEMAN	2016-11-07	24.82	8.50	33.32
714 MILLWRIGHT	2016-11-07	35.13	21.03	56.16
	2017-05-01	37.08	21.03	58.11
715 PAINTERS (INCLUDING HAND BRUSHED, HAND SPRAYED, AND THE TAPING OF PAVEMENT MARKINGS)	2016-11-07	27.76	15.01	42.77
716 PILEDRIVER (INCLUDING VIBRATORY DRIVER OR EXTRACTOR FOR PILING AND SHEETING OPERATIONS)	2016-11-07	27.46	16.11	43.57
717 PIPEFITTERS . STEAMFITTERS	2016-11-07	42.76	24.38	67.14
719 PLUMBERS	2016-11-07	31.34	20.00	51.34
	2017-05-01	32.94	20.00	52.94
721 SHEET METAL WORKERS	2016-11-07	40.88	25.10	65.98
723 TERRAZZO WORKERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			

LABOR CODE AND CLASS	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
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	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
728 WIRING SYSTEMS INSTALLER	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
729 ASBESTOS ABATEMENT WORKER	2016-11-07	30.08	16.46	46.54
730 SIGN ERECTOR	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			

DEPARTMENT OF LABOR AND INDUSTRY
LABOR STANDARDS UNIT

January 25, 2016

NOTICE OF CERTIFICATION OF TRUCK RENTAL RATES AND EFFECTIVE DATE PURSUANT TO MINNESOTA RULES, PART 5200.1105

From April 6, 2015, to June 5, 2015, the Department of Labor and Industry (DLI) conducted a truck operational cost survey. On January 25, 2016, the Commissioner of DLI certified the minimum truck rental rates for highway projects in the state's ten highway and heavy construction areas for trucks and drivers operating "four or more axle units, straight body trucks," "three axle units," "tractor only" and "tractor trailers." The certification followed publication of the Notice of Determination of Truck Rental Rates in the *State Register* on November 16, 2015, and the informal conference held pursuant to Minnesota Rules, part 5200.1105 on December 3, 2015.

According to Minnesota Rules, part 5200.1105, the purpose of the informal conference is for DLI to obtain further input regarding the proposed rates before the rates are certified. Approximately 8 individuals attended the informal conference. None of the attendees at the informal conference commented on the Determination of the Construction Truck Rental Rates or contacted the department with comments regarding the rates prior to the date of this Certification.

Truck rental rates are determined by adding the certified prevailing wage driver rate in each region to the statewide operating cost survey data. The minimum hourly truck rental rate for the four types of trucks in each area is certified to be as follows:

3 Axle Units

	Effective Date	Certified 607 Driver Rate	Surveyed Operating Cost	Determined Truck Rental Rate
Region 1	Certification date	$40.60	$37.35	$77.95
Region 2	Certification date	$34.26	$37.35	$71.61
Region 3	Certification date	$36.91	$37.35	$74.26
	May 1, 2016	$38.36	$37.35	$75.71
Region 4	Certification date	$40.63	$37.35	$77.98
Region 5	Certification date	$43.65	$37.35	$81.00
	May 1, 2016	$44.85	$37.35	$82.20
Region 6	Certification date	$41.45	$37.35	$78.80
	May 1, 2016	$42.90	$37.35	$80.25
Region 7	Certification date	$36.91	$37.35	$74.26
	May 1, 2016	$38.36	$37.35	$75.71
Region 8	Certification date	$13.77	$37.35	$51.12
Region 9	Certification date	$43.65	$37.35	$81.00

	May 1, 2016	$45.10	$37.35	$82.45
Region 10	Certification date	$13.77	$37.35	$51.12

4 or More Axle Units

	Effective Date	Certified 604 Driver Rate	Surveyed Operating Cost	Determined Truck Rental Rate
Region 1	Certification date	$40.70	$50.82	$91.52
Region 2	Certification date	$37.06	$50.82	$87.88
	May 1, 2016	$38.51	$50.82	$89.33
Region 3	Certification date	$37.06	$50.82	$87.88
	May 1, 2016	$38.51	$50.82	$89.33
Region 4	Certification date	$23.88	$50.82	$74.70
Region 5	Certification date	$28.17	$50.82	$78.99
Region 6	Certification date	$41.55	$50.82	$92.37
	May 1, 2016	$43.00	$50.82	$93.82
Region 7	Certification date	$37.40	$50.82	$88.22
Region 8	Certification date	$16.32	$50.82	$67.14
Region 9	Certification date	$43.75	$50.82	$94.57
	May 1, 2016	$45.20	$50.82	$96.02
Region 10	Certification date	$16.02	$50.82	$66.84

Tractor

	Effective Date	Certified 602 Driver Rate	Surveyed Operating Cost	Determined Tractor Only Truck Rental Rate	Plus Trailer Operating Cost	Determined Tractor Trailer Rental Rate
Region 1	Certification date	$43.90	$49.17	$93.07	$11.46	$104.53
	May 1, 2016	$45.35	$49.17	$94.52	$11.46	$105.98
Region 2	Certification date	$37.57	$49.17	$86.74	$11.46	$98.20
	May 1, 2016	$39.02	$49.17	$88.19	$11.46	$99.65
Region 3	Certification date	$27.10	$49.17	$76.27	$11.46	$87.73
Region 4	Certification date	$24.45	$49.17	$73.62	$11.46	$85.08
Region 5	Certification date	$26.27	$49.17	$75.44	$11.46	$86.90
Region 6	Certification date	$39.45	$49.17	$88.62	$11.46	$100.08

Region 7	Certification date	$27.55	$49.17	$76.72	$11.46	$88.18
Region 8	Certification date	$37.57	$49.17	$86.74	$11.46	$98.20
	May 1, 2016	$39.02	$49.17	$88.19	$11.46	$99.65
Region 9	Certification date	$44.30	$49.17	$93.47	$11.46	$104.93
	May 1, 2016	$45.75	$49.17	$94.92	$11.46	$106.38
Region 10	Certification date	$24.50	$49.17	$73.67	$11.46	$85.13

The minimum truck rental rate for these four types of trucks in the state's ten 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*.

Ken B. Peterson,

COMMISSIONER

SALT Schedule of Materials Control - Local Government Agency

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.

1603.2 SAMPLING AND TESTING - INSERT INTO SPECIAL PROVISIONS

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 State Aid for Local Transportation (SALT) "Schedule of Materials Control – Local Government Agency" (SMC-LGA). The SMC-LGA establishes the size of samples and the minimum rate of testing. The SMC-LGA references the 2016 MnDOT Standard Specifications for Construction and does not set contract requirements for the material.

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 tests 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 **I**ndependent **A**ssurance Inspection. Contact the MnDOT District IA Inspector when the job starts to provide the proper servicing of your project.

Definitions

SALT Construction Website

MnDOT Office of **S**tate **A**id for **L**ocal **T**ransportation. The SMC - LGA is located at the construction page under "Information & Resources - Manuals".

MnDOT Schedule of Materials Control

Schedule of Materials Control (SMC) are inserted into project proposals to direct how materials are to be sampled. The SMC is updated yearly. Each SMC is project specific. Therefore, one needs to refer to their specific proposal.

Approved 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.

Qualified Products List

Products are predicted to meet all applicable standards and specifications, but random sample testing is required to verify specific product lots meet specifications prior to usage. These products are generally considered to be "qualified" but not approved until tested for compliance. Successfully tested products lots are considered to be "approved". The approval process for the individual product should specify any further testing requirements for the product.

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 "qualified" products.

Quality assurance (QA) is a process-centered approach to ensuring that the best possible products or services are provided. Related to quality control, quality assurance focuses on enhancing and improving the process that is used to create the end result, rather than focusing on the result itself. Among the parts of the process that are considered in QA are planning, design, development, production and service.

Quality control (QC) is a process that is used to ensure a certain level of quality in a product or service. It includes actions deemed necessary to provide for the control and verification of certain characteristics of a product or service. It involves thoroughly examining and testing the quality of products or the results of services. The basic goal of quality control is to ensure that the products or services that are provided meet specific requirements and characteristics.

Material Acceptance Summary

LOCAL NO. _____

SAP/SP NO. _____

Bid Item #	Item Description	Qualified Product List	Approved Product List	Certificate of Compliance	Accepted by Engineer*
2105.604	Geotextile Fabric Type VI-A				
2105.604	Soil Stabilized Geogrid				
2357.606	Bituminous Tack Coat				
2357.606	Bituminous Tack Coat Shoulder				
2511.515	Geotextile Filter Type IV				
2540.601	Mailbox Support				
2540.602	Mailbox Support - temporary				
2573.502	Silt Fence - MS				
2573.505	Floatation Silt Curtain, still water				
2573.505	Sediment Control Log - wood fiber				
2574.508	Fertilizer type 3 & 4				
2575.502	Seed Mixtures				
2575.523	Erosion Control Blankets CAT 3				
2575.562	Hydraulic Matrix Type Bonded Fiber				
2575.571	Rapid Stabilization Method 3				
2580.603	Interim Pavement Marking				
2582.502	Paint - Pavement Marking				

* Items not included on the Approved Product List or the Manufacturer's Certifications have not been received are hereby accepted by the Engineer. Materials on a Qualified Products list which have not been tested at the discretion of the Engineer are hereby accepted.

signed: _____

Project Engineer Date

Material Acceptance Summary

LOCAL NO. _____

SAP/SP NO. _____

Bid Item #	Item Description	Qualified Product List	Approved Product List	Certificate of Compliance	Accepted by Engineer*

* Items not included on the Approved Product List or the Manufacturer's Certifications have not been received are hereby accepted by the Engineer. Materials on a Qualified Products list which have not been tested at the discretion of the Engineer are hereby accepted.

signed: _____

Project Engineer Date

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.

	Type of Test	Spec Section *	Contractor - QC Testing Rates	Agency - Testing Rates
Start-Up Testing Rates for the 1st 2000 tons **	Bulk Specific Gravity	2360.2.G.7.b	1 test per 500 tons 55 lb. sample 3 full cylinder molds	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 calc'd	2360.2.G.7.a/f		
	Coarse Aggregate Angularity (CAA)	2360.2.G.7.g	1 test per 1000 tons	
	Fine Aggregate Angularity (FAA)	2360.2.G.7.h		
	Added AC/Total AC Ratio (calc'd)	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	1 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	NOTE 1	
	Fine Aggregate Angularity (FAA)	2360.2.G.7.h	NOTE 2	
	TSR	2360.2.G.7.i	When directed by the Materials Engineer	
	Aggregate Specific Gravity	2360.2.G.7.j		
	Mixture Moisture Content	2360.2.G.7.k	As directed by the Engineer	
	Asphalt Binder Certified Supplier	2360.2.G.7.l	NOTE 3 (1qt. Steel container for asphalt binder. 1/2 gal. plastic container with wide screw top for emulsion)	
	Asphalt Emulsion Certified Supplier	2357		
	Compaction / Density Requirements	2360.3.D	Review special provisions	
	Small Quantity Requirements	See 2360.2G.5 & 2360.3G		

Testing rates are minimums, additional testing is encouraged to ensure a quality product.

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

* Review Special Provisions & 2360.2.G Mixture Quality Management.

** The testing rates apply only to mixtures that have not been tested on previous projects.
Mixtures from previous years should use the start- up testing rates.

NOTE 1: **At start-up or new Mix Design**: 2 tests per day for a minimum of 2 days, then 1 per day if CAA is met. If CAA > 8% of requirement, 1 sample per day but test 1 per week. No testing required for Class A and or B Aggregates.

NOTE 2: **At start-up or new Mix Design**: 2 tests per day for a minimum of 2 days, then 1 per day if FAA is met. If FAA > 5% of requirement, 1 sample per day but test 1 per week.

NOTE 3: Shall be a Certified Supplier - No Samples Required unless otherwise directed by the Engineer. Agencies using MnDOT Metro Inspection Services will be sampled at the current MnDOT Schedule of Materials Control rates and will be billed accordingly.

BITUMINOUS SPECIALTY ITEMS

Type of Test	Spec	Contractor - QC Testing Rates	Agency - Testing Rates
Gradation PASSRC & PASB	2363 3139.3	1 per 1,000 Ton with a minimum 1 per day.	1 per day. 35 lbs.
Micro-Surfacing	2354 3139.5	Stockpile: 1/1,500 Tons (min 1/day) Machine Hopper: 1/500 Ton (min 1/day)	Stockpile & Machine Hopper: 1/day 30 lbs.
Seal Coat & Otto Seal	2356 3137.2 B	Stockpile: 1/1,500 Tons (min 1/day) Chip Spreader Hopper: 1/day	1/day from Hopper. 30 lbs.
% Crushing - CAA PASSRC & PASB	2363 3139.3	1 per 1,000 Ton with a minimum 1 per day.	1 per day from gradation test. 35 lbs.
Moisture / Aggregate Micro-Surfacing	2354 3139.5	Machine Hopper: 1/500 Tons (min 3/day)	1/day 2lbs
Sand Equivalence Micro-Surfacing	2354	Stockpile or Machine Hopper: 1/500 Tons (min 1/day)	1/day, test at Engineer discretion, 25 lbs.
Flakiness Index Bituminous Seal Coat	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 Mixture UTBWC	2356 3151.2G	1/300 Tons, min 1/day. %AC, Gradation, Max SpG, Adj.AFT	1/day, 20 lbs. 1 cylinder from truck box.
PASSRC & PASB	3151 2350	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 draindown. Copy MDR to Project Engineer and Grading & Base Enginner.
Asphalt Binder Tests		**Asphalt Emulsion List**	**Asphalt Binder List**
UTBWC	2353 3151	Shall be a Certified Supplier - No Samples Required unless otherwise directed by the Engineer : **Asphalt Binder:** First load, then 1/250,000 gallons. Sample size of 1 quart metal container. **Emulsified Asphalt:** First load, then 1/50,000 gallons. Sample size of 1/2 gallon wide screw top plastic container.	
Micro-Surfacing	2354		
Seal Coat & Otto Seal	2356		
Tack Coat	2357		
PASSRC & PASB	3151		
Asphalt Binder Rate Micro-Surfacing	2354	Verify Application Rate 3/day	Verify Application Rate 1/day
Fog Seal	2355	Verify Application Rate 1/day	Verify Application Rate 1/day
Seal Coat & Otto Seal	2356		
Bit Tack Coat	2357		

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

SALT Schedule of Materials Control - Local Government Agency

Cold Inplace Recycling (CIR) & Stabilized Full Depth Reclamation (SFDR)

Specification 2215

Test Type	Producer Testing Rates	Engineer 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", 3/4", 3/8",#4, #10, #30.
Gradation (Simple) (Material to be stabilized)	1 per mile for SFDR & CIR w/o top size screening. 4 / mile for CIR with top size screens.	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
Depth Check - Unstabilzed and Stabilized	1 per 1,000' /machine width for each vertical machine face for initial pulverization and stabilization.	1 per day	.284 / 401
SFDR: Moisture during compaction of unstabilized portion	1/6,000 sq. yd.	none	.245 Speedy tester not allowed.
Penetration Index (DCP) - SFDR only Unstabilized.	1 per 1/2 mile lane mile	1 per lane 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 5,000 feet of lane of daily anticipated SFDR & one after the addition of water by the Contractor 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	1 per 500 feet of lane width, (**see note below**).	Observe the Contractor.	0.282
Control Strip: SFDR Stabilized and CIR	Minimum of once per project	Observe the Contractor.	
Bituminous Material Samples	none	Shall be a Certified Supplier - No Samples Required unless otherwise directed by the Engineer.	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 once per day.	0.285
Moisture (stabilized) - before placement of next layer during curing.	none	3 daily after compaction.	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.

SALT Schedule of Materials Control - Local Government Agency

GRADING AND BASE CONSTRUCTION ITEMS 1 of 3

	Material Type	Spec.*	Minimum Required Agency Acceptance Testing - QA	QC Testing Rates	Lab Sample
Gradation Testing (See Notes 2 & 3)	Aggregate Surfacing	2118 2211.5	Total quantity less than 4000 tons (2200 cy-cv) = 1 gradation/1,000 tons (550 cy.cv) or less, determine compliance to individual results (table 2211-5). Total quantity greater than 4,000 tons (2200 cy-cv), divide the total quantity by 10,000, roundup to the next whole number to determine the number of lots. Each lot is divide into 4 equal sublots, randomly sample each sublot. Determine individual results and sublot averages for compliance (Table 2211-4 & 2211-5)	1 / 1,000 tons stockpile gradation only required for materials on hand. Spec 1906.2	1/source 30 lb.
	Aggregate Base	2211 2211.5			
	Shoulder Base Aggregate	2221 2211.5			
	Drainable Aggregate Base (OGAB & DSB)	2212 3136			
	Granular and Select Granular Material (borrow/embankment)	3149.2B	1/40,000 Cubic Yards - Compacted Volume - CV	1/10,000 CY - req'd for mat'l on hand, Spec 1906.2	1/source 30 lb.
	Stabilizing Aggregate	3149.2C			
	Reclamation FDR & SFDR	3135.2B 2215.2C	1/day	1/6,000 yd2 & depth check See Note 4	None
	Granular Filter	3601.2B	1/ source	1/source - before delivery on the project.	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			
Proctor * Specified Density	Non-Granular Material per 2105.3F	2105 2106 3149	1 per major soil, subgrade preparation specified density requires 100% of proctor density.	None	1 sample 25 lb.
Sand Cone * Specified Density	Non-Granular Material per 2105.3F		**AGENCY TESTING**: **Roadway Embankment**: One test per 4,000 yd3 (CV) or if test rolled, One test per 8,000 yd3 (CV), **Transverse culverts & Abutments:** 1 test per every 2 feet of fill per 250' of trench length. **Structures Trenches**: One test/500 feet of each structure length at various depths. **Subgrade Preparation:** One per 25 road stations.		
Penetration Index Method (DCP) *	Aggregate Base	3138 2211.3C	1 DCP tests per 500 yd^3 (CV) or 1 per 900 Tons. If test rolled, 1 test / 1,000 yd3 (CV) or 1,800 Tons.	None	None
	Shoulder Base Aggregate				
	Reclamation FDR & SFDR	3135.2B 2215.2C	1 DCP test per 3,000 yd^2		
	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 4,000 yd3 (CV), **Transverse culverts & Abutments:** 1 test per every 5 feet of fill per 250' of trench length. **Structures Trenches:** One test/500 feet of each structure length at various depths. **Subgrade Preparation:** One per 25 road stations.		

The Grading and Base Manual allows the nuclear density gauge, see pages 60 and 65.

SALT Schedule of Materials Control - Local Government Agency

GRADING AND BASE CONSTRUCTION ITEMS 2 of 3

	Material Type	Spec.*	Minimum Required Agency Acceptance Testing - QA	QC Testing Rates	Lab Sample
Moisture Content Test During All Compaction Methods	*Aggregate Base, Shoulder & Surfacing	3138	1 per project unless directed by the Engineer, obtain split companion sample for the Contractor. * May replace tests with time stamped photos showing water being applied for granular materials only.	1 / 1,000 yd3	None
	Drainable Aggregate Base (OGAB & DSB)				
	Reclamation FDR & SFDR	3135.2B 2215.2C		1/6000 yd^2	
	All Embankment Materials	3149 2105		1/10,000 yd3	
	Subgrade Preparation			1 per 25 road stations	
Percent Crushing	Particle Count (note 1)	1/ source unless directed by Engineer, (required for 3138.2B & C, 3149.2C & G1, 3136.2B Drainable Bases).		1 required for mat'l on hand, Spec 1906.2	1/source 30lb
Quality	Aggregate Quality Tests	3138 3149 3601	1/ source unless directed by Engineer	2 required for mat'l on hand, Spec 1906.2	1/source 30lb
Depth Check	Reclamation FDR & SFDR	3135.2B 2215.2C	1 per day unless directed by Engineer	1/1,000 feet of machine width.	
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) and granular layers not meeting the requirements of 3149.2B2 (2105 & 2106). Minimum 12' width and 300' length. Agency to observe test rolling. See G & B Manual 5-692.270.		

Laboratory Samples are companion split samples to the QA sample:

1. Companion gradation, proctor, QA crushing, aggregate quality samples not required 1,000 tons or less.
2. Include the laboratory companion with the first field sample.
3. Include the field sample results with the laboratory sample.
4. Laboratories with AMRL Accreditation are not required to submit laboratory companion samples.
5. Carbonate aggregate materials require 50 lb. samples for the laboratory testing.

NOTE 1: Percent crushing test is not required when the material is crushed from a quarry or contains 25% or greater recycled materials.

NOTE 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.

NOTE 3: The Certification of Aggregates and Granular Materials procedure and documentation of testing locations is at the discretion of the Engineer.

NOTE 4: Provide gradation test results to the Engineer within the first 500 feet of production and within 500 feet after a failing gradation.

* Review the Special Provisions. For granular materials, aggregate compaction will be by the "Penetration Index Method" unless otherwise designated in the Special Provisions. Other compaction methods include the "Specified Density Method" (sand cone), "Quality Compaction Method" or "Light Weight Deflectometer Method. See 2211.3.D.2 Compaction. The Grading and Base Manual allows the nuclear density gauge, see pages 60 and 65.

Conversions: 1 ton = 0.55 yd^3 (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.

Samples are not required for less than 500 tons (275 yd^3).

GRADING AND BASE CONSTRUCTION ITEMS 3 of 3

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	**Yes**, if it contains Bitumen	**Yes**, if it contains Bitumen	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.

Click here for testing procedures in the Grading & Base Manual.

Forms and worksheets at the Grading & Base Website.

Gradation worksheets at the SALT Construction Website

SALT Schedule of Materials Control - Local Government Agency

CERTIFIED READY-MIX CONCRETE, 1 of 2

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.		Test Type (Concrete Manual)	Producer QC Testing Rates	Engineer Testing Rates (1) Verification-companion to QC	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 Plant Production Testing Rates *	Gradation (5-694.145) (5-694.148)	Coarse & Fine: When over 20 yd3 per week, 1 per week or 1 per 400 yd3, whichever is greater. Bridge Deck Concrete must have passing gradations prior to mixing.	Coarse & Fine: 1 per week* per ready-mix plant	**21763** Concrete Agg. Work sheet **2449** Weekly Concrete Agg. Report **24143** Weekly Certified R-M Plant Report
		Moisture Content (5-694.142)	1 every 4 hours	None	
		Aggregate Quality (5-694.146)	Engineer Testing Rates: Minimum of 1 per project per each fraction - use of MnDOT test results for the same 30 day time period is acceptable. For bridge concrete: 1 test each fraction per month. 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 *companion required, double sample size

Aggregate Size	Gradation*	Quality*	Moisture	% -200 C.Agg
3/4" Plus, #4	25 lb.	50 lb.	2000 g	10 lb.
3/4" Minus, #67	25 lb.	30 lb.	2000 g	6 lb.
#7, CA-70	6 lb.	30 lb.	2000 g	6 lb.
CA-80, #89	1.1 lb. (500 g)	30 lb.	500 g	-
Fine Aggregate	1.1 lb. (500 g)	30 lb.	500 g	-

Concrete Field Testing Rates

Sampling Locations for Air, Slump, Temperature and Cylinder Testing

(1) 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 must have passing air content and slump prior to placement. Cast strength specimens from the same load as the air content and slump test. Test whenever adjustments are made to the mix.

(2) Subsequent tests - Sample from the middle portion of the load.

Test Type	Engineer Testing Rates (1)	Form
Air Content - Type 3 Concrete (5-694.541)	1 test per 200 yd3. For Bridge Concrete: 1 test per 100 yd3. Test first load each day per mix. Test when adjustments are made to the mix.	**2448** Weekly Concrete Report
Slump (5-694.531)	1 test per 200 yd3. For Bridge Concrete: 1 test per 100 yd3. Test first load each day per mix, or as necessary to verify passing slump. Not 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.	

(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 is 25 yd3 or less per week with no gradation testing or plant monitoring required but remember that **Concrete Field Testing is required.**

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

SALT Schedule of Materials Control - Local Government Agency

CERTIFIED READY-MIX CONCRETE, 2 of 2

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.

Spec.		Test Type	Engineer Testing Rates (1)	Form
See page 1 of 2	Concrete Field Testing Rates	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.	General Concrete Grades F, G, M, P, and R: 1 set of 3 cylinders per 300 yd3.	**2409** Concrete Cylinder
			Bridge Concrete Grades B, S, and Y: 1 set of 3 cylinders per 100 yd3, then 1 set of 3 cylinders per 300 yd3	
			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, *do not rod*, lightly tap the sides, cover and move to area with no vibration. Do not disturb for 24 hours.	
		Concrete Pavement Thickness **	Observation of probing or coring at the Engineer's discretion.	24327
		Flexural Strength	Producer: 1 beam (28 day) per day per mix. Make additional control beams as necessary. Control beams shall be made within the last hour of concrete poured each day. Fabricate beams, deliver beams to curing site, and clean beam boxes. Cylinders may be substituted for beams at the discretion of the Engineer.	2162 Concrete Test Beam Data
		Concrete Pavement Texture	Producer: 1 per 1000 lineal feet per lane of concrete pavement at locations determined by the Agency. The Contractor supplies all materials necessary to perform the required testing.	MIT SCAN T2 Report

(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 is 25 yd3 or less per week with no gradation testing or plant monitoring required but remember that **Concrete Field Testing is required.**

**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.

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

Agencies using MnDOT Metro Inspection Services will be sampled at the current MnDOT Schedule of Materials Control rates and will be billed accordingly.

The testing rates shown in the SMC - LGA are minimums. Take as many tests as necessary to ensure quality concrete. It is recommended that the Agency Plant Monitor be present during critical pours, such as superstructure or paving concrete. If any field test fails, reject the concrete or if the Producer makes adjustments to the load to meet requirements, record the adjustments on the Certificate of Compliance and Weekly Concrete Report. Retest the load and record the adjusted test results. Make sure the next load is tested, before it gets into the work. If batching adjustments are made at the plant, test the adjusted load, before it gets into the work. Continue to test the concrete when test results are inconsistent or marginal. Material not meeting requirements shall not knowingly be placed in the work. If failing concrete inadvertently gets placed in the work, use either the MN/DOT Standard Specifications for Construction or the Schedule of Price Reductions for Concrete to address penalties. It is recommended that the Agency representative continually monitor the progress of all concrete pours. (It is not a recommended practice to only perform minimum testing requirements and leave the project.)

SALT Schedule of Materials Control - Local Government Agency

Concrete Plant and Field Materials

All materials must come from certified or qualified sources. All certified source 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 Products List do not have to be sampled and 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.	Minimum Required Field Sampling Rate	Form No.
Concrete Plant Batching Materials	Portland Cement	3101	Shall be a Certified Supplier - No Samples Required unless otherwise directed by the Engineer. For certified ready-mix and concrete paving sample rates: 1 sample when the plant is certified. Take additional samples at 6 months if producing Agency concrete, if 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 suppliers 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 (Accelerationg, Retarding, Water-Reducing, Air-Entraining, etc.)	3113	For all concrete: 1 sample in a 1/2 pint plastic container provided by the Agency when the plant is certified. Take additional samples at 3 months if producing Agency concrete, if the plant changes sources or as the contract requires.	2410 Sample ID Card
	Water	3906	1 sample in a 1 gallon clean glass or plastic container from a questionable source.	
Concrete Field Materials	Preformed Joint Filler	3702	Visual Inspection, sample size 2 sq.ft.	2410 Sample ID Card
	Preformed Elastomeric Type	3721	1 per lot. Only materials from a qualified sources. Link to Approved Products List.	
	Silicone Joint Sealer	3722		
	Hot Poured Elastomeric Type	3723 3725		
	Burlap	3751	Visual Inspection	
	Paper	3752	Visual Inspection - Must be white opaque.	
	Membrane Curing Compound	3754 3754AMS 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.			

Agencies using MnDOT Metro Inspection Services will be sampled at the current MnDOT Schedule of Materials Control rates and will be billed accordingly.

SALT Schedule of Materials Control - Local Government Agency

2301 CONCRETE PAVEMENT - AGENCY 1 of 2 *

Test Type (concrete manual)	Spec.	Concrete Paving Batch Plant Agency Testing	Certified Ready-Mix Plant Agency Testing	Form
Gradation **(1)** (5-694.145) (5-694.148)	3126 3137	Test the first 4 QA samples of production each time the Contractor mobilizes the plant in a calendar year or changes aggregate sources.		21764 Agg Work sheet
		1 per day randomly thereafter.	1 per 1000 yd^3 or 1 per week whichever is higher, randomly.	
Aggregate Moisture - QC Verification **(2)** (5-694.142)	3126 3137	If w/c incentives apply: 1 per 1000 yd^3 or every 4 hours, whichever is greater. Take initial sample within the first 250 yd^3.	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)	Concrete Manual	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)	3137	1 randomly selected 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.		21764 Agg Work sheet
Coarse and Fine Aggregate Quality **(4)**	3126 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) Test the -200 on the coarse aggregate at the plant the day it was sampled. 3) 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 Incent / Disincent Work sheet
		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.

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 of your Federal Aid Project.

SALT Schedule of Materials Control - Local Government Agency

2301 CONCRETE PAVEMENT - AGENCY 2 of 2

Test Type	Spec.	Concrete Field Testing - Agency	Form
Air Content before consolidation for Type 3 concrete	Review Concrete Manual Website	I correlation air test per day	2448 Weekly Concrete Report
Air Content after consolidation for Type 3 concrete		1 air test per day	
Slump		**For fixed form placement**: 1 slump test per day. **For slip form placement:** No slump testing required.	
Concrete Temperature		Record temperature each time air content, slump or strength test specimen is performed/fabricated by the Agency.	
Flexural Strength		Supply beam boxes, cure, and test beams. MnDOT standard beam box size is 6" x 6" x 20" unless other sizes or types are approved by the Concrete Engineer.	2162 Test Beam Data
Concrete Pavement Texture		Determine texture testing locations using random numbers.	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.	
Surface Smoothness		None	Concrete Profile Summary Work Sheet

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

NOTE (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 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.

NOTE (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.

NOTE(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.

NOTE (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 yd^3, pre-production sampling is not required.

Minimum Aggregate Sample Size *companion required, double sample size				
Aggregate Size	Gradation*	Quality*	Moisture	% -200 C.Agg
3/4" Plus, #4	25 lb.	50 lb.	2000 g	10 lb.
3/4" Minus, #67	25 lb.	30 lb.	2000 g	6 lb.
#7, CA-70	6 lb.	30 lb.	2000 g	6 lb.
CA-80, #89	1.1 lb. (500 g)	30 lb.	500 g	-
Fine Aggregate	1.1 lb. (500 g)	30 lb.	500 g	-

CONCRETE PAVEMENT - PRODUCER / CONTRACTOR 1 of 2*

Test Type (concrete manual)	Spec.	Concrete Paving Batch Plant Production Testing	Certified Ready-Mix Plant Production Testing
Gradation **(1)** (5-694.145) (5-694.148)	3126 3137	When over 250 yd^3 produced per day: 1 per 1500 yd^3, or completed 1 per 1/2 day, whichever is the higher sampling rate.	When over 20 yd^3 produced per day: 1 per 400 yd^3, or completed every 4 hours, whichever is the higher sampling rate.
Coarse Aggregate -200 sieve (5-694.146)	3137	Test the first sample then at least 1 of the next 3 samples 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 day randomly thereafter. Test these samples at the plant.	
Aggregate Moisture QC Verification **(2)** (5-694.142)	3126 3137	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	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 and Fine Aggregate Quality	3126 3137	Prior to concrete production: Test the Agency's pre-production sample at the Contractor's discretion. During concrete production: Test the -200 on the quality companion sample the day it was sampled. All other testing is at the Contractor's discretion.	
Coarse Aggregate Quality Testing for Incentive / Disincentive	3137	Test at the Contractor's discretion.	

Minimum Aggregate Sample Size *companion required, double sample size

Aggregate Size	Gradation*	Quality*	Moisture	% -200 C.Agg
3/4" Plus, #4	25 lb.	50 lb.	2000 g	10 lb.
3/4" Minus, #67	25 lb.	30 lb.	2000 g	6 lb.
#7, CA-70	6 lb.	30 lb.	2000 g	6 lb.
CA-80, #89	1.1 lb. (500 g)	30 lb.	500 g	-
Fine Aggregate	1.1 lb. (500 g)	30 lb.	500 g	-

* 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.

NOTE (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.

NOTE (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.

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

CONCRETE PAVEMENT - PRODUCER / CONTRACTOR 2 of 2

Test Type	Spec.	Concrete Field Testing - Contractor
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.
Air Content after consolidation for Type 3 concrete		Test 1 air content per 1/2 day per mix of slip form paving to establish an air loss correction factor (ACF). See Special Provisions for additional information.
Slump		**For fixed form placement**: 1 per 300 yd^3 and as directed by the Engineer. Test first load each day per mix. **For slip form placement:** No slump testing required.
Concrete Temperature		Record temperature each time air content, slump or strength test specimen is performed/fabricated by the Contractor.
Flexural Strength		1 beam (28 day) per day per mix. Make additional control beams as necessary. Control beams shall be made within the last hour of concrete poured each day. Fabricate beams, deliver beams to curing site, and clean beam boxes. Cylinders may be substituted for beams at the discretion of the Engineer.
Concrete Pavement Texture		1 per 1000 lineal feet per lane of concrete pavement at locations determined by the Agency. All adjoining lanes shall be tested at the same location if paved at the same time. The Contractor supplies all materials necessary to perform the required testing.
Thickness		The Contractor drills concrete cores at locations determined by the Agency. The Contractor probes the plastic concrete at locations determined by the Agency.
Surface Smoothness		Contractor provides MnDOT certified inertial profiler results for the entire project as required by the contract. Check for current certification.

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

2404 CONCRETE WEARING COURSE FOR BRIDGES

Test Type (concrete manual)	**Spec.**	**Contractor Testing**	**Agency Testing**	**Form**
Gradation, Quality, Coarse Agg -200 QC/Verification (5-694.145) (5-694.146) (5-694.148)	3126 3137	Prior to production, provide the Agency with: Aggregate pit numbers, 1 passing gradation result per fraction per source. Test Agency companion samples are Contractor's discretion.	1 per fraction prior to production and each time aggregate is delivered to the site.	2410 Sample ID Card
Air Content - Type 3 Concrete (Verification) (5-694.541)	Review Concrete Manual Website	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. 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	2409 Cyl. ID Card

Test	Minimum Sample Size *companion req'd, double sample size	
Gradation	6 lb. for # 7	1.1 lb. Sand
Quality	50 lb. for Coarse Aggregate	30 lb. Fine Aggregate

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

CONCRETE PAVEMENT REPAIR - CPR for 3U18

Test Type	Spec.	Contractor Testing	Agency Testing	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: 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.	2410 Sample ID Card
Air Content - Type 3 Concrete	Review Concrete Manual Website	None	1 per 15 yd^3, Test at beginning of pour each day.	21412 Weekly Report of Low Slump Concrete
Slump		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.	
Compressive Strength		None	1 cylinder (28 day) per 30 yd^3	2409 Cyl. ID Card

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

DOWEL BAR RETROFIT - DBR

Test Type	Spec.	Contractor Testing	Agency Testing	Form
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 are Contractor's discretion.	1 per fraction prior to production and each time aggregate is delivered to the site.	2410 Sample ID Card

Test Type	Spec.	Agency Testing	Form
DBR Material Compressive Strength	Review Concrete Manual	**Contractor Testing: None** **Agency Testing**: During the pre-production test operations: 1 set of 3 cylinders tested at a rate as directed by the Engineer. Testing may need to be repeated if any problems with the dowel bar retrofit material are encountered. **First day of production**: 1 set of 3 cylinders at a rate directed by the Concrete Engineer. **After the first day of production**: 1 cylinder per day during production tested at a rate determined by the Engineer to determine traffic strength.	2409 Cylinder ID Card

Test	Minimum Sample Size *companion req'd, double sample size	
Gradation	1.1 lb. for # 89 & Sand	
Quality	50 lb. Coarse Aggregate	30 lb. Fine Aggregate

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

LANDSCAPING AND EROSION CONTROL ITEMS

Kind of Material	Spec. #	Min. Required 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 Lanscape 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.

Contact the MnDOT District IA Inspector to provide servicing of your Federal Aid Project.

CHEMICAL ITEMS

Kind of Material	Spec. No.	Min. Required 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	Verifiy supplied material meets ASTM D 41
Waterproofing Asphalt	3166	Verifiy supplied material meets ASTM D 449
Fabric	3201	Verifiy 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 3355 Special Provisions	Visual Inspection - Check qualified products list. Retain Certificate of Compliance.
Signs and Markers	3352	Visual Inspection - Check qualified products list.

Metals 1 of 2

Kind of Material	Spec. No.	Min. Required 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 Sign Posts	3401	Visual Inspection - As directed by the Engineer. Retain Certificate of Compliance in Project file.
Fence Posts, Brace Bars, Rails and others	3403 3406 3379	Visual Inspection - As directed by the Engineer. Retain Certificate of Compliance and certified mill analysis in project file.
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.	Min. Required 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 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 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 web site: http://www.dot.state.mn.us/bridge/	
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.	Min. Required 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 certified 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 (Construction)	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 available at http://www.dot.state.mn.us/materials/aggregatedocs/gtxlist.pdf
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.	Min. Required 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 Mn/DOT 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 Mn/DOT Signals and Lighting Approved Products Lists (APL). The Contract documents indicate, which items must be on the Signals and/or Lighting APL.
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 AND SIGNAL EQUIPMENT ITEMS 2 of 2

Kind of Material	Spec. No.	Min. Required Acceptance Testing (Field Testing Rate)
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), & Mn/DOT 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 Mn/DOT 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 Mn/DOT 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.	Min. Required 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 block 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	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.	Min. Required 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

Asphalt Products

Bridge Products

Concrete Products

Crack & Joint Materials Products

Truncated Domes

Drainage

Erosion Control and Landscaping Products

Geosynthetics

Maintenance Shop Supplies

Paint/Stain/Coating Systems (Non-Pavement) Products

Roadside Safety Hardwarel

Roadway Lighting Products

Traffic Control Signals Products

Signing Products

Snow and Ice Chemical Products

Temporary Traffic Control Devices

Traffic Management Systems/ITS

Vehicle Safety Lighting

Walls (Retaining/Noise)

SALT Construction Website - Additional Resources

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 at the SALT Construction Website

SALT SMC - LGA Contacts

Districts 1, 2, 3, 4
Ron Bumann - State Aid Construction Practices Specialist
ronald.bumann@state.mn.us
218-725-2811

Districts 6, 7, 8
Rollin Larson - State Aid Construction Specialist
rollin.larson@state.mn.us
651-366-3832

Metro
Mike Pretel - State Aid Construction Engineer
michael.pretel@state.mn.us
651-234-7766

Jim Deeny - State Aid Construction Liaison
james.deeny@state.mn.us
651-234-7762

Telephone Index for MnDOT Specialty Offices

Grading & Base

Terry Beaudry	(651) 366-5456
John Bormann	(651) 366-5496
Melissa Cole	(651) 366-5432

Website: www.dot.state.mn.us/materials/gradingandbase.html

Bituminous

John Garrity	(651) 366-5577
Asphalt Binder	
Jim McGraw	(651) 366-5548
Jason Szondy	(651) 366-5549

Bituminous Specialty Items

Terry Beaudry	(651) 366-5456
Greg Schneider	(651) 366-5403
Melissa Cole	(651) 366-5432
Tom Wood	(651) 366-5573

Website: www.dot.state.mn.us/materials/bituminous.html

Concrete

Concrete – Aggregates and Mix Design Concrete – Certified Ready Mix Concrete Wendy Garr	(651) 366-5423
Concrete – Paving Rob Golish	(651) 366-5576
Concrete – Bridges Ron Mulvaney	(651) 366-5575
Concrete – Pavement Rehabilitation Gordy Bruhn	(651) 366-5523

Website: www.dot.state.mn.us/materials/concrete.html

Landscaping and Erosion Control Items

Erosion Control Lori Belz	(651) 366-3607
Landscaping Scott Bradley	(651) 366-4612
Wood Chips Tina Markeson	(651) 366-3619

Chemical Items

Allen Gallistell	(651) 366-5545
Dave Iverson	(651) 366-5550

Metallic Materials and Metal Products Sampling

Steve Grover	(651) 366-5540
Laboratory - Test Results	(651) 366-5560
Bridge Structural Metals	
Todd Niemann	(651) 366-4567
Barry Glassman	(651) 366-4568

Miscellaneous Materials

Steve Grover	(651) 366-5540
Bearing Pads	
Todd Niemann	(651) 366-4567
Barry Glassman	(651) 366-4568
Laboratory - Test Results	(651) 366-5560

Geosynthetics, Pipe, Tile, and Precast/Prestressed Concrete

Steve Grover	(651) 366-5540
Rich Lamb	(651) 366-5595
Randy Tilseth	(651) 366-5451
Laboratory - Test Results	(651) 366-5560

Brick, Stone and Masonry Units/Modular Retaining Wall Blocks

Steve Grover	(651) 366-5540
Blake Nelson	(651) 366-5599
Laboratory - Test Results	(651) 366-5561

Electrical & Signal

Susan Zarling	(651) 234-7052
Steve Grover	(651) 366-5540
Wendy Garr - Concrete	(651) 366-5423
Laboratory - Test Results	(651) 366-5560

Materials Lab. Contacts	Independent Assurance
District 1, Duluth Leila DeLuca 218-725-2738 Fax 218-725-2814	Nadine Miller (218) 725-2737 Cell (218) 348-6297
District 2, Bemidji Jeff Long, 218-755-6544 Jason Kisseo, 218-755-6542 Fax 218-755-6540	Thomas Lloyd (218) 755-6545 Cell (218) 766-6949
District 3A, Baxter Tom Boser, 218-828-5755 Fax 218-828-5816	Matt Miles (218) 828-5753 Cell (218)232-6748
District 3B, Saint Cloud Teresa Mertens, 320-223-6555 Fax 320-223-6582	Teresa Mertens, 320-223-6555 Cell (320) 493-3559
District 4, Detroit Lakes Brad Hanson, 218-846-3616 Bruce Bryngelson, 218-846-3614 Wayne Koons, 218-846-3617 Fax 218-846-0744	David Brunner Dist. 4 Mat'ls (218) 846-3613 Cell (218) 849-7393 Sandy Kay Wollschlager 4B Mat'ls (320) 589-7300 Cell (320) 815-6660
Metro District, Maplewood Lab Mike Evans, 651-366-5409 Fax 651-366-5408	Waters Edge Mat'ls (651) 234-7356 East: Steve Reinardy (651) 755-1581 East: Mike Sroga (651) 775-0997 West: Greg Bohmert (651) 775-1005 West: Dave Wilkerling (651) 775-1042
District 6, Rochester Ken DeCramer, 507-286-7580 Ken Pickett, 507-286-7586 Brad Horn, 507-286-7535 Fax 507-285-7112	Brandon Weick (507) 286-7584 Cell (507) 251-0138
District 7, Mankato Mark Schoeb, 507-304-6186 Scott Swanson, 507-304-6189 Fax 507-304-6191	Mitch Jordahl (507) 304-6187 Cell (507) 380-9619 Brian Lueck (507) 304-6188 Cell (507) 380-8248
District 8A, Willmar Jay Jorgensen, 320-214-6345 Fax 320-214-6306 **District 8B, Marshall** Mark DeAustin, 507-537-2068 Fax 507-537-3802	Jon Vlaminck (320) 214-6348 Cell (320) 894-7409

	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 Processsed 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.

EQUAL EMPLOYMENT OPPORTUNITY (EEO) SPECIAL PROVISIONS

This section of Special Provisions contains the Equal Employment Opportunity (EEO) rules and regulations for highway construction projects in Minnesota which are federally and/or State funded.

The source of funding determines which EEO regulations and goals (Federal and/or State goals) apply to a specific project. When a project contains funding from both Federal and State sources, both sets of regulations apply, and the Minnesota Department of Transportation (MnDOT) monitors and reviews projects at both levels.

If the project contains any Federal funding, and has a total dollar value exceeding $10,000, Federal EEO regulations and goals apply (pages 2, 6, 7-8, 9-14, 15, 16-17, 22-26, 27-38). The MnDOT Office of Civil Rights monitors and reviews these projects on behalf of the Federal Highway Administration (FHWA), under Federal statutes (23 USC 140) and rules (23 CFR 230).

If the project contains any State funding, and has a total dollar value exceeding $100,000, State EEO regulations and goals apply (pages 2, 3, 4, 5, 6, 9-14, 16-22). MnDOT's Office of Civil Rights monitors and reviews these projects in conjunction with the Minnesota Department of Human Rights under Minnesota Statutes §363A.36 and its accompanying rules.

MnDOT has established a single review and monitoring process which meets both Federal and State requirements.

Please note that Pages 23-38 of these Special Provisions may be omitted from projects with no Federal funding.

CONTENTS

Notice of Requirement for Affirmative Action 2
Notice of Pre-Award Reporting Requirements 3
Minnesota Affirmative Action Requirements 4
Appropriate Work Place Behavior 5
Notice to All Prime and Subcontractors: Reporting Requirements 6
Specific Federal Equal Employment Opportunity Responsibilities 7
Standard Federal and State Equal Employment Construction Contract Specifications 9
Equal Opportunity Clause 15
Minority and Women Employment Goals Chart 16
Sample Summary of Employment Activity, Form EEO-12 18
Sample Monthly Employment Compliance Report, Form EEO-13 20
EEO Compliance Review Report 22
On-The-Job Training Program: Trainee Assignment 23
Certification of On-the-Job Training Hours: Federal-Aid Projects 24
On-the-Job Training (OJT) Program Approval Form 25
On-the-Job Training (OJT) Program Trainee Termination Form 26
Required Contract Provisions: Federal-Aid Construction Contracts 27

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (23 USC 140, 23 CFR 230 and Minnesota Statute §363A.36)

1. The offerer's or bidder's attention is called to the "Minnesota Affirmative Action Requirements" (EEO Page 4), the "Specific Federal Equal Employment opportunity Responsibilities" (EEO Pages 7-8), the "Standard Federal and State Equal Employment Opportunity Construction Contract Specifications" (EEO Pages 9-14), the "Equal Opportunity Clause" (EEO Page 15) and "Required Contract Provisions - Federal-Aid Construction Contracts" (EEO Pages 27-38).

2. The goals and timetables for minority and women participation, expressed in percentage terms of hours of labor for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as shown on EEO Pages 16-17.

   These goals are applicable to all the Contractor's construction work (whether or not it is State or State assisted, Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

   The Contractor's compliance with the regulations in 41 CFR Part 60-4, and/or Minnesota Statutes §363A.36 and its accompanying rules shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) for Federal or federally assisted projects, and Minnesota Statutes §363A.36, and its accompanying rules for State or State assisted projects, and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and women employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority and women employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4 for Federal or federally-assisted projects and/or Minnesota Statutes §363A.36 and its accompanying rules for state or state-assisted projects. Compliance with the goals will be measured against the total work hours performed.

3. If the contract is federally funded, the Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within ten working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. If the contract is state funded, the Contractor shall provide written notification to the Compliance Division, Minnesota Department of Human Rights, Freeman Building, 625 Robert Street North, Saint Paul, Minnesota 55155 within ten working days of award of any construction subcontract in excess of $100,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the Subcontractor; employer identification number of the Subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the county or counties of the State of Minnesota where the work is to be performed.

NOTICE TO ALL PRIME AND SUBCONTRACTORS
PRE-AWARD REPORTING REQUIREMENTS

In order to ensure compliance with Federal and State laws and regulations (23 USC 140, and 23 CFR 230, and Minnesota Statutes §363A.36) and to ensure Mn/DOT's ability to monitor and enforce compliance efforts, the following requirements apply if the apparent low bid exceeds $ 5,000,000.00:

1) The Apparent Low Bidder ("ALB") must provide to Mn/DOT the "EEO-8 Form" (also entitled "EEO Compliance Review Report"), which must provide detail on the contractor's total company workforce in the State of Minnesota during the twelve month period preceding July 30th of the previous year (Office and/or clerical personnel need not to be included).

2) The ALB must provide to Mn/DOT a work plan for meeting the minority and women employment goals established by the Minnesota Department of Human Rights, for the project in question. The work plan must include, at a minimum (1) how the ALB will incorporate its current minority and women employees in the ALB's efforts to meet the established goals; and (2) a contingency plan if the ALB has determined that its current workforce is not sufficient in order to achieve the established employment goals. If the ALB relies in whole or in part upon unions as a source of employees, then the ALB must (1) include a list of established organizations that are likely to yield qualified minority and women candidates if those union(s) are unable to provide a reasonable flow of minority and women candidates in their work plan; and (2) document the method by which these organizations will refer candidates to the ALB for employment opportunities. All bidders are hereby notified that the U.S. Department of Labor has determined that a contractor will not be excused from complying with the Federal and State laws and regulations cited above based solely on the fact that a contractor has a collective bargaining agreement with a union providing for the union to be the exclusive source of referral and that the union failed to refer minority employees. A contractor may obtain a list of organizations likely to yield qualified minority and women candidates from the Mn/DOT Office of Civil Rights.

3) The ALB must provide to Mn/DOT the ALB's total workforce and labor projections for the project (represented in hours), the ALB's projected total number of minority hours for the project, and the ALB's projected total number of women hours for the project. The details must include the trade(s) that will be utilized in order to complete the project.

The ALB must submit documents as required to comply with this section no later than five business days after the date that bids for the contract are opened. The five day period starts the business day following the date that bids were opened. The required documents must be received prior to Contract Award, and must be sent to the Mn/DOT Office of Civil Rights – 395 John Ireland Blvd., Mail Stop 170 St. Paul, MN 55155-1899. Submittal of the documents described in (1), (2) and (3) is required for contract award to the ALB. The submitted documents will be used as a tool to assist contractors in meeting employment goals; the content itself will not be evaluated for the purpose of determining contract award.

MINNESOTA AFFIRMATIVE ACTION REQUIREMENTS

1. It is hereby agreed between the parties to this contract that Minnesota Statutes, Section §363A.36, and its accompanying rules are incorporated into any contract between these parties based upon this specification or any modification of it. A copy of Minnesota Statutes, Section §363A.36, and its accompanying rules is available upon request from the contracting agency. The Contractor hereby agrees to comply with the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.

2. It is hereby agreed between the parties to this contract that this agency requires that the Contractor meet affirmative action criteria as provided for by Minnesota Statutes §363A.36 and its accompanying rules. It is the intent of the Minnesota Department of Transportation to fully carry out its responsibility for requiring affirmative action, and to implement sanctions for failure to meet these requirements. Failure by a contractor to implement an affirmative action plan, meet project employment goals for minority and women employment or make a good faith effort to do so may result in revocation of his/her Certificate of Compliance or suspension or revocation of the contract (Minnesota Statutes §363A.36).

3. Under the affirmative action obligation imposed by the Human Rights Act, Minnesota Statutes, Section §363A.36, contractors shall take affirmative action to employ and advance in employment minority, female, and qualified disabled individuals at all levels of employment. Affirmative action must apply to all employment practices, including but not limited to hiring, 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. The Contractor shall recruit, hire, train and promote persons in all job titles, without regard to race, color, creed, religion, sex, national origin, marital status, status with regard to public assistance, physical or mental disability, sexual orientation or age except where such status is a bona fide occupational qualification. These affirmative action requirements of the Minnesota Human Rights Act are consistent with but broader than the Federal requirements as covered in this contract.

4. Affirmative Action for disabled workers. The Contractor shall not discriminate against any employee or applicant for employment because of a physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled individuals without discrimination based upon their physical or mental disability in all employment practices such as employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training (including apprenticeship). In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with Minnesota Statutes, section §363A.36 and the rules and relevant orders of the Minnesota Department of Human Rights pursuant to the Minnesota Human Rights Act.

5. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the commissioner of the Minnesota Department of Human Rights. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment minority, women and qualified disabled employees and applicants for employment, and the rights of applicants and employees. **A poster entitled "Contractor Non-discrimination is the Law" may be obtained from: Compliance Unit, Minnesota Department of Human Rights, Freeman Building, 625 Robert Street North, Saint Paul, Minnesota 55155.** (651) 539-1100, TTY 296-1283, Toll Free 1-800-657-3704.

6. The Contractor shall notify each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Minnesota Statutes, section §363A.36 of the Minnesota Human Rights Act, and is committed to take affirmative action to employ and advance in employment minority, women and qualified physically and mentally disabled individuals.

APPROPRIATE WORK PLACE BEHAVIOR ON Mn/DOT CONSTRUCTION PROJECTS UTILIZING STATE FUNDS

It is the Minnesota Department of Transportation's (MnDOT's) policy to provide a workplace free from violence, threats of violence, harassment and discrimination. MnDOT has established a policy of zero tolerance for violence in the workplace. Contractors who perform work on MnDOT construction projects, or local government entities or public agencies utilizing state funds on highway construction projects, shall maintain a workplace free from violence, harassment and discrimination (See definitions, below).

Definitions:

1. Violence is the threatened or actual use of force which results in or has a high likelihood of causing fear, injury, suffering or death. Employees are prohibited from taking reprisal against anyone who reports a violent act or threat.

2. Harassment is the conduct of one employee (toward another employee) which has the purpose or effect of 1) unreasonably interfering with the employee's work performance, and/or 2) creating an intimidating, hostile or offensive work environment. Harassment is not legitimate job-related efforts of supervisor to direct/evaluate an employee or to have an employee improve work performance.

A. Unlawful discriminatory harassment is harassment which is based on these characteristics: race, color, creed, religion, national origin, sex, disability, age, marital status, status with regard to public assistance or sexual orientation. Managers, supervisors and employees shall not take disciplinary or retaliatory action against employees who make complaints of sexual harassment.

Sexual harassment is unwelcome sexual advances, requests for sexual favors, or sexually motivated physical contact, or other verbal or physical conduct or communication of a sexual nature, when submission to that conduct or communication is 1) made a term or condition, either explicitly or implicitly, of obtaining employment; or 2) is used as a factor in decisions affecting an individual's employment; or 3) when that conduct or communication has the purpose or effect of substantially interfering with an individual's employment or creating an intimidating, hostile or offensive work environment, and the employer knows or should have known of the existence of the harassment and fails to take timely and appropriate action. Examples include but are not limited to insulting or degrading sexual remarks or conduct; threats, demands or suggestions that status is contingent upon toleration or acquiescence to sexual advances; displaying in the workplace sexually suggestive objects, publications or pictures, or retaliation against employees for complaining about the behavior cited above or similar behaviors.

B. General harassment is harassment which is not based on the above characteristics. Examples may include, but are not limited to: physically intimidating behavior and/or threats of violence; use of profanity (swearing), vulgarity; ridiculing, taunting, belittling or humiliating another person; inappropriate assignments of work or benefits; derogatory name calling.

3. Discrimination includes actions which cause a person, solely because of race, color, creed, religion, national origin, sex, disability, age, marital status, status with regard to public assistance or sexual orientation to be subject to unequal treatment.

Prime Contractors who work on MnDOT projects shall ensure that their managers, supervisors, foremen/women and employees are familiar with MnDOT's policy on appropriate work place behavior; and shall ensure that their subcontractors are familiar with this policy. Managers, supervisors and foremen/women will respond to, document, and take appropriate action in response to all reports of violence, threats of violence, harassment or discrimination. Failure to comply with this policy may result in cancellation, termination or suspension of contracts or subcontracts currently held and debarment from further such contracts or subcontracts as provided by statute. If you need additional information or training regarding this policy, please contact the Office of Civil Rights at (651) 366-3073.

NOTICE TO ALL PRIME AND SUBCONTRACTORS REPORTING REQUIREMENTS

1. In order to monitor compliance with Federal Statutes 23 USC 140 and 23 CFR 230, and Minnesota Statutes §363A.36, all prime contractors and subcontractors are required to complete a Mn/DOT Monthly Employment Compliance Report each month for each project (Form EEO-13, sample copy at EEO Pages 20-21.) Prime contractors are also required to complete a Contractor Employment Data Report (Form EEO-12, sample copy at EEO Pages 18-19) once prior to work commencing on the project, unless one has been completed already within the calendar year.

   The prime contractor of each project collects Monthly Employment Compliance Reports from each subcontractor who performed work during the month, and completes a Monthly Employment Compliance Report on its own work force. **For the month of July only, an EEO-13 is required for each payroll period within the month of July**. The prime contractor submits the EEO-13 forms to the Mn/DOT Project Engineer by the 15th day of the subsequent month.

   Failure to submit the required reports in the allowable time frame will be cause for the imposition of contract sanctions.

   It is the intent of Mn/DOT to implement monitoring measures on each project to ensure that each prime contractor and subcontractor is promoting the full realization of equal employment opportunities. Any project may be scheduled for an in depth on-site contract compliance review. During the scheduled on-site review, the Contractor will be required to provide to Mn/DOT documentation of its "good faith efforts" as shown in EEO Pages 10-13, at 7 a-p of this contract.

2. If a Federally funded project requires On-the-Job-Training (OJT) participation, information is provided in the contract and can be located by referring to the Table of Contents for Division S. (OJT is also listed as a bid line item under Trainees.) When a contract requires OJT participation, the Prime Contractor shall submit a training plan as indicated in the Proposal. The training plan shall include the job classification titles of trainees, planned training activities and the approximate start date of trainees.

3. When a Contractor selects a trainee applicant for OJT, the Contractor completes an On the Job Training Program-Trainee Assignment form (sample copy at EEO Page 23) and submits it to the Contract Compliance Specialist (CCS) assigned to the project for approval. The CCS notifies the Contractor and Project Engineer when the applicant is approved.

4. Hours of work performed by OJT employees shall be documented on a monthly basis on the Certification of On-The-Job Training Hours form, (Mn/DOT Form No. 21860, sample copy at EEO Page 24). The Contractor shall submit the original and one copy to the Project Engineer, and one copy to the CCS assigned to the project.

Do not remove forms from this contract. Please duplicate forms from the copies in this contract, or the Mn/DOT Office of Civil Rights will provide these forms upon request. Please call the Office of Civil Rights, (651) 366-3073.

SPECIFIC FEDERAL EQUAL EMPLOYMENT 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 his/her 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

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

STANDARD FEDERAL AND STATE EEO CONSTRUCTION CONTRACT SPECIFICATIONS *(cont.)*

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

STANDARD FEDERAL AND STATE EEO CONSTRUCTION CONTRACT SPECIFICATIONS *(cont.)*

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.

STANDARD FEDERAL AND STATE EEO CONSTRUCTION CONTRACT SPECIFICATIONS *(cont.)*

(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.)

STANDARD FEDERAL AND STATE EEO CONSTRUCTION CONTRACT SPECIFICATIONS *(cont.)*

(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.

STANDARD FEDERAL AND STATE EEO CONSTRUCTION CONTRACT SPECIFICATIONS *(cont.)*

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.

Minority and Women Employment Goals

County	Federal Goals		State Goals	
	Minority Goal	Women Goal	Minority Goal	Women Goal
Aitkin	2.2%	6.9%	5%	6%
Anoka	2.9%	6.9%	22%	6%
Becker	0.7%	6.9%	6%	6%
Beltrami	2.0%	6.9%	6%	6%
Benton	0.5%	6.9%	3%	6%
Big Stone	2.2%	6.9%	4%	6%
Blue Earth	2.2%	6.9%	4%	6%
Brown	2.2%	6.9%	4%	6%
Carlton	1.2%	6.9%	5%	6%
Carver	2.9%	6.9%	22%	6%
Cass	2.2%	6.9%	6%	6%
Chippewa	2.2%	6.9%	4%	6%
Chisago	2.9%	6.9%	3%	6%
Clay	0.7%	6.9%	6%	6%
Clearwater	2.0%	6.9%	6%	6%
Cook	1.2%	6.9%	5%	6%
Cottonwood	0.8%	6.9%	4%	6%
Crow Wing	2.2%	6.9%	6%	6%
Dakota	2.9%	6.9%	22%	6%
Dodge	0.9%	6.9%	4%	6%
Douglas	2.2%	6.9%	6%	6%
Faribault	2.2%	6.9%	4%	6%
Fillmore	0.9%	6.9%	4%	6%
Freeborn	0.9%	6.9%	4%	6%
Goodhue	2.2%	6.9%	4%	6%
Grant	2.2%	6.9%	6%	6%
Hennepin	2.9%	6.9%	32%	6%
Houston	0.6%	6.9%	4%	6%
Hubbard	2.0%	6.9%	6%	6%
Isanti	2.2%	6.9%	3%	6%
Itasca	1.2%	6.9%	5%	6%
Jackson	0.8%	6.9%	4%	6%
Kanabec	2.2%	6.9%	3%	6%
Kandiyohi	2.2%	6.9%	3%	6%
Kittson	2.0%	6.9%	6%	6%
Koochiching	1.2%	6.9%	5%	6%
Lac Qui Parle	2.2%	6.9%	4%	6%
Lake	1.2%	6.9%	5%	6%
Lake of the Woods	2.0%	6.9%	6%	6%
Le Sueur	2.2%	6.9%	4%	6%
Lincoln	0.8%	6.9%	4%	6%
Lyon	0.8%	6.9%	4%	6%

County	Federal Goals		State Goals	
	Minority Goal	Women Goal	Minority Goal	Women Goal
Mahnomen	2.0%	6.9%	6%	6%
Marshall	2.0%	6.9%	6%	6%
Martin	2.2%	6.9%	4%	6%
McLeod	2.2%	6.9%	3%	6%
Meeker	2.2%	6.9%	3%	6%
Mille Lacs	2.2%	6.9%	3%	6%
Morrison	2.2%	6.9%	6%	6%
Mower	0.9%	6.9%	4%	6%
Murray	0.8%	6.9%	4%	6%
Nicollet	2.2%	6.9%	4%	6%
Nobles	0.8%	6.9%	4%	6%
Norman	2.0%	6.9%	6%	6%
Olmsted	1.4%	6.9%	4%	6%
Otter Tail	2.2%	6.9%	6%	6%
Pennington	2.0%	6.9%	6%	6%
Pine	2.2%	6.9%	3%	6%
Pipestone	0.8%	6.9%	4%	6%
Polk	1.2%	6.9%	6%	6%
Pope	2.2%	6.9%	6%	6%
Ramsey	2.9%	6.9%	32%	6%
Red Lake	2.0%	6.9%	6%	6%
Redwood	0.8%	6.9%	4%	6%
Renville	2.2%	6.9%	3%	6%
Rice	2.2%	6.9%	4%	6%
Rock	0.8%	6.9%	4%	6%
Roseau	2.0%	6.9%	6%	6%
Scott	2.9%	6.9%	22%	6%
Sherburne	0.5%	6.9%	3%	6%
Sibley	2.2%	6.9%	4%	6%
St. Louis	1.0%	6.9%	5%	6%
Stearns	0.5%	6.9%	3%	6%
Steele	0.9%	6.9%	4%	6%
Stevens	2.2%	6.9%	6%	6%
Swift	2.2%	6.9%	4%	6%
Todd	2.2%	6.9%	6%	6%
Traverse	2.2%	6.9%	6%	6%
Wabasha	0.9%	6.9%	4%	6%
Wadena	2.2%	6.9%	6%	6%
Waseca	2.2%	6.9%	4%	6%
Washington	2.9%	6.9%	22%	6%
Watonwan	2.2%	6.9%	4%	6%
Wilkin	0.7%	6.9%	6%	6%
Winona	0.6%	6.9%	4%	6%
Wright	2.9%	6.9%	3%	6%
Yellow Medicine	2.2%	6.9%	4%	6%

Minnesota Department of Transportation
Office of Civil Rights
Contractor Employment Data

1. Contractor Name and Address:

Phone: _____

	2. Employment Data a) Name: Last Name, First Name, MI	**b) Social Security #**	c) New Hire (Y or N)	d) Ethnicity	e) Gender (M or F)	f) Trade/Foreman, Supervisors, Managers	g) Level (A, J, or T)
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							
25.							
26.							
27.							

EEO-12 Rev. 5/09

INSTRUCTIONS FOR EEO-12
CONTRACTOR EMPLOYMENT DATA

This form should be submitted at the Pre-Con to the Project Engineer prior to the start of your first MnDOT construction project for the calendar year (Prime and Subs)

1. Contractor Name and Address self-explanatory.

2. Employment Data information will coincide with your employment records.

   2a. Name should be listed First Name, Middle Initial, and Last Name. This will enable MnDOT EEO staff to readily identify individuals on all projects.

   2b. Social Security Number self-explanatory.

   2c. New Hire is to be indicated with a "Y" for Yes or an "N" for No. "New Hire" is an employee who has not worked for you in any capacity or on any other project within the current calendar year.

   2d. Ethnicity can be indicated by Black (B), Hispanic (H), American Indian/Alaskan Native (AI), Asian/Pacific Islander (AP), or White (W).

   2e. Gender is to be indicated with an "M" for Males or an "F" for Females.

   2f. Trade/Foreman, Supervisors, Managers self-explanatory. List trade that applies unless the employee fits one of the other three categories.

   2g. Level "A" is for an Apprentice, "J" is for a Journey Worker, and "T" is for a MnDOT approved Trainee.

If you have questions about filling out this form, contact the Office of Civil Rights at (651) 366-3073.
(Please make copies as you need them.)

This information can be submitted electronically via the web, through MnDOT's Work force Information Tracking Initiative (WITI) Program. To open a free account to gain access to WITI or to find out more about this possibility please contact MnDOT's Office of Civil Rights at (651) 366-3015.

EEO-12 Rev. 05/09

Minnesota Department of Transportation **Office of Civil Rights** **Monthly Employment Compliance Report** **EEO-13**	**1. SP** ☐ **SAP** ☐ (Check one) **SP#**	**3. Contractor Name:**	**4. Prime** ☐ **Subcontractor** ☐ (check one)
	County or City	Street Address:	5. Dollar Amount of Contract:
	2. Reporting Period to _____	City, State Zip	6. Percent of Completion:

7. Employment Data **a) Name: Last, First Middle Initial**		**b)** **Social Security #**	**c)** **New Hire** **(Y or N)**	**d)** **Ethnicity**	**e) Gender** **M or F)**	**Trade/Foreman, Supervisors, Managers**	**g)** **Level** **(A, J or T)**	**h) Hours Worked This Period**
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								

8. Contract Goals		**9. Prepared by:** (Signature)	**10. Reviewed by:** (Signature)
MINNESOTA GOALS	**%OBTAINED**		
_____ % Minority	_____ %	Print Name:	Print Name:
_____ % Women	_____ %	Title:	Title:
		Date:	Date:
		Phone: Fax:	Phone: Fax:

EEO-13 Rev. 05/09

INSTRUCTIONS FOR EEO-13

MONTHLY EMPLOYMENT COMPLIANCE REPORT

1.-5. Self-explanatory – **S**tate **P**roject #, county project is located in, are you a prime or sub, and contract value.

6. Percent of Completion is the estimated percentage of work completed including this reporting period.

7. Employment Data information will coincide with your employment records. All professional, supervisory and managerial hours actually worked on the project site must be included, whether or not they appear on the certified payroll.

- 7a. Name should be listed Last Name, First Name, and Middle Initial. This will enable MnDOT EEO staff to readily identify individuals on all projects.
- 7b. Social Security Number self-explanatory.
- 7c. New Hire is to be indicated with a "Y" for Yes or an "N" for No. "New Hire" is an employee who has not worked for you in any capacity or on any other project within the current calendar year.
- 7d. Ethnicity can be indicated by Black (B), Hispanic (H), American Indian/Alaskan Native (AI), Asian/Pacific Islander (AP), or White (W).
- 7e. Gender is to be indicated with an "M" for Males or an "F" for Females.
- 7f. Trade/Foreman, Supervisors, Managers list the trade that applies unless the employee fits one of the other three categories.
- 7g. Level "A" is for an Apprentice, "J" is for a Journey Worker, and "T" is for a MnDOT approved Trainee.
- 7h. Hours Worked for This Period will be all hours worked by the individual, for each trade, during the specified reporting period.

8. Contract Goals are the percent of total project hours to be worked by minority and women employees. The goals are determined by the geographic location and source of funding for the project. Projects in excess of $100,000 with any State funding must meet the State Employment Goals. Projects in excess of $10,000 with any Federal funding must meet the Federal Employment Goals. (See chart on EEO Pages 16-17.) Minority and women employee hours shall be distributed evenly throughout the length of the project and in every trade and craft that performs work on the project.

   % Obtained is the percent of the total project hours worked by minority and women employees, up to and including this reporting period.

9. Prepared by Contractor Designee is the signature of the prime or subcontractor's EEO officer/designee.

10. Reviewed by Project Engineer is the signature of the MnDOT staff monitoring the project.

The Prime Contractor will submit EEO-13 forms for its workforce and all subcontractors to the MnDOT Project Engineer by the 15th day of the month following the month when work was performed. If you have questions about filling out this form, contact the Office of Civil Rights at (651) 366-3073. (Please make copies as you need them.)

This information can be submitted electronically via the web, through MnDOT's Workforce Information Tracking Initiative (WITI) Program. To open a free account to gain access to WITI or to find out more about this possibility please contact MnDOT's Office of Civil Rights at (651) 366-3321.

EEO-13 Rev. 05/09

EEO COMPLIANCE REVIEW REPORT

Total Company Workforce

(For 12 Month Period Preceding July 30th of the previous year)

Name and Address of Contractor

_____

_____

_____

Name and Title of Corporate Officer

_____

Name of EEO Officer

_____

Job Categories	Total Employees		Total Minorities		Blacks		Asian/ Pacific Is.		American Indian		Hispanic		On-the-Job Trainees	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Officials (Managers)														
Supervisors														
Foremen/Women														
Clerical														
Equipment Operators														
Mechanics														
Truck Drivers														
Iron Workers														
Carpenters														
Cement Masons														
Electricians														
Pipefitters & Plumbers														
Painters														
Laborers														
Misc. Trades														
Total														
On-the-Job Trainees														

EEO-8 Rev. 07/07

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, 181.13, 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 swear 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 swear 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 swear 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 BIDDERS

Particular note should be made in regard to the clarity of numerals (figures) and to the procedure for alterations and the required certificate as directed by Section 1301.

The following abbreviations may be used in item description and unit of measure in the Schedule of Prices.

A	Arch	JA	Jacked
A-S	Antiseepage	LIN FT	Linear Feet
AB	Asbestos Bonded	LG	Long
ACT	Actuated	MAINT	Maintenance
AGG	Aggregate	MATL	Material
ALUM	Aluminum	MGM	1000 Board Feet
ASB	Asbestos	MET	Metal
ASPH	Asphaltic	MOD	Modification
ASSY	Assemblies	MPA	Metal Pipe Arch
B+B	Balled & Burlapped	MTD	Mounted
BC	Bituminous Coated	NON MET	Non Metallic
BIT	Bituminous	NON PERF	Non-Perforated
BLDG	Building	NON REINF	Non-Reinforced
BR	Bridge	OH	Overhead
CAL	Caliper	P-A	Pipe-Arch
CB	Catch Basin	PAVT	Pavement
CEM	Cement	PERF	Perofrated
C and G	Curb and Gutter	PL	Plate
CI	Cast Iron	PNEUM	Pneumatic
C-I-P	Cast-in-Place	PREC	Precast
CL	Class	PREST	Prestressed
COMM	Commercial	PVC	Poly Vinyl Chloride
CONC	Concrete	RCPA	Reinforced Concrete Pipe Arch
COND	Conductor	REINF	Reinforced
CONN	Connection	RELO	Relocation
CONST	Construct	RESTOR	Restoration
CONT	Continuously	RMC	Rigid Metallic Conduit
CP	Cattle Pass	RNMC	Rigid Non Metallic Conduit
CTD	Coated	RDWY	Roadway
CU FT	Cubic Feet	S-G	Sand & Gravel
CU YD	Cubic Yard	SIG	Signal
CULV	Culvert	SPE	Special
CWT	Hundred Weight	SQ FT	Square Feet
DES	Design	SQ YD	Square Yard
DBL	Double	STA	Station
DI	Drop Inlet	STD	Standard
DIAM	Diameter	STL	Steel
DRWY	Driveway	STKPL	Stockpile
EXC	Excavation	STR	Strength
EXP	Expansion	STRUCT	Structural
FAB	Fabric	SPPA	Structural Plate Pipe Arch
FE	Fence	SYS	System
FERT	Fertilizer	T	Traffic
F+I	Furnish & Install	TBR	Timber
FOUND	Foundation	TEMP	Temporary
FT LG	Feet Long	THERMO	Thermoplastic
FURN	Furnish	TRTD	Treated
GA	Gauge	UNDERGRD	Underground
GRAN	Granular	UNTRTD	Untreated
HI	High	VAR	Variable
INP	In Place	VM	Vehicular Measure
INST	Install	WEAR	Wearing

Division S

S-1 CONTACT INFORMATION

SP2016-1

Direct questions about this Project, including pre-bid questions, to Chad Magnussen.

Chad Magnussen
Lyon County Public Works
504 Fairgrounds Road
Marshall, MN 56258
507-532-8204 (office)
chadmagnussen@co.lyon.mn.us

OR

Aaron VanMoer
Lyon County Public Works
504 Fairgrounds Road
Marshall, MN 56258
507-532-8200 (office)

S-2 MISCELLANEOUS

Proposals with specified Bid Alternates
SAP 42-610-040 and SAP 42-610-042 are both alternate bid projects and are combined under this contract.

Bid Preparation
Separate plans, pay items, descriptions, and quantities for concrete surfacing and bituminous surfacing are included in this bid advertisement. The proposal contains all special provisions required for both concrete and bituminous surfacing options. It is up to the bidder to follow all special provisions applicable to their respective alternate bid.

Bidders must submit a bid for both SAP 042-610-040 and SAP 042-610-042.

Leave the total project price blank for the alternate not chosen on each project's Schedule of Prices and the Schedule of Prices Summary.

Bid Selection for Award
The Lyon County Board of Commissioners will select the bidder for this contract based upon the lowest combined life-cycle cost of the two projects.
Total life-cycle costs include the bidder's initial bid price plus all anticipated maintenance costs for the respective pavement type over its life.
The service life of SAP 42-610-040 is 50 years. The service life of SAP 42-610-042 is 35 years.

S-3 GOVERNING SPECIFICATIONS

The Minnesota Department of Transportation "Standard Specifications for Construction", 2016 Edition shall apply on this contract except as modified or altered in the following Special Provisions.

S-4 COMPLIANCE WITH ZONING ORDINANCE

All bidders shall familiarize themselves and shall comply with the County's zoning and ordinance for conditional use of land pertaining to gravel and borrow pits.

S-5 AFFIRMATIVE ACTION RESPONSIBILITIES

All bidders shall meet with the County's Affirmative Action requirements. If a bidder does not meet the requirements, the County reserves the right not to consider the bid.

S-6 RESPONSIBLE CONTRACTOR

SP2016-5

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 must verify it meets the minimum criteria detailed in the law. A bidder must submit its verification electronically by completing the "Responsible Contractor" section in the "Officers and Acknowledgements" Folder within the Electronic Bid File. A company officer must certify statements in that section. Bidders only need to complete the electronic verification; DO NOT email, fax, or send paper forms to the Department. The Department will not accept emailed, faxed or other paper submissions and will only accept electronic verifications.

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.

S-7 COMPLIANCE WITH TAX LAW REQUIREMENTS

SP2016-6

The Department cannot make final payment to the Contractor until the Contractor demonstrates that it and all its subcontractors have complied with the Income Tax withholding requirements of Minnesota Statutes, section 290.92 for wages paid for work performed under the contract. To establish compliance, the Contractor must submit a "Contractor Affidavit" either online or in paper form (IC134) to the Minnesota Department of Revenue. The contractor will receive written certification of compliance when the Department of Revenue determines that all withholding tax returns have been filed and all withholding taxes attributable to the work performed on the contract have been paid. The Contractor must then provide this written certification to the Department to receive final payment.

Every subcontractor working on the Project must submit an approved "Contractor Affidavit" from the Minnesota Department of Revenue to the Contractor before the Contractor can file its own Contractor Affidavit. **The Contractor is advised to obtain the certification from each subcontractor as soon as the subcontractor completes work on the Project. Experience has shown that waiting until the project is complete to obtain the forms from all subcontractors is likely to result in significant additional work for the Contractor as it will be difficult or impossible to collect all forms.**

The Department of Revenue, in association with the Department of Employment and Economic Development, offers a free seminar to help contractors understand tax law requirements. The Department strongly urges the Contractor and all subcontractors to attend the "Employment Taxes & Employer Responsibilities Seminar"

or similarly offered classes. You can find a schedule and more information on the Department's website at: www.revenue.state.mn.us/businesses/withholding/Pages/EducationandOutreach.aspx.

Complying with this requirement is considered part of the Work under this contract. The Department will enforce this requirement equally with all other Contract requirements. Contractor delay in complying with this requirement will cause the Department to delay final payment and Contract Acceptance. The Department may also report non-compliance to the Department of Revenue, which may result in enforcement action by the Department of Revenue.

S-8 (1103) DEFINITIONS

NEW WRITEUP 03/01/16
SP2016-14.1

The provisions of MnDOT 1103 are supplemented as follows:

S-8.1 The following definition is added to MnDOT 1103:

Unit Day. 12:00 AM to 11:59 PM (0000-2359) or any portion thereof.

S-9 (1203) ACCESS TO PROPOSAL PACKAGE

MnDOT 1203 is hereby deleted from the MnDOT Standard Specifications.

S-10 (1206) PREPARATION OF PROPOSAL

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

S-10.1 MnDOT 1206.1 is hereby deleted from the MnDOT Standard Specifications.

S-10.2 MnDOT 1206.2 is hereby deleted from the MnDOT Standard Specifications and replaced with the following:

1206.2 ALLOWABLE SUBSTITUTIONS

For all Proposals the Bidder shall use the following method:

(1) Submit a Proposal on the Bid Schedule forms provided by the Department. The Bidder shall:
(1.1) Submit a Unit Price in numeric figures for each Pay Item for which a quantity is shown. Assume a numeric quantity of "1" for each "Lump Sum" Pay Item, except as not required in the case of alternate Pay Items,
(1.2) Show the extensions resulting from Unit Prices multiplied by the shown quantities in the specified column, and
(1.3) Add the extended Pay Item amounts to show the total amount of the Proposal.

The Bidder shall write the figures in ink or provide typed or computer printed figures. In the case of a discrepancy between a Unit Price and extension in a Proposal, the Unit Price will govern.

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

If a Pay Item in the Proposal requires the Bidder to choose an alternate Pay Item, the Bidder shall indicate its choice in accordance with the Specifications for that Pay Item.

An authorized representative of the Bidder must sign the Proposal.

S-11 (1209) DELIVERY OF PROPOSALS

The provisions of MnDOT 1209 are modified with the following:

When submitting a Proposal in accordance with 1206.2, "Allowable Substitutions," of these Special Provisions, the Bidder shall deliver the Proposal and the Proposal Guaranty in a sealed envelope. The Bidder shall mark the sealed envelope with the name of the Bidder, the Project number, and the letting date. The Bidder shall deliver the sealed envelope to the Department as specified in the Advertisement for Bids as follows:

(1) To the address specified,
(2) In care of the official receiving the Proposals, and
(3) By the date and time for opening Proposals.

The Bidder shall return paper copies of the following with the submitted Proposal:

(1) Proposal title sheet;
(2) The complete "Schedule of Prices," with all changes made in ink and initialed;
(3) Form 21126D, "Proposal Signature Page" attached to the back of the Proposal, with signatures and all Addenda acknowledged;
(4) Form CM 32-34, "EEO Clause;"
(5) Non-collusion affidavit; and
(6) Any other forms included in the Proposal Package.

If the Department receives a Proposal after the date and time for opening Proposals, the Department will return the Proposal to the Bidder unopened.

S-12 (1210) REVISION OF PROPOSAL PACKAGE OR WITHDRAWAL OF PROPOSALS

The provisions of MnDOT 1210 are deleted and replaced with the following:

When submitting a Proposal in accordance with 1206.2, "Allowable Substitutions," of these Special Provisions, the Bidder may revise or withdraw its Proposal after delivery to the Department if the Department receives the Bidder's written request for withdrawal or revision before the date and time for opening Proposals.

The Department reserves the right to revise the Proposal Package at any time before the date and time for opening Proposals. The Department will issue a numbered and dated Addendum for any revision of the Proposal Package. The Department will post each Addendum as announced in an e-mail or other method of notification to each Bidder on the Department's list of Bidders.

The Department will include each Addendum with all Proposal Forms issued to the Bidder after the date of the Addendum.

If revisions made by an Addendum require change to Proposals or reconsideration by the Bidder, the Department may postpone opening Proposals. If the Department postpones opening Proposals, the Department will specify the new date and time for opening Proposals in the Addendum.

The Bidder shall acknowledge receipt of each Addendum in the proposal.

S-13 (1212) OPENING OF PROPOSALS

The provisions of MnDOT 1212 are modified with the following:

S-13.1 MnDOT 1212 is hereby deleted from the MnDOT Standard Specifications and replaced with the following:

1212 OPENING OF PROPOSALS

The Department will open Proposals at the time, date, and place defined in the Proposal Package and the Advertisement for Bids.

S-14 (1505) COOPERATION BY CONTRACTORS

SP2016-19

The provisions of MnDOT 1505 are supplemented as follows:

S-14.1 A separate contract for S.A.P. 042-610-038 is currently in progress near this Project.

S-14.2 The Contractor shall coordinate work and cooperate with the holders of those current and future separate contracts, as required by MnDOT 1505.

S-15 (1507) UTILITY PROPERTY AND SERVICE

SP2016-21

S-15.1 All utilities related to this Project are classified as "Level D," unless the Plans specifically state 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."

S-15.2 No compensation will be made for additional costs incurred by the Contractor for any Special work or Special construction method necessary to prosecute work over, below or adjacent to utility property whose existence was indicated in the plans or Special Provisions.

S-15.3 The Contractor will be required to work around all utility poles, whether or not they have been moved or lowered. Where poles have been moved or lowered, prior to grading operations, a mound of earth shall be left around each pole of sufficient size to ensure its stability. Where such poles are moved or lowered before all grading on the project is otherwise completed, the Contractor shall remove any mounds of earth which may have been left. No compensation in addition to the contract price for Common Excavation will be made for this work.

S-15.4 It will be the Contractor's responsibility to contact the owners of all utilities in any area prior to the construction in the area so that the Contractor can be informed of the exact locations of all the utilities in the area including any that are not shown in the plans. It will also be the Contractor's responsibility to: (1) report any existing damage or faulty condition (i.e. sand in manholes, damaged valve boxes, etc.) to the owners prior to construction, as once excavation has commenced it will be assumed that all damage to underground installations has been caused by the Contractor's operations and it will be his responsibility to make the necessary repairs; and (2) upon completion of the project, contact all utility owners and make arrangements for a field inspection trip by his representative and representatives of the utility owners to confirm that all damages caused by the Contractor's operations have been repaired to the satisfaction of the owners.

S-16 (1601)SOURCE OF SUPPLY & QUALITY

The provisions of MnDOT 1601 are supplemented as follows:

In conformance with the provisions of Minnesota Laws 2014, Chapter 294, Article 2, Section 22, the Contractor will furnish and use only steel and iron materials to the maximum extent practicable that have been melted and manufactured in the United States. Foreign source materials are any domestic products taken out of the United States for any process (e.g. change of chemical content, permanent shape or size, or final finish of product).

All bids must be based, to the maximum extent practicable, on furnishing domestic iron and steel, which includes the application of the coating. The state may approve the use of foreign iron and steel materials for particular Contract items, provided the bidder submits a stipulation identifying the foreign source iron and/or steel product(s) and the estimated invoice cost of the product(s) for one or more of the Contract bid items. The Contractor shall submit a "Stipulation for Foreign Iron or Steel Materials" form for each stipulation with the Contractor's proposal. **If the Contractor chooses to use ANY non-domestic iron or steel, the Contractor must submit a stipulation with the proposal.**

Prior to performing work, the Contractor shall submit to the Engineer a certification stating that all iron and steel items supplied are of domestic origin, except for non-domestic iron and steel specifically stipulated and permitted in accordance with the paragraph above.

Source of Supply and Quality: MnDOT 1604 is supplemented as follows: All costs of shop inspection at plants outside the United States shall be borne by the Contractor. Monies due or to become due the Contractor will be reduced according to these costs.

Partial Payment: All provisions for partial payments shall apply to domestic materials only. The Contractor will not receive payment for materials manufactured outside of the United States until such materials are delivered to the job site.

S-17 (1701) LAWS TO BE OBSERVED (WET LANDS)

SP2016-31

The provisions of MnDOT 1701 are modified and/or supplemented with the following:

S-17.1 If the Contractor operations involve the excavation and/or disposal of material off MnDOT Right of Way, the Contractor is advised of the following:

MN Statutes Sections 103G.2212 and 103G.241 stipulate that an agent or employee of another may not:

1) drain, excavate, or fill a wetland, wholly or partially; or
2) construct, reconstruct, remove, or make any change in any reservoir, dam, or the course, current, or cross-section of any public water

unless a signed statement from the property owner is obtained stating that any permit or wetland replacement plan required for the work is in place, or that a permit or replacement plan is not required; **AND** this statement is mailed to the appropriate office with jurisdiction over the wetland or public water prior to initiating the work.

The "Landowner Statement and Contractor Responsibility For Work in Wetlands or Public Waters" can be found at http://www.bwsr.state.mn.us/wetlands/forms/Contractor_Responsibility.doc . The Contractor shall provide the Engineer with a copy of the completed "Landowner Statement and Contractor Responsibility for Work in Wetlands or Public Waters" for the excavation and/or disposal site prior to initiating the work.

S-18 (1712) PROTECTION AND RESTORATION OF PROPERTY

The provisions of MnDOT 1712 is hereby supplemented by the following:

S-18.1 The county shall not be held responsible for damages done by the contractor to property located below the ground within the Right of Way or Construction Easements, even though the existence of such property is not shown on the plans, indicated in the Special Provisions or otherwise brought to his attention before damage is done.

S-19 (1714) RESPONSIBILITY FOR DAMAGE CLAIMS; INSURANCE

The provisions of MnDOT 1714 are modified as follows:

S-19.1 MnDOT 1714.3A is deleted and replaced with the following

A Minimum Limits of Liability

The contractor shall provide the following minimum limits of liability:

(1) $2,000,000 – Per occurrence,
(2) $3,000,000 – Annual aggregate,
(3) $3,000,000 – Annual aggregate applying to Products and Complete Operations,
(4) $50,000 – Fire damages, and
(5) $5,000 – Medical expense (and one person per occurrence).

The liability limits specified above are the minimum limits required, and any and all additional limits provided to the Contractor will be available on an excess, umbrella or other basis to the Additional Insured for any and all covered claims.

S-20 (1717) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

Pollution of natural resources of air, land and water by operations under this Contract shall be prevented, controlled, and abated in accordance with the rules, regulations, and standards adopted and established by the Minnesota Pollution Control Agency (M.P.C.A.), and in accordance with the provisions of Mn/DOT 1717, 1803.5 and the following:

S-20.1 Minnesota Pollution Control Agency General Permit, Authorization to Discharge Storm Water

A. The Contractor shall furnish, install and maintain temporary and permanent erosion and sediment control devices in accordance with the provisions of 2105.5, 2573, 2575, as shown in the Plans, in accordance with the provisions of the Special Provisions Attachment "Minnesota Pollution Control Agency General Permit, Authorization to Discharge Storm Water", and the following:

The **County of Lyon** has applied for and received coverage under the above mentioned permit by signing both the Owner's and Contractor's certification blanks on the permit application. The **County** shall retain a photocopy of the original permit application. Upon award of the Contract, the **County** and the Contractor shall execute the Storm Water Permit Transfer/Modification Application form (attached to these Special Provisions) and submit it along with a photocopy of the original application to the Minnesota Pollution Control Agency. The Minnesota Pollution Control Agency, upon receipt of the Storm Water Permit Transfer Modification Application, will amend it to the original permit application thereby making both the **County** and the Contractor co-permittees for the requirements of the General Permit, "Authorization to Discharge Storm Water."

B. There is no fee for the transfer of the permit. Work may not begin until all transfer permit forms are signed and dated and the contractor identifies by name a person knowledgeable and experienced in the application and implementation of the Storm Water Pollution Prevention Plan, and has developed a chain of responsibility for all operators (subcontractors) on the site, in accordance to Part III.A.1 of the General Permit.

C. The Contractor shall be solely responsible for complying with the requirements of General Permit where Contractor is referenced in Part II.B.2: Permittee(s) for Parts II.B, II.C and IV.

The Contractor shall be responsible for providing all inspections, documentation, record keeping, maintenance, remedial actions, repairs required by the permit. All inspections, maintenance, and records required in the General Permit Part IV.E, Inspections and Maintenance, shall be the sole responsibility of the Contractor. The word "Permitee" in these referenced paragraphs shall mean "Contractor". Standard forms for logging all required inspection and maintenance activities shall be used by the Contractor. All inspection and maintenance forms used on this Project shall be turned over to the Engineer every two weeks for retention in accordance with Part IV.E, Inspections and Maintenance of the permit.

The Contractor shall have all logs, documentation, inspection reports on site for Engineer's review and shall post the permit on site. The Contractor shall immediately rectify any shortcomings noted by the Engineer. All meetings with the MPCA, Watershed District, WMO, or any local authority shall be attended by both the Engineer and the Contractor or their representatives. No work required by said entities, and for which the Contractor would request additional compensation, shall be started without approval from the Engineer. No work required by said entities and for which the changes will impact the design or requirements of the Contract documents or impact traffic shall be started without approval from the Engineer.

The Contractor shall immediately notify the Engineer of any site visits by Local Permitting Authorities performed in accordance with Part V.H, Inspection and Entry.

D. If the Contractor fails to perform the requirements as listed herein, the Engineer will issue a Work Order detailing the required action. The Contractor shall start the required action within twenty-four (24) hour of receipt of the Work Order and continue the required action until the Project is brought into compliance with the permit. Failure to perform the required action as specified, shall subject the Contractor to a $1000/calendar day deduction.

The Contractor shall review and abide by the instructions contained in the permit package. The Contractor shall hold the **County** harmless for any fines or sanctions caused by the Contractor's actions or inactions regarding compliance with the permit or erosion control provisions of the Contract Documents.

S-21 (1801) SUBLETTING OF CONTRACT

SP2016-44

The provisions of MnDOT 1801 are modified as follows:

S-21.1 For Projects in excess of $50,000, the Contractor may sublet work only to subcontractors that meet the definition of "responsible contractor" in Minnesota Statutes §16C.285, subdivision 3. The Contractor shall obtain verifications of compliance with §16C.285 from subcontractors using a form provided by the Department. The Contractor must provide such verifications to the Department upon the Department's request.

S-21.2 The third paragraph of MnDOT 1801 is modified to read:

On Contracts with Disadvantaged Business Enterprise (DBE), Targeted Group Business (TGB) or Veteran-Owned Small Business (VET) established goals, or any combination thereof, the Contractor's organization shall perform Work amounting to not less than 30 percent of the total original Contract Amount. The Department will deduct specialty items from the total original Contract Amount before calculating the amount of Work that the Contractor shall perform.

S-22 (1806) DETERMINATION AND EXTENSION OF CONTRACT TIME

REVISED 09/25/15

SP2016-50

The Department will determine Contract Time in accordance with the provisions of MnDOT 1806 and the following:

S-22.1 Contractor must complete all work required under this Contract, except maintenance work and Final Clean Up, on or before **September, 16th 2017.**

S-23 (1901) MEASURMENT OF QUANTITIES

The provisions of Mn/DOT 1901 are supplemented by the following:

S-23.1 **All quantities paid by the "ton" shall be weighed using a certified platform scale.** Automated Weighing Device shall be integrated with a ticket printer. The ticket shall contain the date, project number, pay item number, truck or tractor and trailer identification, truck tare and net mass (weight). The contractor shall provide the truck driver with a copy of the weigh ticket. The truck driver shall provide the ticket to the inspector on the project.

S-24 (1903) COMPENSATION FOR ALTERED QUANTITIES

The provisions of Mn/DOT 1903 is deleted and replaced with the following:

S-24.1 Lyon County reserves the right to increase or decrease the quantities of any item without adjustment in the contract unit prices and the provisions of 1903 shall not apply.

S-25 (1905) COMPENSATION FOR ELIMINATED ITEMS

The provisions of Mn/DOT 1905 is deleted and replaced with the following:

S-25.1 Lyon County reserves the right to delete any item without adjustment in the contract unit prices and the provisions of 1905 shall not apply.

S-26 (1906) PARTIAL PAYMENTS

Partial payments will be made in accordance with the provisions of Mn/DOT 1906, except as modified below:

S-26.1 **Payment for materials on hand will not be made under this contract.**

S-26.2 From the amounts ascertained as payable on each partial estimate, five (5) percent will be retained to protect the Department's interests.

S-26.3 Partial payments will be made out the first week of the month for work completed in the previous month.

S-27 (2011) CONSTRUCTION SURVEYING

The provisions of MnDOT 1508 are hereby modified and supplemented as follows:

S-27.1 GENERAL SURVEY SPECIFICATIONS

This Contract provides for the Contractor to accomplish the Construction Surveying for this Project. MnDOT 1508 is herewith modified to the extent that the Contractor shall meet all the requirements of, and provide all the services listed in, MnDOT 1508 which would otherwise be provided by MnDOT. Furthermore, in accordance with MnDOT 1401, the Contractor is advised that the Contract may not fully describe every detail or make specific allowances for all probable exceptions and contingencies related to the Construction Surveying requirements for this Project. Additional best management practices (BMP's) for Construction Surveying are identified in Appendix A of the MnDOT Surveying and Mapping Manual; in addition to the requirements shown below.

S-27.2 CONSTRUCTION SURVEYING BY THE CONTRACTOR

(A) Contractor Construction Surveying Requirements

Construction Surveying is defined as accurately providing all necessary computations, stakes and marks to establish lines, slopes, elevations, points, continuous profile grades in accordance with MnDOT 1508 and the requirements shown in the Plan for Construction Staking; so that the Contractor's forces are able to construct all required work for the Project in accordance with the Contract requirements; and so that MnDOT Engineers and Inspectors are able to complete all necessary inspection and Contract Administration duties. The staking shall include, but not be limited to, clearing and grubbing, removals, grading, culverts, embankments, borrow, aggregate base course, pavements, bridges, utilities, signs, pavement markings, erosion control and turf establishment items to complete the Project as represented in the Plans. The Surveying must be done in a way that is timely, and that is reflective of the continuing and ongoing nature of construction and inspection activities which will generally require frequent, separate Project visits by the Contractor's survey crew to the Project to accommodate the various stages of construction and inspection activities that will occur.

The Surveyor shall be prepared to make all necessary surveying checks for field verification of actual conditions and shall make the necessary minor surveying and staking adjustments to fit the construction to actual field conditions. In addition, some Plan details may be dependent upon actual field conditions at the time of construction. It may be necessary to perform some field survey or office computations in order to stake these components. All work referred to in this paragraph is considered part of the work of Construction Surveying and no additional payment will be made for this work.

The Contractor shall retain a Professional Land Surveyor or Professional Engineer, licensed in the State of Minnesota, to directly supervise the Construction Surveying. Any determination of, or marking of, Right-of-

Way must be performed under the supervision of a Licensed Land Surveyor. Additionally, for those projects let after August 31, 2007, an individual holding a NSPS - ACSM Level III certification in Construction Surveying, an LSIT, or a licensed Surveyor/Engineer, shall be on the Project site at all times to directly supervise the survey crew(s).

The Contractor shall:

1. Be responsible for the preservation of all reference points, monuments, government land corners, horizontal and vertical control points, stakes, and marks that are established by MnDOT or others within the Project limits. If the Contractor or its surveyor fails to preserve these items and if they must be reestablished by MnDOT, the Engineer will deduct a charge from monies due or becoming due the Contactor according to the Department's costs as shown elsewhere in these Special Provisions.

2. Be responsible to review, balance, adjust, correct, and investigate MnDOT provided data and to perform work on survey data and control points that may be necessary to use the survey points and data, all at no extra cost to MnDOT, unless it is determined by the MnDOT Engineer that latent errors existed in the information provided by MnDOT.

3. Start and end all level runs, traverses, or GPS control surveys, from known control. Complete all control surveys at no worse than the standards specified for supplemental control in Chapter 2, MnDOT Surveying and Mapping Manual.

4. Unless otherwise agreed to, set all stakes and marks in accordance with the Staking Information Sheets included in the Plan.

5. Furnish and install traffic control devices in accordance with the Field Manual for Temporary Traffic Control Zone Layouts, Part VI, (MN MUTCD), when crew members are exposed to traffic.

6. Perform all Construction Surveying for all Project construction as shown in MnDOT 1508, and shall install reference points as needed for the use of any public utility crews that are staking or accomplishing utility relocation or construction associated with this Contract.

    a. From Horizontal and Vertical Control Points established by the Engineer.
    b. According to the Plan, Proposal and Standard Specifications.
    c. According to the MnDOT Surveying and Mapping manual.
    d. According to actual existing field conditions.

7. Perform Bridge and Structure Construction staking which includes setting and reestablishing Working Points and Reference Points by XYZ coordinates to provide line and grade during all stages of work, and at all substructures and segments of Bridge or Structure Construction, as shown below:

    a. Establish Working Points or Reference Points, approved by the Engineer, on the ground as shown on the Bridge Layout sheet in the Plans.
    b. Transfer of required points from the ground to the top of footing after completion of concrete footing construction. If the structure is a curved wall or bridge edge of slab, curb, coping, median, or railing, the Contractor's Surveyor shall mark a curved line on the footings, forms, or deck slab, to the proper degree of curvature within 1/8 inch in 10 feet [3 mm in 3 meters], 1:1000, as needed for construction and inspection activities.
    c. Transfer required points to the top of all finished structures.
    d. Transfer required points to the superstructure deck forming. (MnDOT personnel will complete all work associated with beam stool elevations.)

8. Bear all costs, including but not limited to the cost of actual reconstruction of Contract work, that may be incurred due to errors in Contractor's Construction Surveying.

9. Document surveying during construction in a form acceptable to the Engineer and allow the Engineer access to surveying notes and calculations. The survey documentation includes:

   a. Control station monumentation with reference ties.
   b. Field notes that were used to set construction stakes, control the Project, and document monument locations. The Contractor shall use bound, hard cover field books for recording survey data and field notes; store field notes on an electronic medium; or use both methods. If an electronic medium is used, the raw field data files must be available. When using an electronic medium, the Contractor shall make all files and data available in the Standard formats used by the Department.

10. Present the Engineer with the as-built Survey Data. The as-built Survey Data shall include the following:

    a. Changes from the Plan
       i. Alignment
       ii. Profile
       iii. Sewer
       iv. (List other items as desired)
    b. Locations of utilities relocated or emplaced as part of the Project
    c. Identify any alignment, Right-of-Way, property, or control monumentation destroyed during the Project
    d. Any alignment, Right-of-Way, property, or control monumentation that was placed during the Project and that still exists at Project completion.
    e. The information shall include the x, y and, if applicable, the z coordinates in the Project datum. If the original item had no coordinate reference, then show the revised centerline station and offset.
    f. The information shall be provided in both electronic (Microstation and GeoPak) and hard copy format.
    g. In the case of new monumentation, there should also be a report describing how the monumentation was placed. This will include copies of any fieldwork (traverse or leveling) as well as any adjustments used. It shall also include tie sheets, to include a description of the physical object placed as the monument.

11. Furnish survey documentation and as-built Survey Data to the Engineer within the time limits indicated in the surveying work schedule.

(B) Contractor Construction Surveying Activities

1. The Contractor shall give the Engineer a 14 calendar day written notice before the Contractor needs MnDOT to establish any horizontal and vertical control points shown in the Plan for Construction Surveying.

2. At the preconstruction conference, the Contractor shall submit to the Engineer for approval a written Construction Surveying Work Plan and Schedule detailing:

   a. Pertinent information as to how the requirements in these specifications, and the requirements in Appendix A of the MnDOT Surveying and Mapping Manual, are being met by the Contractor's Surveyor.

b. A Project specific Construction Surveying Work Schedule for the Construction Surveying and how it relates to the time frame for construction activities and MnDOT inspection needs.
c. A proposed method of communications between the Contractor, Surveyor, and MnDOT Project Personnel.
d. How and when the Contractor's Surveyor will make delivery of the as-built Survey Data to MnDOT.

3. During the course of construction, the Contractor shall give notice of commencement of any Construction Surveying activities according to MnDOT 1803.4.

S-27.3 **CONTRACTOR SURVEY METHOD FOR PAVEMENT PROFILE CONTROL**

(1) To be used on concrete overlay project S.A.P. 042-610-042 as well as all provisions of (2011) Construction Surveying.

(2) Survey the pavement surface at 50 foot [15 m] maximum intervals (25 feet [7 m] in transitions) at the centerline and 12 feet [3.6 m] left and right of centerline and place hubs at 50 foot [15 m] intervals on both sides of roadway. Use these results to establish a recommended paving profile for review by the Engineer. The Engineer will approve or disapprove the Contractor's recommended paving profile within 3 working days. The Engineer will base approval on a concrete paving profile that closely follows the old profile to control concrete quantity but has no abrupt changes.

(3) Set and use stringlines for grade control on both sides of the roadway during their paving operations.

(4) The Engineer will not accept a claim for any additional ride incentive or a reduction in the ride disincentive due to Lyon County selecting the finished profile of the concrete overlay.

(5) The above survey method (S-27.3 Contractor Survey Method for Pavement Profile Control) for pavement profile control shall be considered incidental to 2011.601 (Construction Surveying).

S-27.4 METHOD OF MEASUREMENT

The Engineer will measure Construction Surveying on a lump sum basis.

S-27.5 BASIS OF PAYMENT

MnDOT will pay for Item 2011.601 (Construction Surveying) on a Lump Sum Basis at the Contract unit bid price. Payment shall be compensation in full for all surveying work including preparation of the quality management plan, materials, surveying equipment, labor, office work, and any incidental costs required by the Contract.

(A) Payment Schedule

MnDOT will authorize partial payments for construction surveying in accordance with Table 2011-1 below, up to 90 percent of the lump sum bid price. The Contractor will receive the final 10 percent of the lump sum bid price when the survey computations, notes, miscellaneous documents, and as-built Survey Data as specified have been received and accepted by the Engineer within the time limits specified by the Survey Work Schedule. If the Contractor fails to provide acceptable documentation and the as-built Survey Data within the time limits specified, Mn/DOT reserves the right to reduce the lump sum payment for Contractor Construction Surveying by a percentage of up to 10 percent of the lump sum bid price.

Table 2011-1 Construction Surveying Partial Payments	
When	**Pay**
Percent of Original Contract Amount Completed*	**Percent of Construction Surveying**
5	20
15	50
50	75
90	90
* The percent of Original Contract Amount = the amount earned by the Contractor, excluding money earned for mobilization and material on hand, divided by the total value of the original contract (all contract items).	

(B) Payment for Extra Work

When the Engineer determines that extra or additional Construction Surveying beyond the scope of the original Contract is required and orders the Contractor to accomplish this work, compensation will be made as Extra Work in accordance with MnDOT 1904 and at the same rate shown for a MnDOT survey crew above. If the Construction Surveying is accomplished by a subcontract, the prime Contractor allowance will be five (5) percent.

(C) Payment

Payment for Construction Surveying will be made on the basis of the following:

Item No.	Item	Unit
2011.601	Construction Surveying	Lump Sum

S-28 (2051) MAINTENANCE AND RESTORATION OF HAUL ROADS

REVISED 11/20/15

SP2016-65

The provisions of MnDOT 2051 are supplemented by the following:

S-28.1 In addition to the amount the Contractor bids for Item 2051.501 (Maintenance and Restoration of Haul Roads), the State agrees to reimburse the Contractor at the predetermined unit prices set forth below for materials ordered by the Engineer. All materials ordered by the Engineer for the Maintenance and Restoration of haul roads will be measured as set forth in the applicable section of the Standard Specifications.

Each of the following materials measured as provided above, will be paid for at the following predetermined unit prices:

2118.501	Aggregate Surfacing Class 1	$7.00/ton [$7.72/t]
2130.501	Water	$10.00/1000 gal. [$2.50/m^3]
2131.502	Calcium Chloride Solution	$0.50/gal. [$0.14/liter]
2211.501	Aggregate Base Class 5	$7.00/ton [$7.72/t]
2360.501	Type SP 12.5 Wearing Course Mixture (4, B)	$27.95/ton [$30.81/t]
2231.501	Bituminous Patching Mixture	$47.00/ton [$51.70/t]

Crushing will not be required in the production of Class 1 material.

The above prices will be considered to be compensation in full for furnishing and providing the materials complete in place, including, but not limited to, royalty, waste, equipment rental, labor, overhead, profit, and incidentals. When materials other than those listed above are ordered by the Engineer, they will be paid for as

extra work in accordance with MnDOT 1402.5, with **the Contractor and the Department sharing equally in the costs.** Separate payment will not be made for costs of blading and reshaping necessary for the maintenance and restoration of haul roads. The cost of such work shall be incidental.

The above shall be performed to restore visible damage.

S-29 (2211) AGGREGATE BASE CLASS 5 MOD

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

S-29.1 Compaction shall be achieved by the "Quality Compaction Method" described in MnDot 2211.3D2.

S-29.2 **Aggregate Base Class 5 MOD (2211.501) is modified so 6%-12% shall pass the #200 sieve.**

S-30 (2221) SHOULDER BASE CLASS 5 MOD

Aggregate base courses shall be constructed in accordance with the provisions of MnDOT 2221 except as modified below:

S-30.1 Compaction shall be achieved by the "Quality Compaction Method" described in MnDot 2211.3D2.

S-30.2 **Shoulder Base Aggregate Class 5 MOD (2221.501) is modified so 6%-12% shall pass the #200 sieve.**

S-31 (2232) MILL BITUMINOUS SURFACE (2.0")

The provisions of MnDOT 2232 are supplemented as follows:

S-31.1 The contractor is required to submit a load rating for the milling machine and truck combination prior to milling bridge 42521 (S.A.P. 042-610-040). Light weight milling machines may be used if approved by the engineer.

S-32 (2301) CONCRETE PAVEMENT FOR ALTERNATE BID

REVISED 11/20/15
SP2016-114

MnDOT 2301 is hereby modified as follows:

S-32.1 MnDOT 2301.2.M.1 and 2301.2.M.3 shall be deleted and replaced with the following:

2301.2.M.1 Coarse Aggregate Quality Incentive/Disincentive

The Engineer will accept the coarse aggregate for paving concrete in accordance with the aggregate quality requirements of 2301, 2461, and 3137. **No additional Coarse Aggregate Quality Incentive/Disincentive shall apply.**

2301.2.M.3 Well-Graded Aggregate Optional Incentive

No additional Well-Graded Aggregate Optional Incentive shall apply.

S-32.2 MnDOT 2301.3.P shall be deleted and replaced with the following:

P Pavement Smoothness – IRI (International Roughness Index)

Provide concrete pavement smoothness in accordance with 2399, "Pavement Surface Smoothness for Alternate Bid."

S-32.3 MnDOT 2301.4.B.1 shall be deleted and replaced with the following:

B.1 Structural Concrete

If the contract includes the contract item *Structural Concrete* or *Structural Concrete High Early*, the Engineer will measure the volume in accordance with the following:

(1) Verify the volume measurements from the computerized batch ticket printouts from the plant, as verified by 2301.3.E.2, "*Concrete Ingredient Summaries,*" and the consideration of any waste as agreed with the Engineer.
(2) Include the volume of all specified concrete pavements into a single item without regard to grade, strength, width, or thickness of the concrete pavement, except if the plans include a contract item for high-early strength concrete.
(3) Apply incentives or disincentives for *Structural Concrete* based on the cubic yard [cubic meter].

S-32.4 MnDOT 2301.5.B and 2301.5.B.1 shall be deleted and replaced with the following:

B Place Concrete Pavement

Unless the plans include a separate contract item for work incidental to *Place Concrete Pavement*, the contract square yard [square meter] price for *Place Concrete Pavement* includes the cost of constructing the pavement, including fine grading; forming, including all headers; providing and installing keyway and keyway bars, tie bars, taper steel, stopper bars, and other reinforcement bars; placing; spreading; screeding; vibration monitoring; finishing; curing; protecting; sawing; and sealing the concrete.

B.1 Structural Concrete

The Engineer will field calculate the volume of *Structural Concrete* and *Structural Concrete High Early* placed. The contract cubic yard [cubic meter] price for *Structural Concrete* and *Structural Concrete High-Early* includes the cost of producing, delivering, and depositing the concrete, including the cost of the batch materials, mixing operations, and the plant-lab office. The Engineer will verify volume of concrete from the computerized batch ticket printouts from the plant, with consideration of any waste. The Engineer will determine the maximum allowable project volume by multiplying the *Place Concrete Pavement* measurement by the thickness shown in the plans plus ¾ inch [19 mm] for the entire project. If the plans include a separate contract item for *Structural Concrete High-Early* or if the Contractor requests high-early and the Engineer approves, the Department will not provide extra compensation for the production of high-early strength concrete.

If the plans do not include a separate contract item for *Structural Concrete High-Early* and the Engineer orders high-early concrete, the Department will pay for additional cement at a rate of the invoice cost plus 15 percent.

S-33 (2301) CONCRETE PAVEMENT

REVISED 02/07/17
SP2016-115

MnDOT 2301 is hereby modified as follows:

S-33.1 Table 2301-1 of MnDOT 2301.2.B shall be deleted and replaced with the following:

Table 2301-1 Aggregate Testing Requirements	
Aggregate Fraction	**Testing Required**
Tested by Department in the last 3 years	No additional testing unless required by the Concrete Engineer
Not tested by the Department in the last 3 years	Preliminary aggregate testing in accordance with 2301.2.B.1, "Required Preliminary Aggregate Testing."
New source	New source concrete aggregate testing in accordance with 3126, "Fine Aggregate for Portland Cement Concrete," 3131, "Intermediate Aggregate for Portland Cement Concrete," and 3137, "Coarse Aggregate for Portland Cement Concrete."

S-33.2 MnDOT 2301.2.B.2.a(3) and Table 2301-2 shall be deleted and replaced with the following:

(3) Alkali silica reactivity (ASR) ASTM C1260 and ASTM C1567 MnDOT Modified test results are available on the MnDOT Concrete Engineering Unit website. The Concrete Engineer considers the average 14-day expansion result to represent all fine and intermediate aggregates from a single source.

Table 2301-2 Fine and Intermediate Aggregate ASR Mitigation Requirements							
14-day Fine and Intermediate Aggregate Unmitigated Expansion Limits	**Class F Fly Ash**	**Class C Fly Ash**	**Slag**	**Ternary (Maximum of 40%)**			
				Slag/Class F Fly Ash	**Slag/Class C Fly Ash**	**IS(20)/Class F Fly Ash**	**IS(20)/Class C Fly Ash**
≤ 0.150	No mitigation required						
>0.150 –0.200	Minimum 20%	Minimum 20%	35%	20% Slag with a minimum of 15% Class F fly ash	20% Slag and 20% Class C fly ash	Type IS(20) with a minimum of 15% Class F	Type IS(20) with a minimum of 15% Class C
> 0.200 – 0.300	Minimum 20%	Minimum 30%	35%				
> 0.300	The Department will reject the fine aggregate						

S-33.3 MnDOT 2301.2.B.3 shall be deleted and replaced with the following:

B.3 Intermediate Aggregate Requirements

Provide intermediate aggregates complying with the quality requirements of 3131.2.D.3, "Intermediate Aggregate for Portland Cement Concrete."

For any intermediate aggregate size not previously tested by the Department, the Concrete Engineer reserves the right to test for alkali silica reactivity, in accordance with ASTM C1260, prior to allowing incorporation into the concrete mix design.

S-33.4 MnDOT 2301.2.C shall be modified to include the following:

C.5 Ternary Mixes

Ternary mixes are defined as portland cement or Type IL and two other supplementary cementitious materials, or blended cement and one other supplementary cementitious material with a maximum replacement of 40% by weight.

S-33.5 MnDOT 2301.2.D shall be deleted and replaced with the following:

D Concrete Admixtures 3113

Provide admixtures from the Approved/Qualified Products list for all concrete grades shown in Table 2301-5.

Use of any of the following admixtures are at the Contractor's discretion:

(1.1) Type A, Water Reducing Admixture
(1.2) Type B, Retarding Admixture
(1.3) Type D, Water Reducing and Retarding Admixture
(1.4) Type S, Specific Performance Based Admixture

Use of the following admixtures require approval of the Concrete Engineer, in conjunction with the Engineer, unless otherwise allowed in the Contract:

(2.1) Type C, Accelerating Admixture
(2.2) Type E, Water Reducing and Accelerating Admixture
(2.3) Type F, High Range Water Reducing Admixture
(2.4) Type G, High Range Water Reducing and Retarding Admixture

The Engineer will permit the use of Type C or Type E accelerating admixtures when all of the following conditions exist:

(3.1) The ambient temperature is below 36 °F,
(3.2) An Engineer approved cold weather protection plan is in-place, and
(3.3) Cold weather protection materials are on-site and ready for use.

S-33.6 Table 2301-5 of MnDOT 2301.2.L.1 shall be deleted and replaced with the following:

Table 2301-5
Concrete Mix Design Requirements

Concrete Grade	Estimated Concrete Contract Quantity (yd^3) *	Mix Number	Maximum w/c ratio		Minimum Cement Content (lbs/yd^3)	Cementitious Content (lbs/yd^3) ‖	Air Content %	Gradation Requirements	Minimum Aggregate Size Required	Maximum %SCM (Fly Ash/ Slag/ Ternary) †	Slump Range	3137 Spec.
			Fly Ash	Slag/ Ternary								
A	≥ 3,500	3A21	0.40	0.42	385	530 – 615	7.0	Job Mix Formula	1 1/2" nominal	33/35/40	½ - 3" ‡	2.D.3
		3A41	0.40	0.42							2 – 5"	
	< 3,500 and Minor work and fill-ins not provided by the primary paving plant #	3A21	0.42	0.42	385	530 – 615	7.0	3126 and Table 3137-4 Or Job Mix Formula	3/4" nominal	33/35/40	½ - 3" ‡	2.D.3
		3A41	0.42	0.42							2 – 5"	
	Engineer Approved or Plan Allowed High-Early	3A21HE §	0.40	0.42	385	> 615 – 750	7.0	3126 and Table 3137-4 Or Job Mix Formula	3/4" nominal	33/35/40	½ - 3" ‡	2.D.3
		3A41HE §	0.40	0.42							2 – 5"	

* Determined by multiplying the planned pavement area by the planned pavement thickness.
‖ Provide additional cementitious material to meet requirements in accordance with this section at no additional cost to the Department.
† Refer to Table 2301-2 and Table 2301-4 for ASR mitigation requirements.
‡ Adjust slump in accordance with 2301.3.E.1, "Consistency."
# The Concrete Engineer considers minor work or fill-ins as gaps in concrete pavement, turn lanes, intersections or other pavement sections as determined by the Engineer, in conjunction with the Concrete Engineer.
§ The Contractor may use 100% Portland cement for High Early Concrete, provided no mitigation is required for the fine aggregate and intermediate aggregate in accordance with Table 2301-2 and coarse aggregate in accordance with Table 2301-4. If mitigation is required, the Contractor is required to use a minimum of 15% of any supplementary cementitious material when designing High Early Concrete.

S-33.7 MnDOT 2301.2.L.3.a and 2301.2.L.3.b shall be deleted and replaced with the following:

L.3.a JMF Moving Average

The Engineer will determine the sampling location by using a random number chart and multiplying the random number by the sampling rate as defined in the Schedule of Materials Control.

Test and record the individual gradation results using the *JMF Concrete Aggregate Workbook.*

Calculate the moving average of four Contractor aggregate gradation test results during production using the *JMF Moving Average Summary Workbook.*

L.3.b JMF Adjustments

If the Contractor expects a future JMF adjustment, submit a new mix design including JMF in accordance with 2301.L.3, "Job Mix Formula."

If, during concrete batching, the moving average of four (4) Contractor aggregate gradation tests falls outside the allowable JMF working range:

(1) Make immediate adjustments on the *JMF Adjustment Worksheet,* within the limits specified in Table 2301-7;
(2) Review JMF Adjustments with the Engineer. Provided the adjustments comply with Table 2301-7, both the Contractor and Engineer will sign the *JMF Adjustment Worksheet.* Once signed by both, resume paving.
(3) If the moving average of four tests falls outside of the adjusted allowable working range, stop production and provide a new mix design including JMF to the Concrete Engineer.

Table 2301-7
Allowable JMF Adjustments

Sieve Size	Allowable Adjustment, %
≥ No. 4	±5
No. 8 – No. 30	±4
No. 50	±3
No. 100	±2

L.3.c Agency Verification of JMF

The Engineer will randomly verify Contractor combined aggregate gradation results as defined in the Schedule of Materials Control. Record the Agency verification test results using the *JMF Moving Average Summary Workbook.*

If the Engineer and Contractor's results on an individual fraction fall outside of the lab field tolerance established in Table 2301-7A, the Engineer will test all split samples from that day's production.

If the gradation tests on any split samples from that day's testing result in a variation between the Producer and the Engineer greater than that set forth in Table 2301-7A, the Engineer will substitute QA test results into the moving average calculation to determine acceptance and the well-graded aggregate optional incentive.

Table 2301-7A
Allowable Variations on Percent Passing Sieves

Sieve Size	Allowed Percentage
2 in – ⅜ in	± 6
No. 4 – No. 30	± 4
No. 50	± 3
No. 100	± 2
No. 200	± 0.6

S-33.8 Table 2301-8 of MnDOT 2301.2.M shall be deleted and replaced with the following:

Table 2301-8
Designated Primary Concrete Plant Eligibility for Incentives/Disincentives*

Type of Concrete Plant	Method for Hauling Concrete	w/c ratio†	Aggregate Quality	Well-graded Aggregate
Paving Plant	Dump Trucks, Agitator Trucks, or Both	Yes	Yes	Yes
Certified Ready-Mix Plant	Dump Trucks, Agitator Trucks, or Both	Yes	Yes	Yes
Paving Plant	Truck Mixers	No	Yes	Yes
Certified Ready-Mix Plant	Truck Mixers	No	Yes	Yes

* A secondary concrete plant providing any minor work or fill-ins not provided by the primary concrete plant is not eligible for any incentives/disincentives.
† High-early mixes are not eligible for w/c ratio incentive payments.

S-33.9 MnDOT 2301.2.M.2 shall be deleted and replaced with the following:

M.2 Water/Cement (w/c) Ratio

Provide and place concrete with a water/cement ratio not to exceed 0.40 when using cement only or fly ash and 0.42 when using slag or ternary. Make any adjustments immediately when the water/cement ratio exceeds 0.40 when using cement only or fly ash and 0.42 when using slag or ternary.

The Engineer will not make incentive payments for water/cement ratio on high-early mixes.

The Engineer will determine the water/cement ratio for concrete hauled in dump or agitator trucks (concrete hauled in truck mixers are not eligible for w/c ratio incentives) in accordance with the following:

The Engineer will sample, test, and record the individual results in accordance with 2301.2.M.2.a, "Water Content Determination," and 2301.3.M.2.c, "Cementitious Content Determination," at a rate defined in the Schedule of Materials Control. The Engineer will use the *W/C Ratio Calculation Workbook* for moisture testing and determining the incentive/disincentive.

The Engineer will base the statistical analysis of acceptance for water/cement ratio on a per lot basis representing one day's paving. Each individual water/cement ratio determination is considered a sublot. The lot will represent the cumulative average of the sublot values. The Engineer will start a new lot and test if either of the following occur:

(1) Mix design change due to a water/cement ratio exceeding 0.40 when using cement only or fly ash and 0.42 when using slag or ternary, or
(2) Supplementary cementitious type change from fly ash to slag or ternary mix design, or vice versa.

If the quantities of concrete produced results in no Engineer moisture testing for any given day, include the untested quantity of concrete into the next day's production and include that quantity of concrete in the sampling rate. If the untested quantity is on the last day of production, add that quantity to the previous day's production.

S-33.10 MnDOT 2301.2.M.3 shall be deleted and replaced with the following:

M.3 Well-Graded Aggregate Optional Incentive

The Engineer will use the Contractor's combined aggregate gradation test results documented in the *JMF Concrete Aggregate Workbook*, as verified by the Engineer in accordance with 2301.2.L.3.c, "Agency Verification of JMF," to determine eligibility for the incentive. Table 2301-13 defines the well-graded concrete aggregate gradation band, on a percent retained per sieve size basis and the Coarse Sand percent retained and Fine Sand percent retained.

Table 2301-13
% Retained Gradation Band

Sieve Size	% Retained
2 in	0%
1½ in	≤ 5%
1 in	≤ 16%
¾ in	≤ 20%
½ in	4 – 20%
⅜ in	4 – 20%
No. 4	4 – 20%
No. 8	≤ 12%
No. 16	≤ 12%
No. 30	4 – 20%
No. 50	4 – 20%
No. 100	≤ 10%
No. 200	≤ 2%
Coarse Sand % Retained (No. 8 to No. 30 Sieve)	> 15%
Fine Sand % Retained (No. 30 to No. 200 Sieve)	24% – 34%

The Engineer will use statistical analysis of the Contractor's combined (averaged) aggregate gradation samples for well-graded aggregate on a per lot basis representing one day's paving. Each combined aggregate gradation is considered a sublot. The lot will represent the cumulative average of the sublot values on each sieve for the gradation band.

If the quantities of concrete produced results in no gradation testing for any given day, include the untested quantity of concrete into the next day's production and include that quantity of concrete in the sampling rate. If the untested quantity is on the last day of production, add that quantity to the previous day's production.

An optional incentive is available to the Contractor provided a concrete mixture is designed and produced meeting all requirements of Table 2301-13 on a lot basis in accordance with Table 2301-14.

Table 2301-14
Well-Graded Aggregate Optional Incentive

Payment incentive/disincentive per cu. yard
$2.00 per cu. yd

S-33.11 MnDOT 2301.3.D shall be modified to include the following:

Complete base construction of a sufficient width outside the edge of the pavement to support the slipform paver treads without distortion of the alignment or grade line.

S-33.12 MnDOT 2301.3.F shall be modified to include the following:

The Engineer will not allow the edges of the pavement, including longitudinal joints, to deviate from the line shown on the plans by greater than ½ inch at any point.

Place concrete without any vertical surface deviations of the plastic concrete when matching into the beginning and end of the project, bridge approaches and decks, unless otherwise allowed by the Engineer. Correct all high and low spots identified within the 10 foot straight edge.

Do not add water to the surface of the concrete to aid in finishing without the approval of the Engineer. The Engineer will give approval to replace evaporated surface water directly behind the paver caused by a halt in forward progress from a short-term breakdown in equipment or supply of concrete. The Contractor can request approval to add water to the surface when cutting bumps or filling dips in the plastic concrete each time additional water is needed. If the Contractor adds water to the pavement surface without approval by the Engineer, the Engineer will not pay water/cement or pavement smoothness incentives on sections where the water is added and the Engineer may reject the pavement in accordance with 1512, "Unacceptable and Unauthorized Work."

S-33.13 MnDOT 2301.3.F.3 shall be modified to include the following:

Screed newly placed pavement to the same elevation as the in-place concrete to 1/4 in or less.

S-33.14 The first paragraph of MnDOT 2301.3.F.4 shall be deleted and replaced with the following:

Use any approved construction header method as shown in the Standard Plate 1150 when constructing construction headers, temporary headers, and permanent headers as shown on the plans. In the plastic concrete, the Engineer may evaluate headers for vertical surface deviations with a 10 foot straight edge. Correct all high and low spots identified within the 10 foot straight edge.

S-33.15 MnDOT 2301.3.F.5, 2301.3.F.5.a, and 2301.3.F.5.b shall be deleted and replaced with the following:

F.5 Air Content

Sample and test the air content of the concrete in accordance with the Schedule of Materials Control. Using the *Air Content Chart,* record all air content test results.

F.5.a Air Content Before Consolidation

Measure the air content of the plastic concrete after placement on the grade but before consolidation. Maintain the air content of Type 3 paving concrete at the specified target of 7.0 percent **(plus 2.0% / minus 1.5%)** of the measured volume. Make adjustments immediately to maintain the desired target air content, in accordance with Specification 1503, "Conformity with Contract Documents."

F.5.a(1) Non-Conforming Air Content Before Consolidation

Only place Type 3 concrete meeting the air content requirements in the work. If the Contractor places Type 3 concrete not meeting the air content requirements into the work, the Engineer will not accept nonconforming concrete at the contract unit price.

For the quantity of non-conforming concrete not meeting the required air content, the Engineer will make determinations regarding the disposition, payment, or removal in accordance with Table 2301-16.

Table 2301-16 Grade A Paving Concrete (Target Air Content 7.0%)	
Air Content Before Consolidation, %	**Monetary Reduction**
> 9.0	The Engineer, in conjunction with the Concrete Engineer will determine the concrete suitability for the intended use in accordance with 1503, "Conformity with Contract Documents," and 1512, "Unacceptable and Unauthorized Work,"
5.5 – 9.0	No deduction for materials placed as approved by the Engineer.
> 5.0 – < 5.5	$25.00 per cubic yard or 25% of the Contractor-provided invoice for quantity represented by the materials placed
> 4.0 – ≤ 5.0	The Engineer, in conjunction with the Concrete Engineer will determine the concrete suitability for the intended use in accordance with 1503, "Conformity with Contract Documents," and 1512, "Unacceptable and Unauthorized Work." This may include testing on the hardened concrete as required by the Engineer, in conjunction with the Concrete Engineer.
≤ 4.0	Remove and replace concrete in accordance with 1503, "Conformity with Contract Documents" and 1512, "Unacceptable and Unauthorized Work" as directed by the Engineer. This may include testing on the hardened concrete as required by the Engineer, in conjunction with the Concrete Engineer. If the Engineer, in conjunction with the Concrete Engineer, determines the concrete can remain place, the Engineer will not pay for the concrete and if the Engineer determines the surface is exposed to salt-brine freeze-thaw cycling, coat with an epoxy penetrant sealer from the Approved/Qualified Products List.

F.5.b Air Content After Consolidation

If using the slipform paving method, determine the air content after consolidation. Place concrete with an air content of at least 4.5 percent after consolidation.

F.5.b(1) Air-Loss Correction Factor (ACF)

Determine the ACF by subtracting the air content after consolidation from the air content before consolidation. If the ACF exceeds 2.0%, take another test as soon as possible to verify/adjust for a new ACF.

F.5.b(2) ACF Adjustment to Air Content Tests Before Consolidation

Each time an ACF is determined, apply the ACF to all subsequent air content tests before consolidation and evaluate in accordance with 2301.3.F.5.b(3), "Non-conforming Air Content After Consolidation."

F.5.b(3) Non-Conforming Air Content After Consolidation

If the Contractor or Engineer test results in an air content after consolidation of less than 4.5%, take the following action:

(1) Immediately retest and verify the ACF is correct.
(2) If the results are still < 4.5%, make immediate adjustments to the concrete or the consolidation process, test any loads that have not been discharged or adjusted at the plant and apply the ACF to determine compliance.
(3) Test every load of concrete until the air content test results meet the requirements.
(4) Test at least 3 additional trucks to ensure the concrete remains in compliance.
(5) Perform additional testing on the hardened concrete as required by the Engineer in conjunction with the Concrete Engineer.

S-33.16 The third paragraph of MnDOT 2301.3.J.3 shall be deleted and replaced with the following:

If at any time the Engineer determines the dowel bar anchoring or tie bar placement processes are unacceptable due to alignment/tolerance issues, the Engineer may request the Contractor amend the placement process for the operation in question to achieve satisfactory placement of the dowel bars and tie bars.

The Engineer will consider concrete pavement that fails to comply with the alignment tolerances as Unacceptable Work in accordance with 1512, "Unacceptable and Unauthorized Work." The Engineer, in conjunction with the Concrete Engineer, will evaluate the defective concrete pavement in accordance with 2301.3.Q "Workmanship and Quality."

S-33.17 MnDOT 2301.3.K.1 and 2301.3.K.1.a shall be deleted and replaced with the following:

K.1 Pavement Texture

Pull the carpet drag longitudinally over the finished surface to produce a uniform final finish textured surface. Provide a texture depth of at least 1.00 mm in accordance with ASTM E 965-87, "Test Method for Measuring Surface Macrotexture Depth Using a Sand Volumetric Technique."

Provide artificial grass type carpeting for the carpet drag meeting the following characteristics and requirements:

(1) Molded polyethylene pile face,
(2) Blade length from ⅜ in to 1 in [15 mm to 25 mm], and
(3) Total weight of at least 70 oz per sq. yd [2.35 kg per sq. m].

Mount the drag on a bridge having external alignment control. Provide a drag as wide as the concrete placed without causing edge slump. Maintain continual contact between the drag and the pavement surface at all times during texturing. Apply down pressure on the pavement surface as necessary to achieve uniform texturing.

The Contractor may use manual methods including brooms to achieve similar results on the edges of the pavements and ramps, and other locations as approved by the Engineer.

The Contractor may use other texturing equipment to obtain an equivalent texture as approved by the Engineer, in conjunction with the Concrete Engineer.

For concrete pavements with a posted vehicle speed less than or equal to 35 mph [56 km/hr], use either a carpet drag or broom drag longitudinally to achieve a uniform final finish textured surface.

K.1.a Texture Testing

The Engineer will identify the texture testing locations in accordance with 2301.3.I, "Definition of Lot and Sublot for Concrete Field Testing," and the following:

(1) Use the MnDOT Probing Coring Texture MIT-SCAN-T2 Workbook to determine the random testing locations.
(2) Provide the Concrete Texture Report generated from the MnDOT Probing Coring Texture MIT-SCAN T2 Workbook to the Contractor prior to the start of paving.
(3) Offset the texture test at a point located transversely in the outside wheel path.

Perform surface texture testing of the concrete pavement and provide the test results to the Engineer no later than 48 h after pavement placement unless otherwise approved by the Engineer.

S-33.18 MnDOT 2301.3.M.2 shall be modified to include the following:

If corrective work is performed to the satisfaction of the Engineer, the Engineer will provide payment for incentives provided the concrete meets all other requirements of 2301, "Concrete Pavement."

S-33.19 The fourth paragraph of MnDOT 2301.3.O shall be deleted and replaced with the following:

Perform operations on new pavement as approved by the Engineer and in accordance with the following:

(1) When moving on and off the pavement, construct a ramp to prevent damage to the pavement slab.
(2) Protect the concrete pavement surface and joints from damage due to heavy loads or equipment in accordance with 1513, "Restrictions on Movement and Storage of Heavy Loads and Equipment." Sweep the pavement surface free of debris prior to placing the protective material or tracked paving equipment onto the slab.
(3) Operate equipment on a slab without causing damage. If damage results, suspend operations and take corrective action as approved by the Engineer. Do not operate the equipment wheels or tracks within 4 in [100 mm] of the slab edge.
(4) When hauling aggregate and other materials across newly constructed joints, keep the pavement surface free of debris by sweeping or other method as approved by the Engineer to prevent spalling of the pavement joints.

S-33.20 MnDOT 2301.3.Q shall be modified to include the following:

The Engineer may use the 10 ft straightedge as necessary to determine any defects in the hardened concrete.

When measuring the hardened concrete using the straightedge, the Engineer will:

(1) Measure the hardened concrete for surface deviations greater than 1/4 in in 10 ft.
(2) Evaluate transverse joints by centering the straightedge longitudinally across the transverse joint.
(3) Not lay the straightedge across a lane break with differing cross slopes.

The Engineer will require corrective work on vertical surface deviations greater than 1/4 in within the span of the straightedge in any direction. If the Engineer and Contractor mutually agree to not perform corrective work, the Engineer will assess a monetary deduction of $1,500.00 per event per lane. For corrected variations, the Engineer will accept deviations less than or equal to 1/4 in within the span of a 10 ft straightedge in any direction.

S-33.21 MnDOT 2301.3.Q.3 shall be added:

Q.3 Pavement Smoothness after Corrective Work

In any location, where the Contractor must remove and replace concrete full depth pavement due to Workmanship, the Engineer will require re-profiling in accordance with 2399, "Pavement Surface Smoothness."

S-34 (2301) DOWEL BAR

NEW WRITEUP 02/07/17
SP2016-115.1

MnDOT 2301 is hereby modified as follows:

S-34.1 MnDOT 2301.2.F is modified to include the following:

Provide dowel bars meeting one of the following:

(1) Epoxy coated dowel bars in accordance with 3302, "Dowel Bar", or
(2) Galvanized tubular dowel bars in accordance with 3302, "Dowel Bar."

Do not intermix different dowel types or sizes unless allowed by the Concrete Engineer.

S-35 (2357) BITUMINOUS TACK COAT

REVISED 04/08/16

SP2016-134

MnDOT 2357 is hereby modified as follows:

S-35.1 Delete MnDOT 2357.3H Acceptance of Tack Material and replace with:

H Acceptance of Tack Material

The Engineer will address failures related to 3151, "Bituminous Material," or deficiencies related to workmanship or application, in accordance with 1512, "Unacceptable and Unauthorized Work." The basis of measurement for tack failures or deficiencies is the full width of the lane by station. The Engineer may deduct up to 5% of the mixture Unit Price for failures related to 3151.

S-35.2 Delete MnDOT 2357.5 Basis of Payment and replace with:

2357.5 BASIS OF PAYMENT

All costs of furnishing and applying bituminous tack coat material will be incidental.

S-36 (2360) PLANT MIXED ASPHALT PAVEMENT

REVISED 08/04/16

SP2016-137.1

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

S-36.1 Delete MnDOT Table 2360-2 and replace with:

Table 2360-2
PG Asphalt Grades MSCR

Letter	PG Grade MSCR
A	PG 52S – 34
B	PG 58S – 28
C	PG 58H – 34
E	PG 58H – 28
F	PG 58V – 34
H	PG 58V – 28
I	PG 58E – 34
L	PG 64S – 22
M	PG 49S – 34

S-36.2 Delete MnDOT 2360.2.E.7 and replace with:

E.7 Minimum Ratio of Added Asphalt Binder to Total Asphalt Binder

Control recycled materials used in mixture by evaluating the ratio of new added asphalt binder to total asphalt binder as show in Table 2360-8.

Table 2360-8 Requirements for Ratio of Added New Asphalt Binder to Total Asphalt Binder[1] min%:			
Specified Asphalt Grade[2]	Recycled Material		
	RAS Only	RAS + RAP	RAP Only
PG 58X[3]-28, PG 52S-34, PG 64S-22	70	70	70
Wear	70	70	65
Non-Wear			
PG 58X[3]-34			
Wear & Non-Wear	80	80	80

[1] The ratio of added new asphalt binder to total asphalt binder is calculated as (added binder/total binder) x 100
[2] The Contractor can elect to use a blending chart to verify compliance with the specified binder grade. The Department may take production samples to ensure the asphalt binder material meets the requirements. The blending chart is on the Bituminous Office Website.
[3] X=S,H,V,E

S-36.3 Mix Designation Numbers for the bituminous mixtures on this Project are as follows:

Type SP 12.5 Wearing Course (3,C) SPWEB340C
Type SP 12.5 Non-Wearing Course (3,C) SPNWB330C
Type SP 12.5 Wearing Course (3,B) SPWEB340B

S-36.4 Asphalt binder meeting AASHTO M332 (MSCR) is required. See Section S-3151 (BITUMINOUS MATERIAL (MSCR)) of these Special Provisions.

S-36.5 The sentence "In addition to the list the above the pavement surface must meet requirements of 2399 (Pavement Surface Smoothness) requirements." is deleted from MnDOT 2360.3.E Surface Requirements. The requirements of MnDOT 2360.3.E Surface Requirements **will** apply.

The provisions of MnDOT 2360 is modified with the following:

S-36.6 **Mix designations SPWE340C, SPNW330C, and any other mix designations with Standard Binder Grade "C" (PG 58-34) shall contain 0% Recycled Material (RAP).**

S-37 (2360) PLANT MIXED ASPHALT PAVEMENT FOR ALTERNATE BID (MSCR)

REVISED 08/04/16
SP2016-139.1

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

S-37.1 Delete MnDOT Table 2360-2 and replace with:

Table 2360-2 PG Asphalt Grades MSCR	
Letter	**PG Grade MSCR**
A	PG 52S – 34
B	PG 58S – 28
C	PG 58H – 34
E	PG 58H – 28
F	PG 58V – 34
H	PG 58V – 28

Table 2360-2 PG Asphalt Grades MSCR	
Letter	**PG Grade MSCR**
I	PG 58E – 34
L	PG 64S – 22
M	PG 49S – 34

S-37.2 Delete MnDOT 2360.2.E.7 and replace with:

E.7 Minimum Ratio of Added Asphalt Binder to Total Asphalt Binder

Control recycled materials used in mixture by evaluating the ratio of new added asphalt binder to total asphalt binder as show in Table 2360-8.

Table 2360-8 Requirements for Ratio of Added New Asphalt Binder to Total Asphalt Binder[1] min%:			
Specified Asphalt Grade[2]	Recycled Material		
	RAS Only	RAS + RAP	RAP Only
PG 58X[3]-28, PG 52S-34, PG 49-34, PG 64S-22 Wear Non-Wear	70 70	70 70	70 65
PG 58X[3]-34 Wear & Non-Wear	80	80	80

[1] The ratio of added new asphalt binder to total asphalt binder is calculated as (added binder/total binder) x 100

[2] The Contractor can elect to use a blending chart to verify compliance with the specified binder grade. The Department may take production samples to ensure the asphalt binder material meets the requirements. The blending chart is on the Bituminous Office Website.

[3] X=S,H,V,E

S-37.3 Mix Designation Numbers for the bituminous mixtures on this Project are as follows:

Type SP 12.5 Wearing Course (3,C) SPWEB340C
Type SP 12.5 Non-Wearing Course (3,C) SPNWB330C
Type SP 12.5 Wearing Course (3,B) SPWEB340B

S-37.4 Asphalt binder meeting AASHTO M332 (MSCR) is required. See Section S-3151 (BITUMINOUS MATERIAL (MSCR)) of these Special Provisions.

S-37.5 Evaluate pavement smoothness requirements by equation ALT-A as specified in 2399.3D in Section S-2399 (PAVEMENT SURFACE SMOOTHNESS FOR ALTERNATE BID) of these Special Provisions.

S-38 (2399) PAVEMENT SURFACE SMOOTHNESS FOR ALTERNATE BID

REVISED 02/03/17
SP2016-144

MnDOT 2399 is hereby modified as follows:

S-38.1 MnDOT 2399.2.A shall be deleted and replaced with the following:

A Inertial Profiler (IP)

Provide a Department certified, calibrated, and documented IP meeting the requirements of ASTM E 950, Class 1 and procedures maintained by the MnDOT Pavement Engineering Section. Refer to the procedures maintained by the MnDOT Pavement Engineering Section or to the MnDOT Smoothness website for the required settings for individual certified IPs.

Provide an IP capable of producing a profilogram and exporting raw profile data in an unfiltered electronic Engineering Research Division (ERD) file format. Produce ERD filenames in the YYMMDD-T-N-D-L-B-E.ERD standardized format in accordance with Table 2399-1:

Table 2399-1
Standardized Naming Convention for ERD Files

Abbreviation	Definition
YY	Two-digit year
MM	Month (include leading zeros)
DD	Day of month (include leading zeros)
T	Route type (I, MN, US, CSAH, etc.)
N	Route number (no leading zeros) and auxiliary ID (if applicable)
D	Primary route direction (I or D)
L	Lane number (1 for driving lane, increasing by one for each lane to the left; 0 for other lanes such as acceleration/deceleration lanes, ramps, loops)
B	Beginning station
E	End station

S-38.2 MnDOT 2399.2.D.5 shall be deleted and replaced with the following:

D.5 After Corrective Work

After reprofiling, submit a paper summary ProVAL report for each lane, indicating the results of updated "Smoothness Assurance" analyses to the Engineer. Submit the appropriate MnDOT Profile Summary worksheet available on the MnDOT Smoothness website. The worksheet should match the type of construction and the letting year of the project.

S-38.3 MnDOT 2399.3.A shall be deleted and replaced with the following:

A Pavement Surface Testing

Remove objects and foreign material from the pavement surface before performing the pavement surface evaluation. Provide traffic control required for testing and performing corrective work on the final pavement surface.

Run the IP in the direction of traffic. Measure profiles in the left and right wheel paths of each lane.

Test and evaluate each lane separately. The Engineer will determine the length in miles of each mainline traffic lane. Operate the IP at the optimum speed as recommended by the manufacturer.

Separate each lane into segments 0.1 mi in length. Evaluate the remainder segment less than 0.1 mi in each lane as an independent segment. The Engineer will prorate pay adjustments for length.

Make each pass continuously, regardless of length, and end passes before exclusions in accordance with Table 2399-3, "Areas Excluded from Smoothness and ALR Evaluation." Begin each subsequent pass 50 ft before, and including, construction headers and end of day work joints.

The Engineer will use a 10 ft straightedge to measure for surface deviations in accordance with 2301, "Concrete Pavement," and 2360, "Plant Mixed Asphalt Pavement."

S-38.4 MnDOT 2399.3.B shall be deleted and replaced with the following:

B Exclusions

Table 2399-2 indicates areas that are excluded from Smoothness evaluation, but still require measurement with an IP, and are subject to evaluation for ALR and the 10 ft straightedge. Table 2399-3 indicates areas that are excluded from surface testing with the IP, but are subject to evaluation with the 10 ft straightedge.

Table 2399-2 Areas Excluded from Smoothness Evaluation
For All Pavements
Paving in areas with a posted vehicle speed less than or equal to 45 mph
Ramps and loops
Acceleration and deceleration lanes less than or equal to 1,000 ft in length
Projects less than 1,000 ft in length
For Bituminous Pavements
Single lift overlays placed directly on concrete
For Concrete Pavements
Intersections constructed under traffic – begin and end exclusion 100 ft from the intersection radius
Doweled shoulders greater than or equal to 10 ft in width

Table 2399-3 Areas Excluded from Smoothness and ALR Evaluation
For All Pavements
Paving in areas with a posted vehicle speed less than or equal to 35 mph
Paving in areas with a cautionary vehicle speed less than or equal to 35 mph
Turn lanes, crossovers
10 ft on either side of obstructions in lane that obstruction is located
Side streets, side connections
150 ft before stop signs at an intersection
150 ft before yield signs at a roundabout
Bridge decks and approach panels
20 ft from bridge decks and approach panels
20 ft from terminal headers tying into existing pavement
For Bituminous Pavements
Paved shoulders
Intersections where mainline profiles are merged or blended into the cross street profile – begin and end exclusion 100 ft from the intersection radius
For Concrete Pavements
Doweled shoulders less than 10 ft in width
Undoweled shoulders
Headers adjacent to colored concrete

S-38.5 MnDOT 2399.3.D.1 shall be deleted and replaced with the following:

D.1 Smoothness

Evaluate Smoothness requirements using the equation and criteria in accordance with the following table:

(1) Table 2399-4

The Engineer will base pay adjustments on the segment Smoothness value measured at the completion of surface pavement, unless corrective work is required by the ProVAL summary report results. If a segment is less than 100 ft in length and Table 2399-4 requires corrective work, the Engineer will waive the corrective work requirement for the segment and instead assess a prorated disincentive. The Department will still subject the segment to ALR analysis in accordance with Table 2399-5.

For segments requiring corrective work, reprofile the entire 0.1 mi segment after performing corrective work as directed by the Engineer and enter the reprofiled Smoothness values into the final Profile Summary worksheet.

Table 2399-4
Smoothness Pay Adjustments and Corrective Work

Equation	Smoothness in/mi	Pay Adjustment $/0.1 mi
ALT-A	< 30.0	270.00
	30.0 – 80.0	594.00 − 10.800 × Smoothness
	> 80.0	Corrective Work to ≤ 55.0 in/mi

For bituminous projects, the Engineer will not pay any positive Total Pay Adjustments if greater than 25 percent of all mainline density lots for the project fail to meet the minimum density requirements in accordance with 2360, "Plant Mixed Asphalt Pavement."

For concrete projects, if the Contractor adds water to the pavement surface without approval by the Engineer, the Engineer will not pay any positive Pay Adjustments for 0.1 mile segments where the water was added and the Engineer may reject the pavement in accordance with 1512, "Unacceptable and Unauthorized Work."

S-38.6 MnDOT 2399.3.D.2 shall be deleted and replaced with the following:

D.2 Areas of Localized Roughness

The Engineer will evaluate ALR in accordance with Table 2399-5, "ALR Monetary Deductions and Corrective Work Requirements."

Table 2399-5 ALR Monetary Deductions and Corrective Work Requirements		
Equation	**25 ft Continuous MRI in/mi**	**Corrective Work or Monetary Deduction, per linear 1.0 ft**
ALT-A and a posted vehicle speed > 45 mph	< 175.0	Acceptable
	≥ 175.0 to < 225.0	Corrective Work unless both the Engineer and the Contractor agree to a deduct of $25.00
	≥ 225.0	Corrective Work unless both the Engineer and the Contractor agree to a deduct of $125.00
Ramps, loops, concrete intersections constructed under traffic, or any paving with a posted vehicle speed ≤ 45 mph	< 225.0	Acceptable
	≥ 225.0	$25.00

The Engineer will consider areas of ALR acceptable if the reprofiled segment contains no ALR. The Department will reduce payment for ALR remaining after reprofiling as determined by the Engineer and in accordance with Table 2399-5, "ALR Monetary Deductions and Corrective Work Requirements."

S-38.7 MnDOT 2399.3.D.3 shall be deleted.

S-39 (2406) BRIDGE APPROACH PANELS

SP2016-145

MnDOT 2406 is hereby modified as follows:

S-39.1 In MnDOT 2406.3.G paragraph 4 the phrase "...the contract does not contain a separate contact unit price..." is changed to read "...the contract does not contain a separate contract unit price..."

S-40 (2461) STRUCTURAL CONCRETE

REVISED 02/07/17

SP2016-151

MnDOT 2461 is hereby modified as follows:

S-40.1 MnDOT 2461.2.A.5 shall be added:

A.5 Ternary Mixes

Ternary mixes are defined as portland cement or Type IL and two other supplementary cementitious materials, or blended cement and one other supplementary cementitious material with a maximum replacement of 40% by weight.

S-40.2 MnDOT 2461.2.B shall be deleted and replaced with the following:

B Aggregates
Provide aggregates from sources listed on the MnDOT Concrete Aggregate Properties list.

B.1 Fine Aggregate.....3126

B.2 Intermediate Aggregate.....3131

B.3 Coarse Aggregate.....3137

S-40.3 MnDOT 2461.2.C shall be deleted.

S-40.4 MnDOT 2461.2.D shall be modified to include the following:

Provide water from potable sources.

The Concrete Engineer will allow clarified water as a substitution for potable water in accordance with the following:

(1) From the Approved/Qualified Products list,
(2) In any concrete defined as MnDOT Grades B, F, G, M, P, and R,
(3) Up to a maximum of 50.0% of total mix water by weight,
(4) Provided the clarified water is identified separately on the Certificate of Compliance.

S-40.5 MnDOT 2461.2.E shall be deleted and replaced with the following:

E Concrete Admixtures.....3113
Provide admixtures from the Approved/Qualified Products list for all concrete grades shown in Table 2461-6 and Table 2461-7.

Use of any of the following admixtures are at the Contractor's discretion:

(1.1) Type A, Water Reducing Admixture
(1.2) Type B, Retarding Admixture
(1.3) Type D, Water Reducing and Retarding Admixture
(1.4) Type F, High Range Water Reducing Admixture
(1.5) Type G, High Range Water Reducing and Retarding Admixture
(1.6) Type S, Specific Performance Based Admixture

Use of the following accelerating admixtures require approval of the Concrete Engineer, in conjunction with the Engineer, unless otherwise allowed in the Contract:

(2.1) Type C, Accelerating Admixture
(2.2) Type E, Water Reducing and Accelerating Admixture

The Engineer will permit the use of Type C or Type E accelerating admixtures when all of the following conditions exist:

(3.1) The ambient temperature is below 36 °F,
(3.2) An Engineer approved cold weather protection plan is in-place, and
(3.3) Cold weather protection materials are on-site and ready for use.

S-40.6 Table 2461-1 of MnDOT 2461.2.F.1 shall be deleted and replaced with the following:

Table 2461-1
Mix Number Identification

First Digit	Second Digit	Third Digit	Fourth Digit	Additional Digits
Type Designation	Grade Designation	Maximum Slump	Coarse Aggregate Gradation Designation	Additional Digits Allowed or as Specified

S-40.7 MnDOT 2461.2.F.1.b shall be deleted and replaced with the following:

F.1.b Grade Designation

The Department will designate concrete grade in accordance with Table 2461-6 and Table 2461-7 using a letter designating the following:

(1) Intended Use
(2) Maximum water/cement (w/c) ratio
(3) Maximum Cementitious Content
(4) Maximum Supplementary Cementitious Substitution (SCM)
(5) Slump range
(6) Minimum 28-day compressive strength, f'c
(7) Coarse Aggregate Quality in accordance with 3137

S-40.8 MnDOT 2461.2.F.1.d shall be deleted and replaced with the following:

F.1.d Coarse Aggregate Gradation Designation

Select the appropriate coarse aggregate gradation designation in accordance with Table 2461-3 based on the intended use and the gradation requirements in 3137, "Coarse Aggregate for Portland Cement Concrete."

Table 2461-3
Coarse Aggregate Designation for Concrete

Designation	Coarse Aggregate Gradation
0	Job Mix Formula (JMF) combination of fine and coarse aggregate
	Table 3137-4, "Coarse Aggregate Designation for Concrete"
1	ASTM #467
2	ASTM #67
3	ASTM #7
4	ASTM #89
7	CA-70
8	CA-80

S-40.9 MnDOT 2461.2.F.1.e shall be deleted and replaced with the following:

F.1.e Additional Concrete Mix Designation Digits

Specialty concrete mixes require additional concrete digits in accordance with Table 2461-6. Use "EX" for exposed aggregate mixes and "CO" for colored concrete mixes. The Contractor may add additional digits to the right of the required digits in the concrete mix number.

S-40.10 MnDOT 2461.2.F.2, 2461.2.F.2.a, and 2461.2.F.2.b shall be deleted and replaced with the following:

F.2 Concrete Mix Design Requirements

The Engineer determines final acceptance of the concrete for payment based on test results, satisfactory field placement and performance.

F.2.a Department Designed Concrete Mixes

The Department will provide mix designs for the concrete defined in Table 2461-4 and Table 2461-5.

F.2.a(1) Department Designed Concrete Requirements

No additional submittal is required for Table 2461-4 mix designs.

Table 2461-4
Department Designed Concrete Mixes

Type of Concrete	Mix Number	Specification	Mix Design Location
Field Batched Patching Mix	3U18	2302	Table 2302-1
Low Slump Concrete	3U17A	2404	Weekly Report of Low Slump Concrete
Bagged Patching Mix	3U18 and 3U58M	3105	Table 3105-1

F.2.a(2) Grout and Lean Mix Backfill

Submit final mix design proportions on the *General Concrete Mix Design Submittal* for Grout and Lean Mix Backfill in accordance with Table 2461-5.

Table 2461-5
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)	%Air Content	Slump Range	Minimum 28-day Compressive Strength, f'c
1AGROUT *	0.50	379	758	0	100% †	0	3.0%	As needed	4000 psi
3AGROUT *	0.44	379	865	0	100% †	0	10.0 %	As needed	4000 psi
Lean Mix ‖	1.00	375	125	250	50% †	50% † ǂ	N/A	10 in ± 1 in	75 – 400 #

* Do not provide grout containing coarse aggregate or fly ash.
‖ Coarse Aggregate Quality meets requirements of 3137.2.D.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 of 27.00 – 27.27 cu. ft.
ǂ Meeting ASTM #67 gradation as shown in Table 3137-4.
Unconfined compressive strength range.

F.2.b Contractor Designed Concrete Mixes

The Contractor will provide concrete mix designs for concrete defined in Table 2461-6 and Table 2461-7 and elsewhere as specified in the Contract.

The Contractor assumes full responsibility for the mix design and performance of the concrete.

F.2.b(1) General Concrete Mix Design Requirements

The Department defines the concrete mix design requirements for Contractor Designed Mixes in accordance with Table 2461-6.

Table 2461-6
Concrete Mix Design Requirements (Not applicable to Mass Concrete)

Concrete Grade	OLD Mix Number	NEW Mix Number	Intended Use *	Maximum w/c ratio †	Maximum Cementitious Content (lbs/yd³)	Maximum %SCM (Fly Ash/ Slag/Ternary)	Slump Range	Minimum 28-day Compressive Strength, f'c	3137 Spec.
B Bridge Substructure	3Y43	3B52 ‡	Abutment, stems, wingwalls, paving brackets, pier columns and caps, pier struts	0.45	750	30/35/40	2 - 5"	4000 psi	2.D.1
F Flatwork	3A22 3Y22	3F32 ‡	Slipform curb and gutter	0.42	750	30/35/0	½ - 3" #	4500 psi	2.D.1
	3A32 3Y32 3A34	3F52 ‡ 3F52EX 3F53EX 3F52CO ‖	Sidewalk, curb and gutter, slope paving, median sidewalk, driveway entrances, ADA pedestrian sidewalk	0.45	750	25/30/0	2 - 5"	4500 psi	2.D.1
G General Concrete	1A43	1G52 ‡	Footings and pilecap	0.55	750	30/35/40	2 - 5"	4500 psi	2.D.1
	3A43 3B42 3Y43	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	2.D.1
M Median Barrier	3Y12	3M12	Slipform barrier, Median barrier, non-bridge	0.42	750	30/35/40	½ - 1" #	4500 psi	2.D.1
	3Y32	3M52	Barrier, Median barrier, non-bridge	0.45	750	30/35/40	2 - 5"	4500 psi	2.D.1
P Piling	1C62	1P62 ‡	Piling, spread footing leveling pad	0.60	750	30/35/40	3 - 6"	3000 psi	2.D.1
R Pavement Rehabilitation	3A32 3B42	3R52 ‡	CPR - Full depth concrete repairs, concrete base	0.45	750	30/35/40	2 - 5"	4000 psi	2.D.3
S Bridge Superstructure	3Y16	3S12	Slipform bridge barrier, parapets, end post	0.42	750	30/35/40	½ - 1" #	4000 psi	2.D.2
	3A32 3A42 3Y43 3Y46 3Y46A	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	2.D.2
X Miscellaneous Bridge	1X62 1X46	1X62	Cofferdam seals, rock sockets, drilled shafts	0.45	750	30/35/40	3 - 6"	5000 psi	2.D.1
	3X46	3X62	Drilled shafts above frost line	0.45	750	30/35/40	3 - 6"	5000 psi	2.D.1
Y Bridge Deck §	3Y33 3Y33A 3Y36 3Y36A	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	2.D.2
	3A37 3Y37	3Y47 **	Deck patching mix	0.45	750	30/35/40	2 - 4"	4000 psi	2.D.2

* If the intended use is not included elsewhere in the Specification or Special Provisions, use mix 3G52, unless otherwise directed by the Engineer.
‖ Identify specific color used on the certificate of compliance. Colored concrete is only allowed when specified in the plans or the Contract.
† The minimum water/cement (w/c) ratio is 0.30.
‡ The Contractor may choose to use the Coarse Aggregate Designation "1" for the 4th digit in accordance with Table 2461-3.
# Adjust slump in accordance with 2461.3.G.7.a for slipform 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 2461-3.

F.2.b(2) High-Early Concrete Mix Design Requirements

The Department defines High-Early (HE) concrete as concrete designed to achieve the minimum strength of 3000 psi for opening at 48 hours. Unless otherwise included in the plans, all HE concrete requires approval of the Engineer prior to incorporation into the work.

The Engineer will allow one of the following methods to determine minimum time to opening:

(1) Field control cylinders in accordance with 2461.3.G.5.c, "Field Control Strength Cylinders."
(2) Maturity method in accordance with 2461.3.G.6, "Estimating Concrete Strength by the Maturity Method."

The Department defines the concrete mix design requirements for High-Early concrete in accordance with Table 2461-7.

Table 2461-7
High-Early (HE) Concrete Requirements
(Not applicable to Bridge Superstructure or Mass Concrete)

Mix Number	Concrete Grades Allowed	Minimum Time to Opening	Maximum w/c ratio	Maximum Cementitious Content (lbs/ yd^3) *	Slump Range	Minimum Strength to Opening	Minimum 28-day Compressive Strength, f'c	3137 Spec.
3HE32	F	48 hrs	0.42	750	1 – 3" ‖	3000 psi	4500 psi	2.D.1
3HE52	B, F, G	48 hrs	0.42	750	2 – 5"	3000 psi	4500 psi	2.D.1
3YHE52	Y (Repairs Only)	48 hrs	0.42	750	2 – 5"	3000 psi	4000 psi	2.D.2
3RHE52	R (Repairs Only)	48 hrs	0.42	750	2 – 5"	3000 psi	4000 psi	2.D.3

* Supplementary Cementitious Materials allowed.
‖ Adjust slump in accordance with 2461.3.G.7.a,"Concrete Placed by the Slip-form Method."

F.2.b(3) Project Specific Mix Design Requirements

Submit project specific contractor designed mixes on the *Project Specific Mix Design Submittal* forms in accordance with Table 2461-8 and the Contract.

Table 2461-8
Project Specific Contractor Designed Mixes

Concrete Grade	Intended Use	Specification	3137 Spec.
A	Concrete Pavement	2301	2.D.3
W and Y	Precast Concrete	2462	Varies
HPC	High Performance Concrete	Special Provision 2401	2.D.2
MC	Mass Concrete	Special Provision 2401	Varies
CLSM	Cellular Concrete Grout	2519	None

S-40.11 MnDOT 2461.2.F.3 shall be deleted and replaced with the following:

F.3 Submittal Requirements

At least 21 calendar days before initial placement of the concrete, submit the appropriate *General Concrete Mix Design Submittal* form to the Concrete Engineer for approval. The Contractor Mix Design Forms are available from the MnDOT Concrete Engineering Website.

Design the concrete mix to an absolute volume of 27.00 – 27.27 cu. ft.

The Concrete Engineer will:

(1) Provide specific gravity and absorption data using oven dry (OD) weights for mix design calculations.
(2) Review the mix design submittal and approve the materials and mix design for compliance with the Specifications.

Table 2461-8 defines the mix design submittal requirements for Level 1 and Level 2 Mixes.

Table 2461-9
Mix Design Submittal Requirements

	SCM Substitution Limits	Fine Aggregate Limit	Gradation Requirements	Preliminary Test Data Requirements	Submittal Package
Level 1 Mixes *	Fly Ash: 0 – 15% Slag: 0 – 35%	40 – 45% of total aggregate by volume	3126 and 3137	None	General Concrete Mix Design
Level 2 Mixes	Fly Ash: > 15% Ternary: Any	None	Use Either: • 3126 and 3137 • Job Mix Formula (JMF)	2461.2.F.3.a	Use Either: • General Concrete Mix Design • General Concrete Mix Design (JMF)
* High Early concrete in accordance with Table 2461-7 is defined as a Level 1 Mix.					

S-40.12 MnDOT 2461.2.F.3.a, 2461.2.F.3.a(1) and 2461.2.F.3.a(2) shall be deleted and replaced with the following:

F.3.a Preliminary Test Data Requirements for Level 2 Mixes

For Level 2 Mixes, submit the proposed Mix Design Proportions on the *General Concrete Mix Design Submittal* based upon either a suitable experience record or conventional trial mixtures not to exceed the limits specified in Table 2461-6 or 2461-7.

F.3.a(1) Suitable Experience Record

A suitable experience record consists of at least 30 consecutive tests, or two groups of consecutive tests totaling at least 30 tests, within the previous 18 months. If the Contractor does not have 30 tests, the Concrete Engineer will consider a minimum of 10 test results representing a time period of at least 45 days.

The Concrete Engineer considers a suitable experience record to have the following characteristics as compared to the proposed mix:

(1) Average compressive strength (f'cr) meeting the required 28-day compressive strength and no greater than 1000 psi above the required 28-day compressive strength,
(2) Same type or grade of cementitious materials,
(3) Same class of coarse aggregate,
(4) Aggregate weights within 10% of the proposed,
(5) Water/Cement ratio no greater than the maximum allowed,
(6) Cementitious or SCM material weights within 5% of proposed, and
(7) Batching conditions and testing procedures similar to those expected for the proposed work.

Submit all test results on the *Strength Test Data* sheet as part of the *Contractor Mix Design Submittal.*

The Concrete Engineer reserves the right to request batching data representing the suitable experience record submittal.

F.3.a(2) Conventional Trial Mixtures

If the Contractor does not have a suitable experience record as required in 2461.2.F.3.a(1) above, establish concrete proportions from trial mixtures, utilizing an AMRL accredited laboratory in accordance with the following:

(a) Use proportions and consistencies required for proposed work at the w/c ratios or cementitious materials content that will produce a strength meeting or exceeding the required 28-day compressive strength *(f'c)* in accordance with Table 2461-6 or 2461-7;
(b) Design trial mixtures to produce slump within ± 0.75 in. of maximum permitted;
(c) For air-entrained concrete, design trial mixtures to produce air content within ± 0.5 percent of maximum allowable air content;
(d) For each w/c ratio or cementitious materials content, make and cure at least three test cylinders for 28-day breaks in accordance with ASTM C 192. For HE concrete mixes, in addition to the 28-day cylinders, make a set of three test cylinders for 48-hour breaks in accordance with ASTM C 192.

Submit all test results for the trial mixtures, certified by the AMRL accredited laboratory, in addition to the *Contractor Mix Design Submittal.*

S-40.13 Table 2461-11 of MnDOT 2461.2.F.4 shall be deleted and replaced with the following:

Table 2461-11
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
	• Aggregate Sources • Aggregate Proportions • Any cementitious or SCM proportion (≤ 15% max fly ash)	Resubmittal of Mix Design
	• Any cementitious or SCM proportion (> 15% max fly ash)	Resubmittal in accordance with 2461.2.F.3.a
Level 2 Mixes	• Admixture Dosage Rate • Cement or SCM sources	No resubmittal required
	• Aggregate Source, no change in Aggregate Class • ≤ 5% in any cementitious or SCM proportion* • ≤ 10% in Aggregate Proportions	Resubmittal of Mix Design
	• Aggregate source and Class of Coarse Aggregate • > 5% in any cementitious or SCM proportion • > 10% Aggregate Proportions • Admixture Sources	Resubmittal in accordance with 2461.2.F.3.a
* Only one (1) increase in cementitious or SCM allowed per mix design, next adjustment requires resubmittal in accordance with 2461.2.F.3.a, "Prelimimary Test Data Requirements for Level 2 Mixes"		

S-40.14 MnDOT 2461.2.G shall be deleted.

S-40.15 The first paragraph of MnDOT 2461.3.A.9 shall be deleted and replaced with the following:

Provide horizontal axial-revolving blade type mixers (single or multiple shaft) in accordance with the applicable requirements for conventional type mixers in accordance with 2461.3.A.1 through 2461.3.A.7 and this subsection.

S-40.16 The first sentence of MnDOT 2461.3.D.1.c shall be deleted and replaced with the following:

Separately measure each type of mixing water on scales or water metering devices containing the following:

S-40.17 The fifth paragraph of MnDOT 2461.3.D.2 shall be deleted and replaced with the following:

Provide and use only sacked cement in the original mill containers unless the Contractor calibrates the mixer for the specific materials in use. Do not use previously opened sacks.

S-40.18 MnDOT 2461.3.F.1.a(2) shall be deleted and replaced with the following:

(2) The Producer will complete MnDOT Form 2163, *Concrete Plant Contact Report,* prior to the on-site inspection with the Department Representative.
- (2.1) A MnDOT Certified Concrete Plant Level 1 or 2 Technician, representing the Producer, signs the *Concrete Plant Contact Report* certifying compliance with the Certified Ready Mix requirements and continual maintenance of the plant to assure that the plant can produce concrete meeting MnDOT Specifications.
- (2.2) A MnDOT Certified Concrete Plant Level 1 or 2 Technician, representing the Department, signs the *Concrete Plant Contact Report* signifying that the plant complies with all requirements prior to concrete production.

S-40.19 MnDOT 2461.3.F.1.a(3) shall be deleted and replaced with the following:

(3) Include a site map showing stockpile locations identified with the MnDOT pit number.

S-40.20 MnDOT 2461.3.F.1.b shall be deleted and replaced with the following:

F.1.b Maintaining Plant Certification

The Producer will maintain plant certification by:

(1) Displaying the current Contact Report and site map in plain sight at all times;
(2) Updating the Contact Report with any material or equipment changes and submitting to the Department;
(3) Sampling and testing the materials in accordance with this section and the requirements of the Schedule of Materials Control;
(4) Documenting the production and testing of the materials used in the certified ready-mix concrete in the QC Workbook;
(5) Making Producer Plant QC Workbook and QC charts available electronically at all times;
(6) Supplying the following information at the request of the Engineer:
- (6.1) Approved mix design sheets,
- (6.2) Agency cementitious and admixture test results,
- (6.3) Agency verification gradation test results,
- (6.4) Aggregate quality test results.

Any procedural changes that cause non-compliance with this program may result in de-certification of the plant and cessation of further production of Department concrete as determined by the Concrete Engineer in accordance with 2461.3.F.4.h, "Certified Ready-Mix Plant Decertification."

S-40.21 MnDOT 2461.3.F.2 shall be modified to include the following:

(21) For colored concrete, final color

S-40.22 The definition for "Mix design water" and "Batch water" in Table 2461-13 of MnDOT 2461.3.F.3 shall be deleted and replaced with the following:

Table 2461-13
Certified Ready-Mix Terminology

Term	Definition
Mix design water	The maximum allowable water content for 1 cu. yd of concrete.
Batch water	Water actually batched into the truck by the batcher. Batch water includes potable water and clarified water.

S-40.23 MnDOT 2461.3.F.4(7) shall be deleted and replaced with the following:

(7) Take cementitious and admixtures samples per Schedule of Materials Control.
(8) Document the following samples in the appropriate Sampling Log:
  (8.1) Cementitious Materials
  (8.2) Admixtures
  (8.3) Verification Gradations
  (8.4) Coarse Aggregate Quality

S-40.24 MnDOT 2461.3.F.4.b. 2461.3.F.4.c, 2461.3.F.4.d, and 2461.3.F.4.e shall be deleted and replaced with the following:

F.4.b Sampling and Testing

Take all samples randomly in accordance with ASTM D 3665, Section 5, at a rate defined in accordance with the Schedule of Materials Control. Perform all sampling and testing in accordance with the Concrete Manual. The Engineer may oversee the QC sampling and testing process.

Perform QC gradation and moisture testing at the certified ready-mix plant site. Use mechanical shakers for sieve analysis. Determine the moisture content using the oven-dry method in all fractions of the aggregate.

Provide equipment and perform calibrations meeting the requirements of the following:

(1) AASHTO T 27, "Sieve Analysis of Fine and Coarse Aggregates,"
(2) AASHTO T 255, "Total Moisture Content of Aggregate by Drying,"
(3) AASHTO M 92, "Wire-cloth Sieves for Testing Purpose," and
(4) AASHTO M 231, "Weighing Devices Used in the Testing of Materials."

F.4.c QC Gradations

Complete the *Concrete Aggregate Worksheet* for each aggregate size and source:

(1.1) QC gradations;
(1.2) Verification Companion Gradations; The Engineer will not allow a Verification Companion Gradation as a substitute for a QC Gradation.

Identify QC companion samples with the following information:

(2.1) Date,
(2.2) Test number,
(2.3) Time,
(2.4) Type of material,
(2.5) Plant, and
(2.6) Sampling location.

F.4.d Aggregate Gradation QC Charts
Complete the *MnDOT Aggregate Gradation Control Charts* for each aggregate size and aggregate source:

(1) Record Producer QC gradation and Department Verification Companion gradation results. These results are included in the moving average calculation.
(2) Record Department Verification Gradation results. These results are not included in the moving average calculation.

F.4.e Moisture Content
Complete the *Batching Report* for each aggregate size and source.

S-40.25 MnDOT 2461.3.F.4.g shall be deleted and replaced with the following:

F.4.g Signing the Certificate of Compliance
The Producer's MnDOT Certified Plant Level 1 or Level 2 technician will:

(1) Review the first Certificate of Compliance for each mix type, each day, for accuracy; and
(2) Legibly hand sign the Certificate of Compliance at a location designated for Producer signature signifying agreement to the terms of this program and to certify that the materials comply with the requirements of the Contract; and
(3) Write their MnDOT Technical Certification Number next to their signature.

S-40.26 MnDOT 2461.3.F.4.h shall be deleted and replaced with the following:

F.4.h Certified Ready-Mix Plant Decertification
The Concrete Engineer, with coordination from the Engineer, may decertify the plant and halt production of concrete under any of the following conditions:

(1) Unauthorized procedural, material, or equipment changes made after the completion of the Concrete Plant Contact Report,
(2) Failure to meet the required testing rates,
(3) Failure to complete required documents,
(4) Disregards any of the requirements of this section, and
(5) Falsification of test records or certificates of compliance.

S-40.27 MnDOT 2461.3.F.5 shall be deleted and replaced with the following:

F.5 Quality Assurance (QA)
The Engineer's responsibilities include the following:

(1) Confirm the Producer's QC Workbook and aggregate gradation quality charts are accurate and up-to-date;
(2) Check Certificate of Compliance for completeness and accuracy;
(3) Spot check the actual batching of concrete to verify batch weights and tolerances;
(4) Check the bins and stockpiles for segregation, contamination, and interblending of the aggregates;
(5) Obtain Aggregate Quality samples per Schedule of Materials Control;
(6) Observe Producer's Certified Technician obtain aggregate samples and run gradation and moisture tests when possible;
(7) Verify cement, fly ash, and admixtures are certified and approved;
(8) Obtain cement, fly ash, and admixtures samples per the Schedule of Material Control;
(9) Provide the following test results to the Producer in a timely manner:
  (9.1) Cementitious Materials
  (9.2) Admixtures

(9.3) Verification Gradations
(9.4) Coarse Aggregate Quality

S-40.28 The first paragraph of MnDOT 2461.3.G.1 shall be deleted and replaced with the following:

Notify the Engineer at least 24 h before beginning concrete production to allow the Engineer time to provide inspection forces needed for the work and to approve preparations for concrete placement. If the Contractor fails to provide 24 h notice, the Engineer may delay concrete placement and will consider any concrete incorporated into the work as unauthorized in accordance with 1512.2, "Unauthorized Work." The Engineer will consider any delays to the Contract resulting from unauthorized work as non-excusable in accordance with 1806.2.C, "Non-Excusable Delays."

S-40.29 MnDOT 2461.3.G.2 shall be deleted and replaced with the following:

G.2 Placement Temperatures
Maintain concrete temperature from 50 °F to 90 °F until placement.

Unless Engineer approved cold weather protection plans are in –place, do not place concrete when the air temperature is either of the following at the point of placement:

(1) Below 36 °F, or
(2) The National Weather Service predicts the temperature to fall below 36 °F within the following 24 h period.

S-40.30 MnDOT 2461.3.G.4 shall be deleted and replaced with the following:

G.4 Field Adjustments
Mix the load a minimum of 5 min or 50 revolutions at mixing speed after addition of admixture or water.

G.4.a Water Adjustments
The Engineer will allow water adjustments in accordance with all the following:

(1) Prior to discharging approximately 1 cubic yard of concrete,
(2) Water available to add stated on the Certificate of Compliance, and
(3) Concrete is within 60 min from the initial batch time stated on the Certificate of Compliance.

G.4.b Water Adjustments for Concrete Placed by the Slip-Form Method
The Engineer will allow water adjustments for all grades of concrete placed by the slip-form method, except Grade A paving concrete, in accordance with all of the following:

(1) If water is available to add as stated on the Certificate of Compliance.
(2) Concrete is within 60 min from the initial batch time stated on the Certificate of Compliance.

G.4.c Admixture Adjustments
Approved admixture additions are allowed within 90 min from the initial batch time stated on the Certificate of Compliance. If the load of concrete has no available water to add, or the load is greater than 60 minutes old, the Engineer will allow one admixture adjustment diluted with up to 2 gallons of water.

G.4.d Consistency and Air Content Adjustments
The Engineer will test the concrete for compliance with 2461.3.G.7, "Consistency," and 2461.3.G.8, "Air Content," in accordance with the following:

(1) If the first test taken by the Engineer passes, the Engineer will continue verification testing in accordance with the Schedule of Materials Control.
(2) If the test taken by the Engineer fails, make adjustments and perform any quality control testing before the Engineer performs a final test. Acceptance or rejection of the truck is based on the Engineer's final test result.
(3) The Engineer will test up to two additional trucks in accordance with items (1) and (2) above, and
(4) If the concrete does not meet the specification after those three trucks, the Engineer will reduce their verification testing rate to once per truck for acceptance for the remainder of the pour.

For concrete mixes 3U17A and 3U18, allow mix to hydrate 5 min before slump test to assure all cement is saturated.

S-40.31 MnDOT 2461.3.G.5, 2461.3.G.5.a, 2461.3.G.5.b and 2461.3.G.5.c shall be deleted and replaced with the following:

G.5 Test Methods and Specimens

Perform random sampling and testing in accordance with the Concrete Manual and determine testing rates meeting the requirements of the Schedule of Materials Control.

The Engineer performs random sampling and testing in accordance with the Concrete Manual, determines testing rates meeting the requirements of the Schedule of Materials Control.

Anyone fabricating concrete cylinders or beams is required to hold either a current ACI Field 1 Technician Certification or a MnDOT Field 1 Technician Certification.

Anyone performing concrete strength testing of cylinders is required to hold one of the following current certifications:

(1.1) ACI Strength Testing Technician Certification,
(1.2) MnDOT Strength Testing Technician Certification, or
(1.3) WisDOT Strength Testing Technician Certification.

The Engineer will furnish molds based on the maximum size aggregate for the test specimens in accordance with the following:

(2.1) 4 in × 8 in cylinder molds,
(2.2) 6 in × 12 in cylinder molds for maximum aggregate sizes greater than 1¼ in, and
(2.3) 6 in × 6 in × 20 in beam molds; use other beam mold sizes as approved by the Engineer.

The Engineer will transport the cylinders in accordance with the following:

(3.1) A minimum of at least 16 hours after casting.
(3.2) A minimum of at least 12 hours after casting for high early strength (28-day) cylinders.
(3.3) With securely placed tight fitting plastic caps on plastic molds, or by other methods to prevent moisture loss.
(3.4) Protected from jarring, bouncing, and freezing.
(3.5) No greater than 4 hours, unless cylinders are maintained in the moistened condition at ambient temperature of 60 °F to 80 °F.

G.5.a Moist Curing Environments

At least 24 hours prior to concrete placement, provide moist curing environment(s) of adequate size and number, including all ancillary equipment and materials, necessary to maintain moist curing environment(s) in accordance with ASTM C31, 2031.3.C, "Special Requirements," and the following:

For each separate moist curing environment:

(1) Provide a calibrated waterproof digital temperature recording device that records the daily maximum and minimum ambient temperatures for the previous 7 days.
(2) Maintain the standard (28-day) strength cylinders or beams in an ambient temperature range from 60 °F to 80 °F during the initial and intermediate curing periods.

The Engineer will monitor the daily temperatures of the curing environments. Agency monitoring does not relieve the Contractor of the responsibility to maintain the water temperature as specified herein.

If the Contractor fails to comply with the requirements shown here-in, the Engineer may delay concrete placement and will consider any concrete incorporated into the work as unauthorized in accordance with 1512.2, "Unauthorized Work." The Engineer will consider any delays to the Contract resulting from unauthorized work as non-excusable in accordance with 1806.2.C, "Non-Excusable Delays."

All costs related to providing and maintaining moist curing environments is considered incidental.

G.5.b Standard (28-day) Strength Cylinders

The Engineer will perform the following for standard strength cylinders:

(1.1) Cast cylinders (sets of 3) for testing at 28 days in accordance with the Schedule of Materials Control.
(1.2) Mark cylinders for identification of the represented unit or section of concrete in accordance with the following: (1.1, 1.2, 1.3/ 2.1, 2.2, 2.3/ 3.1, 3.2, etc.). In order to differentiate between portions of a project, prefixes and suffixes are allowed.
(1.3) Cure the cylinders meeting the requirements of the 2461.3.G.5.a, "Moist Curing Environments."
(1.4) Complete the MnDOT Concrete Cylinder Identification Card including the results for air content, slump (if required), concrete, and air temperature testing from the same load.

The Concrete Engineer defines the curing period as the following:

(2.1) **Initial curing period** as immediately after final finishing for a period of up to 48 hours. After the initial curing period, the Engineer will both transport and further cure the cylinders in the provided curing tanks for intermediate curing up to 7 days from the day of casting or deliver directly to the laboratory for final curing.
(2.2) **Intermediate Curing Period** as the time between specimen pickup from the initial curing site and delivery to the laboratory for final curing, not to exceed 7 days from the day of casting.
(2.3) **Final Curing Period** as the time when cylinders are cured in the laboratory within 7 days of casting.

S-40.32 MnDOT 2461.3.G.5.c shall be deleted and replaced with the following:

G.5.c Field Control Strength Cylinders

The Engineer will use field control cylinders to determine when the sequence of construction operations is dependent upon the rate of concrete strength development. The Engineer will cast field control cylinders to determine when the concrete attains the required strength for all desired field control limitations.

The Engineer will perform the following for field control strength cylinders:

(1) Cast up to three (3) field control cylinders per structure. The Contractor is responsible for any additional field control cylinders.
(2) Mark field control cylinders for identification of the represented unit or section of concrete in accordance with 2461.3.G.5.a(2).

(3) Cure the cylinders in the same location and under the same conditions as the concrete structure or unit involved meeting the requirements of the Concrete Manual,

(3.1) For High-Early (HE) Concrete as defined in Table 2461-7, the Engineer will allow the Contractor to cure field control cylinders using insulated cylinder storage compartment. Provide insulated storage compartments and any equipment necessary to continually monitor temperatures of both the newly poured concrete structure and the insulated cylinder storage compartment. Maintain the insulated storage compartment at a temperature no greater than 5 °F above the newly poured concrete structures temperature. When the temperature exceeds 5 °F or the temperature monitoring system fails, the Engineer will not accept field control cylinder results.

(4) Complete the MnDOT Concrete Cylinder Identification Card including the results for air content, slump (if required), concrete, and air temperature testing from the same load.

During the Departments normal laboratory operating hours, the Engineer will perform compressive strength testing on the field control cylinders. If Project scheduling requires testing outside of the Departments' laboratories normal operating hours or the Department's nearest laboratory is greater than 30 miles from the project; Provide certified and calibrated hydraulic cylinder-testing machine within 30 miles of the project and at a location approved by the Engineer. Test the field control cylinders in the presence of the Engineer in accordance with ASTM C39.

The Engineer will allow the Contractor to submit a strength-maturity relationship curve for use in lieu of field control cylinders in accordance with 2461.3.G.6, "Estimating Concrete Strength by the Maturity Method."

S-40.33 MnDOT 2461.3.G.5.e, 2461.3.G.5.e(1), 2461.3.G.5.e(2), 2461.3.G.5.e(3), and 2461.3.G.5.e(4) shall be deleted and replaced with the following:

G.5.e Concrete Compressive Strength

The Concrete Engineer defines a single **strength test** as the average (28-day) strength of three (3) cylinders fabricated from a single sample of concrete and cured in accordance with the Concrete Manual.

If 1 of the set of 3 cylinders shows a strength variability of greater than 10% outside of the initial calculated three cylinder average strength, the Engineer will average the remaining two cylinders and report as the 28-day compressive strength.

If 2 or more of the set of 3 cylinders shows a strength variability greater than 10% outside of the initial calculated average strength, the Engineer will use all three cylinder results to calculate the 28-day compressive strength.

The Engineer will consider concrete acceptable in accordance with Table 2461-17 provided **both** the single strength test and the moving average of 3 consecutive strength tests are met for a required f'c.

Table 2461-17
Acceptance Criteria for Standard 28-day Cylinders

	Single Strength tests	**Moving average of 3 consecutive strength tests ***
f'c ≤ 5000 psi	> (f'c – 500 psi)	≥ f'c
f'c > 5000 psi	> 0.90 * f'c	≥ f'c

* If a project does not establish a moving average of 3 consecutive strength tests, use the average of 2 strength tests to determine acceptance. If there is only a single strength test, contact the Concrete Engineer for recommendation.

S-40.34 MnDOT 2461.3.G.5.f, 2461.3.G.5.f(1), 2461.3.G.5.f(2), 2461.3.G.5.f(3), and 2461.3.G.5.f(4) shall be added:

G.5.f Non-Conforming Material

If the Contractor places concrete not meeting the strength requirements of 2461.3.G.5.e, "Concrete Compressive Strength" into the work, the Engineer may not accept nonconforming concrete at the contract unit price. The Engineer will evaluate non-conforming strength results in accordance with the following:

G.5.f(1) Single Strength Test ≤ 500 psi Below f'c

If any single strength test (3 cylinders) shows a strength ≤ 500 psi below f'c and is not deficient due to erroneous/invalid strength tests as defined in 2461.3.G.5.f(4), "Moving Average Below f'c", no additional investigation will occur and the Engineer will include the low strength test result in the moving average.

G.5.f(2) Single Strength Test > 500 psi Below f'c

If any single strength test (3 cylinders) shows a strength > 500 psi below f'c and is not deficient due to erroneous/invalid strength tests as defined in 2461.3.G.5.f(4), "Moving Average Below f'c", the Engineer, in conjunction with the Concrete Engineer, will investigate to determine if the concrete has attained the critical load-carrying capacity.

The investigation may consist of, but is not limited to reviewing the following:

(1) Sampling and testing plastic concrete
(2) Handling of cylinders
(3) Cylinder curing procedures
(4) Compressive strength testing procedures
(5) Certificate of Compliances
(6) Evaluation using Rebound Hammer (ASTM C803), Penetration Resistance (ASTM C805), or other method approved by the Concrete Engineer
(7) Review of the design calculations for the concrete in question

If it is determined that the concrete represented by the single strength test has attained the critical load carrying capacity, the Engineer will include the strength test in the moving average calculation.

If it is determined that the concrete has not attained the critical load carrying capacity, the Engineer will direct the Contractor to remove and replace concrete in accordance with 1503, "Conformity with Contract Documents," and 1512, "Unacceptable and Unauthorized Work." The Contractor may dispute the remove and replace order within 7 days of written notification by the Engineer. If the Contractor disputes the order, follow the dispute resolution coring procedure in accordance with 2461.3.G.5.f(3), "Dispute Resolution Coring for Single Strength Test Failure."

G.5.f(3) Dispute Resolution Coring for Single Strength Test Failure

The Engineer and Contractor will mutually agree on an Independent Third Party to core and test the concrete in accordance with ASTM C42.

(1) The Engineer will identify a minimum of three (3) locations for the Independent Third Party to core.
(2) The Independent Third Party will take one (1) core at each location.
(3) The Independent Third Party will complete all coring within 14 days of notification of the low strength concrete.
(4) The Contractor is responsible for ensuring the core holes are repaired.

The Engineer, in conjunction with the Concrete Engineer, will review the core test results and evaluate in accordance with Table 2461-18, providing all other concrete tests meet requirements.

Table 2461-18 Evaluation of Core Test Results			
Core (average of 3 cores) Test Results:	**Engineer considers concrete:**	**Cost of Coring and Testing:**	**Resolution:**
≥ 85% of f'c and No individual core is < 75% of f'c	Acceptable to remain in place	Agency	No monetary reduction for single strength test failure.
< 85% of f'c	Unacceptable	Contractor	Remove and replace concrete in accordance with 1503, "Conformity with Contract Documents," and 1512, "Unacceptable and Unauthorized Work," as directed by the Engineer.

G.5.f(4) Moving Average Below f'c

If the moving average of three (3) consecutive strength tests < f'c, the Concrete Engineer will review the strength test results and determine if a new mix design is required in accordance with Table 2461-6 or Table 2461-7.

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

(1.1) After investigation the deficient concrete strength is found to be an erroneous/invalid strength test
(1.2) The suspect concrete was removed and replaced
(1.3) Dispute resolution coring identified the concrete acceptable to remain in place

Reasons for finding erroneous test results as determined by the Concrete Engineer:

(2.1) Cylinders kept in the field longer than 7 days,
(2.2) Improper handling/curing of the cylinders, and/or
(2.3) Improper testing of the cylinders

For the quantity of non-conforming concrete not meeting the moving average of three (3) consecutive strength tests, the Engineer will make determinations regarding the disposition, payment, or removal of the concrete in accordance with Tables 2461-19.

Table 2461-19 All Concrete Grades	
Moving average of 3 consecutive strength tests	Monetary Reduction for Moving Average Failure *
> 93.0% of f'c	$20.00 per cubic yard or 10% of the Contractor-provided invoice for quantity represented by test that brought moving average into non-conformance

Table 2461-19 All Concrete Grades	
Moving average of 3 consecutive strength tests	Monetary Reduction for Moving Average Failure *
≥ 87.5% and ≤ 93.0% of f'c	$50.00 per cubic yard or 25% of the Contractor-provided invoice for quantity represented by test that brought moving average into non-conformance
< 87.5% 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% of the Contractor-provided invoice for quantity represented by test that brought moving average into non-conformance.

S-40.35 MnDOT 2461.3.G.6.a and 2461.3.G.6.a(1) shall be deleted and replaced with the following:

G.6.a Development of Maturity-Strength Relationship

The Engineer will allow development of the maturity curve in either the laboratory or in the field, provided the precautions for field curing and testing are followed, as described in the Concrete Manual. Test the concrete strength specimens for development of the maturity curve.

Determine the strength development criteria based on the type of concrete in accordance with the following:

(1) For concrete pavement: 2301.3.O, "Opening Pavement to Traffic,"
(2) For concrete pavement repairs: 2302.3.B.4, "Opening to Construction Equipment and Traffic,"
(3) For concrete structures: 2401.3.G, "Concrete Curing and Protection"
(4) For sidewalks, driveway entrances and curb and gutter, a minimum of 3000 psi [20.6 MPa] is required.

Until an acceptable strength-maturity relationship is established, verify strength using concrete beams or cylinders.

G.6.a(1) Procedure

Estimate the in-place concrete strength using the maturity method as described in ASTM C 1074, except as noted in this specification as follows:

(a) Fabricate 15 cylinders plus 2 additional cylinders to embed temperature sensors or 15 beams;
(b) The Nurse-Saul method of computing maturity;
(c) A datum temperature of -10°C (14°F);
(d) Maintain specimens at temperatures greater than 50° F for the duration of the maturity curve development.

Test three (3) strength specimens at five different ages specified in Table 2461-20 for the type of concrete work.

Table 2461-20 Chronological Testing Ages of Strength Specimens	
Type of Concrete	**Testing Ages ***
Concrete Pavement as defined in 2301	Determined by the Contractor ‖
Normal Strength Concrete as defined in 2461	1, 2, 3, 7 and 28 days
High-Early (HE) Concrete as defined in 2461	12 hours, 1, 2, 7 and 28 days
Ultra High-Early (UHE) Concrete as defined in 2302	3, 4 and 8 hours, 1 and 14 days
* The Contractor may adjust the testing ages if approved by the Engineer, in conjunction with the Concrete Engineer. ‖ Test at least two (2) sets of strength specimens before the anticipated opening strength.	

S-40.36 The first paragraph of MnDOT 2461.3.G.6.c shall be deleted and replaced with the following:

Perform a verification strength test to ensure the in-place concrete strength correlates with the maturity-strength relationship as follows:

(1) Notify the Engineer at least 24 hours in advance of the time and location of both the verification specimen's casting and strength testing.
(2) When the maturity curve is developed prior to the start of construction or in a laboratory, perform a verification strength test on the first day of concrete placement.
(3) Perform a verification strength test at least once every seven (7) calender days during normal plant production for concrete paving. For all other concrete, perform a verification strength test at least once every thirty (30) calendar days during normal plant production.
(4) If the plant has not supplied concrete to the project for a period of greater than thirty (30) calendar days, perform a verification strength test.
(5) Cast 3 cylinders plus one additional cylinder to embed the temperature sensor or 3 beams for each verification strength test.
(6) The Engineer will test the concrete strength specimens for verification of the maturity curve as close to the maturity value determined to represent the opening, loading or form removal strength criteria in accordance with the Concrete Manual.
(7) Record the results of verification test on the *Concrete Maturity-Strength Verification* form and submit an updated copy with the newest test result to the Engineer the day that the verification test is completed.
(8) The Engineer may direct additional verification testing as necessary.
(9) Submit electronic data from the maturity meters or temperature loggers in a comma-delimited (.txt or .csv) file format to the Engineer, which includes at least the project number, date and location of the meters or loggers.

S-40.37 MnDOT 2461.3.G.6.d(4), 2461.3.G.6.d(5) and 2461.3.G.d(6) shall be deleted.

S-40.38 MnDOT 2461.3.G.7.b, Table 2461-25 and Table 2461-26 shall be deleted and replaced with the following:

G.7.b Non-Conforming Material

Only place concrete meeting the slump requirements in the work. If the Contractor places concrete not meeting the slump requirements into the work, the Engineer will not accept non-conforming concrete at the contract unit price.

For the quantity of non-conforming concrete not meeting the required slump, the Engineer will make determinations regarding the disposition, payment, or removal of the concrete in accordance with Tables 2461-23 and 2461-24.

Table 2461-23 All Concrete Grades > 1 in slump	
Outside of Slump Range	**Monetary Reduction**
Below slump range *	No deduction for materials placed as approved by the Engineer.
≤ 1½ in above slump range	$20.00 per cubic yard or 10% of the Contractor-provided invoice for quantity represented by the materials placed
> 1½ in above slump range	$50.00 per cubic yard or 25% of the Contractor-provided invoice for quantity represented by the materials placed
* The Engineer will not reduce contract unit price for low slump concrete placed with the slip-form method as approved by the Engineer.	

Table 2461-24 Low Slump Concrete From ½ in to 1 in	
Outside of Slump Range	**Monetary Reduction**
Below slump range *	No deduction for materials placed as approved by the Engineer
≤ ½ in above slump range	$20.00 per cubic yard or 10% of the Contractor-provided invoice for quantity represented by the materials placed
≥ ¾ in above slump range	$50.00 per cubic yard or 25% of the Contractor-provided invoice for quantity represented by the materials placed
* The Engineer will not reduce contract unit price for low slump concrete placed with the slip-form method as approved by the Engineer.	

S-40.39 MnDOT 2461.3.G.8.a shall be deleted and replaced with the following:

G.8.a Non-Conforming Material

Only place Type 3 concrete meeting the air content requirements in the work. If the Contractor places Type 3 concrete not meeting the air content requirements into the work, the Engineer will not accept non-conforming concrete at the contract unit price.

For the quantity of non-conforming concrete not meeting the required air content, the Engineer will make determinations regarding the disposition, payment, or removal in accordance with Table 2461-27.

Table 2461-27 All Concrete (Target Air Content 6.5%)	
Air Content, %	**Monetary Reduction**
> 10.0	$50.00 per cubic yard or 25% of the Contractor-provided invoice for quantity represented by the materials placed
>8.5 – 10.0	$20.00 per cubic yard or 10% of the Contractor-provided invoice for quantity represented by the materials placed
5.0 – 8.5	The Engineer will pay 100 percent of the contract unit price for the concrete represented, for material placed as approved by the Engineer.
>4.0 – <5.0	$50.00 per cubic yard or 25% of the Contractor-provided invoice for quantity represented by the materials placed
>3.5 – ≤4.0	The Engineer, in conjunction with the Concrete Engineer will determine the concrete suitability for the intended use in accordance with 1503, "Conformity with Contract Documents," and 1512, "Unacceptable and Unauthorized Work." This may include testing on the hardened concrete as required by the Engineer, in conjunction with the Concrete Engineer.

Table 2461-27 All Concrete (Target Air Content 6.5%)	
Air Content, %	**Monetary Reduction**
≤ 3.5	Remove and replace concrete in accordance with 1503, "Conformity with Contract Documents," and 1512, "Unacceptable and Unauthorized Work," as directed by the Engineer. This may include testing on the hardened concrete as required by the Engineer, in conjunction with the Concrete Engineer. If the Engineer, in conjunction with the Concrete Engineer, determines the concrete can remain in place, the Engineer may not pay for the concrete and may require coating with an approved epoxy penetrant sealer from the Approved/Qualified Products List.

S-40.40 MnDOT 2461.3.G.9 shall be deleted and replaced with the following:

G.9 Allowable Testing Tolerances

Allowable tolerances are based on the results from two different testers and two different pieces of equipment from the same sample. Perform the test within the allowable tolerances in accordance with Table 2461-28.

Table 2461-28 Allowable Testing Tolerances	
Test	**Allowable Tolerance**
Air content, % volume of concrete	1.0 %
Average slump:	
< 4 in	1.0 in
4 in – 6 in	1.5 in
> 6 in	2.0 in
Unit weight, per cu. ft, calculated to an air-free basis	1.0 lb/cu. ft
Compressive strength 3,000 psi – 8,000 psi, average of 3 tests	500 psi

S-41 (2540) MAIL BOX SUPPORT

SP2016-196

This work shall consist of removing existing mailbox supports and furnishing and installing new Mail Box Supports in accordance with the applicable MnDOT Standard Specifications, Standard Plate 9350A, and the following:

S-41.1 It is the Contractor's responsibility to coordinate with property owners and the local postal authority as to establishing and installing permanent mailbox location(s).

S-41.2 The inplace mail box, or a new mail box if furnished by the owner, attached distribution box and/or sign, if present, shall be salvaged and installed on the new support. The inplace support shall be removed with as little damage as possible and offered to the property owner. If the owner does not want the support the Contractor shall dispose of it off the Right-of-Way in accordance with MnDOT 2104.3D3. All depressions resulting from removal process shall be filled.

S-42 (2540) RELOCATE MAIL BOX SUPPORT

SP2016-197

This work shall consist of relocating existing mailbox supports in accordance with the applicable MnDOT Standard Specifications, Standard Plate 9350A, and the following:

S-42.1 It is the Contractor's responsibility to coordinate with the local postal authority as to where the temporary location(s) shall be and to notify the postal patrons of the locations.

S-42.2 The inplace mail box, or a new mail box if furnished by the owner, attached distribution box and/or sign, if present, shall be salvaged and installed at the new location as staked in the field by the Contractor. **The contractor shall be responsible to replace mail boxes to existing mailbox supports once construction is completed.** All depressions resulting from the relocation process shall be filled.

All relocation operations shall be done in such a manner so as to cause no interruption of mail delivery if at all possible. In no case shall the owner or resident be without a mailbox installation for more than 24 hours.

S-42.3 Measurement will be made by the number of Mail Box Supports relocated, as specified in the Plan. Payment will be made under Item 2540.602 (Relocate Mail Box Support) at the Contract bid price per each, which shall include but not be limited to all items as specified above, except those that the Contract specifically designates as having been included for payment under separate items.

S-43 (2573) EROSION CONTROL SUPERVISOR

Section 2573.5H is deleted and replaced by the following:

S-43.1 **H Erosion Control Supervisor**

No measurement will be made of the various duties that the Erosion Control Supervisor performs or of the number of hours required, but all such work will be construed to be included in the single Lump Sum Payment under Item 2573.550 (Erosion Control Supervisor). Upon satisfactory completion of at least half of the anticipated Project duration time, the Engineer may authorize partial payment not exceeding 50 percent of the Contract bid price. Project duration time is estimated as the time between the actual Project start date and the Project completion date. The remaining percentage will be paid upon completion of the Project.

S-44 (2575) ESTABLISHING TURF AND CONTROLLING EROSION

REVISED 11/06/15
SP2016-245

MnDOT 2575 is modified as follows:

S-44.1 The provisions of MnDOT 2575.5(L), "Payment Schedule" are modified as follows:

L Payment Schedule

The Department will pay for establishing and maintaining turf and controlling erosion on the basis of the following schedule:

Item No.:	Item:	Unit:
2575.501	Seeding	acre [hectare]
2575.502	Seed, Mixture ___, or (Species)	pound [kilogram]
2575.505	Sod, Type ___	square yard [square meter]
2575.511	Mulch Material, Type ___	ton [metric ton]
2575.513	Mulch Material, Type ___	cubic yard [cubic meter]
2575.515	Mulch Material, Type 4	square yard [square meter]
2575.518	Temporary Poly Covering	square yard [square meter]
2575.519	Disk Anchoring	acre [hectare]
2575.523	Erosion Control Blanket, Category ___*	square yard [square meter]
2575.525	Turf Reinforcement Mat, Category ___	square yard [square meter]
2575.526	Compost Blanket	square yard [square meter]
2575.527	Shoulder Mulch Overspray	pound [kilogram]
2575.535	Water	M gallons [cubic meter]
2575.541	Mowing	acre [hectare]
2575.545	Weed Spraying	acre [hectare]
2575.547	Weed Spray Mixture	gallon [liter]

Item No.:	Item:	Unit:
2575.555	Turf Establishment	lump sum
2575.560	Hydraulic ___ Tackifier	pound [kilogram]
2575.560	Hydraulic ___ Matrix	pound [kilogram]
2575.561	Hydraulic ___ Tackifier	square yard [square meter]
2575.561	Hydraulic ___ Matrix	square yard [square meter]
2575.570	Rapid Stabilization Method 1	acre [hectare]
2575.570	Rapid Stabilization Method 2	acre [hectare]
2575.571	Rapid Stabilization Method 3	M gallons [cubic meter]
2575.572	Rapid Stabilization Method 4	square yard [square meter]
2575.573	Rapid Stabilization Method 5	ton [metric ton]

* If maintenance applies, the Department will place the subnote, "Includes Maintenance" on the pay item shown in the summary of quantities on the plans.

S-44.2 The following is added to MnDOT 2575.5:

M Unit Prices

The Department will pay the following unit prices for temporary erosion control items in the absence of a Contract bid price:

Disc anchoring ..... $45.00/ acre ($110.00/ hectare)
Temporary Seed Mixtures
- 21-111, 21-112 or 21-113 ..... $1.25/ pound ($2.50 /kilogram)
- 22-111 ..... $2.00 /pound ($4.44/ kilogram)

Erosion Control Blanket
- Category 3N ..... $1.80/square yard ($2.15/ square meter)
- Category 4N ..... $2.10/square yard ($2.51/ square meter)

Rapid Stabilization
- Method 1 ..... $465.00/acre ($1162.5/hectare)
- Method 2 ..... $800.00/acre ($1976.75/hectare)
- Method 3 ..... $726.00/M gallon ($149.5/cubic meter)
- Method 4 ..... $1.84/sq yd ($2.20/square meter)

Hydraulic mulch $1.86/lb ($3.33/kilogram)
Hydraulic Stabilized Fiber Matrix $1.81/lb ($4.4/kilogram)
Hydraulic Reinforced Fiber Matrix $1.77/lb ($4.4/kilogram)
Water ..... $17.00/M gallon ($0.53/cubic meter)
Mowing ..... $160.00/ acre ($400.00/hectare)
Weed Spraying ..... $60.00 /acre ($150.00/hectare)

S-45 (3126) FINE AGGREGATE FOR PORTLAND CEMENT CONCRETE

NEW WRITEUP 02/07/17
SP2016-251.1

MnDOT 3126 is hereby modified as follows:

S-45.1 MnDOT 3126.2 shall be deleted and replaced with the following:

3126.2 REQUIREMENTS

A General

Provide fine aggregate consisting of clean, sound, durable particles, uniform in quality and free from wood, bark, roots and other deleterious material.

The Engineer may consider the following as the basis for acceptance of fine aggregate for portland cement concrete:

(1) Results of laboratory tests,
(2) Behavior under natural exposure conditions,
(3) Behavior of portland cement concrete with aggregate from the same or similar geological formations or deposits, and
(4) Any other tests or criteria as deemed appropriate by the Engineer in conjunction with the Concrete Engineer.

Provide fine aggregate from natural sand. If producing fine and coarse aggregates simultaneously from natural gravel deposits during the same operation, the Contractor may provide fine aggregate containing particles of crushed rock with the approval of the Concrete Engineer.

B Quality

B.1 Washing

Wash the fine aggregate.

B.2 Deleterious Material

Provide fine aggregate containing a cumulative quantity of deleterious materials in accordance with Table 3126-1.

Table 3126-1
Deleterious Materials

Quality Test	Maximum Percent by Weight
Shale, Alkali, Mica, and Soft and Flaky Particles, Cumulative Total	2.5
Coal and Lignite, Cumulative Total	0.3

B.3 Organic Impurities

Provide fine aggregate free of injurious quantities of organic impurities. The Concrete Engineer will reject aggregates that produce a color darker than the standard color when tested in accordance with AASHTO T 21, unless the mortar specimens pass the mortar strength requirements specified in 3126.2.B.4, "Structural Strength."

B.4 Structural Strength

The Engineer will test the structural strength of fine aggregate in mortar specimens in accordance with AASHTO T 71 and Table 3126-2. The Engineer will prepare control mortar specimens using Ottawa sand with a Fineness Modulus (FM) from 2.30 to 2.50 for comparison with the proposed fine aggregate.

Table 3126-2
Structural Strength in Fine Aggregate

Mortar Specimens Containing:	Compressive Strength
Type I/II Portland Cement	≥ 90% of control at 7 days
Type III Portland Cement	≥ 90% of control at 3 days

C Gradation Requirements

Produce fine aggregate in accordance with the gradation requirements in Table 3126-3.

Table 3126-3
Fine Aggregate Gradation Requirements

Sieve Size	Percent Passing*
⅜ in	100
No. 4	95 – 100
No. 8	80 – 100

Table 3126-3 Fine Aggregate Gradation Requirements	
Sieve Size	**Percent Passing***
No. 16	55 – 85
No. 30	30 – 60
No. 50	5 – 30
No. 100	0 – 10
No. 200	0 – 2.5
* Percent passing by weight through square opening sieves.	

D Requirements for Uniformity of Grading

The uniformity of grading is determined by the Fineness Modulus (FM) of the fine aggregate.

Both the Engineer and Contractor will determine the FM of fine aggregate in accordance with the MnDOT Concrete Manual. The established FM is available on the MnDOT Concrete Engineering website.

Maintain the FM of the fine aggregate between 2.3 and 3.1. Do not allow the material to deviate from the FM by greater than 0.20. Contact the Engineer, in conjunction with the Concrete Engineer, for an adjustment if the FM approaches the tolerance limit.

S-46 (3131) INTERMEDIATE AGGREGATE FOR PORTLAND CEMENT CONCRETE

NEW WRITEUP 02/07/17

SP2016-251.2

MnDOT 3131 is deleted and replaced with the following:

3131 INTERMEDIATE AGGREGATE FOR PORTLAND CEMENT CONCRETE

3131.1 SCOPE

Provide intermediate aggregate for use in portland cement concrete.

The Concrete Engineer classifies intermediate aggregate as an aggregate fraction with a maximum size of ½ inch. The Contractor may combine intermediate aggregates with other aggregates to create a Job Mix Formula (JMF).

3131.2 REQUIREMENTS

A General

Provide intermediate aggregate consisting of clean, sound, durable particles, uniform in quality, and free from wood, bark, roots, and other deleterious material.

The Engineer, in conjunction with the Concrete Engineer, may consider the following as the basis for acceptance of intermediate aggregate for portland cement concrete:

(1) Results of laboratory tests,
(2) Behavior under natural exposure conditions,
(3) Behavior of portland cement concrete with aggregate from the same or similar geological formations or deposits, and
(4) Any other tests or criteria as deemed appropriate by the Engineer, in conjunction with the Concrete Engineer.

B Classification

Provide intermediate aggregate meeting the requirements of 3137.2.B.

Table 3131-1 designates the intermediate aggregate as one of the following:

(1) Coarse Intermediate Aggregate (CIA)
(2) Fine Intermediate Aggregate (FIA)
(3) Coarse Sand (CS)
(4) Fine Sand (FS)

Table 3131-1
Intermediate Aggregate Designations for Concrete,
percent by weight passing square opening sieves

Sieve Sizes	Intermediate Aggregate Designation			
	Coarse Intermediate Aggregate (CIA)	Fine Intermediate Aggregate (FIA)	Coarse Sand (CS)	Fine Sand (FS)
½ in	100	100	100	100
⅜ in	-	-	100	100
No.4	0 – 90	91 – 100	0 – 90	91 – 100
No.8	0 – 50	0 – 50	51 – 90	51 – 100

C Washing
Wash the intermediate aggregate.

D Quality
If the CIA is from the same source as the ¾ in- fraction, the coarse aggregate quality is determined based upon the composite of the 3/4" in- and the CIA, otherwise quality requirements are based on each individual fraction.

D.1 Intermediate Aggregate for General Use
Provide CIA in accordance with 3137.2.D.1.

Provide FIA, CS and FS in accordance with 3126.

D.2 Intermediate Aggregate for Bridge Superstructure
Provide CIA in accordance with 3137.2.D.2.

Provide FIA, CS and FS in accordance with 3126.

D.3 Intermediate Aggregate for Concrete Pavement
Provide CIA in accordance with 3137.2.D.3, except as modified in Table 3131-2.

Table 3131-2
Intermediate Aggregate for Concrete Pavement

	Quality Test	Maximum Percent by Weight
Coarse Intermediate Aggregate (CIA)		
(b)	Carbonate in Class C aggregates by weight	
	If > 15% of total mixture	30.0
	If ≤ 15% of total mixture	40.0

Provide FIA, CS and FS in accordance with 3126.

E Gradation
Perform all intermediate aggregate gradations in accordance with 3126.3.

3131.3 SAMPLING AND TESTING

A Preliminary Intermediate Aggregate Testing
Sample and test intermediate aggregate fractions separately in accordance with Table 3137-5.

B Intermediate Aggregate Test Methods
Sample and test CIA in accordance with Table 3137-6.

Sample and test FIA, FS and CS for general use concrete in accordance with Table 3126-5.

S-47 (3137) COARSE AGGREGATE FOR PORTLAND CEMENT CONCRETE

REVISED 01/08/16
SP2016-252

MnDOT 3137 is hereby modified as follows:

S-47.1 The first paragraph of MnDOT 3137.2.D.2 shall be deleted and replaced with the following:

Provide coarse aggregate in accordance with 3137.2.D.1, "Coarse Aggregate for General Use," except as modified by Table 3137-2.

S-47.2 Table 3137-2 (h) of MnDOT 3137.2.D.2 shall be deleted and replaced with the following:

h)	Absorption for Class B aggregate for all concrete bridge decks and bridge barrier	≤ 1.10

S-47.3 Table 3137-4 of MnDOT 3137.2.E shall be deleted and replaced with the following:

Table 3137-4
Coarse Aggregate Designation for Concrete,
percent by weight passing square opening sieves

	Coarse Aggregate Designation					
	1	**2**	**3**	**4**	**7**	**8**
Sieve Sizes	**ASTM #467**	**ASTM #67***	**ASTM #7***	**ASTM #89**	**CA-70**	**CA-80**
2 in [50 mm]	100	-	-	-	-	-
1½ in [37.5 mm]	95 – 100	-	-	-	-	-
1 in [25.0 mm]	-	100	-	-	-	-
¾ in [19.0 mm]	35 – 70	90 – 100	100	-	-	-
5/8 in [16.0 mm]	-	-	-	-	100	-
½ in [12.5 mm]	-	-	90 – 100	100	85 – 100	-
⅜ in [9.5 mm]	10 – 30	20 – 55	40 – 70	90 – 100	50 – 100	100
No.4 [4.75 mm]	0 – 5	0 – 10	0 – 15	20 – 55	0 – 25	55 – 95
No.8 [2.36 mm]	-	-	-	5 – 30	-	-
No.16 [1.18 mm]	-	-	-	0 – 10	-	-
No.50 [300 µm]	-	-	-	0 - 5	-	0-5
*ASTM #67 and ASTM #7 Gradations are MnDOT Modified.						

S-48 (3151) BITUMINOUS MAERIAL (MSCR)

NEW WRITEUP 01/15/16

SP2016-253.1

MnDOT 3151 is modified as follows:

S-48.1 Replace MnDOT 3151.2.A with the following:

A Asphalt Binder

Only use Performance Graded (PG) Asphalt Binder meeting the requirements of AASHTO M 332, Table 3151-1A, and the Combined State Binder Group Method of Acceptance for Asphalt Binder, available on the Asphalt Products page of the Approved/Qualified Products List.

Table 3151-1A
Multi Stress Creep Recovery (MSCR) Test Requirements

Grade*	Binder Code for 2360 Mix Design	Jnr@3.2kPa, maximum	%R @ 3.2kPa, min.**	Jnr Difference, max***
PG 58S-28	B	4.5	N/A	75 %
PG 58H-28	E	2.0	30 %	75 %
PG 58V-28	H	1.0	55 %	75 %
PG58E-28		0.5	75 %	N/A
PG58S-34		4.5	N/A	75 %
PG58H-34	C	2.0	30 %	75 %
PG58V-34	F	1.0	55 %	75 %
PG58E-34	I	0.5	75 %	N/A
PG49S-34	M	4.5	N/A	75 %
PG52S-34	A	4.5	N/A	75 %
PG64S-22	L	4.5	N/A	75 %

* LTPP Bind temperature for Minnesota is 58°C for the high PG Binder Grade temperature. The bottom three grades are special use binders and are to be tested at the high temperature indicated by the grade (example: PG 49S-34 is tested @ 49C).
** Use in place of Appendix X1 in AASHTO - M332.
*** Jnr Difference is waived for "E" grade binders.

Use asphalt binder supplier recommendations for mixing and compaction temperatures.

S-49 (3302) DOWEL BAR

NEW WRITEUP 02/07/17

SP2016-254.1

MnDOT 3302.2 is hereby deleted and replaced with the following:

3302.2 REQUIREMENTS

A Epoxy Coated Steel Dowel Bars

Provide Grade 40 or Grade 60 steel dowel bars meeting the requirements of AASHTO M 31.

Epoxy coat the steel dowel bars in accordance with AASHTO M254 and as modified:

(1) Apply 7-13 mils epoxy coating thickness.
(2) Epoxy coat the ends of the dowel bars as required by the manufacturer.

If cutting dowel bars to length by shearing, immediately repair all damaged epoxy coating and verify dowel bars have not exceeded the maximum deformation limits. Ensure that sheared dowel bars are not more than 0.04 in out of round, and that such damage does not extend more than 0.40 in from the end of the bar.

B Galvanized Tubular Dowel Bars

Provide welded carbon and alloy steel tubular dowel bar meeting the requirements of ASTM 513 and Table 3302-1.

Table 3302-1
Tubular Dowel Bar Requirements

Specified Dowel Bar Diameter	Required Tubular Dowel Bar Outside Diameter	Required Tubular Dowel Bar Wall Thickness
1.25 in	1.3125 in or 1.375 in	0.120 in
1.50 in	1.62 in	0.120 in

Provide a galvanized coating providing a minimum 20 year life. Cap the ends of the tubular dowel bar in a way to prevent intrusion of concrete or other materials.

Galvanize the exterior and interior of the tubular dowel bars meeting one of the following:

(1) G40 coverage zinc galvanized coating, or
(2) G90 coverage zinc galvanized coating

Epoxy coat the exterior of the G40 galvanized tubular dowel bars in accordance with AASHTO M254 and as modified:

(1) Apply 7-13 MILS epoxy coating thickness.
(2) Epoxy coat the ends of the dowel bars as required by the manufacturer.

C Certification of Dowel Bars

Ensure the manufacturer's plant quality control office maintains documentation containing the data required by certification, including test data and measurements taken at times and locations as required by the CRSI, the Materials Engineer, or both.

D Storage and Protection of Dowel Bars

Do not store dowel bars in a manner that will cause, induce, or accelerate corrosion or contamination of the metal at any time. Locate timbers (dunnage) on the ground to support the bundles and keep them free of contamination.

Protect coated dowel bars before handling or shipping to prevent damage to the coating. Pad bundling bands and lift bundles using an OSHA-approved spreader bar, multiple supports, or platform bridge to prevent bar-to-bar abrasion from sags in the bar bundle. Do not drag or drop bars or bundles. Support bars or bundles in transit to prevent damage to the coating.

Store materials at the project site to allow the Engineer to visually inspect and check the various types of reinforcement for conformance to the dimensions as shown on the plans. Store bars of the same type together. Identify dowel bars with tags bearing the identification symbols as shown on the plans.

If the epoxy-coated steel is incorporated into the Project and is exposed to the weather or stored exposed to the weather for more than 60 calendar days, cover the steel to protect the material from sunlight, salt-spray and weather exposure. Provide for air circulation around the covered steel to minimize condensation under the protective covering.

S-50 (3906) WATER FOR CONCRETE AND MORTAR

NEW WRITEUP 02/07/17

SP2016-256.3

MnDOT 3906.2 shall be deleted and replaced with the following:

3906.2 REQUIREMENTS

Provide water for mixing concrete meeting ASTM C 1602 and the following:

(1) Not salty or brackish
(2) Clean, and
(3) Free of injurious quantities of deleterious substances such as oil, acid, alkali, and organic matter.

Provide water for use in curing concrete that does not contain impurities at concentrations that cause discoloration or surface etching.

A Potable water

Potable water is defined as water suitable for human consumption. The Engineer will allow potable water without testing.

B Non-Potable Water

Non-potable water is defined as water not fit for human consumption or contains quantities of substances that discolor, make it smell, or have an objectionable taste. Non-potable water does not contain water from concrete production operations. The Engineer may \conduct testing to determine allowable use of a non-potable Contractor proposed water source.

Provide non-potable water meeting the requirements of Table 1 of ASTM C1602.

C Clarified Water

Clarified water is defined as water from concrete production operations that was processed by filtration or a settling system such as a pond or weir(s) to clarify the water.

Supply clarified water only from sources listed on the Approved/Qualified Products list,

Provide clarified water meeting the requirements of Table 1 and Table 2 of ASTM C1602. The specific gravity of the combined mixing water must not exceed 1.03.

AFFIRMATIVE ACTION STATEMENT

I, we, fully intend to comply with the standards of equal employment and anti-discrimination as cited in the Civil Rights Act of 1964, as amended in 1972 by the Equal Employment Opportunity Report.

Signed:_____

Title:_____

S.A.P. 042-610-040 & S.A.P. 042-610-042

I DO HEREBY CERTIFY THAT I AM IN COMPLIANCE

MINNESOTA STATUTES SECTION 363, AS AMENDED BY

LAWS OF 1969.

DATE_____

SIGNED_____

REPRESENTING_____

TELEPHONE NO._____

LYON COUNTY
DEPARTMENT OF HIGHWAYS

"I hereby certify that I am in compliance with Minnesota Statutes Section 363 as amended by Laws of 1969, and (check one of the four below, as applicable):

( ) I have a Certificate of Compliance issued by the Department of Human Rights and will provide a copy to the County.

( ) I have applied for a Certificate of Compliance to the Commissioner of Human Rights, which is pending.

( ) I am exempt from the EEO requirements because the value of this Contract does not exceed $50,000.

( ) I am exempt from the EEO requirements because, though the Contract value exceeds $50,000, I have not employed more than 20 full time employees on a single working day in the twelve months previous to the letting date of this project. Attached herewith is a notarized letter on my company letterhead certifying the above to be true and specifically referencing the project numbers within this Contract.

_____
Signature of Bidder

_____
Position

_____
Name of Firm

_____
Date

This form shall **NOT** be considered sole proof of necessary compliance with Minnesota Statutes, Section 363, implementing the Rules and Regulations of the Minnesota Department of Human Rights. A Certificate of Compliance or Certified Letter must be provided to the County before any work may begin. All questions should be referred to the Minnesota Department of Human Rights, Room 60, State Office Building, St. Paul, Minnesota. Telephone 612-296-5682.

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

THE SCHEDULE OF PRICES SHEETS HAVE INTENTIONALLY BEEN LEFT OUT OF THE PDF PRINT OUT OF THIS PROPOSAL. TO REQUEST THE SCHEDULE OF PRICES SHEETS, PLEASE VISIT OUR WEBSITE, WWW.LYONCO.ORG, FOR INSTRUCTIONS OR CONTACT THE LYON COUNTY HIGHWAY DEPARTMENT AT 507-532-8205. THE SCHEDULE OF PRICES SHEETS WILL BE EMAILED TO YOU FOR INSERTION INTO THE PROPOSAL TO MAKE IT COMPLETE.

Form 21126D (FF Rev. 1-09)
State Project No. **S.A.P .042-610-040 & S.A.P. 042-610-42**

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 (certified check) (bond), prepared as required by 1208 of the Specifications and payable to the Lyon County Treasurer, in an amount equal to at least 5% of the total amount of the bid is submitted herewith as a proposal guaranty.

DISADVANTAGED BUSINESS ENTERPRISE CERTIFICATION: Our firm will meet a minimum goal of ____% of this contract to Disadvantaged Business Enterprises. A bidder who fails to indicate a specific goal above must fulfill the total goals indicated in the proposal.

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 _____, 20

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.)