

SERVICE AND CONSTRUCTION
CREW QUARTER IMPROVEMENTS
18407.00

ISLESBORO

2014

Updated 04/30/13

FEDERAL PROJECT

BIDDING INSTRUCTIONS

FOR ALL PROJECTS:

1. Use pen and ink to complete all paper Bids.
2. As a minimum, the following must be received prior to the time of Bid opening:

For a Paper Bid:

- a) a copy of the Notice to Contractors, b) the completed Acknowledgement of Bid Amendments form, c) the completed Schedule of Items, d) two copies of the completed and signed Contract Offer, Agreement & Award form, e) the completed Contractor Information Sheet, f) a Bid Guaranty, (if required), and g) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

For an Electronic Bid:

- a) a completed Bid using Expedite® software and submitted via the Bid Express™ web-based service, b) an electronic Bid Guaranty (if required) or a faxed copy of a Bid Bond (with original to be delivered within 72 hours), and c) any other Certifications or Bid requirements listed in the Bid Documents as due by Bid opening.
3. Include prices for all items in the Schedule of Items (excluding non-selected alternates).
4. Bid Guaranty acceptable forms are:
 - a) a properly completed and signed Bid Bond on the Department's prescribed form (or on a form that does not contain any significant variations from the Department's form as determined by the Department) for 5% of the Bid Amount or
 - b) an Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors or
 - c) an electronic bid bond submitted with an electronic bid.
5. If a paper Bid is to be sent, "FedEx First Overnight" delivery is suggested as the package is delivered directly to the DOT Headquarters Building located at 16 Child Street in Augusta. Other means, such as U.S. Postal Service's Express Mail has proven not to be reliable.

IN ADDITION, FOR FEDERAL AID PROJECTS:

6. Complete the DBE Proposed Utilization form, and submit with your bid. If you are submitting your bid electronically, you must FAX the form to (207) 624-3431. This is a curable defect.

*If you need further information regarding Bid preparation, call the DOT
Contracts Section at (207) 624-3410.*

*For complete bidding requirements, refer to Section 102 of the Maine Department
of Transportation, Standard Specifications, Revision of December 2002.*

NOTICE

The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain an optional planholders list.

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments, must provide an email address to Diane Barnes or David Venner at the MDOT Contracts mailbox at: MDOT.contracts@maine.gov. Each bid package will require a separate request.

Additionally, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment Form.

The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via <http://www.BIDX.com>. For information on electronic bidding contact Patrick Corum at patrick.corum@maine.gov , Rebecca Snowden at rebecca.snowden@maine.gov or Diane Barnes at diane.barnes@maine.gov.

NOTICE

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

PIN:

Town:

Date of Bid Opening:

Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed

PIN:

Town:

Date of Bid Opening:

Name of Contractor:

This should not be much of a change for those of you who use Federal Express or similar services.

Hand-carried Bids may be in one envelope as before, and should be marked with the following information:

Bid Enclosed: Do Not Open

PIN:

Town:

Name of Contractor:

October 16, 2001

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
Bid Guaranty-Bid Bond Form

KNOW ALL MEN BY THESE PRESENTS THAT _____

_____, of the City/Town of _____ and State of _____

as Principal, and _____ as Surety, a

Corporation duly organized under the laws of the State of _____ and having a usual place of

Business in _____ and hereby held and firmly bound unto the Treasurer of

the State of Maine in the sum of _____ for payment which Principal and Surety bind

themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

The condition of this obligation is that the Principal has submitted to the Maine Department of

Transportation, hereafter Department, a certain bid, attached hereto and incorporated as a

part herein, to enter into a written contract for the construction of _____

_____ and if the Department shall accept said bid

and the Principal shall execute and deliver a contract in the form attached hereto (properly

completed in accordance with said bid) and shall furnish bonds for this faithful performance of

said contract, and for the payment of all persons performing labor or furnishing material in

connection therewith, and shall in all other respects perform the agreement created by the

acceptance of said bid, then this obligation shall be null and void; otherwise it shall remain in full

force, and effect.

Signed and sealed this _____ day of _____ 20_____

WITNESS:

WITNESS

PRINCIPAL:

By _____

By: _____

By: _____

SURETY:

By _____

By: _____

Name of Local Agency: _____

NOTICE

Bidders:

Please use the attached “Request for Information” form when faxing questions and comments concerning specific Contracts that have been Advertised for Bid. Include additional numbered pages as required. Questions are to be faxed to the number listed in the Notice to Contractors. This is the only allowable mechanism for answering Project specific questions. Maine DOT will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

NOTICE

Disadvantaged Business Enterprise Proposed Utilization

The Apparent Low Bidder shall submit the Disadvantaged Business Enterprise Proposed Utilization form with their bid. This is a curable bid defect.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form contains additional information that is required by USDOT.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form should be used.

A copy of the new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact The Office of Civil Rights at (207) 624-3066.

MDOT's DBE Directory of Certified firms can also be obtained at www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php

INSTRUCTIONS FOR PREPARING THE MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR UTILIZATION FORM

The Contractor Shall Extend equal opportunity to MaineDOT certified DBE firms (as listed in MaineDOT's DBE Directory of Certified Businesses) in the selection and utilization of Subcontractors and Suppliers.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone, fax number and e-mail address.

Calculate and provide percentage of your bid that will be allocated to DBE firms, Federal Project Identification Number, and location of the Project work.

In the columns, name each subcontractor, DBE and non-DBE firm to be used, provide the Unit/Item cost of the work/product to be provided by the subcontractor, give a brief description and the dollar value of the work.

Revised 1/12

DBE GOAL NOTICE
Maine Department of Transportation
Disadvantaged Business Enterprise Program

Notice is hereby given that in accordance with US DOT regulation 49 CFR Part 26, the Maine Department of Transportation has established a DBE Program for disadvantaged business participation in the federal-aid highway and bridge construction program; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2013-15 (October 1, 2012 through September 30, 2015) MaineDOT has established an annual DBE participation goal of **4.0%** to be achieved through race/gender neutral means. This goal has been approved by the Federal Highway Administration and remains in effect through September 30, 2015. Maine DOT must meet this goal each federal fiscal year. If the goal is not met, MaineDOT must provide a justification for not meeting the goal and provide a plan to ensure the goal is met, which may include contract goals on certain projects that contractors will be required to meet.

MaineDOT asks all contractors, consultants and subcontractors to seek certified DBE firms for projects and to work to meet the determined 4.0% goal without the need to impose contract goals. DBE firms are listed on the MaineDOT website at:

<http://www.maine.gov/mdot/disadvantaged-business-enterprises/pdf/directory.pdf>

Interested parties may view MaineDOT's DBE goal setting methodology also posted on this website. If you have questions regarding this goal or the DBE program you may contact Sherry Tompkins at the Maine Department of Transportation, Civil Rights Office by telephone at (207) 624-3066 or by e-mail at: sherry.tompkins@maine.gov

**MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR
PROPOSED UTILIZATION FORM**

All Bidders must furnish this form with their bid on Bid Opening day

Contractor: _____ **Telephone:** _____ **Ext** _____

Contact Person: _____ **Fax:** _____

E-mail: _____

BID DATE: _____

FEDERAL PROJECT PIN # _____ **PROJECT LOCATION:** _____

TOTAL ANTICIPATED DBE ____ % PARTICIPATION FOR THIS CONTRACT

W B E	D B E	Non DBE	Firm Name	Item Number & Description of Work	Quantity	Cost Per Unit/Item	Anticipated \$ Value
Subcontractor Total >							
DBE Total >							

**NOTE: THIS INFORMATION IS USED TO TRACK AND REPORT ANTICIPATED DBE PARTICIPATION IN ALL
FEDERALLY FUNDED MAINE DOT CONTRACTS. THE ANTICIPATED DBE AMOUNT IS VOLUNTARY AND WILL
NOT BECOME A PART OF THE CONTRACTUAL TERMS.**

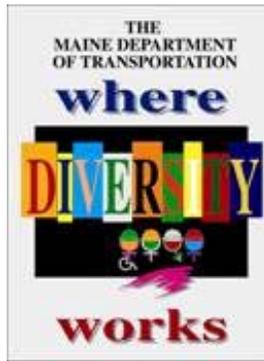
Equal Opportunity Use:

Form received: ___/___/___ Verified by: _____

FHWA FTA FAA

**For a complete list of certified firms and company designation (WBE/DBE) go to
<http://www.maine.gov/mdot>**

Rev. 05/13



**Maine Department of Transportation Civil
Rights Office**

**Directory of Certified Disadvantaged Business
Enterprises**

Listing can be found at:

**[www.maine.gov/mdot/disadvantaged-business-
enterprises/dbe-home.php](http://www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php)**

**For additional information and guidance contact: Civil
Rights Office at (207) 624-3066**

*It is the responsibility of the Contractor to access
the DBE Directory at this site in order to have
the most current listings.*

Vendor Registration

Prospective Bidders must register as a vendor with the Department of Administrative & Financial Services if the vendor is awarded a contract. Vendors will not be able to receive payment without first being registered. Vendors/Contractors will find information and register through the following link –

<http://www.maine.gov/purchases/venbid/index.shtml>

CONTRACTOR INFORMATION

Contractor Name: _____

Mailing Address: _____

Vendor Customer Number: _____

Contact Information (Primary Contact): _____

Phone: _____ **Cell Phone:** _____

Fax: _____

Email: _____

Mailing Address (if different from above): _____

The company has the following organizational structure:

Sole Proprietorship

Limited Liability Company

Partnership

Joint Venture

Corporation

Other: _____

(Date)

(Signature)

(Name and Title Printed)

**STATE OF MAINE DEPARTMENT OF TRANSPORTATION
NOTICE TO CONTRACTORS**

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for **Crew Quarter Expansion** in the town/city of **ISLESBORO**" will be received from contractors at the Reception Desk, Maine DOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on April 23, 2014 and at that time and place publicly opened and read. Bids will be accepted from all bidders. The lowest responsive bidder must have completed, or successfully complete, a Building, or project specific prequalification to be considered for the award of this contract. We now accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening. Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.

Description: WIN 18407.00

Location: In Waldo County, project is located at the Maine State Ferry Service Islesboro Crew Quarters

Outline of Work: Crew quarter expansion and other incidental work.

For general information regarding Bidding and Contracting procedures, contact George Macdougall at (207) 624-3410. Our webpage at <http://www.maine.gov/mdot/contractors/> contains a copy of the schedule of items, Plan Holders List, written portions of bid amendments (not drawings), and bid results. For Project-specific information fax all questions to Riek Dubois at (207) 624-3431. Questions received after 12:00 noon of Friday prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. TTY users call Maine Relay 711.

Plans, specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine and at the Department of Transportation's Regional Office in Augusta. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Full size plans \$10 (\$13.50 by mail). Half size plans \$5 (\$7.25 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

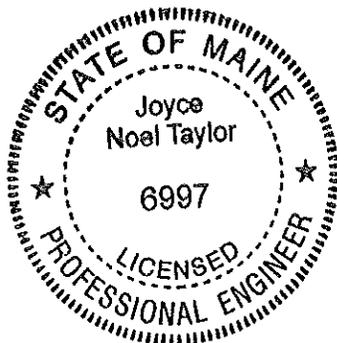
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$5000 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002", price \$10 [\$13 by mail], and Standard Details, Revision of December 2002, price \$20 [\$25 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Standard Detail updates can be found at <http://www.maine.gov/mdot/contractors/publications/>.

The right is hereby reserved to the Maine DOT to reject any or all bids.

Augusta, Maine
April 2, 2014



A handwritten signature in black ink that reads "Joyce Noel Taylor".

JOYCE NOEL TAYLOR P. E.
CHIEF ENGINEER

NOTICE

All bids for Federal Projects **shall** be accompanied by the DBE Proposed Utilization form. If you are submitting an electronic bid, the DBE Utilization Form may be faxed to 207-624-3431. Failure to submit the form with the bid will be considered a curable defect.

**SPECIAL PROVISION 102.7.3
ACKNOWLEDGMENT OF BID AMENDMENTS**

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at <http://www.maine.gov/mdot/contractors/> . It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, to incorporate them into their Bid Package, and to reference the Amendment number and the date on the form below. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening without individually notifying all the planholders.

Amendment Number	Date

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package.

CONTRACTOR

Date

Signature of authorized representative

(Name and Title Printed)

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

(Contractor)

a corporation or other legal entity organized under the laws of the State of _____, with its principal place of business located at _____.

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, WIN 18407.00, for the Crew Quarters Expansion in the town of Islesboro, County of Waldo, in The State of Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before August 29, 2014. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002 and related Special Provisions.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and that the amount of this offer is

\$_____.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Federal Contract Provisions Supplement, and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of WIN 18407.00, for the Crew Quarters Expansion in the town of Islesboro, State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict

accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Third: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fourth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Fifth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

Date

(Signature of Legally Authorized Representative
of the Contractor)

Witness

(Name and Title Printed)

G. Award.

Your offer is hereby accepted.
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David Bernhardt, Commissioner

Witness

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

(Contractor)

a corporation or other legal entity organized under the laws of the State of _____, with its principal place of business located at _____.

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, WIN 18407.00, for the Crew Quarters Expansion in the town of Islesboro, County of Waldo, in The State of Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before August 29, 2014. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002 and related Special Provisions.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and that the amount of this offer is

\$_____.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Federal Contract Provisions Supplement, and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of WIN 18407.00, for the Crew Quarters Expansion in the town of Islesboro, State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict

accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of December 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Third: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fourth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Fifth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

Date

(Signature of Legally Authorized Representative
of the Contractor)

Witness

(Name and Title Printed)

G. Award.

Your offer is hereby accepted.
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David Bernhardt, Commissioner

Witness

CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and (Name of the firm bidding the job) a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at (address of the firm bidding the job)

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. 1224.00, for the Hot Mix Asphalt Overlay in the town/city of South Nowhere, County of Washington, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before November 15, 2006. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002 and related Special Provisions.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is (Place bid here in alphabetical form such as One Hundred and Two dollars and 10 cents)
\$ (repeat bid here in numerical terms, such as \$102.10) Performance Bond and Payment Bond each being 100% of the amount of this Contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 1234.00 South Nowhere, Hot Mix Asphalt Overlay,

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR
(Sign Here)

(Signature of Legally Authorized Representative
of the Contractor)

(Witness Sign Here)

Witness

(Print Name Here)

(Name and Title Printed)

G. Award.

Your offer is hereby accepted.
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

Date

By: David Bernhardt, Commissioner

(Witness)

BOND # _____

CONTRACT PERFORMANCE BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ in the State of _____, as principal,
and.....
a corporation duly organized under the laws of the State of and having a
usual place of business
as Surety, are held and firmly bound unto the Treasurer of the State of Maine in the sum
of _____ and 00/100 Dollars (\$ _____),
to be paid said Treasurer of the State of Maine or his successors in office, for which
payment well and truly to be made, Principal and Surety bind themselves, their heirs,
executors and administrators, successors and assigns, jointly and severally by these
presents.

The condition of this obligation is such that if the Principal designated as Contractor in
the Contract to construct Project Number _____ in the Municipality of
_____ promptly and faithfully performs the Contract, then this
obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the State
of Maine.

Signed and sealed this day of, 20.....

WITNESSES:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY:

Signature

.....

Print Name Legibly

Print Name Legibly

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....
.....
.....

ADDRESS
.....
.....

TELEPHONE.....

.....

BOND # _____

CONTRACT PAYMENT BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ **in the State of** _____, as principal,
and.....
a corporation duly organized under the laws of the State of and having a
usual place of business in
as Surety, are held and firmly bound unto the Treasurer of the State of Maine for the use
and benefit of claimants as herein below defined, in the sum of
_____ **and 00/100 Dollars (\$** _____ **)**
for the payment whereof Principal and Surety bind themselves, their heirs, executors and
administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in
the Contract to construct Project Number _____ in the Municipality of
_____ promptly satisfies all claims and demands incurred for all
labor and material, used or required by him in connection with the work contemplated by
said Contract, and fully reimburses the obligee for all outlay and expense which the
obligee may incur in making good any default of said Principal, then this obligation shall
be null and void; otherwise it shall remain in full force and effect.

A claimant is defined as one having a direct contract with the Principal or with a
Subcontractor of the Principal for labor, material or both, used or reasonably required for
use in the performance of the contract.

Signed and sealed this day of, 20

WITNESS:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....

ADDRESS

.....

.....

TELEPHONE

.....

GENERAL NOTES

1. Any damage to the maintenance lot caused by the Contractor's equipment, personnel, or operation shall be repaired to the satisfaction of the Department. All work, equipment and materials required to make repairs shall be at the Contractor's expense.
2. All waste material not used on the project shall be disposed of in acceptable waste areas approved by the Department.
3. Granular borrow used to backfill muck excavation or in low wet areas to 1' above water level or old ground shall meet requirements for granular borrow underwater backfill.
4. Loam and Seeding and as well as any backing up of any new Pavement areas and any area disturbed during this particular project shall be the responsibility of the Contractor
5. All work shall be done in accordance with the Maine Department of Transportation's Best Management Practices for Erosion Control & Sediment Control, February, 2008. The Contractor Shall be responsible for the Erosion and Sediment Control
6. "Undetermined Locations" shall be determined by the Department.
7. The Contractor shall be responsible for portable toilets and drinking water for their crews, but may use on site water for concrete curing
8. The contractor shall be responsible for the payment for temporary electrical services or the use of a generator required to conduct their work.

General Decision Number: ME140031 03/14/2014 ME31

Superseded General Decision Number: ME20130031

State: Maine

Construction Type: Building

County: Waldo County in Maine.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Modification Number	Publication Date
0	01/03/2014
1	02/07/2014
2	03/14/2014

CARP0118-014 10/01/2010

	Rates	Fringes
MILLWRIGHT (Industrial Work Only).....	\$ 23.32	16.80

CARP1996-005 10/01/2010

	Rates	Fringes
CARPENTER (Industrial Work Only).....	\$ 21.26	16.04

* ELEC1253-011 12/01/2013

	Rates	Fringes
ELECTRICIAN Electrician (Including Industrial Work).....	\$ 28.25	14.15
Electrician (Low Voltage Wiring).....	\$ 22.91	12.74

ELEV0004-004 01/01/2012

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 50.83	23.535+a+b

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day and the Friday after Thanksgiving.

b. VACATION: Employer contributes 8% of basic hourly rate for 5 years or more of service; 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

ENGI0004-022 12/01/2013

	Rates	Fringes
POWER EQUIPMENT OPERATOR: (Industrial Work Only)		
Forklift and Crane.....	\$ 30.42	24.80

IRON0007-021 09/16/2013

	Rates	Fringes
IRONWORKER		
Reinforcing (Industrial Work Only).....	\$ 22.57	19.75
Structural.....	\$ 22.57	19.75

LABO0327-006 06/01/2013

	Rates	Fringes
LABORER: Common or General (Industrial Work Only).....	\$ 17.05	14.97

PAIN0035-005 07/01/2010

	Rates	Fringes
PAINTER (Brush and Roller).....	\$ 33.01	21.90

PLUM0716-003 08/01/2013

	Rates	Fringes
PIPEFITTER (Including Industrial Work and Excluding HVAC Pipe Installation).....	\$ 25.00	14.46

SHEE0017-012 07/01/2012

	Rates	Fringes
SHEET METAL WORKER (Excluding HVAC Duct Work and Metal Siding/Wall Panels for Metal Buildings).....	\$ 23.51	19.57

SUME2011-026 03/23/2011

	Rates	Fringes
BRICKLAYER.....	\$ 23.50	3.71
CARPENTER, Includes Drywall Finishing/Taping, Drywall Hanging, and Form Work (Excludes Industrial Work).....	\$ 17.25	4.26
CEMENT MASON/CONCRETE FINISHER...	\$ 16.13	3.82
INSULATOR: Batt and Foam.....	\$ 13.20	1.58

IRONWORKER, REINFORCING, Excludes Work on Industrial Sites.....	\$ 16.37	9.62
LABORER: Fence Erection.....	\$ 12.00	0.92
LABORER: Landscape.....	\$ 17.00	0.65
LABORER: Mason Tender - Brick...	\$ 15.57	2.06
LABORER: Mortar Mixer.....	\$ 16.93	4.61
LABORER: Common or General, Including cement mason tending and formstripping, excluding industrial work.....	\$ 12.14	3.79
MILLWRIGHT, Excludes Industrial Work.....	\$ 25.62	9.11
OPERATOR: Backhoe.....	\$ 14.62	3.23
OPERATOR: Bulldozer.....	\$ 27.95	18.56
OPERATOR: Excavator.....	\$ 16.77	2.65
OPERATOR: Loader.....	\$ 27.95	18.56
OPERATOR: Roller.....	\$ 12.65	0.00
OPERATOR: Crane, Excluding Industrial Work.....	\$ 22.22	9.36
PIPEFITTER (HVAC Pipe Installation Only).....	\$ 20.72	4.44
PLUMBER, Includes HVAC Unit Installation.....	\$ 19.09	1.88
ROOFER, Includes Installation of Metal Roofs.....	\$ 16.10	3.26
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 17.80	5.08
SHEET METAL WORKER (Metal Buildings -Installation of Siding/Wall Panels).....	\$ 12.95	2.02
TRUCK DRIVER: Dump Truck.....	\$ 11.60	2.31

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

SPECIAL PROVISION
SECTION 104.5.5
GENERAL RIGHTS AND RESPONSIBILITIES
Prompt Payment of Subcontractors

104.5.5

104.5.5 Prompt Payment of Subcontractors

A. Pay When Paid The Contractor shall pay Subcontractors for all Work satisfactorily performed and Invoiced by the Subcontractor no later than 30 Days from the date the Contractor receives payment from the Department for such Subcontractor's Work.

B. Payment Tracking Federal Projects On federally funded projects, the prime contractor, subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System. They will be responsible for entering all payments to all sub and lower tier contractors. MaineDOT will run a query monthly to ensure that contractors are complying and generate an e-mail to contractors who have not responded to confirm receipt of MaineDOT payment or contractor payment to lower tier subcontractors.

C. Retainage The Contractor shall return to the Subcontractor all retainage withheld from the Subcontractor within 30 Days after the date the Subcontractor's Work is satisfactorily completed. If there is a Delay in such return of retainage, the Subcontractor may pursue all rights it may have under the claims procedure referenced in Section 104.5.6 - Subcontractor Claims for Payment.

SPECIAL PROVISION
SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES
(Electronic Payroll Submission)
(Payment Tracking)

104.3.8.1 Electronic Payroll Submission The prime contractor and all subcontractors and lower-tier subcontractors will submit their certified payrolls electronically on this contract utilizing the Elation System web based reporting. There is no charge to the contracting community for the use of this service. The submission of paper payrolls will not be allowed or accepted. Additional information can be found at <http://www.maine.gov/mdot/contractors/> under the first “Notice”.

104.3.8.2 Payment Tracking The prime contractor and all subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Buy America Certification)

105.11 Federal Requirements Add the following as the third and subsequent paragraphs:

“Prior to payment by the Department, the Contractor shall provide a certification from the producer of steel or iron, or any product containing steel or iron as a component, stating that all steel or iron furnished or incorporated into the furnished product was manufactured in the United States in accordance with the requirements of the Buy America provisions of 23 CFR 635.410, as amended. Such certification shall also include (1) a statement that the iron or steel product or component was produced entirely within the United States, or (2) a statement that the iron or steel product or component was produced within the United States except for minimal quantities of foreign steel and iron valued at \$ (actual value).

All manufacturing processes must take place domestically. Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size and shape, or the final finish is considered a manufacturing process. These processes include rolling, extruding, machining, bending, grinding, drilling, and coating. “Coating” includes epoxy coating, galvanizing, painting, or any other coating that protects or enhances the value of the material.

A Buy America Certification is required from each manufacturer, fabricator, supplier, subcontractor, etc. that meets the “manufacturing” definition above.

Buy America does not apply to raw materials (iron ore and alloys), scrap, pig iron, or processed, pelletized, and reduced iron ore.”

SPECIAL PROVISION 105
GENERAL SCOPE OF WORK
Equal Opportunity and Civil Rights
(Disadvantaged Business Enterprises Program)

105.10.1.1 Disadvantaged Business Enterprises Program The Maine Department of Transportation (MaineDOT) has established a Disadvantaged Business Enterprise (DBE) program in accordance with regulations of the United States Department of Transportation (USDOT), 49 CFR Part 26. The MaineDOT receives federal financial assistance from USDOT, and as a condition of receiving this assistance, the Department has signed an assurance that it will comply with 49 CFR Part 26. The MaineDOT is responsible for determining the eligibility of and certifying DBE firms in Maine.

A DBE is defined as a for-profit business that is owned and controlled by one or more socially and economically disadvantaged person(s). For the purpose of this definition:

1. "Socially and economically disadvantaged person" means an individual who is a citizen or lawful permanent resident of the United States and who is Black, Hispanic, Native American, Asian, Female; or a member of another group or an individual found to be disadvantaged by the Small Business Administration pursuant to Section 3 of the Small Business Act.
2. "Owned and controlled" means a business which is:
 - a. A sole proprietorship legitimately owned and controlled by an individual who is a disadvantaged person.
 - b. A partnership or limited liability company in which at least 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).
 - c. A corporation or other entity in which at least 51% of the voting interest and 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).

The disadvantaged group owner(s) or stockholder(s) must possess control over management, interest in capital, and interest in earnings commensurate with the percentage of ownership. If the disadvantaged group ownership interests are real, substantial and continuing and not created solely to meet the requirements of this program, a firm is considered a bona fide DBE.

105.10.1.2 Commercially Useful Function MaineDOT will count expenditures of a DBE contractor toward DBE goals only if the DBE is performing a commercially useful function on that contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. Credit will only be given when the DBE meets all conditions for a CUF. Credit for labor will be in accordance with the responsibilities outlined in the contract. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the Contract, for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, MaineDOT will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the Contract is commensurate with the work it is actually performing and DBE credit claimed for its performance of the work, and other relevant factors.

Rented equipment used by the DBE must not be rented from the Prime Contractor on a job that the DBE is subcontracted with that Prime Contractor for regular course of business.

A current listing of certified DBEs that may wish to participate in the highway construction program and the scope of work for which they are certified can be found at <http://www.maine.gov/mdot/disadvantaged-business-enterprises/pdf/directory.pdf>. Credit will be given for the value described by a DBE performing as:

- A. A prime contractor; 100% of actual value of work performed by own workforces.
- B. An approved subcontractor; 100% of work performed by own workforces.
- C. An owner-operator of construction equipment; 100% of expenditures committed.
- D. A manufacturer; 100% of expenditures committed. The manufacturer must be a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor. Brokers and packagers shall not be regarded as manufacturers.
- E. A regular dealer; 60% of expenditures committed. A regular dealer is defined as a firm that owns, operates, or maintains a store, warehouse or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public. For purposes of this provision a "Broker" is a DBE that has entered into a legally binding relationship to provide goods or services delivered or performed by a third party. Brokers and packagers shall not be regarded as regular dealers.
- F. A bona fide service provider; 100% of reasonable fees or commissions. Eligible services include professional, technical, consultant, or managerial, services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for the performance of the contract. Eligible services also include agencies providing bonding and insurance specifically required for the performance of the contract.
- G. A trucking, hauling or delivery operation. 100% of expenditures committed when trucks are owned, operated, licensed and insured by the DBE and used on the contract and, if applicable, includes the cost of the self supplied materials and supplies. 100% of expenditures committed when the DBE leases trucks from another DBE firm including an owner-operator. 100% of reasonable fees or commissions the DBE receives as a result of a lease arrangement for trucks from a non-DBE, including an owner-operator.
- H. Any combination of the above.

105.10.1.3 Race-neutral Goals The Maine DOT is required to set an annual goal (approved on a three year basis) for DBE participation in Federal-aid projects. In order to fulfill that goal, bidders are encouraged to utilize DBE businesses certified by the MaineDOT. MaineDOT seeks to meet the established DBE goal solely through race-neutral means. *Race-neutral* DBE participation occurs when a DBE is awarded a prime contract through customary competitive procurement procedures, is awarded a subcontract on a contract that does not carry a DBE contract goal, or wins a subcontract from a prime contractor that did not consider its DBE status in making the award. A DBE/subcontractor Utilization Proposed Form is required to be included in bid documents.

MaineDOT will analyze each project and create a Project Availability Target (PAT), based on a number of factors including project scope, available DBE firms, firms certified in particular project work, etc. Each bid will request that the contractor attempt to meet the PAT. This PAT is developed to assist contractors to better understand what the MaineDOT expectations are for a

specific project. The PAT is NOT a mandate but an assessment of what this particular project can bear for DBE participation. The Department anticipates that each contractor will make the best effort to reach or exceed this PAT for the project.

105.10.1.4 Race-conscious Project Goals If it is determined by the Department that the annual DBE goal will not be met through *race-neutral* means, the Department may implement *race-conscious contract goals* on some projects. Race-conscious contract goals are goals that are enforceable by the Department and require that the prime contractor use good faith effort to achieve the goal set by the Department for that particular project. If race conscious means are implemented on a project, the Prime must comply with the requirements of 49 CFR.

At the time of the bid opening, all Bidders shall submit with their bid a Disadvantaged Business Enterprise (DBE) Commitment Form provided by the Department. This form will list the DBE and non-DBE firms that are proposed to be used during the execution of the Work. The list shall show the name of the firm, the item/material/type of work involved and the dollar amount of work to be performed. The dollar total of each commitment shall be totaled and a percentage determined.

If the project goal is not met, acceptable documentation showing all good faith efforts made to obtain participation may be required in order to award the project. Failure to provide the required listing with the dollar participation total or acceptable documentation of good faith efforts to obtain DBE participation within 3 days after the bid opening date will be considered a lack of responsiveness on the part of the low bidder. Rejection of the low bid under these circumstances will require the low bidder to surrender the Proposal Guaranty to the Department. The submission and approval of the above forms does not constitute a formal subcontract.

If for any reason during the progress of the Work the Contractor finds that DBEs included on the list are unable to perform the proposed work, the Contractor, with written release by the committed DBE or approval of the Department, may substitute other DBE firms for those named on the list. If the Contractor is able to clearly document their inability to find qualified substitute firms to meet the project goal, the Contractor may request in writing approval to substitute the DBE with a non-DBE firm. If at any time during the life of the Contract it is determined that the Contractor is not fulfilling the goal or commitment(s) and is not making a good faith effort to fulfill the DBE requirement, the Department may withhold progress payments. If good faith effort is determined by the Department, failure to meet the DBE contract goal will not be a detriment to the bid award. Fulfillment of the goal percentage shall be determined by dividing the dollars committed to the DBEs by the actual contract dollars. These requirements are in addition to all other Equal Employment Opportunity requirements on Federal-aid contracts.

105.10.1.5 Certification of DBE attainment on Contracts The MaineDOT must certify that it has conducted post-award monitoring of all contracts to ensure that DBEs had done the work for which credit was claimed. The certification is for the purpose of ensuring accountability for monitoring which the regulation already requires. The MaineDOT will certify these contracts through review of CUF forms, Elations sub-contract payment tracking as well as occasional on-site reviews of projects and through the project's final closeout documentation provided by our Contracts Section.

105.10.1.6 Bidders' List Survey Pursuant to 49 CFR 26.11 the MaineDOT is required to “create and maintain” a bidders list and gather bidder information on our construction/consultant projects, Contractors will maintain information on all subcontract bids submitted by DBE and Non-DBE firms and provide that information to the Department. The Following information is required:

Firm Name

Firm Address

Firm status (DBE or non-DBE)

Age of firm (years)

And the annual gross receipts amount as indicated by defined brackets, i.e. \$500,000 to \$800,000, rather than requesting exact figures.

Not only is this information critical in determining the availability of DBE businesses relative to other businesses that do similar work, but the Federal Highway Administration requires that we obtain this information.

SPECIAL PROVISION
SECTION 105
General Scope of Work
(Limitations of Operations)

A 24 hour notice is required for any change in work schedule.

Work can be performed at any time except Sundays and Holidays and as provided in Special Provision, Section 107, Contract Time.

Ferry Boat Fees will be waived for the Contractor, including all Subcontractors, equipment and materials deliveries' intended for this project only. The Contractor will be responsible for scheduling all Ferry Boat Trips related to this project, in advance with the Maine State Ferry Service and or the Project Manager.

Construction The existing building will remain in use throughout the project. The building and its contents must be kept dry at all times. The exit will be open at all times for the employees, general public and vendors to enter the building. The contractor will be responsible for signing and coning the area around the entry ways to inform and protect the above mentioned people from Hazards associated with the project.

The contractor will need to work with the local Terminal Supervisor or Transportation Operations Manager for this facility to make arrangements for the storage of the Construction materials and equipment.

The existing roofing and insulation shall be removed and disposed of in accordance with applicable federal, state and local laws and regulations. The existing surface shall be smooth and free of protrusions prior to placing any roofing materials

Materials and shop drawings must be submitted to the Department for review prior to start of any work. All materials shall be stored, handled and installed in accordance with manufacturer's recommendations. The completed installation for the roof shall conform, to all applicable National, State and local codes. The Contractor shall remove all construction debris and dispose of it in accordance with federal, state and local regulations.

Quality and Standards The Contractor shall comply with all contract requirements in performance of the work. If there is no applicable standard set forth in this Contract for a particular item of work, then the Contractor shall perform that item of work in accordance with industry standards prevailing at the time of bid.

Materials and manufactured products incorporated into the work shall be new unless otherwise specified, free from defect, and in conformity with the contract. Where any combination of materials is assembled to form a finished product, any or all of which are covered by specifications, the Department may reject the finished product if any of the

components do not comply with the specifications.

If the Department determines that non-conforming work substantially conforms to the Contract, the Department may accept the non-conforming work, provided that the Department may require a credit to the Department to be deducted from amounts otherwise due the Contractor. If the Department and Contractor cannot agree to the amount of the credit, the work shall be unacceptable work. The Contractor shall remove, replace, or otherwise correct all unacceptable work as directed by the Department at the expense of the Contractor, without cost or liability to the Department.

Changes and Extra Work The Department shall have the right to alter the nature and extent of the Work as provided in the Contract, the Contract Amount being adjusted accordingly.

Allowable Work Times The Contractor must notify the Department a minimum of 48 hours prior to working on this project. The Contractor may perform work at any time as long as approved by the Department. The Contractor is solely responsible for the planning and execution of Work in order to complete the Work within the Contract Time. The Contractor shall perform work only during the following times Monday through Saturday, 6 am to 5 pm, or if prior arrangement are made with the Resident or Project Manager, except for they may not work on Sundays and holidays as defined in Appendix B.

Warranty The Contractor unconditionally warrants and guarantees that the Work and Equipment will be free from warranty defects for one year or as otherwise specified in this Contract. If the Department discovers any warranty defects during the warranty period, the Contractor agrees to perform all remedial work, at no additional cost or liability to the Department. Remedial Work will be completed within two weeks unless a more immediate response is required for safety or convenience, as determined by the Department.

SPECIAL PROVISION
SECTION 107
Time
(Contract Time)

The specified Contract Completion Date is August 29, 2014. All Work must be Complete by the Contract Completion Date specified in the Contract, and any authorized extensions

The contractor will be allowed to commence work provided that all required plans/submittals have been received and approved by the MaineDOT or Department.

Completion of Physical Work occurs when the Work is complete and has undergone a successful final inspection. Liquidated Damages will cease upon the physical completion of the Work. Completion occurs when the Contractor has finished all Work pursuant to the Contract, the Work is complete and has undergone a successful final inspection and delivered documentation is complete and accepted. Completion does not mean substantial Completion. Completion also does not mean Completion of Physical Work.

SPECIAL PROVISION

SECTION 107

TIME

(Scheduling of Work – Projected Payment Schedule)

Description The Contractor shall also provide the Department with a Quarterly Projected Payment Schedule that estimates the value of the Work as scheduled, including requests for payment of Delivered Materials. The Projected Payment Schedule must be in accordance with the Contractor's Schedule of Work and prices submitted by the Contractor's Bid. The Contractor shall submit the Projected Payment Schedule as a condition of Award.

SPECIAL PROVISION
SECTION 107
SCHEDULING OF WORK

Replace Section 107.4.2 with the following:

”107.4.2 Schedule of Work Required Within 21 Days of Contract Execution and before beginning any on-site activities, the Contractor shall provide the Department with its Schedule of Work. The Contractor shall plan the Work, including the activity of Subcontractors, vendors, and suppliers, such that all Work will be performed in Substantial Conformity with its Schedule of Work. The Schedule must include sufficient time for the Department to perform its functions as indicated in this Contract, including QA inspection and testing, approval of the Contractor's TCP, SEWPCP and QCP, and review of Working Drawings.

At a minimum, the Schedule of Work shall include a bar chart which shows the major Work activities, milestones, durations, **submittals and approvals**, and a timeline. Milestones to be included in the schedule include: (A) start of Work, (B) beginning and ending of planned Work suspensions, (C) Completion of Physical Work, and (D) Completion. If the Contractor Plans to Complete the Work before the specified Completion date, the Schedule shall so indicate.

Any restrictions that affect the Schedule of Work such as paving restrictions or In-Stream Work windows must be charted with the related activities to demonstrate that the Schedule of Work complies with the Contract.

The Department will review the Schedule of Work and provide comments to the Contractor within 20 days of receipt of the schedule. The Contractor will make the requested changes to the schedule and issue the finalized version to the Department.”

**SPECIAL PROVISION
SECTION 656**

Temporary Soil Erosion and Water Pollution Control

Standard Specification 656 of the Standard Specifications is deleted and replaced by this Special Provision.

The following information and requirements will constitute the Soil Erosion and Water Pollution Control Plan for this Project. The soil erosion and water pollution control measures associated with this work are as follows:

All work shall be done in accordance with the latest revision of the Maine Department of Transportation Best Management Practices for Erosion and Sediment Control (a.k.a. Best Management Practices manual or BMP Manual). The latest version is dated February 2008 and is available at:

<http://www.maine.gov/mdot/env/documents/pdf/bmp2008/BMP2008full.pdf>

Procedures specified shall be according to the BMP Manual unless stated otherwise.

1. The on-site person responsible for implementation of this plan, shall be the Contractor's Superintendent or other supervisory employee (the "Environmental Coordinator") with the authority to immediately remedy any deficient controls and shall provide the Resident with their numbers (telephone number, cellular phone and pager numbers, if applicable) where the Environmental Coordinator can be reached 24 hours a day.
2. All areas where soil is disturbed shall be permanently mulched on a daily basis and seeded on a weekly basis (if seeded by hand, it shall be done on a daily basis). All previously mulched areas shall be maintained and re-mulched on a daily basis if bare areas develop until an acceptable growth of grass has been obtained.
3. All disturbed ditches shall receive erosion control blanket or stone rip rap, as required, prior to leaving the site each day.
4. Winter stabilization BMPs shall be applied in accordance with the MDOT BMP Manual between November 1 and April 15 or during frozen ground conditions.
5. If the Work includes the handling or storage of petroleum products or Hazardous Materials including the on site fueling of Equipment, the Resident must be provided with a Spill Prevention Control and Countermeasure Plan (SPCCP) plan. At a minimum, the SPCCP shall include:
 - The name and emergency response numbers (telephone number, cellular phone and pager numbers, if applicable) of the Contractor's representative responsible for spill prevention;
 - General description and location of (1) handling, transfer, storage, and containment facilities of such products or Materials ("activities and facilities") and (2) potential receptors of such products or Materials including oceans, lakes, ponds, rivers,

**SPECIAL PROVISION
SECTION 656**

Temporary Soil Erosion and Water Pollution Control

- streams, wetlands, and sand and gravel aquifers ("sensitive resources") including the distances between said activities and facilities and said sensitive resources;
- Description of preventative measures to be used to minimize the possibility of a spill including Equipment and/or Materials to be used to prevent discharges including absorbent Materials,
 - A contingency response plan to be implemented if a spill should occur including a list of emergency phone/pager numbers including the Contractor's representative, MDEP Spill Response, the Resident, and local police and fire authorities. For a related provision, see *Standard Specification, Section, 105.2.2 - Project Specific Emergency Planning*.
6. The Environmental Coordinator must inspect and maintain daily all controls for the duration of the project.
 7. If the Project Resident directs new soil disturbance that requires temporary erosion and sedimentation control, all permits shall be obtained by the MaineDOT and a full SEWPCP will be required and paid for as Extra Work.

Any costs related to this plan shall be considered incidental to the contract.

SPECIAL PROVISION
SECTION 815
Buildings

Description The work shall consist of the furnishing and construction of the Crew Quarters at the Maine Department of Transportation Lot located in Islesboro, Maine in accordance with these contract documents.

Materials All backfill, not otherwise specified, shall be Granular Borrow and shall meet the requirements of Section 703.19 Granular Borrow.

Gravel borrow used for bedding for the footings shall meet the requirements of Section 703.20 Gravel Borrow.

Aggregate Subbase shall meet the requirements of Standard Specification, Section 703.06 Aggregate for Base and Subbase – Grading D.

Construction The Department will provide the Contractor with horizontal and vertical control and conceptual slab layout. The Contractor shall provide the additional layout necessary to complete the Work.

All work shall meet the requirements of governmental agencies having jurisdiction and comply with applicable standards and codes. The Contractor shall submit two (2) copies of shop drawings to Department for review at least fifteen (15) days prior to incorporation into the work. Shop drawings shall be approved prior to incorporation into the work.

Roof, siding and paint colors shall be selected by Department from manufacturer's standard colors.

Excavation shall meet the requirements of Section 203 Excavation and Embankment.

When the structure is to rest on an excavated surface other than rock, special care shall be taken not to disturb the bottom of the excavation. If the surface upon which the structure is to rest is disturbed, it shall be regraded and recompacted to the extent directed by the Resident.

If solid ledge is encountered less than 4 feet below proposed grade, Contractor shall pin footing to ledge as shown on Detail C on Sheet 5.

Placing of gravel borrow used for bedding for the footings shall meet the requirements of Standard Specification, Section 206, Structural Excavation.

Backfilling shall meet the requirements of Section 203 Excavation and Embankment. Backfilling shall consist of placing suitable material in all spaces not occupied by structures up to the elevation of the existing ground or other elevations shown on the plans or designated. Backfill material shall be granular borrow or other material designated on the plans and shall be at or near optimum moisture content and shall not contain stones larger than 3 in, frozen lumps, chunks of clay, mineral matter or any other objectionable matter.

For reinforced concrete sections, no backfill shall be placed until the masonry has been in place at least 14 days or until concrete cylinders cured with the structure establish that design strength has been reached.

Unless otherwise approved the material shall be deposited and spread upon compacted material in full width layers not more than 8 inches in depth, loose measure. Sand or gravel soils shall be compacted by vibratory type compaction equipment or by pneumatic tired equipment and, if necessary, by the addition of water. The compacting operations shall be continued until each layer is satisfactorily compacted to its full depth and width.

Unless otherwise indicated on the plans or directed, all sheeting and bracing used during structural excavation shall be removed by the Contractor following the completion of the work, and all voids resulting from use of the sheeting and bracing backfilled where necessary.

Subgrades shall be promptly graded and rolled to minimize absorption of water. When excavating results in a subgrade of unsuitable soil, the Resident may require the Contractor to remove the unsuitable material and backfill the area with approved material.

Placing and compacting of Aggregate Subbase shall meet the requirements of Standard Specification, Section 304 Aggregate Base and Subbase Course.

Variations from Materials Specified Whenever and wherever items have been identified by describing a proprietary product, such identification is intended to be descriptive, but not restrictive, and is used to indicate the quality and characteristics of products that are satisfactory. Bids shall be considered as offering the item specified in the Invitation for Bid. The Department will consider all alternates submitted by the Contractor, but is not bound to accept any which, in its opinion, is not in the Department's best interest and are determined by the Department to be of equal value in all material respects to the proprietary items specified. The evaluation of and determination as to equality of the product offered shall be the responsibility of the Department and will be based on information furnished by the Contractor, as well as information reasonably available to the purchasing activity.

Quality and Standards Materials and manufactured products incorporated into the work shall be new unless otherwise specified, free from defect, and in conformity with the contract. When material is fabricated or treated with another material or where any combination of materials is assembled to form a finished product, any or all of which are covered by specifications, the Department may reject the finished product if any of the components do not comply with the specifications. The Department may reject materials not conforming to the Specifications at any time, and the Contractor shall remove them immediately from the project site unless otherwise instructed by the Department. The Contractor shall not store or use rejected materials on any Department project.

If there is no applicable standard set forth in this contract for particular Work, then the Contractor shall perform that Work in accordance with industry standards prevailing at the time of bid. If the Department determines that Work is non-conforming, the Contractor shall remove, replace, or otherwise correct all unacceptable work as directed by the Department at the expense of the Contractor, without cost or liability to the Department.

Submittals The Contractor shall submit manufacturers' specifications, product data and installation instructions for all items furnished. The Contractor shall not be relieved of responsibility for any deviation from the requirements of the specifications unless the contractor has specifically informed the owner in writing of such deviation at the time of submission and the owner has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions. No portion of the work shall be commenced until the Department has approved the submittal.

Delivery, Storage, and Handling

- Store materials off the ground and protected from the weather.
- Deliver products in manufacturers' original containers, dry, undamaged, with seals and labels intact.

Installation

- Installation, handling and storage of all materials shall comply with manufacturer's instructions and recommendations.
- The Contractor shall make provisions to allow safe access to the work for the Department in order to inspect the work, facilitate ongoing inspection of the work and to measure the work for payment purposes.
- Complete installation to provide weathertight service.
- Completed installation for the roof shall conform, to all applicable National, State and local codes

New Wastewater Disposal System Contractor shall install new Wastewater Disposal System as shown on Sheet 3. Cross section, exact layout, and additional information can be found attached at the end of this section.

Contractor's Safety Program If a copy of the Contractor's Safety Plan is not on file with the Department, the Contractor must submit an acceptable Contractor's Safety Plan to the Department's Bureau of Maintenance & Operations Section prior to Contract award. If

copy of the Contractor's Safety Plan is on file with the Department's Bureau of Maintenance & Operation's, the Contractor must confirm, in writing, that the plan on file is still applicable prior to Contract award. The Contractor shall designate which portions such submissions it considers confidential business information. If such program is revised during the Contract Time, the Contractor shall provide the updated program to the Department. The Contractor shall comply with its safety program and the Standard Specifications. The Contractor shall be responsible for all claims or damages arising from failure to so comply and indemnifies and holds harmless the Department from all claims and damages arising from such non-compliance.

The contractor shall be responsible for the safety of all operations in connection with the Contract and shall take all necessary actions to ensure the safety of all persons who may be in, on or adjacent to the Site. The Contractor shall perform Work in a manner that is in compliance with the Contractor's TCP, an applicable OSHA requirements, and established safety practices.

Failure by the Contractor to comply with the Contractor's TCP or an applicable OSHA requirement or to follow all established safety practices pertaining to the work being performed, will result in the immediate suspension of Work on the entire project until all unsafe practices are corrected and comply with the applicable requirements, standard or practice.

Environmental Requirements and Waste Materials

Excavation is expected to include deleterious materials such as asphalt pavement. This excavation shall not be reused by the Contractor. The Contractor shall stockpile the excavation material on site as directed by the Department.

All waste materials shall be removed and disposed of in accordance with all federal, state, and local laws.

All materials removed from the site shall be the property of the contractor. Sale of these materials on site, and removal by persons other than the contractor or his personnel, shall be at the risk of the contractor. Once the contract is signed, responsibility for the safety of the public within the confines of the project shall be the responsibility of the contractor. The contractor shall be responsible for any and all materials dropped from his trucks distant from the project. The contractor shall make his own arrangement for disposal of materials taken from the site, and there will be no burning of materials on or adjacent to the site.

Hazardous Materials If the Contractor encounters any condition that indicates the presence of uncontrolled petroleum or hazardous Materials, the Contractor shall immediately stop Work, notify the Department, treat any such conditions with extreme caution, and secure the area of potential hazard to minimize health risks to Workers and the public, and to prevent additional releases of contaminants into the environment. Such conditions include the presence of barrels, tanks, unexpected odors, discoloration of soil or water, an oily sheen on soil or water, excessively hot earth, smoke, or any other condition indicating uncontrolled petroleum or hazardous Materials. The Contractor shall

continue Work in other areas of the Project unless otherwise directed by the Department. The Contractor shall comply with all federal, State, and local laws concerning the handling, storage, treatment, and disposal of uncontrolled petroleum or hazardous Material.

Permits, Fees, and Notices The Contractor shall also acquire, at its sole expense, all licenses, Permits and other permissions that are necessary, appropriate and legally required to perform the Work. The contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and lawful orders of any public authority bearing on the performance of the work. If the contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Department, he shall assume full responsibility therefore and shall bear all cost attributable thereto.

Closeout Procedures The Contractor shall make final changeover of permanent locks and deliver keys to Department, and complete final cleaning requirements, including touchup painting, touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects,.

Final Cleaning The Contractor shall clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program and comply with manufacturer's written instructions.

1. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
3. Remove tools, construction equipment, machinery, and surplus material from Project site.
4. Remove snow and ice to provide safe access to building.
5. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
6. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
7. Sweep concrete floors broom clean in unoccupied spaces.
8. Remove labels that are not permanent.
9. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
10. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
11. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
Replace parts subject to unusual operating conditions.

Closeout Documentation The following documents shall be added to the required list of closeout documentation:

- Project Record Drawings
- Warranties
- Maintenance & Operations Manual

The Contractor shall prepare and submit Project Record Documents, operation and maintenance manuals, and similar final record information.

Warranty The Contractor shall guarantee work for one (1) year from date of Final Acceptance by the Department. The Physical Work must be Complete and in Conformity with the Contract and the Closeout Documentation, exclusive of the All Bills Paid and Request for Final Payment Letters, in order for the Department to finally “accept” the Project. All defects, including leaks occurring during guarantee period, shall be corrected without cost to the Owner. The contractor unconditionally warrants and guarantees to the owner that all work will be of good quality, free from faults and defects, and in conformance with the specification. All work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the owner, the contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If the Department discovers any warranty defects during the warranty period, the Contractor agrees to perform all remedial work, at no additional cost or liability to the Department. Remedial Work will be completed within two weeks unless a more immediate response is required for safety or convenience, as determined by the Department.

The Contractor agrees that the warranty obligations provided by this Contract shall be reported as an outstanding obligation in the event of bankruptcy, dissolution, or the sale, merger, or cessation of operations of the Contractor.

Operations and Maintenance Manual The Contractor shall prepare operation and maintenance manuals, including the following:

- Emergency data.
- Operation data for systems, subsystems, and equipment.
- Maintenance data for the care and maintenance of systems and equipment.

Method of Measurement The Crew Quarters will be measured for payment as one lump sum, complete in place and accepted.

Basis of Payment The Crew Quarters will be paid for at the contract lump sum price, complete and accepted which shall be full compensation for the work indicated on the plans and as called for in the contract, including excavation, borrow, gravel, hot mix asphalt pavement, foundation drain pipe, stone, geotextile, the additional underground electrical and pole as noted on the plans, backfill, labor, equipment and materials for building construction and other contract related incidentals necessary to complete the work.

Islesboro 19845.00
Crew Quarters
April 22, 2013

Payment will be made under:

	<u>Pay Item</u>	<u>Pay Unit</u>
815.00	Buildings – Crew Quarters	Lump Sum

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION		State Dept. Health & Human Services Div. of Environmental Health, 11 SHS (207) 287-6672, Fax: (207) 287-3195
PROPERTY LOCATION		>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<
City, Town, or Plantation	ISLESBORO	The Subsurface Wastewater Disposal System shall not be installed until a Permit is attached HERE by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.
Street or Road	502 FERRY ROAD	
Subdivision, Lot #	MAP 14 LOT B	
OWNER/APPLICANT INFORMATION		
Name (Last, First, MI)	STATE OF MAINE FERRY SERVICE ATTN: WILBREN KNOWLES	<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Applicant
Mailing Address of Owner/Applicant	AUGUSTA, ME 0	
Daytime Tel. #	446-1236	Municipal Tax Map # 14 Lot # 8
OWNER OR APPLICANT STATEMENT I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is cause for the Department and/or Local Plumbing Inspector to deny a Permit.		CAUTION: INSPECTION REQUIRED I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. (Initials) date approved
Signature of Owner or Applicant _____ Date _____		Local Plumbing Inspector Signature _____ (Initials) date approved _____
PERMIT INFORMATION		
TYPE OF APPLICATION <input type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type replaced: _____ Year installed: _____ <input checked="" type="checkbox"/> 3. Expanded System <input type="checkbox"/> a. Minor Expansion <input type="checkbox"/> b. Major Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion	THIS APPLICATION REQUIRES <input checked="" type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 3. Replacement System Variance <input type="checkbox"/> a. Local Plumbing Inspector Approval <input type="checkbox"/> b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit	DISPOSAL SYSTEM COMPONENTS <input type="checkbox"/> 1. Complete Non-engineered System <input type="checkbox"/> 2. Primitive System (graywater & all toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-engineered Treatment Tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input checked="" type="checkbox"/> 6. Non-engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous Components
SIZE OF PROPERTY 200' x 190' <input type="checkbox"/> 0.50 FT. <input type="checkbox"/> ACRES	DISPOSAL SYSTEM TO SERVE <input type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: _____ <input type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: _____ <input checked="" type="checkbox"/> 3. Other: CREW QUARTERS AND ONE BEDROOM (specify) _____ Current Use <input type="checkbox"/> Seasonal <input checked="" type="checkbox"/> Year Round <input type="checkbox"/> Undeveloped	TYPE OF WATER SUPPLY <input checked="" type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other
SHORELAND ZONING <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)	
TREATMENT TANK <input type="checkbox"/> 1. Concrete N/A <input type="checkbox"/> a. Regular <input type="checkbox"/> b. Low Profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other CAPACITY: _____ GAL.	DISPOSAL FIELD TYPE & SIZE <input checked="" type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input type="checkbox"/> 3. Proprietary Device <input type="checkbox"/> a. cluster array <input type="checkbox"/> c. Linear <input type="checkbox"/> b. regular load <input type="checkbox"/> d. H-20 load <input type="checkbox"/> 4. Other: _____ SIZE: 160 sq. ft. <input type="checkbox"/> lin. ft.	GARBAGE DISPOSAL UNIT <input checked="" type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. increase in tank capacity <input type="checkbox"/> d. Filter on Tank Outlet
SOIL DATA & DESIGN CLASS PROFILE, CONDITION DESIGN S, C, 1, 1 at Observation Hole # TP-2 Depth 18" of Most Limiting Soil Factor	DISPOSAL FIELD SIZING <input type="checkbox"/> 1. Small—2.0 sq. ft. / gpd <input type="checkbox"/> 2. Medium—2.8 sq. ft. / gpd <input checked="" type="checkbox"/> 3. Medium—Large 3.3 sq. ft. / gpd <input type="checkbox"/> 4. Large—4.1 sq. ft. / gpd <input type="checkbox"/> 5. Extra Large—5.0 sq. ft. / gpd	EFFLUENT INJECTOR PUMP <input type="checkbox"/> 1. Not Required N/A <input type="checkbox"/> 2. May Be Required <input type="checkbox"/> 3. Required Specify only for engineered systems: DOSE: _____ gallons
SITE EVALUATOR STATEMENT		LATITUDE AND LONGITUDE at center of disposal area Lat. 44 d 17 m 11.3" Lon. 69 d 56 m 02.6" if g.p.s., state margin of error: 2.1'
I certify that on <u>6-29-2011</u> (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).		
Site Evaluator Signature <u>Will Aldrich</u> 192		SE # <u>6-30-2011</u> Date
Site Evaluator Name Printed <u>WILL ALDRICH</u>		Telephone Number <u>207 852-7014</u> E-mail Address _____
Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.		

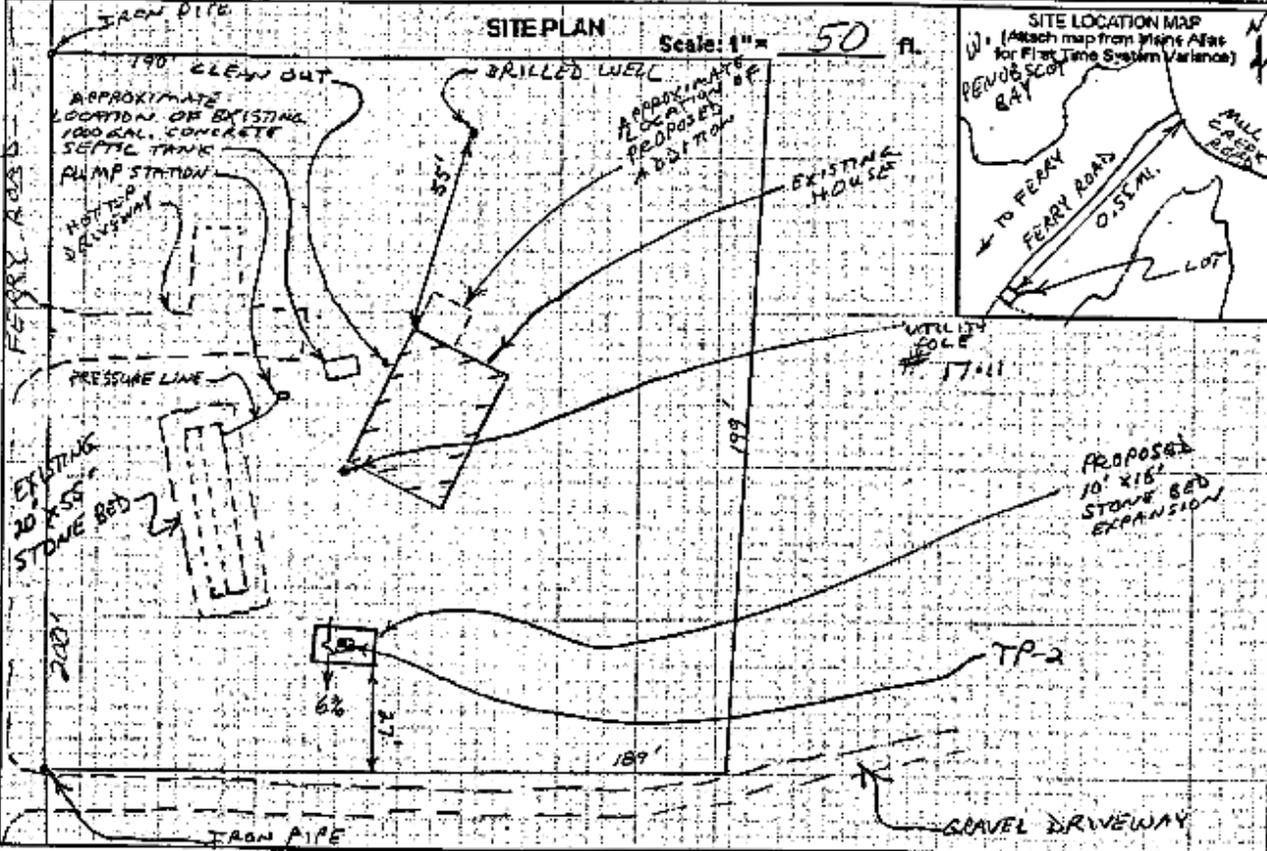
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. of Health & Human Services
Division of Environmental Health, STS 11
(207) 287-5339 FAX (207) 287-3165

Town, City, Parish
ISLESBORO

Street, Road, Subdivision
502 FERRY ROAD

Owner or Applicant Name
**STATE OF MAINE
FERRY SERVICE**



SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole # 3 Test Pit Boring
Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	LOAM	FRIABLE	GRAY-BROWN	
2			GRAY	
4			RED-BROWN	
6			BROWN	
8			OLIVE-BROWN	COMMON
10		FIRM	OLIVE	DISPERSE
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				
40				
42				
44				
46				
48				
50				

Soil Profile: 3 Classification: C Slope: 6 Lending Factor: 18 Buried Above Layer None

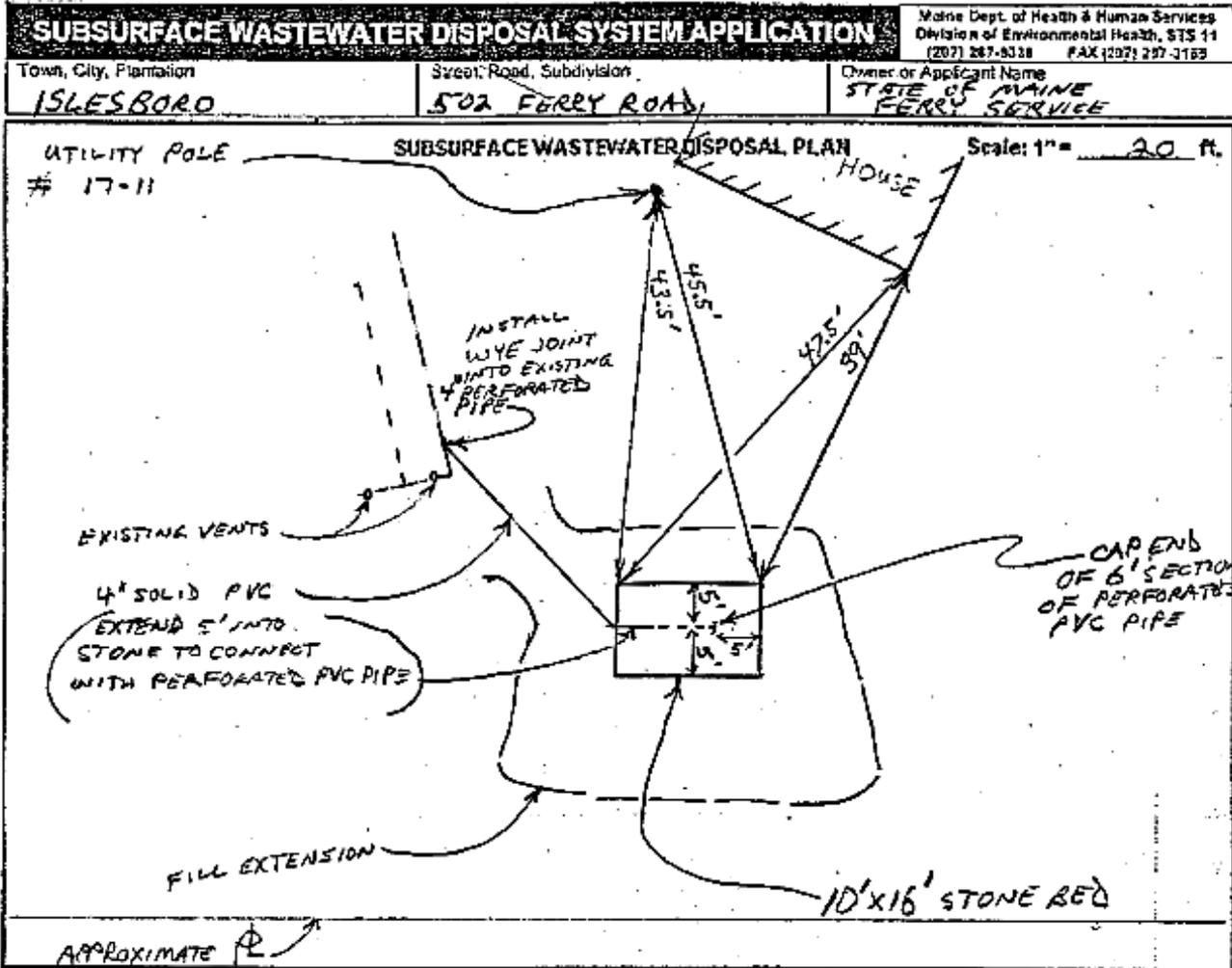
Observation Hole # _____ Test Pit Boring
Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
2				
4				
6				
8				
10				
12				
14				
16				
18				
20				
22				
24				
26				
28				
30				
32				
34				
36				
38				
40				
42				
44				
46				
48				
50				

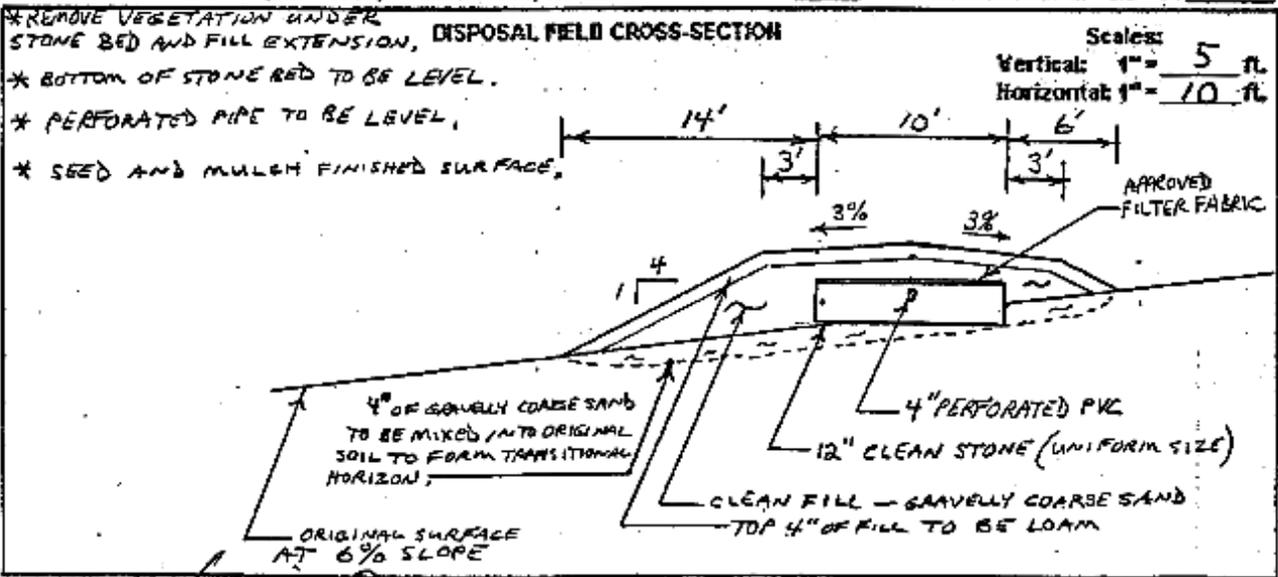
Soil Profile: _____ Classification: _____ Slope: _____ Lending Factor: _____ Buried Above Layer None

Wesley Adams 192
Site Evaluator Signature

SE # _____ Date 6-30-2011



BACKFILL REQUIREMENTS	CONSTRUCTION ELEVATIONS	ELEVATION REFERENCE POINT
Depth of Backfill (upslope) 16'	Finished Grade Elevation -42'	Location & Description: ERP: FLAGGED IN UTILITY POLE 17-11 65' ABOVE GROUND
Depth of Backfill (downslope) 23'	Top of Distribution Pipe or Proprietary Device -55'	Reference Elevation is: 0.0'
DEPTHS AT CROSS-SECTION (shown below)	Bottom of Disposal Field -66'	



W. A. Adams 193 6-30-2011 Page 3 of 3
HHE-200 Rev. 10/02
 Site Evaluator Signature SE # Date

SPECIAL PROVISION
SECTION 02724
FOUNDATION DRAIN PIPE

PART 1 – GENERAL

1.1 Summary

- A. Work included: Provide and install non-pressure pipe and fittings of the sizes and types and in the locations shown on the Drawings and as specified herein.

1.2 Delivery, Storage and Handling

- A. Provide all labor necessary to assist the Department to inspect pipe, fittings, gaskets and other materials.
- B. Carefully inspect all materials at the time of delivery and just prior to installation.
- C. Carefully inspect all pipe and fittings for:
 - 1. Defects and damage.
 - 2. Deviations beyond allowable tolerances for joint dimensions.
 - 3. Debris and foreign matter.
- D. Examine area and structures to receive piping for:
 - 1. Defects such as weak structural components that adversely affect the execution and quality of work.
 - 2. Deviations beyond allowable tolerance for pipe clearances.
- E. All materials and methods not meeting the requirements of the Contract Documents will be rejected.
- F. Immediately remove all rejects materials from the Project site.
- G. Start work only when conditions are correct to the satisfaction of the Department.

PART 2 – PRODUCTS

2.1 Non-Perforated Pipe and Fittings

- A. Size 4” dia. And 6” dia. Inclusive
 - 1. PVC Schedule 40
 - 2. ASTM D-2665
 - 3. Fittings and joints to be compatible with pipe.

2.2 Perforated Pipe and Fittings

- A. Size 4” dia. And 6” dia. Inclusive:
 - 1. MDOT, TYPE “B” meeting requirements of Section 605.
 - 2. Corrugated Polyethylene Drainage Tubing for underdrain. AASHTO M-252.
 - 3. Coiled pipe shall not be used.

PART 3 – EXECUTION

3.1 Inspection

- A. Examine areas to receive piping for the following:
 - 1. Obstructions that adversely affect the installation and quality of the work.
 - 2. Deviations beyond allowable tolerances for clearances.
- B. Examine pipe and fittings before installation to assure no defective materials are incorporated. No single piece of pipe shall be laid unless it is generally straight.
- C. Remove and replace all defective materials at no additional cost to the Department.
- D. Start work only when conditions are satisfactory.

3.2 Installation

- A. Install all pipe and fittings to the lines and grades shown on the Drawings and/or as approved by the Department.
- B. Begin laying pipe at the downstream end.
- C. During installation, close open ends with temporary watertight plugs to prevent earth, water and other material from entering the pipe.

SPECIAL PROVISION
SECTION 03300
CAST-IN-PLACE CONCRETE

PART 1 – GENERAL

1.1 Summary

- A. This work shall consist of furnishing and constructing all cast-in-place Portland Cement Concrete as shown on the contract drawings and as required to complete the work. This work include all steel reinforcement, form work, anchor bolts, sleeves and any other accessories necessary to complete the work.

1.2 References

- A. All work shall comply with the applicable provisions of the following codes:
1. American Concrete Institute ACI-318-08 “Building Code Requirements for Structural Concrete and Commentary”.
 2. American Concrete Institute ACI-301-10 “Specifications for Structural Concrete”.
 3. Concrete-Reinforcing Steel Institute CRSI Handbook, 10th Edition.
 4. ASTM C94 Standard Specification for Ready-Mixed Concrete.

1.3 Submittals

- A. At least 30 days prior to the first placement, a concrete mix design shall be submitted by the contractor to the Department for approval. No concrete shall be placed on the project until the concrete mix design has been approved by the Department. The mix design submitted by the Contractor to the Department shall include the following information:
1. Description of individual coarse aggregate stockpiles, original source, bulk specific gravity, absorption and gradation. A combined coarse aggregate blended gradation shall be provided.
 2. Description of fine aggregate, original source, bulk specific gravity, absorption, colorimetric, gradation, and Fineness Modulus (F.M.).
 3. Description and amount of cement.
 4. Target water-cement ratio.
 5. Target water content by volume.
 6. Target strength.
 7. Target air content, slump and concrete temperature.
 8. Target concrete unit weight.
 9. Type and dosages of air entraining and chemical admixtures.

- B. Approval by the Department will be contingent upon the ability of the mix design proportions to produce the concrete strength requirement and other factors that may affect durability.
- C. The Contractor shall provide the Department with at least two copies of shop drawings for all reinforcing steel and other accessories to be cast-in-place. Shop drawings shall be submitted at least 30 days in advance of concrete placement and shall be reviewed by the Department prior to placement.

1.4 Testing

- A. Concrete acceptance testing will be performed by the Department. The Department will determine the acceptability of the concrete through a quality assurance program. Quality assurance tests will include compressive strength and air content. Concrete sampling for quality assurance tests will be taken at discharge point, with pumped concrete sampling taken at the discharge end of the pump line.
- B. Compressive strength tests will be completed by the Department in accordance with AASHTO T22 at 28 days, except that no slump will be taken. The test average of two concrete cylinders will determine the compressive strength.
- C. Testing for entrained air in concrete, at the rate of one test per subplot, shall be in accordance with AASHTO T152.
- D. Concrete not meeting the standards implied in these specifications or as indicated on the Drawings shall be removed and replaced by the Contractor and no cost to the Department.

1.5 Quality Assurance

- A. **Manufacturer Qualifications:** A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment. Measuring and batching of materials shall be performed at a Department approved batching plant.
- B. Determination of the concrete cover over reinforcing steel for structural concrete shall be made prior to concrete being placed in the forms. Bar supports, chairs, slab bolsters, and side form spacers shall meet the requirements of CRSI Chapter 3, Section 2.5 Class 1, Section 2.6 Class 1A or Section 4. All supports shall meet the requirements for type and spacing as stated in the CRSI Manual of Standard Practice, Chapter 3. Concrete will not be placed until the placing of the reinforcing steel and supports have been approved by the Department. If the Contractor fails to secure Department approval prior to placement, the Contractor's failure shall be cause for removal and replacement at the Contractor's expense. The Contractor shall notify the Department at least 48 hours prior to the placement, when reinforcing steel will be ready for checking. Sufficient time must be allowed for the checking process and any needed repairs.

PART 2 – PRODUCTS

2.1 Concrete

- A. Materials shall meet the requirements specified in the following sections of Division 700 Materials of the “State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002”
- | | |
|---|----------|
| 1. Portland Cement and Portland Pozzolan Cement | 701.01 |
| 2. Water | 701.02 |
| 3. Air Entraining Admixtures | 701.03 |
| 4. Water Reducing Admixtures | 701.04 |
| 5. Water Reducing, High Range Admixture | 701.0401 |
| 6. Set Retarding Admixtures | 701.05 |
| 7. Curing Materials | 701.06 |
| 8. Water Stops | 701.07 |
| 9. Smoothed Surface Asphalt Roll Roofing (Formerly Heavy Roofing Felt). | 701.08 |
| 10. Fly Ash | 701.10 |
| 11. Calcium Nitrate Solution | 701.11 |
| 12. Silica Fume | 701.12 |
| 13. Ground Granulated Blast Furnace Slag | 701.13 |
| 14. Fine Aggregate for Concrete | 703.01 |
| 15. Coarse Aggregate for Concrete | 703.02 |
| 16. Alkali Silica Reactive Aggregates | 703.0201 |
| 17. Preformed Expansion Joint Filler | 705.01 |
- B. Cement
1. Cement shall be Portland Cement conforming to ASTM C-150 for Type I, II or III as specified.
- C. Aggregates
1. Concrete aggregate shall conform to ASTM Specification C-33. All aggregates shall be free from frozen materials and other impurities.
 2. Fine aggregates shall be clean sand free from clay, loam and other deleterious substances.
 3. Coarse aggregate shall be durable, clean, crushed stone or gravel, free from clay, loam and other deleterious substances.
- D. Water
1. Water shall be clean and potable containing no deleterious impurities which may be harmful to concrete or accessories.
- E. Admixtures
1. Prohibited admixture: Calcium chloride, thiocyanates or admixture containing more than 0.05% chloride ions are not permitted.
 2. All admixtures products shall be listed on the Maine DOT Qualified Products List. (<http://www.maine.gov/mdot/tr/qpl/index.htm>).
 3. Certification: Written conformance to the above mentioned requirements and the chloride ion content of the admixture will be required from the admixture manufacturer prior to mix design review by the Department.

2.2 Steel

- A. Reinforcing steel shall conform to ASTM A-615 and be of an approved manufacturer. All bars shall be new, Grade 60 and shall be at the sizes shown on the drawings.
- B. All reinforcing steel shall meet the requirements of Reinforcing Steel, Section 709.01 of the “State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002”.
- C. Steel accessories shall be at the sizes and types as shown on the Drawings unless otherwise specified and shall include all spaces, chairs, ties and other devices for properly spacing, supporting and fastening reinforcement in place. Anchor bolts shall be F1554, Grade 36 or better and of the sizes and types shown on the Drawings.

2.3 Accessories

- A. Non-shrink Grout shall be listed on the Maine DOT Qualified Products List (<http://www.maine.gov/mdot/tr/qpl/index.htm>).

2.4 Joint Sealants

- A. Joint filler shall be listed on the Maine DOT Qualified Products List (<http://www.maine.gov/mdot/tr/qpl/index.htm>).

PART 3 – EXECUTION

3.1 Concrete Proportioning

- A. Concrete shall conform to the following requirements

Use	Min. Strength 28 Day- psi	Max. Size Coarse	% Air (%)	Min-Max Slump	Min Chem. Fac.	Max W/C
Slab	4350	3/4"	1-4	6*	611 #/CY	0.45
Footings & Foundation Walls	4350	3/4"	5-7	6*	611 #/CY	0.52

*Min-Max slump is before the addition of water reducing admixtures.

3.2 Formwork

- A. All construction form work shall be of sufficient strength and construction to safely withstand the loads imposed, conforming to ACI 347. Forms shall be suitably tied and/or bolted together to maintain the specified dimensions. 3/4-inch chamfer strips shall be placed at all exposed corners unless otherwise specified.
- B. Materials – Forms shall be smooth, treated plywood or steel. Plywood forms shall be coated with form oil and steel forms shall be coated with water or other approved substances to facilitate removal. Only non-staining substances shall be used.
- C. All foreign matter within the forms shall be removed before depositing concrete in them.
- D. All forms shall be inspected and approved by the Department prior to placing any concrete within them.
- E. Build into the forms all collars or sleeves required for piping and wiring, and any anchors and inserts as shown on the Drawings.
- F. Forms shall be left in place until the concrete has developed 80 percent of the design strength, and proven by a break of two cylinders. The formwork may be removed 48 hours after the completion of the concrete placement with the approval of the Department and when the following conditions are met:
 - 1. Immediately after the forms are removed, defects in the concrete surface shall be repaired in accordance with section 502.13 of the “State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002” and the repaired area is thoroughly dampened with water. The surfaces of exposed concrete shall be cured for the remainder of the 7-day curing period by the application of a product listed on the Maine Department of Transportation Prequalified list of curing compounds. The curing compound shall be applied continuously by an approved pressure spraying or distributing equipment at a rate necessary to obtain an even, continuous membrane, meeting the manufacturer’s recommendation but at a rate of not less than $0.2L/m^2$ [1 gal/200ft²] of surface. Other methods of curing concrete may be used with the prior approval of the Department.
 - 2. Forms and false work, including blocks and bracing, shall not be removed without the consent of the Department. The Department’s consent shall not relieve the Contractor of responsibility for the safety of the work. In no case shall any portion of the wood forms be left in the concrete. As the forms are removed, all projecting metal devices that have been used for holding the forms in place shall be removed in accordance with Section 502.10 and the holes shall be filled as required in Section 502.13 of the “State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002”.
- G. Forms shall be removed so as not to damage the concrete.

3.3 Placing Concrete

- A. Placing of all concrete shall be done in accordance with Section 502.11 of the “State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002”
- B. All concrete shall be placed before it has taken its initial set, in any case, as specified in Section 502.11. Concrete shall be placed in horizontal layers in such a manner as to avoid separation and segregation. A sufficient number of workers for the proper handling, tamping and operation of vibrators shall be provided to compact each layer before the succeeding layer is placed and to prevent the formation of cold joints between layers. Care shall be taken to prevent mortar from spattering on structural steel, reinforcing steel and forms. Any concrete or mortar that becomes dried on structural steel, reinforcing steel or forms shall be thoroughly cleaned off before the final covering with concrete. Following the placing of the concrete, all exposed surfaces shall be thoroughly cleaned as required, with care not to injure any surfaces.
- C. Concrete in any section of a structure shall be placed in approximately horizontal layers of such thickness that the entire surface shall be covered by a succeeding layer before the underlying layer has taken its initial set. Layers shall not exceed 18in in thickness and shall be compacted to become an integral part of the layer below. Should the placement be unavoidably delayed long enough to allow the underlying layer to take initial set or produce a so-called “cold joint”, the following steps shall be taken:
 - 1. An incomplete horizontal layer shall be bulk-headed off to produce a vertical joint.
 - 2. Horizontal joints shall be treated as required in Section 502.11(f) of the “State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002”
 - 3. Portland cement concreted with a high range, water reducing admixture shall not be placed when the concrete mix temperature is below 5°C[40°F] or above 29°C[85°F].
 - 4. Fresh concrete, threatened with rain damage shall be protected by approved means. Sufficient material for covering the work expected to be done in one day shall be on hand at all times for emergency use. The covering shall be supported above the surface of the concrete.
- D. Transit Mix – Concrete mixed in transit mixers shall be placed within 90 minutes of addition of water at the plant. Delivery tickets shall state the time of water addition or departure from the plant if this is within 10 minutes. If the concrete cannot be placed within the specified time limitations, the Department may require that all cement be added at the job site. No additional water shall be added without consulting the Department. Any additional water added to the concrete on

the site is the Contractor's sole responsibility and risk. The contractor shall provide a Certificate of Compliance for each truckload of concrete to the Department at the time of the load placement. The Certificate of Compliance shall be a form acceptable to the Department and shall include the following:

1. Contract Name & Number
 2. Facility/Building Name
 3. Manufacturing Plant (Batching Facility)
 4. Name of Contractor (Prime Contractor)
 5. Date
 6. Time Batched/Time Discharged
 7. Truck No.
 8. Quantity (Quantity Batched this Load)
 9. Type of concrete by Class and Producer Design Mix No.
 10. Cement Brand or Type, and Shipment Certification No.
 11. Temperature of Concrete at Discharge
 12. Target Weights per cubic yard and Actual Batched Weights for:
 - Cement
 - Coarse Concrete Aggregate
 - Fine Concrete Aggregate
 - Water (including free moisture in aggregates and water added at the project)
 - Admixtures Brand and Quantity (fluid ounces/cubic yard)
 13. Air Entraining Admixture
 14. Water Reducing Admixture
 15. Other admixtures
 16. Placement Location
- E. Vibration
1. Power vibrators shall be provided to thoroughly consolidate and compact the concrete. Vibrators shall not be used to push or move concrete laterally in forms. Excessive vibration will not be permitted. A minimum of two power vibrators shall be on the site when pouring the concrete.
 2. Vibrators shall be an approved type, with a frequency of 5,000 to 10,000 cycles per minute and shall be visibly capable of properly consolidating the designed mixture.
 3. Sufficient vibrators shall be used to consolidate the incoming concrete within 5 minutes after placing.

3.4 Protection of Concrete

- A. All concrete shall be placed/protected in accordance with Section 502.08 Cold Weather Concrete of the "State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002"
- B. Fresh concrete shall be protected from rain, cold and excessive temperature. Concrete shall be placed at temperatures between 40°F and 90°F. When outside

air temperatures are below 40°F, materials shall be heated and maintained above 50°F for at least 5 days after placement.

- C. All concrete surfaces, if not protected by forms, shall be kept thoroughly wet either by sprinkling or by the use of wet burlap, cotton mats or other suitable fabric until the end of curing period. Polyethylene sheets shall not be placed directly on the concrete, but may be placed over the fabric cover to prevent drying except as provided in 3.2 Formwork, Section F.

3.5 Finishing

A. Exposed Concrete

- 1. After the removal of forms, remove all form ties to at least 1 inch below surfaces. Remove all loose and honeycombed concrete, fins and other surface irregularities.
- 2. Concrete patching – After cleaning out all holes, honeycombs and other areas to be patched, moisten surface and apply non-shrink grout or a mixture of one part Portland Cement and 3 parts sand, taking care to match the concrete.
- 3. All concrete which will be exposed to view, shall be hand rubbed using carborundum bricks, burlap or other approved method. Finished surfaces should present a smooth, even appearance of uniform color.

B. Unexposed Concrete

- 1. All unexposed concrete shall have tie holes, honeycombs and other holes filled with patching mortar as above. Fins and other irregularities shall be removed so as to present a uniform surface.
- 2. Unexposed concrete will not require a rubbed finish after patching.

- C. Penetrations – All wall or floor penetrations by pipes, conduit and other inserts shall be sealed with non-shrink grout around entire penetration to provide a watertight finish.

3.6 All concrete mixes must be batched and designed in accordance with this specification and the approved design.

SPECIAL PROVISION
SECTION 06100
ROUGH CARPENTRY

PART 1 – GENERAL

1.1 Summary

- A. This work consists of all labor, materials and equipment necessary to complete the work as shown on the Drawings and as specified herein.

1.2 References

- A. International Building Code, Latest Edition.

1.3 Workmanship

- A. Only experienced personnel shall be engaged in this work.

1.4 Delivery, Storage and Handling

- A. Deliver the materials to the job site and store in a safe area, out of the way of traffic, shored up off the ground surface and covered to protect from weather.

PART 2 – PRODUCTS

2.1 Dimension Lumber

- A. Dimension lumber shall be Spruce-Pine-Fir (SPF) or other wood approved by the Department and shall comply with grading requirements of the Northeastern Lumber Manufacturers Association for Common, Number 2 or better, and shall bear the grade stamp.
- B. When specified on the Plans or in part 4, stress grade structural lumber shall be provided. Stress grade lumber shall bear appropriate stamp for the specified grade and species.
- C. Wood for pressure treating and special installation shall be southern yellow pine meeting the requirements of the Southern Pine Inspection Bureau (SPIB) for Number 2 or better.
- D. All lumber shall not exceed 19% moisture content.

2.2 Zip Sheathing

A. Oriented Strand Board Wall Sheathing: With integral water-resistive barrier, Exposure 1 sheathing.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Huber Engineered Woods LLC; ZIP System Wall Sheathing.
2. Span Rating and Performance Category: Not less than 32/16; ½ Performance Category
3. Edge Profile: Self-spacing profile.
4. Provide fastening guide on top panel surface with pre-spaced fastening symbols for 16-inches and 24-inches on centers spacings.
5. Performance Standard: DOC PS2-10 and ICC-ES ESR-1474.
6. Factory laminated integral water-resistive barrier facer.
7. Perm Rating of Integral Water-Resistive Barrier: 12-16 perms.
8. Assembly maximum air leakage of 0.0072 cfm/sq. ft. infiltration and 0.0023 cfm/ sq. ft. exfiltration at a pressure differential of 1.57 psf.
9. Exposure Time: Designed to resist weather exposure for 180 days.

B. Oriented Strand Board Roof Sheathing: With integral water-resistive barrier, Exposure 1 sheathing.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Huber Engineered Woods LLC; ZIP System Roof Sheathing.
2. Span Rating and Performance Category: Not less than 40/20; 5/8 Performance Category
3. Edge Profile: Tongue and groove
4. Provide fastening guide on top panel surface with pre-spaced fastening symbols for 16-inches and 24-inches on center spacings.
5. Performance Standard: DOC PS2 and ICC-ES ESR-1473.
6. Factory laminated integral roofing underlayment facer.
7. Exposure Time: Designed to resist weather exposure for 180 days.

C. Fasteners

1. Provide fasteners of size and type that comply with requirements specified in this article by the authority having jurisdiction, International Building Code, Wood Frame Construction Manual, and National Design Specification.

D. Self Adhering and Flashing Tape

1. Basis-of-Design Product: Subject to compliance with requirements provide Huber Engineered Woods; ZIP System Seam and Flashing Tape.
2. Thickness: 0.012 inch.
3. Width: 6 inch at all roof valley areas and corners, 3.75 inch else
4. Code Compliance: Comply with requirements of authorities having jurisdiction and ICC Evaluation Service, Inc. "AC148 - Acceptance Criteria for Flexible Flashing Materials."
5. International Code Council (ICC), ICC-ES ESR2227 (ZIP System Tape).

2.3 Accessories

- A. Nails shall be new, galvanized as appropriate, common nails of appropriate lengths and sizes to adequately join the wood. Use galvanized where exposed to weather or pressure treated lumber or where shown on the Drawings.
- B. Joist hangers, framing anchors shall be 18-gauge, galvanized steel such as manufactured by Kant Sag, Simpson, or approved equivalent.
- C. Special Nails shall be used where shown on the Drawings or as recommended by manufacturer.
- D. Glue shall be an all purpose subfloor and construction adhesive, suitable for interior and exterior use, as manufactured by DAP, GE, Ohio Sealants, of approved equivalents.

2.4 Pressure Treated Lumber (P.T)

- A. Lumber or plywood in contact with ground or fresh water shall be treated in accordance with AWWA Standards C2 and LP-22 and shall be rated 0.60 retention.
- B. Lumber in direct contact with concrete, masonry, or steel, not in contact with soil or fresh water shall be treated in accordance with AWWA Standards C2 and LP-2 and shall be rated 0.40 retention.
- C. Pressure treatment shall be water borne chromate copper arsenate (ACQ). D. Wood shall be dried after treatment.

2.5 Laminated Veneer Lumber (LVL)

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated include, but are not limited to, the following:
 - 1. Boise Cascade Corporation
 - 2. Georgia Pacific
 - 3. Trus Joist MacMillian
 - 4. Weyerhaeuser Company
- B. Extreme Fiber Stress in Bending = 3,100 psi
- C. Modulus of Elasticity = 2,000,000 psi

PART 3 – EXECUTION

3.1 Preparation

- A. Carefully select individual lumber pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing.
- B. Cut out and discard defects which render a piece unable to serve its intended function.
- C. Lumber will be rejected by the Department if it is excessively warped, twisted, bowed, mildewed or molded, as well as if it is improperly installed.

3.2 Erection

- A. All framing work shall produce joints which are tight, true, and well nailed with members assembled in accordance with the Drawings and with pertinent codes and regulations.
- B. All framing and fastening shall equal or exceed HUD Minimum Property Standards, Manual of Accepted Practices and the requirements of the IBC. C. Do no shim any framing member.
- D. Install horizontal and sloped members with crown up.
- E. Do no notch, cut or bore members for pipes, ducts, conduits, or for any other reason, except as shown on the Drawings and as approved the Department. F. Bearing surfaces on which structural members rest shall provide a full, even support.
- G. Joists, rafters and similar members shall be fastened with at least two (2) galvanized steel hangers or anchors and nailed completely.
- H. Install solid block bridging at midpoint of joists or as shown on the Drawings.
- I. Provide all shims, blocking and bracing as shown on the Drawings and as approved by the Department to complete the work.
- J. In addition to normal framing operations, install wood blocking or backing required to support the work of other trades.

3.3 Zip Sheathing

- A. Unless otherwise specified or approved by the Department, install sheathing with the face grain perpendicular to framing and center joints over supports. Leave 1/8-inch gap where adjacent plywood panels meet.
- B. Stagger plywood joints so that all joints do not lie on the same support. Nail as shown in the recommended fastening schedule in this Section.
- C. Apply Zip System proprietary seam tape to joints between sheathing panels

3.4 Nailing

- A. Use galvanized nails except as otherwise indicated. Make tight connections between members. Countersink nail heads on exposed carpentry work and fill holes.
- B. Install fasteners without splitting wood; pre-drill as required.
- C. All nailing shall comply with the IBS, Recommended Fastening Schedule (found in table 2304.9.1), unless special requirements are shown on the Drawings.

3.5 Concrete Bearing

- A. All wood which bears against concrete, earth, steel or masonry shall be pressure treated as specified on the Drawings or as approved by the Department.

SPECIAL PROVISION
SECTION 064100
ARCHITECTURAL WOOD CASEWORK

PART 1 - GENERAL

1.1 Summary

- A. Section Includes:
 - 1. Plastic laminate countertops.
 - 2. Shop finishing.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.
 - 2. Section 07 9200 - Joint Sealers.

1.2 References

- A. Architectural Woodwork Institute/Architectural Woodwork Manufacturers of Canada/Woodwork Institute (AWI/AWMAC/WI) - Architectural Woodwork Standards.
- B. Forest Stewardship Council (FSC) STD-40-004 - Chain of Custody Standard.

1.3 Submittals

- A. Submittals for Review:
 - 1. Shop Drawings:
 - a. Include dimensioned plan, sections, elevations, and details, including interface with adjacent work.
 - b. Designate wood species and finishes.

1.4 Delivery, Storage and Handling

- A. Do not deliver materials until proper protection can be provided, and until needed for installation.

1.5 Project Conditions

- A. Environmental Requirements: Maintain following conditions in building for minimum 7 days prior to, during, and after installation of casework:
 - 1. Temperature: 60 to 80 degrees F.

PART 2 - PRODUCTS

2.1 Manufacturers

- A. Acceptable Manufacturers - Plastic Laminate:
 - 1. Formica Corp.
 - 2. Wilsonart International, Inc.
 - 3. Approved equivalent
- B. Substitutions: Under provisions of Division 01.

2.2 Materials

- A. Sheet Products:
 - 1. Graded in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 4 requirements for quality grade specified.
 - 2. Exposed and semi-exposed veneers: Closed grain hardwood, of quality suitable for opaque finish.
 - 3. Sheet core: Medium density fiberboard
- B. Lumber:
 - 1. Graded in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 3 requirements for quality grade specified, average moisture content of six (6) percent.
 - 2. Exposed and semi-exposed locations: Closed grain hardwood, of quality suitable for opaque finish.
- C. Hardboard: Pressed wood fiber with resin binder; standard grade, ¼ inch thick, smooth both sides.
- D. Plastic Laminate: NEMA LD-3.
 - 1. High pressure decorative laminate:
 - a. Horizontal surfaces:
 - 1) Backing sheet: Grade BGF.
 - 2) Postformed surfaces: Grade HGP.
 - 3) Acid resisting: Grade LGP.
 - 4) Other surfaces: Grade HGS.
 - b. Vertical surfaces:
 - 1) Backing sheet: Grade BLF.
 - 2) Cabinet liner: Grade CLS.
 - 3) Other surfaces: Grade VGP
 - 2. Low pressure decorative laminate: Grade VGL.
 - 3. Colors: To be selected from manufacturer's full color range.
 - 4. Finish: Matte.

2.3 Accessories

- A. Fasteners: Type and size as required by conditions of use.
- B. Adhesives:
 - 1. Waterproof, water based type, compatible with backing and veneer] materials.
 - 2. Maximum volatile organic compound (VOC) content: 70 grams per liter.
- C. Finish Hardware: As scheduled at end of Section
- D. Joint Sealers: Specified in Section 07 9200.

2.4 Fabrication

- A. Cabinets - Plastic Laminate Finish:
 - 1. Quality: AWI/AWMAC/WI Architectural Woodwork Standards, Section 10, Premium Grade.
 - 2. Construction type: Face frame.
 - 3. Interface style: Overlay
 - 4. Semi-exposed surfaces: High pressure decorative laminate.
 - 5. Fit exposed and semi-exposed sheet edges with matching PVC edging.
 - 6. Fabricate drawer bodies to full depth of drawer fronts less 1/2 inch.
- B. Plastic Laminate Countertops:
 - 1. Quality: AWI/AWMAC/WI Architectural Woodwork Standards, Section 11, Premium Grade.
 - 2. Fabricate from sheet product with lumber fronts.
 - 3. Locate end joints centered or symmetrical. Join sections with concealed clamp fasteners. Locate plastic laminate butt joints minimum 2 feet away from sinks.
 - 4. Provide holes and cutouts for mounting of sinks, trim, and accessories.
- C. Shop assemble for delivery to project site in units easily handled.
- D. Prior to fabrication, field verify dimensions to ensure correct fit.
- E. Apply plastic laminate in full uninterrupted sheets; fit corners and joints to hairline. Slightly bevel arises. Apply laminate backing sheet to reverse side of laminate faced surfaces.
- F. Where field fitting is required, provide ample allowance for cutting. Provide trim for scribing and site conditions.
- G. Provide cutouts and reinforcement for plumbing, electrical, appliances, and accessories. Prime paint surfaces of cut edges.

2.5 Finishes

- A. Factory Finishing:
 - 1. Factory finish casework in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 5.
 - 2. Color: To be selected from manufacturer's full color range.
 - 3. Sheen: Satin.

PART 3 - EXECUTION

3.1 Preparation

- A. Prior to installation, condition cabinets to average humidity that will prevail after installation.

3.2 Installation

- A. Install in accordance with AWI/AWMAC/WI Architectural Woodwork Standards.
- B. Set plumb, rigid and level.
- C. Scribe to adjacent construction with maximum 1/8 inch gaps.
- D. Adhere countertops, splashes, and skirts with beads of adhesive.
- E. Fill joints between cabinets, tops, splashes, and adjacent construction with joint sealer as specified in Section 07 9200; finish flush.

SPECIAL PROVISION
SECTION 064600
INTERIOR WOOD TRIM

PART 1 - GENERAL

1.1 Summary

- A. Section Includes:
 - 1. Interior wood trim.
 - 2. Shop finishing.
- B. Related Sections:
 - 1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 References

- A. American Wood Protection Association (AWPA) U1 - Use Category System - User Specification for Treated Wood.
- B. Architectural Woodwork Institute/Architectural Woodwork Manufacturers of Canada/Woodwork Institute (AWI/AWMAC/WI) - Architectural Woodwork Standards.
- C. ASTM International (ASTM) E84 - Standard Test Method for Surface Burning Characteristics of Materials.

1.3 Delivery, Storage and Handling

- A. Do not deliver materials until proper protection can be provided, and until needed for installation.

1.4 Project Conditions

- A. Environmental Requirements: Maintain following conditions in building for minimum 7 days prior to, during, and after installation of interior trim:
 - 1. Temperature: 60 to 80 degrees F.

PART 2 - PRODUCTS

2.1 Materials

- A. Interior Trim:
 - 1. Graded in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 3 requirements for quality grade specified, average moisture content of 6 percent.
 - 2. Poplar species, of quality suitable for opaque finish

2.2 Accessories

- A. Fasteners: Type and size as required by conditions of use; plain steel for interior use; hot dip galvanized steel for exterior use.
- B. Adhesives:
 - 1. Waterproof, water based type, compatible with trim and substrate materials.
 - 2. Maximum volatile organic compound (VOC) content: 30 grams per liter.

2.3 Fabrication

- A. Quality: AWI/AWMAC/WI Architectural Woodwork Standards, Section 6, Premium Grade.
- B. Where field fitting is required, provide ample allowance for cutting.
- C. Groove back of trim applied to flat substrate, except do not groove exposed ends.

PART 3 - EXECUTION

3.1 Preparation

- A. Prior to installation, condition wood to average humidity that will prevail after installation.
- B. Back prime wood installed against masonry or cementitious materials prior to installation.

3.2 Installation

- A. Install in accordance with AWI/AWMAC/WI Architectural Woodwork Standards.
- B. Install in longest practical lengths.
- C. Set plumb and level.
- D. Butt ends, corners, and intersections.
- E. Scribe to adjacent construction with maximum 1/8 inch gaps.
- F. Fasten to supporting construction.

SPECIAL PROVISION
SECTION 066500
EXTERIOR SYNTHETIC TRIM

PART 1 - GENERAL

1.1 Summary

A. Section Includes:

1. Exterior synthetic wood trim.
2. Shop finishing.

B. Related Sections:

1. Division 01: Administrative, procedural, and temporary work requirements.

1.2 References

- A. ASTM C1185 – Standard Test Methods for Sampling and Testing Non-Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards.
- B. ASTM D 570 – Standard Test Method for Water Absorption of Plastics.
- C. ASTM D 1761 – Standard Test Methods for Mechanical Fasteners in Wood.
- D. AWPA E10 – Standard Method of Testing Wood Preservatives by Laboratory Soil-Block Cultures.

1.3 Submittals

- A. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- B. Warranty Documentation: Submit manufacturer's standard warranty.

1.4 Delivery, Storage and Handling

- A. Do not deliver materials until proper protection can be provided, and until needed for installation.
- B. Store and handle materials in accordance with manufacturer's instructions.
- C. Keep synthetic trim on flat, level surface.

1.5 Warranty

- A. Warranty period for Exterior Synthetic Trim: 20 year limited warranty:
 1. No decay due to rot.
 2. No excess swelling from moisture.
 3. Resist termite damage.

PART 2 - PRODUCTS

2.1 Manufacturers

A. Acceptable Manufacturers:

1. Boral Composites Inc, phone 888-926-7529, www.boraltrim.com
2. Approved equivalent

2.2 Materials

A. Composition:

1. Post-Industrial Recycled Content: Minimum 68 percent, by weight.
2. Post-Consumer Recycled Content: Minimum 2 percent, by weight.
3. Rapidly Renewable Content: Minimum 5 percent, by weight.
4. Total Recycled and Rapidly Renewable Content: Minimum 75 percent, by weight.
5. Pigments and dyes.

B. Physical Properties:

1. Density, ASTM C 1185: 40 to 50 pcf.
2. Water Absorption, ASTM D 570: Less than 1.5 percent.
3. Fungi Rot, AWPA E10:
 - a. White Rot: Negligible loss.
 - b. Brown Rot: Negligible loss.
4. Termite Resistance: AWPA E1: Greater than 9.0, with 10 being impervious.

C. Mechanical Properties:

1. Flexural Strength, ASTM C 1185: Greater than 1,600 psi.
2. Nail Withdrawal, ASTM D 1761: Greater than 40 lbf.in.

D. Thermal Properties:

1. Coefficient of Linear Expansion, ASTM D 6341, Typical: 1.40E-05 in/in/degree F, tested at minus 30 to 140 degrees F.
2. Flame Spread, ASTM E 84: Less than 25.
3. Smoke Developed, ASTM E 84: Less than 450.

2.3 Finishes

A. Primer.

1. Acrylic based
2. Low VOC
3. Factory applied all sides

2.4 Fasteners

- #### A. Nails or screws, galvanized or stainless steel

PART 3 - EXECUTION

3.1 Preparation

- A. Prior to installation, examine surfaces to receive exterior synthetic trim.
- B. Do not begin installation until unacceptable conditions are corrected.

3.2 Installation

- A. Install in accordance with manufacturer's instruction at locations indicated on the Drawings.
- B. Do not install exterior synthetic trim in structural or load-bearing applications
- C. Set plumb, level and square.
- D. Install exterior synthetic trim with flush, tight joints.
- E. Install fasteners
 - 1. Maximum of 24 inches on center
 - 2. Within 2 inches of end of boards
- F. Fill nail and screw holes with acrylic caulk, wood filler, or auto body filler.
- G. Repair minor damages to exterior synthetic trim in accordance with manufacturer's instructions.
- H. Painting (IMPORTANT): Trim must be painted with a top coat over the factory-applied primer. Failure to paint the exterior synthetic trim will void the warranty.
 - 1. Apply top coat to exterior synthetic trim over factory-applied primer within 150 days of installing trim.

SPECIAL PROVISION
SECTION 072216
RIGID POLYSTYRENE BOARD INSULATION

PART 1 – GENERAL

1.1 References:

- A. ASTM C578-05a: Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
- B. ASTM C208-95 (2001): Standard Specification for Cellulosic Fiber Insulating Board

1.2 Delivery, Storage and Handling

- A. Handle Products carefully, ensuring board corners are not broken and boards are not damaged.
- B. Do not store Product exposed to direct sunlight. If stored outdoors, cover product with light-colored opaque tarpaulins to protect from solar radiation.

PART 2 –PRODUCTS

2.1 Manufacturers

- A. Dow Chemical Company
- B. Approved Equivalent

2.2 Materials

- A. Board Insulation: Extruded polystyrene board to ASTM C578, Type IV, rigid, closed cell type, with integral high density skin.
 - 1. Thermal Resistance (ASTM C518) R-5 per 1 inch of thickness.
 - 2. Board size: 2 x 8 feet or 4 x 8 feet, 2 inches thick
 - 3. Compressive strength: minimum 25 psi
 - 4. Water Absorption (ASTM D2842): 0.7% by volume maximum.
 - 5. Edges: Square
 - 6. Water Vapor Permeance (ASTM E96): <1.5 perms
 - 7. Flame Spread/Smoke Developed Values (ASTM E84): 5/165

PART 3 – EXECUTION

3.1 Examination

- A. Verify that the insulation boards and adjacent materials are compatible.
- B. Ensure vapor retardant membrane is clean and dry.
- C. Verify that substrate is flat, sound, clean and free of oil, grease, and irregularities.

3.2 Installation

- A. After taping seams of wall sheathing, attach insulating boards to sheathing with 1x4 wood strapping.
- B. Use full size sheets of insulation whenever possible.
- C. Stagger board joints whenever possible.
- D. Place wood strapping vertically in line with wall studs, 24" o.c., minimum

SPECIAL PROVISIONS
SECTION 073113
ASPHALT SHINGLES

PART 1 - GENERAL

1.1 Summary

A. Section Includes:

1. Granular surfaced asphalt shingle roofing.
2. Underlayment and ice dam protection.
3. Metal flashings and accessories.

B. Related Sections:

1. Division 01: Administrative, procedural, and temporary work requirements.
2. Section 07 6200 - Sheet Metal Flashing and Trim.

1.2 References

A. ASTM International (ASTM):

1. C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
2. D225 - Standard Specification for Asphalt Shingles (Organic Felt) Surfaced with Mineral Granules.
3. D226 - Standard Specification for Asphalt Saturated Organic Felt Used in Roofing and Waterproofing.
4. D412 - Standard Test Method for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers - Tension.
5. D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
6. D3018 - Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
7. D3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
8. D3462 - Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.
9. D4586 - Standard Specification for Asphalt Roof Cement, Asbestos Free.
10. D4869 - Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing.
11. D6757 - Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing.
12. D6380 - Standard Specification for Asphalt Roll Roofing (Organic Felt).

13. D6381 - Standard Test Method for Measurement of Asphalt Shingle Mechanical Uplift Resistance.
14. D7158 - Standard Test Method for Wind Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
- B. National Roofing Contractors Association (NRCA) - Steep Roofing Manual.
- C. Underwriters Laboratories (UL):
 1. 790 - Standard for Standard Test Methods for Tests of Roof Coverings.
 2. 997 - Standard for Wind Resistance of Prepared Roof Covering Materials.
 3. 2218 - Standard for Impact Resistance of Prepared Roof Covering Materials.
 4. 2390 - Standard for Tests for Wind Resistant Asphalt Shingles with Sealed Tabs.

1.3 Submittals

- A. Submittals for Review:
 1. Product Data: Manufacturer's product description and installation instructions.
 2. Samples: Shingle samples showing available colors.
 3. Warranty: Sample warranty form.

1.4 Quality Assurance

- A. Shingles:
 1. Fire hazard classification Class A
- B. Perform work in accordance with NRCA Manual.

1.5 Project Conditions

- A. Do not install underlayment or shingles at ambient or surface temperatures less than 40 degrees F or on wet or frozen substrate.

1.6 Warranties

- A. Furnish manufacturer's 30 year warranty providing coverage against water leakage through shingles.
- B. Provide manufacturer's 10 year warranty providing coverage against shingle discoloration due to algae growth.
- C. Provide manufacturer's 5 year warranty providing coverage shingle damage due to winds up to 110 MPH.

1.7 Maintenance

- A. Extra Materials: 5 square feet of extra shingles.

PART 2 - PRODUCTS

2.1 Manufacturers

A. Acceptable Manufacturers:

1. IKO, (www.iko.com)
2. CertainTeed Corp. (www.certainteed.com)
3. GAF Materials Corp. (www.gaf.com)
4. Owens Corning. (www.owenscorning.com)
5. Approved equivalent

2.2 Materials

A. Asphalt Shingles:

1. ASTM D3462, glass fiber mat base, mineral granule surfaced, self sealing, fungus and algae resistant.
2. Product: Cambridge series by IKO or approved equivalent.
3. Type: Architectural.
4. Size: 13 ¾ inches x 40 7/8 inches.
5. Color: To be selected from manufacturer's full color range.
6. Exposure: 5 7/8 inches

2.3 Accessories

A. Underlayment: ASTM D4869, Type I - Shingle Underlayment.

B. Ice Dam Protection:

1. Description: ASTM D1970; minimum 30 mil thick polymer modified asphalt laminated to slip-resistant polyethylene film, self adhering with release paper facing.
2. Elongation: Minimum 250 percent, tested to ASTM D412.
3. Tensile strength: Minimum 250 PSI, tested to ASTM D412.

C. Fasteners: Galvanized zinc coated nails as recommended by manufacturer.

D. Ridge Vents: As noted on drawings.

E. Plastic Cement: ASTM D4586, Type I, non running, heavy body material composed of asphalt and other mineral ingredients.

F. Metal Flashings: Specified in Section 07 6200.

G. Flashing Boots: Preformed EPDM or equivalent synthetic rubber material, sized to fit penetration being flashed, with minimum 4 inch wide deck flange and stainless steel draw band at top.

PART 3 - EXECUTION

3.1 Installation of Ice Dam Protection

- A. Starting from eave edge of roof apply one ply modified bitumen underlayment horizontally on roof. Weatherlap each sheet 4 inches over preceding sheet. Lap ends 6 inches minimum.
- B. Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths. Seal ends and edges.
- C. Extend ice dam protection minimum 48 inches beyond interior face of exterior walls.

3.2 Installation of Underlayment

- A. Starting at low edge, apply one ply of underlayment horizontally over substrate.
- B. Weather lap each strip 6 inches minimum over previous strip.
- C. Apply following strips full 36 inch width; weatherlap preceding strip by 19 inches so that not less than two plies cover substrate at any point.
- D. Lap ends 6 inches minimum.
- E. Fasten top of each strip under overlapping strip to hold strip in position until shingles are installed.
- F. Provide 18 inch weave pattern at valleys.
- G. Lap underlayment minimum 12 inches over hips and ridges from both sides. Apply 36 inch wide strip centered lengthwise over ridge. Nail at 12 inches on center on each side.
- H. Extend minimum 4 inches up abutting vertical surfaces.
- I. Press to full bond with substrate without voids, wrinkles, bridging, or fishmouths. Seal ends and edges.
- J. Lap underlayment minimum 12 inches over hips and ridges from both sides. Apply 36 inch wide strip centered lengthwise over ridge.
- K. Extend minimum 4 inches up abutting vertical surfaces.

3.3 Flashings

- A. Rake Edges:
 - 1. Install metal drip edge at rake edges with top flange on top of underlayment.
 - 2. Weather lap ends 2 inches minimum and seal with plastic cement.
 - 3. Nail top flange to decking at 8 inches on center maximum.
 - 4. Apply plastic cement to cover nail heads and at edge of flashings for entire length of metal.
- B. Drip Edges:
 - 1. Apply drip edge at eave with top flange directly on deck; extend underlayment to outer face of drip edge.
 - 2. Lap ends 2 inches minimum and seal with plastic cement.

3. Nail in place at 8 inches on center maximum.
4. Apply plastic cement to cover nail heads and at edge of flashings for entire length of metal.

C. Valleys:

1. Apply one layer of 18 inch wide roll roofing, face down, and one layer of 36 inch wide roll roofing, face up, centered over valleys. Weather lap joints 12 inches minimum.
2. Nail at 18 inches on center, with nails located within 1 inch of edges.
3. Apply one layer of 24 inch wide galvanized metal with 1 inch high V-crimp at midpoint, centered over valleys. Weather lap joints 6 inches minimum. Cleat at 24 inches on center on both sides. Nail cleats only.

D. Stepped Flashings:

1. Install 4 inch high x 2 inch wide x 7 inch long tins concurrent with shingles. Place with ends slightly above with shingle butt ends.
2. Place stepped counterflashing over tins at masonry.

E. Round Penetrations:

1. Place preformed flashing boot over penetration.
2. Fasten flange to deck with minimum of four fasteners.
3. Tighten draw band to watertight condition.

F. Other Flashings:

1. Weather lap ends 2 inches minimum and seal with plastic cement.
2. Nail in place at 8 inches on center maximum.
3. Apply plastic cement to cover nail heads and at edge of flashings for entire length of metal.

3.4 Installation of Roof Detail Sheet

- A. Apply one layer 18 inch wide roof detail sheet centered over hips and ridges.
- B. Apply one layer 9 inch wide roof detail sheet along rake edges drip edges and around penetrations through roof.

3.5 Installation of Ridge Vents

- A. Cut 1 inch wide slot through sheathing under ridge vents, extending to within 6 inches of ends of vents.
- B. Center ridge vent over slot; fasten at maximum 12 inches on center with 3 inch nails.
- C. Apply shingles over vent; fasten with 3 inch nails.

3.6 Installation of Shingles

- A. Install shingles in accordance with manufacturer's instructions.
- B. Remove foreign matter between shingles to ensure uniform contact.
- C. Cut shingles at perimeter and around penetrations. Do not use damaged shingles.
- D. Provide double course of shingles at eaves. Extend shingles 3/8 inch beyond metal drip edges.
- E. Extend shingles on one slope across valley and fasten. Trim shingles from other slope 2 inches from valley center line to achieve closed cut valley, concealing the valley protection.
- F. Lay shingles with open valleys.
- G. Fasten shingles along nailing guide line with minimum of four fasteners per shingle.
- H. Cap hips and ridges with individual shingles, maintaining same exposure as shingles.

SPECIAL PROVISION
SECTION 074640
VINYL SIDING AND SOFFITS

PART 1 – GENERAL

1.1 Section Includes

- A. Vinyl siding.
- B. Vinyl trim and accessories.

1.2 Related Sections

- A. Section 06100 - Rough Carpentry: Framing and sheathing.
- B. Section 07900 - Joint Sealers.

1.3 References

- A. ASTM D 256 - Test Method for Determining the Pendulum Impact Resistance of Notched Specimens of Plastics.
- B. ASTM D 635 - Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supported Plastics in a Horizontal Position.
- C. ASTM D 638 - Test Method for Tensile Properties of Plastics.
- D. ASTM D 648 - Test Method for Deflection Temperature of Plastics Under Flexural Load.
- E. ASTM D 696 - Test Method for Coefficient of Linear Expansion of Plastics.
- F. ASTM D 1929 - Test Method for Ignition Properties of Plastics.
- G. ASTM D 2843 - Test Method for Density of Smoke from the Burning or Decomposition of Plastics.
- H. ASTM D 3679 - Specification for Rigid Poly Vinyl Chloride (PVC) Siding.
- I. ASTM D 4226 - Test Methods for Impact Resistance of Rigid Poly Vinyl Chloride (PVC) Building Products.
- J. ASTM E 84 - Test Method for Surface Burning Characteristics of Building Materials.

1.4 Submittals

- A. Samples: Siding/soffit design, size, and color for approval.
- B. Manufacturer's installation instructions.
- C. Certificate: Manufacturer's certification that siding/soffit as supplied meets or exceeds the conditions specified herein.

1.5 Quality Assurance

- A. Manufacturer: Maintain rigorous production quality control standards to ensure that vinyl siding and soffit will perform as expected for its intended use.

1.6 Delivery, Storage, and Handling

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Pack siding and soffits two squares per carton and clearly mark each carton with manufacturer's name, siding style, color, identifying lot number, and VSI Certification Stamp.
- C. Store vinyl siding, soffits, and accessories in clean, dry area, out of direct sunlight.
- D. Handle material to prevent damage. Do not allow cartons to crease.

1.7 Warranty

- A. Upon completion, provide a written transferable, lifetime limited warranty.

PART 2 - PRODUCTS

2.1 Manufacturers

- A. Acceptable Manufacturer: CertainTeed Corporation
PO Box 860
Valley Forge, PA 19482

2.2 Materials

- A. Vinyl Siding and Soffits - General Requirements: Produced from polyvinyl chloride (PVC) compounds meeting ASTM D 3679 requirements for compound class number 2.
 - 1. Vinyl Siding Institute Certified.
 - 2. Average Impact Strength: 3.86 ft. lbs./in. (26.61 kPa) of notch at 73.4 degrees F (23 degrees C), per ASTM D 256.
 - 3. Average Impact Strength: 2.4 ft. lbs./in. (16.55 kPa) of notch at 32 degrees F (0 degrees C), per ASTM D 256.
 - 4. Tensile Strength: 6,700 psi (46,195 kPa), per ASTM D 638.
 - 5. Modulus of Elasticity: 410,000 psi (2,826,850 kPa), per ASTM D 638.
 - 6. Deflection Temperature: 170 degrees F (77 degrees C), per ASTM D 648.
 - 7. Fire Properties:
 - a. Average Time of Burning: Less than 5 seconds, when tested in accordance with ASTM D 635.

- b. Average Extent of Burning: Less than 5 mm, when tested in accordance with ASTM D 635.
 - c. Flame Spread Index: 20 (Class A), when tested in accordance with ASTM E 84.
 - d. Smoke Developed Index: Less than 450, when tested in accordance with ASTM E 84.
 - e. Ignition Temperature: When tested in accordance with ASTM D 1929, no self ignition and no flaming; no smoldering at less than 680 degrees F (360 degrees C).
8. Interlock: Post-form style lock with positive interlock; both ends of panels factory cut and notched for overlap.
 9. Nail Slots: Elongated 1-inch (25 mm) slots spaced approximately 1/4 inch (6 mm) apart in nailing hem to allow for expansion and contraction.
 10. Weep Holes: Small holes under the bottom butt of siding panels to prevent vapor build-up and allow accumulated moisture to escape.

2.3 Siding

A. Vinyl Siding: "Monogram 46" - Double 4-inch Clapboard Vinyl Siding

1. Finish: Rough Cedar
2. Each 8-inch wide horizontal siding panel nominally configured as two 4 inch panels in the clapboard style with 3/4 inch butt height.
3. TriBeam panel reinforcement system with double thick rolled over nail hem.
4. Length: 12 feet 1 inch.
5. Thickness: 0.046 inch.
6. Color: As selected by The Department from manufacturers standards.

2.4 Accessories

A. Standard Accessories:

1. Consistent with shape, size, and properties shown on the drawings and as required for complete installation.
2. Produced from the same compound materials and with comparable properties as the siding.
3. Color: Matching or color coordinated with siding as chosen by The Department.

PART 3 – EXECUTION

3.1 Examination

- A. Confirm that all critical dimensions are as specified on the drawings.
- B. Beginning installation indicates Installer's acceptance of substrate as suitable to accept siding and soffits.

3.2 Preparation

- A. Repair substrate flaws or defects before applying siding or soffits.
- B. Where necessary, fur surfaces to an even plane and free from obstructions before application.

3.3 Installation

- A. Install siding and soffits in accordance with the latest edition of "Vinyl Siding Installation Manual," published by the Vinyl Siding Institute (VSI) and special details from the drawings.
- B. Install vinyl siding, soffits, and accessories in accordance with best practice, with all joint members plumb and true.

3.4 Field Quality Control

- A. After installation of siding and soffits, check entire surface for obvious flaws or defects.
- B. Replace and repair any problem areas, paying close attention to the substrate for causes of the problem.

3.5 Cleaning

- A. After application of siding and soffits, clean as necessary to remove all fingerprints and soiled areas.
- B. Upon completion of siding application, clean entire area, removing all scrap, packaging, and unused materials related to this work.

SPECIAL PROVISION
SECTION 07920
SEALANTS AND CAULKING

PART 1 – GENERAL

1.1 Summary

- A. Provide all labor, materials and equipment to complete sealing and caulking as shown on the drawings and as specified herein.

1.2 Scope of Work

- A. Sealing and caulking shall be performed on all exterior joints including but not limited to:
 - 1. Around door, frames and windows.
 - 2. Joints around wall, ceiling and penetrations such as electrical boxes, pipes, etc.
 - 3. Joints between dissimilar building materials such as brick and wood, wood and metal, etc., where water might enter.
- B. Interior caulking of all wall, floor, and ceiling penetrations.
- C. Sealing of concrete joints is covered on the plans.

1.3 References

- A. All sealants and caulking shall comply with ASTM C920, Standard Specification for elastomeric joint sealants.

PART 2 – PRODUCTS

2.1 Exterior Caulking

- A. Exterior caulking between prefinished surfaces shall be a one component silicone joint sealant; “Spectrum 1” by Tremco Sealant Systems, Dow Corning “795 Silicone Building Sealant”, or approved equivalent.
- B. Exterior caulking for use on paintable surfaces shall be an acrylic latex joint sealant; “Tremco Acrylic Latex Caulk”; Bostik “Chem-Caulk 600”, or approved equivalents.

2.2 Interior Caulking

- A. Interior caulking for bedding electrical boxes, outlets, pipes or other wall penetrations and around interior doors, frames and windows shall be a non-hardening sealant; “Tremco Acoustical Sealant”, Bostik “Chem-Caulk 600”, or approved equivalents.
- B. Interior caulking per penetrations through fire wall or smoke barriers such as conduits, pipes and ducts shall be a one component fire resistant caulk or putty; 3M Fire Barrier Caulk “CP25” or Putty “303”, or approved equivalents.

2.3 Joint Filler

- A. Joint filler for backing caulking shall be non-absorbent precompressed foam sealant; “Will-Seal 150”, by Will-Seal Construction Foams; “York-Seal 100” by York Manufacturing, Inc., or approved equivalents.

PART 3 – EXECUTION

3.1 Preparation

- A. All joints and spaces to be caulked shall be dry, clean and free from dust and loose materials.
- B. If necessary mask or otherwise protect adjacent surfaces.

3.2 Installation

- A. All sealants and caulking shall be installed according to the manufacturer’s recommendations.
- B. Caulking shall be applied with suitable equipment such as with a caulking gun.
- C. Use foam backing for joints deeper than ½-inch. Pack into joint allowing at least ¼-inch for caulking.
- D. Caulking shall be applied so that surfaces are slightly concave, tight and smooth. Joints shall be air and water tight.
- E. Caulk or putty around fire and smoke wall penetrations shall be applied so as to provide a complete fire barrier sealing system.
- F. Remove excess caulking and clean adjacent surfaces with approved cleaners.

SPECIAL PROVISION
SECTION 08250
DOORS, FRAMES AND HARDWARE

PART 1 – GENERAL

1.1 Summary

- A. This work shall include all labor, materials and equipment necessary to complete the work as shown on the drawings and as specified herein.

1.2 Submittals

- A. Contractor shall submit two (2) copies of shop drawings to the Department 30 days prior to installation. Only doors for which there are reviewed and approved shop drawings shall be incorporated into the work.

1.3 Quality Assurance

- A. Only experienced skilled workmen shall be engaged in this work.

1.4 Delivery Storage and Handling

- A. Deliver doors and all necessary equipment in manufacturer's unopened containers.
- B. Store material in a protected area to prevent damage.
- C. Protect doors and equipment during and after installation from splashing or the accumulation of paint, concrete, mortar, or other foreign material.

PART 2 – PRODUCTS

2.1 Acceptable Manufacturers

- A. Therma-Tru Smooth Star flush panel fiberglass door.
- B. Sargent Lock Co. 10 lines Series Bored Locks
- C. Approved equivalents.

2.2 Fiberglass Doors and Frames

- A. Fiberglass doors shall be insulated core doors, 1-3/4" thick, of the sizes and type as shown on the drawings and as specified herein.
- B. Frames shall be pre-assembled units made of fiberglass or PVC.
- C. Doorstops, latches, doorknobs, hinges, fasteners, etc., for all doors installed shall be provided by the Contractor.
- D. Doors shall have 2'-0" wide by 2'-6" tall tempered glass lites

2.3 Door Hardware

- A. Door hardware shall be equivalent to Sargent.
- B. All hardware shall be knob-style handles with a dull chrome finish.
- C. Hinges shall be full mortise type, 4"x4", concealed ball bearing, stainless steel, three (3) per door, equivalent to Hager Tri Con Hinges #BB800.
- D. Door stops for interior doors shall be as manufactured by H.B. Ives, wall mounted #65 door stop, aluminum finish.

2.4 Weather-stripping

- A. Acceptable Manufacturers:
 - 1. National Guard Products, Inc.
 - 2. Reese
 - 3. Approved equivalents.
- B. Head and jamb weather-stripping shall be nylon brush gasket, National Guard Products #C607, 1/2" X 1/4" or approved equivalent.
- C. Door bottom seal shall be equivalent to National Guard Products aluminum and vinyl seal, and surface mount nylon brush gasket #D698.

PART 3 – EXECUTION

3.1 Doors and Frames

- A. Install units in compliance with the manufacturer's specifications and as approved by the Department.
- B. Frames must be rigid and present a neat appearance.
- C. Frames must be installed with not less than three wall anchors per jamb and an anchor to the floor at each jamb.
- D. The partition shall enter the frame so that the two work as a unit.
- E. Install all units plumb, level, straight and snugly fitted.
- F. Take care not to damage door surface, Defects in surface finish such as hammer marks, scratches, and chips shall be repaired to the satisfaction of the Department.

3.2 Hardware

- A. Install hardware on all doors as specified.
- B. Install doorstops for all doors at heights recommended by the manufacturer.
- C. Provide necessary shims and block to properly install units.
- D. After doors are installed, provide The Department with (20) keys for each installed exterior door.

3.3 Finish

- A. Paint all doors as shown in Finish Schedule of the Specifications, Section 09900.
- B. All colors and products are to be selected and approved by the Department.

3.4 Cleanup and Protections

- A. Clean all doors completely. Wash all windows with approved glass cleaner.
- B. Protect all door units, replacing any breakage or defective parts until accepted by the Department.

3.5 Existing Storm Doors

- A. Carefully remove existing exterior storm doors and accessories and store in a sheltered area.
- B. After installation of new entry doors, reinstall storm doors and accessories in their original condition.

SPECIAL PROVISION
SECTION 085413
FIBERGLASS WINDOWS

PART 1 - GENERAL

1.1 Section Includes

- A. Double hung and stationary windows, complete with hardware, glazing, weather strip, insect screen, jamb extension, sheet rock return, j-channel, and standard or specified anchors, trim and attachments.

1.2 Related Sections

- A. Section 815—Buildings
- B. Section 07920—Sealants and Caulking
- C. Section 099900—Painting

1.3 References

- A. American Society for Testing and Materials (ASTM):
 - 1. E 283: Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
 - 2. E 330: Standard Test Method for Structural Performance of Exterior Windows, Curtains Walls, and Doors by Uniform Static Air Pressure Difference.
 - 3. E 547: Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.
 - 4. E 2190: Standard Specification for Insulating Glass Unit Performance and Evaluation.
 - 5. C 1036: Standard Specification for Flat Glass.
 - 6. E 90-09: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
 - 7. F 2090-10: Standard Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms.
- B. Insulating Glass Manufacturers Alliance / Insulating Glass Certification Council (IGMA / IGCC).
- C. American Architectural Manufacturers Association/Window and Door Manufacturers Association/Canadian Standards Association (AAMA/WDMA/CSA):
 - 1. AAMA/WDMA/CSA 101/I.S.2/A440-05: Standard/Specification for windows, doors, and unit skylights
 - 2. AAMA/WDMA/CSA 101/I.S.2/A440-08:North American Fenestration Standard/Specification for windows, doors, and skylights

- D. Window and Door Manufacturers Association (WDMA): HALLMARK Certification Program
- E. American Architectural Manufactures Association (AMMA): 623-10: Voluntary Specification, Performance Requirements and Test Procedure for Organic Coatings on Fiber Reinforced Thermoset Profiles.
- F. National Fenestration Rating Council (NFRC): 101: Procedure for Determining Fenestration Product Thermal Properties.

1.4 System Description

- A. Design and Performance Requirements:
 - 1. Window units shall be designed to comply with AAMA/NWWDA/CSA 101 / I.S.2/A440-05 and AAMA/WDMA/CSA 101 / I.S.2/A440-08.
 - 2. Air leakage shall not exceed the following when tested at 1.57 according to ASTM E 283: .0.3 cfm per square foot of frame.

1.5 Submittals

- A. Shop Drawings: Submit shop drawings, including locations, elevations, sections, materials, finishes, and attachments.
- B. Product Data: Submit catalog data under provisions of Section 01 33 23.

1.6 Quality Assurance

- A. Conform to applicable accessibility code for locating hardware.

1.7 Delivery

- A. Deliver in original packaging and protect from weather.

1.8 Storage and Handling

- A. Prime or seal wood surfaces, including surface to be concealed by wall construction, if more than thirty (30) days will expire between delivery and installation.
- B. Store window units in an upright position in a clean and dry storage area above ground and protect from weather.

1.9 Warranty

- A. Windows shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of ten (10) years from purchase date.
- B. Window glass shall be warranted to be free from defects in manufacturing, materials and workmanship for period of twenty (20) years from the purchase date.

PART 2 - PRODUCTS

2.1 Manufactured Units

- A. Description: All Ultrex® Casement/Awning/Double Hung (and related stationary or picture units) as manufactured by Integrity Windows and Doors, West Fargo, North Dakota, or approved equivalent.

2.2 Frame Description

- A. Interior: Pultruded reinforced fiberglass, 0.070 – 0.077 inch (2 mm) thick.
- B. Frame depth: 3 3/32 inches (79 mm).
- C. Jamb depth: 2 inches (51 mm).

2.3 Sash Description

- A. Pultruded reinforced fiberglass (Ultrex®), 0.075 – 0.077 inch (2 mm) thick.
- B. Composite sash thickness: 15/16” inches (24 mm).

2.4 Glazing

- A. Select quality complying with ASTM C 1036. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E 2190. STC ratings are certified to the level in accordance with ASTM E90-09.
- B. Glazing method: 11/16 inch (17 mm) Insulated glass.
- C. Glass type: LoE – 180™ with air or Argon gas
- D. Glazing seal: Silicone bedding at exterior. Interior has glazing boot inserted, but no silicone.

2.5 Finish

- A. Exterior: Pultruded Fiberglass. Factory baked on acrylic urethane. Meets AAMA 623-10 requirements.
- B. Interior: Pultruded Fiberglass. Factory baked on acrylic urethane. Meets 623-10 and 00022716 requirements.
- C. Color: Stone White exterior with Stone White interior

2.6 Hardware (Awning)

- A. Factory installed scissors arm roto-gear on awnings. Hardened steel worm drive and gear arms with high pressure die cast housing.
- B. Detachable folding handle.
- C. Sequential locks with removable escutcheon cover and handle.
- D. Color: White

E. Hardware Accessories

1. Window Opening Control Device for operating units

- a. Minimum frame OSM: 18 9/16" (471) x 23 1/2" (597); Maximum frame OSM: 35 1/2" (902) x 71 1/2" (1816)
- b. WOCD locking assembly: Factory installed. Die cast. Color: White and almond Frost.
- c. WOCD tether assembly; Factory installed. Glass filled nylon. Color E-Guard color match.

2.7 Hardware (Double Hung)

- A. Balance System: Coil spring block and tackle with nylon cord, glass filled nylon shoe and zinc locking mechanism.
- B. Sash Lock: High pressure zinc die-cast cam lock and keeper.
 1. Finish: Phosphate coated and electrostatically painted. Color: White.
 2. Two locks on units that are over 3-0 in width.
- C. Sash Lift: Zinc die cast contoured sash lift. Color: White.
- D. Top and Bottom Tilt Latches: Ergonomic tilt latches attached to the upper corners of the top and bottom sash for easy tilting and sash removal.
- E. Sash Limiters: Available as a field applied option to limit sash travel. ABS material and beige in color. Applied in the balance tube channel.
- F. Vent Stops: Available as a factory option. Injected molded nylon, stone white in color. Vent stops limits the sash operation when activated and allow normal operation when deactivated.

2.8 Weather Strip (Awning)

- A. Weather stripped at frame and sash perimeter with flexible gaskets.
- B. Standard weatherstrip color is black.

2.9 Weather Strip (Double Hung)

- A. Frame Weather strip
 1. At Bottom Sash: Color: Beige – Combination foam filled bulb.
 2. At Top Sash: Color: White – Combination hollow vinyl bulb.
 3. At Interlock: Beige: Rigid ABS with flexible hollow bulb.

2.10 Jamb Extension

- A. Standard jamb depth: 2". Optional factory installed jamb extension: 4-9/16" (116 mm); 6-9/16 (167 mm).

2.11 Insect Screen

-

- A. Factory installed screen. Screen mesh, 18 by 16: Charcoal fiberglass.
- B. Aluminum frame finish: Stone White.

2.12 Accessories and Trim

A. Exterior Casing:

1. 3 ½" Flat Casing available as full surround.
2. Colors: Stone White.

B. Installation Accessories:

1. Factory installed vinyl folding nailing fin at head, sill and side jambs.
2. Installation brackets: Brackets for 4-9/16 inch (116 mm); 6-9/16 inch (167 mm) jambs.
3. Sheet rock return.
4. Frame Expander.
5. ¾" Receiver.
6. J-channel.
7. Flush Fin.
8. Mullion kit: Standard mullion kit for field assembly of related units available in horizontal, vertical and 2-wide and/or 2-high configurations. Kit includes: Instructions, interior and exterior mull covers, mull plugs and brackets.

PART 3 - EXECUTION

3.1 Examination

- A. Verification of Conditions: Before Installation, verify openings are plumb, square, and of proper dimension. Report frame defects or unsuitable conditions to the General Contractor before proceeding.
- B. Acceptance of Conditions: Beginning of installation confirms acceptance of existing conditions.

3.2 Installation

- A. Assemble and install window unit according to manufacturer's instructions and reviewed shop drawings.
- B. Install sealant and related backing materials at perimeter of unit or assembly in accordance with Joint Sealants. Do not use expansive foam sealant.
- C. Install accessory items as required.
- D. Use finish nails to apply wood trim and moldings.

3.3 Cleaning

- A. Remove visible labels and adhesive residue according to manufacturer's instructions.
- B. Leave windows and glass in a clean condition.

3.4 Protecting Installed Construction

- A. Protect windows from damage by chemicals, solvents, paint, or other construction operations that may cause damage.

SPECIAL PROVISION
SECTION 093000
TILING

PART 1 – GENERAL

1.1 Summary

A. Section Includes:

1. Porcelain floor tile.

1.2 References:

A. American National Standards Institute (ANSI):

1. A108/A118/A136.1 – American National Standard for Installation of Ceramic Tile.
2. A137.1 – Specifications for Ceramic Tile.

B. ASTM International (ASTM):

1. C150 – Standard Specification for Portland Cement.
2. C207 – Standard Specification for Hydrated Lime for Masonry Purposes.
3. C1028 – Standard Test Method for Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method.

C. Tile Council of North America (TCNA) – Handbook for Ceramic Tile Installation.

D. Resilient Floor Covering Institute (RFCI) – FloorScore Certification Program.

1.3 Performance Requirements

A. Static Coefficient of Friction: Tile of walkway surfaces shall be provided with the following values as determined by testing in conformance with ASTM C 1028:

1. Level Surfaces: Minimum of 0.6 (Wet)
2. Step Treads: Minimum of 0.6 (Wet)
3. Ramp Surfaces: Minimum of 0.8 (Wet)

1.4 Submittals

A. Submittals for Review:

1. Product Data: Manufacturer's installation, cleaning, and maintenance instructions.
2. Samples:
 - a. Tile: 1 x 1 inch samples showing available colors
 - b. Grout: 1/2 x 1/2 x 3 inch long samples showing available colors.

1.5 Quality Assurance

- A. Tile and Trim Units: Meet ANSI A137.1, Standard Grade.

1.6 Delivery, Storage and Handling

- A. Deliver mortar, adhesive, and grout containers bearing hallmark certifying compliance with reference standards.
- B. Protect adhesive containers from freezing and overheating according to manufacturer's instructions.

1.7 Project Conditions

- A. Environmental Requirements: Maintain minimum ambient temperature of 50 degrees F during and after installation.

1.8 Maintenance

- A. Extra Materials: 2 percent of each tile.

PART 2 –PRODUCTS

2.1 Manufacturers

- A. Acceptable Manufacturers – Tile: Ascot Ceramiches, Approved Equivalent
- B. Acceptable Manufacturers – Setting and Grouting Materials: Laticrete International, Mapei Corporation, TEC, Approved Equivalent

2.2 Materials - Tile

- A. Size: 13 ¼ inch x 13 ¼ inch
- B. Edge: Square
- C. Color: To be selected by The Department from manufacturers full color range.
- D. Surface Finish: Unglazed Matte Finish
- E. Trim Units: Coves and Bullnoses, color to match tile

2.3 Accessories

- A. Latex-Portland Cement Mortar: ANSI A118.4, polymer modified dry set type.
- B. Dry Set Portland Cement Mortar: ANSI A118.1 polymer modified dry set type.
- C. Epoxy Adhesive: ANSI A118.3 thin set bond type.
- D. Organic Adhesive: ANSI A136.1 thin set bond type.
- E. Portland Cement: ASTM C150 Type 1, white color.
- F. Sand: ASTM C114, clean, free of organic matter.

- G. Lime: ASTM C 207, Type S, hydrated.
- H. Water: Clean, potable.
- I. Grout:
 - 1. ANSI A118.4, thin set cement mortar
 - 2. Prepackaged dry mortar mix combined with acrylic resin liquid-latex additive.
 - 3. Color: To be selected by The Department from manufacturers full color range.
- J. Joint Sealers: Specified in Section 079200 SEALANTS AND CAULKING.
- K. Metal Edge Strips:
 - 1. White aluminum strips, 1/8 inch wide at top edge with integral provision to anchorage to mortar bed or substrate.
 - 2. Provide Schluter or approved equivalent.
- L. Crack suppression membranes for thin-set tile installations:
 - 1. Fabric-Reinforced, Fluid-Applied Product: System consisting of liquid-latex rubber and fabric reinforcement.
 - 2. Provide Laticrete International Inc. or approved equivalent.

PART 3 – EXECUTION

3.1 Preparation

- A. Clean Surfaces to remove loose and foreign matter that could impair adhesion.
- B. Remove ridges and projections. Fill voids and depressions with patching compound compatible with setting materials.
- C. Allowable Substrate Tolerances:
 - 1. Thin Set Method:
 - a. Maximum variation in substrate surface: 1/8 inch in 8 feet.
 - b. Maximum height of abrupt irregularities: 1/32 inch.
 - 2. Thick Set Method: Maximum 1/4 inch in 10 feet variation in substrate surface.
- D. Test concrete substrate to ASTM D4263: do not install tile until surfaces are sufficiently dry.

3.2 Installation

- A. Methods:
 - 1. Floors: A108.4, thin set with latex-portland cement mortar.
- B. Minimize pieces less than one half size. Locate cuts to be inconspicuous.
- C. Lay tile to pattern furnished by The Department. Do not interrupt tile pattern through openings.
- D. Joint Widths: 3/16 inch, plus or minus 1/16 inch.
- E. Make joints watertight, without voids, cracks, excess mortar or excess grout.
- F. Fit tile around projections and at perimeter. Smooth and clean cut edges. Ensure that trim will completely cover edge cuts.
- G. Install thresholds where tile abuts dissimilar floor finish. Center on door opening.

- H. Allow tile to set for a minimum of 48 hours before grouting.
- I. Grout tile joints in accordance with ANSI A108.10 without excess grout.
- J. Control Joints:
 - 1. Provide Control Joints at:
 - a. Changes in backup material
 - b. Changes in plane
 - c. Over joints in substrate
 - d. Maximum 24 feet on center at interior locations except maximum 8 feet at surfaces exposed to direct sunlight.
 - 2. Form joints per TCNA Method EJ-171.
 - 3. Install joint backing and joint sealer as specified in Section 079200

3.3 Adjusting

- A. Remove and replace pieces that have been damaged during installation.

3.3 Protection

- A. Provide protection for completed work using nonstraining sheet coverings
- B. Prohibit traffic on tile floors for minimum 3 days after installation.

SPECIAL PROVISION
SECTION 09900
PAINING

PART 1 – GENERAL

1.1 Summary

- A. This work shall consist of all labor, materials and equipment necessary to complete painting as shown on the Drawings and as specified herein.
- B. In general, all unfinished surfaces shall be painted or stained unless otherwise specified.

1.2 Submittals

- A. Contractor shall submit color samples, manufacturer and paint specifications to the Department for review fifteen (15) days prior to incorporation into the work. Provide two (2) copies of product information.

1.3 Scope of Work

- A. This work shall include prefinishing and painting or staining of all exposed surfaces and specified unexposed surfaces, except factory or prefinished surfaces. Also included is touching up of prefinished surfaces as required and/or as approved by the Department.

PART 2 –PRODUCTS

2.1 Paint

- A. All materials shall be top quality products of the type and texture as shown on the Drawings and/or as specified in Part 4 of these specifications.
- B. Acceptable manufacturers include: Glidden, Olympic, California, Benjamin Moore, Sherwin Williams and other approved equivalents.
- C. All colors shall be as selected by the Department from samples submitted by the Contractor.

2.2 Painting Accessories

- A. Turpentine shall be pure gum spirits conforming to ASTM DB-65.
- B. Putty shall be as recommended by paint or stain manufacturers and as approved by the Department.

PART 3 – EXECUTION

3.1 Preparation

- A. Prior to painting or staining insure that all surfaces are finished and ready for application.
1. Wood Surfaces:
 - Stain to smooth finish and clean all dust from surfaces. Fill and nail holes, cracks, and other irregularities with approved putty. Pre-color all putty to be used under natural finish wood.
 - Shellac all knots and pitch streaks or pockets to prevent bleeding.
 - Apply prime coat as recommended by manufacturer. Sand lightly where necessary to smooth surface.
 2. Metal surfaces:
 - Clean all grease, rust and dirt from surface. Feather edges of chipped paint on pre-painted items.
 - If so approved by the Department, sandblast or wire brush all metal surfaces to obtain a suitable surface for painting. This procedure will normally be required for refinishing previously painted surfaces which are chipping or peeling.
 - Prime metal surfaces with approved metal primers.
 - Galvanized and prefinished surfaces shall not to be painted unless specified in Painting Schedule.

3.2 All Surfaces

- A. Apply paint or stain only to clean, dry surfaces. Do not paint or stain in the rain or in very humid conditions.
- B. Use masking tape, drop cloths and other means protection to adequately protect adjacent surfaces from dip, spatters and overruns.

3.3 Application

- A. Apply paint or stain as recommended by the manufacturer on properly prepared surfaces according to the paint schedule in Part 4 of these Specifications.
- B. Thoroughly brush or roll all coats to achieve a uniformly smooth coverage.
- C. Allow each coat to dry 48 hours or longer if recommended by manufacturer before applying subsequent coats.
- D. Do not apply paint, stain, varnish or shellac when temperatures are below 45°F unless provision for heating is made.
- E. All finishes shall be smooth, free from runs and sags, streak, brush fibers and other defects. All edges shall be straight and sharp.
- F. Refinish and paint to match any existing adjacent areas which were distributed as a result of the work.

3.4 Cleanup and Protection

- A. Clean all areas of drippings, spatters and debris. Remove all masking tape and clean glass and other areas as required.
- B. Touch up all defective areas to the satisfaction of the Department.
- C. Protect all surfaces until acceptance by the Department.

3.5 Touch-Up Materials

- A. Partially used cans shall also be left with the Owner.

PART 4 – SUPPLEMENTAL SPECIFICATIONS

4.1 Paint Schedule

SURFACE	PRIMER	FINISH
Fiberglass/Wood Door and Frame	1 Coat Acrylic Latex	2 Coats Acrylic Latex Semi-gloss
Misc. Wood	1 Coat Acrylic Latex	2 Coats Acrylic Latex Egg Shell

SPECIAL PROVISION
SECTION 15000
COMMON WORK RESULTS FOR HVAC

PART 1 - GENERAL

1.1 Related Documents

- A. The General Conditions, Supplemental General Conditions and Instructions to Bidders shall apply to this work. Read these to be familiar with conditions related to the installation of the work.

1.2 Work Shown on Drawings

- A. The drawings accompanying this specification, as a part thereof, are working drawings indicating the location and arrangement of the increments of the systems of this section of work. Material deviation from this arrangement, process or means of application, shall bear the Engineer's review stamp before the change is made on the job or materials are ordered. Changes made without such review shall be ordered removed and items installed as specified shall be provided at no additional expense to the Owner.
- B. The drawings are not intended to show in minute detail minor items of installation or materials such as specific fittings or findings.

1.3 Materials and Labor

- A. Furnish materials and labor necessary to deliver to the Owner a complete and operable system installed in accordance with the contract documents.
- B. Materials shall be of the best quality. Workmanship shall be of highest grade and construction shall be done according to best practices of the trade.
- C. Provide, when required, labeled samples of material or equipment specified herein or proposed to be used in this work.
- D. Where words "furnish", "provide", or "install" are mentioned, either singly or in combination, these words are hereby interpreted to mean "furnish and install" or "provide and install", including materials complete with connections, supplemental devices, accessories and appurtenances, unless specifically otherwise noted. These words are likewise hereby interpreted as being prefixed to materials, equipment, and apparatus hereinafter mentioned, either in abbreviated or scheduled information or in the technical sections of the specifications.

1.4 Cooperation Between Trades

- A. Provide information sufficiently in advance of this work, so that work by the other trades may be coordinated and installed without delays. Furnish and locate sleeves, supports, anchors and necessary access panels.
- B. Where work is concealed, assure it does not project beyond finished lines of floors, ceilings, or walls. Equipment or piping requiring access found to be located above sheetrock ceilings shall be brought immediately to the attention of the Owner for resolution.

1.5 Ordinances, Authorities, Permits, and Fees

- A. Obtain necessary permits and licenses, give notices and comply with laws, ordinances, rules, regulations or orders affecting the work, and pay fees and charges in connection therewith.
- B. The "authority having jurisdiction" is the organization, office, or individual responsible for "approving" equipment, an installation, or a procedure.

1.6 Protection of Work and Materials

- A. Protect and care for materials delivered and work performed until the completion of the work. Defective equipment or equipment damaged in the course of storage, installation or test shall be replaced or repaired to the satisfaction of the Engineer at no additional cost to the Owner.

1.7 Applicable Codes

- A. Work and materials shall conform to the latest rules and regulations listed below and these rules and regulations hereby are made part of this specification. They include, but are not necessarily limited to the following:

American Society for Testing and Materials (ASTM) Underwriters' Laboratories, Inc.

(UL)

Air Moving and Conditioning Assoc. (AMCA) American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE)

American Society of Mechanical Engineers (ASME) National Electrical Manufacturers Association (NEMA) Institute of Electrical and Electronics Engineers (IEEE)

American National Standards Institute (ANSI)

National Fire Protection Association (NFPA) Massachusetts State Building Code (780 CMR) Local Fire Code

Local Plumbing Codes

American Welding Society

1.8 Shop Drawings

- A. Submit shop drawings, manufacturers' data and certificates for equipment, materials and finish, and pertinent details for each system where specified in each individual section, eight (8) copies, to be submitted to the Owner. Shop drawings will be returned "No Exceptions Taken", "Make Corrections Noted", "Amend and Resubmit", "Submit Specified Item", or "Rejected" less two (2) copies. Work shall progress in accordance with "Reviewed" shop drawings (ONLY).
- B. Groups of similar shop drawings shall be submitted as individual bound documents with covers and indexes. Typical similar items would be "Diffusers and Registers", "Valves and Controls". Rejection of individual items shall not be cause for rejection of the entire document.
- C. Clearly indicate item(s) to be reviewed on each submission by highlighting or underlining intended item(s). Submissions not clearly marked shall be returned "Amend and Resubmit".
- D. Shop drawings must bear the Engineer's review stamp. In the event that the Engineer returns shop drawings "Amend and Resubmit" or "Rejected", the shop drawing must be revised and resubmitted for review.
- E. Furnishing of the specified item must still produce the results and performance, dependability and quality reasonably to be expected within the spirit of the specifications, drawings, and the standard of good mechanical performance normal to the trade.

1.9 Substitutions

- A. Where the specifications allow the substitution of a product, still this product is subject to review by the Engineer in accordance with the paragraph entitled "Shop Drawings". Review of a substitute item is an indication only that the substitute item is compatible with the specified item as a claim of the manufacturer. Insure dimensional propriety, performance, and quality of the substitute item.
- B. Reference in the specifications or on the drawings to any product, material, fixture, form or type of construction, by proprietary name, manufacturer, make or catalog number, establishes a standard of quality or design and is not meant to limit competition. Use any equivalent substitute provided favorable written review by the Engineer is first obtained. The (ONLY) notation in the specification is an exception to this and leaves no option.
- C. For materials or equipment which are supplied with integral or factory applied finish, the colors will be considered in evaluating substitutions.
- D. For the purpose of avoiding conflicts with other trades, contracts, and adjoining work where more than one (1) article, device, material, fixture, form or proprietary name, manufacturer, make or catalog number, the first named shall be used as the basis of design and details. The cost of any changes because of substituted item shall be borne by the Contractor requesting such change.

PART 3 - EXECUTION

3.1 Grades and Elevations

- A. Establish and maintain grades and elevations in connection with this work.

3.2 Equipment Supports

- A. Furnish and install equipment supports for mechanical equipment as required. Supports shall be subject to review by the Engineer.

3.3 Sleeves and Prepared Openings

- A. Coordinate core-drilling, cutting, patching and setting of sleeves, frames, framing and lintels for openings with other trades. Sleeves shall be furnished by the Contractor.
- B. Failure to give timely notice of and to locate openings and furnish sleeves shall cause no additional expense to the Owner.

3.4 Connection to Equipment

- A. Provide piping connections, supports, brackets, compensators or flexible connections to prevent application of excessive stresses to equipment.
- B. Equipment shall be installed with flanges or unions in such a manner as to permit disconnecting for removal of tubes, coils, elements and other equipment for inspection, service and repairs.

3.5 Access to Equipment

- A. The installation of work performed shall provide reasonable accessibility for operation, inspection, and maintenance of equipment and accessories. The Engineer shall determine the adequacy of such accessibility.

3.6 Access Panels

- A. Access panels shall be provided where indicated on the drawings and as required for access to valves and other serviceable components. Access doors shall be Milcor, Zurn or approved equal hinged with primed finish and with allen wrench operated latch.
- B. Access panels installed in fire-rated assemblies shall have the same fire rating as the assembly.

3.7 Painting of Equipment

- A. Exposed ironwork, including steel supports and hangers in exterior locations shall be properly cleaned, prepared and painted with two (2) coats of black rust inhibiting enamel.

3.8 Guards

- A. Exposed moving and rotating elements of mechanical equipment items shall be protected with suitable guards for personnel protection. Guards shall be of rigid construction, firmly positioned. Holes shall be provided in guards at shaft centers to facilitate tachometer readings.

3.9 Lubrication

- A. Furnish and install grease fittings for points requiring lubrication. Furnish extension type fittings as required to provide easy access for maintenance lubrication.
- B. Furnish initial charges of lubricants for equipment. Lubricants shall be in conformance with the manufacturer's requirements and recommendations.

3.10 Electric Motors and Motor Controls

- A. Unless otherwise noted, motors, motor starters and other electrical accessories which are specified under Mechanical specifications shall be selected with characteristics as follows:
 - 1/2 Horsepower and less - 120 volt, 1 phase, 60 Hz.
 - 3/4 Horsepower and larger - 240 volt, 1 phase, 60 Hz.
- B. Motors shall be built in accordance with the latest applicable NEMA, IEEE and ANSI Standards. Motors shall be manufactured by Baldor, Magnetek or Toshiba, of the latest type and quality specified under individual items of equipment. Motor efficiencies shall be premium high efficiency type per the 2009 American Recovery and Reinvestment Act and the Consortium for Energy Efficiency Standard and/or be "Energy Star" compliant.
- C. Magnetic motor starters for mechanical items of equipment shall be furnished under Division 16 unless the starter is an integral part of a factory packaged item of equipment. Each starter furnished as an integral item of equipment shall be provided with overload heater elements. Starters shall have single phase protection or shall have relays installed to provide this feature. Starters shall be equipped with suitable step-down transformers to provide required control voltage.
- D. Motors shall have a minimum continuous duty service factor of 1.15. Minimum motor efficiency shall be:

MOTOR HORSEPOWER	PERCENTAGE EFFICIENCY		
	(1200RPM)	(1800 RPM)	(3600 RPM)
1-3	----	86.5	85.5
5	89.5	89.5	86.5
7.5	90.2	91.0	88.5
10	91.7	91.7	89.5
15	91.7	93.0	90.2

3.11 Cleaning of Systems

- A. Piping and duct systems shall be thoroughly cleaned and flushed prior to initial operation.
- B. Thoroughly clean exposed portions of the mechanical installation, removing labels and foreign substance.
- C. Furnish detergents, solvents, cleaning compounds, and tools required for cleaning operations.
- D. Keep the premises free from accumulation of waste material or rubbish and at the completion of the work, remove from the job site tools, scaffolding, surplus materials, and rubbish, leaving the work areas "broom" clean.

3.12 Starting of Equipment

- A. Testing or starting of equipment shall be done in collaboration with trades concerned to insure safe and proper operation of the equipment.
- B. Prior to starting equipment, provide lubrication at required points. Before starting any electrical or electric motor driven equipment, a check must be made to insure that proper heater coils are installed in the starters and that the equipment is rotating in the proper direction.

3.13 Operational Testing

- A. Operate systems until successful operation is demonstrated to the Engineer. This initial operation shall be in addition to the testing of the system and shall be done after the system is cleaned and finished.

3.14 Record Drawings

- A. During construction, keep an accurate record of deviations to the installation of the work as indicated on the drawings. Upon completion of the work, furnish a copy of this record to the Engineer. **Submit record drawings before requesting final payment.**

3.15 Manufacturer's Representative

- A. As indicated in the Technical Sections of this specification or as directed by the Engineer, provide the services of a factory trained Engineer or Technician to inspect, adjust, and place in proper operating condition the equipment or item involved. No additional compensation will be allowed for such service.

3.16 Manufacturer's Instructions, Operation and Maintenance Data

- A. Provide for each item of equipment or apparatus furnished, a complete set of printed instructions obtained from the manufacturer covering proper operation, maintenance, lubrication, cleaning, servicing, adjustment, and safety instructions.
- B. Manufacturer's data shall include performance data (curves are preferred where applicable) complete parts lists, recommended spare parts lists, piping, and wiring diagrams.

- C. Arrange data in complete sets, properly indexed and marked.
- D. Data shall include a complete set of shop drawings.
- E. Material shall first be submitted in preliminary form for review by the Engineer. After review, submit two (2) copies in bound volumes to the Engineer for distribution.

3.17 Guarantees

- A. An item becomes "defective" when it ceases to conform to the Contract Documents. Guarantees begin on the date of issuance of a certificate authorizing final payment or certificate of substantial completion with the Owner taking occupancy or beneficial use thereafter.
- B. Upon completion of the work and before applying for final payment, furnish a written guarantee, stating that the work complies with the provisions of codes listed herein and the local enforcing authorities, and that it will be free from defects of material and workmanship for not less than one (1) year. Guarantee shall further state that the Contractor will, at his own expense, repair or replace any of his material and work which may become defective during the time of guarantee, together with other work damaged as a consequence of such defects.
- C. Where special guarantees, covering installation, operation or performance of any systems, or equipment furnished under are indicated, the full responsibility for the fulfillment of such guarantees must be assumed by the Contractor who shall obtain written guarantees in triplicate, two (2) copies of which shall be filed with the Engineer before final acceptance.
- D. Repeated malfunctioning or failure in service of any item or work of the system is sufficient cause for the Engineer to order the removal of the item, and its replacement with new item at the expense of the Contractor.

3.18 Existing Utilities and Equipment

- A. Repair or replacement of any existing utilities or equipment damaged during the course of the work shall be the responsibility of the Contractor.

3.19 Hazardous Materials

- A. Recognized hazardous materials such as lead, mercury or asbestos shall be prohibited from the project. Submit MSDS sheets to the Owner for review.

SPECIAL PROVISION
SECTION 152000
HVAC

PART 1 – GENERAL

1.1 Description

- A. The work covered by this Section of the specifications includes the furnishing of labor, materials, equipment, transportation, permits, inspections and incidentals and the performing of operations required to install the heating and ventilating equipment indicated.

1.2 Related Documents

- A. The drawings and the specifications including SECTION 15000 “Common Work Results for HVAC” are hereby made a part of the work of this section.

1.3 Submittals

- A. Substitutions: Your attention is directed to Section 15000-"Substitutions", relative to competition and the (ONLY) notation. Familiarity with this section should be achieved before reading the PRODUCTS section of this specification.
- B. The items for which the submittals paragraph in Section 15000 “Common Work Results for HVAC”, apply are as follows:

1. Piping and supports.
2. Miscellaneous materials.
3. Hangers.
4. Cutting and patching.
5. Firestopping materials and methods.
6. Fintube Radiation.
7. Ductwork.
8. Exhaust Fan.
9. Controls.
10. Pipe Insulation.

PART 2 – PRODUCTS

2.1 Fan (EF-T)

- A. EF-T Shall be “fan-light” model indicated. Fan manufacturer shall be Panasonic Model FV- 08VQL4, 80 cfm @ 0.1” W.G., Broan or equal. The fan shall include housing, fan wheel, shaft, bearings, inlet shroud, motor, mounting support and

mounting frame as a factory- assembled unit. Provide the fans with motion detectors and time delay relay. Provide a disconnect switch for the fan. A wall-mounted light switches shall control the light and fan speed. Provide a gravity-operated, gasketed backdraft dampers for all exhaust fans.

2.2 Fintube Radiation

- A. Fintube Radiation shall be Slant-Fin, Sterling, or Vulcan, copper tube with aluminum fins, with a minimum rated output of 500 Btuh/ft at 170F. AWT and 1.0 GPM, 60F. EAT. Fintube radiation shall have an adjustable damper.
- B. Installation shall be per the manufacturers recommendations.

2.3 Ductwork

- A. Ductwork shall be galvanized steel sheetmetal, fabricated and installed per the SMACNA Low Velocity Duct Standards and ASHRAE, 2" w.g. pressure class. Joints shall be sealed to SMACNA Seal Class A with a water-based duct sealer applied per the manufacturers recommendations.

2.4 Zone Circulator

- A. The zone circulator (ZC-1) shall be a Taco Model 003, 120V. Furnish with a FloChek to prevent gravity circulation.

2.5 Controls

- A. The zone circulator (ZC-1) shall be controlled by a wall-mounted programmable thermostat with digital display and battery back-up.
- B. On a call for heat, the circulator shall be energized until the setpoint is satisfied.

2.6 Pipe Insulation

- C. Hot water heating supply and return piping above grade shall be insulated with 1½" thick fiberglass pipe insulation with ASJ per the Maine State Energy Standards.

2.7 Piping

- A. Hot water supply and return piping above grade shall be Watts WaterPEX, Uponor AquaPEX, or equal.

PART 3 - EXECUTION

3.1 Surface Conditions

A. Inspection:

1. Prior to work of this Section, carefully inspect the installed work of other trades and verify that such work is complete to the point where this installation may properly commence.

3.2 Closing in Work

- A. Cover up or enclose work after it has been properly and completely tested and reviewed.
- B. No additional cost to the Owner will be allowed for uncovering or recovering any work that is covered or enclosed prior to required test and review.

3.3 Test and Adjust

- A. After the installation is complete and ready for operation, test the system under normal operating conditions in the presence of the Engineer and demonstrate that the system functions as designed.
- B. Correct defects which develop in operational testing, conduct additional testing until defect free operation is achieved.

3.4 Instructions

- A. On completion of the project, instruct the Owner's representative in the care and operation of the system. The total period of instruction shall not be less than one (1) hour. The time of instruction shall be arranged with the Owner. In addition to the prime Mechanical Contractor, the control system Contractor, Balancing Contractor, and Owner's representative shall be present and participate in the Owner's instruction.

3.5 Firestopping

- A. Firestopping shall be performed in accordance with Specification Section 07 84 00 "Firestopping". All penetrations of fire-rated assemblies including walls and floors by mechanical system components (piping, ductwork, conduits, etc.) shall be firestopped as specified.

SPECIAL PROVISION
SECTION 15400
PLUMBING

PART 1 – GENERAL

1.1 Related Documents

- A. The drawings and the specifications including Section 15000 “Supplemental General Mechanical Conditions” are hereby made a part of the work of this section.
- B. Drawings and general provisions of Contract including General and Supplementary Conditions and all Division 1 specification sections.
- C. Uniform Federal Accessibility Standards (UFAS).
- D. Americans with Disabilities Act (ADA).

1.2 Description

- A. The work covered by this Section of the specifications includes the furnishing of labor, materials, equipment, transportation, permits, inspections, and incidentals and the performing of operations required to provide a complete and functional plumbing system.
- B. Work shall be in accordance with the current edition of the Maine State Plumbing Code and applicable local ordinances.

1.3 Submittals

- A. Substitutions: Your attention is directed to Section 15000-"Substitutions", relative to competition and the (ONLY) notation. Familiarity with this section shall be achieved before reading the PRODUCTS section of this specification.
- B. The items for which the submittals paragraph in Section 15000, Supplemental General Mechanical Requirements, apply are as follows:
 - 1. Piping materials.
 - 2. Valves.
 - 3. Pipe hangers.
 - 4. Fixtures and trim.
 - 5. Miscellaneous equipment.
 - 6. Piping, valves and equipment identification.
 - 7. Firestopping.
- C. Submittal Procedures: Submittal procedures.
- D. Product Data: Submit data on product characteristics, performance criteria and limitations.
- E. Manufacturer's Installation Instructions: Submit procedure for preparation and installation.
- F. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

PART 2 – PRODUCTS

2.1 Piping Materials

- A. Soil and Waste (Sanitary) and Vent Piping:
 - 1. Below Grade: Sched. 40 PVC.
 - 2. Above Grade: Sanitary piping shall be Schedule 40 PVC with solvent-welded joints. Vent piping may be Sched. 40 PVC at contractor's option, cast iron (ONLY) thru roof.
- B. Domestic Water Piping:
 - 1. All pipe sizes: Abovegrade: PEX tubing below slab. Piping above / below slab and associated fittings and valves shall be Watts WaterPEX, Uponor AquaPEX, or equal.
- C. Exposed Water and Waste Piping at Fixtures: I.P.S. copper with cast brass fittings chrome plated finish, with deep one piece escutcheon plates at traverse points.
- B. Solder: Lead-free (ONLY), Englehard Silvabrite 100, 440oF melting point, ASTM B32.

2.2 No Hub Couplings

- A. For DWV piping, couplings shall be Clamp-All HI-TORQ125, shall maintain 15 PSI hydrostatic seal, constructed 304SS housing and ASTM C-564 neoprene gasket. Couplings shall meet FM 1680, IBC and local codes and requirements.

2.3 Valves

- A. Ball Valves: Copper alloy with stationary seat ring and chromium plated or stainless steel floating ball per Federal Specification WW-V-35B. Blowout proof stem, reinforced PTFE seal. Sizes 2" and larger shall have threaded ends. Provide lever handle with stem extension as required to allow operation without interfering with pipe insulation.
- B. Check Valves: Horizontal Swing, MSS SP-80, Type 3, Class 125.
- C. Drain Valves: Provide ball valves with 3/4" hose connection and brass cap. D. Fixture Service Stop Valves: Angle Wheel Handle Stop, ASME A112.18M.
 - 1. Each plumbing fixture shall have individual stop valves in the hot and cold supplies.
 - 2. Service stop valves exposed in finished areas shall be chrome-plated brass; in non-finished areas, ball valves shall be used in lieu of chromed supplies.
- E. Temperature and Pressure Relief Valves: Bronze body, tested under ANSI Z21.22, AGA and ASME rated, 125 psig/210oF relief settings.
- F. Fixture Service Stop Valves: Angle Loose Key Stop, ASME A112.18M.
 - 1. Each plumbing fixture and item of equipment shall have individual stop valves in the hot and cold supplies.
 - 2. Service stop valves exposed in finished areas shall be chrome-plated brass; in non-finished areas, ball valves shall be used in lieu of chromed supplies.

2.4 Pipe Hangers

- A. Adjustable Swivel Hangers:
 - 1. Pipe sizes 2" and less: Carpenter and Paterson Fig. 800, oversize for insulated piping systems.
 - 2. Pipe sizes larger than 2": Carpenter and Paterson Fig. 100, oversize for insulated piping systems.
- B. Riser Clamp: Carpenter and Paterson Fig. 126 CT copper plated for copper piping, Fig. 126 for iron and PVC piping.
- C. Insulation Shields: 18 ga. galvanized steel, 180o wrap, Carpenter and Paterson Fig. 265P, Type H.

2.5 Fixtures and Trim

- A. (P1) Water Closet: ADA-compliant, 17" high, floor-mounted, tank type, Toto Model CST454CEF, "Drake II", American-Standard, Kohler, Zurn, or approved equal, elongated bowl, white vitreous china, universal height, low consumption (1.28 gpf), color matched trip lever.
 - 1. Seat: Toto SoftClose Model SS114, Church, or equal, heavy weight solid plastic, open front without cover, self sustaining check hinge, for elongated bowl, white color.
- B. (P2) Lavatory, Countertop: TOTO LT41, Kohler "Pennington", Model K-2196, Zurn, or approved equal, 20"x17", white vitreous china, self-rimming, single hole, front edge shall extend a minimum of 17" from rear finished wall.
 - 1. Faucet: Delta Faucets Commercial Model 2529LF-HDF, ADA-compliant, grid strainer, 0.5 GPM flow aerator, 4" wrist-blade handles, polished chrome finish, rigid metal spout.
 - 2. Drain: perforated grid strainer with offset tailpiece and bright metal finish.
 - 3. Trap: Chrome-plated, cast copper alloy, 1-1/4" P-trap with cleanout plug. Adjustable with connected elbow and nipple to wall. Insulate trap and supplies with Truebro Model 102 insulation kit with PVC cover.
 - 4. ADA lavatories shall be installed at 34" above finished floor. Final installation of lavatory and accessories shall meet ADA guidelines and ANSI A117.1.
- D. (P3) Aqua-Bath Model C4136BF-3/4", Aqua-Glass or Aquarius, ADA / ANSI compliant, 41"x36" molded acrylic with 3/4" threshold, collapsible dam by KR Specialties, integral fold-up seat and stainless steel grab bars, dome light, weighted shower curtain and soap dish.
 - 1. Leonard "Aquatrol" Model 4505 packaged unit, or Symmons, ADA-compliant meeting ASSE 1016 requirements. Pressure balanced, non-scald, mixing valve with lever handle, concealed screw check-stops, maximum limit stop. Furnish with institutional vandal-resistant, 1.8 GPM (maximum) Alsons, or equal, vandal-resistant showerhead and with a wall/hand-held shower, diverter, vacuum breaker, flexible metal hose and 24" slide bar. Provide a 2" shower drain. See Drawings.
 - 2. Installation of shower and accessories shall meet ADA guidelines and ANSI A117.1.

- E. Provide stops on hot and cold water supplies to each fixture with key operators. Provide chrome-plated P-traps per Code. Caulk around all fixtures at the floor and wall with white silicone caulk.

2.6 Miscellaneous Equipment

- A. Floor/Yard Cleanout (FCO/YCO): PVC construction, with gas and watertight ABS tapered thread plug. Provide size equal to piping served with maximum size of 4".
 - 1. Concrete floor finishes: Scoriated round polished bronze top.
 - 2. Sheet tile finishes: Scoriated square polished bronze top recessed to receive tile.
 - 3. Carpeted finishes: Scoriated round polished bronze top and carpet marker.
- B. Wall Cleanout (WCO): Sanitary tee with threaded raised nut or countersunk-nut cleanout plug located behind Zurn Z-1468 round stainless steel wall access cover.
- C. Vacuum Breaker: Watts Model N36, 3/4" size, 20 CFM capacity.
- D. Strainer: Watts Series 777, MIL-S-16293, bronze body wye-type, 200 WOG rating, screwed end connections, 20 mesh stainless steel, monel, or bronze screen.
- E. Water Hammer Arrestor (Shock Absorber): Plumbing and Drainage Institute listed.

Schedule:

- "A" - Size #100 PDI - 0-11 Fixture Units
- "B" - Size #200 PDI - 12-32 Fixture Units
- "C" - Size #300 PDI - 33-60 Fixture Units

- F. Vacuum Breaker: Watts Model N36, 3/4" size, 15 CFM capacity.

PART 3 – EXECUTION

3.1 Surface Conditions

- A. Inspection:
 - 1. Prior to work of this Section, carefully inspect the installed work of other trades and verify that such work is complete to the point where this installation may properly commence.
 - 2. Verify that plumbing may be installed in strict accordance with pertinent codes and regulations and the reviewed Shop Drawings.

3.2 Installation of Piping

- A. Provide and erect in accordance with the best practice of the trade piping shown on the drawings and as required to complete the intended installation. Make offsets as shown or required to place piping in proper position to avoid other work and to allow the application of insulation and finish painting to the satisfaction of the Engineer.

- B. The size and general arrangements, as well as the methods of connecting piping, valves, and equipment, shall be as indicated, or so as to meet the requirements of the Architect.
- C. Piping shall be erected so as to provide for the easy and noiseless passage of fluids under working conditions.
- D. Install unions to facilitate removal of equipment.
- E. Copper pipe shall be reamed to remove burrs.
- F. Connections between copper and steel piping shall be made with dielectric fittings.
- G. Solder joints shall be made with lead free solder. Clean surfaces to be soldered and use a paste flux. Wash joints with sodium bicarbonate and water to remove corrosive effects of heated solder paste. Caution: Lead-bearing solder is not permitted.
- H. Pipe penetrations through walls, floors and ceilings shall be in accordance with Section 15000 "Supplemental General Mechanical Requirements". Traverse points of piping shall be escutcheoned with split chrome floor and ceiling plates and spring anchors, where visible to occupancy.
- I. Sanitary and vent piping shall be sized and installed at 1/4" per foot slope.
- J. All vertical and horizontal penetrations through walls, floors and ceilings shall be sealed against air movement between spaces.

3.3 Pipe Hangers

- A. Impact driven studs are prohibited.
- B. Copper Tubing: supported at intervals with rod sizes as follows, double nuts on hangers and on beam clips.

Copper Size	Hanger Intervals	Rod Sizes
1/2"	5'	3/8"
3/4"	6'	3/8"
1"	6'	3/8"
1-1/4"	8'	3/8"
1-1/2"	8'	3/8"
2"	10'	3/8"

- C. PVC/CPVC Pipe: Supported at 4 foot intervals.
- D. Verticals: Supported by use of clamp hangers at every story height, and at not more than 6 feet intervals for copper piping 1-1/4" and smaller size.
- E. Spring Isolators: All pipe 20' upstream and downstream of pumps.

3.4 Closing in Uninspected Work

- A. General: Cover up or enclose work after it has been properly and completely reviewed.

- B. If any of the work is covered or enclosed prior to required inspections and review, uncover the work as required for the test and review. After review, tests and acceptance, repairs and replacements shall be made by the appropriate trades with such materials as necessary for the acceptance by the Architect and at no additional cost to the Owner.

3.5 Cleanup and Corrosion Prevention

- A. Upon completion of the work thoroughly clean and flush piping systems to the sewer with water.
- B. Fixtures, piping and equipment shall be thoroughly cleaned. Dirt, dust, and debris shall be removed and the premises left in a clean and neat condition.
- C. Caulk around fixtures at floor and wall.
- D. Before covering is applied to piping systems, clips, rods, clevises and other hanger attachments, and before uncovered piping is permitted to be concealed, corrosion and rust shall be wire brushed and cleaned and in the case of iron products, a coat of approved protective paint applied to these surfaces. When corrosion is from the effects of hot solder paste, the areas shall be cleaned and polished and a wash of bicarbonate of soda and water used to neutralize the acid condition.
- E. Paint exposed gas piping with two (2) coats of rust-inhibiting latex enamel paint (yellow).

3.6 Disinfecting

- A. After the entire potable water system is completed, cleaned and tested, and just before the building is ready to be occupied, disinfect the system as follows: After flushing the mains, introduce a water and chlorine solution for a period of not less than three hours before final flushing of the system.

3.7 Tests

- A. Sanitary soil, waste and vent piping: Fill with water to top of vents, and test as required by Code.
- B. Water piping shall be tested to a pressure of 100 lbs. per square inch for at least 30 minutes. Pressure drop in this period shall not exceed two pounds per square inch. Leaks shall be repaired and system retested. Notify Architect 24 hours before test is to be performed.

3.8 Instructions

- A. On completion of the project, provide a competent technician to thoroughly instruct the Owner's representative in the care and operation of the system. The total period of instruction shall not exceed four (4) hours. The time of instruction shall be arranged with the Owner.

3.9 Firestopping

- A. Firestopping shall be performed in accordance with Specification Section on “Firestopping”. All penetrations of fire-rated assemblies including walls and floors by mechanical system components (piping, ductwork, conduits, etc.) shall be firestopped as specified.

SPECIAL PROVISION
SECTION 16500
LIGHTING

PART 1 – GENERAL

1.1 Summary

- A. This work shall include all labor, materials and equipment necessary to install lighting fixtures and accessories as shown on the drawings and as specified herein.
- B. All work shall conform to the National Electrical Code and other applicable codes.

1.2 Submittals

- A. Contractor shall submit two (2) copies of all lighting equipment and accessories to the Department at least 30 days prior to incorporation into the work.
- B. Provide photometric data on all lighting units.

1.3 Permits

- A. Contractor shall obtain and pay for electrical permit from local electrical inspector.
- B. Copies of permit shall be sent to the Department.

PART 2 – PRODUCTS

2.1 Interior Lights

- A. Progress Lighting Light Fixture, Model # P7373-30, white acrylic with 1-32W. and 1-40W. lamp, 120V. rapid start ballast, pre-wired, UL-listed.

2.2 Exterior Lights

- A. WPLED13/PC Exterior Light by RAB Lighting.

PART 3 – EXECUTION

3.1 Installation

- A. Install light fixture where shown on the drawings, complete with lamps, lenses and all accessories securely fastened in place.

- B. Follow manufacturer's instructions and recommendations completely.
- C. Light fixtures shall be installed in accordance with the latest edition of the "National Electrical Code"

3.2 Cleanup and Testing

- A. Test all fixtures and equipment to the satisfaction of the Department.
- B. Repair or replace any defective fixtures, lamps or finishes.
- C. Clean all fixtures and lenses at the completion of the project.

3.3 Warrantee

- A. All materials and work shall be warranted for one (1) year from date of acceptance by the Department.
- B. Contractor shall supply a minimum of 10% spare lamps and 5% spare ballasts to the Department at completion.
- C. Any additional lamps beyond the spares provided shall be replaced at no additional cost to the Department during the warranty period.

SPECIAL PROVISION
SECTION 311100
CLEARING AND GRUBBING

PART 1 - GENERAL

1.1 Summary

- A. Section Includes:
1. Grubbing
 2. Tree Removal
 3. Clearing

1.2 Delivery, Storage and Handling

- A. Deliver materials to store at the site, and handle in a manner which will maintain the materials in their original manufactured or fabricated condition until ready for use.

PART 3 - EXECUTION

3.1 Protection

- A. Keep roads and walks free of dirt and debris at all times
- B. Protect existing utility lines from damage. Notify the Department immediately of damage to or an encounter with an unknown existing utility line. The Contractor shall be responsible for the repair of damage to existing utility lines that are indicated or made known to the Contractor prior to start of clearing and grubbing operations.

3.2 Clearing

- A. Clearing shall consist of the felling, trimming, and cutting of trees into sections and the satisfactory disposal of the trees and other vegetation designated for removal, including downed timber, snags, brush, and rubbish occurring within the areas to be cleared. Clearing shall also include the removal and disposal of structures that obstruct, encroach upon, or otherwise obstruct the work. Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be cut off flush with or below the original ground surface, except such trees and vegetation as may be indicated or redirected to be left standing by the Department.

3.3 Tree Removal

- A. Where indicated or directed by the Department, trees and stumps that are designated as trees shall be removed from areas outside those areas designated for clearing and grubbing. This work shall include the felling of such trees and the removal of their stumps and roots as specified in paragraph “Grubbing.” Trees shall be disposed of as specified in paragraph “Disposal of Materials.”

3.4 Grubbing

- A. Grubbing shall consist of the removal and disposal of stumps, roots larger than 3 inches in diameter, and matted roots from the designated grubbing areas. Material to be grubbed, together with logs and other organic or metallic debris not suitable for foundation purposes, shall be removed to a depth of not less than 18 inches below the original surface level of the ground in areas indicated to be grubbed and in areas indicated as construction areas under this contract, such as areas for building, and areas to be paved. Depressions made by grubbing shall be filled with suitable material and compacted to make the surface conform with the original adjacent surface of the ground.

3.5 Disposal of Material

- A. Saleable Timber
 - 1. All timber on the project site noted for clearing and grubbing shall become the property of the Contractor, and shall be removed from the project site and disposed of off stations.
- B. Nonsaleable Timber
 - 1. Logs, stumps, roots, brush, rotten wood, and other refuse from the clearing and grubbing operations, except for saleable timber, shall be disposed of outside the limits of Government-controlled land at the Contractor's responsibility, except when otherwise directed in writing. Such directive will state the conditions covering the disposal of such products and will also state the areas in which they may be placed.

STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at:

http://www.maine.gov/mdot/contractor-consultant-information/ss_standard_details_updates.php

<u>Detail #</u>	<u>Description</u>	<u>Revision Date</u>
203(03)	Backslope Rounding	1/29/08
502(03)	Concrete Curb - Bituminous Wearing Surface	8/08/11
502(03)A	Concrete Curb - Concrete Wearing Surface	2/2/09
502(07)	Precast Concrete Deck Panels - Layout Plan	2/2/09
502(07)A	Precast Concrete Deck Panels - Layout Plan	2/2/09
502(08)	Precast Concrete Deck Panels - Panel Plan	2/2/09
502(09)	Precast Concrete Deck Panels - Blocking Detail	2/2/09
502(10)	Precast Concrete Deck Panels	2/2/09
502(11)	Precast Concrete Deck Panels	2/2/09
502(12)	Precast Concrete Deck Panels - Notes	10/28/09
502(12)A	Precast Concrete Deck Panels - Notes	2/2/09
504(15)	Diaphragms	5/19/11
504(21)	Tension Flange Connection for Diaphragm and Cross Frames	10-11-12
504(22)	Diaphragm & Crossframe Notes	10/11/12
504(23)	Hand-Hold Details	12/08/05
502(24)	Hand-Hold Details	10/11/12
507(04)	Steel Bridge Railing	2/05/03
507(04A)	Steel Bridge Railing	7/3/13
507(09)	Steel Bridge Railing	5/19/11
507(09)A	Steel Bridge Railing	5/19/11

526(06)	Permanent Concrete Barrier	2/2/09
526(08)	Permanent Concrete Barrier – Type IIIA	10/07/10
526(08)A	Permanent Concrete Barrier – Type IIIA	12/07/10
526(13)	Permanent Concrete Barrier – Type IIIB	2/2/09
526(14)	Permanent Concrete Barrier – Type IIIB	2/2/09
526(21)	Concrete Transition Barrier	2/2/09
526(29A)	Concrete Transition Barrier	5/1/13
526(29B)	Concrete Transition Barrier	5/1/13
526(29C)	Concrete Transition Barrier	5/1/13
526(33)	Concrete Transition Barrier	5/1/13
526(39)	Texas Classic Rail – Between Window	2/2/09
526(40)	Texas Classic Rail – Through Window	2/2/09
526(41)	Texas Classic Rail – Through Post	2/2/09
526(42)	Texas Classic Rail – Through Nose	2/2/09
535(01)	Precast Superstructure - Shear Key	10/12/06
535(02)	Precast Superstructure - Curb Key & Drip Notch	5/20/08
535(03)	Precast Superstructure - Shear Key	12/5/07
535(04)	Precast Superstructure - Shear Key	12/05/07
535(05)	Precast Superstructure - Post Tensioning	5/20/08
535(06)	Precast Superstructure - Sections	10/12/06
535(07)	Precast Superstructure - Precast Slab & Box	10/12/06
535(08)	Precast Superstructure - Sections	10/12/06
535(09)	Precast Superstructure - Sections	10/12/06
535(10)	Precast Superstructure - Sections	10/12/06
535(11)	Precast Superstructure - Sections	10/12/06

535(12)	Precast Superstructure - Sections	10/12/06
535(13)	Precast Superstructure - Sections	10/12/06
535(14)	Precast Superstructure - Stirrups	10/12/06
535(15)	Precast Superstructure - Plan	10/12/06
535(16)	Precast Superstructure - Reinforcing	10/12/06
535(17)	Precast Superstructure - Notes	12/05/07
604(01)	Catch Basins	11/16/05
604(05)	Type "A" & "B" Catch Basin Tops	11/16/05
604(06)	Type "C" Catch Basin Tops	11/16/05
604(07)	Manhole Top "D"	11/16/05
604(09)	Catch Basin Type "E"	11/16/05
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606(02)	Multiple Mailbox Support	11/16/05
606(03)	Guardrail Standard Detail	9/19/12
606(07)	Reflectorized Beam Guardrail Delineator Details	11/16/05
606(20)	Guardrail - Type 3 - Single Rail - Bridge Mounted	2/2/09
606(21)	Guardrail - Type 3 - Single Rail - Bridge Mounted	2/2/09
606(22)	Guardrail - Type 3 - Single Rail - Bridge Mounted	2/2/09
606(23)	Guardrail - Type 3 - Single Rail - Bridge Mounted	2/2/09
609(03)	Curb Type 3	6/27/06
609(06)	Vertical Bridge Curb	2/12/09
609(07)	Curb Type 1	6/27/06
609(08)	Precast Concrete Transition Curb	2/2/09

610(02)	Stone Scour Protection	8/9/11
610(03)	Stone Scour Protection	5/19/11
610(04)	Stone Scour Protection	5/19/11
620(05)	Geotextile Placement for Protection of Slopes Adjacent to Stream & Tidal Areas	5/19/11
626(09)	Electrical Junction Box for Traffic Signals and Lighting	8/27/10
645(06)	H-Beam Posts – Highway Signing	7/21/04
645(09)	Installation of Type II Signs	7/21/04
801(01)	Drives on Sidewalk Sections	12/13/07
801(02)	Drives on Non-Sidewalk Sections	12/13/07

SUPPLEMENTAL SPECIFICATION
(Corrections, Additions, & Revisions to Standard Specifications - Revision of December 2002)

SECTION 101
CONTRACT INTERPRETATION

101.2 Definitions

Closeout Documentation Replace the sentence “A letter stating the amount..... DBE goals.” with “DBE Goal Attainment Verification Form”

Add “Environmental Information Hazardous waste assessments, dredge material test results, boring logs, geophysical studies, and other records and reports of the environmental conditions. For a related provision, see Section 104.3.14 - Interpretation and Interpolation.”

Add “Fabrication Engineer The Department’s representative responsible for Quality Assurance of pre-fabricated products that are produced off-site.”

Geotechnical Information Replace with the following: “Boring logs, soil reports, geotechnical design reports, ground penetrating radar evaluations, seismic refraction studies, and other records of subsurface conditions. For a related provision, see Section 104.3.14 - Interpretation and Interpolation.”

SECTION 102
DELIVERY OF BIDS

102.7.1 Location and Time Add the following sentence “As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book.”

102.11.1 Non-curable Bid Defects Replace E. with “E. The unit price and bid amount is not provided or a lump sum price is not provided or is illegible as determined by the Department.”

SECTION 103
AWARD AND CONTRACTING

103.3.1 Notice and Information Gathering Change the first paragraph to read as follows: “After Bid Opening and as a condition for Award of a Contract, the Department may require an Apparent Successful Bidder to demonstrate to the Department’s satisfaction that the Bidder is responsible and qualified to perform the Work.”

SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES

104.3.14 Interpretation and Interpolation In the first sentence, change “...and Geotechnical Information.” to “...Environmental Information, and Geotechnical Information.”

SECTION 105 GENERAL SCOPE OF WORK

Delete the entire Section 105.6 and replace with the following:

105.6.1 Department Provided Services The Department will provide the Contractor with the description and coordinates of vertical and horizontal control points, set by the Department, within the Project Limits, for full construction Projects and other Projects where survey control is necessary. For Projects of 1,500 feet in length, or less: The Department will provide three points. For Projects between 1,500 and 5,000 feet in length: The Department will provide one set of two points at each end of the Project. For Projects in excess of 5,000 feet in length, the Department will provide one set of two points at each end of the Project, plus one additional set of two points for each mile of Project length. For non-full construction Projects and other Projects where survey control is not necessary, the Department will not set any control points and, therefore, will not provide description and coordinates of any control points. Upon request of the Contractor, the Department will provide the Department's survey data management software and Survey Manual to the Contractor, or its survey Subcontractor, for the exclusive use on the Department's Projects.

105.6.2 Contractor Provided Services Utilizing the survey information and points provided by the Department, described in Subsection 105.6.1, Department Provided Services, the Contractor shall provide all additional survey layout necessary to complete the Work. This may include, but not be limited to, reestablishing all points provided by the Department, establishing additional control points, running axis lines, providing layout and maintenance of all other lines, grades, or points, and survey quality control to ensure conformance with the Contract. The Contractor is also responsible for providing construction centerline, or close reference points, for all Utility Facilities relocations and adjustments as necessary to complete the Work. When the Work is to connect with existing Structures, the Contractor shall verify all dimensions before proceeding with the Work. The Contractor shall employ or retain competent engineering and/or surveying personnel to fulfill these responsibilities.

The Contractor must notify the Department of any errors or inconsistencies regarding the data and layout provided by the Department as provided by Section 104.3.3 - Duty to Notify Department If Ambiguities Discovered.

105.6.2.1 Survey Quality Control The Contractor is responsible for all construction survey quality control. Construction survey quality control is generally defined as, first, performing initial field survey layout of the Work and, second, performing an independent check of the initial layout using independent survey data to assure the accuracy of the initial layout; additional iterations of checks may be required if significant discrepancies are discovered in this process. Construction survey layout quality control also requires written documentation of the layout process such that the process can be followed and repeated, if necessary, by an independent survey crew.

105.6.3 Survey Quality Assurance It is the Department's prerogative to perform construction survey quality assurance. Construction survey quality assurance may, or may not, be performed by the Department. Construction survey quality assurance is generally defined as an independent check of the construction survey quality control. The construction survey

quality assurance process may involve physically checking the Contractor's construction survey layout using independent survey data, or may simply involve reviewing the construction survey quality control written documentation. If the Department elects to physically check the Contractor's survey layout, the Contractor's designated surveyor may be required to be present. The Department will provide a minimum notice of 48 hours to the Contractor, whenever possible, if the Contractor's designated surveyor's presence is required. Any errors discovered through the quality assurance process shall be corrected by the Contractor, at no additional cost to the Department.

105.6.4 Boundary Markers The Contractor shall preserve and protect from damage all monuments or other points that mark the boundaries of the Right-of-Way or abutting parcels that are outside the area that must be disturbed to perform the Work. The Contractor indemnifies and holds harmless the Department from all claims to reestablish the former location of all such monuments or points including claims arising from 14 MRSA § 7554-A. For a related provision, see Section 104.3.11 - Responsibility for Property of Others.

SECTION 106 QUALITY

106.4.3 Testing Change the first sentence in paragraph three from "...maintain records of all inspections and tests." to "...maintain original documentation of all inspections, tests, and calculations used to generate reports."

106.6 Acceptance Add the following to paragraph 1 of A: "This includes Sections 401 - Hot Mix Asphalt, 402 - Pavement Smoothness, and 502 - Structural Concrete - Method A - Air Content."

Add the following to the beginning of paragraph 3 of A: "For pay factors based on Quality Level Analysis, and"

106.7.1 Standard Deviation Method Add the following to F: "Note: In cases where the mean of the values is equal to either the USL or the LSL, then the PWL will be 50 regardless of the computed value of s."

Add the following to H: "Method C Hot Mix Asphalt: $PF = [55 + (Quality\ Level * 0.5)] * 0.01$ "

SECTION 107 TIME

107.3.1 General Add the following: "If a Holiday occurs on a Sunday, the following Monday shall be considered a Holiday. Sunday or Holiday work must be approved by the Department, except that the Contractor may work on Martin Luther King Day, President's Day, Patriot's Day, the Friday after Thanksgiving, and Columbus Day without the Department's approval."

107.7.2 Schedule of Liquidated Damages Replace the table of Liquidated Damages as follows:

From More Than	Up to and Including	Amount of Liquidated Damages per Calendar Day
\$0	\$100,000	\$225

\$100,000	\$250,000	\$350
\$250,000	\$500,000	\$475
\$500,000	\$1,000,000	\$675
\$1,000,000	\$2,000,000	\$900
\$2,000,000	\$4,000,000	\$1,000
\$4,000,000	and more	\$2,100

SECTION 108
PAYMENT

Remove Section 108.4 and replace with the following:

“108.4 Payment for Materials Obtained and Stored Acting upon a request from the Contractor and accompanied by bills or receipted bills, the Department will pay for all or part of the value of acceptable, non-perishable Materials that are to be incorporated in the Work, including Materials that are to be incorporated into the Work, not delivered on the Work site, and stored at places acceptable to the Department. Examples of such Materials include steel piles, stone masonry, curbing, timber and lumber, metal Culverts, stone and sand, gravel, and other Materials. The Department will not make payment on living or perishable Materials until acceptably planted in their final locations.

If payment for Materials is made to the Contractor based on bills, only, then the Contractor must provide receipted bills to the Department for these Materials within 14 days of the date the Contractor receives payment for the Materials. Failure of the Contractor to provide receipted bills for these Materials within 14 days of the date the Contractor receives payment will result in the paid amount being withheld from the subsequent progress payment, or payments, until such time the receipted bills are received by the Department.

Materials paid for by the Department are the property of the Department, but the risk of loss shall remain with the Contractor. Payment for Materials does not constitute Acceptance of the Material. If Materials for which the Department has paid are later found to be unacceptable, then the Department may withhold amounts reflecting such unacceptable Materials from payments otherwise due the Contractor.

In the event of Default, the Department may use or cause to be used all paid-for Materials in any manner that is in the best interest of the Department.”

SECTION 109
CHANGES

109.1.1 Changes Permitted Add the following to the end of the paragraph: “There will be no adjustment to Contract Time due to an increase or decrease in quantities, compared to those estimated, except as addressed through Contract Modification(s).”

109.1.2 Substantial Changes to Major Items Add the following to the end of the paragraph: “Contract Time adjustments may be made for substantial changes to Major Items when the change affects the Critical Path, as determined by the Department”

109.4.4 Investigation / Adjustment Third sentence, delete the words “subsections (A) - (E)”

109.5.1 Definitions - Types of Delays

B. Compensable Delay Replace (1) with the following; “a weather related Uncontrollable Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an Equitable Adjustment if the Project falls within the geographic boundaries prescribed under the disaster declaration.”

109.7.2 Basis of Payment Replace with the following: “Adjustments will be established by mutual Agreement based upon Unit or Lump Sum Prices. These agreed Unit or Lump Sum prices will be full compensation and no additions or mark-ups are allowed. If Agreement cannot be reached, the Contractor shall accept payment on a Force Account basis as provided in Section 109.7.5 - Force Account Work, as full and complete compensation for all Work relating to the Equitable Adjustment.”

109.7.3 Compensable Items Delete this Section entirely.

109.7.4 Non-Compensable Items Replace with the following: “The Contractor is not entitled to compensation or reimbursement for any of the following items:

- A. Total profit or home office overhead in excess of 15%,
- B.”

109.7.5 Force Account Work

C. Equipment

Paragraph 2, delete sentence 1 which starts; “Equipment leased....”

Paragraph 6, change sentence 2 from “The Contractor may furnish...” to read “If requested by the Department, the Contractor will produce cost data to assist the Department in the establishment of such rental rate, including all records that are relevant to the Actual Costs including rental Receipts, acquisition costs, financing documents, lease Agreements, and maintenance and operational cost records.”

Add the following paragraph; “Equipment leased by the Contractor for Force Account Work and actually used on the Project will be paid for at the actual invoice amount plus 10% markup for administrative costs.”

Add the following section;

“F. Subcontractor Work When accomplishing Force Account Work that utilizes Subcontractors, the Contractor will be allowed a maximum markup of 5% for profit and overhead on the Subcontractor’s portion of the Force Account Work. If the Department does not accept the Subcontractor quote, then the Subcontractor work will be subject to the Force Account provisions with a 5% markup for profit & overhead..”

SECTION 110

INDEMNIFICATION, BONDING, AND INSURANCE

Delete the entire Section 110.2.3 and replace with the following:

110.2.3 Bonding for Landscape Establishment Period The Contractor shall provide a signed, valid, and enforceable Performance, Warranty, or Maintenance Bond complying with the Contract, to the Department at Final Acceptance.

The bond shall be in the full amount for all Pay Items for work pursuant to Sec 621, Landscape, payable to the “Treasurer - State of Maine,” and on the Department’s forms, on exact copies thereof, or on forms that do not contain any significant variations from the Department’s forms as solely determined by the Department.

The Contractor shall pay all premiums and take all other actions necessary to keep said bond in effect for the duration of the Landscape Establishment Period described in Special Provision 621.0036 - Establishment Period. If the Surety becomes financially insolvent, ceases to be licensed or approved to do business in the State of Maine, or stops operating in the United States, the Contractor shall file new bonds complying with this Section within 10 Days of the date the Contractor is notified or becomes aware of such change.

All Bonds shall be procured from a company organized and operating in the United States, licensed or approved to do business in the State of Maine by the State of Maine Department of Business Regulation, Bureau of Insurance, and listed on the latest Federal Department of the Treasury listing for “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies.”

By issuing a bond, the Surety agrees to be bound by all terms of the Contract, including those related to payment, time for performance, quality, warranties, and the Department’s self-help remedy provided in Section 112.1 - Default to the same extent as if all terms of the Contract are contained in the bond(s).

Regarding claims related to any obligations covered by the bond, the Surety shall provide, within 60 Days of Receipt of written notice thereof, full payment of the entire claim or written notice of all bases upon which it is denying or contesting payment. Failure of the Surety to provide such notice within the 60-day period constitutes the Surety’s waiver of any right to deny or contest payment and the Surety’s acknowledgment that the claim is valid and undisputed.

110 - Indemnification, Bonding and Insurance

Add the following to the end of Section 110, Indemnification, Bonding and Insurance:

Nothing in these Standard Specifications constitutes a waiver of any defense, immunity or limitation of liability that may be available to the Department, or its officers, agents or employees under the Maine Tort Claims Act (Title 14 M.R.S.A. 8101 et seq.), and shall not constitute a waiver of other privileges or immunities that may be available to the Department.

SECTION 202 REMOVING STRUCTURES AND OBSTRUCTIONS

202.02 Removing Buildings Make the following change to the last sentence in the final paragraph, change “...Code of Maine Regulations 401.” to “...Department of Environmental

Protection Maine Solid Waste Management Rules, 06-096 CMR Ch. 401, Landfill Siting, Design and Operation.”

SECTION 203 EXCAVATION AND EMBANKMENT

203.01 Description Under b. Rock Excavation; add the following sentence: “The use of perchlorate is not allowed in blasting operations.”

Delete the entire Section 203.041 and replace with the following:

“203.041 Salvage of Existing Hot Mix Asphalt Pavement All existing hot mix asphalt pavement designated to be removed under this contract must be salvaged for utilization. Existing hot mix asphalt pavement material shall not be deposited in any waste area or be placed below subgrade in any embankment.

Methods of utilization may be any of the following:

1. Used as a replacement for untreated aggregate surface course on entrances provided the material contains no particles greater than 50 mm [2 in] in any dimension. Payment will be made under Pay Item 411.09, Untreated Aggregate Surface Course or 411.10, Untreated Aggregate Surface Course, Truck Measure. Material shall be placed, shaped, compacted and stabilized as directed by the Resident.

2. Used as the top 3” of gravel. Recycled Asphalt Pavement (RAP) shall be process to 1½” minus and blending will not be allowed. When this method is utilized, a surcharge will not be required

3. Stockpiled at commercial or approved sites for commercial or MaineDOT use.

4. Other approved methods proposed by the Contractor, and approved by the Resident which will assure proper use of the existing hot mix asphalt pavement.

The cost of salvaging hot mix asphalt material will be included for payment under the applicable pay item, with no additional allowances made, which will be full compensation for removing, temporarily stockpiling, and rehandling, if necessary, and utilizing the material in entrances or other approved uses, or stockpiling at an approved site as described above. The material will also be measured and paid for under the applicable Pay Item if it is reused for aggregate in entrances, or other approved uses.”

SECTION 502 STRUCTURAL CONCRETE

502.05 Composition and Proportioning; TABLE #1; NOTE #2; third sentence; Change “...alcohol based saline sealer...” to “alcohol based silane sealer...”. Add NOTE #6 to Class S Concrete.

502.0502 Quality Assurance Method A - Rejection by Resident Change the first sentence to read: “For an individual subplot with test results failing to meet the criteria in Table #1, or if the calculated pay factor for Air Content is less than 0.80.....”

502.0503 Quality Assurance Method B - Rejection by Resident Change the first sentence to read: “For material represented by a verification test with test results failing to meet the criteria in Table #1, the Department will.....”

502.0505 Resolution of Disputed Acceptance Test Results Combine the second and third sentence to read: “Circumstances may arise, however, where the Department may”

502.10 Forms and False work

D. Removal of Forms and False work 1., First paragraph; first, second, and third sentence; replace “forms” with “forms and false work”

502.11 Placing Concrete

G. Concrete Wearing Surface and Structural Slabs on Precast Superstructures Last paragraph; third sentence; replace “The temperature of the concrete shall not exceed 24° C [75° F] at the time of placement.” with “The temperature of the concrete shall not exceed 24° C [75° F] at the time the concrete is placed in its final position.”

502.15 Curing Concrete First paragraph; replace the first sentence with the following; “All concrete surfaces shall be kept wet with clean, fresh water for a curing period of at least 7 days after concrete placing, with the exception of vertical surfaces as provided for in Section 502.10 (D) - Removal of Forms and False work.”

Second paragraph; delete the first two sentences.

Third paragraph; delete the entire paragraph which starts “When the ambient temperature....”

Fourth paragraph; delete “approved” to now read “...continuously wet for the entire curing period...”

Fifth paragraph; second sentence; change “...as soon as it is possible to do so without damaging the concrete surface.” to “...as soon as possible.”

Seventh paragraph; first sentence; change “...until the end of the curing period.” to “...until the end of the curing period, except as provided for in Section 502.10(D) - Removal of Forms and False work.”

502.19 Basis of Payment First paragraph, second sentence; add "pier nose armor" to the list of items included in the contract price for concrete.

SECTION 503
REINFORCING STEEL

503.06 Placing and Fastening Change the second paragraph, first sentence from: “All tack welding shall be done in accordance with Section 504, Structural Steel.” to “All tack welding shall be done in accordance with AWS D1.4 Structural Welding Code - Reinforcing Steel.”

SECTION 504
STRUCTURAL STEEL

504.09 Facilities for Inspection Add the follow as the last paragraph: “Failure to comply with the above requirements will be consider to be a denial to allow access to work by the Contractor. The Department will reject any work done when access for inspection is denied.”

504.18 Plates for Fabricated Members Change the second paragraph, first sentence from: “...ASTM A 898/A 898 M...” to “...ASTM A 898/A 898 M or ASTM A 435/A 435 M as applicable and...”

504.31 Shop Assembly Add the following as the last sentence: “The minimum assembly length shall include bearing centerlines of at least two substructure units.”

504.64 Non Destructive Testing-Ancillary Bridge Products and Support Structures Change the third paragraph, first sentence from “One hundred percent...” to “Twenty five percent...”

SECTION 535
PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

535.02 Materials Change “Steel Strand for Concrete Reinforcement” to “Steel Strand.” Add the following to the beginning of the third paragraph; “Concrete shall be Class P conforming to the requirements in this section. 28 day compressive strength shall be as stated on the plans. Coarse aggregate....”

535.05 Inspection Facilities Add the follow as the last paragraph: “If the above requirements are not met, the Contractor shall be considered to be in violation of Standard Specification 104.2.5 – Right to Inspect Work. All work occurring during a violation of this specification will be rejected.”

535.26 Lateral Post-Tensioning Replace the first paragraph; “A final tension...” with “Overstressing strands for setting losses cannot be accomplished for chuck to chuck lengths of 7.6 m [25 ft] and less. In such instances, refer to the Plans for all materials and methods. Otherwise, post-tensioning shall be in accordance with PCI standards and shall provide the anchorage force noted in the Plans. The applied jacking force shall be no less than 100% of the design jacking force.”

SECTION 603
PIPE CULVERTS AND STORM DRAINS

603.0311 Corrugated Polyethylene Pipe for Option III Replace the Minimum Mandrel Diameter Table with the following:

Nominal Size US Customary (in)	Minimum Mandrel Diameter (in)	Nominal Size Metric (mm)	Minimum Mandrel Diameter (mm)
12	11.23	300	280.73
15	14.04	375	350.91
18	16.84	450	421.09
24	22.46	600	561.45
30	28.07	750	701.81

36	33.69	900	842.18
42	39.30	1050	982.54
48	44.92	1200	1122.90

SECTION 604
MANHOLES, INLETS, AND CATCH BASINS

604.02 Materials Add the following:

“Tops and Traps	712.07
Corrugated Metal Units	712.08
Catch Basin and Manhole Steps	712.09”

SECTION 605
UNDERDRAINS

605.05 Underdrain Outlets Make the following change:

In the first paragraph, second sentence, delete the words “metal pipe”.

SECTION 606
GUARDRAIL

606.02 Materials Delete the entire paragraph which reads “The sole patented supplier of multiple mailbox....” and replace with “Acceptable multiple mailbox assemblies shall be listed on the Department’s Approved Products List and shall be NCHRP 350 tested and approved.” Delete the entire paragraph which reads “Retroreflective beam guardrail delineators....” and replace with “Reflectorized sheeting for Guardrail Delineators shall meet the requirements of Section 719.01 - Reflective Sheeting. Delineators shall be fabricated from high-impact, ultraviolet and weather resistant thermoplastic.

606.09 Basis of Payment First paragraph; delete the second and third sentence in their entirety and replace with “Butterfly-type guardrail reflectorized delineators shall be mounted on all W-beam guardrail at an interval of every 10 posts [62.5 ft] on tangents sections and every 5 posts [31.25 ft] on curved sections as directed by the Resident. On divided highways, the delineators shall be yellow on the left hand side and silver/white on the right hand side. On two-way roadways, the delineators shall be silver/white on the right hand side. All delineators shall have retroreflective sheeting applied to only the traffic facing side. Reflectorized guardrail delineators will not be paid for directly, but will be considered incidental to the guardrail items.”

SECTION 609
CURB

609.04 Bituminous Curb f., Delete the requirement “Color Natural (White)”

SECTION 610

STONE FILL, RIPRAP, STONE BLANKET, AND STONE DITCH PROTECTION

Add the following paragraph to Section 610.02:

“Materials shall meet the requirements of the following Sections of Special Provision 703:

Stone Fill	703.25
Plain and Hand Laid Riprap	703.26
Stone Blanket	703.27
Heavy Riprap	703.28
Definitions	703.32”

Add the following paragraph to Section 610.032.a.

“Stone fill and stone blanket shall be placed on the slope in a well-knit, compact and uniform layer. The surface stones shall be chinked with smaller stone from the same source.”

Add the following paragraph to Section 610.032.b:

“Riprap shall be placed on the slope in a well-knit, compact and uniform layer. The surface stones shall be chinked with smaller stone from the same source.”

Add the following to Section 610.032: “Section 610.032.d. The grading of riprap, stone fill, stone blanket and stone ditch protection shall be determined by the Resident by visual inspection of the load before it is dumped into place, or, if ordered by the Resident, by dumping individual loads on a flat surface and sorting and measuring the individual rocks contained in the load. A separate, reference pile of stone with the required gradation will be placed by the Contractor at a convenient location where the Resident can see and judge by eye the suitability of the rock being placed during the duration of the project. The Resident reserves the right to reject stone at the job site or stockpile, and in place. Stone rejected at the job site or in place shall be removed from the site at no additional cost to the Department.”

SECTION 615 LOAM

615.02 Materials Make the following change:

<u>Organic Content</u>	<u>Percent by Volume</u>
Humus	“5% - 10%”, as determined by Ignition Test

SECTION 618 SEEDING

618.01 Description Change the first sentence to read as follows: “This work shall consist of furnishing and applying seed” Also remove “,and cellulose fiber mulch” from 618.01(a).

618.03 Rates of Application In 618.03(a), remove the last sentence and replace with the following: “These rates shall apply to Seeding Method 2, 3, and Crown Vetch.”

In 618.03(c) “1.8 kg [4 lb]/unit.” to “1.95 kg [4 lb]/unit.”

618.09 Construction Method In 618.09(a) 1, sentence two, replace “100 mm [4 in]” with “25 mm [1 in] (Method 1 areas) and 50 mm [2 in] (Method 2 areas)”

618.15 Temporary Seeding Change the Pay Unit from Unit to Kg [lb].

SECTION 620 GEOTEXTILES

620.03 Placement Section (c)

Title: Replace “Non-woven” in title with “Erosion Control”.

First Paragraph: Replace first word “Non-woven” with “Woven monofilament”.

Second Paragraph: Replace second word “Non-woven” with “Erosion Control”.

620.07 Shipment, Storage, Protection and Repair of Fabric Section (a)

Replace the second sentence with the following: “Damaged geotextiles, as identified by the Resident, shall be repaired immediately.”

620.09 Basis of Payment

Pay Item 620.58: Replace “Non-woven” with “Erosion Control”

Pay Item 620.59: Replace “Non-woven” with “Erosion Control”

SECTION 621 LANDSCAPING

621.0036 Establishment Period In paragraph 4 and 5, change “time of Final Acceptance” to “end of the period of establishment”. In Paragraph 7, change “Final Acceptance date” to “end of the period of establishment” and change “date of Final Acceptance” to “end of the period of establishment”.

SECTION 626 HIGHWAY SIGNING

626.034 Concrete Foundations Add to the following to the end of the second paragraph: “Pre-cast and cast-in-place foundations shall be warranted against leaning and corrosion for two years after the project is completed. If the lean is greater than 2 degrees from normal or the foundation is spalling within the first two years, the Contractor shall replace the foundation at no extra cost.”

SECTION 627 PAVEMENT MARKINGS

627.10 Basis of Payment Add to the following to the end of the third paragraph: “If allowed by Special Provision, the Contractor may utilize Temporary Bi-Directional Yellow and White(As required) Delineators as temporary pavement marking lines and paid for at the contract lump sum price. Such payment will include as many applications as required and removal.”

SECTION 637 DUST CONTROL

637.06 Basis of Payment Add the following after the second sentence of the third paragraph: “Failure by the Contractor to follow Standard Specification or Special Provision - Section 637 and/or the Contractor’s own Soil Erosion and Pollution Control Plan concerning Dust Control and/or the Contractor’s own Traffic Control Plan concerning Dust Control and/or visible evidence of excessive dust problems, as determined by the Resident, will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department’s Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item. Additional penalties may also be assessed in accordance with Special Provision 652 - Work Zone Traffic Control and Standard Specification 656 - Temporary Soil Erosion and Water Pollution Control.”

SECTION 639 ENGINEERING FACILITIES

639.04 Field Offices Change the forth to last paragraph from: “The Contractor shall provide a fully functional desktop copier...” to “....desktop copier/scanner...”

Description Change “Floor Area” to “Floor Area (Outside Dimension)”. Change Type B floor area from “15 (160)” to “20 (217)”.

639.09 Telephone Paragraph 1 is amended as follows:
“The contractor shall provide **two** telephone lines and two telephones,....”

Add- “In addition the contractor will supply one computer broadband connection, modem lease and router. The router shall have wireless access and be 802.11n or 802.11g capable and wireless. The type of connection supplied will be contingent upon the availability of services (i.e. DSL or Cable Broadband). It shall be the contractor’s option to provide dynamic or static IP addresses through the service. **The selected service will have a minimum downstream connection of 1.5 Mbps and 384 Kbps upstream.** The contractor shall be responsible for the installation charges and all reinstallation charges following suspended periods. Monthly service and maintenance charges shall be billed by the Internet Service Provider (ISP) directly to the contractor.”

SECTION 652 MAINTENANCE OF TRAFFIC

652.2.3 Flashing Arrow Board Delete the existing 5 paragraphs and replace with the following: Flashing Arrow Panels (FAP) must be of a type that has been submitted to AASHTO’s National Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of Transportations’ Approved Products List of Portable Changeable Message Signs & Flashing Arrow Panels.

FAP units shall meet requirements of the current Manual on Uniform Traffic Control Devices

(MUTCD) for Type “C” panels as described in Section 6F.56 - Temporary Traffic Control Devices. An FAP shall have matrix of a minimum of 15 low-glare, sealed beam, Par 46 elements capable of either flashing or sequential displays as well as the various operating modes as described in the MUTCD, Chapter 6-F. If an FAP consisting of a bulb matrix is used, each element should be recess-mounted or equipped with an upper hood of not less than 180 degrees. The color presented by the elements shall be yellow.

FAP elements shall be capable of at least a 50 percent dimming from full brilliance. Full brilliance should be used for daytime operation and the dimmed mode shall be used for nighttime operation. FAP shall be at least 2.4 M x 1.2 M [96” x 48”] and finished in non-reflective black. The FAP shall be interpretable for a distance not less than 1.6 km [1 mile].

Operating modes shall include, flashing arrow, sequential arrow, sequential chevron, flashing double arrow, and flashing caution. In the three arrow signals, the second light from the arrow point shall not operate.

The minimum element on-time shall be 50 percent for the flashing mode, with equal intervals of 25 percent for each sequential phase. The flashing rate shall be not less than 25 nor more than 40 flashes per minute. All on-board circuitry shall be solid state.

Primary power source shall be 12 volt solar with a battery back-up to provide continuous operation when failure of the primary power source occurs, up to 30 days with fully charged batteries. Batteries must be capable of being charged from an onboard 110 volt AC power source and the unit shall be equipped with a cable for this purpose.

Controller and battery compartments shall be enclosed in lockable, weather-tight boxes. The FAP shall be mounted on a pneumatic-tired trailer or other suitable support for hauling to various locations, as directed. The minimum mounting height of an arrow panel should be 2.1 M [7 feet] from the roadway to the bottom of the panel.

The face of the trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers.

A portable changeable message sign may be used to simulate an arrow panel display.”

652.2.4 Other Devices Delete the last paragraph and add the following:

“652.2.5 Portable Changeable Message Sign Trailer mounted Portable Changeable Message Signs (PCMS) must be of a type that has been submitted to AASHTO’s National Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of Transportations’ Approved Products List of Portable Changeable Message Signs & Flashing Arrow Panels. The PCMS unit shall meet or exceed the current specifications of the Manual on Uniform Traffic Control Devices (MUTCD), 6F.55.

The front face of the sign should be covered with a low-glare protective material. The color of the LED elements shall be amber on a black background. The PCMS should be visible from a distance of 0.8 km [0.5 mile] day and night and have a minimum 15° viewing angle. Characters must be legible from a distance of at least 200 M [650 feet].

The message panel should have adjustable display rates (minimum of 3 seconds per phase), so that the entire message can be read at least twice at the posted speed, the off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed. Each message shall consist of either one or two phases. A phase shall consist of up to eight characters per line. The unit must be capable of displaying at least three lines of text with eight characters per line. Each character shall be 457 mm [18"] high. Each character module shall use at least a five wide and seven high pixel matrix. The text of the messages shall not scroll or travel horizontally or vertically across the face of the sign.

Units shall automatically adjust their brightness under varying light conditions to maintain legibility.

The control system shall include a display screen upon which messages can be reviewed before being displayed on the message sign. The control system shall be capable of maintaining memory when power is unavailable. Message must be changeable with either a notebook computer or an on-board keypad. The controller shall have the capability to store a minimum of 200 user-defined and 200 pre-programmed messages. Controller and battery compartments shall be enclosed in lockable, weather-tight boxes.

PCMS units shall have the capability of being made programmable by means of wireless communications. PCMS units shall also be fully capable of having an on-board radar system installed if required for a particular application.

PCMS' primary power source shall be solar with a battery back-up to provide continuous operation when failure of the primary power source occurs. Batteries must be capable of being charged from a 110 volt AC power source. The unit must also be capable of being operated solely from a 110 volt AC power source and be equipped with a cable for this purpose.

The PCMS shall be mounted on a trailer in such a way that the bottom of the message sign panel shall be a minimum of 2.1 M [7 ft] above the roadway in urban areas and 1.5 M [5 ft] above the roadway in rural areas when it is in the operating mode. PCMS trailers should be of a heavy duty type with a 51 mm [2"] ball hitch and a minimum of four leveling jacks (at each corner). The sign shall be capable of being rotated 360° relative to the trailer. The face of the trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers."

652.3.3 Submittal of Traffic Control Plan In item e. change "A list of all certified flaggers..." to "A list of all the Contractor's certified flaggers..."

Change a. in the list of requirements to: "a. The name, telephone number, and other contact numbers (cellular phone, pager, if any) of the Contractor's Traffic Control Supervisor (the person with overall responsibility for following the TCP), who has received Work Zone Traffic Control Training commensurate with the level of responsibility shown in the requirements of the Contract, and who is empowered to immediately resolve any work zone traffic control deficiencies or issues. Provide documentation that the Traffic Control Supervisor has completed a Work Zone Traffic Control Training Course (AGC, ATSSA, or other industry-recognized training), and a Supervisory refresher training every 5 years thereafter. Submit the course name, training entity, and date of training.

Traffic Control Training Course curriculum must be based on the standards and guidelines of the MUTCD and must include, at a minimum, the following:

1. Parts of Temporary Traffic Control Zone
2. Appropriate use and spacing of signs
3. Use and spacing of channelizing devices
4. Flagging basics
5. Typical examples and applications

The Traffic Control Supervisor, or designee directly overseeing physical installation, adjustment, and dismantling of work zone traffic control, will ensure all personnel performing those activities are trained to execute the work in a safe and proper manner, in accordance with their level of decision-making and responsibility.”

Add the follow to the list of requirements: “k. The plan for unexpected nighttime work along with a list of emergency nighttime equipment available on-site.”

In the last paragraph add the following as the second sentence: “The Department will review and provide comments to the Contractor within 14 days of receipt of the TCP.” Add the following as the last sentence: “The creation and modification of the TCP will be considered incidental to the related 652 items.”

652.3.5 Installation of Traffic Control Devices In the first paragraph, first sentence; change “Signs shall be erected...” to “Portable signs shall be erected..” In the third sentence; change “Signs must be erected so that the sign face...” to “Post-mounted signs must also be erected so that the sign face...”

652.4 Flaggers Replace the first paragraph with the following; “The Contractor shall furnish flaggers as required by the TCP or as otherwise specified by the Resident. All flaggers must have successfully completed a flagger test approved by the Department and administered by a Department-approved Flagger-Certifier who is employing that flagger. All flaggers must carry an official certification card with them while flagging that has been issued by their employer. Flaggers shall wear safety apparel meeting ANSI 107-2004 Class 2 risk exposure that clearly identifies the wearer as a person, and is visible at a minimum distance of 300 m [1000 ft], and shall wear a hardhat with 360° retro-reflectivity. For nighttime conditions, Class 3 apparel, meeting ANSI 107-2004, shall be worn along with a hardhat with 360° retro-reflectivity. Retro-reflective or flashing SLOW/STOP paddles shall be used, and the flagger station shall be illuminated to assure visibility in accordance with 652.6.2.”

Second paragraph, first sentence; change “...have sufficient distance to stop before entering the workspace.” to “...have sufficient distance to stop at the intended stopping point.” Third sentence; change “At a spot obstruction...” to “At a spot obstruction with adequate sight distance,...”

Fourth paragraph, delete and replace with “Flaggers shall be provided as a minimum, a 10 minute break, every 2 hours and a 30 minute or longer lunch period away from the work station. Flaggers may only receive 1 unpaid break per day; all other breaks must be paid. Sufficient certified flaggers shall be available onsite to provide for continuous flagging operations during break periods. If the flaggers are receiving the appropriate breaks, breaker flagger(s) shall be paid starting 2 hours after the work begins and ending 2 hours before the work ends. A maximum of 1 breaker per 6 flaggers will be paid. (1 breaker flagger for 2 to 6 flaggers, 2 breaker flaggers for 7 to 12 flaggers, etc)”

Add the following:

“652.5.1 Rumble Strip Crossing When lane shifts or lane closures require traffic to cross a permanent longitudinal rumble strip for 7 calendar days or less, the Contractor shall install warning signs that read “RUMBLE STRIP CROSSING” with a supplemental Motorcycle Plaque, (W8-15P).

When lane shifts or lane closures require traffic to cross a permanent longitudinal rumble strip for more than 7 calendar days, the Contractor shall pave in the rumble strips in the area that traffic will cross, unless otherwise directed by the Resident. Rumble strips shall be replaced prior to the end of the project, when it is no longer necessary to cross them.”

652.6 Nightwork Delete this section entirely and replace with the following:

“652.6.1 Daylight Work Times Unless otherwise described in the Contract, the Contractor is allowed to commence work and end work daily according to the Sunrise/Sunset Table at: <http://www.sunrisesunset.com/usa/Maine.asp> . If the Project town is not listed, the closest town on the list will be used as agreed at the Preconstruction Meeting. Any work conducted before sunrise or after sunset will be considered Night Work.

652.6.2 Night Work When Night Work occurs (either scheduled or unscheduled), the Contractor shall provide and maintain lighting on all equipment and at all work stations.

The lighting facilities shall be capable of providing light of sufficient intensity to permit good workmanship, safety and proper inspection at all times. The lighting shall be cut off and arranged on stanchions at a height that will provide perimeter lighting for each piece of equipment and will not interfere with traffic, including commercial vehicles, approaching the work site from either direction.

The Contractor shall have available portable floodlights for special areas.

The Contractor shall utilize padding, shielding or other insulation of mechanical and electrical equipment, if necessary, to minimize noise, and shall provide sufficient fuel, spare lamps, generators, etc. to maintain lighting of the work site.

The Contractor shall submit, as a subset of the Traffic Control Plan, a lighting plan at the Preconstruction Conference, showing the type and location of lights to be used for night work. The Resident may require modifications be made to the lighting set up in actual field conditions.

Prior to beginning any Night Work, the Contractor shall furnish a light meter for the Residents use that is capable of measuring the range of light levels from 5 to 20 foot-candles.

Horizontal illumination, for activities on the ground, shall be measured with the photometer parallel to the road surface. For purposes of roadway lighting, the photometer is placed on the pavement. Vertical illumination, for overhead activities, shall be measured with the photometer perpendicular to the road surface. Measurements shall be taken at the height and location of the overhead activity.

Night Work lighting requirements:

Mobile Operations: For mobile-type operations, each piece of equipment (paver, roller, milling machine, etc) will carry indirect (i.e. balloon type) lights capable of producing at least 10 foot-candles of lighting around the work area of the equipment.

Fixed Operations: For fixed-type operations (flaggers, curb, bridge, pipes, etc.), direct (i.e. tower) lighting will be utilized capable of illuminating the work area with at least 10 foot-candles of light.

Hybrid Operations: For hybrid-type operations (guardrail, sweeping, Inslope excavation, etc.), either direct or indirect lighting may be utilized. The chosen lights must be capable of producing at least 10 foot-candles of light around the work area of the equipment

Inspection Operations: Areas required to be inspected by the Department will require a minimum of 5 foot-candles of lighting. This may be accomplished through direct or indirect means.

All workers shall wear safety apparel labeled as meeting the ANSI 107-2004 standard performance for Class 3 risk exposure.

The Contractor shall apply 2- inch wide retro-reflective tape, with alternating red and white segments, to outline the front back and sides of construction vehicles and equipment, to define their shape and size to the extent practicable. Pickup trucks and personal vehicles are exempt from this requirement. The Contractor shall furnish approved signs reading "Construction Vehicle - Keep Back" to be used on trucks hauling to the project when such signs are deemed necessary by the Resident. The signs shall be a minimum of 30 inches by 60 inches, Black and Orange, ASTM D 4956 - Type VII, Type VIII, or Type IX (prismatic).

All vehicles used on the project, including pickup trucks and personal vehicles, shall be equipped with amber flashing lights, visible from both front and rear, or by means of single, approved type, revolving, flashing or strobe lights mounted so as to be visible 360°. The vehicle flashing system shall be in continuous operation while the vehicle is on any part of the project.

The Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item. Failure to follow the approved Lighting Plan will result in a Traffic Control violation.

Payment for lighting, vehicle mounted signs and other costs accrued because of night work will not be made directly but will be considered incidental to the related contract items.”

652.8.2 Other Items Replace the first paragraph with the following: “The accepted quantities of flagger hours will be paid for at the contract unit price per hour for each flagging station occupied excluding lunch breaks, and for each approved breaker flagger. Overtime hours, as reported on the certified payrolls, will be paid an additional 30% of the bid price for 652.38. The computation and additional payment for overtime hours will occur during the project

close-out process and will be paid as additional hours of 652.38 to the nearest ¼ hour. The contract unit price shall be full compensation for hiring, transporting, equipping, supervising, and the payment of flaggers and all overhead and incidentals necessary to complete the work.” Replace the last paragraph with the following: “There will be no payment made under any 652 pay items after the expiration of the adjusted total contract time.”

SECTION 653
POLYSTYRENE PLASTIC INSULATION

653.05 Placing Backfill In the second sentence; change “...shall be not less than 150 mm [6 in] loose measure.” to “...shall be not less than 250 mm [10 in] loose measure.” In the third sentence; change “...crawler type bulldozer of not more than 390 kg/m² [80 lb/ft²] ground contact pressure...” to “...crawler type bulldozer of not more than 4875 kg/m² [2000 lb/ft²] ground contact pressure...”

653.06 Compaction In the last sentence; change “...not more than 390 kg/m² [80 lb/ft²] ground contact...” to “...not more than 4875 kg/m² [2000 lb/ft²] ground contact...”

SECTION 656
TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

656.5.1 If Pay Item 656.75 Provided Replace the second paragraph with the following: “Failure by the Contractor to follow Standard Specification or Special Provision - Section 656 and/or the Contractor’s own Soil Erosion and Water Pollution Control Plan (SEWPCP) will result in a violation letter and a reduction in payment as shown in the schedule below. The Department’s Resident or any other representative of The Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item.

ORIGINAL CONTRACT AMOUNT

<u>From</u>	<u>Up to and</u>	<u>Amount of Penalty Damages per Violation</u>		
<u>More Than</u>	<u>Including</u>	<u>1st</u>	<u>2nd</u>	<u>3rd & Subsequent</u>
\$0	\$1,000,000	\$250	\$500	\$1,250
\$1,000,000	\$2,000,000	\$500	\$1,000	\$2,500
\$2,000,000	\$4,000,000	\$1,000	\$2,000	\$5,000
\$4,000,000	and more	\$2,000	\$4,000	\$10,000”

SECTION 701
STRUCTURAL CONCRETE RELATED MATERIALS

701.10 Fly Ash - Chemical Requirements Change all references from “ASTM C311” to “ASTM C114”.

SECTION 703
AGGREGATES

703.05 Aggregate for Sand Leveling Change the percent passing the 9.5 mm [3/8 in] sieve from “85 – 10” to “85 – 100”

703.06 Aggregate for Base and Subbase Delete the first paragraph: “The material shall have...” and replace with “The material shall have a minimum degradation value of 15 as determined by Washington State DOT Test Method T113, Method of Test for Determination of Degradation Value (January 2009 version), except that the reported degradation value will be the result of testing a single specimen from that portion of a sample that passes the 12.5 mm [½ in] sieve and is retained on the 2.00 mm [No. 10] sieve, minus any reclaimed asphalt pavement used.”

703.07 Aggregates for HMA Pavements Delete the forth paragraph: “The composite blend shall have...” and replace with “The composite blend, minus any reclaimed asphalt pavement used, shall have a Micro-Deval value of 18.0 or less as determined by AASHTO T 327. In the event the material exceeds the Micro Deval limit, a Washington Degradation test shall be performed. The material shall be acceptable if it has a value of 30 or more as determined by Washington State DOT Test Method T 113, Method of Test for Determination of Degradation Value (January 2009 version) except that the reported degradation value will be the result of testing a single composite specimen from that portion of the sample that passes the 12.5mm [1/2 inch] sieve and is retained on the 2.00mm [No 10] sieve, minus any reclaimed asphalt pavement used.”

703.09 HMA Mixture Composition The coarse and fine aggregate shall meet the requirements of Section 703.07. The several aggregate fractions for mixtures shall be sized, graded, and combined in such proportions that the resulting composite blends will meet the grading requirements of the following table.

AGGREGATE GRADATION CONTROL POINTS

SIEVE SIZE	Nominal Maximum Aggregate Size---Control Points (Percent Passing)				
	TYPE 25 mm	TYPE 19 mm	TYPE 12.5 mm	TYPE 9.5 mm	TYPE 4.75 mm
	PERCENT BY WEIGHT PASSING - COMBINED AGGREGATE				
37.5 mm	100				
25 mm	90-100	100			
19 mm	-90	90-100	100		
12.5 mm		-90	90-100	100	100
9.5 mm		-	-90	90-100	95-100
4.75 mm		-	-	-90	80-100
2.36 mm	19-45	23-49	28-58	32-67	40 - 80
1.18 mm		-	-	-	-
600 µm		-	-	-	-
300 µm		-	-	-	-
75 µm	1-7	2-8	2-10	2-10	2-10

Gradation Classification---- The combined aggregate gradation shall be classified as coarse-graded when it passes below the Primary Control Sieve (PCS) control point as defined in the following table. All other gradations shall be classified as fine-graded.

GRADATION CLASSIFICATION

PCS Control Point for Mixture Nominal Maximum Aggregate Size (% passing)				
Nominal Maximum Aggregate Size	TYPE 25 mm	TYPE 19 mm	TYPE 12.5 mm	TYPE 9.5 mm
Primary Control Sieve	4.75 mm	4.75 mm	2.36 mm	2.36 mm
PCS Control Point (% passing)	40	47	39	47

If a Grading “D” mixture is allowed per Special Provision Section 403, it shall meet the following gradation and the aggregate requirements of Section 703.07.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
½ inch	100
¾ inch	93-100
No. 4	60-80
No. 8	46-65
No. 16	25-55
No. 30	16-40
No. 50	10-30
No. 100	6-22
No. 200	3.0-8.0

703.18 Common Borrow Replace the first paragraph with the following: “Common borrow shall consist of earth, suitable for embankment construction. It shall be free from frozen material, perishable rubbish, peat, and other unsuitable material including material currently or previously contaminated by chemical, radiological, or biological agents unless the material is from a DOT project and authorized by DEP for use.”

703.22 Underdrain Backfill Material Change the first paragraph from “...for Underdrain Type B...” to “...for Underdrain Type B and C...”

Replace subsections 703.25 through 703.28 with the following:

“703.25 Stone Fill Stones for stone fill shall consist of hard, sound, durable rock that will not disintegrate by exposure to water or weather. Stone for stone fill shall be angular and rough. Rounded, subrounded, or long thin stones will not be allowed. Stone for stone fill may be obtained from quarries or by screening oversized rock from earth borrow pits. The maximum allowable length to thickness ratio will be 3:1. The minimum stone size (10 lbs) shall have an average dimension of 5 inches. The maximum stone size (500 lbs) shall have a maximum dimension of approximately 36 inches. Larger stones may be used if approved by the Resident. Fifty percent of the stones by volume shall have an average dimension of 12 inches (200 lbs).

703.26 Plain and Hand Laid Riprap Stone for riprap shall consist of hard, sound durable rock that will not disintegrate by exposure to water or weather. Stone for riprap shall be angular and rough. Rounded, subrounded or long thin stones will not be allowed. The maximum

allowable length to width ratio will be 3:1. Stone for riprap may be obtained from quarries or by screening oversized rock from earth borrow pits. The minimum stone size (10 lbs) shall have an average dimension of 5 inches. The maximum stone size (200 lbs) shall have an average dimension of approximately 12 inches. Larger stones may be used if approved by the Resident. Fifty percent of the stones by volume shall have an average dimension greater than 9 inches (50 lbs).

703.27 Stone Blanket Stones for stone blanket shall consist of sound durable rock that will not disintegrate by exposure to water or weather. Stone for stone blanket shall be angular and rough. Rounded or subrounded stones will not be allowed. Stones may be obtained from quarries or by screening oversized rock from earth borrow pits. The minimum stone size (300 lbs) shall have minimum dimension of 14 inches, and the maximum stone size (3000 lbs) shall have a maximum dimension of approximately 66 inches. Fifty percent of the stones by volume shall have average dimension greater than 24 inches (1000 lbs).

703.28 Heavy Riprap Stone for heavy riprap shall consist of hard, sound, durable rock that will not disintegrate by exposure to water or weather. Stone for heavy riprap shall be angular and rough. Rounded, subrounded, or thin, flat stones will not be allowed. The maximum allowable length to width ratio will be 3:1. Stone for heavy riprap may be obtained from quarries or by screening oversized rock from earth borrow pits. The minimum stone size (500 lbs) shall have minimum dimension of 15 inches, and at least fifty percent of the stones by volume shall have an average dimension greater than 24 inches (1000 lbs).”

Add the following paragraph:

“703.32 Definitions (ASTM D 2488, Table 1).

Angular: Particles have sharp edges and relatively plane sides with unpolished surfaces

Subrounded: Particles have nearly plane sides but have well-rounded corners and edges

Rounded: Particles have smoothly curved sides and no edges”

SECTION 706

NON-METALLIC PIPE

706.06 Corrugated Polyethylene Pipe for Underdrain, Option I and Option III Culvert Pipe

Change the first sentence from “...300 mm diameters to 900 mm” to “...300 mm diameters to 1200 mm” Delete, in its’ entirety, the last sentence which begins “This pipe and resins...” and replace with the following; “Manufacturers of corrugated polyethylene pipe must participate in, and maintain compliance with, AASHTO's National Transportation Product Evaluation Program (www.ntpep.org) which audits producers of plastic pipe. A certificate of compliance must be provided with each shipment.”

SECTION 708

PAINTS AND PERSERVATIVES

708.03 Pavement Marking Paint Change the first sentence from “...AASHTO M248” to “...the Maine DOT Maintenance Fast-Dry Water-Based Traffic Paint on file at the Traffic Section in Augusta”. Delete, in its’ entirety, the last sentence.

SECTION 709

REINFORCING STEEL AND WELDED STEEL WIRE FABIC

709.03 Steel Strand Change the second paragraph from "...shall be 12mm [½ inch] AASHTO M203M/M203 (ASTM A416/A416M)..." to "...shall be 15.24 mm [0.600 inch] diameter AASHTO M203 (ASTM A416)..."

SECTION 710

FENCE AND GUARDRAIL

710.03 Chain Link Fabric Add the following sentence: "Chain Link fabric for PVC coated shall conform to the requirements of AASHTO M181, Type IV-Class B."

710.04 Metal Beam Rail Replace with the following: "Galvanized steel rail elements shall conform to the requirements of AASHTO M 180, Class A, Type II.

When corrosion resistant steel is specified, rail shall conform to AASHTO M 180, Class A, Type IV. Beams of corrosion resistant steel shall not be painted or galvanized. They shall be so handled and stored that the traffic face of these beams, used in a continuous run of guardrail, shall not show a distinctive color differential.

When metal beam rail is to be installed on a curve having a radius of curvature of 150 ft. or less, the beam sections shall be fabricated on an arc to the required radius and permanently stamped or embossed with the designated radius.

The engineer may take one piece of guardrail, a backup plate, and end or buffer section from each 200 pieces in a lot, or from each lot if less than 200 pieces are included therein for determination of compliance with specification requirements. If one piece fails to conform to the requirements of this specification, two other pieces shall be tested. If either of these pieces fails to conform to the requirements of this specification, the lot of material represented by these samples shall be rejected. A lot shall be considered that quantity of material offered for inspection at one time that bears the same heat and coating identification."

710.07 Guardrail Posts Section b. change "...AASHTO M183/M183M..." to "...AASHTO M 270M/M 270 Grade 250 (36)..."

SECTION 712

MISCELLANEOUS HIGHWAY MATERIALS

712.04 Stone Curbing and Edging Delete the existing and replace with the following: "Stone for curbing and edging shall be approved granite from acceptable sources. The stone shall be hard and durable, predominantly gray in color, free from seams that would be likely to impair its structural integrity, and of a smooth splitting character. Natural grain size and color variations characteristic of the source deposit will be permitted. Such natural variations may include bands or clusters of mineral crystallization provided they do not impair the structural integrity of the curb stone. The Contractor shall submit for approval the name of the quarry that is the proposed source of the granite for curb materials along with full scale color photos of the granite. Such submission shall be made sufficiently in advance of ordering so that the Resident may have an opportunity to judge the stone, both as to quality and appearance. Samples of curbing shall be submitted for approval only when requested by the Resident. The dimensions, shape, and other details shall be as shown on the plans."

712.06 Precast Concrete Units In the first paragraph, change "...ASTM C478M..." to "...AASHTO M199..." Delete the second paragraph and replace with the following; "Approved structural fibers may be used as a replacement of 6 x 6 #10 gauge welded wire fabric when used at an approved dosage rate for the construction of manhole and catch basin units. The material used shall be one of the products listed on the Maine Department of Transportation's Approved Product List of Structural Fiber Reinforcement." Delete the fifth paragraph and replace with the following; "The concrete mix design shall be approved by the Department. Concrete shall contain 6% air content, plus or minus 1½% tolerance when tested according to AASHTO T152. All concrete shall develop a minimum compressive strength of 28 MPa [4000 psi] in 28 days when tested according to AASHTO T22. The absorption of a specimen, when tested according to AASHTO T280, Test Method "A", shall not exceed nine percent of the dry mass."

Add the following:

712.07 Tops, and Traps These metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials.

Gray iron or ductile iron castings shall conform to the requirements of AASHTO M306 unless otherwise designated."

712.08 Corrugated Metal Units The units shall conform to plan dimensions and the metal to AASHTO M36/M36M. Bituminous coating, when specified, shall conform to AASHTO M190 Type A.

712.09 Catch Basin and Manhole Steps Steps for catch basins and for manholes shall conform to ASTM C478M [ASTM C478], Section 13 for either of the following material:

- (a) Aluminum steps-ASTM B221M, [ASTM B211] Alloy 6061-T6 or 6005-T5.
- (b) Reinforced plastic steps Steel reinforcing bar with injection molded plastic coating copolymer polypropylene. Polypropylene shall conform to ASTM D 4101.

712.23 Flashing Lights Flashing Lights shall be power operated or battery operated as specified.

- (a) Power operated flashing lights shall consist of housing, adapters, lamps, sockets, reflectors, lens, hoods and other necessary equipment designed to give clearly visible signal indications within an angle of at least 45 degrees and from 3 to 90 m [10 to 300 ft] under all light and atmospheric conditions.

Two circuit flasher controllers with a two-circuit filter capable of providing alternate flashing operations at the rate of not less than 50 nor more than 60 flashes per minute shall be provided.

The lamps shall be 650 lumens, 120 volt traffic signal lamps with sockets constructed to properly focus and hold the lamp firmly in position.

The housing shall have a rotatable sun visor not less than 175 mm [7 in] in length designed to shield the lens.

Reflectors shall be of such design that light from a properly focused lamp will reflect the light rays parallel. Reflectors shall have a maximum diameter at the point of contact with the lens of approximately 200 mm [8 in].

The lens shall consist of a round one-piece convex amber material which, when mounted, shall have a visible diameter of approximately 200 mm [8 in]. They shall distribute light and not diffuse it. The distribution of the light shall be asymmetrical in a downward direction. The light distribution of the lens shall not be uniform, but shall consist of a small high intensity portion with narrow distribution for long distance throw and a larger low intensity portion with wide distribution for short distance throw. Lenses shall be marked to indicate the top and bottom of the lens.

(b) Battery operated flashing lights shall be self-illuminated by an electric lamp behind the lens. These lights shall also be externally illuminated by reflex-reflective elements built into the lens to enable it to be seen by reflex-reflection of the light from the headlights of oncoming traffic. The batteries must be entirely enclosed in a case. A locking device must secure the case. The light shall have a flash rate of not less than 50 nor more than 60 flashes per minute from minus 30 °C [minus 20 °F] to plus 65 °C [plus 150 °F]. The light shall have an on time of not less than 10 percent of the flash cycle. The light beam projected upon a surface perpendicular to the axis of the light beam shall produce a lighted rectangular projection whose minimum horizontal dimension shall be 5 degrees each side of the horizontal axis. The effective intensity shall not have an initial value greater than 15.0 candelas or drop below 4.0 candelas during the first 336 hours of continuous flashing. The illuminated lens shall appear to be uniformly bright over its entire illuminated surface when viewed from any point within an angle of 9 degrees each side of the vertical axis and 5 degrees each side of the horizontal axis. The lens shall not be less than 175 mm [7 in] in diameter including a reflex-reflector ring of 13 mm [$\frac{1}{2}$ in] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be one-piece construction. The lens material shall be plastic and meet the luminous transmission requirements of this specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20 foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall

be provided to the Resident upon request without cost to the Department. All such samples shall be returned to the Contractor upon completion of the tests.

712.32 Copper Tubing Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.

712.33 Non-metallic Pipe, Flexible Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.

712.34 Non-metallic Pipe, Rigid Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D1785. Fittings shall be of the same material.

712.341 Metallic Pipe Metallic pipe shall be ANSI, Standard B36.10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

712.35 Epoxy Resin Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.

712.36 Bituminous Curb The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01 Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture.

Bituminous material for curb shall meet the requirements of Section 403 - Hot Bituminous Pavement.

712.37 Precast Concrete Slab Portland cement concrete for precast slabs shall meet the requirements of Section 502 - Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the plans and cross section and in accordance with the Standard Detail plans for Concrete Sidewalk Slab. The surface shall be finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

712.38 Stone Slab Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [½ in] under a 600 mm [2 ft] straightedge or over 25 mm [1 in] under a 1200 mm [4 ft] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [¾ in] shall show in the joint for the full exposed height.

Liftpin holes in all sides will be allowed except on the exposed face.

SECTION 717 ROADSIDE IMPROVEMENT MATERIAL

717.03 C. Method #3 - Roadside Mixture #3 Change the seed proportions to the following:

Crown Vetch	25%
Perennial Lupine	25%
Red Clover	12.5%
Annual Rye	37.5%

717.05 Mulch Binder Change the third sentence to read as follows:

“Paper fiber mulch may be used as a binder at the rate of 2.3 kg/unit [5 lb/unit].”

SECTION 720 STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS

720.08 U-Channel Posts Change the first sentence from “..., U-Channel posts...” to “..., Rib Back U-Channel posts...”

SECTION 722 GEOTEXTILES

722.01 Stabilization/Reinforcement Geotextile Add the following to note #3; “The strengths specified in the columns labeled “<50%” and “≥ 50%” refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the “<50%” column. Submittals must include the percent elongation at which the material was tested.”

722.02 Drainage Geotextile Add the following to note #3; “The strengths specified in the columns labeled”<50%” and “≥ 50%” refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the “<50%” column. Submittals must include the percent elongation at which the material was tested.”

722.01 Erosion Control Geotextile Add the following note to Elongation in the Mechanical Property Table; “The strengths specified in the columns labeled”<50%” and “≥ 50%” refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the “<50%” column. Submittals must include the percent elongation at which the material was tested.”

FEDERAL CLAUSES

Fly America Requirements

Contractor shall comply with 49 USC 40118 (the "Fly America" Act) in accordance with General Services Administration regulations 41 CFR 301-10, stating that recipients and sub recipients of Federal funds and their contractors are required to use US Flag air carriers for US 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. Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a US 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. Contractor shall include the requirements of this section in all subcontracts that may involve international air transportation.

Buy America Certification (Steel and Manufactured Products)

Contractor shall comply with 49 USC 5323(j) and 49 CFR 661, as amended by MAP-21 stating 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 CFR 661.7, and include final assembly in the US for 15 passenger vans and 15 passenger wagons produced by Chrysler Corp., software, microcomputer equipment and small purchases (currently less than \$100,000) made with capital, operating or planning funds. Separate requirements for rolling stock are stated at 5323(j) (2) (C) and 49 CFR 661.11. Rolling stock must be manufactured in the US and have a minimum 60% domestic content. A bidder or offeror shall submit appropriate Buy America certification to the recipient with all bids on FTA-funded contracts, except those subject to a general waiver. Proposals not accompanied by a completed Buy America certification shall be rejected as nonresponsive. This requirement does not apply to lower tier subcontractors.

Cargo Preference

Contractor shall: a. use privately owned US-Flag commercial vessels to ship at least 50% 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 US flag commercial vessels; b. furnish within 20 working days following the loading date of shipments originating within the US or within 30 working days following the loading date of shipments originating outside the US, a legible copy of a rated, "on-board" commercial bill-of-lading in English for each shipment of cargo described herein to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the recipient (through contractor in the case of a subcontractor's bill-of-lading.); c. include these requirements in all subcontracts issued pursuant to this contract when the subcontract involves the transport of equipment, material or commodities by ocean vessel.

Seismic Safety

Contractor agrees that any new building or addition to an existing building shall be designed and constructed in accordance with the standards required in USDOT Seismic Safety Regulations 49 CFR 41 and shall certify compliance to the extent required by the regulation. Contractor shall also ensure that all work performed under this contract, including work performed by subcontractors, complies with the standards required by 49 CFR 41 and the certification of compliance issued on the project.

Energy Conservation

Contractor shall comply with mandatory standards and policies relating to energy efficiency, stated in the state energy conservation plan issued in compliance with the Energy Policy & Conservation Act.

Clean Water

Contractor shall comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq. Contractor shall report each violation to the recipient and understands and agrees that the recipient shall, in turn, report each violation as required to FTA and the appropriate EPA Regional Office. Contractor shall include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with FTA assistance.

Lobbying

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.

Access to Records and Reports

The following access to records requirements apply to this Contract:

1. Where the purchaser is not a State but a local government and is an FTA recipient or a sub grantee of FTA recipient in accordance with 49 CFR 18.36(i), contractor shall provide the purchaser, the FTA, the US Comptroller General or their authorized representatives access to any books, documents, papers and contractor records which are pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor shall also, pursuant to 49 CFR 633.17, provide authorized FTA representatives, including any PMO contractor, access to contractor's records and construction sites pertaining to a capital project, defined at 49 USC 5302(a)1, which is receiving FTA assistance through the programs described at 49 USC 5307, 5309 or 5311.
2. Where the purchaser is a State and is an FTA recipient or a sub grantee of FTA recipient in accordance with 49 CFR 633.17, contractor shall provide the purchaser, authorized FTA representatives, including any PMO Contractor, access to contractor's records and construction sites pertaining to a capital project, defined at 49 USC 5302(a)1, which receives FTA assistance through the programs described at 49 USC 5307, 5309 or 5311. By definition, a capital project excludes contracts of less than the simplified acquisition threshold currently set at \$100,000.
3. Where the purchaser enters into a negotiated contract for other than a small purchase or under the simplified acquisition threshold and is an institution of higher education, a hospital or other non-profit organization and is an FTA recipient or a sub grantee of FTA recipient in accordance with 49 CFR 19.48, contractor shall provide the purchaser, the FTA, the US Comptroller General or their authorized representatives, access to any books, documents, papers and record of the contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions.
4. Where a purchaser which is an FTA recipient or a sub grantee of FTA recipient in accordance with 49 USC 5325(a) enters into a contract for a capital project or improvement (defined at 49 USC 5302(a)1) through other than competitive bidding, contractor shall make available records related to the contract to the purchaser, the Secretary of USDOT and the US Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.
5. Contractor shall permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
6. Contractor shall maintain all books, records, accounts and reports required under this contract for a period of not less than three (3) 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 recipient, FTA Administrator, US Comptroller General, or any of their authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Re: 49 CFR 18.39(i)(11).

FTA does not require the inclusion of these requirements in subcontracts.

Federal Changes

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

Bonding Requirements

Applicability – For those construction or facility improvement contracts or subcontracts exceeding \$100,000, FTA may accept the bonding policy and requirements of the recipient, provided that they meet the minimum requirements for construction contracts as follows:

- 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, certified 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.
- b. A performance bond on the part to the Contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.
- c. A payment bond on the part of the contractor for 100 percent of the contract price. A "payment bond" is one executed in connection with a contract to assure payment, as required by law, of all persons supplying labor and material in the execution of the work provided for in the contract. Payment bond amounts required from Contractors are as follows:
 - (1) 50% of the contract price if the contract price is not more than \$1 million;
 - (2) 40% of the contract price if the contract price is more than \$1 million but not more than \$5 million; or
 - (3) \$2.5 million if the contract price is more than \$5 million.
- d. A cash deposit, certified check or other negotiable instrument may be accepted by a grantee in lieu of performance and payment bonds, provided the grantee has established a procedure to assure that the interest of FTA is adequately protected. An irrevocable letter of credit would also satisfy the requirement for a bond.

Bid Bond Requirements (Construction)

- (a) Bid Security - A Bid Bond must be issued by a fully qualified surety company acceptable to (Recipient) and listed as a company currently authorized under 31 CFR, Part 223 as possessing a Certificate of Authority as described thereunder.
- (b) Rights Reserved - In submitting this Bid, it is understood and agreed by bidder that the right is reserved by (Recipient) to reject any and all bids, or part of any bid, and it is agreed that the Bid may not be withdrawn for a period of [ninety (90)] days subsequent to the opening of bids, without the written consent of (Recipient). It is also understood and agreed that if the undersigned bidder should withdraw any part or all of his bid within [ninety (90)] days after the bid opening without the written consent of (Recipient), shall refuse or be unable to enter into this Contract, as provided above, or refuse or be unable to furnish adequate and acceptable Performance Bonds and Labor and Material Payments Bonds, as provided above, or refuse or be unable to furnish adequate and acceptable insurance, as provided above, he shall forfeit his bid security to the extent of (Recipient's) damages occasioned by such withdrawal, or refusal, or inability to enter into an agreement, or provide adequate security therefor. It is further understood and agreed that to the extent the defaulting bidder's Bid Bond, Certified Check, Cashier's Check, Treasurer's Check, and/or Official Bank Check (excluding any income generated thereby which has been retained by (Recipient) as provided in [Item x "Bid Security" of the Instructions to Bidders]) shall prove inadequate to fully recompense (Recipient) for the damages occasioned by default, then the undersigned bidder agrees to indemnify (Recipient) and pay over to (Recipient) the difference between the bid security and (Recipient's) total damages, so as to make (Recipient) whole.

The undersigned understands that any material alteration of any of the above or any of the material contained on this form, other than that requested will render the bid unresponsive.

Performance and Payment Bonding Requirements (Construction)

The Contractor shall be required to obtain performance and payment bonds as follows:

(a) Performance bonds

- 1. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the (Recipient) determines that a lesser amount would be adequate for the protection of the (Recipient).
- 2. The (Recipient) may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. The (Recipient) may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(b) Payment bonds

- 1. The penal amount of the payment bonds shall equal:
 - (i) Fifty percent of the contract price if the contract price is not more than \$1 million.
 - (ii) Forty percent of the contract price if the contract price is more than \$1 million but not more than \$5 million; or
 - (iii) Two and one half million if the contract price is more than \$5 million.
- 2. If the original contract price is \$5 million or less, the (Recipient) may require additional protection as required by subparagraph 1 if the contract price is increased. Performance and Payment Bonding Requirements (Non-Construction)
The Contractor may be required to obtain performance and payment bonds when necessary to protect the (Recipient's) interest.

(a) The following situations may warrant a performance bond:

- 1. (Recipient) property or funds are to be provided to the contractor for use in performing the contract or as partial compensation (as in retention of salvaged material).
- 2. A contractor sells assets to or merges with another concern, and the (Recipient), after recognizing the latter concern as the successor in interest, desires assurance that it is financially capable.
- 3. Substantial progress payments are made before delivery of end items starts.
- 4. Contracts are for dismantling, demolition, or removal of improvements.

(b) When it is determined that a performance bond is required, the Contractor shall be required to obtain performance bonds as follows:

- 1. The penal amount of performance bonds shall be 100 percent of the original contract price, unless the (Recipient) determines that a lesser amount would be adequate for the protection of the (Recipient).
- 2. The (Recipient) may require additional performance bond protection when a contract price is increased. The increase in protection shall generally equal 100 percent of the increase in contract price. The (Recipient) may secure additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) A payment bond is required only when a performance bond is required, and if the use of payment bond is in the (Recipient's) interest.

(d) When it is determined that a payment bond is required, the Contractor shall be required to obtain payment bonds as follows:

- 1. The penal amount of payment bonds shall equal:
 - (i) Fifty percent of the contract price if the contract price is not more than \$1 million;
 - (ii) Forty percent of the contract price if the contract price is more than \$1 million but not more than \$5 million; or
 - (iii) Two and one half million if the contract price is increased.

Advance Payment Bonding Requirements

The Contractor may be required to obtain an advance payment bond if the contract contains an advance payment provision and a performance bond is not furnished. The (recipient) shall determine the amount of the advance payment bond necessary to protect the (Recipient). Patent Infringement Bonding Requirements (Patent Indemnity) The Contractor may be required to obtain a patent indemnity bond if a performance bond is not furnished and the financial responsibility of the Contractor is unknown or doubtful. The (recipient) shall determine the amount of the patent indemnity to protect the (Recipient).

Warranty of the Work and Maintenance Bonds

- 1. The Contractor warrants to (Recipient), the Architect and/or Engineer that all materials and equipment furnished under this Contract will be of highest quality and new unless otherwise specified by (Recipient), free from faults and defects and in conformance with the Contract Documents. All work not so conforming to these standards shall be considered defective. If required by the [Project Manager], the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
- 2. The Work furnished must be of first quality and the workmanship must be the best obtainable in the various trades. The Work must be of safe, substantial and durable construction in all respects. The Contractor hereby guarantees the Work against defective materials or faulty workmanship for a minimum period of one (1) year after Final Payment by (Recipient) and shall replace or repair any defective materials or equipment or faulty workmanship during the period of the guarantee at no cost to (Recipient). As additional security for these guarantees, the Contractor shall, prior to the release of Final Payment [as provided in Item X below], furnish separate Maintenance (or Guarantee) Bonds in form acceptable to (Recipient) written by the same corporate surety that provides the Performance Bond and Labor and Material Payment Bond for this Contract. These bonds shall secure the Contractor's obligation to replace or repair defective materials and faulty workmanship for a minimum period of one (1) year after Final Payment and shall be written in an amount equal to ONE HUNDRED PERCENT (100%) of the CONTRACT SUM, as adjusted (if at all).

Clean Air

- 1) Contractor shall comply with all applicable standards, orders or regulations pursuant to the Clean Air Act, 42 USC 7401 et seq. Contractor shall report each violation to the recipient and understands and agrees that the recipient will, in turn, report each violation as required to FTA and the appropriate EPA Regional Office.
- 2) Contractor shall include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with FTA assistance.

Recycled Products

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.

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

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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 recipient 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 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 recipient 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 Regulation 56

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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 subcontractors 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) Equal employment opportunity -

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, contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in 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 18 USC 1001.

Contract Work Hours & Safety Standards Act

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 40 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 40 hours in such workweek.
2. Violation; liability for unpaid wages; liquidated damages - In the event of any violation of the clause set forth in para. (1) of this section, contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable 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 para. (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 40 hours without payment of the overtime wages required by the clause set forth in para. (1) of this section.
3. Withholding for unpaid wages and liquidated damages - the recipient shall upon its own action or upon written request of USDOL withhold or cause to be withheld, from any moneys payable on account of work performed by 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 & 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 para. (2) of this section.
4. Subcontracts - Contractor or subcontractor shall insert in any subcontracts the clauses set forth in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. Prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this section.

No Government Obligation to Third Parties

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

Program Fraud and False or Fraudulent Statements or Related Acts

- (1) Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 USC 3801 et seq. and USDOT regulations, "Program Fraud Civil Remedies," 49 CFR 31, apply to its actions pertaining to this project. Upon execution of the underlying contract, 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 FTA assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submittal, or certification, the US Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act (1986) on contractor to the extent the US Government deems appropriate.
- (2) If contractor makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submittal, or certification to the US Government under a contract connected with a project that is financed in whole or in part with FTA assistance under the authority of 49 USC 5307, the Government reserves the right to impose the penalties of 18 USC 1001 and 49 USC 5307(n)(1) on contractor, to the extent the US Government deems appropriate.
- (3) Contractor shall include the above two clauses in each subcontract financed in whole or in part with FTA assistance. The clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

Termination

- a. Termination for Convenience (General Provision) the recipient may terminate this contract, in whole or in part, at any time by written notice to contractor when it is in the recipient's best interest. Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. Contractor shall promptly submit its termination claim to the recipient. If contractor is in possession of any of the recipient's property, contractor shall account for same, and dispose of it as the recipient directs.
- b. Termination for Default [Breach or Cause] (General Provision) If contractor does not deliver items in accordance with the contract delivery schedule, or, if the contract is for services and contractor fails to perform in the manner called for in the contract, or if contractor fails to comply with any other provisions of the contract, the recipient may terminate this contract for default. Termination shall be effected by serving a notice of termination to contractor setting forth the manner in which contractor is in default. Contractor shall only be paid the contract price for supplies delivered and accepted, or for services performed in accordance with the manner of performance set forth in the contract. If it is later determined by the recipient that 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 contractor, the recipient, after setting up a new delivery or performance schedule, may allow contractor to continue work, or treat the termination as a termination for convenience.
- c. Opportunity to Cure (General Provision) the recipient in its sole discretion may, in the case of a termination for breach or default, allow contractor an appropriately short period of time in which to cure the defect. In such case, the notice of termination shall state the time period in which cure is permitted and other appropriate conditions. If contractor fails to remedy to the recipient's satisfaction the breach or default or any of the terms, covenants, or conditions of this Contract within ten (10) days after receipt by contractor or written notice from the recipient setting forth the nature of said breach or default, the recipient 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 the recipient 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 the recipient elects to waive its remedies for any breach by contractor of any covenant, term or condition of this Contract, such waiver by the recipient shall not limit its 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 recipient, by written notice, may terminate this contract, in whole or in part, when it is in the recipient's interest. If the 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 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 recipient may terminate this contract for default. The recipient shall terminate by delivering to contractor a notice of termination specifying the nature of default. Contractor shall 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 contractor was not in default, the rights and obligations of the parties shall be the same as if termination had been issued for the recipient's convenience.
- g. Termination for Default (Transportation Services) If 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 contractor fails to comply with any other provisions of this contract, the recipient may terminate this contract for default. The recipient shall terminate by delivering to contractor a notice of termination specifying the nature of default. Contractor shall 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 contractor has possession of the recipient goods, contractor shall, as directed by the recipient, protect and preserve the goods until surrendered to the recipient or its agent. Contractor and the recipient shall agree on payment for the preservation and protection of goods. Failure to agree on an amount shall be resolved under the Dispute clause. If, after termination for failure to fulfill contract obligations, it is determined that contractor was not in default, the rights and obligations of the parties shall be the same as if termination had been issued for the recipient's convenience.
- h. Termination for Default (Construction) If contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified, or any extension, or fails to complete the work within this time, or if contractor fails to comply with any other provisions of this contract, the recipient may terminate this contract for default. The recipient shall terminate by delivering to contractor a notice of termination specifying the nature of default. In this event, the recipient may take over the work and complete 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. Contractor and its sureties shall be liable for any damage to the recipient resulting from contractor's refusal or failure to complete the work within specified time, whether or not contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the recipient in completing the work. Contractor's right to proceed shall not be terminated nor shall contractor be charged with damages under this clause if:
1. Delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of 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. Contractor, within 10 days from the beginning of any delay, notifies the recipient in writing of the causes of delay. If in the recipient's judgment, delay is excusable, the time for completing the work shall be extended. The recipient's judgment shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses. If, after termination of contractor's right to proceed, it is determined that contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if termination had been issued for the recipient's convenience.
- i. Termination for Convenience or Default (Architect & Engineering) the recipient may terminate this contract in whole or in part, for the recipient's convenience or because of contractor's failure to fulfill contract obligations. The recipient shall terminate by delivering to contractor a notice of termination specifying the nature, extent, and effective date of termination. Upon receipt of the notice, contractor shall

(1) immediately discontinue all services affected (unless the notice directs otherwise), and

(2) deliver to the recipient all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process. If termination is for the recipient's convenience, it shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services. If termination is for contractor's failure to fulfill contract obligations, the recipient may complete the work by contract or otherwise and 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 contractor was not in default, the rights and obligations of the parties shall be the same as if termination had been issued for the recipient's convenience.

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

Government Wide Debarment and Suspension (Non Procurement)

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 contractors, 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 proposal, the bidder or proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by the recipient. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to the recipient, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer 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 proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Contracts Involving Federal Privacy Act Requirements

The following requirements apply to the Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract:

(1) The Contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. § 552a. Among other things, the Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.

(2) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

Civil Rights Requirements

The following requirements apply to the underlying contract:

The Recipient understands and agrees that it must comply with applicable Federal civil rights laws and regulations, and follow applicable Federal guidance, except as the Federal Government determines otherwise in writing. Specifically:

a. Nondiscrimination in Federal Public Transportation Programs. The Recipient agrees to, and assures that each Third Party Participant will, comply with Federal transit law, 49 U.S.C. § 5332 (FTA's "Nondiscrimination" statute): (1) FTA's "Nondiscrimination" statute prohibits discrimination on the basis of: (a) Race, (b) Color, (c) Religion, (d) National origin, (e) Sex, (f) Disability, or (g) Age, and (2) The FTA "Nondiscrimination" statute's prohibition against discrimination includes: a) Exclusion from participation, b) Denial of program benefits, or c) Discrimination, including discrimination in employment or business opportunity,

b. Nondiscrimination – Title VI of the Civil Rights Act. The Recipient agrees to, and assures that each Third Party Participant will: (1) Prohibit discrimination based on: (a) Race, (b) Color, or (c) National origin, (2) Comply with: (a) Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000d et seq., (b) U.S. DOT regulations, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964," 49 C.F.R. part 21, and (c) Federal transit law, specifically 49 U.S.C. § 5332, as stated in the preceding section a, and (3) Except as FTA determines otherwise in writing, follow: (a) The most recent edition of FTA Circular 4702.1, "Title VI and Title VI-Dependent Guidelines for Federal Transit Administration Recipients," to the extent consistent with applicable Federal laws, regulations, and guidance. (b) U.S. DOJ, "Guidelines for the enforcement of Title VI, Civil Rights Act of 1964," 28 C.F.R. § 50.3, and (c) Other applicable Federal guidance that may be issued,

c. Equal Employment Opportunity. (1) Federal Requirements and Guidance. The Recipient agrees to, and assures that each Third Party Participant will, prohibit discrimination on the basis of race, color, religion, sex, or national origin, and: (a) Comply with Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000e et seq., (b) Facilitate compliance with Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order No. 11246, Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note, (c) Comply with Federal transit law, specifically 49 U.S.C. § 5332, as stated in section a, and (d) Comply with other applicable EEO laws and regulations, as provided in Federal guidance, including laws and regulations prohibiting discrimination on the basis of disability, except as the Federal Government determines otherwise in writing, (2) General. The Recipient agrees to: (a) Ensure that applicants for employment are employed and employees are treated during employment without discrimination on the basis of their: 1 Race, 2 Color, 3 Religion, 4 Sex, 5 Disability, 6 Age, or 7 National origin, (b) Take affirmative action that includes, but is not limited to: 1 Recruitment advertising, 2 Recruitment, 3 Employment, 4 Rates of pay, 5 Other forms of compensation, 6 Selection for training, including apprenticeship, 7 Upgrading, 8 Transfers, 9 Demotions, 10 Layoffs, and 11 Terminations, and (3) Equal Employment Opportunity Requirements for Construction Activities. In addition to the foregoing, when undertaking "construction" as recognized by the U.S. Department of Labor (U.S. DOL), the Recipient agrees to comply, and assures the compliance of each Third Party Participant, with: (a) U.S. DOL regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. chapter 60, and (b) Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order No. 11246, Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note,

d. Disadvantaged Business Enterprise. To the extent authorized by applicable Federal law, the Recipient agrees to facilitate, and assures that each Third Party Participant will facilitate, participation by small business concerns owned and controlled by socially and economically disadvantaged individuals, also referred to as "Disadvantaged Business Enterprises" (DBEs), in the Project as follows: (1) Requirements. The Recipient agrees to comply with: (a) Section 1101(b) of MAP-21, 23 U.S.C. § 101 note, (b) U.S. DOT regulations, "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs," 49 C.F.R. part 26, and (c) Federal transit law, specifically 49 U.S.C. § 5332, as stated in section a, (2) Assurance. As required by 49 C.F.R. § 26.13(a), the Recipient provides assurance that: The Recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 C.F.R. part 26. The Recipient shall take all necessary and reasonable steps under 49 C.F.R. part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The Recipient's DBE program, as required by 49 C.F.R. part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and 182

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failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the Recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under 49 C.F.R. part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. § 1001 and/or the Program Fraud Civil Remedies Act of 1986, 31 U.S.C. § 3801 et seq.,

e. Nondiscrimination on the Basis of Sex. The Recipient agrees to comply with Federal prohibitions against discrimination on the basis of sex, including: (1) Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. § 1681 et seq., (2) U.S. DOT regulations, "Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance," 49 C.F.R. part 25, and (3) Federal transit law, specifically 49 U.S.C. § 5332, as stated in section a,

f. Nondiscrimination on the Basis of Age. The Recipient agrees to comply with Federal prohibitions against discrimination on the basis of age, including: (1) The Age Discrimination in Employment Act (ADEA), 29 U.S.C. §§ 621 – 634, which prohibits discrimination on the basis of age, (2) U.S. Equal Employment Opportunity Commission (U.S. EEOC) regulations, "Age Discrimination in Employment Act," 29 C.F.R. part 1625, which implements the ADEA, (3) The Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6101 et seq., which prohibits discrimination against individuals on the basis of age in the administration of programs or activities receiving Federal funds, (4) U.S. Health and Human Services regulations, "Nondiscrimination on the Basis of Age in Programs or Activities Receiving Federal Financial Assistance," 45 C.F.R. part 90, which implements the Age Discrimination Act of 1975, and (5) Federal transit law, specifically 49 U.S.C. § 5332, as stated in section a,

g. Nondiscrimination on the Basis of Disability. The Recipient agrees to comply with the following Federal prohibitions pertaining to discrimination against seniors or individuals with disabilities: (1) Federal laws, including: (a) Section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 794, which prohibits discrimination on the basis of disability in the administration of federally funded programs or activities, (b) The Americans with Disabilities Act of 1990 (ADA), as amended, 42 U.S.C. § 12101 et seq., which requires that accessible facilities and services be made available to individuals with disabilities, (c) The Architectural Barriers Act of 1968, as amended, 42 U.S.C. § 4151 et seq., which requires that buildings and public accommodations be accessible to individuals with disabilities, (d) Federal transit law, specifically 49 U.S.C. § 5332, which now includes disability as a prohibited basis for discrimination, and (e) Other applicable laws and amendments pertaining to access for elderly individuals or individuals with disabilities, (2) Federal regulations, including: (a) U.S. DOT regulations, "Transportation Services for Individuals with Disabilities (ADA)," 49 C.F.R. part 37, (b) U.S. DOT regulations, "Nondiscrimination on the Basis of Disability in Programs and Activities Receiving or Benefiting from Federal Financial Assistance," 49 C.F.R. part 27, (c) U.S. DOT regulations, "Transportation for Individuals with Disabilities: Passenger Vessels," 49 C.F.R. part 39, (d) Joint U.S. Architectural and Transportation Barriers Compliance Board (U.S. ATBCB) and U.S. DOT regulations, "Americans With Disabilities (ADA) Accessibility Specifications for Transportation Vehicles," 36 C.F.R. part 1192 and 49 C.F.R. part 38, (e) U.S. DOJ regulations, "Nondiscrimination on the Basis of Disability in State and Local Government Services," 28 C.F.R. part 35, (f) U.S. DOJ regulations, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities," 28 C.F.R. part 36, (g) U.S. EEOC, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. part 1630, (h) U.S. Federal Communications Commission regulations, "Telecommunications Relay Services and Related Customer Premises Equipment for Persons with Disabilities," 47 C.F.R. part 64, Subpart F, (i) U.S. ATBCB regulations, "Electronic and Information Technology Accessibility Standards," 36 C.F.R. part 1194, and (j) FTA regulations, "Transportation for Elderly and Handicapped Persons," 49 C.F.R. part 609, and (3) Other applicable Federal civil rights and nondiscrimination guidance,

h. Drug or Alcohol Abuse - Confidentiality and Other Civil Rights Protections. The Recipient agrees to comply with the confidentiality and civil rights protections of: (1) The Drug Abuse Office and Treatment Act of 1972, as amended, 21 U.S.C. § 1101 et seq., (2) The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, as amended, 42 U.S.C. § 4541 et seq., and (3) The Public Health Service Act, as amended, 42 U.S.C. §§ 290dd – 290dd-2,

i. Access to Services for People with Limited English Proficiency. Except as the Federal Government determines otherwise in writing, the Recipient agrees to promote accessibility of public transportation services to people whose understanding of English is limited by following: 1) Executive Order No. 13166, "Improving Access to Services for Persons with Limited English Proficiency," August 11, 2000, 42 U.S.C. § 2000d-1 note, and (2) U.S. DOT Notice, "DOT Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficiency (LEP) Persons," 70 Fed. Reg. 74087, December 14, 2005,

j. Environmental Justice. Except as the Federal Government determines otherwise in writing, the recipient agrees to promote environmental justice by following: (1) Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 11, 1994, 42 U.S.C. § 4321 note, as well as facilitating compliance with that Executive Order, and (2) DOT Order 5610.2, "Department of Transportation Actions To Address Environmental Justice in Minority Populations and Low-Income Populations," 62 Fed. Reg. 18377, April 15, 1997, and (3) The most recent and applicable edition of FTA Circular 4703.1, "Environmental Justice Policy Guidance for Federal Transit Administration Recipients," August 15, 2012, to the extent consistent with applicable Federal laws, regulations, and guidance, and

k. Other Nondiscrimination Laws. Except as the Federal Government determines otherwise in writing, the Recipient agrees to: (1) Comply with other applicable Federal nondiscrimination laws and regulations, and (2) Follow Federal guidance prohibiting discrimination.

l. Contractor shall include these requirements in each subcontract financed in whole or in part with FTA assistance, modified only if necessary to identify the affected parties.

Breaches and Dispute Resolution

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

Performance During Dispute - Unless otherwise directed by the recipient, 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 therefore shall be made in writing to such other party within ten days after the first observance of such injury or damage.

Remedies - Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the recipient and 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 residing State.

Rights and Remedies - 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 recipient 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.

Disadvantaged Business Enterprise

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 recipient's overall goal for DBE participation is listed elsewhere. If a separate contract goal for DBE participation has been established for this procurement, it is listed elsewhere.

b. The contractor shall not discriminate on the basis of race, color, religion, 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 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 the municipal corporation 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, Bidders/offers 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.
- d. If no separate contract goal has been established, the successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance.
- e. 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 recipient. In addition, the contractor may not hold retainage from its subcontractors or must return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this contract is satisfactorily completed or must return any retainage payments to those subcontractors within 30 days after incremental acceptance of the subcontractor's work by the recipient and contractor's receipt of the partial retainage payment related to the subcontractor's work.
- f. The contractor must promptly notify the recipient 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 the recipient.

Incorporation of Federal Transit Administration (FTA) Terms

The preceding provisions include, in part, certain Standard Terms & Conditions required by USDOT, whether or not expressly stated in the preceding contract provisions. All USDOT-required contractual provisions, as stated in FTA Circular 4220.1F, 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 request that would cause the recipient to be in violation of FTA terms and conditions.

Other Federal Requirements

The following requirements are not federal clauses.

Full and Open Competition

In accordance with 49 U.S.C. § 5325(a) all procurement transactions shall be conducted in a manner that provides full and open competition.

Prohibition Against Exclusionary or Discriminatory Specifications

Apart from inconsistent requirements imposed by Federal statute or regulations, the contractor shall comply with the requirements of 49 USC 5323(h)(2) by refraining from using any FTA assistance to support procurements using exclusionary or discriminatory specifications.

Conformance with ITS National Architecture

Contractor shall conform, to the extent applicable, to the National Intelligent Transportation Standards architecture as required by SAFETEA-LU Section 5307(c), 23 U.S.C. Section 512 and as amended by MAP-21 23 U.S.C. § 517(d), note and follow the provisions of FTA Notice, "FTA National Architecture Policy on Transit Projects," 66 Fed. Reg. 1455 et seq. January 8, 2001, and any other implementing directives FTA may issue at a later date, except to the extent FTA determines otherwise in writing.

Access Requirements for Persons with Disabilities

Contractor shall comply with 49 USC 5301(d), stating Federal policy that the elderly and persons with disabilities have the same rights as other persons to use mass transportation services and facilities and that special efforts shall be made in planning and designing those services and facilities to implement that policy. Contractor shall also comply with all applicable requirements of Sec. 504 of the Rehabilitation Act (1973), as amended, 29 USC 794, which prohibits discrimination on the basis of handicaps, and the Americans with Disabilities Act of 1990 (ADA), as amended, 42 USC 12101 et seq., which requires that accessible facilities and services be made available to persons with disabilities, including any subsequent amendments thereto.

Notification of Federal Participation

To the extent required by law, in the announcement of any third party contract award for goods and services (including construction services) having an aggregate value of \$500,000 or more, contractor shall specify the amount of Federal

assistance to be used in financing that acquisition of goods and services and to express that amount of Federal assistance as a percentage of the total cost of the third party contract.

Interest of Members or Delegates to Congress

No members of, or delegates to, the US Congress shall be admitted to any share or part of this contract nor to any benefit arising therefrom.

Ineligible Contractors and Subcontractors

Any name appearing upon the Comptroller General's list of ineligible contractors for federally-assisted contracts shall be ineligible to act as a subcontractor for contractor pursuant to this contract. If contractor is on the Comptroller General's list of ineligible contractors for federally financed or assisted construction, the recipient shall cancel, terminate or suspend this contract.

Other Contract Requirements

To the extent not inconsistent with the foregoing Federal requirements, this contract shall also include those provisions attached hereto, and shall comply with the recipient's Procurement Guidelines, available upon request from the recipient.

Compliance with Federal Regulations

Any contract entered pursuant to this solicitation shall contain the following provisions: All USDOT-required contractual provisions, as set forth in FTA Circular 4220.1F, are incorporated by reference. Anything to the contrary herein notwithstanding, FTA mandated terms shall control in the event of a conflict with other provisions contained in this Agreement. Contractor shall not perform any act, fail to perform any act, or refuse to comply with any grantee request that would cause the recipient to be in violation of FTA terms and conditions. Contractor shall comply with all applicable FTA regulations, policies, procedures and directives, including, without limitation, those listed directly or incorporated by reference in the Master Agreement between the recipient and FTA, as 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.

Real Property

Any contract entered into shall contain the following provisions: Contractor shall at all times comply with all applicable statutes and USDOT regulations, policies, procedures and directives governing the acquisition, use and disposal of real property, including, but not limited to, 29 CFR 18.31, 49 CFR 24 Subpart B, FTA Circular 5010.1D, and FTA Master Agreement, as they may be amended or promulgated during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

Access to Services for Persons with Limited English Proficiency

To the extent applicable and except to the extent that FTA determines otherwise in writing, the Recipient agrees to comply with the policies of Executive Order No. 13166, "Improving Access to Services for Persons with Limited English Proficiency," 42 U.S.C. § 2000d 1 note, and with the provisions of U.S. DOT Notice, "DOT Guidance to Recipients on Special Language Services to Limited English Proficient (LEP) Beneficiaries," 70 Fed. Reg. 74087, December 14, 2005.

Environmental Justice

The Recipient agrees to comply with the policies of Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations," 42 U.S.C. § 4321 note, except to the extent that the Federal Government determines otherwise in writing.

Environmental Protections

Compliance is required with any applicable Federal laws imposing environmental and resource conservation requirements for the project. Some, but not all, of the major Federal laws that may affect the project include: the National Environmental Policy Act of 1969; the Clean Air Act; the Resource Conservation and Recovery Act; the comprehensive Environmental response, Compensation and Liability Act; as well as environmental provisions with Title 23 U.S.C., and 49 U.C. chapter 53. The U.S. EPA, FHWA and other federal agencies may issue other federal regulations and directives that may affect the project. Compliance is required with any applicable Federal laws and regulations in effect now or that become effective in the future.

Geographic Information and Related Spatial Data

Any project activities involving spatial data or geographic information systems activities financed with Federal assistance are required to be consistent with the National Spatial Data Infrastructure promulgated by the Federal Geographic Data ¹⁸⁶

Committee, except to the extent that FTA determines otherwise in writing.

Federal Single Audit Requirements for State Administered Federally Aid Funded Projects Only

Non Federal entities that expend \$500,000 or more in a year in Federal awards from all sources are required to comply with the Federal Single Audit Act provisions contained in U.S. Office of Management and Budget (OMB) Circular No. A 133, Audits of States, Local Governments, and Non Profit Organizations. Non Federal entities that expend Federal awards from a single source may provide a program specific audit, as defined in the Circular. Non Federal entities that expend less than \$500,000 in a year in Federal awards from all sources are exempt from Federal audit requirements for that year, except as noted in '3052.215(a), but records must be available for review or audit by appropriate officials of the Federal and State agencies.

Catalog of Federal Domestic Assistance (CFDA) Identification Number

The municipal project sponsor is required to identify in its accounts all Federal awards received and expended, and the Federal programs under which they were received. Federal program and award identification shall include, as applicable, the CFDA title and number, award number and year, name of the Federal agency, and name of the pass through entity.

CFDA number for the Federal Transportation Administration

A Recipient covered by the Single Audit Act Amendments of 1996 and OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," agrees to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF-SAC) required by OMB Circular A-133. The Recipient agrees to accomplish this by identifying expenditures for Federal awards made under Recovery Act separately on the SEFA, and as separate rows under Item 9 of Part III on the SF-SAC by CFDA number, and inclusion of the prefix "ARRA" in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF-SAC.

APPENDIX A TO DIVISION 100

SECTION 1 - BIDDING PROVISIONS

A. Federally Required Certifications By signing and delivering a Bid, the Bidder certifies as provided in all certifications set forth in this Appendix A - Federal Contract Provisions Supplement including:

- Certification Regarding No Kickbacks to Procure Contract as provided on this page 1 below.
- Certification Regarding Non-collusion as provided on page 1 below.
- Certification Regarding Non-segregated Facilities as provided by FHWA Form 1273, section III set forth on page 21 below.
- "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion" as provided by FHWA Form 1273, section XI set forth on page 32 below.
- "Certification Regarding Use of Contract Funds for Lobbying" as provided by FHWA Form 1273, section XII set forth on page 35 below.

Unless otherwise provided below, the term "Bidder", for the purposes of these certifications, includes the Bidder, its principals, and the person(s) signing the Bid. Upon execution of the Contract, the Bidder (then called the Contractor) will again make all the certifications indicated in this paragraph above.

CERTIFICATION REGARDING NO KICKBACKS TO PROCURE CONTRACT Except expressly stated by the Bidder on sheets submitted with the Bid (if any), the Bidder hereby certifies, to the best of its knowledge and belief, that it has not:

(A) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me) to solicit or secure this contract;

(B) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract, or;

(C) paid, or agreed to pay, to any firm, organization, or person (other than a bona fide employee working solely for me) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the contract;

By signing and submitting a Bid, the Bidder acknowledges that this certification is to be furnished to the Maine Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation in connection with this contract in anticipation of federal aid highway funds and is subject to applicable state and federal laws, both criminal and civil.

CERTIFICATION REGARDING NONCOLLUSION Under penalty of perjury as provided by federal law (28 U.S.C. §1746), the Bidder hereby certifies, to the best of its knowledge and belief, that:

the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with the Contract.

For a related provisions, see Section 102.7.2 (C) of the Standard Specifications - "Effects of Signing and Delivery of Bids" - "Certifications", Section 3 of this Appendix A entitled "Other Federal Requirements" including section XI - "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion" and section XII. - "Certification Regarding Use of Contract Funds for Lobbying."

B. Bid Rigging Hotline To report bid rigging activities call: **1-800-424-9071**

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

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

SECTION 2 - FEDERAL EEO AND CIVIL RIGHTS REQUIREMENTS

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 2 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Nondiscrimination & Civil Rights - Title VI The Contractor and its subcontractors 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 DOT assisted contracts. 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 the Department deems appropriate. The Contractor and subcontractors shall comply with Title VI of the Civil Rights Act of 1964, as amended, and with all State of Maine and other Federal Civil Rights laws.

For related provisions, see Subsection B - "Nondiscrimination and Affirmative Action - Executive Order 11246" of this Section 2 and Section 3 - Other Federal Requirements of this "Federal Contract Provisions Supplement" including section II - "Nondiscrimination" of the "Required Contract Provisions, Federal Aid Construction Contracts", FHWA-1273.

B. Nondiscrimination and Affirmative Action - Executive Order 11246 Pursuant to Executive Order 11246, which was issued by President Johnson in 1965 and amended in 1967 and 1978, this Contract provides as follows.

The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its efforts to achieve maximum results from its actions. The Contractor shall

document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

Ensure and maintain a working environment free of harassment, intimidations, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all forepersons, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and to maintain a record of the organization's responses.

Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

Provide immediate written notification to the Department's Civil Rights Office when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Design-Builder's efforts to meet its obligations.

Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under B above.

Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligation; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review

of these items with on-site supervisory personnel such as Superintendents, General Forepersons, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractor's and Subcontractors with whom the Contractor does or anticipates doing business.

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

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

Validate all tests and other selection requirements.

Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractor's and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.

Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

C. Goals for Employment of Women and Minorities Per Executive Order 11246, craft tradesperson goals are 6.9% women and .5% minorities employed. However, goals may be

adjusted upward at the mutual agreement of the Contractor and the Department. Calculation of these percentages shall not include On-the-Job Training Program trainees, and shall not include clerical or field clerk position employees.

For a more complete presentation of requirements for such Goals, see the federally required document "Goals for Employment of Females and Minorities" set forth in the next 6 pages below.

Start of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES
Federally Required Contract Document

§60-4.2 Solicitations

(d) The following notice shall be included in, and shall be part of, all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to §60-4.6 of this part (see 41 CFR 60-4.2(a)):

Notice of Requirement for Affirmative Action to Ensure Equal Opportunity (Executive Order 11246)

1. The Offeror's or bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

<u>Goals for female participation in each trade</u>	6.9%
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Goals for minority participation for each trade

Maine

001 Bangor, ME	0.8%
Non-SMSA Counties (Aroostook, Hancock, Penobscot, Piscataquis, Waldo, Washington)	
002 Portland-Lewiston, ME	
SMSA Counties: 4243 Lewiston-Auburn, ME	0.5%
(Androscoggin)	
6403 Portland, ME	0.6%
(Cumberland, Sagadahoc)	
Non-SMSA Counties:	0.5%
(Franklin, Kennebec, Knox, Lincoln, Oxford, Somerset, York)	

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs

construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non federally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be in violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated started and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the Contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, county and city, if any).

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department form 941;
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

- (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of the North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
 3. If the contractor, is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors for Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a. through p. of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical areas where the work is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specific.
 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant, thereto.
 6. In order for the non working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of

employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

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

employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment, efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing prior to the date for the acceptance of applications for apprenticeship or the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on site and in other areas of a Contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of

solicitation to minority and female contractor associations and other business associations.

- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7 a through p.). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7 a through p. of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program and reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions take on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, specific minority group of women is underutilized.)
 10. The Contractor shall not use the goals and timetables or affirmative action even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if standards to discriminate against any person because of race, color, religion, sex, or national origin.
 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementation regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the

requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.6.

- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

End of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES
 Federally Required Contract Document

D. Disadvantaged Business Enterprise (DBE) Requirements The Department has established an annual Disadvantaged Business Enterprise goal to be achieved through race neutral means. This goal will be adjusted periodically and will be provided by Supplemental Provision. The Contractor shall comply with all provisions of this section regarding DBE participation and the Department’s latest version of the Disadvantaged Business Enterprise Program Manual, said Manual being incorporated herein by reference. In the case of conflict between this Contract and said Manual, this Contract shall control. The Department reserves the right to adjust DBE goals on a project-by-project basis by addendum.

Policy. It is the Department’s policy that DBEs as defined in 23 CFR Part 26 and referenced in the Transportation Equity Act for 21st Century of 1998, as amended from the Surface Transportation Uniform Relocation Assistance Act of 1987, and the Intermodal Surface Transportation Efficiency Act of 1991. The intent hereto remains to provide the maximum opportunity for DBEs to participate in the performance of contracts financed in whole or in part with federal funds.

The Department and its Contractors shall not discriminate on the basis of race, color, national origin, ancestry, sex, age, or disability in the award and performance of DOT assisted contracts.

Disadvantaged Business Enterprises are those so certified by the Maine Department of Transportation Civil Rights Office prior to bid opening date.

The Department has determined that elements of a good faith effort to meet the contract goal include but are not limited to the following:

1. Whether the Contractor advertised in general circulation, trade association, and minority/women's-focus media concerning the subcontracting opportunities;
2. Whether the Contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract is being solicited;
3. Whether the Contractor followed up on initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested;
4. Whether the Contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goals;
5. Whether the Contractor provided interested DBEs with adequate information about the plans, specification and requirements of the contract;
6. Whether the Contractor negotiated in good faith with interested DBEs, not rejecting the DBE as unqualified without sound reasons based on a thorough investigation of their capabilities;
7. Whether the Contractor made efforts to assist interested DBEs with other appropriate technical/financial assistance required by the Department or Contractor;
8. Whether the Contractor effectively used the services of available minority/women's community organizations, minority/women's business assistance offices; and other organizations that provide assistance in the recruitment and placement of DBEs.

Substitutions of DBEs. The following may be acceptable reasons for Civil Rights Office approval of such a change order:

- The DBE defaults, voluntarily removes itself or is over-extended;
- The Department deletes portions of the work to be performed by the DBE.

It is not intended that the ability to negotiate a more advantageous contract with another certified DBE be considered a valid basis for such a change in DBE utilization once the DBE Bid Submission review has been passed. Any requests to alter the DBE commitment must be in writing and included with the change order.

Failure to carry out terms of this Standard Specification shall be treated as a violation of this contract and will result in contract sanctions which may include withholding of partial payments totaling the creditable dollars amount which would have been paid for said DBE participation, termination of this contract or other measures which may affect the ability of the Contractor to obtain Department contracts.

Copies of the Maine Department of Transportation's DBE Program may be obtained from:

Maine Department of Transportation
Civil Rights Office
#16 State House Station
Augusta, Maine 04333-0016
tel. (207) 624-3519

Quarterly Reporting Requirement. The Contractor must submit Semi-annual reports of actual dollars paid to Disadvantaged Business Enterprises (DBE's) on this Project to the MaineDOT Civil Rights Office by the end of the third week of April and October for the period covering the preceding six months considered Federal Fiscal Year periods. The reports will be submitted directly to the Civil Rights Office on the form provided in the latest version of the DBE Program Manual. Failure to submit the report by the deadline may result in a withholding of approval of partial payment estimates by the Department.

SECTION 3 - OTHER FEDERAL REQUIREMENTS

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 3 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Buy America

If the cost of products purchased for permanent use in this project which are manufactured of steel, iron or the application of any coating to products of these materials exceeds 0.1 percent of the contract amount, or \$2,500.00, whichever is greater, the products shall have been manufactured and the coating applied in the United States. The coating materials are not subject to this clause, only the application of the coating. In computing that amount, only the cost of the product and coating application cost will be included.

Ore, for the manufacture of steel or iron, may be from outside the United States; however, all other manufacturing processes of steel or iron must be in the United States to qualify as having been manufactured in the United States.

United States includes the 50 United States and any place subject to the jurisdiction thereof.

Products of steel include, but are not limited to, such products as structural steel, piles, guardrail, steel culverts, reinforcing steel, structural plate and steel supports for signs, luminaries and signals.

Products of iron include, but are not limited to, such products as cast iron grates.

Application of coatings include, but are not limited to, such applications as epoxy, galvanized and paint.

To assure compliance with this section, the Contractor shall submit a certification letter on its letterhead to the Department stating the following:

“This is to certify that products made of steel, iron or the application of any coating to products of these materials whose costs are in excess of \$2,500.00 or 0.1 percent of the original contract amount, whichever is greater, were manufactured and the coating, if one was required, was applied in the United States.”

B. Materials

a. Convict Produced Materials References: 23 U.S.C. 114(b)(2), 23 CFR 635.417

Applicability: FHWA's prohibition against the use of convict material only applies to Federal-aid highways. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if: 1) such materials have been produced by convicts who are on parole, supervised release, or probation from a prison; or 2) such material has been produced in a qualified prison facility, e.g., prison industry, with the amount produced during any 12-month period, for use in Federal-aid projects, not exceeding the amount produced, for such use, during the 12-month period ending July 1, 1987.

Materials obtained from prison facilities (e.g., prison industries) are subject to the same requirements for Federal-aid participation that are imposed upon materials acquired from other sources. Materials manufactured or produced by convict labor will be given no preferential treatment.

The preferred method of obtaining materials for a project is through normal contracting procedures which require the contractor to furnish all materials to be incorporated in the work. The contractor selects the source, public or private, from which the materials are to be obtained (23 CFR 635.407). Prison industries are prohibited from bidding on projects directly (23 CFR 635.112e), but may act as material supplier to construction contractors.

Prison materials may also be approved as State-furnished material. However, since public agencies may not bid in competition with private firms, direct acquisition of materials from a prison industry for use as State-furnished material is subject to a public interest finding with the Division Administrator's concurrence (23 CFR 635.407d). Selection of materials produced by convict labor as State-furnished materials for mandatory use should be cleared prior to the submittal of the Plans Specifications & Estimates (PS&E).

b. Patented/Proprietary Products References: 23 U.S.C. 112, 23 CFR 635.411

FHWA will not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

- the item is purchased or obtained through competitive bidding with equally suitable unpatented items,
- the STA certifies either that the proprietary or patented item is essential for synchronization with the existing highway facilities or that no equally suitable alternative exists, or
- the item is used for research or for a special type of construction on relatively short sections of road for experimental purposes. States should follow FHWA's procedures for "Construction Projects Incorporating Experimental Features" ([expermnt.htm](#)) for the submittal of work plans and evaluations.

The primary purpose of the policy is to have competition in selection of materials and allow for development of new materials and products. The policy further permits materials and products that are judged equal may be bid under generic specifications. If only patented or proprietary products are acceptable, they shall be bid as alternatives with all, or at least a

reasonable number of, acceptable materials or products listed; and the Division Administrator may approve a single source if it can be found that its utilization is in the public interest.

Trade names are generally the key to identifying patented or proprietary materials. Trade name examples include 3M, Corten, etc. Generally, products identified by their brand or trade name are not to be specified without an "or equal" phrase, and, if trade names are used, all, or at least a reasonable number of acceptable "equal" materials or products should be listed. The licensing of several suppliers to produce a product does not change the fact that it is a single product and should not be specified to the exclusion of other equally suitable products.

c. State Preference References: 23 U.S.C. 112, 23 CFR 635.409

Materials produced within Maine shall not be favored to the exclusion of comparable materials produced outside of Maine. State preference clauses give particular advantage to the designated source and thus restrict competition. Therefore, State preference provisions shall not be used on any Federal-aid construction projects.

This policy also applies to State preference actions against materials of foreign origin, except as otherwise permitted by Federal law. Thus, States cannot give preference to in-State material sources over foreign material sources. Under the Buy America provisions, the States are permitted to expand the Buy America restrictions provided that the STA is legally authorized under State law to impose more stringent requirements.

d. State Owned/Furnished/Designated Materials References: 23 U.S.C. 112, 23 CFR 635.407

Current FHWA policy requires that the contractor must furnish all materials to be incorporated in the work, and the contractor shall be permitted to select the sources from which the materials are to be obtained. Exceptions to this requirement may be made when there is a definite finding, by MaineDOT and concurred in by Federal Highway Administration's (FHWA) Division Administrator, that it is in the public interest to require the contractor to use materials furnished by the MaineDOT or from sources designated by MaineDOT. The exception policy can best be understood by separating State-furnished materials into the categories of manufactured materials and local natural materials.

Manufactured Materials When the use of State-furnished manufactured materials is approved based on a public interest finding, such use must be made mandatory. The optional use of State-furnished manufactured materials is in violation of our policy prohibiting public agencies from competing with private firms. Manufactured materials to be furnished by MaineDOT must be acquired through competitive bidding, unless there is a public interest finding for another method, and concurred in by FHWA's Division Administrator.

Local Natural Materials When MaineDOT owns or controls a local natural materials source such as a borrow pit or a stockpile of salvaged pavement material, etc., the materials may be designated for either optional or mandatory use; however, mandatory use will require a public interest finding (PIF) and FHWA's Division Administrator's concurrence.

In order to permit prospective bidders to properly prepare their bids, the location, cost, and any conditions to be met for obtaining materials that are made available to the contractor shall be stated in the bidding documents.

Mandatory Disposal Sites Normally, the disposal site for surplus excavated materials is to be of the contractor's choosing; although, an optional site(s) may be shown in the contract provisions. A mandatory site shall be specified when there is a finding by MaineDOT, with the concurrence of the Division Administrator, that such placement is the most economical or that the environment would be substantially enhanced without excessive cost. Discussion of the mandatory use of a disposal site in the environmental document may serve as the basis for the public interest finding.

Summarizing FHWA policy for the mandatory use of borrow or disposal sites:

- mandatory use of either requires a public interest finding and FHWA’s Division Administrator's concurrence,
- mandatory use of either may be based on environmental consideration where the environment will be substantially enhanced without excessive additional cost, and
- where the use is based on environmental considerations, the discussion in the environmental document may be used as the basis for the public interest finding.

Factors to justify a public interest finding should include such items as cost effectiveness, system integrity, and local shortages of material.

C. Standard FHWA Contract Provisions - FHWA 1273

Unless expressly otherwise provided in the Bid Documents, the following “Required Contract Provisions, Federal Aid Construction Contracts”, FHWA-1273, are hereby incorporated into the Bid Documents and Contract.

Start of FHWA 1273 REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS (As revised through May 1, 2012)

FHWA-1273 -- Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination

- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

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

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

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

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield

qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

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

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

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

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

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

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with

Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor 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 DOT-assisted contracts. 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 the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-

minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, 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.d. 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 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 classification and wage rates conformed under paragraph 1.b. 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.

b. (1) 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:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) 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.

(3) 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 Wage and Hour Administrator for determination. The Wage and Hour 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) 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.

c. 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.

d. 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.

2. Withholding

The contracting agency 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, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, 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

a. 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. 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.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) 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:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) 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;

(iii) 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.

(3) 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 3.b.(2) of this section.

(4) 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.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the

contracting agency, the State DOT, the FHWA, 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 FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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

a. Apprentices (programs of the USDOL).

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, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, 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 Office of Apprenticeship Training, Employer and Labor Services 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 determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, 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.

b. Trainees (programs of the USDOL).

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.

c. Equal employment opportunity. 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.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

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 Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 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.

a. 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).

b. 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).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

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 (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), 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 FHWA or the contacting agency 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 paragraph (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.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not

permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal 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) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. 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 this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--
Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. 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 any Federal 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.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal 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.

2. 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. 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.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR
APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL
ACCESS ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

End of FHWA 1273

