Duluth Transit Authority REQUEST for BIDS

FOR
Facility Floor Coating

June 24, 2013

Duluth Transit Authority

2402 W. Michigan St · Duluth, MN 55806 (218) 623-4316 fax: (218) 722-4428 email: jheilig@duluthtransit.com

Duluth Transit Authority

Request for Bids

Facility Floor Coating

The Duluth Transit Authority ("DTA") hereby requests written bids for the provision of Facility Floor Coating at: 2402 West Michigan St., Duluth MN. All bids are to be marked "*DTA Facility Floor Coating*", and mailed or delivered to:

Jim Heilig DTA Director of Administration 2402 West Michigan Street Duluth MN 55806

Bids must be received no later than 2:00 p.m., July 25, 2013. The DTA reserves the right to accept or reject any and/or all bids in the best interest of the DTA.

Specifications are available at the DTA and may be Emailed or mailed to prospective bidders. Contact Jim Heilig at (218) 623-4316 or jheilig@duluthtransit.com.

TABLE OF CONTENTS

- A. GENERAL CONDITIONS
- B. MANDATORY CLAUSES
- C. CONTRACT
- D. BID FORM
- E. TECHNICAL SPECIFICATIONS

Duluth Transit Authority

Facility Floor Coating

General Conditions and Mandatory Clauses

June 24, 2013

General Conditions & Mandatory Clauses:

G-1 **REQUEST FOR BIDS**

- a) Bids are requested for **Facility Floor Coating** between the maintenance area and the bus storage area at the DTA Operating Facility located at 2402 West Michigan Street, Duluth, MN.
- b) Bids shall be on the basis of total project costs for the project under the following requirements and conditions, which shall be considered an essential part of the Contract Documents.
- c) The DTA reserves the right to accept or refuse any or all Bids in the interest of the DTA.
- d) Bid prices shall be good for 90 days after the bid opening.
- e) Bid opening will be July 25, 2013 at 2 PM at the offices of the Duluth Transit Authority, 2402 West Michigan Street, Duluth, MN.
- f) The DTA intends to choose the lowest responsive and responsible bidder as early as August 7, 2013.
- g) Throughout these specifications the words equipment, materials, and work can be interpreted as interchangeable.

G-2 CONTRACT DOCUMENTS

The Contract Documents for this Contract shall consist of the following component parts:

Contract; Request for Bids (Procurement # 041-13-0304.1) including the General Conditions, Mandatory Clauses, and Technical Specifications; Executed Bid Form; and all addenda issued prior to and all modifications issued after execution of the Contract.

G-3 **INQUIRIES**

All inquiries and other correspondence relating to this request for bids, both prior to and subsequent to the letting of the Contract arising therefrom, with the exception of the bid itself shall be with the Bid Manager and addressed to:

Jim Heilig, DTA 2402 West Michigan St Duluth, MN 55806

DEFINITION OF TERMS

Whenever the following terms are used in these bid specifications, the intent and meaning of them shall be interpreted as follows:

- 1. DTA, customer, buyer, or Operator shall mean the DTA.
- 2. Project Manager shall mean Jim Brown, DTA.
- 3. Manufacturer, Vendor, Bidder, or Contractor shall mean that firm submitting the lowest responsive and responsible bid and subsequently receiving the Contract award from the DTA as the Contractor as detailed in these specifications.

G-4 SUBSTITUTIONS AND OR EQUAL

- a) Where proprietary names are used in these specifications, it is understood that they are followed by the words "or equal".
- b) Prime contractors and /or subcontractors may make appointments to discuss these specifications. This, however, does not relieve them from the written, documented request required by paragraph c) below. Where prior approval is called for in the specifications it means prior to bid opening. A pre-bid meeting will take place at the DTA at 3:00 PM on June 27, 2013.
- c) Requests for approved equals, clarifications of specifications, and protest of specifications must be received by the Jim Heilig in writing no later than 2 p.m. on July 9, 2013 Any request for an

approved equal must be fully supported with technical data, test results, or other pertinent information as evidence that the substitute offered is equal to or better than the specifications that pertain to an item under consideration. The supporting evidence for the approved equal must be submitted with the request for approval. All requests must be submitted via US Mail unless otherwise approved by DTA in writing.

- d) The replies to request under paragraph c) above will be emailed, mailed or faxed out on July 16, 2013 to all prospective bidders.
- e) Changes to the specifications will be made **only** by **written** addendum.

G-5 **SELECTION CRITERIA**

This is a bid, so the DTA will award a contract based on the lowest responsive and responsible bidder.

G-6 **PREPARATION OF BID**

Bids must be submitted on the forms attached. All blanks in the bid form must be completed with ink or typewriter. Bids containing alterations or erasures may be rejected unless the alteration or erasure is corrected by crossing out the error, inserting the correction adjacent thereto with ink or typewriter and initialing the correction in ink by the person signing the bid. In the event any price term is expressed by the bidder in both written and numerical form, the **written** representation shall govern in the event of an inconsistency.

Bids shall not stipulate any condition not contained in the specifications and other documents submitted for bid.

Each bid and all papers bound and attached thereto, together with the bid security, shall be placed and securely sealed in an envelope marked "Facility Floor Coating" and mailed or delivered to:

Jim Heilig DTA Director of Administration 2402 West Michigan Street Duluth MN 55806

Bids must be received no later than 2:00 p.m. July 25, 2013. Time means local time in Duluth, Minnesota. Bids received after such time will not be considered. The DTA reserves the right to accept or reject any and/or all Bids in the best interest of the DTA.

No bid may be modified after submission except by written modification physically received by the DTA prior to the time set for the opening of bids. Modifications must be signed by the person submitting the bid or accompanied by an explanation why it is not, and must indicate that it modifies the original bid. Modifications shall be submitted in a securely sealed envelope marked as indicated on the Bid Form.

G-7 WITHDRAWAL OF BIDS

A bidder may withdraw his bid at any time before the time set for the opening of the Bids only by a written addressed to the bid opening marked "WITHDRAWAL OF BID", and physically received by the DTA prior to the time for the opening of Bids.

G-8 CONSIDERATION OF BID

The DTA reserves the right, in the determination of the lowest responsive and responsible bidder, to consider the ultimate economy of the bid within the guidelines of these specifications, the best interests of the DTA and such other factors as may be reasonably determined to affect the ultimate economy of the award as stipulated in the Technical Specifications.

G-9 CONTRACT FORM AND CHANGES

The chosen bidder, within ten (10) days after the award of the Contract from the DTA shall sign the formal Contract.

Any proposed change in this Contract shall be submitted to the DTA for its prior approval. Only written change orders, amendments or addenda signed by the General Manager of the DTA shall be binding upon the DTA.

G-10 **BONDING REQUIREMENTS**

Bidder must meet State of Minnesota bonding requirements. A Performance Bond is required if the base bid exceeds \$75,000. A Payment Bond is required if the base bid exceeds \$100,000.

G-11 PRICE COMPLETE

The price quoted in any bid submitted shall include all items of services, labor, material, alterations, tools, equipment and other costs necessary to fully complete the work under the Contract pursuant to these specifications. It is the intention of these specifications to provide and require complete equipment and materials of the type prescribed herein to complete the work under the Contract. Any items omitted from the specifications which are clearly necessary for the work under the Contract shall be considered included in the bid specifications although not directly specified or called for in these specifications. No advantage shall be taken by the manufacturer or supplier in the omission of any part or detail which goes to make the equipment or materials complete and ready for service or use under the Contract.

G-12 **DOCUMENTATION**

The Contractor shall provide a complete listing of all products used.

G-13 INDEMNIFICATION

The Contractor shall defend, indemnify and save the DTA harmless from all costs, charges, damages, and loss of any kind that may grow out of the matter covered by this Contract. Said obligation does not include indemnification of the DTA for claims of liability arising out of the sole negligent or intentional acts or omissions of DTA but shall include but not be limited to the obligation to defend, indemnify and hold harmless the DTA in all cases where claims of liability against the DTA arise out of acts or omissions of DTA which are derivative of the negligence or intentional acts or omissions of Contractor such as, and including but not limited to, the failure to supervise, the failure to warn, the failure to prevent such act or omission by Contractor and any other such source of liability. In addition, Contractor will comply with all local, state and federal laws, rules and regulations applicable to this Contract and to the work to be done and things to be supplied hereunder.

G-14 INSURANCE

- a. Contractor shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota, which insurance shall indemnify Contractor and DTA from all liability described in the paragraph above.
 - (1) Workers' compensation in accordance with the laws of the state of Minnesota.
 - Public Liability and Automobile Liability Insurance with limits not less than \$1,500,000 Single Limit and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the DTA; and shall provide for the following: Liability for Premises,

Operations, Completed Operations, Independent Contractors, and Contractual Liability.

(3) DTA shall be named as an **Additional Insured** under the Public Liability, Excess/Umbrella Liability* and Automobile Liability, or as an alternate, Contractor may provide Owners-Contractors Protective policy, naming itself and the DTA. Contractor shall also provide evidence of Statutory Minnesota Worker's Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-days' notice of cancellation, non-renewal or material change provisions included. The DTA does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor's interests and liabilities.

*An umbrella policy with a "following form" provision is acceptable if written verification is provided that the underlying policy names the DTA as an additional insured.

- (4) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the DTA without fail not less than 30 days prior to any cancellation, non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to DTA will render any such change or changes in said policy or coverages ineffective as against the DTA.
- (5) The use of an "Acord" form as a certificate of insurance shall be accompanied by two forms 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney's Office.
- b. The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Contractor, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Contractor, its employees, agents and representatives in the negligent performance of work covered by this Agreement.
- c. Certificates showing that Contractor is carrying the above described insurance in the specified amounts shall be furnished to the DTA prior to the execution of this Contract and a certificate showing continued maintenance of such insurance shall be on file with the DTA during the term of this Contract.
- d. Contractor shall be required to provide insurance meeting the requirements of this Paragraph unless Contractor successfully demonstrates to the satisfaction of the City Attorney, in the exercise of his or her discretion, that such insurance is not reasonably available in the market. If Contractor demonstrates to the satisfaction of the City Attorney that such insurance is not reasonably available, the City Attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the DTA which is reasonably available.

G-15 GOVERNING LAW

This contract shall be governed by the laws of the State of Minnesota.

G-16 RIGHTS AND REMEDIES

The duties and obligations imposed by the Contract and the right and remedies available hereunder shall be in addition to and not in limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

Failure of the DTA to act shall in no way constitute a waiver of any right or duty afforded to it under the Contract, nor shall any such action or failure to act constitute an approval of or an acquiescence in any breach of this Contract, except as may be specifically agreed in writing by the DTA.

G-17 DELAYS

Contractor shall notify DTA in writing of any delays, including all relevant details, immediately upon encountering any difficulties which threaten to delay the timely performance of this Contract, and may at that time or subsequently request an extension of the delivery date or schedule; however, such notification or request or acceptance of delinquent equipment shall not constitute acceptance of the delay, or request for extension, without written acceptance by DTA as a change in the contract.

G-18 PAYMENT

Terms of payment shall be thirty (30) days net from the conclusion of the month for which payment is due, unless a discount for earlier payment is solicited by the DTA and offered by the Bidder.

G-19 **INVOICES**

Forward application to James Heilig for approval (two copies please)

The invoice shall be addressed to: James Heilig, Director of Administration

Duluth Transit Authority 2402 West Michigan Street

Duluth MN 55806

G-20 STATE, FEDERAL, OSHA SAFETY REQUIREMENTS

All work performed under this Contract shall conform to all latest local, state, and federal safety requirements and shall, in all cases, meet OSHA requirements. It shall be the Contractor's responsibilities insure complete compliance with these requirements.

G-21 Liquidated Damages will be assessed based on a 120 calendar day scheduled from the date of the letter to proceed. The cost per day is set at \$100.00.

Significant Dates of Procurement

Date of Release	June 24, 2013	
Proposal Conference	June 27, 2013	3:00 PM
Requests for Equals Responses and Final Addendum	July 9, 2013 July 16, 2013	2:00 PM
Proposal Opening	July 25, 2013	2:00 PM.

FEDERAL TRANSIT ADMINISTRATION

Contract Clauses

TABLE OF CONTENTS (Appendix A - Governing Documents)

A.1 - Federally Required and Other Model Contract Clauses

- 1. Fly America Requirements
- 2. Buy America Requirements
- 3. Charter Bus and School Bus Requirements
- 4. Cargo Preference Requirements
- 5. Seismic Safety Requirements
- 6. Energy Conservation Requirements
- 7. Clean Water Requirements
- 8. Bus Testing
- 9. Pre-Award and Post Delivery Audit Requirements
- 10. Lobbying
- 11. Access to Records and Reports
- 12. Federal Changes
- 13. Bonding Requirements
- 14. Clean Air
- 15. Recycled Products
- 16. Davis-Bacon and Copeland Anti-Kickback Acts
- 17. Contract Work Hours and Safety Standards Act
- 18. [Reserved]
- 19. No Government Obligation to Third Parties
- 20. Program Fraud and False or Fraudulent Statements and Related Acts
- 21. Termination
- 22. Government-wide Debarment and Suspension (Nonprocurement)
- 23. Privacy Act
- 24. Civil Rights Requirements
- 25. Breaches and Dispute Resolution
- 26. Patent and Rights in Data
- 27. Transit Employee Protective Agreements
- 28. Disadvantaged Business Enterprises (DBE)
- 29. [Reserved]
- 30. Incorporation of Federal Transit Administration (FTA) Terms
- 31. Drug and Alcohol Testing

1. <u>FLY AMERICA REQUIREMENTS</u> **49 U.S.C. § 40118,** 41 CFR Part 301-10

Fly America Requirements

The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

2. <u>BUY AMERICA REQUIREMENTS</u> 49 U.S.C. 5323(j) 49 CFR Part 661

Applicability to Contracts

The Buy America requirements apply to the following types of contracts: Construction Contracts and Acquisition of Goods or Rolling Stock (valued at more than \$100,000).

Buy America - The contractor agrees to comply with 49 U.S.C. 5323(j) and 49 C.F.R. Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 C.F.R. 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, and microcomputer equipment and software. Separate requirements for rolling stock are set out at 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the FTA recipient the appropriate Buy America certification (below) with all bids or offers on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America certification must be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

Certification requirement for procurement of steel, iron, or manufactured products.

Certificate of Compliance with 49 U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 C.F.R. Part 661.5.

Date	 	 	
Signature	 	 	
Company Name	 	 	
Title			

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(1)

Duluth Transit Authority Facility Floor Coating

Procurement # 041-13-0304.1

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(1) and 49 C.F.R. 661.5, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

Date
Signature
Company Name
Title
Certification requirement for procurement of buses, other rolling stock and associated equipment.
Certificate of Compliance with 49 U.S.C. $5323(j)(2)(C)$.
The bidder or offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and the regulations at 49 C.F.R. Part 661.11.
Date
Signature
Company Name
Title
Certificate of Non-Compliance with 49 U.S.C. $5323(j)(2)(C)$
The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C. 5323(j)(2)(C) and 49 C.F.R. 661.11, but may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 CFR 661.7.
Date
Signature
Company Name
Title

3. CHARTER BUS REQUIREMENTS

49 U.S.C. 5323(d), 49 CFR Part 604

Does not apply to this contract

3. SCHOOL BUS REQUIREMENTS

49 U.S.C. 5323(F), 49 CFR Part 605

Does not apply to this contract

4. CARGO PREFERENCE REQUIREMENTS 46 U.S.C. 1241, 46 CFR Part 381

Applicability to Contracts

The Cargo Preference requirements apply to all contracts involving equipment, materials, or commodities which may be transported by ocean vessels.

Cargo Preference - Use of United States-Flag Vessels - The contractor agrees: a. to use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; b. to furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the contractor in the case of a subcontractor's bill-of-lading.) c. to include these requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

5. SEISMIC SAFETY REQUIREMENTS 42 U.S.C. 7701 et seq. 49 CFR Part 41

Does not apply to this contract

6. ENERGY CONSERVATION REQUIREMENTS 42 U.S.C. 6321 et seq. 49 CFR Part 18

Applicability to Contracts

The Energy Conservation requirements are applicable to all contracts.

Energy Conservation - The contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

7. CLEAN WATER REQUIREMENTS 33 U.S.C. 1251

Applicability to Contracts

The Clean Water requirements apply to each contract and subcontract which exceeds \$100,000.

Clean Water - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et <u>seq</u>. The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

8. BUS TESTING
49 U.S.C. 5323(c)
49 CFR Part 665
Does not apply to this contract

9. PRE-AWARD AND POST DELIVERY AUDITS REQUIREMENTS

49 U.S.C. 5323, 49 CFR Part 663

Does not apply to this contract

10. LOBBYING 31 U.S.C. 1352, 49 CFR Part 19, 49 CFR Part 20

Applicability to Contracts

The Lobbying requirements apply to Construction/Architectural and Engineering/Acquisition of Rolling Stock/Professional Service Contract/Operational Service Contract/Turnkey contracts.

Byrd Anti-Lobbying Amendment, 31 U.S.C. 1352, as amended by the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, et seq.] - Contractors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

APPENDIX A, 49 CFR PART 20--CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(*To be submitted with each bid or offer exceeding* \$100,000)

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.)]
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31,

Duluth Transit Authority Facility Floor Coating

Procurement # 041-13-0304.1

U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The Contractor, _______, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, et seq., apply to this certification and disclosure, if any. ________ Signature of Contractor's Authorized Official ________ Date

11. ACCESS TO RECORDS AND REPORTS 49 U.S.C. 5325, 18 CFR 18.36 (i), 49 CFR 633.17

Access to Records - The following access to records requirements apply to this Contract:

- 1. Where the Purchaser is not a State but a local government and is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C.F.R. 18.36(i), the Contractor agrees to provide the Purchaser, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C.F.R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.
- 5. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- 6. The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until the Purchaser, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).
- 7. FTA does not require the inclusion of these requirements in subcontracts.

Requirements for Access to Records and Reports by Types of Contract

Contract Characteristics	Operational Service Contract	Turnkey	Construction	Architectural Engineering	Acquisition of Rolling Stock	Professional Services
a. Contracts below SAT	None	Those imposed on state pass thru to	None	None	None	None
(\$100,000) b. Contracts above \$100,000/Capital Projects	None unless ¹ non- competitive award	Contractor	Yes, if non- competitive award or if funded thru ² 5307/5309/53 11	None unless non- competitive award	None unless non- competitive award	None unless non- competitive award

Duluth Transit Authority Facility Floor Coating

Procurement # 041-13-0304.1

II Non State Grantees	Yes ³	Those imposed on non-state	Yes	Yes	Yes	Yes
a. Contracts below SAT (\$100,000) b. Contracts above \$100,000/Capital Projects	Yes ³	Grantee pass thru to Contractor	Yes	Yes	Yes	Yes

Sources of Authority:

- ¹ 49 USC 5325 (a)
- ² 49 CFR 633.17
- ³ 18 CFR 18.36 (i)

12. FEDERAL CHANGES 49 CFR Part 18

Federal Changes - Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Purchaser and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

13. BONDING REQUIREMENTS

Applicability to Contracts

For those construction or facility improvement contracts or subcontracts exceeding \$75,000, The State of Minnesota requires a 100% performance bond. This supersedes the Federal Requirement.

a. A bid guarantee from each Bidder equivalent to five (5) percent of the bid price. The "bid guarantees" shall consist of a firm commitment such as a bid bond, certifies check, or other negotiable instrument accompanying a bid as assurance that the Bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

14. CLEAN AIR 42 U.S.C. 7401 et seq, 40 CFR 15.61, 49 CFR Part 18

Clean Air - (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq. The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(2) The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

<u>15. RECYCLED PRODUCTS</u> 42 U.S.C. 6962, 40 CFR Part 247, Executive Order 12873

Recovered Materials - The contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

16. DAVIS-BACON AND COPELAND ANTI-KICKBACK ACTS

Background and Application

The Davis-Bacon and Copeland Acts are codified at 40 USC 3141, *et seq.* and 18 USC 874. The Acts apply to grantee construction contracts and subcontracts that "at least partly are financed by a loan or grant from the Federal Government." 40 USC 3145(a), 29 CFR 5.2(h), 49 CFR 18.36(i)(5). The Acts apply to any construction contract over \$2,000. 40 USC 3142(a), 29 CFR 5.5(a). 'Construction,' for purposes of the Acts, includes "actual construction, alteration and/or repair, including painting and decorating." 29 CFR 5.5(a). The requirements of both Acts are incorporated into a single clause (*see* 29 CFR 3.11) enumerated at 29 CFR 5.5(a) and reproduced below.

The clause language is drawn directly from 29 CFR 5.5(a) and any deviation from the model clause below should be coordinated with counsel to ensure the Acts' requirements are satisfied.

Clause Language

(1) Davis-Bacon and Copeland Anti-Kickback Acts

(1) **Minimum wages** - (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) Except with respect to helpers as defined as 29 CFR 5.2(n)(4), the work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) With respect to helpers as defined in 29 CFR 5.2(n)(4), such a classification prevails in the area in which the work is performed.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The

Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (v)(A) The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination with 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(v) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (2) **Withholding** The [*insert name of grantee*] shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any

other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the [*insert name of grantee*] may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

- (3) **Payrolls and basic records** (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the [insert name of grantee] for transmission to the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;
- (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal Transit Administration or the Department of

Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

- (4) **Apprentices and trainees** (i) Apprentices Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (ii) Trainees Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) <u>Equal employment opportunity</u> The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) **Compliance with Copeland Act requirements** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- (6) Subcontracts The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1)

- through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (7) **Contract termination: debarment** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) **Compliance with Davis-Bacon and Related Act requirements** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) **Disputes concerning labor standards** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- (10) **Certification of eligibility** (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

17. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Contract Work Hours and Safety Standards

- (1) **Overtime requirements** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) **Violation; liability for unpaid wages; liquidated damages** In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- (3) Withholding for unpaid wages and liquidated damages The (write in the name of the grantee) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- (4) **Subcontracts** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

18. [RESERVED]

19. NO GOVERNMENT OBLIGATION TO THIRD PARTIES

No Obligation by the Federal Government.

- (1) The Purchaser and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Purchaser, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.
- (2) The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

20. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS; 31 U.S.C. 3801 et seq., 49 CFR Part 31 18 U.S.C. 1001 49 U.S.C. 5307

Program Fraud and False or Fraudulent Statements or Related Acts.

(1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § 3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil

Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

- (2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.
- (3) The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

<u>21. TERMINATION</u> 49 U.S.C. Part 18, FTA Circular 4220.1E

- **a.** Termination for Convenience (General Provision) The DTA may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Government's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to DTA to be paid the Contractor. If the Contractor has any property in its possession belonging to the DTA, the Contractor will account for the same, and dispose of it in the manner the DTA directs.
- **b.** Termination for Default [Breach or Cause] (General Provision) If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the DTA may terminate this contract for default. Termination shall be effected by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

If it is later determined by the DTA that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Contractor, the DTA, after setting up a new delivery

of performance schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

c. Opportunity to Cure (General Provision) The DTA in its sole discretion may, in the case of a termination for breach or default, allow the Contractor [an appropriately short period of time] in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions

If Contractor fails to remedy to DTA's satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within [ten (10) days] after receipt by Contractor of written notice from DTA setting forth the nature of said breach or default, DTA shall have the right to terminate the Contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude DTA from also pursuing all available remedies against Contractor and its sureties for said breach or default.

- **d.** Waiver of Remedies for any Breach In the event that DTA elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by DTA shall not limit DTA's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.
- **e.** Termination for Convenience (Professional or Transit Service Contracts) The DTA, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Recipient shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.
- **f. Termination for Default (Supplies and Service)** If the Contractor fails to deliver supplies or to perform the services within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, the DTA may terminate this contract for default. The DTA shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. The Contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner or performance set forth in this contract.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Recipient.

g. Termination for Default (**Transportation Services**) If the Contractor fails to pick up the commodities or to perform the services, including delivery services, within the time specified in this contract or any extension or if the Contractor fails to comply with any other provisions of this contract, the DTA may terminate this contract for default. The DTA shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of default. The Contractor will only be paid the contract price for services performed in accordance with the manner of performance set forth in this contract.

If this contract is terminated while the Contractor has possession of Recipient goods, the Contractor shall, upon direction of the DTA, protect and preserve the goods until surrendered to the Recipient or its agent. The Contractor and DTA shall agree on payment for the preservation and protection of goods. Failure to agree on an amount will be resolved under the Dispute clause.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the DTA.

h. Termination for Default (Construction) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provisions of this contract, the DTA may terminate this contract for default. The DTA shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, the Recipient may take over the work and compete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Recipient resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Recipient in completing the work.

The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause if-

- 1. the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include: acts of God, acts of the Recipient, acts of another Contractor in the performance of a contract with the Recipient, epidemics, quarantine restrictions, strikes, freight embargoes; and
- 2. the contractor, within [10] days from the beginning of any delay, notifies the DTA in writing of the causes of delay. If in the judgment of the DTA, the delay is excusable, the time for completing the work shall be extended. The judgment of the DTA shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.

If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Recipient.

i. Termination for Convenience or Default (Architect and Engineering) The DTA may terminate this contract in whole or in part, for the Recipient's convenience or because of the failure of the Contractor to fulfill the contract obligations. The DTA shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Contractor shall (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Contracting Officer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.

If the termination is for the convenience of the Recipient, the Contracting Officer shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services.

If the termination is for failure of the Contractor to fulfill the contract obligations, the Recipient may complete the work by contact or otherwise and the Contractor shall be liable for any additional cost incurred by the Recipient.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Recipient.

j. Termination for Convenience of Default (Cost-Type Contracts) The DTA may terminate this contract, or any portion of it, by serving a notice or termination on the Contractor. The notice shall state whether the termination is for convenience of the DTA or for the default of the Contractor. If the termination is for default, the notice shall state the manner in which the contractor has failed to perform the requirements of the contract. The Contractor shall account for any property in its possession paid for from funds received from the DTA, or property supplied to the Contractor by the DTA. If the termination is for default, the DTA may fix the fee, if the contract provides for a fee, to be paid the contractor in proportion to the value, if any, of work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the DTA and the parties shall negotiate the termination settlement to be paid the Contractor.

If the termination is for the convenience of the DTA, the Contractor shall be paid its contract close-out costs, and a fee, if the contract provided for payment of a fee, in proportion to the work performed up to the time of termination.

If, after serving a notice of termination for default, the DTA determines that the Contractor has an excusable reason for not performing, such as strike, fire, flood, events which are not the fault of and are beyond the control of the contractor, the DTA, after setting up a new work schedule, may allow the Contractor to continue work, or treat the termination as a termination for convenience.

22. GOVERNMENT-WIDE DEBARMENT AND SUSPENSION (NONPROCUREMENT) Suspension and Debarment

This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the contractor is required to verify that none of the contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into. By signing and submitting its bid or bid, the bidder or bidder certifies as follows:

Duluth Transit Authority Facility Floor Coating

Procurement # 041-13-0304.1

The certification in this clause is a material representation of fact relied upon by **Duluth Transit Authority**. If it is later determined that the bidder or bidder knowingly rendered an erroneous certification, in addition to remedies available to **Duluth Transit Authority**, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or bidder agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or bidder further agrees to include a provision requiring such compliance in its lower tier covered transactions.

23. PRIVACY ACT 5 U.S.C. 552

Does not apply to this contract

24. CIVIL RIGHTS REQUIREMENTS

29 U.S.C. § 623, 42 U.S.C. § 2000 42 U.S.C. § 6102, 42 U.S.C. § 12112 42 U.S.C. § 12132, 49 U.S.C. § 5332 29 CFR Part 1630, 41 CFR Parts 60 et seq.

Applicability to Contracts

The Civil Rights Requirements apply to all contracts.

Civil Rights - The following requirements apply to the underlying contract:

- (1) Nondiscrimination In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.
- (2) <u>Equal Employment Opportunity</u> The following equal employment opportunity requirements apply to the underlying contract:
- (a) Race, Color, Creed, National Origin, Sex In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: 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. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
- (b) <u>Age</u> In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
- (c) <u>Disabilities</u> In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(3) The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

25. BREACHES AND DISPUTE RESOLUTION 49 CFR Part 18

FTA Circular 4220.1E

Disputes - Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of DTA's [title of employee]. This decision shall be final and conclusive unless within [ten (10)] days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the [title of employee]. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the [title of employee] shall be binding upon the Contractor and the Contractor shall abide be the decision.

Performance During Dispute - Unless otherwise directed by DTA, Contractor shall continue performance under this Contract while matters in dispute are being resolved.

Claims for Damages - Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his employees, agents or others for whose acts he is legally liable, a claim for damages therefor shall be made in writing to such other party within a reasonable time after the first observance of such injury of damage.

Remedies - Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the DTA and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which the DTA is located.

Rights and Remedies - The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the DTA, (Architect) or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

26. PATENT AND RIGHTS IN DATA

37 CFR Part 401 49 CFR Parts 18 and 19

Does not apply to this contract

27. TRANSIT EMPLOYEE PROTECTIVE AGREEMENTS 49 U.S.C. § 5310, § 5311, and § 5333, 29 CFR Part 215

Does not apply to this contract

28. DISADVANTAGED BUSINESS ENTERPRISE (DBE) 49 CFR Part 26

Disadvantaged Business Enterprises

- a. This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.* The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. The agency's overall goal for DBE participation is 12 %. A separate contract goal has not been established for this procurement.
- b. The contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as **Duluth Transit Authority** deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (*see* 49 CFR 26.13(b)).

- c. {If a separate contract goal has been established, use the following} Bidders/offerors are required to document sufficient DBE participation to meet these goals or, alternatively, document adequate good faith efforts to do so, as provided for in 49 CFR 26.53. Award of this contract is conditioned on submission of the following [concurrent with and accompanying sealed bid] [concurrent with and accompanying an initial bid] [prior to award]:
- 1. The names and addresses of DBE firms that will participate in this contract;
- 2. A description of the work each DBE will perform;
- 3. The dollar amount of the participation of each DBE firm participating;
- 4. Written documentation of the bidder/offeror's commitment to use a DBE subcontractor whose participation it submits to meet the contract goal;
- 5. Written confirmation from the DBE that it is participating in the contract as provided in the prime contractor's commitment; and
- 6. If the contract goal is not met, evidence of good faith efforts to do so.

Bidders must present the information required above with initial bids (see 49 CFR 26.53(3)).

{If no separate contract goal has been established, use the following} The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance.

- d. The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work from the **Duluth Transit Authority**. In addition, [the contractor may not hold retainage from its subcontractors.] [is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this contract is satisfactorily completed.] [is required to return any retainage payments to those subcontractors within 30 days after incremental acceptance of the subcontractor's work by the Duluth Transit Authority and contractor's receipt of the partial retainage payment related to the subcontractor's work.]
- e. The contractor must promptly notify **Duluth Transit Authority**, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of **Duluth Transit Authority**

29. [**RESERVED**]

30. INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS FTA Circular 4220.1E

Incorporation of Federal Transit Administration (FTA) Terms - The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1E, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any (name of grantee) requests which would cause (name of grantee) to be in violation of the FTA terms and conditions.

31. DRUG AND ALCOHOL TESTING
49 U.S.C. §5331
49 CFR Parts 653 and 654
Does not apply to this contract

DULUTH TRANSIT AUTHORITY

CONTRACT FOR

Facility Floor Coating

June 24, 2013

Duluth Transit Authority Facility Floor Coating

Procurement # 041-13-0304.1

This Agreement, made as of August___, 2013, by and between ______, of ______, hereafter referred to as "Contractor", and the Duluth Transit Authority, 2402 W. Michigan St., Duluth, MN, hereafter referred to as "DTA". The DTA and Contractor agree as set forth below.

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents in priority order consist of this Contract; Request for Bids (Procurement # 041-13-0304.1) dated June 24, 2013 including the General Conditions, Mandatory Clauses and Technical Specifications; Contractor's Bid including required certificates; and all addenda issued prior to and all modifications issued after execution of the Contract; all as fully a part of the Contract as if attached to this Contract or repeated herein.

ARTICLE 2 THE WORK

The Contractor shall perform the work required by the Contract Documents for: Request for Bid: Facility Floor Coating, in accordance with the generally accepted standards of the profession for services of this type.

ARTICLE 3 TIME OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

The Work to be performed under this Contract shall begin in no later than August 31, 2013 and completed no later December 15, 2013.

ARTICLE 4 CONTRACT SUM

The DTA shall pay the Contractor in current funds for the performance of the work, subject to additions and deductions by Change Orders as provided in the Contract Documents. The Contract base price shall not exceed \$_____ and must be price complete.

ARTICLE 5 PAYMENTS TO CONTRACTOR

The DTA will reimburse Contractor based on monthly billings for service. DTA may withhold payment for Contractor's services where the services are in dispute, where the services or any claimed reimbursable expenses are not documented or warranted, or when the service was not performed in accordance with the terms of the Contract Documents.

ARTICLE 6 CONTRACTOR CHANGES

The DTA or the Contractor may, from time to time, request changes in the scope of the services to be performed hereunder. Such changes, including the increase or decrease in the amount of the Contractor's compensation, which are mutually agreed upon by and between the DTA and the Contractor, shall be incorporated in written amendments to the Contract.

ARTICLE 7 TERMINATION FOR CONVENIENCE

The performance of work under this Contract may be terminated by the DTA in accordance with this clause in whole, or from time to time in part, whenever the DTA determines it is in the best interest of the DTA. Any such termination shall be effected by delivery to the Contractor of a written notice of termination specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.

After receipt of a notice of termination, and except as otherwise directed by the DTA, the Contractor shall:

1 Stop work under the Contract on the date and to the extent specified in the notice of termination:

- 1. Place no further orders or subcontracts for materials, services or facilities except as may be necessary for completion of such portion of the work under contract as is not terminated
- 3. Assign to the DTA in the manner, at the times, and to the extent directed by the DTA, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the DTA shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts
- 4. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the DTA, to the extent they may require, which approval or ratification shall be final for all the purposes of this clause
- 5. Use its best efforts to sell, in the manner, at the times, to the extent, and at the price directed or authorized by the DTA, any property of the types referred to above, provided, however, that the Contractor shall not be required to extend credit to any purchaser, and Contractor may acquire any such property under the conditions prescribed by and at a price approved by the DTA, and provided further, that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the DTA to the Contractor under this Contract or shall otherwise be credited to the price or cost of the work covered by this Contract or paid in such manner as the DTA may direct
- 6. Complete performance of such part of the work as shall not have been terminated by the notice of termination
- 7. Take such action as may be necessary, or as the DTA may direct, for the protection or preservation of the property related to this Contract which is in the possession of the Contractor and in which the DTA has or may acquire an interest.

Settlement of claims by the Contractor under this termination for convenience clause shall be in conformance with the provisions set forth in Section 21. TERMINATION 49 U.S.C. Part 18 FTA Circular 4220.1E. except that wherever the word "Government" appears it shall be deleted and the word "DTA" shall be substituted in lieu thereof.

ARTICLE 8 TERMINATION FOR DEFAULT

The DTA may, by written notice of default to the Contractor, terminate the whole or any part of this Contract if the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or the extension thereof; or if the Contractor fails to perform any of the other provisions of the Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms and in any of these circumstances does not cure such failure within a period of 10 days (or such longer period as the DTA may authorize in writing) after receipt of notice from the DTA specifying such failure.

If the Contract is terminated in whole or in part for default, the DTA may procure, upon such terms and in such manner as the DTA may deem appropriate, supplies or services similar to those so terminated. The Contractor shall be liable to the DTA for any excess costs for such similar supplies or services, and shall continue the performance of this Contract to the extent not terminated under the provisions of this clause.

Payment for completed supplies delivered to and accepted by the DTA shall be at the Contract price. The DTA may withhold from amounts otherwise due the Contractor for such completed supplies such sum as the DTA determines to be necessary to protect the DTA against loss because of outstanding liens or claims of former lien holders.

If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clauses, or that the default was excusable under

the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to termination for convenience of the DTA.

The rights and remedies of the DTA provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE 9 RECORDS AND INSPECTIONS

a. Establishment and Maintenance of Records

Records shall be maintained by Contractor in accordance with requirements prescribed by DTA and with respect to all matters covered by this Agreement. Such records shall be maintained for a period of six (6) years after receipt of final payment under this Project.

b. Documentation of Costs

Contractor will ensure that all costs shall be supported by properly executed payrolls, time records, invoices, contracts, vouchers or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts, vouchers, orders or other accounting documents pertaining in whole or in part to this Agreement shall be clearly identified and readily accessible.

c. Reports and Information

Contractor shall be responsible for furnishing to DTA records, data and information as DTA may require pertaining to matters covered by this Agreement.

d. Audits and Inspections

Contractor shall ensure that at any time during normal business hours and as often as DTA may deem necessary, there shall be made available to DTA for examination, all of its records with respect to all matters covered by this Agreement. Contractor will also permit DTA to audit, examine and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment, and other data relating to all matters covered by this Agreement.

e. Confidentiality of Information

All reports, data, information, documentation and material given or prepared by Contractor pursuant to this Agreement will be confidential and will not be released by Contractor without prior authorization from DTA.

f. Ownership of Data

All survey notes, reports, design plans, specifications, special studies, records and other data prepared under this Agreement shall become the property of DTA upon completion or termination of the services of Contractor.

ARTICLE 10 INDEPENDENT CONTRACTOR

That at all times and for all purposes hereunder, Contractor shall be an independent contractor and is not an employee of the DTA for any purpose. No statement contained in this Agreement shall be construed so as to find Contractor to be an employee of the DTA, and Contractor shall not be entitled to any of the rights, privileges, or benefits of employees of the DTA, including, but not limited to, workers' compensation, health/death benefits, and indemnification for third-party personal injury/property damage claims.

ARTICLE 11 SEVERABILITY

In the event any provision herein shall be deemed invalid or unenforceable, the remaining provisions shall continue in full force and effect and shall be binding upon the parties to this Contract.

ARTICLE 12 SUBCONTRACTING AND ASSIGNMENTS

Contractor shall not subcontract or assign this Contract or any portion thereof without the prior written approval of the Project Manager.

ARTICLE 13 COMMUNICATIONS

General Manager

Communications in connection with this Contract shall be in writing and shall be delivered personally; or by e-mail, telegram, fax; or by regular, registered, or certified mail addressed to the officer(s) or employee(s) of the DTA and of the Contractor designated to receive such communications. Telephone calls may be used to expedite communications but shall not be official communication unless confirmed in writing.

Designation for DTA	Designation for Bidder
Jim Brown or Brad Erickson	
This Agreement represents the supersedes all prior negotiation	ENT OF AGREEMENT entire and integrated agreement between the DTA and the Contractor and as, representations or agreements, either written or oral. This Agreement may be ament signed by both DTA and Contractor.
Unless otherwise specified, thi State of Minnesota. The approx	ERNING LAW s Agreement shall be governed by the applicable laws of the City of Duluth and opriate venue and jurisdiction for any litigation hereunder shall be in the court innesota. However, litigation in Federal Courts involving the parties shall be in the State of Minnesota.
The DTA shall have the right t	CELLATION o cancel this Agreement if the DTA's governing body does not appropriate money an amount equal to the cost of this Agreement.
	VISIONS HELD INVALID nent is held invalid, such holding shall not affect the validity of the remainder of the
This Agreement entered into a	s of the day and year first written above.
Duluth Transit Authority	Contractor:

BID SHEETS

June 24, 2013

Procurement # 041-13-0304.2

FORMAL BID SHEET

Formal	Req	uest	for	Bid

Date: July 25, 2013

ATTN: Jim Heilig, DTA

DTA "Facility Floor Coating"

2402 West Michigan Street Duluth, MN 55806 ph. (218) 623-4316

Bid Opening at 2:00 P.M. on <u>July 25, 2013</u>

NOTE: All bids must be written, signed and transmitted in a sealed envelope, plainly marked with bid number, subject matter and opening date. All applicable MN State sales taxes must be included in this price.

Return Bid in Duplicate with Duplicate Descriptive Literature

BID DEPOSIT REQUIREMENTS: 5% of total bid or \$1,000.00 whichever is less.

Deposit shall mean cash, cashier's check, or corporate bond payable to: Duluth Transit Authority

PERFORMANCE BOND and PAYMENT Bond required as per specifications.

Bids: All prices must be complete . **ALL taxes, fees, delivery, and installation must be included**. TAX: Federal Excise Tax Exemption Account No. 4174056K; The DTA is City Tax Exempted, but not State.

			Total Cost	t
FACILITY FLO	OOR COATING	system as specified:		
Base Bid:		-	\$	
Add Alternate l	No. 1		Φ	
Unit Price No.	1 – Concrete Sla	b Repair, per square foot	\$	
Unit Price No.	2 – Concrete Cra	ack Repair, per linear foot	\$	
			Yes	,
Dust Control P	lan Attached			
Description of	Floor Coating S	ystem attached		
-	_	•		
Firm Name:				
Mailing Addre		_		dendum Acknowledgment mber Date Received
Č				
				
CITY	STATE	ZIP CODE		
(PRINT NAM	E)	TITLE	PH	ONE NO.
Signature		Date		

REQUIRED CERTIFICATES A. AFFIDAVIT OF NONCOLUSION

Certificate

I hereby swear (or affirm) under penalty of perjury:

- 1. That I am the bidder (if the bidder is an individual), a partner of the bidder (if the bidder is a partnership), or an officer or employee of the bidding corporation, have authority to sign on its behalf (if the bidder is a corporation);
- 2. That the attached bid or bids have been arrived at by the bidder independently, and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with any other vendor of materials, supplies, equipment, or services described in the invitation to bid, designed to limit independent bidding or competition;
- 3. That the contents of the bid or bids have not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid or bids, and will not be communicated to any such person prior to the official opening of the bid or bids; and
- 4. That I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Additionally;	
The Company Name	hereby certifies it is /is not (circle one)
included on the United States Comptroll various public contracts incorporating la	er General's consolidated list of persons or firms currently debarred for violations of bor standards provisions.
Signed	

B. DEBARRED BIDDERS

Certificate

Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters:

- (a) (1) The Offeror certifies, to the best of its knowledge and belief, that:
 - a. The Offeror and/or any of its Principals:
 - (1) are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
 - (2) have () have not (), within a three year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; and
 - (3) are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in (a)(1)(I) of this provision.
 - b. The Offeror has () has not (), within a three year period preceding this offer, had one or more contracts terminated for default by any Federal agency.
 - (2)"Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general Manager; plant Manager; head of a subsidiary, division, or business segment, and similar positions).

This certification concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under section 1001, title 18, United States Code.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to the other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

Type Name and Title
 Signature

Subscribed and sworn to before me this, 2013			
Notary Public			
My Commission Expires, 20			

C	COMPLIANCE	WITH CDE	CITICATIONS
C.	COMPLIANCE	WILLSEE	CIFICATIONS

Certificate

The bidder hereby states that it will comply with the technical specifications issued by the
Duluth Transit Authority in all areas except those where approved equals were
granted by the purchaser (s).

SIGNED	
FIRM NAME	
Subscribed and sworn to before me this day of, 2013	
Notary Public	

My Commission Expires ______, 20____

Procurement # 041-13-0304.2

D. DRUG-FREE WORKPLACE Certificate

Introduction

FTA's drug and alcohol rules, 49 CFR 653 and 654, respectively, are unique among the regulations issued by FTA. First, they require recipients to ensure that any entity performing a safety-sensitive function on the recipient's behalf (usually subrecipients and/or contractors) implement a complex drug and alcohol testing program that complies with Parts 653 and 654. Second, the rules condition the receipt of certain kinds of FTA funding on the recipient's compliance with the rules; thus, the recipient is not in compliance with the rules unless every entity that performs a safety-sensitive function on the recipient's behalf is in compliance with the rules. Third, the rules do not specify how a recipient ensures that its subrecipients and/or contractors comply with them.

How a recipient does so depends on several factors, including whether the contractor is covered independently by the drug and alcohol rules of another Department of Transportation operating administration, the nature of the relationship that the recipient has with the contractor, and the financial resources available to the recipient to oversee the contractor's drug and alcohol testing program. In short, there are a variety of ways a recipient can ensure that its subrecipients and contractors comply with the rules.

Therefore, FTA has developed three model contract provisions for recipients to use "as is" or to modify to fit their particular situations.

Explanation of Model Contract Clauses

Under Option 1, the recipient ensures the contractor's compliance with the rules by requiring the contractor to participate in a drug and alcohol program administered by the recipient. The advantages of doing this are obvious: the recipient maintains total control over its compliance with 49 CFR 653 and 654. The disadvantage is that the recipient, which may not directly employ any safety-sensitive employees, has to implement a complex testing program. Therefore, this may be a practical option only for those recipients which have a testing program for their employees, and can add the contractor's safety-sensitive employees to that program.

Under Option 2, the recipient relies on the contractor to implement a drug and alcohol testing program that complies with 49 CFR 653 and 654, but retains the ability to monitor the contractor's testing program; thus, the recipient has less control over its compliance with the drug and alcohol testing rules than it does under option 1. The advantage of this approach is that it places the responsibility for complying with the rules on the entity that is actually performing the safety-sensitive function. Moreover, it reserves to the recipient the power to ensure that the contractor complies with the program. The disadvantage of Option 2 is that without adequate monitoring of the contractor's program, the recipient may find itself out of compliance with the rules.

Under option 3, the recipient specifies some or all of the specific features of a contractor's drug and alcohol compliance program. Thus, it requires the recipient to decide what it wants to do and how it wants to do it. The advantage of this option is that the recipient has more control over the contractor's drug and alcohol testing program, yet it is not actually administering the testing program. The disadvantage is that the recipient has to specify and understand clearly what it wants to do and why.

Drug and Alcohol Testing Option 1

The contractor agrees to:

(a) participate in (grantee's or recipient's) drug and alcohol program established in compliance with 49 CFR 653 and 654.

Drug and Alcohol Testing Option 2

The contractor agrees to establish and implement a drug and alcohol testing program that complies with 49 CFR Parts 653 and 654, produce any documentation necessary to establish its compliance with Parts 653 and 654, and permit any authorized representative of the United States Department of Transportation or its operating administrations, the State Oversight Agency of (name of State), or the (insert name of grantee), to inspect the facilities and records associated with the implementation of the drug and alcohol testing program as required under 49 CFR Parts 653 and 654 and review the testing process. The contractor agrees further to certify annually its compliance with Parts 653 and 654 before (insert date) and to submit the Management Information

System (MIS) reports before (insert date before March 15) to (insert title and address of person responsible for receiving information). To certify compliance the contractor shall use the "Substance Abuse Certifications" in the "Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements," which is published annually in the Federal Register.

Drug and Alcohol Testing Option 3

The contractor agrees to establish and implement a drug and alcohol testing program that complies with 49 CFR Parts 653 and 654, produce any documentation necessary to establish its compliance with Parts 653 and 654, and permit any authorized representative of the United States Department of Transportation or its operating administrations, the State Oversight Agency of (name of State), or the (insert name of grantee), to inspect the facilities and records associated with the implementation of the drug and alcohol testing program as required under 49 CFR Parts 653 and 654 and review the testing process. The contractor agrees further to certify annually its compliance with Parts 653 and 654 before (insert date) and to submit the Management Information System (MIS) reports before (insert date before March 15) to (insert title and address of person responsible for receiving information). To certify compliance the contractor shall use the "Substance Abuse Certifications" in the "Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements," which is published annually in the Federal Register. The Contractor agrees further to [Select a, b, or c] (a) submit before (insert date or upon request) a copy of the Policy Statement developed to implement its drug and alcohol testing program; OR (b) adopt (insert title of the Policy Statement the recipient wishes the contractor to use) as its policy statement as required under 49 CFR 653 and 654; OR (c) submit for review and approval before (insert date or upon request) a copy of its Policy Statement developed to implement its drug and alcohol testing program. In addition, the contractor agrees to: (to be determined by the recipient, but may address areas such as: the selection of the certified laboratory, substance abuse professional, or Medical Review Officer, or the use of a consortium).

Option Chosen: (Circle One)	A	В	C
SIGNED			
FIRM NAME		-	
Subscribed and sworn to before me this day of, 20			
Notary Public			
My Commission Expires	20		

E. BUY AMERICAN (if contract is over \$100,000)

Certificate

- (a) The Buy American Act (41 U.S.C. 10) provides that the Government gives preference to domestic end products. "Components," as used in this clause, means those articles, materials, and supplies incorporated directly into the end products. "Domestic end product," as used in this clause, means (1) an unmanufactured end product mined or produced in the United States, or (2) an end product manufactured in the United States, if the costs of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as the products referred to in subparagraph (b)(3) of this clause shall be treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic. On acquisitions above \$25,000 in value, components of Canadian origin are treated as domestic. "End Products," as used in this clause, means those articles, materials, and supplies to be acquired for public use under this contract.
- (b) The Contractor shall deliver only domestic end products, except those (1) for use outside the United States; (2) that the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality; (3) for which the agency determines that domestic preference would be inconsistent with the public interest; or (4) for which the agency determines the cost to be unreasonable (see section 24.105 of the Federal Acquisition Regulation). (The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954, as amended and Subpart 25.1 of the Federal Acquisition Regulation).

BUY AMERICAN CERTIFICATION

The offerer certifies that each end product, except those listed below, is a domestic end product (as defined in the Federal Acquisition Regulations clause entitled Buy American Act -"Supplies"), and that components of unknown origin are considered to have been mined, produced, or manufactured outside the United States.

Excluded End Products:	Count	ry of Origin (List as necessary)
Offerors may obtain from the Contracti	ing Officer lists of art	icles, materials, and supplies excepted from the Buy American Act.
		Subscribed and sworn to before me
	this	day of, 2013
Signature		
		Notary Public
		My Commission Expires . 20

E. <u>BUY AMERICAN NON-COMPLIANCE CERTIFICATION</u>

Certificate

The bidder hereby certifies that it cannot comply with the requirements of Section 165A of the Surface Transp	ortation Act of
1982, but it may qualify for an exception to the requirement pursuant to Section 165B of the Surface	Transportation
Assistance Act and regulations at 49 C.F.R. 661.7.	
	
Signature	

My Commission Expires _____

Notary Public

Subscribed and sworn to before me this _____ day of ______, 2013

F. Anti-Lobbying Certificate

Byrd Anti-Lobbying Amendment, 31 U.S.C. 1352, as amended by the Lobbying Disclosure Act of 1995, P.L. 104-65 [to be codified at 2 U.S.C. § 1601, et seq.] - Contractors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

APPENDIX A, 49 CFR PART 20--CERTIFICATION REGARDING LOBBYING Certification for Contracts, Grants, Loans, and Cooperative Agreements (*To be submitted with each bid or offer exceeding \$100,000*)

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, et seq.)]
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

required certification or disc	. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a losure form shall be subject to an \$10,000 and not more than \$100,000 for each such expenditure or failure.]
	, certifies or affirms the truthfulness and accuracy of each statement of its certification and on, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, <i>et seq.</i> , apply to this if any.
	Signature of Contractor's Authorized Official
	Name and Title of Contractor's Authorized Official

Certificate G

The respondent hereby states that it has read and will comply the DTA's Vendor Code of Ethics and Organizational Conflict of Interest (both on the DTA website) as well as the applicable Federal Clauses and Requirements contained herein.
SIGNED
FIRM NAME

TECHNICAL SPECIFICATIONS

FOR

Facility Floor Coating

June 24, 2013

Duluth Transit Authority

2402 WEST MICHIGAN STREET DULUTH, MN 55806



Operations Center Facility Floor Coatings

LHB Project #130139

SPECIFICATIONS

JUNE 24, 2013

LHB 21 West Superior Street, Ste 500 Duluth, Minnesota 55802 (218) 727-8446

FAX: (218) 727-8456



TABLE OF CONTENTS

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

00 3100 AVAILABLE PROJECT INFORMATION

DIVISION 01 - GENERAL REQUIREMENTS

01 1000	SUMMARY
01 2000	PRICE AND PAYMENT PROCEDURES
01 2100	ALLOWANCES
01 2200	UNIT PRICES
01 2300	ALTERNATES
01 3119	COORDINATION AND MEETINGS
01 3300	SUBMITTALS
01 4000	QUALITY REQUIREMENTS
01 5000	CONSTRUCTION FACILITIES
01 6000	PRODUCT REQUIREMENTS
01 7800	CONTRACT CLOSE-OUT

DIVISION 03 - CONCRETE

03 0130.75	CONCRETE SLAB REPAIR
03 3511	CONCRETE FLOOR FINISHES

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 1800 TRAFFIC COATINGS

DIVISION 09 - FINISHES

09 9000 PAINTING AND COATING

SECTION 00 3100 AVAILABLE PROJECT INFORMATION

PART 1 GENERAL

1.01 PRELIMINARY DATA

- A. Certain preliminary investigations and studies made by the Owner are available to the bidders but will not be part of the Contract Documents, as follows:
 - 1. Vapor Transmission, Relative Humidity and Adhesion Testing Report by Braun Intertec, dated March 26, 2012. Report is attached.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION



Braun Intertec Corporation

4511 West First Street

Suite 4

Duluth, MN 55807

Phone: 218.624.4967 Fax: 218.624.0196 Web: braunintertec.com

March 26, 2012

Project DU-12-00643

Alan Vorderbruggen, PE, SE LHB, Inc. 21 West Superior Street, Suite 500 Duluth, MN 55802

Re: Vapor Transmission and Adhesion Testing

DTA 2012 Coatings Testing 2402 West Michigan Street Duluth, Minnesota

Dear Mr. Vorderbruggen:

We recently conducted water vapor transmission tests, relative humidity tests and pull-off tests of coatings on the slab-on-grade concrete floors at the Duluth Transit Authority at 2402 West Michigan Street in Duluth, Minnesota.

Evaluation Procedures

Water vapor transmission testing performed in accordance with ASTM F 1869, "Standard Test Method for Measuring Moisture Vapor Transmission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride".

Relative Humidity testing performed in accordance with ASTM F2170-09, "Standard Test method for Determining Relative Humidity in Concrete Floor Slabs".

Pull-Off Strength of coatings performed in accordance with ASM D4541-09, "Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Tester".

Discussion

Relative Humidity vs Vapor Transmission

A question was raised as to why the vapor transmission test results were within typical coating manufacturer specifications while the relative humidity test results were higher than typically allowed. Generally, the relative humidity and the anhydrous calcium chloride tests are measuring two different parameters.

The relative humidity is a measure of vapor pressure, which is temperature dependent, and is usually 1/2 the pressure above the slab than below. Generally speaking, as you increase the surrounding temperature, you decrease the relative humidity. The relative humidity test results are greatly affected by the temperature differential between the concrete slab temperature and the temperature of the surrounding air and soil conditions.

Anhydrous calcium chloride testing measures the amount of water vapor emitting from the slab surface, which also requires that the concrete and air temperature has reached equilibrium and the anticipated service conditions.

There is some debate in the industry on which test is a better representation of the moisture vapor emission from below and within the slab, but regardless, the flooring system manufacturer specifies both the testing procedure and limits to qualify for a warranty, so their requirements are what drives the testing process. If passing moisture vapor emission rate results cannot be achieved, there are moisture mitigation products that can be used, which require additional testing and can be somewhat costly.

Other Observations

Our scope of services required collection of data; however, we noted several items during our testing. These are not conclusions but are general observations and should be considered as such.

- There are cracks in the floor slab, we did not map out the cracks but we noticed that the areas where cracking occurred corresponded to areas where there were coatings failures. Daryl Carlson, our coatings grinding contractor noted that as a permanent fix he would grind all areas around cracks, seal the cracks and apply a patch coating.
- The pull-off tests had lower failures in strips, this could potentially be an indication of inconstant surface preparation, or it could be inconsistencies in the coating product.
- The tests were conducted in areas where coatings appear to be in good condition, test results in failure areas may differ.

Test Results

The test areas were selected by the LHB in conjunction with DTA and Braun personnel.

Table 1. Moisture Vapor Emission Rates (ASTM F 1869)

Test	Location	Moisture Vapor Emission Rate (lbs. / 1000 sq. ft. /24 hr.)
1	4' West of Gridline S / 3.	3.87
2	13' East of gridline S / 3, 7' South of gridline S / 7.	3.54
3	15' West of Gridline S / 3.	3.06
4	6' South of gridline T / 3.	3.06
5	8' East of gridline T / 3.	2.9
6	18' West of gridline U / 3, 6' South of gridline U / 3.	3.06
7	5' West of Gridline U / 3.	3.22
8	26' West of Gridline S /3	4.67
9	5' East of Gridline U / 3.	3.38
10	16' East of gridline U / 3, 5' South of gridline U / 3.	3.06
11	16' West of Gridline V / 3.	3.06
12	2' East of gridline V / 3, 4' South of gridline V / 3.	3.87
13	12' East of gridline V / 3.	3.54



Test	Location	Moisture Vapor Emission Rate (lbs. / 1000 sq. ft. /24 hr.)
14	5' West of gridline W / 3, 5' South of gridline W / 3.	3.83
15	5' East of gridline W / 3.	3.54
16	8' West of Gridline R / 5.	3.87
17	4' East of gridline R / 5, 5' South of gridline R / 5.	2.90
18	5' West of gridline S / 5.	3.54
19	8' East of gridline S / 5, 4' South of gridline S / 5.	3.38
20	5' West of Gridline T / 5.	3.06
21	4' East of gridline T / 5, 4' South of gridline T / 5.	3.22
22	11' West of gridline U / 5.	2.74
23	3' East of gridline U / 5, 4' South of gridline U / 5.	3.71
24	15' East of gridline U / 5.	3.38
25	4' East of gridline V / 5, 4' South of gridline V / 5.	3.71
26	15' West of Gridline W / 5.	4.03
27	5' West of gridline W / 5, 3' South of gridline W / 5.	2.90
28	8' East of gridline W / 5.	2.74
29	4' East of gridline X / 5, 4' South of gridline X / 5.	2.90
30	1' West of Gridline R / 7.	3.98
31	8' South of gridline R / 7, 7' East of R / 7	3.15
32	8' West of gridline S / 7.	3.49
33	12' East of gridline S / 7, 10' South of gridline S / 7.	3.65
34	5' West of gridline T / 7	3.65
35	17' East of gridline T / 7, 8' South of gridline T / 7.	3.15
36	8' West of gridline U / 7	3.32
37	10' East of gridline U / 7, 8' South of gridline U / 7	3.98
39	6' East of gridline V /7, 7' South of gridline V / 7	3.15
40	19' West of gridline W / 7	3.98
41	5' West of gridline W / 7, 4' South of gridline W / 7	3.95
42	11' East of gridline W / 7	2.32
43	11' East of gridline X / 7, 7' South of gridline X / 7	2.99
44	2' North of gridline X / 10, 11' West of gridline R / 10	2.99
45	9' North of gridline X / 10, 5' East of gridline X / 10	2.82
46	2' North of gridline S / 10, 8' West of gridline R / 10	3.49
47	14' East of gridline S / 10	2.49
48	17' West of gridline T / 10, 9' North of gridline T / 10	3.82
49	14' East of gridline T / 10, 9' North of gridline T / 10	2.99
50	12' West of gridline U / 10	2.99
51	10' East of gridline U / 10, 9' North of gridline U / 10	3.32
52	14' West of gridline V / 10	3.32
53	12' East of gridline V / 10, 10' North of gridline V / 10	4.15
54	7' West of gridlineV.9 / 10	4.15
55	13' West of gridline W / 10	2.82
56	13' West of gridline X / 10	3.15
57	9' North of gridline X / 10	3.15



Test	Location	Moisture Vapor Emission Rate (lbs. / 1000 sq. ft. /24 hr.)
58	14' East of gridline X.3 / 10, 2' North of gridline X.3 / 10	2.66
59	6' East of gridline R / 12, 2' South of gridline R / 12	3.15
60	2' East of gridline R / 12, 8' South of gridline R / 12	3.32
61	16' North of gridline T / 12	3.49
62	3' East of gridline S / 14, 12' North of gridline S / 14	3.15
63	9' East of gridline T / 14, 9' North of gridline T / 14	2.16
64	14' West of gridline U / 12	3.32
65	7' North of gridline U / 14, 13' East of gridline U / 14	2.49
66	18' West of gridline V / 12	3.15
67	12' North of gridline W/13, 12' West of gridline W/13	2.3
68	6' West of gridline X / 12	2.49
69	5' West of gridline X / 13, 2' South of gridline X / 13	2.99
70	12' West of gridline W / 14	2.82
71	5' East of gridline Q / 3, 6' South of gridline Q / 3.	3.87
72	7' North of gridline Q/7, 6' East of gridline Q/7	4.59
73	5' East of gridline Q / 10, 2' North of gridline Q / 10	3.98
74	9' East of gridline Q / 12, 2' South of gridline Q / 12	4.15
75	37' West of gridline R / 12, 33' South of gridline R / 12	2.82
76	9' East of gridline T / 14, 22' South of gridline T / 14	2.82
77	6' East of gridline U / 14, 22' South of gridline U / 14	2.66
78	14' West of gridline W / 14, 22' South of gridline W / 14	2.49
79	38' East of gridline X / 13, 27' South of gridline X / 13	2.49
80	5' West of gridline YY / 10, 12' South of gridline YY / 10.	2.49
81	5' West of gridline YY / 7, 7' North of gridline YY / 7.	2.58
82	5' West of gridline YY / 4, 8' South of gridline YY / 4.	3.06
83	5' West of gridline R / 4	3.38
84	10' East of gridline T/ 4,	3.06
85	4' West of gridline R / 6	2.58
86	5' West of gridline T / 6	3.06
87	7' North of gridline S / 8	2.99
88	17' South of gridline T / 8	2.99
89	6' West of gridline V / 4	3.06
90	6' West of gridline X / 4	3.71
91	6' West of gridline V / 6	4.19
92	4' West of gridline X / 6	3.06
93	6' East of gridline U / 8	4.65
94	11' West of gridline W / 10	2.99
95	8' West of gridline S / 9	2.49
96	11' West of gridline U / 9	2.82
97	7' East of gridline R / 11	2.82
98	10' East of gridline T / 11	3.32
99	7' West of gridline V / 9	3.82
100	8' West of gridline W / 11	2.99



Table 2. Relative Humidity Results (ASTM F2170-09)

	,		Relative Humidity (%)
Test	Location	Probe Serial Number	/Temperature
1	4' West of Gridline R / 13.	S353215	92 / 64
2	10' East of gridline T / 13.	S357711	83 / 66
3	4' West of Gridline V / 13.	S364293	91 / 66
4	4' East of gridline X / 13.	S327517	91 / 65
5	4' West of gridline R / 10.	S364954	99 / 66
6	10' East of gridline T /10.	S316072	94 / 64
7	4' West of Gridline V / 10.	\$353290	94 / 64
8	4' East of gridline X / 10.	S364549	99 / 64
9	4' West of gridline R / 7.	S364282	99 / 66
10	10' East of gridline T / 7.	S364935	93 / 65
11	4' West of Gridline V / 7.	S326799	94 / 66
12	4' East of gridline X / 7.	S317366	93 / 63
13	4' East of gridline X / 5.	S364855	99 / 66
14	4' West of Gridline V / 5.	S326056	99 / 66
15	10' East of gridline T / 5.	S316181	99 / 67
16	4' West of gridline R / 5.	S364295	99 / 64

Table 3. Pull-Off Strength of Coatings Results (ASTM D4541-09)

	The strength of Coatings Results (
Test	Location	PSI	Type of Failure
1	2' West of gridline R/13	562	100% Concrete failure
2	2' West of gridline R/11	358	100% Concrete failure
3	2' West of gridline R/9	184	100% Concrete failure
4	2' West of gridline R/7	184	100% Concrete failure
5	2' West of gridline R/5	374	100% Coating failure
6	2' West of gridline S/3	153	50% Coating failure; 50% glue failure
7	2' West of gridline T/13	117	20% Coating failure
8	2' West of gridline T/11	246	100% Concrete failure
9	2' West of gridline T/9	546	100% Concrete failure
10	2' West of gridline T/7	84	25% Coating failure
11	2' West of gridline T/5	220	100% Coating failure
12	2' West of gridline T/3	254	75% Coating; 25 % concrete failure
13	2' West of gridline V/13	106	35% Coating failure
14	2' West of gridline V/11	400	100% Concrete failure
15	2' West of gridline V/9	193	80% Concrete failure; 20% glue failure
16	2' West of gridline V/7	284	50% Concrete; 50% coating failure
17	2' West of gridline V/5	238	100% Coating failure
18	2' West of gridline V/3	163	100% Concrete failure
19	2' East of gridline X/13	163	35% Coating; 65% glue failure
20	2' East of gridline X/11	549	50% Coating failure; 50% glue failure



Test	Location	PSI	Type of Failure
21	2' East of gridline X/9	405	100% Concrete failure
22	2' East of gridline X/7	559	30% concrete; 70% coating failure
23	2' East of gridline X/5	234	30% Concrete;70% glue failure
24	2' East of gridline W/3	422	100% Concrete failure

General Remarks

Services were provided on an on-call basis. We attempted to make observations and perform tests representative of the site conditions, but did not observe or test each and every portion of the site.

Services performed by the geotechnical and material engineers for this project have been conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in this area under similar budget and time restraints. No warranty, expressed or implied, is made.

It has been a pleasure to be of service to you on this project. If we can be of further assistance in answering any questions or in providing any additional services as construction proceeds, please contact Joe Butler at 218.624.4967 or jbutler@braunintertec.com.

Sincerely,

BRAUN INTERTEC CORPORATION

Joseph C. Butler, PE

Associate Principal / Project Engineer



SECTION 01 1000 SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: Operations Center, Storage and Maintenance area Floor Coatings.
- B. Owner's Name: DTA.
- C. The Project consists of the repair, sealing and coating of existing concrete structural slab at grade.

1.02 CONTRACT DESCRIPTION

A. Contract Type: A single prime contract based on Fixed Fee as described in Request for Bids - Contractor Agreement.

1.03 DESCRIPTION OF WORK

A. Scope of Work is shown on drawings.

1.04 OWNER OCCUPANCY

- A. Owner intends to continue to occupy portions of the existing building during the entire construction period for the conduct of normal operations
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.05 CONTRACTOR USE OF SITE AND PREMISES

- A. Arrange use of site and premises to allow:
 - 1. Owner occupancy.
- B. Provide access to and from site as required by law and by Owner:
 - Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.
- C. Existing building spaces may be used for storage.
- D. Time Restrictions:
 - 1. Limit conduct of certain Work impacting Owner operations to weekends, as described in the Phasing Plan, Drawing Sheet A1.00
- E. Utility Outages and Shutdown:
 - 1. Prevent accidental disruption of utility services.

1.06 WORK SEQUENCE

A. Construct Work in phases during the construction period. Refer to Phasing Plan, Drawing Sheet A1.00 for information for bidding purposes.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 2000 PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.

1.02 RELATED REQUIREMENTS

A. Request for Bids - Contractor Agreement

1.03 SCHEDULE OF VALUES

- A. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect/Engineer for approval.
- Forms filled out by hand will not be accepted.
- Submit Schedule of Values in duplicate within 7 days after date of Owner-Contractor Agreement.
- D. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification Section.
- E. Revise schedule to list approved Change Orders, with each Application For Payment.

1.04 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: monthly.
- B. Form to be used: AIA G702.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect/Engineer for approval.
- D. Forms filled out by hand will not be accepted.
- E. Execute certification by signature of authorized officer.
- F. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- G. Submit three copies of each Application for Payment.

1.05 MODIFICATION PROCEDURES

- A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect/Engineer will issue instructions directly to Contractor.
- B. For other required changes, Architect/Engineer will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
 - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change.
- C. For changes for which advance pricing is desired, Architect/Engineer will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 7 days.
- D. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 2100 ALLOWANCES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Quantity Allowances

1.02 RELATED REQUIREMENTS

A. Section 01 2200 - Unit Prices

1.03 QUANTITY ALLOWANCES

- A. Quantities included in Quantity Allowances are for Base Bid amounts, cost of product and install to Contractor.
- B. Architect/Engineer will prepare Change Order for quantities of Work agreed upon, above or below Quantity Allowance based on Unit Prices.
- C. Consult with Architect/Engineer for consideration and selection of work areas for each Quantity Allowance in a pre-installation meeting.

1.04 ALLOWANCES SCHEDULE

- A. Section 03 0130.75 include the Quantity of 500 SF of concrete slab repair in the Base Bid.
- B. Section 03 0130.75 include the Quantity of 3,000 LF of concrete crack repair in the Base Bid for cracks larger than 1/16" in width. This Quantity Allowance does not include repair of Cracks 1/16" or less. Repair of cracks 1/16" in width or less shall be included in Base Bid Work and completed as required by the floor coating manufacturer, per Specification Section 03 3511 Concrete Floor Finishes and 07 1800 Traffic Coatings.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 2200 UNIT PRICES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. List of Add/Deduct unit prices, for use in preparing Bids.
- B. Measurement and payment criteria applicable to Work performed under a unit price payment method.

1.02 RELATED SECTIONS

A. Section 01 2100 - Allowances. Quantities included in Base Bld

1.03 COSTS INCLUDED

A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

1.04 MEASUREMENT OF QUANTITIES

- A. Assist by providing necessary equipment, workers, and survey personnel as required.
- B. Measurement by Area: Measured by square dimension using mean length and width or radius.
- C. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.

1.05 PAYMENT

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Architect/Engineer, multiplied by the unit price, less the Base Bid Allowance. Amounts greater than the allowance will result in an Add. Amounts less than the Allowance amount will result in a Deduct to the Contract amount.
- B. Payment will not be made for any of the following:
 - 1. Products determined as unacceptable before or after placement.
 - 2. Products placed beyond the lines and levels of the required Work.
 - 3. Loading, hauling, and disposing of rejected Products.

1.06 SCHEDULE OF UNIT PRICES

- A. Item #1: Concrete Slab Repair; Section 03 0130.75, Add or Deduct Unit Price per square foot.
- B. Item #2: Concrete Crack Repair; Section 03 0130.75,Add or Deduct Unit Price per linear foot

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 2300 ALTERNATES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of alternates.
- B. Procedures for pricing alternates.

1.02 RELATED REQUIREMENTS

A. Request for Bids - Contractor Agreement.

1.03 ACCEPTANCE OF ALTERNATES

A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted alternates will be identified in the Owner-Contractor Agreement.

1.04 SCHEDULE OF ALTERNATES

- A. Alternate No. 1 TC-2 where indicated as an Alternate in the Drawings:
 - Base Bid Item: Section 03 3511 and Drawing number A2.01 including SL-2 where indicated.
 - 2. Alternative Item: Section 07 1800 and Drawing number A2.01 including TC-2 where indicated.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 3119 COORDINATION AND MEETINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Coordination.
- B. Field engineering.
- C. Preconstruction meeting.
- D. Progress meetings.

1.02 COORDINATION

A. Coordinate scheduling, submittals, and Work of the various sections of the Project Manual to assure efficient and orderly sequence of installation of interdependent construction elements with provisions for accommodating items installed later.

1.03 SUBMITTALS

A. Phasing Plan: See paragraph 1.05 Phasing of work. Contractor shall submit written plan prior to beginning work. Should changes in the plan become necessary, Contractor shall submit proposed phasing plan changes to Owner for approval and coordination with operations, with a minimum of three days notice prior to beginning work involved.

1.04 PRECONSTRUCTION MEETING

- A. Architect/Engineer will schedule a meeting after Notice of Award.
- B. Attendance Required: Owner, Architect/Engineer and Contractor.
- C. Agenda:
 - 1. Designation of personnel representing the parties in Contract and the Engineer.
 - 2. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract close-out procedures.
 - 3. Scheduling.
 - 4. Use of premises by Owner and Contractor.
 - 5. Owner's requirements.
 - 6. Security and housekeeping procedures.
 - 7. Procedures for testing.
 - 8. Procedures for maintaining record documents.
- D. Architect/Engineer will record minutes and distribute copies to participants, and those affected by decisions made.

1.05 PHASING OF WORK

- A. Work will need to be staged to minimize the impact to the Owner's facility operations. Refer to Phasing Plan, Drawing Sheet A1.00. Phasing plan is provided for Bidding purposes. Phasing Plan to be finalized by Contractor in discussion with Owner. Contractor shall document and submit written plan prior to beginning work.
- B. Weekend work will be required in some areas. Weekend work may begin as early as Friday at 4:00 pm and shall conclude, ready for traffic by 7:00 am on Monday morning.
- C. Contractor shall coordinate with Owner and Architect/Engineer to minimize disruption to Owner's daily operations. Unless otherwise authorized by the Owner, a maximum of two repair crews will be permitted to work at any given time.
- D. Concrete crack and spall repair work shall be completed progressively as the floor coating work advances. Initial prep and crack repair may be performed in advance of weekend coating work.

1.06 PROGRESS MEETINGS

A. Due to the expected short duration of the Work, there will be no scheduled progress meetings; however, if issues arise that warrant a meeting an on-site meeting can be arranged on short notice.

B. Contractor's Job Superintendent shall participate in a site walk through with Owner at weekly intervals to review work progress and dust control procedures.

PART 2 PRODUCTS - NOT USED PART 3 EXECUTION - NOT USED

SECTION 01 3300 SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Submittal procedures.
- B. Construction progress schedules.
- C. Proposed Products list.
- D. Product Data.

1.02 SUBMITTAL PROCEDURES

- A. Submittal Documents: Submit in electronic format computer generated (pdf), one (1) copy.
- B. Where electronic format is not possible, submit in hard copy, the number of copies required by the Contractor plus (2) copies
- C. Transmit each submittal with Architect/Engineer accepted Transmittal form.
- D. Identify Project, Contractor, Subcontractor or supplier, pertinent drawing and detail number, and specification section number, and type of submittal (product data, sample, etc.)
- E. Apply Contractor's stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents. Submittals without Contractor's stamp and signature will not be reviewed.
- F. Schedule submittals to expedite the Project, and deliver to business address. Coordinate submission of related items.
- G. For each submittal for review, allow 7 days excluding delivery time to and from the Contractor.
- H. Identify variations from Contract Documents and Product or system limitations, which may be detrimental to successful performance of the completed Work.
- I. Provide space for Contractor and Architect review stamps.
- J. Revise and resubmit, identify all changes made since previous submission.
- K. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with provisions.
- L. Submittals not requested will not be recognized or processed.

1.03 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial schedule at pre-construction meeting.
- B. Submit revised schedules with each Application for Payment, identifying changes since previous version.
- C. Indicate estimated percentage of completion for each item of Work at each submission.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 4000 QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Quality Control control of installation.
- B. References.
- Testing and Inspection Agencies Testing and Inspection Defect Assessment.

1.02 QUALITY ASSURANCE - CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.
- C. Perform work by persons qualified to produce workmanship of specified quality.

1.03 TESTING AND INSPECTION AGENCIES

- A. The Contractor shall employ the services of an independent testing agency in accordance with the provisions herein to perform the testing requirements indicated in each of the sections of this specification and elsewhere in the bid documents. Performance and payment of all the testing indicated in the sections is the responsibility of the Contractor. The Contractor shall coordinate and provide notification to the testing agency for the specified testing. Results of all testing performed on the site or in the laboratory shall be copied to the Engineer within 24 hours of the completion of the testing.
- B. Testing Agency Requirements:
 - 1. Testing agency: Comply with requirements of ASTM E329, ASTM E548, ASTM C1093, ASTM E543, ASTM C1021, ASTM C1077, ASTM C1093, and ASTM C1021.
 - 2. Laboratory: Authorized to operate in State in which Project is located.
 - 3. Laboratory Staff: Maintain a full-time registered Engineer on staff to review services.
 - 4. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 TESTING AND INSPECTION

- A. See individual specification sections for testing required.
- B. Testing Agency Duties:
 - 1. Test samples of mixes submitted by the Contractor.
 - Provide qualified personnel at site. Cooperate with Owner and Contractor in performance of services.
 - 3. Perform specified sampling and testing of products in accordance with specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - Promptly notify Owner and Contractor of observed irregularities or non-conformance of Work or products.
 - 6. Promptly submit reports of all tests/inspections specified to the Architect/Engineer and Owner
 - 7. Reports shall indicate whether tested material does, or does not, meet the project specifications.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.

- 2. Agency may not approve or accept any portion of the Work.
- 3. Agency has no authority to stop the Work.

D. Contractor Responsibilities:

- 1. Deliver to agency at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.
- 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
- 3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
- 4. Notify Owner and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by the Owner. Payment for re-testing will be the responsibility of the Contractor.

3.02 DEFECT ASSESSMENT

A. Replace Work or portions of the Work not conforming to specified requirements.

SECTION 01 5000 CONSTRUCTION FACILITIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Access to the site and use of the premises.
- B. Utilities: Water and power.
- C. Temporary Controls: Signage, barriers, enclosures, and traffic control
- D. Coordination with occupants.
- E. Dust Control.
- F. Protection of installed work.
- G. Security.
- H. Progress cleaning and waste removal.
- I. Removal of utilities, facilities and controls.
- J. Construction aids.

1.02 SUBMITTALS

- A. See Section 01 3300 Submittals, for submittal procedures.
- B. Submit with Bid a detailed description of Dust Control Plans proposed for the Work.

1.03 ACCESS TO THE SITE AND USE OF THE PREMISES

- A. The space available to the Contractor for the performance of the work is the interior bus parking and maintenance facility.
- B. Other areas are off limits to all construction personnel.
 - Exception: Owner's toilet facilities will be provisionally available, subject to Contractor's personnel maintaining facilities in a clean condition. Owner retains the right to waive access at any time.
- C. The Owner will continue to occupy the existing building during the construction period.
 - 1. The Owner will endeavor to cooperate with the Contractor's operations when the Contractor has notified the Owner in advance of need for changes in operations in order to accommodate the construction operations.
 - 2. Conduct the work so as to cause the least interference with the Owner's operations.
- D. Unsecured storage areas will be available on site.
- E. Concrete Redi Mix trucks may be used within the building provided:
 - 1. The truck delivers no more than 3 or 4 cubic yards of concrete.
 - 2. Door clearance is adequate.

1.04 UTILITIES

A. Water and power: Owner will provide access to water and power necessary for the Work. (Power available is 110, 220 volt, single phase). Any modifications required for Contractor's use shall be done at the Contractor's sole expense and shall be returned to original condition upon Owner's request at Contractor's sole expense.

1.05 TEMPORARY CONTROLS

- A. Signs: Provide signs adequate to direct individuals from areas which may be hazardous during construction Work.
- B. Contractor shall have sole responsibility for furnishing and maintaining pedestrian and traffic control signage, barriers, etc., to ensure efficient traffic control and safety of pedestrians and vehicle occupants. Contractor shall coordinate traffic control with Owner to minimize impact to Owner's operations.

1.06 COORDINATION WITH OCCUPANTS

A. Occupied areas include all areas in which the Owner's regular operations will be going on or to which the Owner requires access during the construction period, whether conducted by the Owner or his customers, clienteles, or the public.

1.07 DUST CONTROL

- A. Work that creates significant dirt/dust shall be controlled to minimize impact to the Owner's operations and facilities. Contractor shall include a "Dust Control Plan" to meet the following criteria:
 - 1. Contractor shall be solely responsible for containment of dust.
 - 2. Work shall be fully enclosed while performing any activities which create dust to prevent dust from migrating into the building. Enclosure shall include sides and top, with top sealed to sides, and sides sealed to floor.
 - 3. Should dust escape at any time, Contractor shall cease operations immediately and make adjustments to enclosure. Contractor shall be responsible for cleaning of all escaped dust. If Contractor fails to take immediate action, Owner may at their discretion perform or hire others to perform cleaning at Contractor expense.
 - 4. Prior to removal of the enclosure, vacuum all surface within the enclosure to collect dust Mist surfaces prior to disassembly.

1.08 PROTECTION OF INSTALLED WORK

- Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to prevent damage.
- C. Prohibit equipment, pedestrian and vehicle traffic at areas that could be damaged from these activities.

1.09 SECURITY

A. Provide secure storage for materials for which the Owner has made payment and which are stored on site.

1.10 PROGRESS CLEANING AND WASTE REMOVAL

- A. Provide waste storage dumpster and removal services as required to maintain the site in clean and orderly condition. Owner will provide exterior, on-site space for a dumpster.
- B. Provide containers with lids.
- C. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- D. Collect and remove waste materials, debris, and rubbish from site weekly and dispose off-site, in a licensed waste disposal facility.
- E. Progress cleaning broom and vacuum clean areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- F. Burial of waste on the project site is prohibited.

1.11 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities and materials, prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 01 6000 PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Transportation, handling, storage and protection.
- B. Product option requirements.
- C. Substitution limitations and procedures.
- D. Maintenance materials, including extra materials, spare parts, tools, and software.

1.02 RELATED REQUIREMENTS

A. Section 01 4000 - Quality Requirements: Product quality monitoring.

1.03 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 PRODUCTS

2.01 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description, or to be submitted for approval if so noted.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.02 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Contractor is required to submit a description of proposed floor coating systems with Bid.
- B. Substitutions will not be given after award of contract.
- C. Where the Contract Documents stipulate a particular product, substitutions will be considered up until receipt of Proposals.
- D. Where products are proposed other than those indicated in the Specification, document with complete data substantiating compliance of proposed substitution with Contract Documents.
- E. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.

F. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

3.02 TRANSPORTATION AND HANDLING

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.

3.03 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturers' instructions.
- B. Store with seals and labels intact and legible.
- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

SECTION 01 7800 CONTRACT CLOSE-OUT

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Close-Out procedures.
- B. Final cleaning.
- C. Project record documents.

1.02 CLOSE-OUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Engineer's review.
- B. The Contractor shall assemble and submit as one package the following before making application for final payment:
 - Project record documents:
 - 2. Maintenance Materials
 - Warranties
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.03 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
- B. Remove waste and surplus materials, rubbish and construction facilities from the site.
- Clean all floors, walls, louvers and other facilities of all debris, dust, marks, etc. due to construction activities.

1.04 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one (1) set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Record information concurrent with construction progress.
- D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Field changes of dimension and detail.
 - 2. Details not on original Contract drawings.
- E. Submit documents to Engineer with claim for final Application for Payment.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

SECTION 03 0130.75 CONCRETE SLAB REPAIR

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preparation and repair of spalled, cracked or otherwise deteriorated portions of slab concrete discovered in the course of performing the Work and as directed by the Architect/Engineer.
- Repair and replacement of existing deteriorated reinforcing steel.

1.02 PRICE AND PAYMENT PROCEDURES

- A. See Section 01 2200 Unit Prices unit price requirements.
- B. Repair of cracks 1/16" and smaller in width is incidental to the Work.

1.03 RELATED REQUIREMENTS

- A. Section 01 2100 Allowances
- B. Section 01 2200 Unit Prices
- C. Section 01 3300 Submittals.
- D. Section 03 3511 Concrete Floor Finishes
- E. Section 07 1800 Traffic Coatings.

1.04 REFERENCE STANDARDS

- A. ASTM A615/A615M Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement; 2009b.
- B. ASTM A775/A775M Standard Specification for Epoxy-Coated Steel Reinforcing Bars; 2007b.
- C. ASTM C33 Standard Specification for Concrete Aggregates; 2008.
- D. ASTM C150 Standard Specification for Portland Cement; 2007.
- E. ASTM C404 Standard Specification for Aggregates for Masonry Grout; 2007.

1.05 SUBMITTALS

- A. See Section 01 3300 Submittals, for submittal procedures.
- B. Product Data: Indicate product standards, physical and chemical characteristics, technical specifications, limitations, maintenance instructions, and general recommendations regarding each material.
- C. Submit concrete mix design for all redi-mix concrete considered for use.
- D. Submit floor coating manufacturer's recommendations for crack repair.
- E. Manufacturer's Certificate: Certify that specified products meet or exceed specified requirements.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than five years of documented experience.
- B. Applicator Qualifications: Company specializing in performing the work of this section with minimum five years of experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Comply with manufacturers' instructions for storage, shelf life limitations, and handling.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Cementitious Mortars for Partial-Depth Slab Repair:
 - 1. Mn/DOT Pre-packaged Mix No. 3U18.
 - 2. Ready Mix delivered concrete of an approved mix design.

- 3. Fast-setting, pre-approved bag mix where necessary to restore/maintain traffic.
- 4. Substitutions: See Section 01 6000 Product Requirements.

2.02 PATCHING AND CRACK REPAIR MATERIALS

- A. Concrete repairs shall be made with a high quality commercial cementitious concrete repair material developed for patching exterior concrete. It shall be designed for a minimum of 5000 psi compressive strength at 28 days and conform to ASTM C666 for freeze/thaw durability and ASTM C672 for scaling resistance to deicing salts. Submit product literature for approval 7 days prior to performing any patching work.
- B. Acceptable bag mix will be Mn/DOT mix 3U18 with approved air entrainment admixture at partial-depth repairs, except where faster setting material is needed to maintain traffic.
- C. Provide fast-setting material where necessary to provide turnover to maintain traffic. Fast-setting material shall achieve a minimum compressive strength of 4,000 psi within 24 hours.
- D. Portland Cement: ASTM C 150, Type I, grey.
- E. Fine and Coarse Aggregates: ASTM C 33; compatible with cementitious mortar and associated manufacturer's recommendations (3/4" minus).
- F. Sand: ASTM C 33 or ASTM C 404; uniformly graded, clean.
- G. Water: Clean and potable.
- H. Epoxy Resin: Two-part epoxy adhesive containing 100 percent solids, meeting the following minimum characteristics:
 - 1. Floor coating manufacturer recommended product.
 - 2. Low or super low viscosity for gravity feed application.
 - 3. Clear where used in conjunction with clear floor sealer product.
 - 4. Bond Strength (ASTM C882): 2,700 psi.
 - 5. Tensile Strength (ASTM D638): 6,600 psi.
 - 6. Percent Elongation (ASTM D638): 2 percent at 7 days at 70 degrees F.
 - 7. Compressive Strength (ASTM D695): 6,500 psi.

2.03 CONCRETE ADMIXTURES

- A. Air Entrainment Admixture: ASTM C 260.
- B. Chemical Admixtures: ASTM C 494/C 494M, Type A Water Reducing, Type C Accelerating, and Type D Water Reducing and Retarding.
 - 1. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.

2.04 REINFORCEMENT MATERIALS

- A. Reinforcing Steel: ASTM A615/A615M Grade 60 (420) billet-steel deformed bars, epoxy-coated.
 - 1. Epoxy coated in accordance with ASTM A775/A 775M.

2.05 ANTI-CORROSIVE PRIMER

A. Brush-on anti-corrosive primer product specifically for use on reinforcing steel in concrete repair applications, to be submitted for approval.

2.06 JOINT SEALANT

- A. Joint sealants shall be 2-component Type II non-sag unmodified polyurethane sealant containing no coal tar or asphalt, color to match existing sealant or floor, such as:
 - 1. Tremco Dymeric.
 - 2. Dvnatrol II.
 - 3. Sonolastic NP2.
 - 4. Substitutions: See Section 01 6000 Product Requirements, for Substitutions.

2.07 MIXING EPOXY MORTARS

A. Mix epoxy mortars in accordance with manufacturer's instructions for purpose intended.

2.08 MIXING CEMENTITIOUS MATERIALS

A. Mix cementitious mortar in accordance with manufacturer's instructions for purpose intended.

PART 3 EXECUTION

3.01 PHASING

A. Refer to Drawing Sheet A1.00 for required Phasing of the Work.

3.02 EXAMINATION

- Verify that surfaces are ready to receive work.
- B. Beginning of installation means acceptance of substrate.

3.03 PREPARATION - SPALLED, CHIPPED OR DELAMINATED CONCRETE

- A. Prepare and construct in accordance with the Drawings and as follows:
 - 1. Remove existing loose or damaged floor coating materials.
 - 2. The concrete shall be rendered free of all spalled, loose, cracked or otherwise unsound concrete. Removal of concrete shall be accomplished with the use of lightweight air hammers fitted with spade bits or bush heads depending on the extent of the concrete deterioration and the type of repair material specified. Remove concrete to a minimum depth as follows. Perform removal in a manner so as to not nick or damage existing reinforcing. Any reinforcing damaged by Contractor shall be replaced at Contractor's sole expense.
 - a. 3/4 inch beyond exposed reinforcing.
 - b. To a minimum depth of 2 inches.
 - c. To reach sound concrete.
 - 3. Sawcut the perimeter of the repair area to a 3/4 inch minimum depth. Sawcuts shall be made in a series of straight line cuts. The number of straight line cuts shall be minamized, but shall generally following the shape of the excavation.
 - 4. Concrete surfaces shall be prepared by shot or sand blasting only.
 - 5. Reinforcing steel shall have all corrosion products removed by shot or sand blasting. Splice new reinforcing steel to existing steel where corrosion has depleted the cross section area by 20 percent or more as noted below or as otherwise approved by the Engineer. Apply an anti-corrosive primer coating to all exposed reinforcing steel.
 - a. Lap new reinforcing steel 20 bar diameters with good existing steel for 20% material loss.
 - b. Lap new reinforcing steel 40 bar diameters with good existing steel for material loss of 50% or more.
 - c. Lap lengths shall vary linearly between 20 and 40 bar diameters between 20% and 50% material loss.
 - d. Original construction drawings are available to Contractor to review size and spacing of existing reinforcing steel.
 - 6. Any joints encountered in repair areas shall be maintained continuous through the repair. Match configuration, alignment, backer rod, joint sealant, etc. of existing joint. Joint sealant repair shall be incidental to the work.

3.04 PREPARATION - CRACKED CONCRETE

- A. Remove existing loose or damaged floor coating materials.
- B. Grind or shotblast exposed concrete surface along cracks to open pores for repair epoxy and subsequent floor coating.
- C. At edges of existing coating along crack, grind to create tapered feathered surface to accept proposed coating system without abrupt visible edges.
- D. Cracks Wider than 1/16": Saw or route to create reservoir for epoxy resin (and sand if applicable).

- E. All Cracks: Clean cracks with wire brushes and wheels or by shot blasting followed by high pressure, oil-free compressed air to remove dust and debris to ensure open, clean and not contaminated with any bond-inhibiting materials such as oil or grease.
- F. Allow cracks to dry completely.

3.05 APPLICATION - CEMENTITIOUS REPAIR MORTAR

- A. Saturate prepared surface with water for a minimum of 24 hours and allow surface to dry (SSD condition Surface Saturated yet Dry).
- B. Apply cementitious mortar product with a steel trowel. The placement of patching material shall be in layers no greater than the maximum thickness of the concrete patching material, as recommended by the material manufacturer.
- C. Apply sufficient pressure to ensure complete penetration of product into voids and behind reinforcing steel.
- Apply product flush with original surface of concrete. Apply a finish to match the adjacent concrete finish.
- E. Product shall be cured by damp curing in accordance with ACI recommendations for a minimum of 72 hours except where fast-setting materials are used, for which damp cure time shall be 24 hours.

3.06 APPLICATION - GRAVITY FEED EPOXY RESIN CRACK REPAIR

- A. Repair exposed structural, shrinkage, and settlement cracks of concrete as indicated on drawings by the gravity feed epoxy resin method.
- B. Gravity feed epoxy resin into cracks without excessive spread or staining over adjacent surfaces. Fill cracks completely. Note: Epoxy primer used for traffic coating system, if approved for use as crack repair resin, may be squeegeed over surface and into cracks in one application for cracks 1/16" and smaller.
- C. Remove excess adhesive.
- D. Clean surfaces adjacent to repair and blend finish.

3.07 FIELD QUALITY CONTROL

- An independent testing agency, as specified in Section 01 4000, shall perform field inspection and testing.
- B. Ready Mix Concrete: For every 50 cu. yd. or for each day, whichever is more frequent, perform the following tests:
 - 1. Compressive tests: Cast 4 cylinders, test one at 7 days, two at 28 days, and hold one.
 - 2. Air entrainment.
 - 3. Slump.
 - 4. Temperature.
- C. Bag mix and fast-setting concrete: For first application, and until 3 day cylinder breaks are received and approved by the Architect/Engineer for every 50 cu. yd. or for each day, whichever is more frequent, perform the following tests. After receipt and approval of 3 day cylinder breaks, more testing is not required unless specifically requested by the Architect/Engineer.
 - 1. Compressive tests: Cast 4 cylinders, test one at 7 days, two at 28 days, and hold one.
 - 2. Air entrainment.
 - 3. Slump.
 - 4. Temperature.

SECTION 03 3511 CONCRETE FLOOR FINISHES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface treatments for concrete floors and slabs.

1.02 RELATED REQUIREMENTS

- A. Section 01 2100 Allowances
- B. Section 01 2200 Unit Prices
- C. Section 03 0130.75 Concrete Slab Repair
- D. Section 07 1800 Traffic Coatings
- E. Section 09 9000 Painting and Coating: Pavement marking paint

1.03 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Submit with Bid complete description of proposed Floor Sealers, SL-1 and SL-2, including the products
- C. Product Data: Manufacturer's published data on each finishing product, including information on compatibility of different products and limitations.
- D. Manufacturer's installation instructions.
- E. Maintenance Data: Provide data on stain removal, maintenance and renewal of applied finishes.

1.04 PRE-INSTALLATION MEETING

- A. Schedule and convene meeting a minimum of one week prior to commencing Work of this Section.
- B. Attendance required: Contractor, Installer, Owner's Representative, and Architect/Engineer.
- C. Review requirements for application, including surface preparation, substrate condition and pretreatment, minium curing period, installation procedures, dust control and work sequence/phasing.Discuss procedures for protecting adjacent finished Work.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company with minimum 10 years of experience in manufacturing specified products.
- B. Applicator Qualifications: minimum of 5 years experience in application of specified products on projects of similar size and scope.
- C. Sealer Manufacturer representative shall visit the site at the beginning to ensure preparation and application of product is in accordance with Manufacturer's recommendations.

1.06 MOCK-UP

- A. For each floor finish, construct mock-up area under conditions similar to those that will exist during application, with coatings applied.
- B. Mock-Up Size: five feet by five feet.
- C. Locate where directed.
- D. Mock-up may remain as part of the work.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's sealed packaging, including application instructions.
- B. Store in unopened packaging in clean, dry environment, protected from sunlight at temperature between 40 and 85 degrees F.

1.08 FIELD CONDITIONS

A. Maintain ambient temperature of 40 degrees F minimum.

PART 2 PRODUCTS

2.01 CONCRETE FLOOR SEALERS

- A. Hardening, Sealing and Dustproofing (SL-1):
 - 1. Composition: alkali-silicate.
 - 2. Color: clear
 - VOC content: none.
 - a. Products:
 - 1) BASF Construction Chemicals-Building Systems; Lapidolith: www.buildingsystems.basf.com.
 - 2) Substitutions: See Section 01 6000 Product Requirements.
- B. Penetrating Silane Sealer (SL-2):
 - 1. Composition: 100% silane
 - 2. Penetration, average depth .35 inches
 - 3. Surface appearance after application: unchanged.
 - 4. VOC content: less than 400 g/L, less water and exempt solvents
 - 5. Product:
 - a. BASF Construction Chemicals-Building Systems; Hydrozo 100: www.buildingsystems.basf.com.
 - b. LymTal International, Inc.: Iso-Flex 618-100, www.lymtal.com
 - c. TK Products, Division of Sierra Corporation, TK-590-100, www.tkproduct.com
 - d. Substitutions: See Section 01 6000 Product Requirements

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that floor surfaces are acceptable to receive the work of this section.
- B. Verify that flaws in concrete have been patched and joints filled with methods and materials suitable for further finishes.

3.02 SURFACE PREPARATION

- Repair all concrete cracks, spalls and other surface defects in accordance with Section 03 0130.75.
- B. Clean substrate surface free of foreign matter and prepare surface in strict accordance with Manufacturer's recommendations, and with the following minimum requirements:
 - 1. Remove all oil, grease spots and construction debris in accordance with the Manufacturer's recommendations.
 - 2. Pressure wash and scrub substrate with manufacturer-approved detergent to remove all grease, oils and other contaminants which may reduce bond.
 - 3. Concrete surface preparation shall require shotblasting, as specified herein. Grind areas not accessible to shotblasting equipment.
 - 4. Excessive amount of coarse aggregate shall not be exposed.
 - 5. All areas with exposed coarse aggregate shall be repaired in accordance with sealer Manufacturer's requirements at no additional cost to the Owner.
 - 6. Remove debris immediately after the surface preparation. Debris includes, but is not limited to, shot, aggregate and dust. Debris shall be placed in a covered dumpster or a covered area where it will not be rebroadcast by wind or water.
 - 7. Prestrip repaired cracks with sealer or as otherwise recommended by Manufacturer.
 - 8. Detail coats over cracks, construction joints, cove joints (at patch perimeters), etc. are to be incidental to sealer cost.
 - 9. Do not apply the sealer until the crack, control, construction and cove sealants are fully cured. Sealants shall cure a minimum of 24 hours prior to installation of sealer.

- The Installer shall be responsible for repair or replacement of all materials damaged by surface preparation operations.
- 11. Acid shall not be used as a surface preparation method prior to installation of sealer.

C. Shotblast Performance Requirements:

- 1. Equipment shall be capable of travelling at a constant speed to provide uniform profile.

 The speed and size of the equipment and the size of the steel shot shall be selected to provide desired preparation without causing unnecessary damage to the concrete surface.
- Equipment shall vacuum, or otherwise retain all dirt, dust and debris from the blasting operation.
- 3. Surfaces shall have a profile in which fine aggregates are exposed; however, large aggregate shall not be exposed. All laitance shall be removed.
- 4. Surfaces shall be air blown with sufficient pressure to remove excess dirt, dust and debris, and to assure that concrete pores are open.
- D. After shotblasting and abrasive blasting and prior to the first coat of sealer, the pitting, bug holes, popouts (and shallow scaling) shall be filled (prepared) in accordance with the Manufacture's recommendations.
- E. Protect adjacent surfaces.

3.03 APPLICATION

A. Apply materials in accordance with manufacturer's instructions.

3.04 SEALER APPLICATION

- A. Protect adjacent non-coated areas from drips, overflow, and overspray; immediately remove excess material.
- B. Apply sealer in two coats, perpendicular to each other.
- C. Apply sealers in accordance with manufacturer's instructions.

SECTION 07 1800 TRAFFIC COATINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Coating for waterproofing and traffic surface, including furnishing all labor, materials, equipment and supervision.
- B. Work includes surface preparation and crack and joint detailing in accordance with the Drawings and Specifications to ensure a complete and homogeneous system.

1.02 PRICE AND PAYMENT PROCEDURES

A. See Section 01 2300 - Alternates for Description of Alternate Work

1.03 RELATED REQUIREMENTS

- A. Section 03 0130.75 Concrete Slab Repair.
- B. Section 09 9000 -Painting and Coating; Pavement Markings.

1.04 REFERENCE STANDARDS

- A. ASTM C 957 Standard Specification for High-Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with Integral Wearing Surface; 2006.
- B. ASTM D 4263 Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method; 1983 (Reapproved 2005).

1.05 SUBMITTALS

- A. See Section 01 3300 Submittals, for submittal procedures.
- B. Submit with Bid for review and approval:
 - Complete description of each floor finish system proposed, including the materials, mil
 thickness of each layer, surface preparation and cure times, including repair materials for
 pitting, bug holes, popouts (and shallow scaling), and cure times and including aggregates.
 Include product characteristics and limitations. Identify dissolving solvents, fuels, and
 potential destructive compounds.
 - 2. Health and safety data sheets, and Manufacturer's Spec Data Sheets of each product, solvent, or related chemicals to be used on site and certification that the materials conform to local, state and federal environmental and workers' safety laws and regulations.
 - 3. Standard color chart.
 - 4. Crack detailing requirements, including size of crack requiring detailing, description of materials, preparation and installation.
 - 5. List of references and nearby installations.
- C. Submit three wet film thickness gauges.
- D. Manufacturer's Installation Instructions: Include special environmental conditions required to install traffic membrane and potential incompatibilities with adjacent materials.
- E. Maintenance Data: Include procedures for stain removal, repairing surface, and cleaning.
- F. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products of the type specified in this Section, with not less than five years of documented experience.
- B. Applicator Qualifications: Company specializing in performing installation of traffic membrane, with minimum five years of documented experience and approved by the manufacturer.
- C. Installer and Manufacturer shall review the condition of the surfaces prior to bidding.
- D. Coating Manufacturer representative shall visit the site at the beginning to ensure preparation and application of product is in accordance with Manufacturer's recommendations.

1.07 WARRANTY

- A. Provide to the Owner a five (5) year "Joint and Several" Warranty by the Installer and Manufacturer that the coating system will be free of defects, water penetration and chemical damage related to system design, workmanship or material deficiency, consisting of, but not limited to:
 - 1. Surface crazing or other weathering deficiency
 - 2. Abrasion or tear failure resulting from normal traffic use
 - 3. Tear failure resulting from anticipated movement
 - 4. Debonding from the substrate (existing concrete, new concrete repairs or in-place traffic coatings, or delamination between layers).
 - 5. Defective installation
 - 6. Debonding or damage of repair material used for filling in pitting, bug holes, popouts and shallow scaling with the concrete or coating material.
- B. If the coatings indicate any of the defects indicated above, supply labor and material to repair all defective areas and repaint all damaged striping.
- C. Perform any repair work under the Warranty at no cost to the Owner.
- D. Snowplows, vandalism, abrasive maintenance equipment and construction traffic are not normal traffic use and are exempted from Warranty.
- E. Coating to be applied to both existing concrete and new concrete repair areas. Installer shall provide system suitable for such application. Warranty shall cover coating damage due to new concrete cracking.

1.08 MOCK-UP

- A. Construct complete system mock-up, 5 feet long by 5 feet wide, for each Traffic Coating system applied to actual substrate.
- B. Locate where directed.
- C. Mock-up may remain as part of the Work.

1.09 EXISTING CONDITIONS

A. Refer to Section 00 3100 - Available Project Information

1.10 ENVIRONMENTAL REQUIREMENTS

- A. Contractor is required to confirm that all deck coating materials used in accordance with this Section conform to local, state and federal environmental and workers' safety laws and regulations.
- B. Contractor is solely responsible for fume control and shall take necessary precautions against injury to personnel or building occupants during application. Personnel shall use protective equipment and area shall be well vented to the outside. As a minimum, Installer shall take the following precautions:
 - 1. Provide and maintain barricades.
 - 2. Locate and protect building air intake during application.
 - 3. Follow all state, federal and local safety regulations.
 - 4. Follow all Manufacturer's requirements.
 - Immediate and proper disposal of empty containers.
- C. Contractor is solely responsible for dust control and shall follow required Dust Control Plan as indicted in Section 01 5000 Construction Facilities.

1.11 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all materials to site in original, unopened containers, bearing the following information:
 - 1. Name of product.
 - 2. Name of Manufacturer.
 - 3. Date of manufacture.
 - 4. Lot or batch number.

- B. Store materials under cover, protected from the weather, within the Manufacturer's recommend temparature range.
- C. Replace containers or materials showing any signs of damage with new material at no additional cost to the Owner.
- At no time shall the weight of the stored material placed on a slab area exceed the total design load.

1.12 FIELD CONDITIONS

A. Restrict traffic from area where materials are being installed or are curing.

PART 2 PRODUCTS

2.01 TRAFFIC COATINGS

- A. The traffic coating system shall be a fast-setting, fluid-applied, waterproof, heavy-duty high-build epoxy or epoxy-urethane hybrid traffic bearing membrane system capable of preventing penetration into the concrete by water, gasoline, oils, greases, salts, deicing chemicals, battery acids and radiator coolants, and suitable to hold up to heavy daily bus traffic and turning.
- B. Color of traffic coating shall be light gray with the Owner selecting the shade of gray from the standard color chart submittal.
- C. The material to fill in the pitting, bug holes, popouts (and shallow scaling) shall be in accordance with the Manufacturer's written recommendations.
- D. Same Manufacturer's deck coating system shall be used throughout.
- E. The deck coating thicknesses are minimum dry film thicknesses (unless noted otherwise) and do not include the aggregate. A coat may have to be installed in more than one layer to achieve the minimum thickness. Install each coat in accordance with the Manufacturer's recommended yield for the required thickness.
- F. Thinner or solvent shall not be added to deck coating materials.
- G. Low Odor.
- H. Rapid curing.

2.02 MANUFACTURERS/SYSTEMS

- A. Traffic Coating (TC-1):
 - 1. Total System Finished Coating Thickness: 36 mils, minimum.
 - 2. Manufacturers/Systems:
 - a. Neogard Corporation, Dallas, TX, www.neogard.com
 - 1) Primer/Base Coat: TrafficTuff 70714/70715-09, with aggregate broadcast.
 - 2) Top Coat: TrafficTuff 70714/70715-09.
 - b. BASF, BASF Building Systems, Shakopee, MN. www.BuildingSystems.BASF.com
 - 1) Primer/Base Coat: Trafficguard EP35, with aggregate broadcast.
 - 2) Top Coat: Conipur 275
 - c. Accuflex High-Build Epoxy System, Superior Coating Specialists, www.accuflexcoatings.com.
 - 1) Primer/Base Coat: AF069 High Build Epoxy, with aggregate broadcast.
 - 2) Top Coat: AF069 High Build Epoxy.
 - d. Substitutions See Section 01 6000- Product Requirements
- B. Traffic Coating (TC-2):
 - 1. Total System Finished Coating Thickness: 50 mils, minimum.
 - 2. Manufacturers/Systems:
 - a. Neogard Corporation, Dallas, TX, www.neogard.com
 - 1) Primer/Base Coat: TrafficTuff 70714/70715-09, clear with aggregate broadcast.
 - Second Coat: TrafficTuff 70714/70715-09. with aggregate broadcast.
 - 3) Top Coat: TrafficTuff 70714/70715-09, Gray.
 - b. BASF, BASF Building Systems, Shakopee, MN. www.BuildingSystems.BASF.com

- 1) Primer/Base Coat: Trafficguard EP35, with aggregate boradcast.
- 2) Second Coat: Conipur 265
- 3) Top Coat: Conipur 275
- c. Accuflex High-Build Epoxy System, Superior Coating Specialists, www.accuflexcoatings.com.
 - 1) Primer/Base Coat: AF069 High Build Epoxy, with Aggregate broadcast.
 - 2) Second Coat: AF069 High Build Epoxy, with aggregate broadcast.
 - 3) Top Coat: AF069 High Build Epoxy,
- d. Substitutions: See Section 01 6000 Product Requirements.

PART 3 EXECUTION

3.01 PHASING

A. Refer to Drawing Sheet A1.00 for Phasing of the Work.

3.02 EXAMINATION

- A. Verify that substrate is ready to receive work, surface is clean, dry and free of substances that could adversely affect bond. Product Manufacturer, Supplier and Contractor shall be mutually responsible to ensure that in-place conditions are properly prepared and suitable for proposed and furnished coating system. Proceeding with coating work shall constitute product Manufacturer's, Supplier's and Contractor's acceptance of conditions for product suitability, application and Warranty.
- B. Report immediately in writing to the Engineer any deficiencies in the surface which render it unsuitable for proper execution of this Work. Do not proceed with Work until unsatisfactory conditions have been corrected in an acceptable manner in accordance with the Engineer.
- C. Coordinate and verify that the related work meets the following requirements:
 - 1. Concrete surfaces are finished, cleaned and prepared, as specified by the Manufacturer for the system to be installed.
 - Previous surface treatments used on concrete surfaces are compatible with the Work to be installed.
 - 3. Concrete surfaces have completed the proper curing period at proper temperatures for the system selected.
 - 4. Systems selected for use are compatible with each other.

3.03 PREPARATION FOR ALL COATINGS:

- Repair all concrete cracks, spalls and other surface defects in accordance with Section 03 0130.75.
- B. Clean substrate surface free of foreign matter and prepare surface in strict accordance with Manufacturer's recommendations, and with the following minimum requirements:
 - 1. Remove all oil, grease spots and construction debris in accordance with the Manufacturer's recommendations.
 - 2. Pressure wash and scrub substrate with manufacturer-approved detergent to remove all grease, oils and other contaminants which may reduce bond.
- C. Coves, terminations and all unusual situations shall be detailed per the Manufacturer's recommendations.
- D. Prestrip cracks with primer or as otherwise recommended by Manufacturer.
- E. Detail coats over cracks, construction joints, cove joints (at patch perimeters), etc. are to be incidental to deck coating cost.
- F. Do not apply the deck coating until the control, construction and cove sealants are fully cured. Sealants shall cure a minimum of 24 hours prior to installation of primer/deck coating.
- G. The Installer shall be responsible for repair or replacement of all materials damaged by surface preparation operations.
- H. Acid shall not be used as a surface preparation method prior to installation of deck coating.

I. Remove floor trench drain grates prior to installing coatings. Re-install after coatings have cured such that they will not adhere to the grates.

3.04 ADDITIONAL PREPARATION FOR TC-1

- A. Completely remove any loose or poorly bonded existing traffic coating.
- B. Prepare the surface of the existing traffic coating by lightly grinding with a walk-behind grinder. Surface shall be sufficiently roughened to promote bonding of the new coating system to the satisfaction of the coating Manufacturer.
- C. Remove debris immediately after the surface preparation. Debris includes, but is not limited to, existing traffic coating particles and dust. Debris shall be placed in a covered dumpster or a covered area where it will not be rebroadcast by wind or water.

3.05 ADDITIONAL PREPARATION FOR TC-2

- A. Concrete surface preparation shall require shotblasting, as specified herein. Grind areas not accessible to shotblasting equipment. The surface preparation shall extend up the vertical surfaces.
- B. Excessive amount of coarse aggregate shall not be exposed.
- C. All areas with exposed coarse aggregate shall be repaired in accordance with coating Manufacturer's requirements at no additional cost to the Owner.
- D. Remove debris immediately after the surface preparation. Debris includes, but is not limited to, shot, aggregate and dust. Debris shall be placed in a covered dumpster or a covered area where it will not be rebroadcast by wind or water.
- E. Shotblast Performance Requirements:
 - Equipment shall be capable of travelling at a constant speed to provide uniform profile.
 The speed and size of the equipment and the size of the steel shot shall be selected to provide desired preparation without causing unnecessary damage to the concrete surface.
 - 2. Equipment shall vacuum, or otherwise retain all dirt, dust and debris from the blasting operation.
 - 3. Surfaces shall have a profile in which fine aggregates are exposed; however, large aggregate shall not be exposed. All laitance shall be removed.
 - 4. Surfaces shall be air blown with sufficient pressure to remove excess dirt, dust and debris, and to assure that concrete pores are open.
- F. After shotblasting and abrasive blasting and prior to the first coat of coating, the pitting, bug holes, popouts (and shallow scaling) shall be filled (prepared) in accordance with the Manufacture's recommendations.
- G. Protect adjacent surfaces.

3.06 INSTALLATION

- A. Apply system materials in strict accordance with Manufacturer's written instructions and specifications, and as indicated.
- B. Do not apply coating materials until the concrete has been air dried at temperatures at or above 40 degrees F for at least 14 days after placement or as otherwise approved by the Manufacturer.
- C. Concrete shall be dry prior to application of deck coating. Installer shall perform slab moisture testing in accordance with ASTM D 4263 Test Method for Indicating Moisture by the Plastic Sheet Method. Testing shall be performed in at least 1 location for every 7,500 square feet of coating. Report test results to the Engineer.
- D. All coating shall maintain straight edges by using duct tape at terminations. Upon removal of duct tape, remaining deck coatings shall have a straight bonded edge.
- E. Surfaces to be coated shall be divided into areas in accordance with the Manufacturer's recommended yield for the minimum required thickness and for the specific container size of material. The area is to be divided by keel marks, or another Engineer approved method.

- F. All construction joints, control joints, joints at perimeter of patches, cold joints and cracks (sealed and unsealed) shall receive a detail coat, minimum of 4 inches wide, in addition to specified procedure. Detail coat shall be the same thickness as the base coat unless Manufacturer's requirements are more strict. Detail coat shall cure a minimum of 12 hours prior to base coating.
- G. At concrete repairs, extend coating a minimum of 4" beyond the repair area in all directions. Feather edges by grinding existing coatings as necessary to provide a flush final installation.
- H. Extend coating 6 inches up vertical surfaces unless indicated otherwise on the Drawings.
- I. Incorporate aggregate until refusal, in order that the surface is completely tan in color. Additional aggregates may have to be added after the first pass.

3.07 DAMAGE AND REPAIRS

- A. Any necessary repairs for coating resulting from dry film testing are to be repaired by Installer.
- B. Pinholing of the membrane will be cause for rejection. Installer shall repair and take the necessary steps to prevent pinholing to occur at no additional expense to the Owner.

3.08 CLEANUP

A. Remove all excess primer, sealant, deck coating, and masking materials from the structure.

3.09 PROTECTION

- A. Protect installed surfaces from traffic for duration of curing time as recommended by Manufacturer
- B. Do not permit traffic over unprotected surfaces.

SECTION 09 9000 PAINTING AND COATING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints.

1.02 RELATED REQUIREMENTS

- A. Section 03 3511 Concrete Floor Finishes
- B. Section 07 1800 Traffic Coatings

1.03 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; current edition.
- B. ASTM D16 Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2012.

1.04 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Show all pavement markings indicating locations, layout, color, & size, font type and size where applicable.
- C. Product Data: Provide complete list of all products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. MPI product number (e.g. MPI #47).
- D. Samples: Submit two painted samples, illustrating selected colors and textures for each color and system selected. Submit on tempered hardboard, 3 x 5 inch in size.
- E. Manufacturer's Instructions: Indicate special surface preparation procedures.
- F. Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.
- G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. See Section 01 6000 Product Requirements, for additional provisions.
 - 2. Extra Paint and Coatings: 1 gallon of each color; store where directed.
 - 3. Label each container with color in addition to the manufacturer's label.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years experience.
- B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum three years experience.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

A. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide all paint and coating products from the same manufacturer to the greatest extent possible.
- B. Substitutions: See Section 01 6000 Product Requirements.

2.02 PAINTS AND COATINGS - GENERAL

- A. Paints and Coatings: Ready mixed, unless intended to be a field-catalyzed coating.
 - 1. Provide paints and coatings of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Supply each coating material in quantity required to complete entire project's work from a single production run.
 - 3. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.
- B. Primers: Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.
- C. Volatile Organic Compound (VOC) Content:
 - Provide coatings that comply with the most stringent requirements specified in the following:
 - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
 - b. Architectural coatings VOC limits of State in which the project is located.
 - 2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.
- D. Colors: As indicated on drawings

2.03 PAINT SYSTEMS

- A. Pavement Marking Paint: All pavement markings indicated Including concrete surfaced with sealer or traffic coating
 - 1. Preparation as specified by manufacturer
 - 2. One top coat and one coat primer recommended by manufacturer.
 - 3. Semi-Gloss: MPI gloss level 5; use this sheen at all locations.

2.04 ACCESSORY MATERIALS

A. Accessory Materials: Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required to achieve the finishes specified whether specifically indicated or not; commercial quality.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- C. If substrate preparation is the responsibility of another installer, notify Architect/Engineer of unsatisfactory preparation before proceeding.
- D. Test paint for compatibility with floor sealer or traffic coating materials.

3.02 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to coating application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 APPLICATION

- A. Apply products in accordance with manufacturer's instructions.
- B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C. Apply each coat to uniform appearance.

3.04 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 SCHEDULE - PAINT SYSTEMS

A. Pavement Markings: refer to Drawings for locations, text, color and extents.