CONTRACT AND CONTRACT DOCUMENTS
For
LEWISTON RIVERSIDE GREENWAY
BICYCLE/PEDESTRIAN FACILITY
PHASE II
Federal Project No. STP-1184(800)X/ Me DOT PIN No. 11848.00
Bid Number: 2014-012

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
103 ADAMS AVENUE
LEWISTON, MAINE 04240

Tel. 207 513-3003  Fax 207 784-5647
CITY OF LEWISTON, MAINE
DEPARTMENT OF PUBLIC WORKS

CONTRACT AND CONTRACT DOCUMENTS
FOR
RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY
PHASE II
FEDERAL PROJECT No. STP-1184(800)X / MEDOT PIN No. 11848.00
BID NO. 2014-012

PREPARED BY
CITY OF LEWISTON
ENGINEERING DIVISION
# RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY

## PHASE II

**FEDERAL PROJECT No. STP-1184(800)X / MEDOT PIN No. 11848.00**

**BID NO. 2014-012**

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Environmental Package w/ Approved Permits
Sealed proposals for the **RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY – PHASE II** will be received by the office of Budget/Purchasing at 27 Pine Street, City Hall, Lewiston, ME 04243-0479 until **May 20, 2014 at 2:00 PM** prevailing time, and at that time publicly opened and read.

**A mandatory pre-bid conference will be held on Tuesday, May 6th, 2014 at 10:00am. The location will be Lewiston Public Works, 103 Adams Ave., Lewiston, Maine, first-floor Conference Room.**

The work for the **RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY – PHASE II** shall consist of, but not limited to, the complete and satisfactory construction of approximately 6600 LF of a 10’ wide hot mix asphalt (HMA) trail, 4000 CY of Common Borrow, 3300 CY of Aggregate Base, Option III culvert pipe, 6” underdrain, chain link fence, a 25'-11” Super-Span™ metal open-bottom arch crossing, pre-fabricated concrete block gravity wall, pavement markings, riprap, timber guardrail; and all other incidental work as necessary to satisfactorily complete the project as outline or implied in the Plans/Specifications.

**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”**

Bids will be accepted from all bidders. The basis of award will be to the lowest responsive bidder. The lowest responsive bidder must demonstrate successful completion of projects of similar size and scope to be considered for the award of this contract.

Each bidder is required to state in his/her Proposal his/her name and place of residence and the names of all persons or parties interested as principals with him/her; and that the Proposal is made without any connection with any other bidder making any Proposal for the same work; and that no person acting for, or employed by, the City of Lewiston is directly or indirectly interested in the Proposal or in any contract which may be entered into to which the Proposal relates, or in any portion of the profits there from, except as provided by the City Charter.

The Proposal must be signed by the bidder with his/her full name and address and be enclosed in a sealed envelope together with the bid security. The sealed envelope shall be marked with the name and address of the bidder and entitled:
RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY – PHASE II
Bid No. 2014-012

and addressed to: “Director of Budget & Purchasing, City Hall, Lewiston, Maine”. If the Proposal is forwarded by mail, the sealed envelope containing the Proposal and marked as above must be enclosed in a second envelope which shall be addressed to: “Director of Budget & Purchasing, 27 Pine Street, City Hall, Lewiston, ME 04243-0479.” All mailed Proposals should be sent by registered mail to insure delivery.

Contact Person: Norman Beauparlant, Director of Budget/Purchasing, 207-513-3127 Ext. 3259. Email: nbeauparlant@lewistonmaine.gov.


Any bidder may withdraw his/her Proposal prior to the scheduled time for the opening of Proposals upon presentation to the Director of Budget & Purchasing of a request, in writing, to do so. Any bidder who withdraws his/her Proposal within thirty (30) days after the actual opening thereof shall be considered to have abandoned his/her Proposal and the bid security accompanying the Proposal will be forfeited to the City of Lewiston. Any Proposal received after the scheduled opening time will not be considered.

The Finance Committee reserves the right to waive any formality and may consider as informal any Proposal not prepared and submitted in accordance with these provisions. The Finance Committee reserves the right to reject all Proposals if it is deemed to be in the public interest to do so.

No Proposal will be considered unless it is accompanied by a bid security in the form of a bid bond or certified check in the amount of five percent (5%) of the total bid price, made out in favor of the City of Lewiston. All bid securities will be released upon deliverance of a signed Contract or, if no Contract award is made, within forty-five (45) days after the opening of the Proposals, unless forfeited as herein stipulated.

The Contract must be signed within ten (10) days, Saturdays, Sundays, and holidays excluded, after the date of notification to the bidder by the Director of Budget & Purchasing of the acceptance of his/her Proposal and readiness of the Contract to be signed. If the bidder fails or neglects, after such notification, to execute the Contract, the Finance Committee may determine that the Proposal has been abandoned; and, in such case, the bid security accompanying the Proposal shall be forfeited to the City of Lewiston.

A Performance Bond and a Labor and Material Payment Bond, preferably executed on AIA Bond Form Number A311, in an amount equal to the total Contract price, of a surety
company satisfactory to the Director of Budget & Purchasing, will be required of the successful bidder to ensure completion of the work and the proper fulfillment of the conditions of the Contract. The total Contract price shall mean the total bid price as stated in the Proposal based on the estimated quantities of the various items of work.

The work must be commenced within ten (10) days after the date of the Contract signing unless otherwise specified in the Specifications or directed by the Director of Budget & Purchasing, in writing, and is to be continued with diligent regularity until its completion within the time limit specified.

All Proposals must be made on the blank Proposal Form bound in the Contract Documents. Bidders shall state prices for each separate item of work as called for in the Proposal Form. These prices are to cover all expenses incidental to the completion of the work in full conformity with the Contract Documents.

The prices must be stated both in words and figures. Should a discrepancy be found between the prices written in words and the prices written in figures, the prices written in words shall govern. Proposals which do not contain prices for all items which are called for or which otherwise are not in conformity with this Notice may be rejected.

Each bidder shall make his/her Proposal from his/her own examinations and estimates, and shall not hold the City, its agents or employees, responsible for, or bound by, any schedule, estimate, sounding, boring, or any plan thereof; and shall, if any error in any plan, drawing, specification or direction relating to anything to be done under this Contract comes to his/her knowledge, report it at once, in writing, to the Engineer.

All materials and labor required to complete the work shall be supplied by the Contractor unless otherwise provided for in the Special Provisions, Plans or the Standard and Supplemental Specifications. The cost and expense of all the necessary labor, tools and equipment required to complete the work shall be included in the prices stated in the Proposal.

The City may set off any unpaid taxes, fees or other charges or other amounts owed by the contractor against the contract price, in full or partial satisfaction.

Plans and Specifications can be obtained free of charge on the City of Lewiston web site under Finance Dept/Bids and Awards (www.lewistonmaine.gov).

All questions by prospective bidders pertaining to the Contract Documents, Plans and Specifications must be received, in writing, by the Engineer, at least five (5) days before the date set for the opening of the Proposals. Any questions which, in the opinion of the Director of Budget & Purchasing, require interpretation, will be posted to the City of Lewiston web site and will be e-mailed to the plan holders, with the interpretation, in the form of a numbered Addendum, to each person or firm who has taken out a set of Contract Documents, not later than three (3) days prior to the scheduled opening of the Proposals. Addenda issued later than three (3) days prior to the scheduled opening of the Proposals may be by e-mail,
telephone, or fax machine. Bidders shall acknowledge receipt of all Addenda in the space provided therefore in the Proposal Form, whether the Addenda are in response to questions or otherwise issued by the City and whether the Addenda are received by e-mail, telephone or fax.

The Special Provisions, Plans, and the Standard and Supplemental Specifications delineate the particular project to which the Contract Documents pertain. Should any discrepancy be found to exist between the Supplemental Specifications and the Standard Specifications and/or the Contract Plans, the Supplemental Specifications and/or Contract Plans shall govern.

If the Bid Price of any or several bid items submitted with this Proposal appear to be extremely low or high, compared to the actual cost of performing the work, the Bidder may be asked to explain, in writing, how the work in question is to be performed at the price or prices bid before a decision is made by the City to award a Contract or reject the Bid.

Proposals will be considered irregular and will be rejected for the following reasons:

A. If the Proposal is on a form other than that furnished by the City or if the form is altered in any way.

B. If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may make the Proposal incomplete, indefinite, or ambiguous as to its meaning.

C. If the Bidder adds any provisions reserving the right to accept or reject an award or to enter into a Contract pursuant to an award.

D. If the Proposal does not contain a unit price for each pay item listed unless otherwise specified.

E. If any of the bid prices are unbalanced, or do not reflect the actual cost required to perform the work, as outlined in the Plans and Specifications.

The bid shall also be subject to Section 102.11 “Bid Responsiveness” in the MDOT Specifications in regards to curable and non-curabile bid defects.
CITY OF LEWISTON
PROPOSAL FOR
RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY
PHASE II
FEDERAL PROJECT No. STP-1184(800)X / MEDOT PIN No. 11848.00

To: Director of Budget & Purchasing
   City Hall, Lewiston, Maine

Dear Sir/Madam:

The undersigned hereby declares that he/she has carefully examined the location of the proposed work, the proposed Contract Form and the Contract Documents therein referred to and that he/she proposes and agrees, if this Proposal is accepted, that he/she will contract with the City of Lewiston, by its City Administrator to provide all machinery, tools, labor, equipment and other means of construction and to do all the work and to furnish all the materials, except those specified in the Specifications to be furnished by the City, necessary to complete the work in the manner and time therein prescribed, in accordance with the conditions and requirements set forth in the Contract Documents and the requirements of the Engineer and/or Director of Public Works as provided for therein; and that he/she will accept in full payment therefore the following sums to wit:

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<td>($_______)SF</td>
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</table>
The undersigned acknowledges the receipt of Addenda numbered ________________.

The undersigned further agrees that, after notification by the Director of Budget & Purchasing of the acceptance of his/her Proposal and the readiness of the Contract for signature, he/she will execute the Contract and furnish the required Bonds within ten (10) days, Saturdays, Sundays and Holidays, excluded, and that he/she will commence the work within ten (10) days after the execution of the Contract and deliverance of the Bonds, unless otherwise specified in the Supplemental Specifications or directed by the Director of Public Works or City Engineer in writing; and that he/she will prosecute the work to its completion within the time limit specified in the Supplemental Specifications. The undersigned further agrees that there shall be deducted from monies due the Contractor, not as a penalty, but as inspection costs, the sum of five hundred ($500.00) dollars for each working day beyond the time limit specified in the Supplemental Specifications which is required by the Contractor to complete the whole work to the satisfaction of the Engineer and the Director of Public Works.

The undersigned further agrees that in the employment of labor, preference will be given, all other things being equal, to the citizens of Lewiston and of the State of Maine, in that order. The undersigned hereby further declares that the only persons or parties interested in this Proposal, as principals, are named below; that the Proposal is made without any connection with any other person or party making any Proposal for the same work; and that no person acting for or employed by the City of Lewiston is directly or indirectly interested in this Proposal or in any contract which may be made under it or in profits expected to arise there from, except as provided by the City Charter. The full names and addresses of all persons and parties interested in this Proposal, as principals, are as follows: (Give first and last names in full; and in the case of a Corporation, give names and addresses of President, Treasurer and Manager; and in case of a Partnership, give names and addresses of members):

Accompanying this Proposal is a bid security deposit in the amount of $(_______), which is to become the property of the City of Lewiston, by forfeiture, if the undersigned fails, after notification by the Director of Budget & Purchasing of the acceptance of his/her Proposal, to execute a Contract with the City and furnish the required Bonds within the time agreed to herein; or, in case the undersigned withdraws his/her Proposal within thirty (30) days after the
opening of the Proposals. Otherwise, the deposit will be returned to the undersigned in accordance with the provisions in the Notice to Contractors.

Signature of person, firm, or corporation making bid:

___________________________________________________________

By: __________________________

Legal Address:

___________________________________________________________

Principal place of business:

___________________________________________________________

FIRM’S I.R.S. IDENTIFICATION NO: ____________ Date: ________________

Address to which all correspondence and notifications are to be sent:

___________________________________________________________

Phone No: __________________________
This Agreement, made and entered into this _______ day of _______(Month) in the year Two Thousand Fourteen, by and between the City of Lewiston, Maine, a municipal corporation existing under the laws of the State of Maine, hereinafter called “Owner”, by its City Administrator, party of the first part, and

hereinafter called “Contractor”, with legal address and principal place of business at

party of the second part:

WITNESSETH:
That the parties to these presents, each in consideration of the covenant and agreements on the part of the other herein contained, have covenanted and agreed and do hereby covenant and agree, the party of the first part for itself and the party of the second part for himself/herself and his/her heirs, executors, administrators and assigns under the penalties expressed in the Performance Bond and the Labor and Material Payment Bond as follows:

That this Agreement includes the following documents, hereinafter referred to as Contract Documents, which are attached hereto and incorporated by reference into this Agreement:

A. Notice to Contractors
B. Proposal
C. Contract
D. Notice of Award
E. Notice to Proceed
F. Supplemental Specifications
G. Standard Specifications
H. Contract Plans, if any
I. Addenda, if any
J. Federal Conditions, if any

That the party of the second part will do all the work, furnish all the materials, tools and equipment, except as otherwise specified, and do everything necessary and proper for performing and faithfully completing the work required by the Contract Documents in strict conformity with the provisions of the Contract Documents within the time specified in the Special Provisions, Plans, and the Standard and Supplemental Specifications. That the party of the first part will pay the party of the second part as full compensation for well and faithfully completing the whole work according to the Contract Documents as follows:

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The party of the second part represents and warrants:

A. That he/she is financially solvent; and is experienced in and competent to perform the work; and is able to furnish the plant, materials, supplies, labor, and equipment to be furnished by him/her; and,

B. That he/she is familiar with all Federal, State, Municipal and Departmental laws, ordinances and regulations which may in any way affect the work or those employed therein; and,
C. That such temporary and permanent work required by the Contract Documents to be done by him/her can be satisfactorily constructed and used for the purposes for which it is intended; and that such construction will not injure any person or damage any property other than that damage caused by the construction; and,

D. That he/she has carefully examined the Contract Documents and the site of the work; and from his/her own investigation has satisfied himself/herself as to the nature and location of the work, the character, quality and quantity of surface and subsurface material likely to be encountered, the character of equipment and other facilities needed for the performance of the work, the general and local conditions; and all the other materials and conditions which may in any way affect the work or its performance.

IN WITNESS WHEREOF, the said City, by its City Administrator and the said ________________________________

________________________________________________________

________________________________________________________

By its __________________________ thereunto duly authorized have hereunto set their hands and
seals the day and year first above written.

Signed in the presence of:

_________________________ By: ____________________________
Witness Edward Barrett, City Administrator

_________________________ By: ____________________________
Witness Contractor
NOTICE OF AWARD

To:

Bid #: 2014-012

RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY - PHASE II
FEDERAL PROJECT No. STP-1184(800)X / MEDOT PIN No. 11848.00

The City of Lewiston has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated ______and Information for Bidders.

You are hereby notified that your BID has been accepted for items __________________ for a total award of ___________. You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR’S Performance Security and certificates of insurance within ten (10) days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) days from the date of this Notice, said City of Lewiston will be entitled to consider all your rights arising out of the City acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The City will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of the NOTICE OF AWARD to the City of Lewiston.

Dated this: ______________________

By: _____________________________
Project Engineer

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged

by (firm) ____________________________________________________________
this the _____________day of ____________________________, 2014

By: __________________________________________
Title: __________________________________________
NOTICE TO PROCEED

To:

Bid #: 2014-012

RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY - PHASE II
FEDERAL PROJECT No. STP-1184(800)X / MEDOT PIN No. 11848.00

You are hereby notified to proceed with the work entitled ________________________, together with all necessary appurtenances, and to diligently prosecute the work.

You are instructed to immediately take the necessary steps for execution of the work within ten (10) calendar days (or other start time as specified) from the date of this Notice to Proceed. The work is to be completed by ____________ as stated in the Contract.

By: __________________________
   Project Manager

Title: __________________________

Date: __________________________
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10.01 SCPE OF WORK

The general scope of the project includes, but is not limited to, the following:

The work for the RIVERSIDE GREENWAY BICYCLE/PEDESTRIAN FACILITY – PHASE II shall consist of, but not limited to, the complete and satisfactory construction of approximately 6600 LF of a 10’ wide hot mix asphalt (HMA) trail, 4000 CY of Common Borrow, 3300 CY of Aggregate Base, Option III culvert pipe, 6” underdrain, chain link fence, a 25’-11” Super-Span™ metal open-bottom arch crossing, pre-fabricated concrete block gravity wall, pavement markings, riprap, timber guardrail; and all other incidental work as necessary to satisfactorily complete the project as outline or implied in the Plans/Specifications.

The contractor will submit requisition for payment based on the phase of the project that the work was completed on. The following is a breakout of the estimated quantity for each phase of the project.

10.02 TIME LIMIT

Construction shall commence on this project as early as possible in the 2014 construction season and shall progress continuously until complete, with completion no later than October 1, 2014. The Contractor shall be responsible for ordering his/her materials promptly.

Note: As stated in the NRPA permit L-25903-TA-C-N, all in-stream work shall occur between July 1 through October 1.

The Director of Public Works or his/her authorized representative may extend the Time Limit, if the Contractor submits, in writing, evidence that he/she cannot complete the Project within the Time Limit specified because of long delivery time on the materials or other justifiable reason.

10.03 SAFETY

During the course of the work, the Contractor shall assume full responsibility for the safety and protection of all workers and the general public, and shall meet all applicable local, State and
Federal safety standards. The contractor shall maintain safe and continuous vehicular and pedestrian traffic while work is being done.

The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act. The Contractor shall have a competent person or persons as required under the Occupational Safety and Health Act on the site to inspect the work and to supervise the conformance of the Contractor's operations with the regulations of the Act. Bidders are urged to make themselves familiar with these requirements of the regulations.

10.04 PRECONSTRUCTION AND UTILITY CONFERENCE

A Preconstruction and Utility Conference will be held between the Contractor, Utility Companies, and the City of Lewiston, at a mutually agreed time, to review the Contractor's proposed methods of complying with the requirements of the Plans and Specifications and the Regulations of the City.

At the Preconstruction meeting the Contractor shall submit to the Engineer a work schedule, traffic control plan, and Shop Drawings, submittals, erosion control plan and contractor's safety plan.

10.05 CHANGE IN THE SCOPE OF WORK

The City of Lewiston reserves the right to add or delete portions of the work required under this Contract, using unit prices established in the Proposal. The Contractor's attention is directed to Sections 20.29, "Extra Work" and 20.30 “Reduction of Work” of the Specifications. If no unit price exists, a change order must be negotiated between the City of Lewiston and the Contractor.

10.06 MATERIALS

The Contractor shall supply all materials, equipment, and labor as necessary to complete the Project in accordance with the Plans and Specifications.

10.07 FIELD LAYOUT

The City shall provide control points once for the Contractor, if they exist. The Contractor shall establish baseline from the supplied control points. The baseline in these Specifications is for reference only to locate items and is not meant to be exact locations. GIS based plans shall be laid out by a method as directed by the Engineer. If, during the course of construction, the layout points, benchmarks, or control points are disturbed by the Contractor, it shall be his/her responsibility to re-establish their locations.
10.08 **DISPOSAL OF SURPLUS MATERIAL**

Existing pavement may be disposed of at the Gendron & Gendron quarry on Alfred Plourde Parkway, St. Laurent and Son pit in Sabattus or other approved location. Surplus excavation and bricks/concrete may be disposed of at the City of Lewiston dump site (quarry) on River Rd. or other approved dump site. Excavation disposed of at the City quarry or any other fill site **MUST** have ALL asphalt and asbestos pipe separated out. The tipping fee will be waived.

10.09 **SHOP DRAWINGS**

The Contractor shall submit two (2) copies of shop drawings to the Engineer for his/her review and approval, for the following materials: gravels, hot mix asphalt, catch basin and manhole frame and covers.

10.10 **SITE INVESTIGATION**

The Contractor shall examine the Plans/Specifications and site of the work and from his/her own investigation, determine the nature and location of the work, the general and local conditions, particularly those bearing on access, transportation, quality and quantity of surface and sub-surface materials to be encountered, any dewatering, the machinery and services required to complete the Project as required by the Contract Documents and all other aspects of the work.

10.11 **MAINTENANCE OF TRAFFIC**

The Contactor shall be required to maintain one lane, in each direction, for traffic and emergency vehicles at all times. If the contractor cannot maintain traffic in each direction, the Engineer may allow one lane traffic in short sections. Completely closing traffic lanes will not be permitted except under special permission from the Public Works Director, Fire Chief, and the Police Chief. The Contractor shall install detour signs as required by the Engineer. The City shall be responsible for approving the traffic plan.

10.12 **MISCELLANEOUS WORK**

Performance and Payment Bonds - The Contractor shall include in his/her Proposal under the "Miscellaneous Work" item, the cost of his/her Performance and Payment Bond. The Contractor shall be paid this amount on his/her first partial payment provided that invoices substantiating the amount are submitted to the Engineer prior to payment.

**Sweeping and Dust Control** - The Contractor shall be responsible for controlling dust at all times by sweeping existing pavement and watering gravel roadways. Streets shall be swept and calcium chloride shall be applied to gravel daily to control dust overnight. When project and traffic conditions require, as determined by the Engineer, a water truck shall remain on site. The truck may be filled free of charge at the Public Works facility. If for any reason the Contractor does not have a water truck available and the City is forced to use a Public Works
truck or other method to control dust, the Contractor will be charged a fee to be subtracted from the next pay requisition.

**Miscellaneous** - The cost of all other incidental construction work required to complete the whole work as specified or implied in the Plans and Specifications for which there is no pay item, will be paid under the "Miscellaneous Work" item. An itemized cost breakdown for the "Miscellaneous Work" item shall be given to the Engineer at the Preconstruction Conference.

### 10.13 SITE MAINTENANCE AND CLEAN UP

The Contractor shall maintain a neat work area at all times with all fill or other materials picked up off the street every night and the road swept. At no time during the work shall fill, tools, pipe, structures, equipment or vehicles be placed, parked or stored on private property. No vehicles or equipment shall be parked in private driveways at any time. All work shall be completed within the right-of-way unless easements or other arrangements have been made. All driveways shall be filled in sufficiently every night for property owners to enter without damage. Homeowners shall be given adequate notice in the morning to move their vehicles before work begins in front of their driveway.

All debris resulting from the operations under this Contract and all tools and apparatus are to be removed from the site at the DAILY completion of the work and the site left clear and free from hazards, to the satisfaction of the City of Lewiston. Any equipment or materials left on the edge of the street at night shall be well barricaded with reflective barrels or barricades.

### 10.14 PREPARATION FOR FINAL PAVING:

All temporary pavement and gravel trenches shall be maintained by the Contractor until final pavement is placed. Trench preparation for final paving shall be performed immediately prior to final paving (no more than one day beforehand). Remove the top layer of aggregate base placed during backfilling for the appropriate thickness of pavement. Fine grading of mainline trenches shall be completed by use of a bulldozer or grader. Trench edges at existing pavement shall be clean and loose chunks of pavement removed. Reshape and compact trench according to Div. 90.08 in preparation for final paving. No separate payment shall be made for the aggregate base material removed.

### 10.15 PAVING:

Streets, sidewalks and driveways shall be paved by the Contractor. Paving shall be completed according to Division 80 of these specifications.

An asphalt escalator shall apply according to MDOT spec Section 108, as attached to this Division. The equivalent MDOT Item No shall be applied (403.207, 403.208, 403.209, 403.210) and the pay adjustment shall be made at the completion of the project. The paving shall be subject to the MaineDOT Special Provision 400 – Pavements, February 12, 2013 revision.
10.16 **SALES TAX:**

Materials purchased for use on this project are exempt from State Sales and Use or Excise taxes to the extent allowed by law.

End of Section
# DIVISION 20

## GENERAL PROVISIONS

## STANDARD SPECIFICATIONS

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DIVISION 20

GENERAL PROVISIONS

STANDARD SPECIFICATION

20.01 SCOPE:

These Standard Specifications and Addenda, if any, are to govern construction of storm sewers, sanitary sewers, water lines, streets, sidewalks, parking lots, general construction and other related work, for the City of Lewiston, and they shall become part of any contract with the City for the construction of said work. Provisions of these Specifications shall be modified or changed only in writing. These Standard Specifications will be amended by Supplemental Specifications as necessary and by Contract Plans.

The Supplemental Specifications and Contract Plans delineate the particular project to which the Contract Documents pertain. Should any discrepancy be found to exist between the Standard Specifications and the Supplemental Specifications and/or the Contract Plans, the Supplemental Specifications and/or Contract Plans shall govern.

20.02 DEFINITIONS:

A. **Contract Documents:** Whenever the term Contract Documents, or a pronoun in its stead, is used, it shall mean and include, but not necessarily limited to, these items: The Notice to Contractors, the Proposal, the Contract, the Supplemental Specifications, the Standard Specifications, the Contract Plans, any other documents included with these Specifications and attached thereto, and any Addenda to the above issued prior to the date of this Contract.

B. **Contractor:** Whenever the term Contractor, or a pronoun in its stead, is used, it shall mean the person or persons or co-partnership or corporation or other entity which has entered into this agreement or their legal representative.

C. **Owner:** Whenever the term Owner, or a pronoun in its stead is used, it shall mean the City of Lewiston, acting through its designated officials and/or employees.

D. **City Engineer or Engineer:** Whenever the term City Engineer, or a pronoun, in their stead is used, it shall mean the City Engineer of the City of Lewiston or his/her assistants or inspector acting under him/her or his/her duly authorized representatives acting for him/her, limited to the particular duties entrusted to them.

E. **Director of Public Works or Director:** Whenever the term Director of Public Works, Director or a pronoun, in their stead is used, it shall mean the Director of Public Works of the City of Lewiston or his/her assistants or inspectors acting under him/her, limited to the particular duties entrusted to them.

F. **ASTM:** Whenever the abbreviation ASTM is used, it shall mean the American Society for Testing Materials; and, unless otherwise stated, refer to the latest revision of the particular standard.
G. **Specification:** Whenever the term Specifications or a pronoun in its stead is used, it shall mean and include the Standard Specifications as herein set forth and any Supplemental Specifications included in the Contract Documents.

H. **Contract Plans:** Whenever the term Contract Plans, or a pronoun in their stead, is used, it shall mean and include all drawings, graphic representations, diagrams and any notes or explanations thereon supplied to the Contractor before the date of this Contract.

I. **Lump Sum Bid Price:** Whenever the term Lump Sum Bid Price, Lump Sum Bid, Lump Sum or a pronoun in their stead is used, it shall mean the amount of money mutually agreed to by the Contractor to furnish the labor, machinery, tools, apparatus and other means of construction and for doing all the work and furnishing all material called for by the Contract Documents except rock excavation and those items specifically stated as being considered extra work or for which unit prices have been established in the Contract and Proposal.

J. **Unit Bid Price:** Whenever the term Unit Bid Price, Unit bid, Unit Price or a pronoun in their stead is used, it shall mean the amount of money mutually agreed to by the Contractor and the City as full payment to the Contractor for furnishing all necessary labor, materials and equipment (except that which is specifically excluded in the Supplemental and Standard Specifications and Contract Plans) necessary to do one unit of work, i.e., the unit price for one cubic yard of excavation multiplied by the actual number of cubic yards excavated, yields the total payment for the work done.

**20.03 INSURANCE AND LIABILITY:**

The Contractor shall take all responsibility of the work and take all precautions for preventing injuries to persons and property in or about the work; shall bear all losses resulting to him/her on account of the amount or character of the work or because the nature of the land in or on which the work is done is different from what was estimated or expected or on account of the weather, elements or other cause; and he/she shall assume the defense of and indemnify and save harmless the City and its officers, agents and servants from all claims relating to labor and materials furnished for the work; to inventions, patents and patent rights used in doing the work; to injuries to any person or corporation received or sustained by or from the Contractor and his/her employees in doing the work, or in consequence of any improper materials, implements or labor used therein; and to any act, omission or neglect of the Contractor and his/her employees therein.

The Contractor shall furnish proof of coverage with adequate insurance of the types and to the limits specified below naming the City of Lewiston as additional insured. Certificate of such insurance shall be filed with the Director of Budget/Purchasing for his/her approval before permission to commence work will be granted.

**INSURANCE REQUIREMENTS**

A. **Claims:**
The City of Lewiston will not be held responsible for any damages or injuries arising out of any activity for the City. Any related claim will be referred to the Contractor. The contractor may wish to make personal restoration within a reasonable amount of time at the property owner’s satisfaction or process a claim with their insurance carrier.
B. **Insurance:**
The Contractor shall furnish proof of coverage with adequate insurance of the types and to the limits specified below **naming the City of Lewiston as additional insured.** Certificate of such insurance shall be filed with the Director of Budget/Purchasing by the start of work.

C. **Workers’ Compensation:**
Workers’ Compensation, coverage with Statutory Limits and Employers Liability for all employees with limits of $400,000 per incident; and in case any work is sublet, the Contractor shall require the sub-contractor similarly to provide coverage for the latter’s employees unless such employees are covered by the protection afforded the Contractor.

D. **Automotive Liability Insurance:**
Automotive Liability insurance with minimum limits of liability for bodily injury in the amount of $1,000,000 for each occurrence and minimum limits of liability for property damage in the amount of $50,000/$100,000 aggregate.

E. **General Liability Insurance:**
General Liability insurance with minimum limits of liability for bodily injury in the amount of $1,000,000 for each occurrence and minimum limits of liability for property damage in the amount of $50,000/$100,000 aggregate, or a combined single limit of $500,000 for each occurrence, including completed operations shall be required.

F. **Performance Bond and Labor and Material Payment Bond** in the sum of the total amount of the Contractor’s proposal with a surety company satisfactory to the Owner will be required as surety for the faithful performance of the Contract by the successful bidder. The bonds will be required prior to execution of the Contract.

20.04 **DISPUTE RESOLUTION COSTS AND EXPENSES:**
In the event of any dispute between or involving the City of Lewiston and Contractor, whether resolved by arbitration, litigation or some other mechanism of dispute resolution, in the event that the City shall be a prevailing party, Contractor shall reimburse the City for its attorney’s fee and costs reasonably incurred in connection with the resolution of the dispute.

20.05 **LAWS AND REGULATIONS:**
The Contractor shall keep himself/herself informed of all existing and future State and Federal laws and Municipal ordinances and regulations which in any way affect those engaged or employed in the work, or the materials used in the work; or in any way affect the conduct of the work and of all orders and decrees of bodies of tribunals having any jurisdiction is discovered in the Plans or Specifications or Contract for this work in relation to any such law, ordinance, regulation, order or decree, he/she shall forthwith report the same to the Director in writing. He/she shall at all times himself/herself observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees; and shall protect and indemnify the City and its officers and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself/herself or his/her employees.
20.06 **PERMITS:**

The Contractor shall, at his/her own expense, obtain all necessary permits from the County, Municipal or other public authorities, shall give all notices required by law or ordinances; and shall post all bonds and pay fees and charges incident to the due and lawful prosecution of the work covered by this Contract. Fees for street opening permits on City projects shall be waived.

20.07 **ESTIMATES AND PAYMENTS:**

The Engineer will, each month, make an approximate estimate of the amount of work done since the last preceding estimate and of the value thereof, and upon such estimate being made, the City will pay to the Contractor ninety (90%) per cent of the estimate; provided, however, that no such estimate or payment shall be required to be made when, in the judgment of the Engineer, the total value of the work done since the last estimate or payment amounts to less than three hundred ($300.00) dollars. Payment may at any time be withheld if the work is not proceeding in accordance with the provisions of this Contract. The Engineer may, if he/she deems it expedient so to do, cause estimates to be made more frequently than once in each month, and he/she may approve payments to be made more frequently to the Contractor. The Engineer may at his/her option retain, temporarily or permanently, a smaller amount than aforesaid, and may approve payment to the Contractor, either temporarily or permanently from time to time during the progress of the work, of such portion of the retained amount as he/she may deem prudent. The City, may keep any money which would otherwise be payable at any time hereunder, and apply the same, or so much as may be necessary therefore, to the payment of any expenses, losses, or damage incurred by the City and determined as herein; and may retain, until all claims are settled, so much of such money as the Director shall be of the opinion will be required to settle all claims against the City, its officers, agents or servants. **The City may set off any unpaid taxes, fees or other charges or other amounts owed by the contractor against the contract price, in full or partial satisfaction.**

20.08 **FINAL ESTIMATE AND PAYMENT:**

It is further mutually agreed that whenever, in the opinion of the Engineer and the Director, the Contractor shall have completely performed all the work embraced in this Contract, the Engineer shall proceed with all reasonable diligence to measure the work and shall make out the final estimate for the same and shall certify the same in writing; and his/her certificate shall state the whole amount of the payments previously paid and the amount retained in all previous estimates. Within the term of thirty (30) days after the date of such final estimate, the City will pay to the said Contractor the amount due. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

Provided that nothing herein contained shall be construed to affect the right of the City by its Director of Public Works hereby reserved, to reject the whole or any portion of the aforesaid work should the said certificate or certificates be found or known to be inconsistent with the terms of this Agreement or otherwise improperly given.

20.9 **LAST PAYMENT TO TERMINATE LIABILITY OF CITY:**

No person or corporation other than the signer of this Contract as Contractor now has any interest hereunder, and no claim shall be made or be valid; and neither the City, nor its Mayor,
nor any member or agent thereof, shall be liable for, or be held to pay any money, except as provided for in Sections 20.07, 20.08, 20.16, and 20.33 of the Standard Specifications and in the Contract. The Acceptance by the Contractor of the last payment aforesaid shall operate as and shall be a release to the City, its Mayor, and every member or agent thereof, from all claim or liability to the Contractor for anything done or furnished for, or relating to the work, or for any act or neglect of the City, or of any person relating to or affecting the work, except the claim against the City for the remainder, if any there be of the amount kept or retained as provided for in Section 20.07.

20.10 SITE INVESTIGATION:

The Contractor shall examine the Plans, Specifications and site of the work and from his/her own investigation, determine the nature and location of the work, the general and local conditions, particularly those bearing on access, transportation, quality and quantity of surface and sub-surface materials to be encountered, and all other aspects of the work, machinery and services required to complete the project as required by the Contract Documents. The City will not be responsible for any understanding or representation made by any City employee during or prior to negotiation and execution of the Contract, unless such understanding or representation shall be in writing and become a part of the Contract Documents.

20.11 BORINGS AND ESTIMATE OF QUANTITIES NOT WARRANTED:

It is expressly understood and mutually agreed to by the parties hereto that the quantities of the various classes of work to be done and materials to be furnished under this Contract have been estimated and are approximate and only for the purpose of comparing on a uniform basis the bids offered for the work. It is also understood that the Contractor has made his/her proposal from his/her own examinations and estimates and shall not hold the City, its agents or employees responsible for or bound by any schedule, estimate, sounding, boring or any plan thereof as being even approximately correct; and should the Contractor encounter quicksand or other difficulties, he/she shall have no claim on that account; and he/she shall, if any error in any plan, drawing, specification or direction relating to anything to be done under this Contract comes to his/her knowledge, report it at once to the Engineer. The Contractor further agrees that neither the City of Lewiston, nor the Director of Public Works, the Engineer, nor either of them separately or together are to be held responsible that any of the quantities be found even approximately correct in the construction of the work, and that the Contractor will make no claim for anticipated profits or for loss of profit because of a difference between the quantities of the various classes of work actually done, or of the materials actually delivered, and any estimated quantities stated in the bids. The Contractor hereby agrees that he/she will complete the entire work to the satisfaction of the Engineer and in accordance with the Specifications and Plans herein mentioned and at the prices agreed upon and fixed therefore.

20.12 COMMENCEMENT OF WORK:

The Contractor agrees to commence the work required in the Contract Documents within ten (10) days after the signing of the Contract and deliverance of the Bond, unless otherwise specified in the Supplemental Specifications or directed by the Director of Public Works; and at his/her own cost and expense do and complete all the work and furnish all the labor, machinery, tools and materials, except as specified in the Supplemental Specifications, and to do everything required
to build and put into complete working order for the City of Lewiston the work described in the
Contract Documents.

20.13 **TIME AND ORDER OF DOING WORK:**

The Contractor agrees that the work shall be commenced and carried on at such points and in
such order of precedence and at such times and seasons as may from time to time be directed
by the Engineer.

It is further agreed that no work shall be done under this Contract on Saturdays or Sundays or on
days declared by the State Legislature as Legal Holidays, except in cases of emergency and
then only with the consent in writing of the Director of Public Works; nor shall any work be done
at night unless authorized in writing by the Director. The Contractor shall make his/her work
week conform to that of the Public Works Department. When permission is granted to perform
work during times other than this work week, the Contractor shall reimburse the City for any costs
for inspection during these periods.

20.14 **NO DAMAGES FOR DELAY:**

The Director may delay the beginning of the work or any part thereof if the City shall not have
obtained possession of the land in or upon which the same is to be performed or if for any other
reason it becomes necessary to do so. The Contractor shall have no claim for damages on
account of such delay, but shall be entitled to so much additional time wherein to perform and
complete this Contract on his/her part as the Director shall certify in writing to be just. Whenever
any part of the work covered by this Agreement is done in part by or connects with the work so as
to accommodate the work of the other contractors and to cooperate with such contractors in
mutual agreements as to all such work, and no contractor shall have a claim against the City
growing out of the negligence or delay of any other contractor or contractors; but each contractor
shall be liable to every other contractor for any such delay or negligence.

20.15 **COMPETENT PERSONNEL TO BE EMPLOYED:**

The Contractor shall employ only competent personnel to do the work; and whenever the Director
shall notify the Contractor, in writing, that any person on the work is, in his/her opinion,
incompetent, unfaithful, disorderly or otherwise unsatisfactory, such person shall be discharged
from the work and shall not again be employed on it except with the consent of the Director.

20.16 **NOT TO SUBLET OR ASSIGN:**

The Contractor shall give his/her personal attention constantly to the faithful prosecution of the
work, shall keep the same under his/her personal control and shall not assign, by power of
attorney or otherwise, nor sublet the work or any part thereof, without the previous written
consent of the Director; and shall not, either legally or equitably, assign any of the money payable
under this Agreement or his/her claim thereto, unless by and with the like consent of the Director.

20.17 **DIRECTIONS AND EXPLANATIONS, CORRECTIONS OF ERRORS:**

The Plans and Specifications are understood to be explanatory of each other, but should any
discrepancy appear or any misunderstanding arise as to the import of anything contained in
either of them, the parties hereto further agree that the explanation and decision of the Engineer shall be final and binding on the Contractor; and all directions or explanations required or necessary to complete any of the provisions of this Contract and these Specifications and give them due effect shall be given by the Engineer. Correction of any error in the Plans or Specifications may be made by the Engineer, when such correction is necessary for the proper fulfillment of the intention of such Plans or Specifications, the effect of such correction to date from the time that the Engineer gives due notice in writing to the Contractor.

20.18 **DUTY TO NOTIFY ENGINEER IF AMBIGUITIES DISCOVERED:**

The Contractor shall not take advantage of any ambiguity, error, omission, conflict, or discrepancy (“ambiguity, etc.”) contained in the Plans and Specifications that may significantly affect the cost, quality, conformity, or timeliness of the work. If the Contractor discovers any such ambiguity, etc., for which the Contractor may seek adjustments to compensation, time, or other Contract requirements, the Contractor shall provide a written notice stating the nature of the ambiguity, etc. within forty eight (48) hours of discovering or being notified of the ambiguity and before performing any work related to the ambiguity, etc., as provided in Section 20.19 – Early Negotiation. Failure to provide such written notice in compliance with the Contract shall constitute a waiver of all claims related to the ambiguity, etc.

20.19 **EARLY NEGOTIATION:**

A. **Notice Required:** When the Contractor becomes aware of facts or circumstances that may cause the Contractor to seek additional compensation, time, or any other change in the requirements of the Plans and Specifications (“Issue”), then the Contractor shall notify the Engineer in writing within forty eight (48) hours of identification of the issue and at least 48 hours before commencing any part of the Work relating to the Issue. The notice must describe the basic nature and extent of the Issue.

Such notice may be verbal only if confirmed in writing in one of the two following ways: (A) if a Progress Meeting is held within fourteen (14) days of the date that the Issue became known, such Notice may be confirmed with an entry in the Progress Meeting minutes. Such entry must describe the basic nature and extent of the Issue. (B) Otherwise, the Contractor shall confirm a verbal notice by delivering to the Engineer, within fourteen (14) days of the date the Issue arose, a Written Notice that describes the basic nature and extent of the Issue.

The written notice or confirmation will be known as a “Notice of Issue for Consideration”. The Contractor will not be entitled to any additional compensation, time, or any other change to the requirements of the Plans and Specifications without a timely Notice of Issue for Consideration.

B. **Negotiation:** When the Engineer receives the Notice of an Issue for Consideration conforming to Section 20.19 A. Notice Required, the Engineer and the Contractor will negotiate in good faith to attempt to resolve the Issue. Any resolution will be noted in the Progress Meeting minutes or confirmed otherwise in writing by the Engineer. Any changes to the Plans and Specifications that affect compensation, time, quality, or other requirements of the Plans and Specifications shall be by written Change Order.
20.20 SUPERINTENDENCE BY CONTRACTOR:

At the site of the work, the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Engineer and shall be one who can be continued in that capacity for the particular job involved unless he/she ceases to be on the Contractor's payroll. All directions given to such representative in the Contractor's absence shall be as binding as if given to the Contractor.

20.21 ALTERATIONS:

It is further agreed that the Engineer may make alterations in the line, grade, form, position, dimension or material of the work herein contemplated, or any part thereof, either before or after the commencement of the work; and that the Director may at any time, order an alterations increase in the amount of work. Such increase shall be paid for according to the quantity actually done as extra work as provided for in Section 20.29. If such alterations diminish the quantity of work to be done, they shall not constitute a claim by the Contractor for damages or for anticipated profits on the work dispensed with and payment will be reduced in an amount determined as provided for in Section 20.30.

20.22 NO CITY EMPLOYEE TO BE INTERESTED:

It is further agreed that this Contract shall be utterly void as to the City if any person employed in any capacity by the City of Lewiston is either directly or indirectly interested therein, except as provided by the City Charter.

20.23 WAIVER:

No order by the Inspector or the Engineer or any of his/her employees, nor any order, measurement or certificate by the Engineer, nor any order by him/her for the payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the Director, nor any extension of time, nor any possession taken by the Director or his/her employees, shall operate as a waiver of any provision of this Contract, or of any power herein reserved by the Director, or of any right to damages herein provided; nor shall any waiver of any breach of this Contract be held to be a waiver of any other or subsequent breach. Any remedy provided in this Contract shall be taken and construed as cumulative, that is, in addition to each and every other remedy herein provided and the City and the Director shall also be entitled to a writ of injunction against any breach of any of the promises of this Contract.

20.24 ACCESS TO WORK:

The Engineer and Director, their assistants and inspectors may, for any purpose, enter upon the work and premises used by the Contractor, and the Contractor shall provide safe and proper facilities therefore. Other City contractors may also, for all the purposes which may be required by their contracts, enter upon the work and premises used by the Contractor. Any difference or conflicts which may arise between the Contractor and other contractors of the City in regard to their work shall be adjusted and determined by the Director.
20.25 ENGINEER TO DETERMINE AMOUNT AND QUANTITY OF WORK, INSPECTION OF MATERIALS:

To prevent all disputes and litigations, it is hereby agreed by and between the parties to this Contract that the Engineer shall in all cases determine the amount and quality of the various classes of work which are to be paid for under this Contract; and that the Engineer by himself/herself, or his/her representatives acting under him/her, shall inspect all the materials to be furnished and all work to be done under this Contract to see that the same corresponds to the Specifications herein set forth. The Contractor further agrees that he/she will furnish the Engineer with such information and vouchers relating to the work, the materials therefore, and the persons employed thereon, as he/she shall from time to time request, and will give to the Engineer or his/her representatives all necessary labor, tools and facilities for inspecting the material to be furnished and the work to be done under this Contract.

The Engineer has the authority to stop the work whenever such a stoppage may be necessary to insure proper execution of this Contract. He/she also has the authority to reject all work and materials which do not conform to the Specifications or Plans, to direct application of forces to any portion of the work and to order the force increased or diminished as in his/her judgment is required.

20.26 DEFECTIVE WORK AND MATERIALS:

The inspection of the work shall not relieve the Contractor of any of his/her obligations to fulfill this Contract as herein prescribed and defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such work and materials have been previously overlooked by the Engineer and accepted or estimated for payment. If the work or any part thereof shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good such defect, in a manner satisfactory to the Engineer, and if any materials brought upon the ground for use in the work, or selected for the same, shall be condemned by the Engineer as unsuitable or not in conformity with the Specifications, the Contractor shall forthwith remove such materials from the vicinity of the work. Nothing in this Contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil; but such materials shall, upon being so attached or affixed, become the property of the City.

20.27 SANITARY REGULATIONS:

Necessary sanitary conveniences for the use of laborers on the work, properly secluded from public observation and made fly proof and satisfactory to the Health Officer, shall be constructed and maintained by the Contractor in such a manner and their use shall be strictly enforced. The building or shanties or other structures for housing and personnel will be permitted only at such places as the Director shall approve and the sanitary conditions in or about such shanties or other structures must at all times be maintained in a manner satisfactory to the Director.

20.28 NO INTOXICATING DRINKS:

The Contractor shall neither permit or suffer the introduction or use of intoxicating substances upon or about the works embraced in this Contract or upon any grounds occupied by him/her.
20.29 **EXTRA WORK:**

The City of Lewiston reserves the right to add portions of the work required under this Contract, using the unit prices established in the proposal. The City will determine if all work outlined in the plans or portions thereof shall be built under this Contract prior to the Contract signing.

The term Extra Work as used herein refers to and includes work required by the City which, in the judgment of the Director, involves changes in or additions to that are required by the Plans and Specifications; provided, however, such changes or additions do not result from the fault of the Contractor.

The Contractor shall do any extra work when and as ordered in writing by the Director or his/her agents specially authorized thereto in writing, and shall, when requested by the Director so to do, furnish itemized statements of cost of the extra work ordered and give the Director access to the accounts, bills and vouchers relating thereto. If the Contractor claims compensation for extra work not ordered as aforesaid, or for any damage sustained, he/she shall, within one week after the beginning of any such work or of the sustaining of any such damage, make a written statement to the Engineer of the nature of the work performed or damage sustained and shall, on or before the fifteenth (15th) day of the month succeeding that in which any such extra work shall have been done or any such damage sustained, file with the Engineer an itemized statement of the details and amount of such work or damage; and unless such statements shall be made as so required, his/her claim for compensation shall be forfeited and invalid and he/she shall not be entitled to payment on account of such work or damage. The determination of the Engineer and Director shall be final upon all questions of the amount and value of extra work. If a unit price does not exist, payment for extra work will be actual cost plus fifteen (15%) per cent. For work performed by subcontractors, payment shall be the subcontractors actual cost plus 15%, plus an additional 5% for the Contractor’s oversight. No allowance will be made for overhead costs.

20.30 **REDUCTION OF WORK:**

The City of Lewiston reserves the right to delete portions of the work required under this Contract, using the unit prices established in the Proposal. The City will determine if all work outlined in the Plans or portions thereof shall be built under this Contract prior to the Contract signing.

The Contractor shall omit and not perform any portion of the work required by the Contract Documents when ordered in writing by the Director or his/her agents specially authorized thereto in writing. If no unit price exists, it will be an estimate to be made by the Director and the Engineer. Their estimate will be final and binding. These reductions shall not constitute a claim by the Contractor for damage or for anticipated profit on the work dispensed with.

20.31 **NO TIME EXTENSION:**

The Contractor further agrees that the time of completion of the whole work is the essence of the Contract; and that he/she will make every effort to complete the work within the time limit specified in the Supplemental Specifications. In the event the Contractor fails to complete the whole work in the time specified, there shall be deducted from monies due the Contractor, not as a penalty, but as inspection costs, the sum of five hundred ($500.00) dollars for each working day, over and beyond the time limit specified which is required by the Contractor to complete the work.
whole work to the satisfaction of the Engineer and the Director. No extension of the time limit will be considered except in the case of an extremely unusual circumstance beyond the control of the Contractor. Any time extension will be authorized only in writing by the Engineer and Director; in which case the inspection cost charges will begin on the first working day after the extended time limit.

20.32 EMPLOYMENT OF LABOR:

The Contractor agrees that in the employment of labor, preference will be given, all things being equal, to citizens of Lewiston, the State of Maine and the United States in their respective order as above noted.

20.33 CONDITIONS UNDER WHICH DIRECTOR MAY COMPLETE WORK:

The Contractor hereby agrees that if the work to be done under this Contract shall be abandoned or if this Contract or any part thereof shall be sublet without the previous written consent of the Director, or if the contract or any claim thereunder shall be assigned by the Contractor otherwise than as herein specified, or at any time the Director shall be of the opinion that the work is unnecessarily or unreasonably delayed, or that the Contractor is willfully violating any of the conditions or agreements of this Contract, or is not executing the Contract in good faith, or is not making such progress in the execution of the work as to indicate its completion within the required time, the Director shall have the power and right to notify the Contractor to discontinue all work or any part thereof under this Contract. Thereupon the Contractor shall discontinue the work or any such parts thereof as the Director shall have the power, by contract with or without advertising, day labor or otherwise as he/she may determine, to employ such labor and obtain such tools and appliances as he/she may deem necessary to work at and be used to complete the work herein described or such parts thereof as the Director may deem necessary, and to use such tools and materials of every description as may be found upon the line of work, and to procure other materials for the completion of the same, and to charge the expense of said labor, tools and materials to the Contractor; and the expense so charged shall be deducted and paid by the City out of such monies as may be due or may become due the Contractor under this Contract or any part thereof. In case such expense is more than the sum which would have been payable under this Contract, if the same had been completed by the Contractor, then the Contractor shall pay the amount owed by the City under this Contract at the time the Contractor is notified in writing to discontinue the work or any part thereof, plus the amount of the Bond executed by the Contractor for the performance of the Contract.

20.34 PAYMENT FOR MATERIALS:

Payments will be made in accordance with the price stated in the Contract. The Contractor may include requests for payment of material delivered to the job site when such requests are accompanied by invoices substantiating the requests for material payment satisfactory to the City.

20.35 GUARANTEE:

The Contractor guarantees that the work to be done under this Contract will be done in a good and workmanlike manner and all materials, whether furnished by him/her or the City used in the construction of the work, will be free from defects and flaws and in conformity with the Plans and
Specifications in all respects. This guarantee will be for a period of one (1) year after the date of acceptance of the whole work by the City of Lewiston.

The Contractor shall at all times, until the final acceptance of the whole work, keep the surface of the streets in the position and condition required by these Plans and Specifications. If at any time within the period of the guaranty, any other part of the work constructed under the terms of this Contract shall in the opinion of the Director of Public Works require repairing, the Director shall notify the Contractor in writing to make the required repairs. If the Contractor shall neglect to make such repairs to the satisfaction of the Director within the time limit as set forth in the notice in writing to the Contractor of the required repairs, then the Director of Public Works may make the necessary repairs, by contract or otherwise, and the City shall have a claim against the Contractor in the amount of the expense incurred by the City in making such repairs.

It is hereby, however, specifically agreed and understood that this guaranty shall not include any repairs made necessary by any cause or causes other than defective work or materials.

20.36 WORK DAY:

A work day shall be any day, other than a State of Maine legal holiday, Saturday or Sunday, on which weather and working conditions permit the Contractor to make effective use of not less than seventy-five (75%) per cent of the hours during the regular work day. In the event the Contractor is granted permission to engage in work on a legal holiday or Sunday, such a day will be considered and counted as a work day.

End of Section
FEDERAL PROJECT
NOTICE

All bids for Federal Projects opened after December 1, 2008 MUST 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.
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.

MDOTs 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
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 construction program; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2012 (October 1, 2011 through September 30, 2012), MaineDOT has established a DBE participation goal of 5.9% to be achieved through race/gender neutral means. This goal remains in effect through September 30, 2012 unless otherwise determined by Federal Highway Administration.

MaineDOT submitted a new goal methodology and goal on August 1, 2011. That goal was sent to FHWA for approval. FHWA has not approved the most recent submittal. Per FHWA, a revised goal and methodology must be submitted by August 1, 2012.

Interested parties may view MaineDOT’s DBE goal setting methodology posted on this website. If you have questions regarding this goal you may contact the Maine Department of Transportation, Civil Rights Office by telephone at (207) 624-3042 or by e-mail at: theresa.savoy@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: ________________________________

FEDERAL PROJECT PIN # _______________ PROJECT LOCATION: ___________________________________

TOTAL ANTICIPATED DBE ___ % PARTICIPATION FOR THIS CONTRACT

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<th>DBE</th>
<th>Non DBE</th>
<th>Firm Name</th>
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<th>Cost Per Unit/Item</th>
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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: ______________________________

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

Rev. 05/12
Maine Department of Transportation Civil Rights Office

Directory of Certified Disadvantaged Business Enterprises

Listing can be found at:

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 –
General Decision Number: ME140049 02/07/2014  ME49
Superseded General Decision Number: ME20130049
State: Maine
Construction Type: Highway
County: Androscoggin County in Maine.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

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ENGI0004-006 04/01/2013

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<td>Milling Machine.............$ 20.90</td>
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<td>* IRON0007-008 09/16/2013</td>
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<td>CEMENT MASON/CONCRETE FINISHER...$ 16.94</td>
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<td>LABORER: Landscape...............$ 15.43</td>
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<td>LABORER: Wheelman................$ 18.76</td>
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<td>OPERATOR: Backhoe.................$ 17.92</td>
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OPERATOR:  Bobcat/Skid Steer/Skid Loader................$ 16.98  4.65
OPERATOR:  Broom/Sweeper........$ 14.08  0.00
OPERATOR:  Bulldozer...............$ 17.09  3.71
OPERATOR:  Crane....................$ 20.08  0.00
OPERATOR:  Excavator..............$ 18.14  5.20
OPERATOR:  Grader/Blade............$ 27.40  8.46
OPERATOR:  Loader...................$ 17.46  5.80
OPERATOR:  Mechanic...............$ 21.39  6.24
OPERATOR:  Milling Machine Reclaimer Combo...............$ 24.77  8.39
OPERATOR:  Paver  (Asphalt, Aggregate, and Concrete).........$ 17.49  4.26
OPERATOR:  Roller, Base (Ride Along)....................................$ 13.00  1.54
OPERATOR:  Screed.................$ 19.58  5.95
PILEDRIVERMAN.........................$ 19.95  5.26
TRUCK DRIVER, Includes all axles including Dump Trucks......$ 13.95  2.01
TRUCK DRIVER:  Lowboy Truck......$ 15.15  5.62

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

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.

================================================================
END OF GENERAL DECISION
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.

<table>
<thead>
<tr>
<th>Amendment Number</th>
<th>Date</th>
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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)
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/comprehensive-list-projects/project-information.php 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-entrerprises/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.
The northern long-eared bat (*Myotis septentrionalis*) (hereafter referred to as ‘NLE bat’) was proposed for listing under the Federal Endangered Species Act (ESA) on October 2, 2013 (Federal Register Vol. 78, No. 191, pages 61046-61080). This species is expected to be listed as Endangered under the ESA around October 2014.

The following conditions must be met to minimize harm to the NLE bat.

I. Special Conditions:
   1. **All clearing for the entire project must occur prior to October 10/1/2014.**
108.4.1 Price Adjustment for Hot Mix Asphalt: For all contracts with hot mix asphalt in excess of 500 tons total, a price adjustment for performance graded binder will be made for the following pay items:

- Item 403.102  Hot Mix Asphalt – Special Areas
- Item 403.206  Hot Mix Asphalt - 25 mm
- Item 403.207  Hot Mix Asphalt - 19 mm
- Item 403.2071  Hot Mix Asphalt - 19 mm (Polymer Modified)
- Item 403.2072  Hot Mix Asphalt - 19 mm (Asphalt Rich Base)
- Item 403.2073  Warm Mix Asphalt - 19 mm
- Item 403.208  Hot Mix Asphalt - 12.5 mm
- Item 403.2081  Hot Mix Asphalt - 12.5 mm (Polymer Modified)
- Item 403.20813  Warm Mix Asphalt - 12.5 mm (Polymer Modified)
- Item 403.2083  Warm Mix Asphalt - 12.5 mm
- Item 403.209  Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)
- Item 403.210  Hot Mix Asphalt - 9.5 mm
- Item 403.2101  Hot Mix Asphalt - 9.5 mm (Polymer Modified)
- Item 403.2102  Hot Mix Asphalt - 9.5 mm (Asphalt Rich Base)
- Item 403.2103  Warm Mix Asphalt - 9.5 mm
- Item 403.2104  Hot Mix Asphalt - 9.5 mm (3/4” Surface)
- Item 403.211  Hot Mix Asphalt – Shim
- Item 403.2111  Hot Mix Asphalt – Shim (Polymer Modified)
- Item 403.2113  Warm Mix Asphalt - Shim
- Item 403.212  Hot Mix Asphalt - 4.75 mm (Shim)
- Item 403.2123  Warm Mix Asphalt - 4.75 mm (Shim)
- Item 403.213  Hot Mix Asphalt - 12.5 mm (base and intermediate course)
- Item 403.2131  Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer Modified)
- Item 403.2132  Hot Mix Asphalt - 12.5 mm (Asphalt Rich Base and intermediate course)
- Item 403.2133  Warm Mix Asphalt - 12.5 mm (base and intermediate course)
- Item 403.214  Hot Mix Asphalt - 4.75 mm (Surface)
- Item 403.2143  Warm Mix Asphalt - 4.75 mm (Surface)
- Item 404.70  Colored Hot Mix Asphalt – 9.5mm (Surface)
- Item 404.72  Colored Hot Mix Asphalt – 9.5mm (Islands, sidewalks, & incidentals)
- Item 461.13  Maintenance Surface Treatment

Price adjustments will be based on the variance in costs for the performance graded binder component of hot mix asphalt. They will be determined as follows:
The quantity of hot mix asphalt for each pay item will be multiplied by the performance graded binder percentages given in the table below times the difference in price between the base price and the period price of asphalt cement. Adjustments will be made upward or downward, as prices increase or decrease.

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 403.102</td>
<td>6.2%</td>
</tr>
<tr>
<td>Item 403.206</td>
<td>4.8%</td>
</tr>
<tr>
<td>Item 403.207</td>
<td>5.2%</td>
</tr>
<tr>
<td>Item 403.208</td>
<td>5.6%</td>
</tr>
<tr>
<td>Item 403.209</td>
<td>6.2%</td>
</tr>
<tr>
<td>Item 403.210</td>
<td>6.2%</td>
</tr>
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<td>Item 403.211</td>
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</tr>
<tr>
<td>Item 403.212</td>
<td>6.8%</td>
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<tr>
<td>Item 403.213</td>
<td>5.6%</td>
</tr>
<tr>
<td>Item 403.214</td>
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<td>Item 403.301</td>
<td>6.2%</td>
</tr>
<tr>
<td>Item 404.70</td>
<td>6.2%</td>
</tr>
<tr>
<td>Item 404.72</td>
<td>6.2%</td>
</tr>
<tr>
<td>Item 461.13</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

**Hot Mix Asphalt:** The quantity of hot mix asphalt will be determined from the quantity shown on the progress estimate for each pay period.

**Base Price:** The base price of performance graded binder to be used is the price per standard ton current with the bid opening date. This price is determined by using the average New England Selling Price (Excluding the Connecticut market area), as listed in the Asphalt Weekly Monitor.

**Period Price:** The period price of performance graded binder will be determined by the Department by using the average New England Selling Price (Excluding the Connecticut market area), listed in the Asphalt Weekly Monitor current with the paving date. The maximum Period Price for paving after the adjusted Contract Completion Date will be the Period Price on the adjusted Contract Completion Date.
SPECIAL PROVISION 400 - PAVEMENTS

SECTION 401 - HOT MIX ASPHALT PAVEMENT

401.01 Description The Contractor shall furnish a uniformly blended, homogeneous mixture placed as one or more courses of Hot Mix Asphalt Pavement (HMA) on an approved base in accordance with the contract documents and in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the plans or established by the Resident. The Department will accept this work under Quality Assurance provisions, in accordance with these specifications and the requirements of Section 106 – Quality, the provisions of AASHTO M 323 except where otherwise noted in sections 401 and 703 of these specifications, and the MaineDOT Policies and Procedures for HMA Sampling and Testing.

401.02 Materials Materials shall meet the requirements specified in Section 700 - Materials:
- Asphalt Cement
- Aggregates for HMA Pavement
- RAP for HMA Pavement
- HMA Mixture Composition

401.03 Composition of Mixtures The Contractor shall compose the Hot Mix Asphalt Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), and mineral filler if required. HMA shall be designed and tested according to AASHTO R35 and the volumetric criteria in Table 1. The Contractor shall size, uniformly grade, and combine the aggregate fractions in proportions that provide a mixture meeting the grading requirements of the Job Mix Formula (JMF).

The Contractor shall submit for Department approval a JMF to the Central Laboratory in Bangor for each mixture to be supplied. The Department may approve 1 active design per nominal maximum size, per traffic level, per plant, plus a 9.5mm “fine” mix for shimming and where required, a non-RAP design for bridge decks. The Department shall then have 15 calendar days in which to process a new design before approval. The JMF shall establish a single percentage of aggregate passing each sieve size within the limits shown in section 703.09. The mixture shall be designed and produced, including all production tolerances, to comply with the allowable control points for the particular type of mixture as outlined in 703.09. The JMF shall state the original source, gradation, and percentage to be used of each portion of the aggregate including RAP when utilized, and mineral filler if required. It shall also state the proposed PGAB content, the name and location of the refiner, the supplier, the source of PGAB submitted for approval, the type of PGAB modification if applicable, and the location of the terminal if applicable.

In addition, the Contractor shall provide the following information with the proposed JMF:
- Properly completed JMF indicating all mix properties (Gmm, VMA, VFB, etc.)
- Stockpile Gradation Summary
- Design Aggregate Structure Consensus Property Summary
- Design Aggregate Structure Trial Blend Gradation Plots (0.45 power chart)
- Trial Blend Test Results for at least three different asphalt contents
- Design Aggregate Structure for at least three trial blends
- Test results for the selected aggregate blend at a minimum of three binder contents
- Specific Gravity and temperature/viscosity charts for the PGAB to be used
- Recommended mixing and compaction temperatures from the PGAB supplier
- Material Safety Data Sheets (MSDS) For PGAB
- Asphalt Content vs. Air Voids trial blend curve
- Test report for Contractor’s Verification sample
Summary of RAP test results (if used), including count, average and standard deviation of binder content and gradation

At the time of JMF submittal, the Contractor shall identify and make available the stockpiles of all proposed aggregates at the plant site. There must be a minimum of 150 ton for stone stockpiles, 75 ton for sand stockpiles, and 50 ton of blend sand before the Department will sample. The Department shall obtain samples for laboratory testing. The Contractor shall also make available to the Department the PGAB proposed for use in the mix in sufficient quantity to test the properties of the asphalt and to produce samples for testing of the mixture. Before the start of paving, the Contractor and the Department shall split a production sample for evaluation. The Contractor shall test its split of the sample and determine if the results meet the requirements of the Department’s written policy for mix design verification (See MaineDOT Policies and Procedures for HMA Sampling and Testing available at the Central Laboratory in Bangor). If the results are found to be acceptable, the Contractor will forward their results to the Department’s Lab, which will test the Department’s split of the sample. The results of the two split samples will be compared and shared between the Department and the Contractor. If the Department finds the mixture acceptable, an approved JMF will be forwarded to the Contractor and paving may commence. The first day’s production shall be monitored, and the approval may be withdrawn if the mixture exhibits undesirable characteristics such as checking, shoving or displacement.

The Contractor shall be allowed to submit aim changes within 24 hours of receipt of the first Acceptance test result. Should all of the Acceptance samples of a Lot be obtained prior to the receipt of the first Acceptance result, the Department will not allow the aim changes to be applied to that Lot. Adjustments will be allowed of up to 2% on the percent passing the 2.36 mm sieve through the 0.075 mm and 3% on the percent passing the 4.75 mm or larger sieves. Adjustments will be allowed on the %PGAB of up to 0.2%. Adjustments will be allowed on GMM of up to 0.010.

The Contractor shall submit a new JMF for approval each time a change in material source or materials properties is proposed. The same approval process shall be followed. The cold feed percentage of any aggregate may be adjusted up to 10 percentage points from the amount listed on the JMF, however no aggregate listed on the JMF shall be eliminated. The cold feed percentage for RAP may be reduced up to 10 percentage points from the amount listed on the JMF and shall not exceed the percentage of RAP approved in the JMF or for the specific application under any circumstances.

<table>
<thead>
<tr>
<th>Design ESAL’s (Millions)</th>
<th>Required Density (Percent of G_{mm})</th>
<th>Voids in the Mineral Aggregate (VMA)(Minimum Percent)</th>
<th>Voids Filled with Binder (VFB) (Minimum %)</th>
<th>Fines/Eff. Binder Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>N_{initial}</td>
<td>N_{design}</td>
<td>Nominal Maximum Aggregate Size (mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;0.3</td>
<td>≤91.5</td>
<td>25, 19, 12.5, 9.5, 4.75</td>
<td>70-80</td>
<td>0.6-1.2</td>
</tr>
<tr>
<td>0.3 to &lt;3</td>
<td>≤90.5</td>
<td>96.0, ≤98.0, 13.0, 14.0, 15.0, 16.0</td>
<td>65-80</td>
<td></td>
</tr>
<tr>
<td>3 to &lt;10</td>
<td>&lt;89.0</td>
<td>10 to ≤30</td>
<td>65-80*</td>
<td></td>
</tr>
<tr>
<td>≥30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*For 9.5 mm nominal maximum aggregate size mixtures, the maximum VFB is 82.  
*For 4.75 mm nominal maximum aggregate size mixtures, the maximum VFB is 84.

401.031 Warm Mix Technology The Contractor may place Hot Mix Asphalt Pavement produced with an accepted WMA technology if approved by the Department. Methods or technologies shall generally be at the Contractors option, but will be limited to proven, Agency and Industry accepted practice. Mixture production,
placement and volumetric testing details, including temperatures, shall be included in the project specific QCP, and submitted to the Department for approval prior to any work.

401.04 Temperature Requirements  After the JMF is established, the temperatures of the mixture shall conform to the following tolerances:

- In the truck at the mixing plant – allowable range 275 to 325°F
- At the Paver – allowable range 275 to 325°F

The JMF and the mix subsequently produced shall meet the requirements of Tables 1 and Section 703.07.

401.05 Performance Graded Asphalt Binder  Unless otherwise noted in Special Provision 403 - Hot Mix Asphalt Pavement, the Contractor may utilize either a 64-28 or 58-28 PGAB. The Contractor must stipulate which PGAB grading will be used to construct the entire HMA pavement structure prior to starting work. For mixtures containing greater than 20 percent but no more than 30 percent RAP the PGAB shall be PG 58-34 (or PG 52-34 when approved by the Department). The PGAB shall meet the applicable requirements of AASHTO M320 - Standard Specification for PGAB. Polymer-modified PGAB shall meet the applicable requirements of AASHTO MP 19. The Contractor shall provide the Department with an approved copy of the Quality Control Plan for PGAB in accordance with AASHTO R 26 Certifying Suppliers of PGAB.

The Contractor shall request approval from the Department for a change in PGAB supplier or source by submitting documentation stating the new supplier or source a minimum of 24 hours prior to the change. In the event that the PGAB supplier or source is changed, the Contractor shall make efforts to minimize the occurrence of PGAB co-mingling.

401.06 Weather and Seasonal Limitations  The State is divided into two paving zones as follows:

- **a. Zone 1**  Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
- **b. Zone 2**  Areas south of Zone 1 including the US Route 2 and Route 9 boundaries.

The Contractor may place Hot Mix Asphalt Pavement for use other than a traveled way wearing course in either Zone between the dates of April 15th and November 15th, provided that the air temperature as determined by an approved thermometer (placed in the shade at the paving location) is 40°F or higher.

The Contractor may place Hot Mix Asphalt Pavement produced with an accepted WMA technology for any base, intermediate base, or shim course in either Zone between the dates of April 15th and November 15th, provided that the air temperature as determined by an approved thermometer (placed in the shade at the paving location) is 35°F or higher, and the area to be paved is not frozen. The Hot Mix Asphalt Pavement produced with an approved WMA technology shall meet the requirements of section 401.04 - Temperature Requirements, unless otherwise approved by the Department.

The Contractor may place Hot Mix Asphalt Pavement as traveled way wearing course in Zone 1 between the dates of May 1st and the Saturday following October 1st and in Zone 2 between the dates of April 15th and the Saturday following October 15th, provided the air temperature determined as above is 50°F or higher. For the purposes of this Section, the traveled way includes truck lanes, ramps, approach roads and auxiliary lanes. The atmospheric temperature for all courses on bridge decks shall be 50°F or higher.

Hot Mix Asphalt Pavement used for curb, driveways, sidewalks, islands, or other incidentals is not subject to seasonal limitations, except that conditions shall be satisfactory for proper handling and finishing of the mixture. All mixtures used for curb, driveways, sidewalks, islands, or other incidentals shall conform to section 401.04 - Temperature Requirements. Unless otherwise specified, the Contractor shall not place Hot Mix Asphalt Pavement on a wet or frozen surface and the air temperature shall be 40°F or higher.
On all sections of overlay with wearing courses less than 1 in thick, the wearing course for the travelway and adjacent shoulders shall be placed between the dates of May 15th and the Saturday following September 15th.

On all sections of overlay with wearing courses less than 1 inch thick, the wearing course for the travelway and adjacent shoulders shall be placed between the dates of June 1st and the Saturday following September 1st if the work is to be performed, either by contract requirement, or Contractor option, during conditions defined as “night work”.

401.07 Hot Mix Asphalt Plant

401.071 General Requirements  HMA plants shall conform to AASHTO M156.

   a. Truck Scales  When the hot mix asphalt is to be weighed on scales meeting the requirements of Section 108 - Payment, the scales shall be inspected and sealed by the State Sealer as often as the Department deems necessary to verify their accuracy.

   Plant scales shall be checked prior to the start of the paving season, and each time a plant is moved to a new location. Subsequent checks will be made as determined by the Resident. The Contractor will have at least ten 20 Kg [50 pound] masses for scale testing.

401.072 Automation of Batching  Batch plants shall be automated for weighing, recycling, and monitoring the system. In the case of a malfunction of the printing system, the requirements of Section 401.074 c. of this specification will apply.

The batch plant shall accurately proportion the various materials in the proper order by weight. The entire batching and mixing cycle shall be continuous and shall not require any manual operations. The batch plant shall use auxiliary interlock circuits to trigger an audible alarm whenever an error exceeding the acceptable tolerance occurs. Along with the alarm, the printer shall print an asterisk on the delivery slip in the same row containing the out-of-tolerance weight. The automatic proportioning system shall be capable of consistently delivering material within the full range of batch sizes. When RAP is being used, the plant must be capable of automatically compensating for the moisture content of the RAP.

All plants shall be equipped with an approved digital recording device. The delivery slip load ticket shall contain information required under Section 108.1.3 - Provisions Relating to Certain Measurements, Mass and paragraphs a, b, and c of Section 401.073

401.073 Automatic Ticket Printer System on Automatic HMA Plant  An approved automatic ticket printer system shall be used with all approved automatic HMA plants. The requirements for delivery slips for payment of materials measured by weight, as given in the following Sections, shall be waived: 108.1.3 a., 108.1.3 b., 108.1.3 c., and 108.1.3 d. The automatic printed ticket will be considered as the Weight Certificate.

The requirements of Section 108.1.3 f. - Delivery Slips, shall be met by the weigh slip or ticket, printed by the automatic system, which accompanies each truckload, except for the following changes:

    a. The quantity information required shall be individual weights of each batch or total net weight of each truckload.
    b. Signatures (legible initials acceptable) of Weighmaster (required only in the event of a malfunction as described in 401.074 c.).
    c. The MaineDOT designation for the JMF.
401.074 Weight Checks on Automatic HMA Plant  At least twice during each 5 days of production either of the following checks will be performed:

a. A loaded truck may be intercepted and weighed on a platform scale that has been sealed by the State Sealer of Weights and Measures within the past 12 months. The inspector will notify the producer to take corrective action on any discrepancy over 1.0%. The producer may continue to operate for 48 hours under the following conditions.
   1. If the discrepancy does not exceed 1.5%; payment will still be governed by the printed ticket.
   2. If the discrepancy exceeds 1.5%, the plant will be allowed to operate as long as payment is determined by truck platform scale net weight.

If, after 48 hours the discrepancy has not been addressed and reduced below 1.0%, than plant operations will cease. Plant operation may resume after the discrepancy has been brought within 1.0%.

b. Where platform scales are not readily available, a check will be made to verify the accuracy and sensitivity of each scale within the normal weighing range and to assure that the interlocking devices and automatic printer system are functioning properly.

c. In the event of a malfunction of the automatic printer system, production may be continued without the use of platform truck scales for a period not to exceed the next two working days, providing total weights of each batch are recorded on weight tickets and certified by a Licensed Public Weighmaster.

401.08 Hauling Equipment  Trucks for hauling Hot Mix Asphalt Pavement shall have tight, clean, and smooth metal dump bodies, which have been thinly coated with a small amount of approved release agent to prevent the mixture from adhering to the bodies. Solvent based agents developed to strip asphalts from aggregates will not be allowed as release agents.

All truck dump bodies shall have a cover of canvas or other water repellent material capable of heat retention, which completely covers the mixture. The cover shall be securely fastened on the truck, unless unloading.

All truck bodies shall have an opening on both sides, which will accommodate a thermometer stem. The opening shall be located near the midpoint of the body, at least 12 in above the bed.

401.09 Pavers  Pavers shall be self-contained, self-propelled units with an activated screed (heated if necessary) capable of placing courses of Hot Mix Asphalt Pavement in full lane widths specified in the contract on the main line, shoulder, or similar construction.

On projects with no price adjustment for smoothness, pavers shall be of sufficient class and size to place Hot Mix Asphalt Pavement over the full width of the mainline travel way with a 10 ft minimum main screed with activated extensions.

The Contractor shall place Hot Mix Asphalt Pavement on the main line with a paver using an automatic grade and slope controlled screed, unless otherwise authorized by the Department. The controls shall automatically adjust the screed and increase or decrease the layer thickness to compensate for irregularities in the preceding course. The controls shall maintain the proper transverse slope and be readily adjustable so that transitions and superelevated curves can be properly paved. The controls shall operate from a fixed or moving reference such as a grade wire or ski type device (floating beam) with a minimum length of 30 ft, a non-contact grade control with a minimum span of 24 ft, except that a 40 ft reference shall be used on Expressway projects.
The Contractor shall operate the paver in such a manner as to produce a visually uniform surface texture and a thickness within the requirements of Section 401.101 - Surface Tolerances. The paver shall have a receiving hopper with sufficient capacity for a uniform spreading operation and a distribution system to place the mixture uniformly, without segregation in front of the screed. The screed assembly shall produce a finished surface of the required evenness and texture without tearing, shoving, or gouging the mixture. Pavers with extendible screeds shall have auger extensions and tunnel extenders as per the manufacturer’s recommendations, a copy of which shall be available if requested.

The Contractor shall have the paver at the project site sufficiently before the start of paving operations to be inspected and approved by the Department. The Contractor shall repair or replace any paver found worn or defective, either before or during placement, to the satisfaction of the Department. Pavers that produce an unevenly textured or non-uniform mat will be repaired or replaced before continuing to place HMA on MaineDOT projects.

On a daily basis, the Contractor shall perform density testing across the mat being placed, prior to being compacted by equipment at 12 in intervals. If the density values vary by more than 2.0% from the mean, the Contractor shall make adjustments to the screed until the inconsistencies are remedied. Failure to replace or repair defective placement equipment may result in a letter of suspension of work and notification of a quality control violation resulting in possible monetary penalties as governed by Section 106 - Quality.

401.10 Rollers Rollers shall be static steel, pneumatic tire, oscillatory, or approved vibrator type. Rollers shall be in good mechanical condition, capable of starting and stopping smoothly, and be free from backlash when reversing direction. Rollers shall be equipped and operated in such a way as to prevent the picking up of hot mixed material by the roller surface. The use of rollers, which result in crushing of the aggregate or in displacement of the HMA will not be permitted. Any Hot Mix Asphalt Pavement that becomes loose, broken, contaminated, shows an excess or deficiency of Performance Graded Asphalt Binder, or is in any other way defective shall be removed and replaced at no additional cost with fresh Hot Mix Asphalt Pavement, which shall be immediately compacted to conform to the adjacent area.

The Contractor shall repair or replace any roller found to be worn or defective, either before or during placement, to the satisfaction of the Department. Rollers that produce grooved, unevenly textured or non-uniform mat will be repaired or replaced before continuing to place HMA on MaineDOT projects. The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor’s option, provided specification densities are attained and with the following requirements:

a. On variable-depth courses, the first lift of pavement over gravel, reclaimed pavement, on irregular or milled surfaces, or on bridges, at least one roller shall be 16 ton pneumatic-tired. Unless otherwise allowed by the Resident, pneumatic-tired rollers shall be equipped with skirting to minimize the pickup of HMA materials from the paved surface. When required by the Resident, the roller shall be ballasted to 20 ton.

b. Compaction with a vibratory or steel wheel roller shall precede pneumatic-tired rolling, unless otherwise authorized by the Department.

c. Vibratory rollers shall not be operated in the vibratory mode when checking or cracking of the mat occurs, or on bridge decks.

d. Any method, which results in cracking or checking of the mat, will be discontinued and corrective action taken.

e. The use of an oscillating steel roller shall be required to compact all mixtures placed on bridge decks.
The maximum operating speed for a steel wheel or pneumatic roller shall not exceed the manufacturer’s recommendations, a copy of which shall be available if requested.

401.101 Surface Tolerances The Department will check surface tolerance utilizing the following methods:

a.) A 16 ft straightedge or string line placed directly on the surface, parallel to the centerline of pavement.

b.) A 10 ft straightedge or string line placed directly on the surface, transverse to the centerline of pavement.

The Contractor shall correct variations exceeding $\frac{1}{4}$ in by removing defective work and replacing it with new material as directed by the Department. The Contractor shall furnish a 10 foot straightedge for the Departments use.

401.11 Preparation of Existing Surface The Contractor shall thoroughly clean the surface upon which Hot Mix Asphalt Pavement is to be placed of all objectionable material. When the surface of the existing base or pavement is irregular, the Contractor shall bring it to uniform grade and cross section. All surfaces shall have a tack coat applied prior to placing any new HMA course. Tack coat shall conform to the requirements of Section 409 – Bituminous Tack Coat, Section 702 – Bituminous Material, and all applicable sections of the contract.

401.12 Hot Mix Asphalt Documentation The Contractor and the Department shall agree on the amount of Hot Mix Asphalt Pavement that has been placed each day. All delivery slips shall conform to the requirements of 401.073.

401.13 Preparation of Aggregates The Contractor shall dry and heat the aggregates for the HMA to the required temperature. The Contractor shall properly adjust flames to avoid physical damage to the aggregate and to avoid depositing soot on the aggregate.

401.14 Mixing The Contractor shall combine the dried aggregate in the mixer in the amount of each fraction of aggregate required to meet the JMF. The Contractor shall measure the amount of PGAB and introduce it into the mixer in the amount specified by the JMF.

The Contractor shall produce the HMA at the temperature established by the JMF.

The Contractor shall dry the aggregate sufficiently so that the HMA will not flush, foam excessively, or displace excessively under the action of the rollers. The Contractor shall introduce the aggregate into the mixer at a temperature of not more than 25°F above the temperature at which the viscosity of the PGAB being used is 0.150 Pa·s.

The Contractor shall store and introduce into the mixer the Performance Graded Asphalt Binder at a uniformly maintained temperature at which the viscosity of the PGAB is between 0.150 Pa·s and 0.300 Pa·s. The aggregate shall be coated completely and uniformly with a thorough distribution of the PGAB. The Contractor shall determine the wet mixing time for each plant and for each type of aggregate used. The resultant material shall be a uniformly blended, homogeneous HMA mixture.

401.15 Spreading and Finishing On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable, the Contractor shall spread, rake, and lute the HMA with hand tools to provide the required compacted thickness. Solvent based agents developed to strip asphalts from aggregates will not be allowed as release agents.
On roadways with adjoining lanes carrying traffic, the Contractor shall place each course over the full width of the traveled way section being paved that day, unless otherwise noted by the Department in Section 403 - Hot Mix Asphalt Pavement.

In addition, hot mix asphalt pavement placed on bridges shall also conform to Section 508.04 and the following requirements.

a. The bottom course shall be placed with an approved rubber mounted paver of such type and operated in such a manner that the membrane waterproofing will not be damaged in any way.

b. The top course shall not be placed until the bottom course has cooled sufficiently to provide stability.

c. The Contractor will not be required to cut sample cores from the compacted pavement on the bridge deck, unless otherwise directed by Special Provision.

d. After the top course has been placed, the shoulder areas shall be sealed 3 ft wide with two applications of an emulsified bituminous sealer meeting the requirements of Section 612.03 – Sealing and Section 702.12 - Emulsified Bituminous Sealing Compound. The first application shall be pre-mixed with fine, sharp sand, similar to mortar sand, as needed to fill all voids in the mix in the area being sealed. The second application may be applied without sand. The sealer shall be carried to the curb at the gutter line in sufficient quantity to leave a bead or fillet of material at the face of the curb. The area to be sealed shall be clean, dry and the surface shall be at ambient temperature.

e. The furnishing and applying of the required quantity of sealer for the bridge shoulder areas shall be incidental to placing the hot mix asphalt pavement.

f. The atmospheric temperature for all courses placed on bridge decks shall be 50°F or higher.

401.16 Compaction  Immediately after the Hot Mix Asphalt Pavement has been spread, struck off, and any surface irregularities adjusted, the Contractor shall thoroughly and uniformly compact the HMA by rolling.

The Contractor shall roll the surface when the mixture is in the proper condition and when the rolling does not cause undue displacement, cracking, or shoving. The Contractor shall prevent adhesion of the HMA to the rollers or vibrating compactors without the use of fuel oil or other petroleum based release agents. Solvents designed to strip asphalt binders from aggregates will not be permitted as release agents on equipment, tools, or pavement surfaces.

The Contractor shall immediately correct any displacement occurring as a result of the reversing of the direction of a roller or from other causes to the satisfaction of the Department. Any operation other than placement of variable depth shim course that results in breakdown of the aggregate shall be discontinued. Any new pavement that shows obvious cracking, checking, or displacement shall be removed and replaced for the full lane width as directed by the Resident at no cost to the Department.

Along forms, curbs, headers, walls, and other places not accessible to the rollers, the Contractor shall thoroughly compact the HMA with mechanical vibrating compactors. The Contractor shall only use hand tamping in areas inaccessible to all other compaction equipment. On depressed areas, the Contractor may use a trench roller or cleated compression strips under a roller to transmit compression to the depressed area.
Any HMA that becomes unacceptable due to cooling, cracking, checking, segregation or deformation as a result of an interruption in mix delivery shall be removed and replaced, with material that meets contract specifications at no cost to the Department.

401.17 Joints  The Contractor shall construct wearing course transverse and longitudinal joints in such a manner that minimum tolerances shown in Section 401.101 - Surface Tolerances are met when measured with a straightedge.

The paver shall maintain a uniform head of HMA during transverse and longitudinal joint construction.

The HMA shall be free of segregation and meet temperature requirements outlined in section 401.04. Transverse joints of the wearing course shall be straight and neatly trimmed. The Contractor may form a vertical face exposing the full depth of the course by inserting a header, by breaking the bond with the underlying course, or by cutting back with hand tools. The Department may allow feathered or "lap" joints on lower base courses or when matching existing base type pavements.

Longitudinal joints shall be generally straight to the line of travel, and constructed in a manner that best ensure joint integrity. Methods or activities that prove detrimental to the construction of straight, sound longitudinal joints will be discontinued.

The Contractor shall apply a coating of emulsified asphalt immediately before paving all joints to the vertical face and 3 in of the adjacent portion of any pavement being overlaid except those formed by pavers operating in echelon. The Contractor shall use an approved spray apparatus designed for covering a narrow surface. The Department may approve application by a brush for small surfaces, or in the event of a malfunction of the spray apparatus, but for a period of not more than one working day.

Where pavement under this contract joins an existing pavement, or when the Department directs, the Contractor shall cut the existing pavement along a smooth line, producing a neat, even, vertical joint. The Department will not permit broken or raveled edges. The cost of all work necessary for the preparation of joints is incidental to related contract pay items.

401.18 Quality Control Method A, B & C  The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The QCP shall meet the requirements of Section 106.6 - Acceptance and this Section. The Contractor shall not begin paving operations until the Department approves the QCP in writing.

Prior to placing any mix, the Department and the Contractor shall hold a Pre-paving conference to discuss the paving schedule, source of mix, type and amount of equipment to be used, sequence of paving pattern, rate of mix supply, random sampling, project lots and sublots and traffic control. A copy of the QC random numbers to be used on the project shall be provided to The Resident. The Departments’ random numbers for Acceptance testing shall be generated and on file with the Resident and the Project Manager. All personnel of the Department and the Contractor who have significant information relevant to the paving items shall attend, including the responsible onsite paving supervisor for the Contractor. The Resident will prepare minutes of the conference and distribute them to all attendees. Any requests to revise the minutes must be made to the Resident within 7 Days of Receipt. These minutes will constitute the final record of the Pre-paving conference.
The QCP shall address any items that affect the quality of the Hot Mix Asphalt Pavement including, but not limited to, the following:

a. JMF(s)
b. Hot mix asphalt plant details
c. Stockpile Management (to include provisions for a minimum 2 day stockpile)
d. Make and type of paver(s)
e. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers
f. Name of QCP Administrator, and certification number
g. Name of Process Control Technician(s) and certification number(s)
h. Name of Quality Control Technicians(s) and certification number(s)
i. Mixing & transportation including process for ensuring that truck bodies are clean and free of debris or contamination that could adversely affect the finished pavement
j. Testing Plan
k. Laydown operations including longitudinal joint construction, procedures for avoiding paving in inclement weather, type of release agent to be used on trucks tools and rollers, compaction of shoulders, tacking of all joints, methods to ensure that segregation is minimized, procedures to determine the maximum rolling and paving speeds based on best engineering practices as well as past experience in achieving the best possible smoothness of the pavement. Solvent based agents developed to strip asphalts from aggregates will not be allowed as release agents.
l. Examples of Quality Control forms including a daily plant report, daily paving report, and delivery slip template for any plant to be utilized.
m. Silo management and details (can show storage for use on project of up to 36 hours)

n. Provisions for varying mix temperature due to extraordinary conditions or production limitations. If a warm-mix technology is utilized, a proposed target production temperature range (not to exceed 50°F) will be provided for each mix design.
o. Name and responsibilities of the Responsible onsite Paving Supervisor.
p. Method for calibration/verification of Density Gauge
q. A note that all testing will be done in accordance with AASHTO and the MaineDOT Policies and Procedures for HMA Sampling and Testing.
r. A detailed description of RAP processing, stockpiling and introduction into the plant as well as a note detailing conditions under which the percent of RAP will vary from that specified on the JMF.
s. A detailed procedure outlining when production will be halted due to QC or Acceptance testing results.
t. A plan to address the change in PGAB source or supplier and the potential co-mingling of differing PGAB’s.
u. A procedure to take immediate possession of acceptance samples once released by MaineDOT and deliver said samples to the designated acceptance laboratory.
v. Provisions for how the QCP will be communicated to the Contractor’s field personnel

The QCP shall include the following technicians together with following minimum requirements:

a. QCP Administrator - A qualified individual shall administer the QCP. The QCP Administrator must be a full-time employee of or a consultant engaged by the Contractor or paving subcontractor. The QCP Administrator shall have full authority to institute any and all actions necessary for the successful operation of the QCP. The QCP Administrator (or its designee in the QCP Administrator’s absence) shall be available to communicate with the Department at all times. The QCP Administrator shall be certified as a Quality Assurance Technologist certified by the New England Transportation Technician Certification Program (NETTCP).
b. Process Control Technician(s) (PCT) shall utilize test results and other quality control practices to assure the quality of aggregates and other mix components and control proportioning to meet the JMF(s). The PCT shall inspect all equipment used in mixing to assure it is operating properly and that mixing conforms to the mix design(s) and other Contract requirements, and that delivery slips and plant recordation accurately reflects the mix being produced with all the required information. The QCP shall detail how these duties and responsibilities are to be accomplished and documented, and whether more than one PCT is required. The Plan shall include the criteria to be utilized by the PCT to correct or reject unsatisfactory materials. The PCT shall be certified as a Plant Technician by the NETTCP.

c. Quality Control Technician(s) (QCT) shall perform and utilize quality control tests at the job site to assure that delivered materials meet the requirements of the JMF(s). The QCT shall inspect all equipment utilized in transporting, laydown, and compacting to assure it is operating properly and that all laydown and compaction conform to the Contract requirements. The QCP shall detail how these duties and responsibilities are to be accomplished and documented, and whether more than one QCT is required. The QCP shall include the criteria utilized by the QCT to correct or reject unsatisfactory materials. The QCT shall be certified as a Paving Inspector by the NETTCP.

The QCP shall detail the coordination of the activities of the Plan Administrator, the PCT and the QCT. The Project Superintendent shall be named in the QCP, and the responsibilities for successful implementation of the QCP shall be outlined.

The Contractor shall sample, test, and evaluate Hot Mix Asphalt Pavement in accordance with the following minimum frequencies:

<table>
<thead>
<tr>
<th>Test or Action</th>
<th>Frequency</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature of mix</td>
<td>6 per day at street and plant</td>
<td>-</td>
</tr>
<tr>
<td>Temperature of mat</td>
<td>4 per day</td>
<td>-</td>
</tr>
<tr>
<td>%TMD (Surface)</td>
<td>1 per 125 ton (As noted in QC Plan)</td>
<td>ASTM D2950</td>
</tr>
<tr>
<td>%TMD (Base)</td>
<td>1 per 250 ton (As noted in QC Plan)</td>
<td>AASHTO T269</td>
</tr>
<tr>
<td>Fines / Effective Binder</td>
<td>1 per 500 ton</td>
<td>AASHTO T312*</td>
</tr>
<tr>
<td>Gradation</td>
<td>1 per 500 ton</td>
<td>AASHTO T30</td>
</tr>
<tr>
<td>PGAB content</td>
<td>1 per 500 ton</td>
<td>AASHTO T164 or T308</td>
</tr>
<tr>
<td>Voids at $N_{design}$</td>
<td>1 per 500 ton</td>
<td>AASHTO T312*</td>
</tr>
<tr>
<td>Voids in Mineral Aggregate at $N_{design}$</td>
<td>1 per 500 ton</td>
<td>AASHTO T312*</td>
</tr>
<tr>
<td>Rice Specific Gravity</td>
<td>1 per 500 ton</td>
<td>AASHTO T209</td>
</tr>
<tr>
<td>Coarse Aggregate Angularity</td>
<td>1 per 5000 ton</td>
<td>ASTM D5821</td>
</tr>
<tr>
<td>Flat and Elongated Particles</td>
<td>1 Per 5000 ton</td>
<td>ASTM D4791</td>
</tr>
<tr>
<td>Fine Aggregate Angularity</td>
<td>1 Per 5000 ton</td>
<td>AASHTO T304</td>
</tr>
</tbody>
</table>

*Method A and B only

The Contractor may utilize innovative equipment or techniques not addressed by the Contract documents to produce or monitor the production of the mix, subject to approval by the Department.
The Contractor shall submit all Hot Mix Asphalt Pavement plant test reports, inspection reports and updated pay factors in writing, signed by the appropriate technician and present them to the Department by 1:00 P.M. on the next working day, except when otherwise noted in the QCP due to local restrictions. The Contractor shall also retained splits of the previous 5 QC tests, with QC results enclosed for random selection and testing by The Department during QA inspections of the HMA production facility. Test results of splits that do not meet the Dispute Resolution Variance Limits in Table 10 shall trigger an investigation by the MaineDOT Independent Assurance Unit, and may result in that lab losing NETTCP certification and the ability to request a dispute [Section 401.223 - Process for Dispute Resolution (Methods A, B and C only)].

The Contractor shall make density test results, including randomly sampled densities, available to the Department onsite. Summaries of each day's results, including a daily paving report, shall be recorded and signed by the QCT and presented to the Department by 1:00 p.m. the next working day.

The Contractor shall have a testing lab at the plant site, equipped with all testing equipment necessary to complete the tests in Table 2. The Contractor shall locate an approved Gyratory Compactor at the plant testing lab or within 30 minutes of the plant site.

The Contractor shall fill all holes in the pavement resulting from cutting cores by the Contractor or the Department with a properly compacted, acceptable mixture no later than the following working day. Before filling, the Contractor shall carefully clean the holes and apply a coating of emulsified asphalt. On surface courses, cores shall not be cut except for Verification of the Nuclear Density Gauge, at a rate not to exceed 3 per day or 2 per 1000 Mg [1000 ton] placed.

The Contractor shall monitor plant production using running average of three control charts as specified in Section 106 - Quality. Control limits shall be as noted in Table 3 below. The UCL and LCL, shall not exceed the allowable gradation control points for the particular type of mixture as outlined in Table 1 of section 703.09

<table>
<thead>
<tr>
<th>Property</th>
<th>UCL and LCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passing 4.75 mm and larger sieves</td>
<td>Target +/-4.0</td>
</tr>
<tr>
<td>Passing 2.36 mm sieve</td>
<td>Target +/-2.5</td>
</tr>
<tr>
<td>Passing .075 mm sieve</td>
<td>Target +/-1.2</td>
</tr>
<tr>
<td>PGAB Content*</td>
<td>Target +/-0.3</td>
</tr>
<tr>
<td>Voids in the Mineral Aggregate</td>
<td>LCL = LSL + 0.2</td>
</tr>
<tr>
<td>% Voids at N_{design}</td>
<td>JMF Target +/-1.3</td>
</tr>
</tbody>
</table>

*Based on AASHTO T 308

The Contractor shall cease paving operations whenever one of the following occurs on a lot in progress:

a. Method A: The Pay Factor for VMA, Voids @ N_{dv}, Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.85.

b. Method B: The Pay Factor for VMA, Voids @ N_{dv}, Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.90.

c. Method C: The Pay Factor for VMA, Voids @ N_{dv}, Percent PGAB, percent passing the nominal maximum sieve, percent passing 2.36 mm sieve, percent passing 0.300 mm sieve, percent passing 0.075 mm sieve or density using all Acceptance or all available Quality Control tests for the current lot is less than 0.85.
d. The Coarse Aggregate Angularity or Fine Aggregate Angularity value falls below the requirements of Table 3: Aggregate Consensus Properties Criteria in Section 703.07 for the design traffic level.

e. Each of the first 2 control tests for a Method A or B lot fall outside the upper or lower limits for VMA, Voids @ Nd, or Percent PGAB; or under Method C, each of the first 2 control tests for the lot fall outside the upper or lower limits for the nominal maximum, 2.36 mm, 0.300 mm or 0.075 mm sieves, or percent PGAB.

f. The Flat and Elongated Particles value exceeds 10% by ASTM D4791.

g. There is any visible damage to the aggregate due to over-densification other than on variable depth shim courses.

h. The Contractor fails to follow the approved QCP.

The Contractor shall notify the Resident in writing as to the reason for shutdown, as well as the proposed corrective action, by the end of the work day. Failure to do so will be treated as a second incident under 106.4.6 QCP Non-compliance. The Department will consider corrective action acceptable if the pay factor for the failing property increases, based on samples already in transit, or a verification sample is tested and the property falls within the specification limits.

In cases where the corrective action can be accomplished immediately, such as batch weight or cold feed changes, the Contractor may elect to resume production once the corrective action is completed. Additional QC testing shall be performed to verify the effectiveness of the corrective action. Subsequent occurrences of shutdown for the same property in a Lot in progress will require paving operations to cease. Paving operations shall not resume until the Contactor and the Department determines that material meeting the Contract requirements will be produced. The Department may allow the Contractor to resume production based upon a passing QC sample, with a split of the sample being sent to the Department for verification testing. If the submitted verification sample test results fall outside the specification limits, the Contractor shall cease production until a verification sample is submitted to the Department has been tested by the Department and found to be within specification limits.

If the Contractor’s control chart shows the process to be out of control (defined as a single point outside of the control limits on the running average of three chart) on any property listed in Table 3: Control Limits, the Contractor shall notify the Resident in writing of any proposed corrective action by 1:00 PM the next working day.

The Department retains the exclusive right, with the exception of the first day’s production of a new JMF, to determine whether the resumption of production involves a significant change to the production process. If the Department so determines, then the current lot will be terminated, a pay factor established, and a new lot will begin.

401.19 Quality Control Method D For Items covered under Method D, the Contractor shall submit a modified QC Plan detailing, how the mix is to be placed, what equipment is to be used, and what HMA plant is to be used. All mix designs (JMF) shall be approved and verified by MaineDOT prior to use. Certified QC personnel shall not be required. The Contractor shall certify the mix and the test results for each item by a Certificate of Compliance.

401.20 Acceptance Method A, B & C These methods utilizes Quality Level Analysis and pay factor specifications. For Hot Mix Asphalt Pavement designated for acceptance under Quality Assurance provisions, the Department will sample once per sublot on a statistically random basis, test, and evaluate in accordance with the following Acceptance Criteria:
TABLE 4: ACCEPTANCE CRITERIA

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>POINT OF SAMPLING</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gradation</td>
<td>Paver Hopper</td>
<td>AASHTO T30</td>
</tr>
<tr>
<td>PGAB Content</td>
<td>Paver Hopper</td>
<td>AASHTO T308</td>
</tr>
<tr>
<td>%TMD (Surface)</td>
<td>Mat behind all Rollers</td>
<td>AASHTO T269</td>
</tr>
<tr>
<td>%TMD (Base or Binder)</td>
<td>Mat behind all Rollers</td>
<td>AASHTO T269</td>
</tr>
<tr>
<td>Air Voids at N_d</td>
<td>Paver Hopper</td>
<td>AASHTO T 312</td>
</tr>
<tr>
<td>%VMA at N_d</td>
<td>Paver Hopper</td>
<td>AASHTO T 312</td>
</tr>
<tr>
<td>Fines to Effective Binder</td>
<td>Paver Hopper</td>
<td>AASHTO T 312</td>
</tr>
<tr>
<td>%VFB</td>
<td>Paver Hopper</td>
<td>AASHTO T 312</td>
</tr>
</tbody>
</table>

In the event the Department terminates a Lot prematurely but fails to obtain the required number of acceptance samples to calculate the volumetric property pay factor under the test method specified in the contract, the pay factor shall be calculated using the number of samples actually obtained from the contract. Should the number of acceptance samples taken total less than three, the resulting pay factor shall be 1.0 for volumetric properties. A minimum of three cores will be used for a density pay factor using the contract’s specified Acceptance method, if applicable, for quantities placed to date.

Should the Contractor request a termination of the Lot in progress prior to three acceptance samples being obtained, and the Department agrees to terminate the Lot, then the pay factor for mixture properties shall be 0.80. A minimum of three cores will be used to determine a density pay factor using the contract’s specified Acceptance method, if applicable, for quantities placed to date.

**Lot Size** For purposes of evaluating all acceptance test properties, a lot shall consist of the total quantity represented by each item listed under the lot size heading.

**Sublot size** - Refer to section 401.201, 401.202, and 401.203 for minimum size and number of sublots. The quantity represented by each sample will constitute a sublot.

If there is less than one-half of a sublot remaining at the end, then it shall be combined with the previous sublot. If there is more than one-half sublot remaining at the end, then it shall constitute the last sublot and shall be represented by test results. If it becomes apparent partway through a Lot that, due to an underrun, there will be insufficient mix quantity to obtain the minimum number of sublots needed, the Resident may adjust the size of the remaining sublots and select new sample locations based on the estimated quantity of material remaining in the Lot.

**Acceptance Testing** The Department will obtain samples of Hot Mix Asphalt Pavement in conformance with AASHTO T168 Sampling Bituminous Paving Mixtures, and the MaineDOT Policies and Procedures for HMA Sampling and Testing, which will then be transported by the Contractor to the designated MaineDOT Laboratory within 48 hours (except when otherwise noted in the project specific QCP due to local restrictions), as directed by MaineDOT in approved transport containers to be provided by the Department, unless otherwise directed by the Resident. Failure to deliver an acceptance sample to the designated acceptance laboratory will be considered the second incident under 106.4.6–QCP Non-Compliance.
The Department will take the sample randomly within each sublot. Target values shall be as specified in the JMF. The Department will use Table 5 for calculating pay factors for gradation, PGAB Content, Air Voids at \( N_{\text{design}} \), VMA, Fines to Effective Binder and VFB. The Department will withhold reporting of the test results for the Acceptance sample until 7:00 AM, on the second working day of receipt of the sample, or after receipt of the Contractors results of the Acceptance sample split. Upon conclusion of each lot, where there is a minimum of four sublots, results shall be examined for statistical outliers, as stated in Section 106.7.2 - Statistical Outliers.

Isolated Areas  During the course of inspection, should it appear that there is an isolated area that is not representative of the lot based on a lack of observed compactive effort, excessive segregation, a change in process or any other questionable practice, that area may be isolated and tested separately. An area so isolated that has a calculated pay factor below 0.80 for Method A and C or below 0.86 for Method B, based on three random tests shall be removed and replaced at the expense of the Contractor for the full lane width and a length not to be less than 150 ft.

Pavement Density  The Department will measure pavement density using core samples tested according to AASHTO T-166. The Department will randomly determine core locations. The Contractor shall cut 6 inch diameter cores at no additional cost to the Department by the end of the working day following the day the pavement is placed, and immediately give them to the Department. Cores for Acceptance testing shall be cut such that the nearest edge is never within 9 inches of any joint. The cores will be placed in a transport container provided by the Department and transported by the Contractor to the designated MaineDOT Lab as directed by the Department. Pre-testing of the cores will not be allowed. At the time of sampling, the Contractor and the Department shall mutually determine if a core is damaged. If it is determined that the core(s) is damaged, the Contractor shall cut new core(s) at the same offset and within 3 ft of the initial sample. At the time the core is cut, the Contractor and the Department will mutually determine if saw cutting of the core is needed, and will mark the core at the point where sawing is needed. The core may be saw cut by the Contractor in the Department's presence onsite, or in a MaineDOT Lab by The Department, without disturbing the layer being tested to remove lower layers of Hot Mix Asphalt Pavement, gravel, or RAP. No recuts are allowed at a test location after the core has been tested. Upon conclusion of each lot, density results shall be examined for statistical outliers as stated in Section 106.7.2.

On all sections of overlay with wearing courses designed to be 3/4 in or less in thickness, there shall be no pay adjustment for density otherwise noted in Section 403 - Hot Mix Asphalt Pavement. For overlays designed to be 3/4 in or less in thickness, density shall be obtained by the same rolling train and methods as used on mainline travelway surface courses with a pay adjustments for density, unless otherwise directed by the Department.

There shall be no pay adjustment for density on shoulders unless otherwise noted in Section 403 - Hot Mix Asphalt Pavement. Density for shoulders shall be obtained by the same rolling train and methods as used on mainline travelway, unless otherwise directed by the Department. Efforts to obtain optimum compaction will not be waived by the Department unless it is apparent during construction that local conditions make densification to this point detrimental to the finished pavement surface course.

401.201 Method A  Lot Size will be the entire production per JMF for the project, or if so agreed at the Pre-paving Conference, equal lots of up to 4500 tons, with unanticipated over-runs of up to 1500 ton rolled into the last lot. Sublot sizes shall be 750 ton for mixture properties, 500 ton for base or binder densities and 250 ton for surface densities. The minimum number of sublots for mixture properties shall be 4, and the minimum number of sublots for density shall be five.
**TABLE 5: METHOD A ACCEPTANCE LIMITS**

<table>
<thead>
<tr>
<th>Property</th>
<th>USL and LSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Passing 4.75 mm and larger sieves</td>
<td>Target +/-7%</td>
</tr>
<tr>
<td>Percent Passing 2.36 mm to 1.18 mm sieves</td>
<td>Target +/-5%</td>
</tr>
<tr>
<td>Percent Passing 0.60 mm</td>
<td>Target +/-4%</td>
</tr>
<tr>
<td>Percent Passing 0.30 mm to 0.075 mm sieve</td>
<td>Target +/-3%</td>
</tr>
<tr>
<td>PGAB Content</td>
<td>Target +/-2%</td>
</tr>
<tr>
<td>Air Voids</td>
<td>Target +/-0.4%</td>
</tr>
<tr>
<td>Fines to Effective Binder</td>
<td>4.0% +/-1.5%</td>
</tr>
<tr>
<td>Voids in the Mineral Aggregate</td>
<td>0.9 +/-0.3</td>
</tr>
<tr>
<td>Voids Filled with Binder</td>
<td>LSL Only from Table 1</td>
</tr>
<tr>
<td>% TMD (In-place Density)</td>
<td>Table 1 values plus a 4% production tolerance for USL only</td>
</tr>
<tr>
<td>Percent Passing 4.75 mm and larger sieves</td>
<td>95.0% +/- 2.5%</td>
</tr>
</tbody>
</table>

**401.202 Method B** Lot Size will be the entire production per JMF for the project and shall be divided into 3 equal sublots for Mixture Properties and 3 equal sublots for density.

**TABLE 6: METHOD B ACCEPTANCE LIMITS**

<table>
<thead>
<tr>
<th>Property</th>
<th>USL and LSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Passing 4.75 mm and larger sieves</td>
<td>Target +/-7</td>
</tr>
<tr>
<td>Percent Passing 2.36 mm to 1.18 mm sieves</td>
<td>Target +/-5</td>
</tr>
<tr>
<td>Percent Passing 0.60 mm</td>
<td>Target +/-4</td>
</tr>
<tr>
<td>Percent Passing 0.30 mm to 0.075 mm sieve</td>
<td>Target +/-3</td>
</tr>
<tr>
<td>PGAB Content</td>
<td>Target +/-0.5</td>
</tr>
<tr>
<td>Air Voids</td>
<td>4.0% +/-2.0</td>
</tr>
<tr>
<td>Fines to Effective Binder</td>
<td>0.9 +/-0.3</td>
</tr>
<tr>
<td>Voids in the Mineral Aggregate</td>
<td>LSL from Table 1</td>
</tr>
<tr>
<td>Voids Filled with Binder</td>
<td>Table1 plus a 4% production tolerance for USL.</td>
</tr>
<tr>
<td>% TMD (In-place Density)</td>
<td>95.0% +/- 2.5%</td>
</tr>
</tbody>
</table>

**401.203 Method C** Lot Size will be the entire production per JMF for the project, or if so agreed at the Pre-paving Conference, equal lots of up to 4500 tons, with unanticipated over-runs of up to 1500 ton rolled into the last lot. Sublot sizes shall be 750 ton for mixture properties, 500 ton for base or binder densities and 250 ton for surface densities. The minimum number of sublots for mixture properties shall be 4, and the minimum number of sublots for density shall be five.
TABLE 7: METHOD C ACCEPTANCE LIMITS

<table>
<thead>
<tr>
<th>Property</th>
<th>USL and LSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passing 4.75 mm and larger sieves</td>
<td>Target +/-7%</td>
</tr>
<tr>
<td>Passing 2.36 mm to 1.18 mm sieves</td>
<td>Target +/-5%</td>
</tr>
<tr>
<td>Passing 0.60 mm</td>
<td>Target +/-4%</td>
</tr>
<tr>
<td>Passing 0.30 mm to 0.075 mm sieve</td>
<td>Target +/-2%</td>
</tr>
<tr>
<td>PGAB Content</td>
<td>Target +/-0.4%</td>
</tr>
<tr>
<td>Air Voids</td>
<td>4.0% +/-1.5%</td>
</tr>
<tr>
<td>Fines to Effective Binder</td>
<td>0.9 +/-0.3</td>
</tr>
<tr>
<td>Voids in the Mineral Aggregate</td>
<td>LSL Only from Table 1</td>
</tr>
<tr>
<td>Voids Filled with Binder</td>
<td>Table 1 values plus a 4% production tolerance for USL only</td>
</tr>
<tr>
<td>% TMD (In place density)</td>
<td>95.0% +/- 2.5%</td>
</tr>
</tbody>
</table>

401.204 Method D  For hot mix asphalt items designated as Method D in Section 403 - Hot Mix Asphalt Pavement, one sample will be taken from the paver hopper or the truck body per 250 ton per pay item. The mix will be tested for gradation and PGAB content. Disputes will not be allowed. If the mix is within the tolerances listed in Table 8: Method D Acceptance Limits, the Department will pay the contract unit price. Contractor shall cut two 6 in cores, which shall be tested for percent TMD per AASHTO T-269 unless otherwise noted in Section 403 - Hot Mix Asphalt Pavement. If the average for the two tests falls below 92.5% the disincentive shall apply. If the test results for each 250 ton increment are outside these limits, the following deductions (Table 8B) shall apply to the HMA quantity represented by the test.

TABLE 8: METHOD D ACCEPTANCE LIMITS

<table>
<thead>
<tr>
<th>Property</th>
<th>USL and LSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Passing 4.75 mm and larger sieves</td>
<td>Target +/-7</td>
</tr>
<tr>
<td>Percent Passing 2.36 mm to 1.18 mm sieves</td>
<td>Target +/-5</td>
</tr>
<tr>
<td>Percent Passing 0.60 mm</td>
<td>Target +/-4%</td>
</tr>
<tr>
<td>Percent Passing 0.30 mm to 0.075 mm sieve</td>
<td>Target +/-3%</td>
</tr>
<tr>
<td>PGAB Content</td>
<td>Target +/-0.5</td>
</tr>
<tr>
<td>% TMD (In-place Density)</td>
<td>95.0% +/- 2.5%</td>
</tr>
</tbody>
</table>

TABLE 8B Method “D” Price Adjustments

<table>
<thead>
<tr>
<th>PGAB Content</th>
<th>-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.36 mm sieve</td>
<td>-2%</td>
</tr>
<tr>
<td>0.30 mm sieve</td>
<td>-1%</td>
</tr>
<tr>
<td>0.075 mm sieve</td>
<td>-2%</td>
</tr>
<tr>
<td>Density</td>
<td>-10%</td>
</tr>
</tbody>
</table>

401.21 Method of Measurement  The Department will measure Hot Mix Asphalt Pavement by the ton in accordance with Section 108.1 - Measurement of Quantities for Payment.

401.22 Basis of Payment  The Department will pay for the work, in place and accepted, in accordance with the applicable sections of this Section, for each type of HMA specified.

The Department will pay for the work specified in Section 401.11, for the HMA used, except that cleaning objectionable material from the pavement and furnishing and applying bituminous material to joints and contact surfaces is incidental. Payment for this work under the appropriate pay items shall be full compensation for all labor, equipment, materials, and incidentals necessary to meet all related contract requirements, including design
of the JMF, implementation of the QCP, obtaining core samples, transporting cores and samples, filling core holes, applying emulsified asphalt to joints, and providing testing facilities and equipment. The Department will make a pay adjustment for quality as specified below.

401.221 Pay Adjustment The Department will sample, test, and evaluate Hot Mix Asphalt Pavement in accordance with Section 106 - Quality and Section 401.20 - Acceptance, of this Specification.

In addition, for 9.5 mm NMAS mixtures the following pay adjustment shall also apply:

The average percent passing for the 0.075 mm sieve shall be evaluated for each Lot. If the average is greater than 6.5%, a pay adjustment according to Table 8C below shall apply in addition to the other pay adjustments for the given method of testing.

<table>
<thead>
<tr>
<th>AVERAGE PERCENT PASSING 0.075 MM SIEVE</th>
<th>PAY ADJUSTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.6% - 7.0%</td>
<td>-5% Pay Adjustment</td>
</tr>
<tr>
<td>&gt; 7.0%</td>
<td>-10% Pay Adjustment</td>
</tr>
</tbody>
</table>

The Department shall notify the Contractor whenever the average of at least three samples in a given Lot is greater than 6.5%.

401.222 Pay Factor (PF) The Department will use the following criteria for pay adjustment using the pay adjustment factors under Section 106.7 - Quality Level Analysis:

Density If the pay factor for Density falls below 0.80 for Method A or C or 0.86 for Method B, all of the cores will be randomly re-cut by Sublot. A new pay factor will be calculated that combines all initial and retest results. If the resulting pay factor is below 0.80 for Method A or C or below 0.86 for Method B, the entire Lot shall be removed and replaced with material meeting the specifications at no additional cost to the Department, except that the Department may, when it appears that there is a distinct pattern of defective material, isolate any defective material by investigating each mix sample sublot and require removal of defective mix sample sublots only, leaving any acceptable material in place if it is found to be free of defective material. Pay factors equal to or greater than the reject level will be paid accordingly.

Gradation For HMA evaluated under Acceptance Method A or B, the Department will determine a composite pay factor (CPF) using applicable price adjustment factors “f” from Table 9: Table of Gradation Composite “f” Factors, and Acceptance limits from Table 5: Method A Acceptance Limits, for Method A or Table 6: Method B Acceptance Limits, for Method B. The Department will not make price adjustments for gradation on Methods A and B except for 9.5mm NMAS mixtures as outlined in Table 4A. Gradations for Methods A and B shall be monitored as shutdown criteria.
TABLE 9: TABLE OF GRADATION COMPOSITE "f" FACTORS (Methods A and B)

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Gradation</th>
<th>&quot;f&quot; Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25 mm</td>
<td>19 mm</td>
</tr>
<tr>
<td></td>
<td>19 mm</td>
<td>12.5 mm</td>
</tr>
<tr>
<td></td>
<td>12.5 mm</td>
<td>9.5 mm</td>
</tr>
<tr>
<td></td>
<td>9.5 mm</td>
<td>4.75 mm</td>
</tr>
</tbody>
</table>

For HMA evaluated under Acceptance Method C, the Department will determine a pay factor using acceptance limits from Table 7: Method C Acceptance Limits.

VMA, Air Voids, VFB and Fines to Effective Binder: The Department will determine a pay factor (PF) using the applicable Acceptance Limits.

The following variables will be used for pay adjustment:

\[
\begin{align*}
PA & = \text{Pay Adjustment} \\
Q & = \text{Quantity represented by PF in ton} \\
P & = \text{Contract price per ton} \\
PF & = \text{Pay Factor}
\end{align*}
\]

Pay Adjustment Method A

The Department will use the following criteria for pay adjustment: density, Performance Graded Asphalt Binder content, voids @ Nd, VMA, VFB, F/B_{eff} and the screen sizes listed in Table 9 for the type of HMA represented in the JMF. If any single pay factor for PGAB Content, VMA, or Air Voids falls below 0.80, then the composite pay factor for PGAB Content, VMA, and Air Voids shall be 0.55.

Density: For mixes having a density requirement, the Department will determine a pay factor using Table 5: Method A Acceptance Limits:

\[
PA = (\text{density PF- 1.0})(Q)(P)x0.50
\]

PGAB Content, VMA and Air Voids: The Department will determine a pay adjustment using Table 5: Method A Acceptance Limits as follows:

\[
PA = (\text{voids @ Nd PF- 1.0})(Q)(P)x0.20 + (\text{VMA @ Nd PF- 1.0})(Q)(P)x0.20 + (\text{PGAB PF- 1.0})(Q)(P)x0.10
\]

VFB and Fines to Effective Binder: The Department will determine a pay factor (PF) using Table 5: Method A Acceptance Limits. The Department will not make price adjustments for VFB or Fines to Effective Binder, but will monitor them as shutdown criteria.
Pay Adjustment Method B

The Department will use the following criteria for pay adjustment: density, Performance Graded Asphalt Binder content, voids @Nd, VMA, VFB, F/B_{eff} and the screen sizes listed in Table 9 for the type of HMA represented in the JMF. If any single pay factor for PGAB Content, VMA, or Air Voids falls below 0.86, then the composite pay factor for PGAB Content, VMA, and Air Voids shall be 0.70.

Density: For mixes having a density requirement, the Department will determine a pay factor using Table 6: Method B Acceptance Limits:

\[ PA = (\text{density} \times \text{PF} - 1.0)(Q)(P)x0.50 \]

PGAB Content, VMA and Air Voids: The Department will determine a pay adjustment using Table 6: Method B Acceptance Limits as follows:

\[ PA = (\text{voids} @ \text{N}_d \times \text{PF} - 1.0)(Q)(P)x0.20 + (\text{VMA} @ \text{N}_d \times \text{PF} - 1.0)(Q)(P)x0.20 + (\text{PGAB} \times \text{PF} - 1.0)(Q)(P)x0.10 \]

VFB and Fines to Effective Binder The Department will determine a pay factor (PF) using Table 6: Method B Acceptance Limits. The Department will not make price adjustments for VFB or Fines to Effective Binder, but will monitor them as shutdown criteria.

Pay Adjustment Method C

The Department will use density, Performance Graded Asphalt Binder content, and the percent passing the nominal maximum, 2.36 mm, 0.300 mm and 0.075 mm sieves for the type of HMA represented in the JMF. If the PGAB content falls below 0.80, then the PGAB pay factor shall be 0.55.

Density: For mixes having a density requirement, the Department will determine a pay factor using Table 7: Method C Acceptance Limits:

\[ PA = (\text{density} \times \text{PF} - 1.0)(Q)(P)x0.50 \]

PGAB Content and Gradation The Department will determine a pay factor using Table 7: Method C Acceptance Limits. The Department will calculate the price adjustment for Mixture Properties as follows:

\[ PA = (% \text{Passing Nom. Max} \times \text{PF} - 1.0)(Q)(P)x0.05 + (% \text{passing} \ 2.36 \ \text{mm} \times \text{PF} - 1.0)(Q)(P)x0.05 + (% \text{passing} \ 0.30 \ \text{mm} \times \text{PF} - 1.0)(Q)(P)x0.05 + (% \text{passing} \ 0.075 \ \text{mm} \times \text{PF} - 1.0)(Q)(P)x0.10 + (\text{PGAB} \times \text{PF} - 1.0)(Q)(P)x0.25 \]

VMA, Air Voids, VFB and Fines to Effective Binder The Department will determine a pay factor (PF) using Table 7: Method C Acceptance Limits. The Department will not make price adjustments for VMA, Air Voids, VFB or Fines to Effective Binder, but will monitor them as shutdown criteria.

Pay Adjustment Method D

The Department will use density, Performance Graded Asphalt Binder content, and the screen sizes listed in Table 8b for the type of HMA represented in the JMF. If test results do not meet the Table 8 requirements, deducts as shown in Table 8b shall be applied to the quantity of mix represented by the test.
401.223  Process for Dispute Resolution (Methods A B & C only)

a. Dispute Resolution sampling  At the time of Hot-Mix Asphalt sampling, the Department will obtain a split sample of each Acceptance test random sample for possible dispute resolution testing. The Contractor shall also obtain a split sample of the HMA at this same time. If the Contractor wishes to retain the option of requesting dispute testing of the initial Acceptance sample, the Contractor will test their split of the Acceptance sample and shall report their results to the Resident, with a copy to the QA Engineer by 7:00 AM, on the second working day from time of QA sampling, otherwise dispute resolution will not be initiated. The Department’s dispute resolution split sample will be properly labeled and stored for a period of at least two weeks, or until the sample is tested.

b. Disputing Acceptance results  The Contractor may dispute the Department’s Acceptance results and request (Methods A, B, & C) that the dispute resolution split sample be tested by notifying the Department’s Resident and the QA Engineer in writing within two working days after receiving the results of the Acceptance test. The following shall be provided in the request:
   • Acceptance sample reference number
   • The specific test result(s) or property(ies) being disputed, and
   • The complete, signed report of the Contractor’s testing (In a lab certified by the NETTCP and MaineDOT) of their split of the Acceptance sample indicating that the variances in Table 10: Dispute Resolution Variance Limits, for the specific test result(s) or property(ies) were exceeded.

c. Disputable items
   For Methods A and B: The Contractor may dispute any or all of the following test results when the difference between the Department’s value and the Contractor’s value for that test equals or exceeds the corresponding allowable variation in Table 10: Dispute Resolution Variance Limits, PGAB content, Gmb, and Gmm. In addition, if the allowable variation for the Gmb or Gmm is not met or exceeded, the Contractor may dispute either or both of the following material properties provided the difference between results for them equals or exceeds the corresponding allowable variation in Table 10: Voids at N_{design}, and VMA. The Contractor may dispute the 0.075 mm sieve test result when a 9.5 mm NMAS mixture is used.

   For Method C only: The results for PGAB content and the screen sizes used for pay adjustment may be disputed.

d. Outcome  The value of any disputed result or property reported for the initial Acceptance sample shall stand if the value reported for the dispute resolution sample is not closer to the value the Contractor reported for their split sample than to the value reported for the initial Acceptance sample. If the value reported for the dispute resolution falls precisely half-way between the other two values the value reported for the dispute resolution will replace the original acceptance value. Otherwise, the value reported for the dispute resolution sample will replace the value reported for the initial Acceptance sample, and will be used to re-calculate any other affected results or properties.
SECTION 402 - PAVEMENT SMOOTHNESS

402.00 Smoothness Projects  Projects to have their pavement smoothness analyzed in accordance with this Specification will be so noted in Special Provision 403 - Hot Mix Asphalt Pavement.

402.01 Pavement Smoothness  The final pavement surface shall be evaluated for smoothness using a Class I or Class II profiler as defined by ASTM E950 (94). Smoothness measurements will be expressed in terms of the International Roughness Index (IRI) as defined by the World Bank, in units of inches/mile.

402.02 Lot Size  Lot size for smoothness will be 3000 lane-feet. A sublot will consist of 20 50 lane-feet. Partial lots will be included in the previous lot if less than one-half the size of a normal lot. If equal to or greater than one-half the normal lot size, it will be tested as a separate lot.

402.03 Acceptance Testing  The Department will conduct Acceptance testing following completion of the surface course. Sections to be excluded from testing include the following:

- Bridge decks and joints (no smoothness measurements will be taken within 100 ft of bridge joints)
- Acceleration and deceleration lanes
- Shoulders and ramps
- Side streets and roads
- Within 100 ft of transverse joints at the beginning and end of the project
- Within 100 ft of railroad crossings
- Urban areas with speed limits of 30 mph or lower

Each lot shall have 2 measurements made in each wheel path. The average of the 4 measurements will determine the smoothness for that lot.

The smoothness measurements will be statistically evaluated for pay factors as described in Subsection 106.7 - Quality Level Analysis, using the specification limits shown below.

### ACCEPTANCE LIMITS

<table>
<thead>
<tr>
<th>Level</th>
<th>USL</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>60 in/mile</td>
</tr>
<tr>
<td>II</td>
<td>70 in/mile</td>
</tr>
<tr>
<td>III</td>
<td>80 in/mile</td>
</tr>
</tbody>
</table>

TABLE 10: DISPUTE RESOLUTION VARIANCE LIMITS

<table>
<thead>
<tr>
<th></th>
<th>USL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGAB Content</td>
<td>+/- 0.4%</td>
</tr>
<tr>
<td>(G_{mb})</td>
<td>+/- 0.030</td>
</tr>
<tr>
<td>(G_{mm})</td>
<td>+/- 0.020</td>
</tr>
<tr>
<td>Voids @ (N_d)</td>
<td>+/- 0.8%</td>
</tr>
<tr>
<td>VMA</td>
<td>+/- 0.8%</td>
</tr>
<tr>
<td>Passing 4.75 mm and larger sieves</td>
<td>+/- 4.0%</td>
</tr>
<tr>
<td>Passing 2.36 mm to 0.60 mm sieves</td>
<td>+/- 3.0%</td>
</tr>
<tr>
<td>Passing 0.30 mm to 0.15</td>
<td>+/- 2.0%</td>
</tr>
<tr>
<td>0.075 mm sieve</td>
<td>+/- 1.0%</td>
</tr>
</tbody>
</table>
Computation of Smoothness Pay Adjustment:

\[ PA = (PF - 1.0)(Q)(P) \]

where:
- \( Q \) = Quantity of surface course in the Lot (excluding shoulders, side streets, bridge decks, ramps, acceleration and deceleration lanes)
- \( PF \) = smoothness pay factor for the Lot
- \( P \) = Contract unit price for surface pavement
- \( PA \) = pay adjustment

402.04 Unacceptable Work  In the event that any Lot is found to have a pay factor less than 0.80, the Contractor shall take whatever remedial action is required to correct the pavement surface in that Lot at no additional expense to the Department. Such remedial action may include but is not limited to removal and replacement of the unacceptable pavement. In the event remedial action is necessary, the Contractor shall submit a written plan to the Resident outlining the scope of the remedial work. The Resident must approve this plan before the remedial work can begin. Following remedial work, the Lot shall be retested, and will be subject to the specification limits listed above. The resulting pay factor, if within the acceptable range, will be used in the final pay adjustment. The Contractor shall pay the cost of retesting the pavement following corrective action. Localized surface tolerance defects will be subject to the provisions outlined in Section 401.101 Surface Tolerances.

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>402.10 Incentive/Disincentive - Pavement Smoothness</td>
<td>Lump Sum</td>
</tr>
</tbody>
</table>

SECTION 403 - HOT MIX ASPHALT PAVEMENT

403.01 Description  This work shall consist of constructing one or more courses of Hot Mix Asphalt pavement on an approved base in accordance with these specifications, and in reasonably close conformity with the lines, grades, thickness and typical cross sections shown on the plans or established.

The HMA pavement shall be composed of a mixture of aggregate, filler if required, and asphalt material.

403.02 General  The materials and their use shall conform to the requirements of Section 401 - Hot Mix Asphalt Pavement.

403.03 Construction  The construction requirements shall be as specified in Section 401 - Hot Mix Asphalt Pavement.

403.04 Method of Measurement  Hot mix asphalt pavement will be measured as specified in Section 401.21-Method of Measurement.

403.05 Basis of Payment  The accepted quantities of hot mix asphalt pavement will be paid for at the contract unit price per ton for the mixtures, including hot mix asphalt material complete in place.
Method A, Method B, Method C and Method D shall be used for acceptance as specified in Section 401 - Hot Mix Asphalt Pavements. (See Complementary Notes, Section 403 - Hot Mix Asphalt Pavement, for Method location).

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>403.102</td>
<td>Hot Mix Asphalt Pavement for Special Areas</td>
</tr>
<tr>
<td>403.206</td>
<td>Hot Mix Asphalt, 25 mm Nominal Maximum Size</td>
</tr>
<tr>
<td>403.207</td>
<td>Hot Mix Asphalt, 19.0 mm Nominal Maximum Size</td>
</tr>
<tr>
<td>403.2071</td>
<td>Hot Mix Asphalt, 19.0 mm Nominal Maximum Size (Polymer Modified)</td>
</tr>
<tr>
<td>403.2072</td>
<td>Asphalt Rich Hot Mix Asphalt, 19.0 mm Nominal Maximum Size (Asphalt Rich Base and Intermediate course)</td>
</tr>
<tr>
<td>403.208</td>
<td>Hot Mix Asphalt, 12.5 mm Nominal Maximum Size</td>
</tr>
<tr>
<td>403.2081</td>
<td>Hot Mix Asphalt - 12.5 mm Nominal Maximum Size (Polymer Modified)</td>
</tr>
<tr>
<td>403.20813</td>
<td>Warm Mix Asphalt - 12.5 mm Nominal Maximum Size (Polymer Modified)</td>
</tr>
<tr>
<td>403.2083</td>
<td>Warm Mix Asphalt, 12.5 mm Nominal Maximum Size</td>
</tr>
<tr>
<td>403.209</td>
<td>Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (sidewalks, drives, islands &amp; incidentals)</td>
</tr>
<tr>
<td>403.210</td>
<td>Hot Mix Asphalt, 9.5 mm Nominal Maximum Size</td>
</tr>
<tr>
<td>403.2101</td>
<td>Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Polymer Modified)</td>
</tr>
<tr>
<td>403.2102</td>
<td>Asphalt Rich Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Asphalt Rich Intermediate course)</td>
</tr>
<tr>
<td>403.2103</td>
<td>Warm Mix Asphalt, 9.5 mm Nominal Maximum Size</td>
</tr>
<tr>
<td>403.2104</td>
<td>Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Thin Lift Surface Treatment)</td>
</tr>
<tr>
<td>403.211</td>
<td>Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming)</td>
</tr>
<tr>
<td>403.2111</td>
<td>Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming, Polymer Modified)</td>
</tr>
<tr>
<td>403.2113</td>
<td>Warm Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming)</td>
</tr>
<tr>
<td>403.212</td>
<td>Hot Mix Asphalt, 4.75 mm Nominal Maximum Size</td>
</tr>
<tr>
<td>403.2123</td>
<td>Warm Mix Asphalt, 4.75 mm Nominal Maximum Size</td>
</tr>
<tr>
<td>403.213</td>
<td>Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course)</td>
</tr>
<tr>
<td>403.2131</td>
<td>Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course, Polymer Modified)</td>
</tr>
<tr>
<td>403.2132</td>
<td>Asphalt Rich Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course)</td>
</tr>
<tr>
<td>403.2133</td>
<td>Warm Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course)</td>
</tr>
<tr>
<td>403.214</td>
<td>Hot Mix Asphalt, 4.75 Nominal Maximum Size (5/8” Surface Treatment)</td>
</tr>
<tr>
<td>403.2143</td>
<td>Warm Mix Asphalt, 4.75 Nominal Maximum Size (5/8” Surface Treatment)</td>
</tr>
</tbody>
</table>
SPECIAL PROVISION
SECTION 403
HOT MIX ASPHALT

<table>
<thead>
<tr>
<th>Desc. Of Course</th>
<th>Grad Design.</th>
<th>Item Number</th>
<th>Total Thick</th>
<th>No. Of Layers</th>
<th>Comp. Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2” HMA Overlay Areas – New Trail Construction</td>
<td>9.5 mm</td>
<td>403.209</td>
<td>2”</td>
<td>1/more</td>
<td>2,4,10,11,14,16</td>
</tr>
</tbody>
</table>

COMPLEMENTARY NOTES

2. The incentive/disincentive provisions for density shall not apply. Rollers shall meet the requirements of this special provision. The use of an oscillating steel roller shall be required to compact all mixtures pavements placed on bridge decks.

4. The design traffic level for mix placed shall be 0.3 to <3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at 50 gyrations.

10. Section 106.6 Acceptance, (2) Method D.

11. The combined aggregate gradation required for this item shall be classified as a 9.5mm “fine graded” mixture, (using the Primary Control Sieve control point) as defined in 703.09.

14. The combined aggregate gradation required for this item shall be classified as a 9.5mm Thin Lift Mixture (TLM) mixture, using the Aggregate Gradation Control Points as defined in 703.09.

16. Compaction of the new Hot Mix Asphalt Pavement will be obtained using a minimal roller train consisting of a 3-5 ton vibratory roller. An approved release agent is required to ensure the mixture dose not adhere to hand tools, rollers, pavers, and truck bodies. The use of petroleum based fuel oils, or asphalt stripping solvents will not be permitted.

Tack Coat
A tack coat of emulsified asphalt, RS-1, Item 409.15 shall be applied to any existing pavement at a rate of approximately 0.025 gal/yd², and on milled pavement approximately 0.05 gal/yd² prior to placing a new course. A fog coat of emulsified asphalt shall be applied between shim/base courses and the surface course, at a rate not to exceed 0.025 gal/yd². Cleaning objectionable material from the pavement and furnishing and applying Item 409.15 bituminous materials to joints and contact surfaces is incidental to the contract paving items.
SPECIAL PROVISION
SECTION 502
STRUCTURAL CONCRETE
(Quality Level Analysis)

502.01 Description  In second sentence, replace “…METHOD B Small Quantity Product Verification…” with “…METHOD B Statistical Acceptance…”

502.05 Composition and Proportioning  Delete Table 1 and replace with the following;

<table>
<thead>
<tr>
<th>Concrete CLASS</th>
<th>Compressive Strength (PSI)</th>
<th>Permeability (COULOMBS)</th>
<th>Entrained Air (%)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>2,900</td>
<td>N/A</td>
<td>6.0</td>
<td>1, 5</td>
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<tr>
<td>A</td>
<td>4,350</td>
<td>-----</td>
<td>6.0</td>
<td>1,2,5,6</td>
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<tr>
<td>P</td>
<td>-----</td>
<td>-----</td>
<td>5 ½</td>
<td>1,2,3,4,5</td>
</tr>
<tr>
<td>LP</td>
<td>5,075</td>
<td>-----</td>
<td>6.0</td>
<td>1,2,5,6</td>
</tr>
<tr>
<td>Fill</td>
<td>2,900</td>
<td>N/A</td>
<td>N/A</td>
<td>6</td>
</tr>
</tbody>
</table>

502.0503  Delete and replace with the following;

“502.0503 Quality Assurance METHOD B  The Department will determine the acceptability of the concrete through a quality assurance program.

The Department will take Quality Assurance samples a minimum of once per subplot on a statistically random basis. Quality Assurance tests will include compressive strength, air content and permeability.

Concrete sampling for quality assurance tests will be taken at the discharge point, with pumped concrete sampling taken at the discharge end of the pump line.

Lot Size  A lot size shall consist of the total quantity represented by each class of concrete in the Contract, except in the case when the same class of concrete is paid for under both lump sum items and unit price items in the Contract; in this case, the lump sum item quantities shall comprise 1 lot and the unit price item quantities shall comprise a separate lot. A lot shall consist of a minimum of 3 and a maximum of 10 sublots. If a lot is comprised of more than 10 sublots, sized in accordance with Table #3, then this quantity shall be divided equally into 2, or more, lots such that there is a minimum of 3 and a maximum of 10 sublots per lot. If there is insufficient quantity in a lot to meet the recommended minimum subplot size, then the lot shall be divided into 3 equal sublots.
Sublot Size, General  The size of each sublot shall be determined in accordance with Table #3. The Resident may vary sublot sizes based on placement sizes and sequence.

Sublot Size, Unit Price Items  Sublot sizes will initially be determined from estimated quantities. When the actual final quantity of concrete is determined: If there is less than one-half the estimated sublot quantity in the remaining quantity, then this quantity shall be combined with the previous sublot, and no further Acceptance testing will be performed; if there is more than one-half the estimated sublot quantity in the remaining quantity, then this quantity shall constitute the last sublot and shall be represented by Acceptance test results. If it becomes apparent part way through a lot that, due to an underrun in quantity, there will be an insufficient quantity of concrete to comprise three sublots, then the Resident may adjust the sizes of the remaining sublots and select new sample locations based on the revised estimated quantity of concrete remaining in the lot.

Sublot Size, Lump Sum Items  Each lot shall be divided into sublots of equal size, based on the estimated quantity of concrete.

<table>
<thead>
<tr>
<th>Quantity [m^3]</th>
<th>Recommended Sublot Size [m^3]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-400 [0-500]</td>
<td>40 [50]</td>
</tr>
<tr>
<td>401-800 [501-1000]</td>
<td>60 [75]</td>
</tr>
<tr>
<td>801-1600 [1001-2000]</td>
<td>80 [100]</td>
</tr>
<tr>
<td>1601 [2001] or greater</td>
<td>200 [250]</td>
</tr>
</tbody>
</table>

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 Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice, 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 Resident. 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 Resident, at least 48 hours prior to the placement, when the reinforcing steel will be ready for checking. Sufficient time must be allowed for the checking process and any needed repairs.

Evaluation of materials will be made using the specification limits in Table 1.

Compressive strength tests will be completed by the Department in accordance with AASHTO-T22 at $\geq 28$ days, except that no slump will be taken. The average of two
concrete cylinders per sublot will constitute a test result and this average will be used to
determine the compressive strength for pay adjustment computations.

Testing for Entrained Air in concrete, at the rate of one test per sublot, shall be in
accordance with AASHTO T152.

Rapid Chloride Permeability test specimens will be completed by the Resident in
accordance with AASHTO T-277 at an age ≥ 56 days. Two 100 mm x 200 mm [4 in x 8
in] cylinders will be taken per sublot placed.

Surface Tolerance, Alignment and Trueness, Plumb and Batter, and Finish will be
measured as described in Section 502.0502.

Rejection by Resident For an individual sublot with a calculated pay factor of
less than 0.80, the Department will, at its sole discretion:

A. Require the Contractor to remove and replace the entire affected
placement with concrete meeting the Contract requirements at no additional
expense to the Department, or

B. Accept the material, at a reduced payment as determined by the
Department. (See also Section 502.191)

For a lot in progress, the Contractor shall discontinue operations whenever one or
more of the following occurs:

A. The pay factor for any property drops below 1.00 and the Contractor is taking
no corrective action

B. The pay factor for any property is less than 0.90

C. The Contractor fails to follow the QC Plan”

502.18 Method of Measurement Under Section E. make the following change from
“….Method A, and under Section 502.19…” to “…Method A, Section 502.0503- Quality
Assurance Method B, and under Section 502.19…”

502.19 Basis of Payment Modify the first sentence of the seventh paragraph from
“…accepted under Method A.” to “…accepted under Method A and Method B.”

502.191 Pay Adjustment for Compressive Strength Add the following as the second
sentence to the first paragraph; “Pay factors (PF) for pay adjustments for compressive
strength will be determined using the Quality Level Analysis as specified in Section
106.”
502.192 Pay Adjustment for Chloride Permeability  Delete and replace with the following:

“Pay factors (PF) for pay adjustments for Chloride Permeability will be determined using the Quality Level Analysis as specified in Section 106.

Values greater than 4000 coulombs shall be subject to rejection and replacement at no additional cost to the Department.”

502.193 Pay Adjustment for Air Content  Delete and replace with the following:

“Pay factors (PF) for pay adjustments for air content will be determined using the Quality Level Analysis as specified in Section 106.”

Add the following Section:

“502.195 Pay Adjustments for Compressive Strength, Chloride Permeability and Air Content  The Composite Pay Factor (CPF) for each lot of concrete shall be computed as follows:

\[
CPF = [(\text{Compressive Strength PF}-1)(0.20)] + [(\text{Air Content PF}-1)(0.40)] + [(\text{Chloride Permeability PF}-1)(0.40)]
\]

The pay adjustment for each lot of concrete shall be computed as follows:

\[
\text{Lot Pay Adjustment} = P \times CPF \times \text{Lot Size}
\]

There will be no positive pay adjustments for Method B Concrete.”
### SPECIAL PROVISION
**SECTION 502**
**STRUCTURAL CONCRETE**
(QC/QA Acceptance Methods)

<table>
<thead>
<tr>
<th>CLASS OF CONCRETE</th>
<th>ITEM NUMBER</th>
<th>DESCRIPTION</th>
<th>P</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>502.325</td>
<td>Structural Concrete Pedestal/Footer</td>
<td>-</td>
<td>C</td>
</tr>
</tbody>
</table>
SECTION 603 - PIPE CULVERTS AND STORM DRAINS

603.01 Description  This work shall consist of constructing or reconstructing pipe culverts and storm drains, in accordance with these specifications, the Standard Detail plans and in reasonably close conformity with the lines and grades shown on the plans or established.

The word "pipe" in these specifications shall include both round pipe and pipe arches.

603.02 Materials  Meet Sections:

- Joint Mortar 705.02
- Flexible Gaskets 705.03
- Flexible Culvert Polyvinylchloride (PVC) Pipe 706.08
- Corrugated Steel, Metallic Coated Pipe 707.02
- Corrugated Aluminum Alloy Pipe & Pipe Arches 707.06
- Polymer Precoated, Galvanized Corrugated Steel 707.07

- Pipe & Pipe Arches
  - Aluminum Coated (Type 2) Corrugated Steel Pipe 707.10
  - Zinc-Coated (Galvanized) Corrugated Steel Pipe 707.11

- Rigid Culvert
  - Reinforced Concrete Pipe 706.02
  - Corrugated Polyethylene Pipe 706.06
  - Corrugated Polypropylene Pipe 706.10

Flexible culverts with a diameter of 48 inches or more shall have the ends cut to a partial bevel as called for on the plans. The cut ends of galvanized steel pipe shall be regalvanized or painted with a zinc aluminum paint conforming to Federal Specification TT-P-1561A or an approved equal.

Helical corrugated pipe shall be re-rolled to form angular corrugations on the ends.

The corrugated bands for connecting pipe with \(2^{2/3}\) inches by \(\frac{1}{2}\) inch corrugations shall be not less than 10\(\frac{1}{2}\) inches wide.

Rigid culverts, designated to have the ends shaped to a partial bevel, shall be either cast or cut to the required shape and dimensions. In either case, the edges of the pipe shall be even and true with no exposed reinforcing.

603.03 Construction Requirements

603.031 General  Culvert pipe and pipe arches shall be furnished under the following options unless otherwise specified.
Option I  The Contractor shall furnish any of the following type of pipe under Option I:

- Corrugated Steel, Metallic (zinc or aluminum) Coated Pipe
- Reinforced Concrete Pipe
- Corrugated Polyethylene Pipe
- Corrugated Polypropylene Pipe
- Any of the metal pipes allowed under Option III.

Option III  The Contractor shall furnish any of the following types of pipe under Option III. (Corrugated pipe used under this option shall be adequate to equal the flow capacity of comparable smoothlined pipe):

- Corrugated Aluminum Alloy Pipe
- Polyvinylchloride (PVC) Pipe
- Polymer-Precoated Galvanized Corrugated Steel Pipe
- Reinforced Concrete Pipe
- Corrugated Polyethylene Pipe
- Corrugated Polypropylene Pipe

Within any single run of culvert pipe, including extensions of existing culverts, the type of pipe shall be the same unless otherwise specified or as directed by the Resident. In a closed drainage system, a run of culvert pipe shall be considered from catch basin to catch basin. In an open drainage system, a run of culvert shall be considered from inlet to outlet.

Option III polyvinylchloride (PVC) pipe shall only be used in closed drainage systems, between catch basins.

603.0311 Corrugated Polyethylene or Polypropylene Pipe for Option III  If inspection by the Resident reveals an unsatisfactory installation, the Resident may direct the contractor to test installed Smooth Lined Corrugated Polyethylene or Polypropylene Pipe for Option III to ensure the vertical deflection does not exceed the maximum allowable deflection. Maximum allowable deflection shall be 5 percent of the sum of the nominal inside diameter minus a 1.5 percent undersize tolerance.

Deflection tests shall not be performed until at least 30 days after completion of installation and compaction of backfill. The pipe shall be cleaned and inspected for offsets and obstructions before testing.

For all pipes 24 inches and smaller, a mandrel shall be pulled through the pipe by hand to ensure the maximum allowable deflections have not been exceeded. The mandrel shall be certified by the Department prior to use. If the mandrel fails to pass through the pipe, the pipe will be deemed overdeflected.

For pipes greater than 24 inches, deflections shall be determined by a method submitted and approved by the Department. If a mandrel is selected, the minimum diameter and length and
other requirements shall conform to the dimensions and requirements stated below. If other methods are used the measurements shall meet the minimum mandrel diameter requirements.

Any overdeflected pipe shall be uncovered and if not damaged as determined by the Department shall be allowed for reinstallation. Damaged pipe shall not be reinstalled and shall be removed from the work site.

The mandrel shall be a rigid non-adjustable, odd numbered-leg (9 legs minimum) mandrel having an effective length not less than its nominal diameter and having a minimum diameter at any point along the full length as follows:

<table>
<thead>
<tr>
<th>Nominal Size inches</th>
<th>Minimum Mandrel Diameter inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>11.23</td>
</tr>
<tr>
<td>15</td>
<td>14.04</td>
</tr>
<tr>
<td>18</td>
<td>16.84</td>
</tr>
<tr>
<td>24</td>
<td>22.46</td>
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<td>30</td>
<td>28.07</td>
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<td>36</td>
<td>33.69</td>
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<tr>
<td>48</td>
<td>44.92</td>
</tr>
<tr>
<td>60</td>
<td>56.15</td>
</tr>
</tbody>
</table>

When deflection testing reveals overdeflected pipe, all costs incurred by the Contractor including mandrel and deflection testing, reinstallation of pipe and delays shall be the responsibility of the Contractor. When deflection testing reveals satisfactory pipe, all costs for deflection testing will be paid for by the Department.

603.032 Excavation Trenches shall be excavated in accordance with the requirements of Section 206 - Structural Excavation and wide enough to allow joining the culvert and compacting the bedding and backfill material under and around the culvert. Unless otherwise designated, trench walls shall be as nearly vertical as possible and the trench width no greater than necessary for installation of the culvert.

603.04 Bedding Culverts, less than 42 inches in diameter, shall be bedded on a firm foundation of uniform density. After placing the culvert pipe, backfill material shall be placed along the bottom of the trench, thoroughly tamped against the lower portion of the pipe with special care taken not to move the bedded pipe.
For culverts 42 inches in diameter and larger, the bottom of the trench shall be compacted to uniform density and shaped to fit a template with reasonable closeness for at least 10 percent of the culvert's total height.

On all bedding, when bell and spigot pipe is used, the portion of trench at the joints shall be shaped to fit the bell.

603.05 Laying Culvert The Contractor shall not install nor backfill culverts between December 15th and April 1st without written permission. Installing shall begin at the downstream end of the culvert line. Bell or groove ends of rigid culverts shall be placed facing upstream.

Elliptically shaped culverts shall be placed with the major axis within 5 degrees of vertical. Elliptically reinforced concrete pipe shall be placed with the vertical axis, indicated by the manufacturer, within 5 degrees of vertical.

603.06 Joining Culverts The method of joining rigid culvert sections shall be such that the ends are fully entered and the inner surfaces are reasonably flush and even. Joints shall be made with portland cement mortar, portland cement grout, rubber ring gaskets, or flexible plastic gaskets.

The pipe ends shall be thoroughly cleaned before the joint is made. Mortared joints shall be made with an excess of mortar to form a bead around the outside of the culvert and finished smooth inside. For grouted joints, molds or runners shall be used to retain the poured grout.

Joints with rubber ring gasket or flexible plastic gasket shall be made in accordance with the manufacturer's recommended procedures.

When portland cement mixtures are used, the completed joints shall be covered to protect against drying.

Flexible culvert section and metal end sections shall be firmly jointed by coupling bands. These bands shall meet the same applicable requirements as the flexible culvert being joined.

603.07 Shop Strutting All flexible circular culvert pipe 48 inches in diameter and larger shall be elongated along the vertical diameter in accordance with one of the following two methods:

a) The pipe shall be elongated by the manufacturer after fabrication by increasing the diameter along the vertical axis approximately 3 percent with a corresponding decrease along the horizontal axis. The elongation shall be obtained by installing rods and tightening the rods, uniformly from end to end of the pipe, obtaining approximately one quarter of the required elongation each time throughout the length of the pipe.

The rods shall be ⅝ inch diameter threaded 7 inches at both ends with washers and nuts. The length of the rods shall be the diameter of the pipe plus 8 inches. The rods shall be
placed on the horizontal axis of the pipe at 2 foot spacing and located halfway between the circumferential riveting. A block of soft wood 2 inches by 4 inches by 12 inches long, shall be placed over the rods at each end to provide contact against the outside of the pipe. The long dimension of the blocks shall be parallel with the horizontal axis of the pipe. The rods shall be left in the pipe until the fill is completed and compacted, unless for some unusual condition their removal is ordered. The rods shall be removed by cutting from the inside adjacent to the pipe.

(b) The pipe shall be elongated by the manufacturer by increasing the diameter along the vertical axis approximately 5 percent with a corresponding decrease along the horizontal axis by applying sufficient pressure to the sides of the pipe after fabrication to produce the specified distortion. The elongation shall be maintained by drilling holes in the ends of the pipe sections and placing and tightening horizontal wires. After the pipe sections have been installed with coupling bands, the wires shall be removed.

Helically corrugated culvert sections shall be match marked before being elongated by the manufacturer or before the ⅝ inch diameter rods are installed.

603.08 Backfilling Culverts and Storm Drains After the pipe is installed, it will be inspected before any backfill material is placed. All pipe found to be out of alignment, unduly settled or damaged to the extent that full performance is impaired, shall be taken up and re-laid or replaced.

Trenches shall be backfilled in accordance with Section 206.03 and as follows. The backfill material shall be thoroughly rammed under the haunches of the pipe with power or pneumatic operated hand tampers. The remainder of the backfill shall be thoroughly compacted with power tampers or vibratory compactors or other approved equipment or combination of equipment.

When the top of the pipe is exposed above the top of the trench, the embankment material around the pipe shall be placed and compacted on each side of the pipe in the aforementioned manner described for backfilling trenches, for a width of 5 feet measured from the outside diameter of the pipe. Only that portion of the embankment on each side and top of the pipe, for a minimum distance of 15 inches measured from the outside diameter of the pipe, must be of material conforming to the requirements described for backfilling in Section 206.03. Backfill material beyond these limits may contain stones larger than 3 inches but no greater than the thickness of the layer being placed. The embankment construction around the pipe shall continue up to an elevation 15 inches above the top of the pipe. Beyond these limits, the embankment shall be placed and compacted in accordance with the embankment construction requirements specified for the work except where the induced trench method is called for on the plans.

When construction equipment is used or traffic is maintained the Contractor shall provide a minimum cover of 3 feet over all pipes, if possible. Whenever this cover extends above the subgrade the Contractor shall temporarily place earth, which shall be removed when necessary
to complete the work in accordance with the plans, or as directed. Any deviation from this practice shall have prior approval.

603.09 Induced Trench Under this method, for designated rigid pipes only, the embankment shall be completed as specified above, to a height above the culvert equal to the vertical outside diameter of the pipe plus 1 foot. A trench, equal in width to the outside horizontal diameter of the pipe, shall then be excavated to within 1 foot of the top of the pipe. Trench walls shall be as nearly vertical as possible. Hay bales shall be used to fill the lower 1/4 to 1/3 of the trench. Construction of the embankment above shall then proceed in a normal manner. The trench shall be loosely filled with highly compressible soil.

603.10 Removing and Relaying Culverts The pipe shall be carefully removed from its existing location, transported to and installed in the new location in accordance with these specifications for the particular type of pipe involved. Pipe damaged by the Contractor shall be replaced with pipe of similar type by the Contractor without additional compensation.

New metal bands or joint material shall be supplied and installed when necessary.

603.11 Method of Measurement Culvert and storm drain pipe of the different types and sizes, both new and re-laid, will be measured by the length in linear feet along the invert, laid as directed, complete in place, and accepted. Pipe laid in excess of the authorized length will not be included.

When the ends of a pipe are sloped or skewed, the amount to be included for payment shall be the length along the invert of the pipe.

When elbows, tees, wyes, or other special fittings are required, each fitting shall be included for payment as 3 additional linear feet of the largest pipeline involved.

Inlet grate units will be measured by each unit installed, complete in place, and accepted.

Concrete pipe ties shall be measured per Group (2 ties per Group).

603.12 Basis of Payment The accepted quantities of pipe for culverts and storm drains will be paid for at the contract unit price per linear foot, for the types and sizes specified, complete in place.

No payment will be made for pipe ordered without written approval of the Resident when such pipe is not required to be installed for completion of the work.

Excavation for culverts and storm drains, including excavation below the pipe, for induced trench and for bedding and backfilling will be considered incidental, except as provided in Section 206 - Structural Excavation.
Whenever minimum cover material extends above the subgrade, removal of the cover material necessary to complete the work will not be paid for directly but shall be considered part of the work specified herein.

Coupling bands and joint material will not be paid for separately but shall be considered included in the unit bid price for the type of pipe being used or re-laid.

Existing culverts to be re-laid, salvaged, or wasted shall be removed and disposed of as directed. The excavation for removal of these culverts that is not paid for under other items or incidental to other items shall be paid for as Common Excavation.

Inlet grate units will be paid for at the contract unit price each for the size specified, complete in place.

The accepted quantity of concrete pipe ties will be paid for at the contract unit price per Group. Such payment will be full compensation for furnishing, installing, and all other necessary incidentals for satisfactory completion of the work. Any grout or mortar necessary to repair chipping shall be incidental to the installation of the pipe ties.

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>603.15</td>
<td>12 inch Culvert Pipe Option I</td>
</tr>
<tr>
<td>603.16</td>
<td>15 inch Culvert Pipe Option I</td>
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<tr>
<td>603.17</td>
<td>18 inch Culvert Pipe Option I</td>
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<tr>
<td>603.18</td>
<td>21 inch Culvert Pipe Option I</td>
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<td>603.19</td>
<td>24 inch Culvert Pipe Option I</td>
</tr>
<tr>
<td>603.20</td>
<td>30 inch Culvert Pipe Option I</td>
</tr>
<tr>
<td>603.21</td>
<td>36 inch Culvert Pipe Option I</td>
</tr>
<tr>
<td>603.159</td>
<td>12 inch Culvert Pipe Option III</td>
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<td>18 inch Culvert Pipe Option III</td>
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<td>603.199</td>
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<tr>
<td>603.209</td>
<td>27 inch Culvert Pipe Option III</td>
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<td>603.229</td>
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<td>603.239</td>
<td>36 inch Culvert Pipe Option III</td>
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<td>603.249</td>
<td>42 inch Culvert Pipe Option III</td>
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<td>603.259</td>
<td>48 inch Culvert Pipe Option III</td>
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<td>603.269</td>
<td>54 inch Culvert Pipe Option III</td>
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<td>603.279</td>
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<td>603.289</td>
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<td>603.299</td>
<td>72 inch Culvert Pipe Option III</td>
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<tr>
<td>603.30</td>
<td>21 inch span by 15 inch rise Pipe Arch Option III</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>603.31</td>
<td>24 inch span by 18 inch rise Pipe Arch Option III</td>
</tr>
<tr>
<td>603.32</td>
<td>28 inch span by 20 inch rise Pipe Arch Option III</td>
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<td>603.33</td>
<td>35 inch span by 24 inch rise Pipe Arch Option III</td>
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<td>603.34</td>
<td>42 inch span by 29 inch rise Pipe Arch Option III</td>
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<td>603.37</td>
<td>64 inch span by 43 inch rise Pipe Arch Option III</td>
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<td>603.38</td>
<td>66 inch span by 51 inch rise Pipe Arch Option III</td>
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<td>603.39</td>
<td>73 inch span by 55 inch rise Pipe Arch Option III</td>
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<td>603.40</td>
<td>81 inch span by 59 inch rise Pipe Arch Option III</td>
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<td>603.41</td>
<td>24 inch Reinforced Conc. Pipe Class IV</td>
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<td>603.42</td>
<td>30 inch Reinforced Conc. Pipe Class IV</td>
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<td>603.43</td>
<td>36 inch Reinforced Conc. Pipe Class IV</td>
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<td>603.44</td>
<td>42 inch Reinforced Conc. Pipe Class IV</td>
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<td>603.46</td>
<td>54 inch Reinforced Conc. Pipe Class IV</td>
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<td>603.47</td>
<td>60 inch Reinforced Conc. Pipe Class IV</td>
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<td>603.48</td>
<td>66 inch Reinforced Conc. Pipe Class IV</td>
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<tr>
<td>603.49</td>
<td>72 inch Reinforced Conc. Pipe Class IV</td>
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<td>603.55</td>
<td>Concrete Pipe Ties</td>
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<td>603.73</td>
<td>Remove and Relay Metal Pipe: _______</td>
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<td>Remove and Relay 15 inch Metal Pipe</td>
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<td>603.7348</td>
<td>Remove and Relay 48 inch Metal Pipe</td>
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<td>603.7372</td>
<td>Remove and Relay 72 inch Metal Pipe</td>
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<td>603.74</td>
<td>Remove and Relay Concrete Pipe: _______</td>
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<tr>
<td>603.7415</td>
<td>Remove and Relay 15 inch Concrete Pipe</td>
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<tr>
<td>603.7418</td>
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<td>603.79</td>
<td>21 inch Inlet Grate Unit</td>
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<tr>
<td>603.80</td>
<td>24 inch Inlet Grate Unit</td>
</tr>
</tbody>
</table>
706.10 Corrugated Polypropylene Pipe for Option I and Option III Culvert Pipe
Option I/III pipe and fittings shall conform to the requirements of AASHTO M 330 Type S (dual wall) or Type D (triple wall). All polypropylene pipe shall be smooth lined and shall meet the pipe stiffness requirements of AASHTO M 330. The manufacturing plants of polypropylene pipe shall participate annually in the National Transportation Product Evaluation Program (NTPEP) process for plastic pipe and resins which includes audits by the AASHTO Materials Reference Laboratory (AMRL). Plants shall be listed as “Compliant” on the NTPEP website and take immediate corrective action for any deficiencies found during audits. Continued compliance with all elements of the NTPEP/AMRL program and the Maine DOT manufactured Materials Verification Program will be required in order to continue supplying product to the Maine DOT.
SPECIAL PROVISION
SECTION 610
Riprap

Add the following:

610.08 Riprap (D50=9")  Materials shall meet the requirements below. The control of gradation shall be done by visual inspection and shall conform to the following gradation:

The riprap used shall be have an approximate d$_{50}$ (mean particle size) of 9 inches.

<table>
<thead>
<tr>
<th>% Smaller Than Given Size By Weight</th>
<th>Intermediate Rock Dimension (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-100</td>
<td>15</td>
</tr>
<tr>
<td>50-70</td>
<td>12</td>
</tr>
<tr>
<td>35-50</td>
<td>9</td>
</tr>
<tr>
<td>2-10</td>
<td>3</td>
</tr>
</tbody>
</table>

610.16 Heavy Riprap (D50=12")  Materials shall meet the requirements below. The control of gradation shall be done by visual inspection and shall conform to the following gradation:

The riprap used shall be have an approximate d$_{50}$ (mean particle size) of 12 inches.

<table>
<thead>
<tr>
<th>% Smaller Than Given Size By Weight</th>
<th>Intermediate Rock Dimension (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-100</td>
<td>21</td>
</tr>
<tr>
<td>50-70</td>
<td>18</td>
</tr>
<tr>
<td>35-50</td>
<td>12</td>
</tr>
<tr>
<td>2-10</td>
<td>4</td>
</tr>
</tbody>
</table>

Payment will be under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>610.08 Riprap (D50=9&quot;)</td>
<td>CY</td>
</tr>
<tr>
<td>610.16 Heavy Riprap (D50=12&quot;)</td>
<td>CY</td>
</tr>
</tbody>
</table>
SPECIAL PROVISION  
SECTION 618  
SEEDING  
(Seeding Method Number 1 and 2)

Add the following:

618.11 Method of Measurement  Payment for seeding by the unit will be along the slope of the ground. One Unit will be 100 m² [1000 ft²].

Payment will be under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>618.1301 Seeding Method Number 1 – Plan Quantity</td>
<td>Unit</td>
</tr>
<tr>
<td>618.1401 Seeding Method Number 2 – Plan Quantity</td>
<td>Unit</td>
</tr>
</tbody>
</table>

SPECIAL PROVISION  
SECTION 619  
MULCH  
(Mulch)

Add the following:

619.06 Method of Measurement  Payment for hay and straw mulch by the unit will be along the slope of the ground. One Unit will be 100 m² [1000 ft²].

Payment will be under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>619.12 Mulch – Plan Quantity</td>
<td>Unit</td>
</tr>
</tbody>
</table>
SPECIAL PROVISION  
SECTION 635  
PRECAST CONCRETE BLOCK GRAVITY WALL

The following replaces Section 635 in the Standard Specifications in its entirety:

635.01 Description  The work under this item shall consist of design, fabrication, furnishing and construction of a Precast Concrete Block Gravity Wall in accordance with these specifications and in close conformance with the lines and grades shown on the Plans, or established by the Resident. The Precast Concrete Block Gravity Wall shall consist of facing blocks made of wet cast concrete made from Portland cement, water, chemical admixtures, and aggregates, supported on concrete leveling pads, and if required, geosynthetic-reinforced backfill.

Included in the scope of the precast gravity wall construction are: geotechnical design of any wall with a exposed height greater than 4.5 feet or as specified on the Plans, all grading necessary for wall construction, compaction of the wall foundation soil, backfill, piped drainage, construction of leveling pads, and block wall installation. The top of the upper row of blocks shall be at or above the top of the face elevation shown on the Plans.

635.02 Quality Assurance  The wall system shall be one of the approved combinations of facing block and soil reinforcement systems noted in the Plans or on the Department’s Qualified Products List (QPL). Alternate wall systems will not be considered for this Item.

All design calculations and Shop Drawings shall be signed and sealed by a Professional Engineer licensed in the State of Maine.

The Contractor shall require the wall design-supplier to provide an on-site, qualified experienced technical representative to advise the Contractor concerning proper installation procedures. The technical representative shall be on-site during initial stages of installation and thereafter shall remain available for consultation as necessary for the Contractor or as required by the Resident.

635.03 Materials  Materials for walls shall meet the requirements of the following sections of Division 700:

<table>
<thead>
<tr>
<th>Material</th>
<th>Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gravel Borrow</td>
<td>703.20</td>
</tr>
<tr>
<td>Underdrain Backfill Type C</td>
<td>703.22</td>
</tr>
<tr>
<td>Underdrain Pipe</td>
<td>706.06 or 706.09</td>
</tr>
<tr>
<td>Reinforcing Steel</td>
<td>709.01</td>
</tr>
<tr>
<td>Structural Precast Concrete Units</td>
<td>712.061</td>
</tr>
<tr>
<td>Reinforcement Geotextile</td>
<td>722.01</td>
</tr>
<tr>
<td>Drainage Geotextile</td>
<td>722.02</td>
</tr>
</tbody>
</table>
The Contractor is cautioned that all of the materials listed are not required for every Precast Concrete Block Gravity Wall. The Contractor shall furnish the Resident a Materials Certification Letter certifying that the applicable materials comply with this section of the specifications. Materials shall meet the following additional requirements:

635.031 Concrete Units  The Materials Certification Letter described above shall contain the date of concrete casting, a lot identification number, compressive strength results, and entrained air results. All prefabricated concrete units shall conform to the requirements of 712.061 with the following exceptions:

A. Materials. Materials are modified as follows: the maximum water cement ratio shall be 0.42, use of calcium nitrite is not required, and the minimum 28day compressive strength shall be 4600 psi.

B. Quality Control and Quality Assurance. Quality Control and Quality Assurance is modified as follows: delete the second and third paragraphs.

C. Construction. Construction requirements are modified as follows:
   Delete the second paragraph and replace it with the following:
   All units for a designated wall system, including end blocks, steps, caps and other wall units shall be manufactured from the same material sources of aggregates, brand and type of cement and color pigment.

   Replace the first sentence in the paragraph which begins “The forms shall remain …” with the following:
   The forms shall remain in place until the concrete has gained sufficient strength such that removal of the forms and subsequent handling will not damage the units.

   Replace the paragraph which begins “A minimum of 8 ….” With the following:
   The Contractor shall make and test at least one set of cylinders for every 50 yd$^3$ of production concrete used to cast the concrete units.

   Replace the paragraph which begins “At least once ….” with the following:
   The Contractor shall make four cylinders for use by the Department for every 200 yd$^3$.

   Add the following paragraph at the end of the Construction section:
   Face texture of the units shall be a formed finish on all exposed surfaces. Pigment shall be added during the casting process of the concrete unit to achieve a consistent shade of gray or other color as determined by the Resident.

D. Tolerances. Maximum dimensional deviation of formed unit dimensions shall be $\frac{1}{2}$ - inch or 2 percent or the manufacturer’s published tolerances, whichever is less. Units not meeting the specified tolerances will be rejected.
635.032 Geosynthetic Reinforcement  Geosynthetic reinforcement shall be as required by the proprietary wall system manufacturer or wall designer. Geosynthetic reinforcement shall consist of a geotextile or geogrid approved by the Geotechnical Engineer. Substitution of a geosynthetic other than that required by the proprietary wall system manufacturer shall not be allowed unless approved by the Geotechnical Engineer after submittal of shop drawings and pullout and interface friction test data.

A. Geotextiles and Thread for Sewing. Woven or nonwoven geotextiles shall consist of long chain polymeric filaments or yarns formed into a stable network such that the filaments or yarns retain their position relative to each other during handling, placement, and design life. At least 95 percent by weight of the long chain polymer shall be polyolefin or polyester. The material shall be free of defects and tears. Geotextiles used for reinforcement shall conform as a minimum to the properties indicated for 722.01, Stabilization/Reinforcement Geotextile and shall meet the requirements of part D and E below. Geotextiles shall have a minimum permeability greater or equal to that shown on the Shop Drawings and the reinforced soil permeability.

B. Geogrids. The geogrid shall be a regular network of integrally connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding soil or rock. The geogrid structure shall be dimensionally stable and able to retain its geometry under manufacture, transport and installation. Geogrids shall conform as a minimum to the criteria specified in part D and E below.

C. Required Properties. The specific geosynthetic materials shall be preapproved and shall have the ultimate tensile strength ($T_{ult}$) shown on the approved Shop Drawings for the geosynthetic specified and for the fill type shown. $T_{ult}$ shall be determined from wide width tests specified in ASTM D 4595 for geotextiles and ASTM D 6637 or GRI:GG1 for geogrids. The ultimate tensile strength value is based on the minimum average roll values (MARV) for the product.

D. The geosynthetic shall conform to the following criteria:

1. PP and HDPE: Min. retained strength of 70 percent after 150 hours, per ASTM D-4355.
2. HDPE: Grade = E-4, E-5, E-8, E-9, E-10, E-11, J-3, J-4, or J-5, per ASTM D-1248.
3. PET: Molecular weight (Mn) > 25,000, per GRI:GG8 and ASTM D-4603.
4. PET: Carboxyl end group (CEG) ≥ 15 mmol/kg, GRI:GG7.
5. All polymers: Minimum Weight per Unit Area of 8 oz/yd$^2$, per ASTM D-5261.
6. All Polymers: Maximum 0 percent post consumer recycled material by weight.
7. A default total reduction factor for creep, durability, and installation damage of RF = 7 may be used in design, provided the criteria of 2 through 6 are satisfied and 1 is adjusted to 70 percent after 500 hours is satisfied.
E. Manufacturer Quality Control. The geosynthetic reinforcements shall be manufactured with a high degree of quality control. The Manufacturer is responsible for establishing and maintaining a quality control program to ensure compliance with the requirements of the specification. The purpose of the QC testing program is to verify that the reinforcement geosynthetic being supplied to the project is representative of the material used for performance testing and approval. Conformance testing shall be performed as part of the manufacturing process and may vary for each type of product. As a minimum the following index tests shall be considered as applicable for an acceptable QA/QC program:

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Gravity (HDPE only)</td>
<td>ASTM D-1505</td>
</tr>
<tr>
<td>Ultimate Tensile Strength</td>
<td>ASTM D-4595 GRI:GG1</td>
</tr>
<tr>
<td>Melt Flow (HDPE and PP only)</td>
<td>ASTM D-1238</td>
</tr>
<tr>
<td>Intrinsic Viscosity (PET only)</td>
<td>ASTM D-4603</td>
</tr>
<tr>
<td>Carboxyl End Group (PET only)</td>
<td>ASTM D-2455</td>
</tr>
</tbody>
</table>

F. Sampling Testing and Acceptance. Sampling and conformance testing shall be in accordance with ASTM D-4354. Conformance testing procedures are established above. Geosynthetic product acceptance shall be based on ASTM D-4759. The quality control certificate shall include:

1. Roll numbers and identification
2. Sampling procedures
3. Results of quality control tests, including a description of test methods used.

G. Certification. The Contractor shall submit a manufacturer’s certification that the geosynthetics supplied meet the respective index criteria set when the geosynthetic was approved, measured in full accordance with all test methods and standards specified, or referenced, in this specification.

The manufacturer’s certificate shall state that the furnished geosynthetic meets the requirements of these specifications as evaluated by the manufacturer’s quality control program. The values submitted shall be certified by a person having legal authority to bond the manufacturer. In case of dispute over validity of values, the Resident can require the Contractor to supply test data from an agency approved laboratory to support the values submitted, at the Contractor’s cost.

635.033 Geosynthetic Connection Reinforcing bar used in the geosynthetic connection shall be 1/2-inch diameter epoxy coated reinforcing bar, coated on the ends and meeting the requirements of Section 503, Reinforcing Steel. Installation shall be in accordance with manufacturer’s recommendations.
635.034 Concrete Leveling Pad  Concrete for leveling pads shall be Fill Concrete conforming to the requirements of Section 502 Structural Concrete. Unless otherwise specified, concrete for leveling pads shall be accepted under Method “C” requirements.

635.035 Backfill Material  Backfill material placed behind the concrete units shall meet the requirements of Section 703.20 Gravel Borrow, except that the backfill material shall only contain particles that will pass the 3-inch square mesh sieve. The contractor is required to submit a grain size distribution curve (ASTM D 422) and a moisture-density relationship curve (AASHTO T-180) for acceptance of the proposed backfill material and determination of the appropriate installation damage reduction factor (RF_{ID}).

Walls with reinforced backfill require that the backfill material be subjected to pH testing to determine the appropriate durability reduction factor (RF_{D}).

Material between blocks must be Gravel Borrow, or Underdrain Backfill Material meeting the requirements of Section 703.22, Type C.

635.036 Materials Certification Letter  The Contractor, or the supplier as his agent, shall furnish the Resident a Materials Certification Letter for the above materials, including the backfill material, in accordance with Section 700 of the Standard Specifications. A copy of all test results performed by the Contractor or his supplier necessary to assure contract compliance shall also be furnished to the Resident. The Resident will base acceptance upon the materials Certificate Letter, accompanying test reports, and visual inspection.

635.04 Design Requirements  The wall shall be designed with a service life of not less than 75 years. The Precast Concrete Block Gravity Wall shall be designed and sealed by a Professional Engineer licensed in the State of Maine. The wall shall be designed in accordance with the following:
1. AASHTO LRFD Bridge Design Specifications, current edition, herein referred to as LRFD
2. FHWA-NHI-10-024 Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, Volumes I and II, 2010
3. FHWA-NHI-09-087 Corrosion/Degradation of Soil Reinforcements for Mechanically Stabilized Earth Walls and Reinforced Soil Slopes, 2009
4. The Contract Plans
5. The requirements specified herein
6. The manufacturer’s requirements

Where conflicting requirements occur, the more stringent requirements shall govern.

Forty-five days prior to beginning construction of the wall, the design computations shall be submitted to the Resident for review by the Geotechnical Engineer. Any additional design or costs arising as a result of rejection of a wall design by the Geotechnical Engineer shall be borne by the Contractor.
Design calculations that consist of computer program generated output shall be supplemented with at least one hand calculation and graphic demonstrating the design methodology used. Design calculations shall provide thorough documentation of the sources of equations used and material properties. The design by the wall system supplier shall consider the stability of the wall as outlined below and in the Contract Documents:

A. Failure Plane The theoretical failure plane within the reinforced soil mass shall be determined in accordance with LRFD Article 11 and be analyzed so that the soil stabilizing components extend sufficiently beyond the failure plane within the reinforced soil mass to stabilize the material.

B. External Loads External loads which affect the internal and external stability such as those applied through traffic loadings, impact on traffic barrier posts, slope surcharge, hydrostatic, and seismic loads shall be accounted for in the design. Traffic surcharge and traffic impact loads shall be calculated and applied in compliance with LRFD Section 11.

C. External Stability Loads and load combinations selected for design shall be consistent with LRFD. Application of load factors shall be taken as specified in LRFD Section 11. Sliding resistance factors and bearing resistance factors shall be consistent with LRFD. Overturning and sliding provisions of LRFD shall apply.

D. Internal Stability Evaluation of reinforcement pullout, reinforcement rupture and reinforcement/block connection pullout or rupture shall be consistent with LRFD Section 11, and checked at each level. Loads, load combinations and load factors shall be as specified in LRFD Section 11. Resistance factors for internal design are specified in LRFD Section 11. Maximum reinforcement loads shall be calculated using the Simplified Method approach. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life.

a. Geosynthetic Reinforcement Design Tensile Resistance The nominal long term reinforcement design strength ($T_{alt}$) shall be determined by reducing $T_{ult}$ by reduction factors (RF) in accordance with the documents referenced above. The designer shall procure and use the manufacturers tested and certified geosynthetic reinforcement reduction factors for creep (RF$_{CR}$), durability (RF$_{D}$), and installation damage (RF$_{ID}$) to determine $T_{alt}$. In absence of manufacturers tested and certified reduction factors, a combined default reduction factor RF = 7 shall be used in accordance with the referenced documents. For RF$_{ID}$, the installation damage reduction factor shall be checked in accordance with LRFD and FHWA-NHI-00-044.

b. Reinforcement/Facing Connection Design Strength The nominal long-term connection strength between the geosynthetic reinforcement and the
concrete blocks shall be checked in accordance with LRFD and FHWA-NHI-10-024.

c. Reinforcement Pullout The pullout resistance factor, \( F^* \), and scale effect correction factor (\( \alpha \)) used in pullout design, shall be determined from project specific pullout tests using the proposed geosynthetic in the specified project backfill material or equivalent soil. The pullout resistance factors shall be determined in accordance with LRFD and FHWA-NHI-10-024. In the absence of test data, empirical relationships may be used to determine the pullout resistance factors, any empirical relationships used in design shall be referenced in the design calculations.

E. Backfill and Foundation Soils Parameters The friction angle of the backfill used in the reinforced fill zone for internal stability design shall be assumed have a friction angle of 34 degrees unless specific project select backfill is tested for frictional strength. The friction angle of the foundation soils and random backfill shall be assumed to be 30 degrees unless otherwise shown on the plans.

F. Reinforcement Length The soil reinforcement shall be the same length from the bottom to the top of each wall section. The reinforcement length defining the width of the entire reinforced soil mass may vary with wall height. The minimum length of the soil reinforcement shall be 8 ft, but shall not be less than 70 percent of the wall height, \( H \), for walls with level surcharges, or 70 percent of \( H_1 \) for walls with a sloped surcharge or walls supporting an abutment. The mechanical wall height, \( H \) or \( H_1 \), shall be the vertical difference between the top of the leveling footing and the elevation at which the failure surface, as described above, intercepts the ground surface supported by the wall.

G. Bearing Resistance The factored bearing pressures under the Precast Concrete Block Gravity Wall shall be clearly indicated on the Shop Drawings. Walls shall be dimensioned so that the factored bearing resistance of the foundation soils, as noted on the Plans, is not exceeded.

H. Facing Stability Stability calculations for the concrete facing blocks shall be in accordance with LRFD, and shall include an evaluation of the maximum vertical spacing between reinforcement layers.

I. Stability During Construction Walls shall be designed to resist failure by instability of temporary construction slope. Passive pressure in front of the wall mass shall be assumed to be zero for design purposes.

J. Design Life The wall design life shall be a minimum of 75 years.

K. Depth of Embedment The depth of embedment for frost protection and stability shall be at or below the elevation shown on the Plans and the approved Shop Drawings.
L. **Drainage System**  Piped drainage shall be designed to collect and dispose of water from the base of the reinforced soil zone and backfill soil. This shall outlet into surrounding drainage systems or ditches.

635.05 **Submittals**  The Contractor shall supply wall design computations, wall details, dimensions, quantities, and cross sections necessary to construct the wall. A sample hand calculation including all equations, parameter values used, units, theory, free-body diagram, comparison to design requirements, etc. shall be provided. Spread sheet calculations alone are not acceptable.

Forty-five days prior to beginning construction of the wall, four (4) sets of the wall design computations and Shop Drawings shall be submitted to the Resident for review by the Geotechnical Engineer. Mix design information shall be submitted at the same time, including aggregate source, current gradation, aggregate quality information and concrete unit weight.

The contractor shall also submit backfill material test results as part of the wall submittal package. Backfill material test results shall include grain size distribution curve, moisture-density relationship curve, and pH test results required for reinforced backfill only.

If geotechnical design is required, the fully detailed plans shall be prepared in conformance with Section 105 and shall include, but not be limited to the following items:

A. A plan and elevation sheet or sheets for each wall, containing the following: elevations at the top of leveling pads, the distance along the face of the wall to all steps in the leveling pads, the location of the original and final ground line.

B. All details for foundations and leveling pads, including details for steps in the leveling pads, as well as allowable and actual maximum bearing pressures shall be provided.

C. Details for the barriers, posts, curbs and facing as required by the project conditions.

D. Design computations prepared and sealed by a licensed Professional Engineer.

E. Prior to the beginning of construction, the contractor shall supply the Resident with two copies of the design-supplier’s Installation Manual. In addition, the Contractor shall have two copies of the Installation Manual on the project site.

635.06 **Construction Requirements**  The Precast Concrete Block Gravity Wall shall have the following construction requirements:

A. **Excavation.** The excavation and use as fill disposal of all excavated material shall meet the requirements of Section 203 -- Excavation and Embankment, except as modified herein.
B. Foundation. The area upon which the prefabricated block gravity wall structure is to rest, and within the limits shown on the submitted plans, shall be graded for a width equal to, or exceeding, the length of the blocks. Prior to wall and leveling pad construction, this foundation material shall be compacted to at least 95 percent of maximum laboratory dry density (AASHTO T-180 Method C or D). Frozen and unsuitable soil shall be removed and replaced with gravel borrow compacted to 95 percent of AASHTO T-180.

A concrete leveling pad shall be constructed as indicated on the plans. Dimensions may be modified per the wall supplier’s recommendations, with written approval of the Geotechnical Engineer. The leveling pad shall be cast to the design elevations as shown on the plans, or as required by the wall supplier upon written approval of the Geotechnical Engineer. The allowable elevation tolerances from the design elevations are +0.01 feet and -0.02 feet. Leveling pads which do not meet this requirement shall be repaired or replaced as directed by the Resident at no additional cost to the Department. Placement of wall units may begin after the strength of the concrete leveling pad reaches 1000 psi or is adequate to support the proposed loads. Contractor may begin placement of concrete block units after 12 hours at his own risk.

C. Method and Equipment. Prior to erection of the prefabricated concrete block wall, the Contractor shall furnish the Resident with detailed information concerning the proposed construction method and equipment to be used. The erection procedure shall be in accordance with the manufacturer’s instructions. Any units that are damaged due to handling will be replaced at the Contractor’s expense.

D. Installation of Wall Units. A field representative from the wall system being used shall be available, as needed, during the erection of the wall. The services of the representative shall be at no additional cost to the project. Horizontal joint fillers shall be installed as needed.

The maximum offset in any unit horizontal joint shall be 1/4 inch. The prefabricated wall blocks shall be installed to a tolerance of plus or minus 3/4 inch in 10 feet in vertical alignment and horizontal alignment.

E. Backfill Placement. Backfill placement shall closely follow the erection of each row of prefabricated wall units. The Contractor shall decrease the lift thickness if necessary to obtain the specified density. The maximum lift thickness shall be 8 inches loose. Gravel borrow backfill shall be compacted in accordance with Section 203.12 except that the minimum required compaction shall be at least 92 percent of maximum density as determined by AASHTO T-180 Method C or D. Backfill compaction shall be accomplished without disturbance or displacement of the wall blocks. Sheepfoot rollers will not be allowed. Whenever a compaction test fails, no additional backfill shall be placed over the area until the lift is recompacted and a passing test achieved.
The moisture content of the backfill material prior to and during compaction shall be uniform throughout each layer. Backfill material shall have a placement moisture content less than or equal to the optimum moisture content. Backfill material with a placement moisture content in excess of the optimum moisture content shall be removed and reworked until the moisture content is uniform and acceptable throughout the entire lift. The optimum moisture content shall be determined in accordance with AASHTO T-180, Method C or D. At the end of the day’s operations, the Contractor shall shape the last level of backfill so as to direct runoff of rain water away from the wall face.

Material between blocks must be Gravel Borrow or Underdrain Backfill Material meeting the requirements of Section 703.22, Type C. If Gravel Borrow is used between blocks, 722.02 drainage geotextile shall be placed behind vertical joints to prevent loss of granular material between blocks. Compliance with the gradation requirements shall be the responsibility of the Contractor, who shall furnish a copy of the backfill test results prior to construction. If Underdrain Backfill Material is used between blocks, no geotextile is required behind vertical joints.

635.07 Method of Measurement  Precast Concrete Block Gravity Wall will be measured by the square foot of front surface not to exceed the dimensions shown on the Contract Plans unless authorized by the Resident. Vertical and horizontal dimensions will be from the edges of the blocks. No field measurements for computations will be made unless the Resident specifies, in writing, a change in the limits indicated on the Plans.

635.08 Basis of Payment  The accepted quantity of Precast Concrete Block Gravity Wall will be paid for at the contract unit price per square foot complete in place. Payment shall be full compensation for furnishing geotechnical design as required, all labor, equipment and materials including all precast concrete units, hardware, joint fillers, geosynthetics, reinforcing steel, drainage pipe, backfill materials and technical field representative. Excavation, foundation material and backfill material will all be incidental to the Precast Concrete Block Gravity Wall.

Cost of cast-in-place concrete for leveling pad will not be paid for separately, but will be considered incidental to the Precast Concrete Block Gravity Wall.

There will be no allowance for excavating and backfilling for the Precast Concrete Block Gravity Wall beyond the limits shown on the approved submitted plans, except for excavation required to remove unsuitable subsoil in preparation for the foundation. Payment for excavating unsuitable subsoil shall be full compensation for all costs of pumping, drainage, sheeting, bracing and incidentals for proper execution of the work, and will be paid as Common Excavation in accordance with Section 203.

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>635.31 Precast Concrete Block Gravity Wall</td>
<td>square foot</td>
</tr>
</tbody>
</table>
Failure by the contractor to follow the Contracts 652 Special Provisions and Standard Specification and/or The Manual on Uniform Traffic Control Devices (MUTCD) and/or The Contractors own Traffic Control Plan will result in a violation letter and result in a reduction in payment as shown in the schedule below. The Departments 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. Any reduction in payment under this Special Provision will be in addition to forfeiting payment of maintenance of traffic control devices for that day.

<table>
<thead>
<tr>
<th>ORIGINAL CONTRACT AMOUNT</th>
<th>Amount of Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>from More Than</td>
<td>Including</td>
</tr>
<tr>
<td>$0</td>
<td>$100,000</td>
</tr>
<tr>
<td>$100,000</td>
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<td>$2,000,000</td>
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<tr>
<td>$2,000,000</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>$4,000,000</td>
<td>and more</td>
</tr>
</tbody>
</table>
PROJECT APPROACH SIGNING

TWO WAY TRAFFIC
<table>
<thead>
<tr>
<th>TYPE OF TAPER</th>
<th>TAPER LENGTH (L)*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Merging Taper</td>
<td>at least L</td>
<td></td>
</tr>
<tr>
<td>Shifting Taper</td>
<td>at least 0.5L</td>
<td></td>
</tr>
<tr>
<td>Shoulder Taper</td>
<td>at least 0.33L</td>
<td></td>
</tr>
<tr>
<td>One-Lane, Two-Way Traffic Taper</td>
<td>100 ft (30 m) maximum</td>
<td></td>
</tr>
<tr>
<td>Downstream Taper</td>
<td>100 ft (30 m) per lane</td>
<td></td>
</tr>
</tbody>
</table>

* Formulas for L are as follows:

For speed limits of 40 mph (60 km/h) or less:

\[ L = \frac{WS^2}{60} \quad (L = \frac{WS^2}{155}) \]

For speed limits of 45 mph (70 km/h) or greater:

\[ L = WS \quad (L = \frac{WS}{1.6}) \]

* Formulas for L are as follows:

A minimum of 5 channelization devices shall be used in the taper.

CHANNELIZATION DEVICE SPACING

The spacing of channelization devices shall not exceed a distance equal to 1.0 times the speed limit in mph when used for taper channelization, and a distance in feet of 2.0 times the speed limit in mph when used for tangent channelization.

<table>
<thead>
<tr>
<th>ROAD TYPE</th>
<th>DISTANCE BETWEEN SIGNS**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban 30 mph (50 km/h) or less</td>
<td>A 100 (30) B 100 (30) C 100 (30)</td>
</tr>
<tr>
<td>Urban 35 mph (55 km/h) and greater</td>
<td>350 (100) B 350 (100) C 350 (100)</td>
</tr>
<tr>
<td>Rural</td>
<td>500 (150) B 500 (150) C 500 (150)</td>
</tr>
<tr>
<td>Expressway / Urban Parkway</td>
<td>2,640 (800) B 1,500 (450) C 1,000 (300)</td>
</tr>
</tbody>
</table>

**Distances are shown in feet (meters).

SUGGESTED BUFFER ZONE LENGTHS

<table>
<thead>
<tr>
<th>SPEED (mph)</th>
<th>LENGTH (feet)</th>
<th>SPEED (mph)</th>
<th>LENGTH (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>115</td>
<td>40</td>
<td>325</td>
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<tr>
<td>25</td>
<td>155</td>
<td>45</td>
<td>360</td>
</tr>
<tr>
<td>30</td>
<td>200</td>
<td>50</td>
<td>425</td>
</tr>
<tr>
<td>35</td>
<td>250</td>
<td>55</td>
<td>495</td>
</tr>
</tbody>
</table>

GENERAL NOTES:

1. Final placement of signs and devices may be changed to fit field conditions as approved by the Resident.
The following is added to Section 656 regarding Project Specific Information and Requirements. All references to the Maine Department of Transportation Best Management Practices for Erosion and Sedimentation Control (a.k.a. Best Management Practices manual or BMP Manual) are a reference to the latest revision of said manual. The latest version is dated “February 2008” and is available at:


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

**Project Specific Information and Requirements**

The following information and requirements apply specifically to this Project. The temporary soil erosion and water pollution control measures associated with this work shall be addressed in the Soil Erosion and Water Pollution Control Plan (SEWPCP.)

1. Newly disturbed earth shall be mulched by the end of each workday. Mulch shall be maintained on a daily basis.

2. All disturbed ditches/slopes shall be stabilized by the end of each workday. Stabilization shall be maintained on a daily basis.

3. Erosion control blanket shall be installed in the bottoms of all ditches except where a stone lining is planned. Seed shall be applied prior to the placement of the blanket.

4. The SEWPCP shall describe the location and method of temporary erosion and sediment control for existing and proposed catch basins, outlet areas and culvert inlets and outlets.

5. Stream flow shall be maintained at all times.

6. CLEARING LIMIT LINES SHALL BE MINIMIZED. Clearing shall be minimized as shown on the design plans.

7. If water is flowing within the drainage system, the water shall be diverted to a stable area or conduit and work shall be conducted in the dry. The Contractor’s plan shall address when and where the diversions will be necessary.
8. Dust control items other than those under Standard Specification 637, if applicable, shall be included in the plan.

9. Permanent slope stabilization measures shall be applied within one week of the last soil disturbance. Temporary slope stabilization is required on a daily basis.

10. Permanent seeding shall be done in accordance with *Special Provision, Section 618, Seeding* unless the Contract states otherwise.

11. Culvert inlet and outlet protection shall be installed within 48 hours of culvert installation, or prior to a storm event, whichever is sooner.

12. Temporary winter stabilization must be used between November 1st and April 1st or outside of that time period if the ground is frozen or snow covered. Temporary winter stabilization involves, at a minimum, covering all disturbed soils and seeded ground that is not Acceptable Work with an approved method. If temporary winter stabilization practices are used then spring procedures for permanent stabilization shall also be described in the SEWPCP. Use of these methods for over-winter temporary erosion control will be incidental to the contract and be paid for as part of Pay Item 656.75.

13. If a cofferdam sedimentation basin is used, it shall be located in an upland area where the water can settle and sink into the ground or be released slowly to the resource in a manner that will not cause erosion. The location of such a cofferdam sedimentation basin shall be addressed in the SEWPCP.

14. Prior to release to a natural resource, any impounded water that has been in contact with concrete placed during construction must have a pH between 6.0 and 8.5, must be within one pH unit of the background pH level of the resource and shall have a turbidity no greater than the receiving resource. This requirement is applicable to concrete that is placed or spilled (including leakage from forms) as well as indirect contact via tools or equipment. Water not meeting release criteria shall be addressed in the SEWPCP. Discharging impounded water to the stream must take place in a manner that does not disturb the stream bottom or cause erosion.

15. The Contractor shall be responsible for monitoring pH with a calibrated meter accurate to 0.1 units. A record of pH measurements shall be kept in the Environmental Coordinator’s log (*Section 656.4.4.*)
SPECIAL PROVISION
SECTION 703
AGGREGATES

The Standard Specifications, Revision of 2002 Section 700 - Materials, Subsection 703.09 HMA Mixture Composition has been revised as follows:

**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 tables or as otherwise specified.

**TABLE 1: COMPOSITION OF MIXTURES - CONTROL POINTS**

<table>
<thead>
<tr>
<th>SIEVE SIZE</th>
<th>GRADING</th>
<th>TYPE 19 mm</th>
<th>TYPE 12.5 mm</th>
<th>TYPE 9.5 mm</th>
<th>TYPE 4.75 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.5 mm</td>
<td>PERCENT BY WEIGHT PASSING - COMBINED AGGREGATE</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>25 mm</td>
<td>90-100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 mm</td>
<td>-90</td>
<td>90-100</td>
<td>100</td>
<td></td>
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<td>90-100</td>
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<td>80-100</td>
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<tr>
<td>2.36 mm</td>
<td>23-49</td>
<td>28-58</td>
<td>32-67</td>
<td>40-80</td>
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</tr>
<tr>
<td>1.18 mm</td>
<td>-</td>
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<td>-</td>
<td></td>
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<tr>
<td>600 µm</td>
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<td>300 µm</td>
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<tr>
<td>75 µm</td>
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<td>2.0-7.0</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SIEVE SIZE</th>
<th>RESTRICTED ZONES</th>
<th>TYPE 19 mm</th>
<th>TYPE 12.5 mm</th>
<th>TYPE 9.5 mm</th>
<th>TYPE 4.75 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.5 mm</td>
<td>PERCENT BY WEIGHT PASSING - COMBINED AGGREGATE</td>
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<td>-</td>
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<td>25 mm</td>
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<td>4.75 mm</td>
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<td>2.36 mm</td>
<td>34.6</td>
<td>39.1</td>
<td>47.2</td>
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<td>-</td>
</tr>
<tr>
<td>1.18 mm</td>
<td>22.3-28.3</td>
<td>25.6-31.6</td>
<td>31.6-37.6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>600 µm</td>
<td>16.7-20.7</td>
<td>19.1-23.1</td>
<td>23.5-27.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>300 µm</td>
<td>13.7</td>
<td>15.5</td>
<td>18.7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>75 µm</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

* The restricted zone is presented for information and definition of “Fine” 9.5mm mixes only.
1.0 GENERAL

1.1 This specification covers the design, manufacturing and installation of the SUPER-SPAN galvanized 6x2 corrugated steel structural plate structure detailed in the plans.

1.2 Qualified Suppliers

(a) Each bidder is required to identify their intended bridge supplier as part of the bid submittal. Qualified suppliers must have at least fifteen (15) years experience fabricating equal or larger type structures.

(b) Pre-Approved Manufacturer:
   Contech Engineered Solutions LLC
   700 Tech Drive
   Winchester, KY 40391

(c) Suppliers other than those listed above may be used provided the owner’s agent evaluates the proposed supplier and approves the supplier 14 business days prior to bid.

(d) The contractor must provide the following documentation, for any proposed Supplier who is not pre-approved, at least 14 business days prior to bid:
   - Product Literature
     All documentation to ensure substitution will be in compliance with these specifications.
     Project specific representative drawings for bridge projects listed above with material, complete design calculations and design specification references.

(e) Proposed suppliers must have at least fifteen (15) years experience designing these types of structures and a minimum of fifteen (15) successful projects, of similar shape and construction as specifically written in these specifications and drawings, each of which has been in service at least three (3) years. List the location, shape, size, owner, and a contact for reference for each project.

(f) The owner’s agent will evaluate and verify the accuracy of the submittal prior to bid. If the owner’s agent determines that the qualifying criteria have not been met, the contractor’s proposed supplier shall be rejected. This ruling shall be final.

1.3 The required structure will be designated by standard applicable catalog structure number, span, rise and plate Pi.

1.4 Pi shall equal 3.2 inches.

1.5 Cover over the structure shall be determined from the crown of the structure to the bottom of flexible pavement or top of rigid pavement.
2.0 DIMENSIONS

2.1 Span: Maximum span shall be 25ft – 11in
Bottom span shall be 25ft – 9in
Span shall be determined at the inside corrugations

2.2 Rise: Total rise shall be 8ft - 7in
Top rise shall be 7ft - 7in (from spring line to crown)
Rise shall be determined at the inside corrugations

2.3 Gage: Plate gage shall be 5 gage (0.218 in) for all plates or as described

2.4 Corrugation: The SUPER-SPAN galvanized structural plate shall have 6 inch x 2 inch annular corrugations. The corrugation profile shall have AASHTO recognition for a minimum of 15 years.

3.0 DESIGN

3.1 Design Criteria: The design of the structure shall be in accordance with:

The structure shall have a design load rating of H-20.

3.2 Design Loads: Design loads shall be specified by the Engineer. Construction loads and any temporary loads exceeding the service live load are not allowed on the structure without approval from the Engineer.

(a) The Engineer shall specify materials and extents of the foundations or bedding and backfill material within the critical backfill zone with consideration of structure shape and in-situ conditions.

(b) The Engineer shall consider the structural capacity of trench walls or adjacent embankments to provide balanced soil loads on the structure.

(c) The Engineer shall consider hydraulic forces on the ends of the structure. End treatment such as headwalls, slope collars, slope paving or cut-off walls shall be considered to protect the backfill and provide stability and protection to the ends of the structure as well as to prevent erosion or washout.

(d) The Engineer shall consider scour effects on the structure foundation. The use of scour counter-measures shall be considered for strip footings. The Engineer shall consider potential washout/undermining effects on the invert. The use of a toewall at the ends of a structure or a paved invert shall be considered.

3.3 Shop Drawings: Shop drawings and design calculations shall be prepared and submitted to the owner for approval. The contractor shall be responsible for
verification of all field dimensions prior to fabrication. Shop drawings shall include location and dimensions for longitudinal thrust beams and transverse ring beams (if required). The thrust and ring beams shall be fully detailed in the plans and specifications.

4.0 MATERIALS

4.1 **Structural Plate**: SUPER-SPAN galvanized steel structural plate shall consist of plate and appurtenant items as shown on the plans and shall conform to the requirements of AASHTO M167 or ASTM A761 and Table 1

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<td>0.704</td>
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</table>

4.2 **Hot Dip Galvanizing**: Galvanizing shall conform to AASHTO M111 or ASTM A153

4.3 **Fasteners**: Nuts and bolts shall conform to AASHTO M232 and M291 or ASTM A449, Type 1 (bolts) and A563, Grade C (nuts).

4.4 **Bituminous (Asphalt) Coating**: If specified, bituminous coating shall conform to AASHTO M190.

5.0 FABRICATION AND QUALITY CONTROL

5.1 All manufacturing processes including corrugating, punching, curving, special fabrication and galvanizing shall be performed in the United States of America at a common location.

5.2 All raw materials shall be domestic and certification of origin in the United States of America.

5.3 All raw materials shall be traceable and certified by the mill for material composition and physical properties.

6.0 INSTALLATION

6.1 **Assembly**: The structure shall be assembled in accordance with the shop drawings and plate layout provided by the manufacturer. Bolts shall be tightened to an applied torque between 100 and 300 ft-lbs.

6.2 **Installation**: The structure shall be installed in accordance with AASHTO Standard Specifications for Highway Bridges Section 26 or ASTM A807, the plans and specifications, and the manufacturer’s recommendations.

(a) The Contractor shall provide footings per the project plans and specifications.
(b) The Contractor shall provide proper bedding and backfill to avoid distortion
that may create undesirable stresses in the structure and/or settlement of the
roadway. The bedding shall be free of rock formations, protrusions, frozen
material or organic material.

6.3 Backfill: The structure shall be backfilled using clean, well-graded granular
materials that meet the requirements of AASHTO M145 soil classifications A-1-a,
A-1-b, A-2-4 or A-2-5 per the requirements of Table 2. Plastic or cohesive soils
shall not be used.

<table>
<thead>
<tr>
<th>Table 2 – AASHTO M-145 Soil Classification</th>
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<tbody>
<tr>
<td>Group Classification</td>
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<tr>
<td>Sieve Analysis Percent Passing</td>
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<tr>
<td>No. 10 (2.000 mm)</td>
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<tr>
<td>No. 40 (0.425 mm)</td>
</tr>
<tr>
<td>No. 100 (0.150 mm)</td>
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<tr>
<td>No. 200 (0.075 mm)</td>
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<table>
<thead>
<tr>
<th>Atterberg Limits for Fraction Passing No. 40 (0.425 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Limit</td>
</tr>
<tr>
<td>Plasticity Index</td>
</tr>
<tr>
<td>Usual Materials</td>
</tr>
</tbody>
</table>

NOTE: Atterberg limits are modified to provide materials that are primarily granular

(a) Backfill materials shall be placed in symmetrical lifts on each side of the
structure. The differential between the lifts on either side shall not exceed 24
inches. Each layer of soil shall be placed in 6 to 8 inch loose lifts and
compacted to a minimum of 90% density per AASHTO T180 or ASTM D1557
(Modified Proctor).

(b) Backfill soils shall be free of rocks exceeding 3 inches, frozen lumps, ice,
organic matter and foreign materials that could cause hard spots or
decompose to create voids.

(c) The presence of a high percentage of silt or fine sand in the native soils
suggests the need for well graded granular material in the critical backfill
zone or the use of non-woven geotextile to prevent soil migration.

(d) The Contractor shall submit soil classification and sieve analysis of the
backfill material per AASHTO T88 or T11 and T27.

(e) During backfilling operations, only small tracked construction equipment
(such as a D-4 dozer or smaller) shall be near the structure as fill progresses
above the crown and to the minimum height of cover. After adequate cover
and compaction is achieved, live loads may increase at the direction of the
Engineer.

(f) The Contractor shall select equipment and methods to provide the specified
backfill density without excessive movement or deformation of the structure.

(g) The Manufacturer shall provide on-site shape control monitoring of the
structure during all backfilling operations. The shape control technician shall
confirm the structure shape before backfilling, then monitor the shape and verify compaction tests performed by the Geotechnical Engineer until the backfill reaches the extents of the critical backfill zone. The shape control technician shall have stop-work authority and shall immediately report any discrepancies to the Engineer.

6.4 **Critical Backfill Zone**: The Engineer shall determine the extents of the critical backfill zone and provide a detail on the plans. The minimum extent of the critical backfill zone shall be 6 feet on either side of the maximum span and from the bottom of footing to the top of the minimum cover height.

6.5 **Shape Control**: The Manufacturer shall provide a qualified, third party Shape Control Inspector to monitor the shape of the structure prior to and during backfilling operations. The Shape Control Technician shall:

(a) take initial measurements of the assembled structure

(b) observe all backfill materials and placement, record the compaction density of the backfill as lifts are placed and report any results that do not meet the requirements of the plans and specifications

(c) monitor the placement of the structural backfill to the specified minimum height of cover over the structure

(d) have necessary stop work authority to correct any observed deficiencies and report immediately to the Manufacturer’s designated local representative.

6.6 **Preconstruction Conference**: Prior to construction, a meeting shall be held to review the construction procedures for the SUPER-SPAN structure. The following requirements must be met:

(a) a representative of the Owner, Engineer of Record, Prime Contractor and any involved Sub-Contractors shall be present

(b) at least one of the Manufacturer’s representative(s) shall be a Registered Professional Engineer with direct involvement in the design and preparation of the shop drawings.

(c) a meeting announcement, agenda, attendance list and minutes will be prepared by the Manufacturer’s representative.

(d) the agenda items shall include: site and foundation preparation, assembly of the structure, methods and responsibility for shape control inspection, backfill material selection, testing and placement and compaction methods and testing and any other pertinent special requirements.

(e) the Manufacturer shall prepare a project specific preconstruction book which covers structure information, site preparation, footings, assembly, initial backfilling, thrust beams, final backfilling, shape control and any pertinent project-specific special provisions.

Revised April 2013
SPECIAL PROVISION
SECTION 802
Sewer Manhole

Add the following:

802.162 Adjust Sewer Manhole  The method for adjusting sewer manholes to grade shall follow the procedures as specified in 604.18 Adjust Manhole. Payment for 802.162 Adjust Sewer Manhole will be based on the accepted quantities of adjusted sewer manholes and will be paid for at the contract unit price each completed in place.

Payment will be under:

<table>
<thead>
<tr>
<th>Pay Item</th>
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<tbody>
<tr>
<td>802.162 Adjust Sewer Manhole</td>
<td>Each</td>
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</table>
SPECIAL PROVISION
SECTION 841
Removable Bollard

Add the following:

841.481 Removable Bollard  Materials shall be TrafficGuard® Locking Round Post Lock Series (RPL4), or approved equivalent. Post shall be 36” high, 4.5” O.D., 0.237” wall thickness, painted black. Payment for 841.481 Removable Bollard will be paid for at the contract unit price each completed in place and installed per manufacturer’s recommendation.

Payment will be under:

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Standard Detail Updates
Repair Specifications
STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at:

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<tr>
<th>Detail #</th>
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<td>Electrical Junction Box for Traffic Signals and Lighting</td>
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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.”
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:

<table>
<thead>
<tr>
<th>From More Than</th>
<th>Up to and Including $100,000</th>
<th>Amount of Liquidated Damages per Calendar Day $225</th>
</tr>
</thead>
</table>
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 dated 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.

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 processed 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 sublot 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:

<table>
<thead>
<tr>
<th>Nominal Size US Customary (in)</th>
<th>Minimum Mandrel Diameter (in)</th>
<th>Nominal Size Metric (mm)</th>
<th>Minimum Mandrel Diameter (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>11.23</td>
<td>300</td>
<td>280.73</td>
</tr>
<tr>
<td>15</td>
<td>14.04</td>
<td>375</td>
<td>350.91</td>
</tr>
<tr>
<td>18</td>
<td>16.84</td>
<td>450</td>
<td>421.09</td>
</tr>
<tr>
<td>24</td>
<td>22.46</td>
<td>600</td>
<td>561.45</td>
</tr>
<tr>
<td>30</td>
<td>28.07</td>
<td>750</td>
<td>701.81</td>
</tr>
<tr>
<td>36</td>
<td>33.69</td>
<td>900</td>
<td>842.18</td>
</tr>
<tr>
<td>42</td>
<td>39.30</td>
<td>1050</td>
<td>982.54</td>
</tr>
<tr>
<td>48</td>
<td>44.92</td>
<td>1200</td>
<td>1122.90</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Material</th>
<th>703 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone Fill</td>
<td>703.25</td>
</tr>
<tr>
<td>Plain and Hand Laid Riprap</td>
<td>703.26</td>
</tr>
<tr>
<td>Stone Blanket</td>
<td>703.27</td>
</tr>
<tr>
<td>Heavy Riprap</td>
<td>703.28</td>
</tr>
</tbody>
</table>
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:
Organic Content  Percent by Volume
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”.

Page 11 of 27
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: “Precast 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 Transportation’s 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 15º 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.

<table>
<thead>
<tr>
<th>ORIGINAL CONTRACT AMOUNT</th>
<th>From More Than</th>
<th>Up to and Including</th>
<th>Amount of Penalty Damages per Violation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$0</td>
<td>$1,000,000</td>
<td>1st $250  2nd $500  3rd &amp; Subsequent $1,250</td>
</tr>
<tr>
<td></td>
<td>$1,000,000</td>
<td>$2,000,000</td>
<td>1st $500  2nd $1,000  3rd &amp; Subsequent $2,500</td>
</tr>
<tr>
<td></td>
<td>$2,000,000</td>
<td>$4,000,000</td>
<td>1st $1,000  2nd $2,000  3rd &amp; Subsequent $5,000</td>
</tr>
<tr>
<td></td>
<td>$4,000,000 and more</td>
<td>$2,000  4th &amp; Subsequent $10,000</td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>SIEVE SIZE</th>
<th>Nominal Maximum Aggregate Size---Control Points (Percent Passing)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TYPE 25 mm</td>
</tr>
<tr>
<td>37.5 mm</td>
<td>100</td>
</tr>
<tr>
<td>25 mm</td>
<td>90-100</td>
</tr>
<tr>
<td>19 mm</td>
<td>-90</td>
</tr>
<tr>
<td>12.5 mm</td>
<td>-90</td>
</tr>
<tr>
<td>9.5 mm</td>
<td>-</td>
</tr>
<tr>
<td>4.75 mm</td>
<td>-</td>
</tr>
<tr>
<td>2.36 mm</td>
<td>19-45</td>
</tr>
<tr>
<td>1.18 mm</td>
<td>-</td>
</tr>
<tr>
<td>600 μm</td>
<td>-</td>
</tr>
<tr>
<td>300 μm</td>
<td>-</td>
</tr>
<tr>
<td>75 μm</td>
<td>1-7</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>PCS Control Point for Mixture Nominal Maximum Aggregate Size (% passing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Maximum Aggregate Size</td>
</tr>
<tr>
<td>Primary Control Sieve</td>
</tr>
<tr>
<td>PCS Control Point (% passing)</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Sieve Designation</th>
<th>Percentage by Weight Passing Square Mesh Sieves</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ inch</td>
<td>100</td>
</tr>
<tr>
<td>¾ inch</td>
<td>93-100</td>
</tr>
<tr>
<td>No. 4</td>
<td>60-80</td>
</tr>
<tr>
<td>No. 8</td>
<td>46-65</td>
</tr>
<tr>
<td>No. 16</td>
<td>25-55</td>
</tr>
<tr>
<td>No. 30</td>
<td>16-40</td>
</tr>
<tr>
<td>No. 50</td>
<td>10-30</td>
</tr>
<tr>
<td>No. 100</td>
<td>6-22</td>
</tr>
<tr>
<td>No. 200</td>
<td>3.0-8.0</td>
</tr>
</tbody>
</table>

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 PRESERVATIVES

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 FABRIC

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 [½ 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. Photocell 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 [3/4 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.”
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 that 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.

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:

Goals for female participation in each trade

<table>
<thead>
<tr>
<th>Trade</th>
<th>Goal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.9%</td>
</tr>
</tbody>
</table>

Goals for minority participation for each trade

Maine

<table>
<thead>
<tr>
<th>County</th>
<th>Goal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>001 Bangor, ME</td>
<td>0.8%</td>
</tr>
<tr>
<td>Non-SMSA Counties</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SMSA Counties: 4243 Lewiston-Auburn, ME

<table>
<thead>
<tr>
<th>County</th>
<th>Goal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Androscoggin)</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

6403 Portland, ME

<table>
<thead>
<tr>
<th>County</th>
<th>Goal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Cumberland, Sagadahoc)</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Non-SMSA Counties:

<table>
<thead>
<tr>
<th>County</th>
<th>Goal Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Franklin, Kennebec, Knox, Lincoln, Oxford, Somerset, York)</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

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
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 workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be 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 through 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 sat 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

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).


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.


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.


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.

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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).


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 federal-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
LAP Environmental Summary Sheet

WIN: 11848.00         Date Submitted: 3/27/14
Town: Lewiston
CPD Team Leader: Kristen Chamberlain

NEPA Complete: 8/24/06; 6/21/12 Re-evaluation
Individual CE

☒ Section 106
No Federal Action       No Adverse Effect-Riverside Cemetery

☒ Section 4(f) and 6(f)
Section 4(f)
Review Complete    de minimus use
Section 6(f)
Not Applicable

☒ Section 7
Species of Concern: Atlantic Salmon DPS
No Effect- above Lewiston Falls and reviewed by USFWS via ACOE Section 404 Process
Species of Concern: Northern Long-Eared Bat-No Jeopardy. Clearing for the project will be completed prior to 10/1/14. See Special Provision 105.

☒ Hazardous Waste Review
Not Applicable

☒ State and Federal Permits
Letter 12 submitted  2/7/14  (date)
Copies of approvals submitted_2/4/14___ (date)
*Permits need to be included in the contract package. See Attached.

General Notes and/or Comments:

*All approvals based on plans/scope as of: 2/7/14
SPECIAL PROVISION
SECTION 105
General Scope of Work
(Environmental Requirements)

The northern long eared bat (*Myotis septentrionalis*) (hereafter referred to as ‘NLE bat’) was proposed for listing under the Federal Endangered Species Act (ESA) on October 2, 2013 (Federal Register Vol. 78, No. 191, pages 61046-61080). This species is expected to be listed as Endangered under the ESA around October 2014.

The following conditions must be met to minimize harm to the NLE bat.

I. Special Conditions:
   1. **All clearing for the entire project must occur prior to October 1, 2014.**
June 2013

City of Lewiston
Department of Public Works
103 Adams Ave
P.O. Box 479
Lewiston, ME 04240-0479
ATTN: Richard Burnham, P.E.

RE: Natural Resources Protection Act Application, Lewiston
DEP#L-25903-L6-B-N/L-25903-TA-C-N

Dear Mr. Burnham:

Please find enclosed a signed copy of your Department of Environmental Protection land use permit. You will note that the permit includes a description of your project, findings of fact that relate to the approval criteria the Department used in evaluating your project, and conditions that are based on those findings and the particulars of your project. Please take several moments to read your permit carefully, paying particular attention to the conditions of the approval. The Department reviews every application thoroughly and strives to formulate reasonable conditions of approval within the context of the Department’s environmental laws. You will also find attached some materials that describe the Department’s appeal procedures for your information.

If you have any questions about the permit or thoughts on how the Department processed this application please get in touch with me directly. I can be reached at (207) 446-1806 or at Daniel.Courtemanch@maine.gov.

Sincerely,

Daniel Courtemanch, Project Manager
Division of Land Resource Regulation
Bureau of Land & Water Quality

pc: File
DEPARTMENT ORDER

IN THE MATTER OF

CITY OF LEWISTON
Lewiston, Androscoggin County
RIVERSIDE GREENWAY PATH
L-25903-L6-B-N (approval)
L-25903-TA-C-N (approval)

) NATURAL RESOURCES PROTECTION ACT
) FRESHWATER WETLAND ALTERATION
) STREAM ALTERATION
) WATER QUALITY CERTIFICATION
) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of the CITY OF LEWISTON with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes to construct a pedestrian/bicycle path along the Androscoggin River, extending from Winter Street to Tall Pines Drive. The path will be approximately 6,000 feet long and 10 feet wide. The majority of the proposed path will be located on top of an existing sewer line or other developed areas that are within 75 feet of the Androscoggin River. As part of the project, the applicant proposes to install a new pipe arch culvert crossing over Jepson Brook and to replace an existing crossing over an unnamed stream. The crossing over Jepson Brook will consist of a pipe arch with a 26 foot span. In order to facilitate the construction of the path, the applicant will alter 1,786 square feet of freshwater wetlands and permanently alter 683 square feet of stream channel. The details of the proposed project can be seen on the plans included in the application, the first of which is entitled “City of Lewiston Riverside Greenway Bicycle/Pedestrian Path Along Androscoggin River From Sunnyside Park to Tall Pines Drive” prepared by Jones Associates Inc. and dated February 5, 2013.

The applicant also submitted a stormwater permit by rule (PBR) which indicates that the project will create 0.64 acre of impervious area and 1.5 acres of developed area. The PBR was assigned #56171 and was accepted on May 1, 2013.

B. Current Use of the Site: The project site parallels the Androscoggin River and contains varying levels of development which include a school, a cemetery, an underground sewer line with an associated access trail, and undeveloped areas.

2. EXISTING SCENIC, AESTHETIC, RECREATIONAL OR NAVIGATIONAL USES:

In accordance with Chapter 315, Assessing and Mitigating Impacts to Scenic and Aesthetic Uses, the applicant submitted a copy of the Department's Visual
Evaluation Field Survey Checklist as Appendix A to the application along with a description of the property and the proposed project. The applicant also submitted several photographs of the proposed project site. Department staff visited the project site in the summer of 2012.

The proposed project is located in several unnamed wetlands and Jepson Brook, which are not scenic resources. The project is also located adjacent to the Androscoggin River, which is a scenic resource visited by the general public, in part, for the use, observation, enjoyment and appreciation of its natural and cultural visual qualities. The project will retain much of the existing wooded buffer between the path and the Androscoggin River. The buffer will range in width from approximately five feet to over 100 feet.

The proposed project was evaluated using the Department’s Visual Impact Assessment Matrix and was found to have an acceptable potential visual impact rating. Based on the information submitted in the application, the visual impact rating and the site visit, the Department determined that the location and scale of the proposed activity is compatible with the existing visual quality and landscape characteristics found within the viewshed of the scenic resource in the project area.

The Department did not identify any issues involving existing recreational and navigational uses.

The Department finds that the proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses of the protected natural resource.

3. **SOIL EROSION:**

   The applicant developed an erosion and sedimentation control plan which outlines the use of erosion controls, temporary site stabilization and permanent site stabilization. All of these were designed in accordance with the Maine Erosion and Sediment Control Best Management Practices manual.

   The Department finds that the activity will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

4. **HABITAT CONSIDERATIONS:**

   The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviewed the proposed project and stated that there are no Essential or Significant Wildlife Habitats at the project site. MDIFW did comment that the applicant should maintain a 100 foot undisturbed buffer between the path and all streams at the project site. MDIFW also commented that all work within 100 feet of any stream and in-stream work should occur between July 1 and October 1 to minimize impacts to fisheries.
The applicant reviewed MDIFW’s comments and stated that maintaining a 100 foot buffer along streams is impossible because the project was designed using property that the City owns, and that the project has been designed to minimize impacts to stream buffers by co-locating the path along the existing sewer line, which is already developed. Because the majority of the project will occur within 100 feet of either the river or a stream, the applicant stated that it is not feasible to limit upland construction to the recommended timeframe. Doing so would prolong construction of the project to take place over several construction seasons. The applicant did agree to limit any in-stream work to July 1 through October 1 of any year.

The Department normally requires work windows when conducting a project directly within a waterbody, such as the proposed crossing of Jepson Brook and the unnamed stream. MDIFW did not submit site specific information indicating why it would be important to limit construction activities adjacent to the waterbodies affected by this project. Department staff visited the project site and noted that the sewer line is already used as an informal walking path by local residents and that the project as proposed will retain much of the existing vegetated buffer along the waterbodies.

Considering MDIFW’s comments, the applicant’s response, and the Department’s review, the Department determined that limiting all upland work within 100 feet of the river or a stream to occur between July 1 to October 1 is unnecessary. Therefore, the Department finds that the activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life provided that the applicant limits all in-stream work to occur between July 1 through October 1 of any year.

5. **WATER QUALITY CONSIDERATIONS:**

In order to maintain water quality, the applicant proposes to cure all concrete in forms for at least one week.

The Department does not anticipate that the proposed project will violate any state water quality law, including those governing the classification of the State’s waters.

6. **WETLANDS AND WATERBODIES PROTECTION RULES:**

The applicant proposes to permanently alter 683 square feet of stream channel and 1,786 square feet of freshwater wetlands to construct the path.

The Wetland Protection Rules interpret and elaborate on the NRPA criteria for obtaining a permit. The rules guide the Department in its determination of whether a project’s impacts would be unreasonable. A proposed project would generally be found to be unreasonable if it would cause a loss in wetland area, functions and values and there is a practicable alternative to the project that would be less damaging to the environment. Each application for a Natural Resources Protection
Act permit that involves a freshwater wetland and stream alteration must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist.

A. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. The applicant submitted an alternatives analysis for the proposed project completed by Jones Associates which stated that the project goal is to create a public pathway that offers a safe way for pedestrians and bicyclists to access different parts of the City. The applicant has avoided impacts by locating the project on the developed area of the existing sewer line and other existing infrastructure where possible. The applicant was unable to find any existing infrastructure for the crossing of Jepson Brook, but was able to locate the bridge 170 feet upstream from its confluence with the Androscoggin River, in a place where the brook narrows. In addition, the applicant also designed the crossing to use a 26-foot arch style culvert, which is the largest size available that meets the applicant’s load requirements for emergency vehicles. The applicant stated that the proposed project avoids impacts to both freshwater wetlands and waterbodies to the greatest extent practicable given the project’s purpose.

B. Minimal Alteration. The amount of wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. The applicant co-located the proposed project along the existing sewer line to minimize impacts to wetlands and streams. The applicant also designed the pathway to be the minimum width possible that will still allow for emergency vehicle access.

C. Compensation. In accordance with Chapter 310(5)(C), compensation is required to achieve the goal of no net loss of stream channel functions and values. Mitigation must meet a 2:1 ratio of stream channel compensation to stream channel alteration. The impacts from the proposed project will directly alter 683 square feet of stream channel. The applicant conducted a functions and values assessment of Jepson Brook. The applicant proposes to mitigate stream channel impacts through the replacement of a hung culvert on a perennial tributary to No Name Brook. The replacement of the culvert will allow for fish passage through the culvert, restoring fish access to 2,000 linear feet of stream habitat and a small open water pool. The applicant also proposes to remove 100 linear feet of an existing 4,000 linear foot concrete channel on Hart Brook near Westminster Street. The area proposed for restoration is the most downstream section of the concrete channel. Once the concrete is removed, the applicant will place course gravel and rocks to recreate the stream bed. The applicant will grade the embankment and plant the area with native vegetation. The removal of the concrete channel will result in the restoration of 2,348 square feet of stream channel. The applicant proposes to deed restrict the Westminster Street restoration parcel using the Department’s standard deed restriction language. The details of the proposed compensation project can be seen on plan entitled “Proposed Compensation Site Lewiston Greenway Project Westminster Street Lewiston, Maine” prepared by Jones Associates Inc. and dated January 24, 2013. Within 90 days of the date of this Order, the applicant must execute and record the Declaration of Covenants and Restrictions that protects the
mitigation areas. The recorded deed restriction must be submitted to the Bureau of Land and Water Quality within 30 days of its recording.

In order to ensure that the mitigation will be successful, the applicant proposes to monitor the compensation project annually over a 5-year period starting in 2014. A qualified, professional wetland scientist must conduct all field assessments. Reports detailing the findings must be submitted to the Department prior to December 15 of each of the five reporting years. The reports must include labeled photographs representing current site conditions, a comparison of the mitigation plan with existing site conditions, and a narrative detailing existing site conditions during the monitoring event. The narrative must include, but not be limited to, vegetative coverage, success rates, vegetative community diversity, spatial extent, functions and values, embankment stability, and any measure required to remEDIATE adverse site conditions.

Furthermore, in accordance with Chapter 310 Section 5(C)(6)(a)(ii), compensation is not required to achieve the goal of no net loss of freshwater wetland functions and values since the project will not result in over 15,000 square feet of fill in a freshwater wetland, which is the threshold over which compensation is generally required.

The Department finds that the applicant has avoided and minimized wetland and waterbody impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project provided that the applicant records the Declaration of Covenants and Restrictions and monitors the compensation site as described above.

7. OTHER CONSIDERATIONS:

The Department did not identify any other issues involving existing scenic, aesthetic, or navigational uses, soil erosion, habitat or fisheries, the natural transfer of soil, natural flow of water, water quality, or flooding.

BASID on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq, and Section 401 of the Federal Water Pollution Control Act:

A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.

B. The proposed activity will not cause unreasonable erosion of soil or sediment.

C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life
provided that the applicant limits in-stream work as described in Finding 4, records the Declaration of Covenants and Restrictions and monitors the compensation site as described in Finding 6.

E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.

F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.

G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.

H. The proposed activity is not on or adjacent to a sand dune.

I. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A. Section 480-P.

THEREFORE, the Department APPROVES the above noted application of the CITY OF LEWISTON to construct the Greenway Path as described in Finding 1, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. Standard Conditions of Approval, a copy attached.

2. The applicant shall take all necessary measures to ensure that their activities or those of their agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.

3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

4. The applicant shall monitor the compensation project annually over a 5-year period starting in 2014. A qualified, professional wetland scientist shall conduct all field assessments. Reports detailing the findings shall be submitted to the Department prior to December 15 of each of the five reporting years. The reports shall include labeled photographs representing current site conditions, a comparison of the mitigation plan with existing site conditions, and a narrative detailing existing site conditions during the monitoring event. The narrative shall include, but not be limited to, vegetative coverage, success rates, vegetative community diversity, spatial extent, wetland functions, and any measure required to remediate adverse site conditions.

5. Within 90 days of the date of this Order, the applicant shall execute and record the Declaration of Covenants and Restrictions that protects the mitigation area. The recorded deed restriction shall be submitted to the Bureau of Land and Water Quality within 30 days of its recording.
6. All in-stream work shall occur between July 1 and October 1 of any year.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 21st DAY OF June, 2013.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  
For: Patricia W. Aho, Commissioner

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

DC/L25903BNCN/ATS#75855,76201
Natural Resource Protection Act (NRPA)  
Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET. SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.

B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.

C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.

D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other than specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.

E. Time Frame for Approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.

F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.

G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.

H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

Revised (12/2011/DEP LW0428)
DEP INFORMATION SHEET
Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection’s (“DEP”) Commissioner: (1) an administrative process before the Board of Environmental Protection (“Board”); or (2) in a judicial process before Maine’s Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine’s Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES


HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner’s decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner’s decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board’s receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP’s offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP’s Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP’s record at the time of decision being added to the record for consideration by the Board as part of an appeal.
WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. **Aggrieved Status.** The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner’s decision.

2. **The findings, conclusions or conditions objected to or believed to be in error.** Specific references and facts regarding the appellant’s issues with the decision must be provided in the notice of appeal.

3. **The basis of the objections or challenge.** If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.

4. **The remedy sought.** This can range from reversal of the Commissioner’s decision on the license or permit to changes in specific permit conditions.

5. **All the matters to be contested.** The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.

6. **Request for hearing.** The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.

7. **New or additional evidence to be offered.** The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP’s attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. **Be familiar with all relevant material in the DEP record.** A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.

2. **Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.** DEP staff will provide this information on request and answer questions regarding applicable requirements.

3. **The filing of an appeal does not operate as a stay to any decision.** If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.
II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine’s Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P 80C. A party’s appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board’s or the Commissioner’s decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board’s or the Commissioner’s decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine’s Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board’s Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk’s office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant’s rights.
MAINE GENERAL PERMIT (GP)
AUTHORIZATION LETTER AND SCREENING SUMMARY

City of Lewiston
Department of Public Works
P.O. Box 479
Lewiston, Maine 04240-0479

CORPS PERMIT #: NAE-2013-00784
CORPS PGP ID#: non-screen
STATE ID#: L-25903-L6-B-N

DESCRIPTION OF WORK:
Placement fill in 2.469 SF (0.05 acres) wetland and waterway in conjunction with developing a walking path along the Androscoggin River from Winter Street (Sunnyside Park) to Tall Pines Drive in Lewiston. Maine as shown on the project plans entitled "City of Lewiston Riverside Greenway Bicycle/Pedestrian Path Along Androscoggin River From Sunnyside Park to Tall Pines Drive for City of Lewiston, Maine by Jones Associates, Inc. Maine" in 6 sheets dated 2/5/2013.

See Attached Conditions:

LAT/LONG COORDINATES: 44.11618 N 70.21237 W USGS QUAD: ME-Lewiston

I. CORPS DETERMINATION:
Based on our review of the information you provided, we have determined that your project will have only minimal individual and cumulative impacts on waters and wetlands of the United States. Your work is therefore authorized by the U.S. Army Corps of Engineers under the enclosed Federal Permit, the Maine General Permit (GP). Accordingly, we do not plan to take any further action on this project.

You must perform the activity authorized herein in compliance with all the terms and conditions of the GP (including any attached Additional Conditions and any conditions placed on the place 401 Water Quality Certification including any required mitigation). Please review the enclosed GP carefully, including the GP conditions beginning on page 5, to familiarize yourself with its contents. You are responsible for complying with all the GP requirements; therefore you should be certain that whoever does the work fully understands all of the conditions. You may wish to discuss the conditions of this authorization with your contractor to ensure the contractor can accomplish the work in a manner that conforms to all requirements.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

Condition 41 of the GP (page 18) provides one year for completion of work that has commenced or is under contract to commence prior to the expiration of the GP on October 12, 2015. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 12, 2016.

This authorization presumes the work shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to the undersigned.

No work may be started unless and until all other required local, State and Federal licenses and permits have been obtained. This includes but is not limited to a Flood Hazard Development Permit issued by the town if necessary.

II. STATE ACTIONS: PENDING [X], ISSUED [ ], DENIED [ ] DATE: ___________

APPLICATION TYPE: PBR: [X], TIER 1: [X], TIER 2: [ ], TIER 3: [ ], LURC: [ ] DMR LEASE: [ ] NA: [ ]

III. FEDERAL ACTIONS:

JOINT PROCESSING MEETING: Non-screen LEVEL OF REVIEW: CATEGORY 1: [X] CATEGORY 2: [ ]

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10, 404 [X] 10/404 [ ] 103 [ ]

EXCLUSIONS: The exclusionary criteria identified in the general permit do not apply to this project.

FEDERAL RESOURCE AGENCY OBJECTIONS: EPA: NO USFWS: NO NMFS: NO

If you have any questions on this matter, please contact my staff at 207-623-8367 at our Manchester, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://per2.nwp.usace.army.mil/survey.html

RODNEY A. HOWE
SENIOR PROJECT MANAGER
MAINE PROJECT OFFICE

FRANK J. DEL GIUDICE
CHEF, PERMITS & ENFORCEMENT BRANCH
REGULATORY DIVISION

DATE 4/3/13
PLEASE NOTE THE FOLLOWING GENERAL CONDITIONS FOR
DEPARTMENT OF THE ARMY
GENERAL PERMIT
NO. NAE-2013-00784

1. Please note General Condition 22 Stream Work and Crossings and appendix A (c) River/Stream/Brook Work & Crossings and Wetland Crossings on page 2, in-stream work limited to July 15 – October 1 of the attached Programmatic General Permit.

APPLICATION FOR A NATURAL RESOURCES PROTECTION ACT PERMIT

1. Name of Applicant: City of Lewiston
   Dept of Public Works

2. Applicant's Mailing Address: 103 Adams Ave.
   PO Box 479
   Lewiston, ME 04240-0479

3. Applicant's Daytime Phone #: 207-513-3003

4. Applicant's Email Address: RBurnham@lewistonmaine.gov

5. Name of Agent: Jones Associates Inc

6. Agent's Mailing Address: 63 Tucker Lane
   Poland Spring, ME 04274

7. Agent's Daytime Phone #: 207-998-5242

8. Agent's Email Address: jones@jonesai.com

9. Location of Activity: Winter Street (Sunnyside Park) to Tall Pines Drive
   (Nearest Road, Street, Rt. #)

10. Town: Lewiston

11. County: Androscoggin

12. Type of Resource: (Check all that apply)

   - River, stream or brook
   - Great Pond
   - Coastal Wetland
   - Freshwater Wetland
   - Wetland Special Significance
   - Significant Wildlife Habitat
   - Fragile Mountain

13. Name of Resource: Androscoggin River

14. Amount of Impact: (Sq.Ft.)
   - Total Wetland Impacts 1,786 Sq. Ft.
   - Stream Impacts 86 Lin. Ft. 683 Sq. Ft.

Dredging/Veg Removal/Other:

15. Type of Wetland: (Check all that apply)

   - Forested
   - Scrub Shrub
   - Emergent
   - Wet Meadow
   - Peatland
   - Open Water
   - Other:

   FOR FRESHWATER WETLANDS

   Tier 1
   - 0 - 4,999 sq. ft.
   - 5,000-9,999 sq ft
   - 10,000-14,999 sq ft

   Tier 2
   - 15,000 - 43,560 sq. ft.

   Tier 3
   - > 43,560 sq. ft.

16. Brief Activity Desc.: Impacts associated with construction of a bicycle / pedestrian path along the Androscoggin River from Winter Street (Sunnyside Park) to Tall Pines Drive

17. Size of Lot or Parcel & UTM Locations:
   - 2+/- acres
   - UTM Northing: Beg: 4886222 N
   - UTM Easting: Beg: 403269 E

18. Title, Right or Interest: □ own (rights) □ lease □ purchase option □ written agreement (see attached letter)

19. Deed Reference Numbers: Book#: Page:
   - 20. Map and Lot Numbers: Map #: Lot #:

21. DEP Staff Previously Contacted:
   - Dan Courtemanche

22. Part of a larger project:
   - □ Yes
   - □ No

23. Resubmission of Application:
   - □ Yes
   - □ No

24. Written Notice of Violation?
   - □ Yes
   - □ No

25. Previous Wetland Alteration:
   - □ Yes
   - □ No

26. Detailed Directions to the Project Site:

27. TIER 1

   □ Title, right or interest documentation
   □ Topographic Map
   □ Narrative Project Description
   □ Plan or Drawing (8 1/2" x 11")
   □ Photos of Area
   □ Statement of Avoidance & Minimization

   □ Title, right or interest documentation
   □ Topographic Map
   □ Copy of Public Notice/Public Information Meeting Documentation
   □ Wetlands Delineation Report (Attachment 1) that contains the Information listed under Site Conditions
   □ Alternatives Analysis (Attachment 2) including description of how wetland impacts were Avoided/Minimized
   □ Erosion Control/Construction Plan
   □ Functional Assessment (Attachment 3), if required
   □ Compensation Plan (Attachment 4), if required
   □ Appendix A and others, if required
   □ Statement/Copy of cover letter to MHPC

   □ Description of Previously Mined Peatland, if required

28. FEES Amount Enclosed: $284.00

CERTIFICATIONS AND SIGNATURES LOCATED ON PAGE 2
IMPORTANT: IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.

By signing below the applicant (or authorized agent), certifies that he or she has read and understood the following:

DEP SIGNATORY REQUIREMENT

PRIVACY ACT STATEMENT
Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor a permit be issued.

CORPS SIGNATORY REQUIREMENT
USC Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry shall be fines not more than $10,000 or imprisoned not more than five years or both. I authorize the Corps to enter the property that is subject to this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

DEP SIGNATORY REQUIREMENT
"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

[Signature]

Date: 2/5/2013

SIGNATURE OF AGENT/APPLICANT

NOTE: Any changes in activity plans must be submitted to the DEP and the Corps in writing and must be approved by both agencies prior to implementation. Failure to do so may result in enforcement action and/or the removal of the unapproved changes to the activity.

"I hereby authorize the DEP to send me an electronically signed decision on the license I am applying for with this application by emailing the decision to the address located on the front page of this application (see #4 for the applicant and #9 for the agent. Do not sign if you elect to “opt out” or receive the decision via regular mail.

Signed (Applicant) [Signature]

Date: [Date]

and/or

Signed (Agent) [Signature]

Date: 2/5/2013

Jones Associates Inc
ATTACHMENT 3 – LOCATION MAP

Proposed Bicycle / Pedestrian Pathway

Approximate Location:
Begin Lat: 44.1228008°N  Long: 70.2089991°W
UTM: 403269 East, 4886222 North Meters
End Lat: 44.1079999°N  Long: 70.2170340°W
UTM: 402602 East, 4884588 North Meters

City of Lewiston
Riverside Greenway Bicycle/Pedestrian Path

USGS Lewiston Quadrangle (7.5 Minute Series)  NOT TO SCALE
Jones Associates, Inc., 63 Tucker Lane Poland Spring, Maine 04274  (207) 998-5242
CITY OF LEWISTON RIVERSIDE GREENWAY
BICYCLE/PEDESTRIAN PATH
ALONG ANDROSCOGGIN RIVER
FROM SUNNYSIDE PARK TO TALL PINES DRIVE

PREPARED FOR: CITY OF LEWISTON
27 PINE STREET
LEWISTON, MAINE

PREPARED BY: JONES ASSOCIATES INC.
27 PINE STREET
LEWISTON, MAINE

DATE: 2/5/2013
SCALE: 1"=400'
PROJ. #: 12-033LE

REVISIONS

NOTE:

This is not a boundary survey. This plan is based on plans provided by the City of Lewiston.
CITY OF LEWISTON RIVERSIDE GREENWAY
BICYCLE/PEDESTRIAN PATH
ALONG ANDROSCOGGIN RIVER
FROM SUNNYSIDE PARK TO TALL PINES DRIVE

NOTES:
THIS IS NOT A BOUNDARY SURVEY. THIS PLAN IS BASED ON PLANS PROVIDED BY THE CITY OF LEWISTON.

REPLACE EXISTING 36" CMP WITH NEW 36" HDPE

20-FT-WIDE EASEMENT

Wetland Impact C 512 SF

25' Shoreland Zone

Per FEMA, Flood Zone elevation is approx. 180' in this area

Androscoggin River per G15

Existing Trail

Assumed

0 10 20 40
1 inch = 20 ft

GRAPHIC SCALE

PROJECTIONS

PROJ. #: 12-033LE

DATE: 2/5/2013
SCALE: 1"=20'

JONES ASSOCIATES INC.
WICKER MISS, BEAVER SPRINGS, ME 04298
307-792-2424

27 PINE STREET
LEWISTON, MAINE

307-792-2424

WI-2
NOTES:

THIS IS NOT A BOUNDARY SURVEY. THIS PLAN IS BASED ON PLANS PROVIDED BY THE CITY OF LEWISTON.
DEPARTMENT OF THE ARMY
GENERAL PERMIT
STATE OF MAINE

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues this General Permit (GP) for activities in waters of the United States (U.S.) that have no more than minimal individual, secondary, and cumulative adverse effects on the aquatic environment in waters of the U.S. within the boundaries of and off the coast of the State of Maine.

I. GENERAL CRITERIA
In order for activities to qualify for this GP, they must meet the GP’s terms and eligibility criteria (Pages 1 – 4), general conditions (GC) (Pages 5 – 18), and Appendix A - Definition of Categories.

Under this GP, projects may qualify for the following:
- **Category 1**: Category 1 Notification Form required.
  (Submittal of the Category 1 Notification Form at Appendix B to the Corps is required.
- **Category 2**: Application required.
  (Submittal of an application to the Corps is required and written approval from the Corps must be received.

If your project is ineligible for Category 1, it may qualify for Category 2 or an Individual Permit and you must submit an application (see Page 3). The thresholds for Categories 1 and 2 are defined in Appendix A. This GP does not affect the Corps Individual Permit review process or activities exempt from Corps regulation.

II. ACTIVITIES COVERED:
- Work and structures that are located in, under or over any navigable water of the U.S.\(^1\) that affect the course, location, condition, or capacity of such waters; or the excavating from or depositing of material in such waters. The Corps regulates this under Section 10 of the Rivers and Harbors Act of 1899);
- The discharge of dredged or fill material into waters of the U.S\(^2\). The Corps regulates this under Section 404 of the Clean Water Act (CWA).\(^3\)
- The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates this under Section 103 of the Marine Protection, Research and Sanctuaries Act.

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\(^1\) Defined at 33 CFR 329 and Appendix A, Page 4.
\(^2\) Defined at 33 CFR 328
\(^3\) When there is a regulated discharge of dredged or fill material into waters of the U.S., the Corps will also consider secondary impacts, which are defined at Appendix A, Endnote/Definition 2.
III. PROCEDURES:

1. State Approvals

Applicants are responsible for applying for and obtaining any of the required state or local approvals (see GC 1, Page 5). Federal and state jurisdictions may differ in some instances. State permits may be required for specific projects regardless of the general permit category.

In order for authorizations under this GP to be valid, when any of the following state approvals or statutorily-required reviews is also required, the approvals must be obtained prior to the commencement of work in Corps jurisdiction.

- Maine Department of Environmental Protection (DEP): Natural Resources Protection Act (NRPA) permit, including permit-by-rule and general permit authorizations; Site Location of Development Act permit; and Maine Waterway Development and Conservation Act permit.
- Maine Department of Conservation: Land Use Regulation Commission (LURC) permit.
- Maine Department of Marine Resources: Aquaculture Leases.
- Maine Department of Conservation, Bureau of Parks and Lands, Submerged Lands: Lease

NOTE: This GP may authorize projects that are not regulated by the State of Maine (e.g., seasonal floats or moorings).

2. Corps Authorizations

   a. Category 1 (Submission of Category 1 Notification Form required)

Eligibility Criteria

Activities in Maine that:

- Are subject to Corps jurisdiction (see GC 2, Page 5),
- Meet the terms and eligibility criteria of this GP (Pages 1 - 4),
- Meet all GCs of this GP (Pages 5 – 18), and
- Meet the definition of Category 1 in Appendix A - Definition of Categories,

**may proceed without application to the Corps provided:**

- The Category 1 Notification Form (Appendix B) is submitted to the Corps before starting the work authorized by this GP.

Consultation with the Corps and/or outside experts may be necessary to ensure compliance with this GP’s general conditions (starting on Page 5) and related federal laws such as the National Historic Preservation Act, the Endangered Species Act (ESA), and the Wild and Scenic Rivers Act. For example, experts on historic resources may include the agencies and tribes referenced in GC 8, while experts on endangered species include the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). Project proponents are encouraged to contact the Corps with Category 1 eligibility questions.

Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, is eligible for Category 1 authorization under this GP. The Maine DEP and LURC have waived WQC for projects authorized under Categories 1 and 2 of this GP. The state has concurred with the determination that projects authorized under Categories 1 and 2 of this GP are consistent with the enforceable policies of the Maine CZM Program.
b. **Category 2 (Application to and written approval from the Corps required)**

**Eligibility Criteria**
Activities in Maine that:
- Are subject to Corps jurisdiction (see GC 2, Page 5),
- Meet the terms of this GP (Pages 1 - 4),
- Meet all GCs of this GP (Pages 5 - 18),
- Meet the definition of Category 2 in Appendix A - Definition of Categories,

 require an application to and written approval from the Corps. The Corps will coordinate review of Category 2 activities with federal and state agencies, as appropriate. To be eligible and subsequently authorized, an activity must result in no more than minimal impacts to the aquatic environment as determined by the Corps based on comments from the review team and the criteria listed above. This may require project modifications involving avoidance, minimization or compensatory mitigation for unavoidable impacts to ensure the net effects of a project are minimal. Compensatory mitigation for waterway/wetland impacts may take the form of wetland preservation, restoration, enhancement, creation, and/or “in-lieu fee” for inclusion into the Natural Resources Mitigation Fund. See [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg), “Mitigation” and then “Maine” for more information.

Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, is eligible for Category 2 authorization under this GP. The Maine DEP and LURC have waived WQC for projects authorized under Categories 1 and 2 of this GP. The state has concurred with the determination that projects authorized under Categories 1 and 2 of this GP are consistent with the enforceable policies of the Maine CZM Program.

3. **Applying for a Permit**

All applicants for Category 2 projects must:

a. Apply directly to the Corps using the state application form or the Corps application form (ENG Form 43451), and apply directly to the state (DEP, LURC, BPL or DMR) as applicable using the appropriate state form, if the work is regulated by the Corps and the state.

b. Apply directly to the Corps using the Corps application form (ENG Form 43451) if the work is regulated by the Corps but not the state (DEP, LURC, BPL or DMR).

c. Provide application information (see “Information Typically Required” in Appendix C) to help ensure the application is complete and to speed project review.

d. Submit a copy of their application materials to the Maine Historic Preservation Commission (MHPC) and the five Indian tribes listed at Appendix D, at the same time, or before, they apply to the state (DEP or LURC) or the Corps, to be reviewed for the presence of historic, archaeological or tribal resources in the permit area that the proposed work may affect. Submittals to the DEP or Corps shall include information to indicate that this has been done (a copy of the applicant’s cover letter to MHPC and tribes or a copy of the MHPC and tribal response letters is acceptable).

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4. **Review Procedures**

The Corps will coordinate review of all Category 2 activities with federal and state agencies, as appropriate, to ensure that the work will result in no more than a minimal impact to the aquatic environment. Applicants are responsible for applying for the appropriate state and local approvals listed on Page 2.

**Emergency Procedures:** 33 CFR 325.2(e)4 states that an “emergency” is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures.” The Corps will work with all applicable agencies to expedite authorization according to established procedures in emergency situations.

**Individual Permit Procedures:** Proponents of work that does not meet the terms and general conditions of this GP must submit the Corps application form and the appropriate application materials to the Corps at the earliest possible date in order to expedite the Individual Permit review process. General information and application forms can be obtained at our website or by calling us (see Appendix D). Individual WQC and CZM consistency concurrence are required when applicable from the State of Maine before Corps permit issuance. The Corps encourages applicants to concurrently apply for a Corps Individual Permit and state permits.

5. **Approval Process**

Applicants for Category 2 activities may not proceed with work in Corps jurisdiction until written authorization is received from the Corps. If the Corps determines that the Category 2 activity is eligible for the GP, the Corps will send an authorization letter directly to the applicant. The Corps will attempt to issue a written eligibility determination within the state’s review period. If the Corps determines that the activity is not eligible under the GP or that additional information is required, the Corps will notify the applicant in writing and send a copy to the DEP or LURC. Applicants are responsible for obtaining all applicable approvals listed on Page 2 from the appropriate state and local agencies before commencing work in Corps jurisdiction.
V. GENERAL PERMIT CONDITIONS:

The following conditions apply to activities authorized under this Maine GP, unless otherwise specified, including all Category 1 (notification required) and Category 2 (application required) activities:

1. **Other Permits.** Authorization under this GP does not obviate the need to obtain other federal, state, or local authorizations required by law. This includes, but is not limited to, the project proponent obtaining a Flood Hazard Development Permit issued by the town, if necessary. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See www.maine.gov/spo/flood.

2. **Federal Jurisdictional Boundaries.**
   (a) Applicability of this GP shall be evaluated with reference to federal jurisdictional boundaries. Applicants are responsible for ensuring that the boundaries used satisfy the federal criteria defined at 33 CFR 328 “Waters of the U.S.” and 33 CFR 329 “Navigable Waters of the U.S.”
   (b) For Category 1 projects, proponents are not required to delineate the waters of the U.S. that they plan to impact, but must approximate the square footage of impacts in order to determine the review category (1 or 2 or Individual Permit). For projects filling <15,000 SF of waters of the U.S. that do not qualify for Category 1 (e.g., vernal pool, secondary or endangered species impacts, etc.) and therefore require an application to the Corps, and for those filling ≥15,000 SF, applicants shall delineate all waters of the U.S. that will be filled (direct impacts) in accordance with the Corps of Engineers Wetlands Delineation Manual and the most recent regional supplements (see Appendix E). In addition, applicants shall approximately identify all waters of the U.S. on the property and known waters adjacent to the property in order for the Corps to evaluate secondary impacts. The waters of the U.S. shall be clearly shown on the project plans submitted with the application. This includes all waters of the U.S. in areas under DEP or LURC jurisdiction regardless of whether they’re shown on LURC zoning maps.
   (c) On a case-by-case basis, the Corps may modify/refine the above delineation and identification requirements for waters of the U.S.

3. **Minimal Direct, Secondary and Cumulative Impacts.**
   (a) Projects authorized by this GP shall have no more than minimal direct, secondary and cumulative adverse environmental impacts. Category 2 applicants should provide information on secondary and cumulative impacts as stated in Appendix C. Compensatory mitigation may be required to offset unavoidable impacts (see GC 16) and to ensure that they are no more than minimal. Compensatory mitigation requirements will be determined on a case-by-case basis.
   (b) Secondary impacts to waterway and/or wetland areas, (e.g., areas drained, flooded, cleared, excavated or fragmented) shall be added to the total fill area when determining whether the project qualifies for Category 1 or 2. Direct, secondary and cumulative impacts are defined at Appendix A, Endnote 2.
   (c) Site clearing, grading and construction activities in the upland habitat surrounding vernal pools (“Vernal Pool Management Areas”) are secondary impacts. See GC 28 for avoidance and minimization requirements and recommendations.

4. **Discretionary Authority.** Notwithstanding compliance with the terms and conditions of this permit, the Corps retains discretionary authority to require Category 2 or Individual Permit review based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR
This authority is invoked on a case-by-case basis whenever the Corps determines that the potential consequences of the proposal warrant a higher level of review based on the concerns stated above. This authority may be invoked for projects that may contribute to cumulative environmental impacts that are more than minimal or if there is a special resource or concern associated with a particular project that is not already covered by the remaining conditions of the GP and that warrants greater review. Whenever the Corps notifies an applicant that an Individual Permit may be required, the project is not authorized under this GP and no work may be conducted until an Individual Permit is obtained or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under this GP.

5. Single and Complete Projects.
   (a) This GP shall not be used to piecemeal work and shall be applied to single and complete projects. When determining the review category in Appendix A (Category 1 or 2) for a single and complete project, proponents must include any permanent historic fill placed since October 1995 that is associated with that project and all currently proposed temporary and permanent impact areas.
   (b) A single and complete project must have independent utility.
   (c) Unless the Corps determines the activity has independent utility:
      i. This GP shall not be used for any activity that is part of an overall project for which an Individual Permit is required,
      ii. All components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.
   (d) For linear projects, such as power lines or pipelines with multiple crossings, the single and complete project is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies and crossings of such features cannot be considered separately. If any crossing requires a Category 2 activity, then the entire linear project shall be reviewed as one project under Category 2.

6. Permit On-Site. For Category 2 projects, the permittee shall ensure that a copy of this GP and the accompanying authorization letter are at the work site (and the project office) authorized by this GP whenever work is being performed, and that all personnel with operation control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this GP. This shall be achieved by including the entire permit authorization in the specifications for work. The term “entire permit authorization” means this GP and the authorization letter (including its drawings, plans, appendices and other attachments) and also includes permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or sub-contract. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire GP authorization, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

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1 Single and Complete Project and Independent Utility are defined at Appendix E.
7. **St. John/St. Croix Rivers.** Work within the Saint John and Saint Croix River basins that requires approval of the International Joint Commission is not eligible for Category 1 and an application to the Corps is required if any temporary or permanent use, obstruction or diversion of international boundary waters could affect the natural flow or levels of waters on the Canadian side of the line; or if any construction or maintenance of remedial works, protective works, dams, or other obstructions in waters downstream from boundary waters could raise the natural level of water on the Canadian side of the boundary.

8. **Historic Properties.** No activity otherwise authorized by this GP shall result in effects (as that term is defined at 36 C.F.R. § 800.16(i)) on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties, unless and until the Corps or another federal agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act. Work is not eligible for Category 1 and an application to the Corps is required if the activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. Work is eligible for Category 1 if a no effect or no adverse effect determination has been made for that work by another federal action agency in its Section 106 consultation with the Maine Historic Preservation Commission (MHCP) and the five federally recognized Indian tribes listed at Appendix D. Information on the location and existence of known historic resources can be obtained from the MHPC, the National Register of Historic Places, and the five tribes listed in Appendix D. Historic properties include those that are eligible for inclusion, but not necessarily listed on the National Register. If the permittee, either prior to construction or during construction of the work authorized herein, encounters a previously unidentified archaeological or other cultural resource within the area subject to Corps jurisdiction that might be eligible for listing in the National Register of Historic Places, he/she shall stop work and immediately notify the Corps and the MHPC and/or applicable tribe(s).

9. **National Lands.** None of the following work is eligible as a Category 1 project:
   
   **(a)** Activities that impinge upon the value of any National Wildlife Refuge, National Forest, National Marine Sanctuary, National Park or any other area administered by the National Park Service, U.S. Fish and Wildlife Service (USFWS) or U.S. Forest Service.
   
   **(b)** Work on Corps properties and Corps-controlled easements. Contact the Corps, Real Estate Division (978) 318-8585 to initiate reviews about both Corps holdings and permit requirements.
   
   **(c)** Any proposed temporary or permanent modification or use of a federal project (including but not limited to a levee, dike, floodwall, channel, sea wall, bulkhead, jetty, wharf, pier, or other work built but not necessarily owned by the United States), which would obstruct or impair the usefulness of the federal project in any manner, and/or would involve changes to the authorized federal project’s scope, purpose, and/or functioning that go beyond minor modifications required for normal operation and maintenance (requires review and approval by the Corps pursuant to 33 USC 408). Federal projects in Maine as of October 2010 are shown at Appendix F. This map may not be inclusive of all projects.

10. **Endangered Species.**

   **(a)** No activity may be authorized under Category 1 of this GP which:

   - **i.** “May affect” a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all herein referred to as “listed species or habitat”) as identified under the federal Endangered Species Act (ESA) (unless specified in a programmatic agreement with NMFS or USFWS),
ii. Results in a “take” of any federally-listed threatened or endangered species of fish or wildlife, or
iii. Results in any other violation of Section 9 of the ESA protecting threatened or endangered
species of plants.

(b) Work in Inland Waters and Wetlands\(^1\) and the non-tidal portions of Navigable Waters\(^2\) (e.g., the
Penobscot River, Kennebec River) is not eligible for Category 1 if:
   i. The project action area occurs within a watershed occupied by listed Atlantic salmon or
   shortnose sturgeon. Project proponents must check the site in Footnote 3 below.
   ii. In areas outside these watersheds contact the USFWS (see Appendix D, Page 1 for contact
   information) to check for the presence of other listed species.

(c) Work in the tidal portions of Navigable Waters may be eligible for Category 1. Reference
Appendix A, II. Navigable Waters, Pages 4 – 9, and the other terms and general conditions (GC 11 is
particularly relevant) of this GP to determine Category 1 eligibility. Project proponents must contact
the USFWS (see Appendix D, Page 1 for contact information) to ensure that work in all tidal portions
of Navigable Waters\(^2\) is not in critical habitat or areas occupied by listed species other than Atlantic
salmon or shortnose sturgeon.

(d) Although some work is excluded from Category 1 as stated in (b) and (c) above, work may qualify
for Category 1 if a no effect determination has been made for that work by a federal action agency such
as the Corps.

(e) Proponents must submit an application to the Corps if any of the activities in 10(a)-10(c) that do not
qualify for Category 1 may occur and provide information on federally-listed species or habitat to allow
the Corps to conduct any required consultation under Section 7 of the ESA.

(f) The Corps review may consider species listed as endangered and threatened pursuant to Maine
state law.

11. Essential Fish Habitat. Any work in the following rivers and streams, including all tributaries
to the extent that they are currently or were historically accessible for salmon migration, shall not be
authorized under Category 1 of the GP and must be screened for potential impacts to EFH (see
Appendix E for more information).

Androscoggin River  Aroostook River  Boyden River  Dennys River
Ducktrap River   East Machias River   Hobart Stream  Kennebec River
Machias River    Narraguagus River   Orland River  Passagassawaukeag River
Patten Stream    Penobscot River      Pleasant River  Presumpscot River
Saco River      Sheepscot River       St. Croix River  Tunk Stream
                   Union River

The above does not apply to the following activities which may qualify for Category 1 work:
   • Exploratory drilling and borings for bridges.
   • Moorings (see Appendix A, Page 6 for Category 1 thresholds and requirements)
   • Structures and floats (see Appendix A, Page 7 for Category 1 thresholds and requirements)
   • Other activities specified in a programmatic agreement with NMFS.

\(^1\) See Appendix A, Page 1 for definition.
\(^2\) See Appendix A, Page 4 for definition.
\(^3\) For areas considered occupied by listed Atlantic salmon and/or shortnose sturgeon in Inland Waters and
   Wetlands, and in Navigable Waters, see: www.nero.noaa.gov/prot_res/altsalmon/dpsmaps.html. Tidal
   portions of navigable waters occupied by listed Atlantic salmon are more specifically described as those
   waters from the Kennebec River to its mouth at Merrymeeting Bay, northeast to the Dennys River, including
   the Androscoggin River upstream to the Brunswick Dam, and other streams northeast of this line to the limit
   of their tidal reaches.
12. **Wild and Scenic Rivers.** Any activity that occurs in the designated main stem of, within 0.25 mile up or downstream of the designated main stem of, or in tributaries within .25 miles of the designated main stem of a National Wild and Scenic River, or in “bordering and contiguous wetlands” (see Appendix A, Endnote 1) that are adjacent to the designated main stem of a National Wild and Scenic River, or that has the potential to alter flows within a river within the National Wild and Scenic River System, is not eligible for Category 1 regardless of size of the impacts. This condition applies to both designated Wild and Scenic Rivers and rivers officially designated by Congress as study rivers for possible inclusion while such rivers are in an official study status. National Wild and Scenic Rivers System segments for Maine as of October 2010 include: Allagash River beginning at Telos Dam continuing to Allagash checkpoint at Eliza Hole Rapids, approximately 3 miles upstream of the confluence with the St. John River (length = 92 miles).

13. **Federal Navigation Project.** Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (see Appendix F) than a distance of three times the project’s authorized depth shall be subject to removal at the owner’s expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. This is applicable to Category 1 and 2. Reference Appendix A, Page 6 (Moorings) and Page 7 (Structure and Floats).

14. **Navigation.**
   (a) There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.
   (b) The permittee understands and agrees that, if future U.S. operations require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

15. **Federal Liability.** In issuing this permit, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest; (c) damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension, or revocation of this permit.

16. **Avoidance, Minimization and Compensatory Mitigation.** Discharges of dredged or fill material into waters of the U.S., including wetlands, shall be avoided and minimized to the maximum extent practicable through consideration of alternatives. The Corps may require compensatory mitigation of unavoidable direct and secondary impacts associated with Category 2 projects on a case-by-case basis (see Appendix E).

17. **Heavy Equipment in Wetlands.** Operating heavy equipment other than fixed equipment (drill rigs, fixed cranes, etc.) within wetlands shall be minimized, and such equipment shall not be stored, maintained or repaired in wetlands, to the maximum extent practicable. Where construction requires heavy equipment operation in wetlands, the equipment shall either have low ground pressure...
(typically <3 psi), or it shall be placed on swamp/construction/timber mats (herein referred to as “construction mats” and defined at Appendix A, Endnote 4) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation. Construction mats are to be placed in the wetland from the upland or from equipment positioned on swamp mats if working within a wetland. Dragging construction mats into position is prohibited. Other support structures that are capable of safely supporting equipment may be used with written Corps authorization (Category 2 authorization or Individual Permit). Similarly, the permittee may request written authorization from the Corps to waive use of mats during frozen, dry or other conditions. An adequate supply of spill containment equipment shall be maintained on site.

18. Temporary Fill.
Temporary fill that qualifies for Category 1 (e.g., <15,000 SF of combined temporary and permanent fill associated with the single and complete project) or is authorized in writing under Category 2, shall adhere to the following:
(a) All temporary fill shall be stabilized to prevent its eroding into portions of waters of the U.S., including wetlands, where it is not authorized.
(b) Unconfined temporary fill authorized for discharge into waters of the U.S., including wetlands, shall consist of material that minimizes impacts to water quality (e.g. sandbags, clean gravel, stone, aggregate, etc.).
(c) Temporary fill authorized for discharge into wetlands should be placed on geotextile fabric or other material (e.g., straw) laid on the pre-construction wetland grade where practicable to minimize impacts.
(d) Temporary fill shall be removed as soon as it is no longer needed, disposed of at an upland site, and suitably contained to prevent subsequent erosion into waters of the U.S, including wetlands.
To qualify for Category 1, temporary fill placed during the:
i. Growing season must be removed before the beginning of the next growing season.
ii. Non-growing season may remain throughout the following growing season, but must be removed before the beginning of the next growing season.
(e) Waters of the U.S., including wetlands, where temporary fill was discharged shall be restored (see GC 19).
(f) Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must be placed in a manner that will not be eroded by expected high flows (see GC 21).
(g) Construction mats and corduroy roads (see GC 17 above) are considered as temporary fill when they are removed immediately upon work completion. The area must be restored (see GC 19).

(a) Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized.
(b) Upon completion of construction, all disturbed wetland areas (the disturbance of these areas must be authorized) shall be properly stabilized. Any seed mix shall contain only plant species native to New England and shall not contain any species listed in the “Invasive and Other Unacceptable Plant Species” Appendix in the “New England District Compensatory Mitigation Guidance” (see Appendix E, Paragraph 6). This list may be updated periodically.
(c) In areas of authorized temporary disturbance, if trees are cut they shall be cut at ground level and
not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.

(a) Projects involving construction or reconstruction/maintenance of bank stabilization structures within Corps jurisdiction shall be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable.
(b) Project proponents must design and construct bank stabilization projects using this sequential minimization process: avoidance of aquatic resource impacts, diversion of overland flow, vegetative stabilization, stone-sloped surfaces, and walls/bulkheads. Vertical walls/bulkheads shall only be used in situations where reflected wave energy can be tolerated. Refer to Appendix E for design guidance.
(c) Inland Water bank stabilization activities necessary for erosion prevention must meet all of the following criteria: (i) No material is placed in excess of the minimum needed for erosion protection; (ii) The activity is no more than 500 feet in length along the bank; (iii) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark; (iv) Structures angled steeper than 1H:1V and any material other than angular or subangular stone or fiber roll revetments require at least a Category 2 review. (v) The activity does not involve discharges of dredged or fill material into special aquatic sites; (vi) No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the U.S.; (vii) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and, (viii) The activity is not a stream channelization activity.
(d) Navigable Water bank stabilization activities are provided at Appendix A, Page 4.

(a) Adequate sedimentation and erosion control management measures, practices and devices, such as phased construction, installation of sediment control barriers (i.e. silt fence, vegetated filter strips, geotextile silt fences, erosion control mixes, hay bales or other devices) downhill of all exposed areas, retention of existing vegetated buffers, application of temporary mulching during construction, and permanent seeding and stabilization shall be installed and properly maintained to reduce erosion and retain sediment on-site during and after construction. They shall be capable of preventing erosion, of collecting sediment, suspended and floating materials, and of filtering fine sediment.
(b) Temporary sediment control barriers shall be removed upon completion of work, but not until all disturbed areas are permanently stabilized. The sediment collected by these sediment barriers shall be removed and placed at an upland location and stabilized to prevent its later erosion into a waterway or wetland.
(c) All exposed soil and other fills shall be permanently stabilized at the earliest practicable date (see GC 19).
22. Stream Work and Crossings

Notes:

(a) GC 22(a) and (b) apply to Inland Waters and Wetlands (see Appendix A, Page 1 for definition) and Navigable Waters (see Appendix A, Page 4 for definition). GC 22(c)-(l) only apply to Inland Waters and Wetlands that are streams. All new and replacement crossings in Navigable Waters require an application to the Corps and at least a Category 2 review.

(b) In-stream work in a watershed occupied by listed Atlantic salmon or shortnose sturgeon [see GC 10(b)] and some stream work such as crossings on EFH waters (see GC 11) is not eligible for Category 1.

(c) “High-Quality Stream Segments” are shown at [www.maine.gov/dep/gis/datamaps](http://www.maine.gov/dep/gis/datamaps) and may be useful in evaluating impacts to fisheries. GIS shape files are under “Other Google Earth Interactive Maps” and PDFs by county are under “DEP GIS Maps.” See Appendix E, 8(b) for more information.

Conditions:

(a) All permanent crossings of rivers, streams, brooks, etc. (hereon referred to as “streams”) shall be suitably culverted, bridged, or otherwise designed to:

i. Withstand and to prevent the restriction of high flows to qualify for Category 1, and

ii. Not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity’s primary purpose is to impound water to qualify for Category 1 or 2. (NOTE: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine applicability of this GP).

(b) Any work that temporarily or permanently impacts upstream or downstream flood conditions, or permanently impacts wetlands in excess of Category 1 thresholds, must be reviewed at least under Category 2. See the documents referenced in Appendix E, 8(c) and (d) for guidance.

(c) New Stream Crossings. For new stream crossings to qualify for Category 1:

i. Must ensure compliance with GC 22(a) and GC 22(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 14 and the stream simulation document listed at Appendix E, 8(a).

(d) Replacement Stream Crossings. For replacement stream crossings to qualify for Category 1:

i. Must ensure compliance with GC 22(a) and GC 22(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing Standards provided on Page 14 and the stream simulation document listed at Appendix E, 8(a).

(e) Culvert Extensions. Culvert extensions on culverts that do not meet the Corps General Stream Crossing Standards do not qualify for Category 1 and require an application to the Corps at least as a Category 2 project.

(f) Temporary Stream Crossings.

Note: The General Stream Crossing Standards don’t apply to temporary stream crossings.

i. Temporary stream crossings or cofferdams shall be used for equipment access across streams [see Appendix E, 8(e)]. Note: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine the review category in Appendix A.

ii. Temporary stream crossings shall be removed within 180 days to qualify for Category 1.

iii. Temporary stream crossings that are not spans² (typically culverts) must be designed in accordance with 1-6 below to qualify for Category 1. Category 2 applications should include information demonstrating 2-6 below:

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1 This condition does not apply to non-tidal drainage systems and irrigation ditches excavated on dry land.
2 For the purposes of this GP, spans are bridges, three-sided box culverts, open-bottom culverts or arches that span the stream with footings landward of bankfull width.
1. Installed and removed during the low flow period specified in GC 22(l) below.
2. Placed on geotextile fabric or other material where practicable to ensure restoration to the original grade. Soil may not be used to construct or stabilize these structures and rock must be large enough to allow for easy removal without disrupting the streambed.
3. Designed and maintained to withstand and pass high flows. Water height should be no higher than the top of the culvert’s inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts must be aligned to prevent bank erosion or streamed scour.
4. Equipped with energy dissipating devices installed downstream if necessary to prevent scour.
5. Designed and maintained to prevent soil from entering the waterbody.
6. Removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using stream simulation methods.

(g) Slip Lining. Work using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), invert lining, or resulting in decreased diameter, do not qualify for Category 1, either as new work or maintenance activities.

(h) Work in Flowing Waters. To qualify for Category 1, no unconfined fill [see GC 18(b)] or excavation in flowing waters is allowed. To accomplish this:
   i. Bank stabilization work below ordinary high water (OHW) shall utilize erosion controls such as inflatable cofferdams, jersey barriers, silt screen, turbidity curtain, etc. where practicable to prevent sediment input to the stream and to minimize turbidity and sedimentation impacts for sensitive life stages. Bank stabilization above OHW must utilize erosion controls.
   ii. Management techniques such as temporary flume pipes, culverts, cofferdams, etc. must be used to maintain normal flows within the stream boundary’s confines, or water diversions may be used immediately up and downstream of the work footprint (see Appendix A, Endnote 6) or work must be performed in the dry under no flow conditions, or under very low flow conditions following the practices in GC 22(a).

(i) Minimization. In order to make the Category 2 review process more efficient and result in a faster decision, new and replacement stream crossings should be designed using the least intrusive and environmentally damaging method following this sequential minimization process: 1) spans with no stream impacts, 2) spans with stream impacts, and 3) embedded culverts with stream simulation or low-slope design.

(j) Maintenance Requirements. The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit to facilitate aquatic life passage as stated in GC 22(a). Culverts that develop “hanging” inlets or outlets, result in bed washout, or a stream that doesn’t match the characteristics of the substrate in the natural stream channel such as mobility, slope, stability confinement will require maintenance or repair to comply with this GC. This does not apply to GC 22(f) above.

(k) Maintenance and Replacement Information. An existing stream crossing must be authorized and in compliance with all conditions of its authorization(s) to qualify for maintenance not subject to regulation. See Appendix A, Endnote 7. A non-serviceable crossing is not eligible for maintenance and is therefore considered as a replacement crossing [see 22(d)].

(l) Work Window. For projects that otherwise meet the terms of Category 1, in-stream construction work shall be conducted during the low flow period July 15 - October 1 in any year. Projects that are not to be conducted during that time period are ineligible for Category 1 and shall be screened pursuant to Category 2, regardless of the waterway and wetland fill and/or impact area.

(See next page for Corps General Stream Crossing Standards.)

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1 Design and construction shall be in accordance with the stream simulation document listed at Appendix E, 8(a).
Corps General Stream Crossing Standards (required for Category 1, recommended for Category 2):

(a) Culverts must be embedded:
- $\geq 2$ feet for box culverts and other culverts with smooth internal walls,
- $\geq 1$ foot for corrugated pipe arches
- $\geq 1$ foot and at least 25 percent for corrugated round pipe culverts

(b) For new crossings, spans$^1$ are required to avoid or cause minimal disruption to the streambed and to meet the requirements of General Condition 22(a) and 22(b). Footings and abutments must be landward of 1.2 times bankfull width. To the greatest extent practicable, work in the stream shall be minimized, and design and construction shall allow the streambed’s natural structure and integrity to remain intact. Any fill or excavation of the streambed below bankfull width other than footings, support pilings, or work specified in 22(h)ii requires Category 2 review and, unless demonstrated otherwise, stream simulation$^2$ to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

(c) For replacement crossings, spans$^1$ are required to meet the requirements of General Condition 22(a) and 22(b). Footings and abutments shall be landward of 1.2 times bankfull width. Unless demonstrated otherwise, stream simulation$^2$ is required to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

(d) Crossings must have a natural bottom substrate within the structure matching the characteristics of the substrate in the natural stream channel and the banks (mobility, slope, stability, confinement, grain and rock size)$^2$ at the time of construction and over time as the structure has had the opportunity to pass significant flood events. To allow terrestrial passage for wildlife and prevent undermining the footings, crossings shall have a bank on both sides of the stream matching the horizontal profile of the existing stream and banks$^2$.

(e) Crossings must be designed and constructed$^2$ with appropriate bed forms and streambed characteristics so that water depths and velocities are comparable to those found in the natural channel at a variety of flows. In order to provide appropriate water depths and velocities at a variety of flows and especially low flows, it is usually necessary to reconstruct the streambed or preserve the natural channel within the structure. Otherwise, the width of the structure needed to accommodate higher flows will create conditions that are too shallow at low flows. The grain and rock size, and arrangement of streambed materials within the structure should be in accordance with (d) above. Flows could go subsurface within the structure if only large material is used without smaller material filling the voids.

23. Wetland Crossings.

(a) All temporary and permanent crossings of wetlands shall be suitably culverted, bridged, or otherwise designed to: i) Withstand and prevent the restriction of high flows, ii) Not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the wetland, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity’s primary purpose is to impound water. See Appendix E for the Maine DEP’s crossing standards.

(b) To qualify for Category 1, new and replacement wetland crossings that are permanent shall be culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity, at its present level, between the wetlands on either side of the road. To meet this requirement, we

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$^1$ For the purposes of this GP, spans are bridges, three-sided box culverts, open-bottom culverts or arches that span the stream with footings landward of bankfull width.

$^2$ Design and construction shall be in accordance with the stream simulation document listed at Appendix E, 8(a).
recommend that culverts, spans or bridges be placed at least every 50 feet with an opening at least 2 feet high and 3 feet wide at ground level where practicable. Closed bottom culverts shall be embedded at least 6 inches with a natural bottom.

(c) In the case of non-compliance, the permittee shall take necessary measures to correct wetland damage due to lack of hydraulic and ecological connectivity.

(d) Any work that results in flooding, results in impacts to wetlands on either side of the wetland crossing in excess of Category 1 thresholds, or impacts wetland drainage from the upgradient side of the wetland crossing does not qualify for Category 1.

24. Discharge of Pollutants.  
(a) All activities involving any discharge of pollutants into waters of the U.S., including wetlands, authorized under this GP shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the Clean Water Act (CWA) (33 USC 1251), and applicable state and local laws. If applicable water quality standards, limitations, etc., are revised or modified during the term of this GP, the authorized work shall be modified to conform with these standards within six months of the effective date of such revision or modification, or within a longer period of time deemed reasonable by the Corps in consultation with the EPA. Issuance of a LURC or DEP NRPA permit confirms that state water quality standards are met.

(b) All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.

(c) All activities involving any discharge of pollutants into waters of the U.S., including wetlands, authorized under this GP must comply with Section 402 [33 U.S.C. 1342] of the CWA and the requirements of the National Pollutant Discharge Elimination System (40 CFR 122).

25. Spawning, Breeding and Migratory Areas. Activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities, in fish migratory areas, fish and shellfish spawning or nursery areas, or amphibian and migratory bird breeding areas, during spawning or breeding seasons shall be avoided and minimized to the maximum extent practicable.

26. Storage of Seasonal Structures. Coastal structures, such as pier sections and floats, that are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location located above mean high water (MHW) and not in tidal wetlands or mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is seaward of MHW. This is intended to prevent structures from being stored on the marsh substrate, mudflats, or the substrate seaward of MHW. Seasonal storage of structures in navigable waters, e.g., in a protected cove on a mooring, requires Corps and local harbormaster approval.

27. Environmental Functions and Values. The permittee shall make every reasonable effort to carry out the construction or operation of the work authorized herein in a manner that maintains as much as is practicable, and minimize any adverse impacts on existing fish, wildlife, and natural environmental functions and values.
28. Protection of Vernal Pools (VPs).
(a) Impacts to VP Management Areas\(^1\) for all VPs on, and known VPs surrounding, the project site shall be minimized to the maximum extent practicable.
(b) The following management practices must be followed for all work within the VP Management Area (750’ of a VP’s edge) of all VPs in order to qualify for Category 1 when there is fill placed in a water of the U.S., including wetlands:
   i. Similar to the DEP’s Significant Wildlife Habitat regulations\(^2\):
      1. No disturbance within the VP Depression or VP Envelope (area within 100 feet of the VP Depression’s edge)\(^3\);
      2. Maintain a minimum of 75% of the Critical Terrestrial Habitat (area within 100-750 feet of the VP Depression’s edge) as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris\(^3\);
      3. Maintain or restore forest corridors connecting wetlands and significant vernal pools;
      4. Minimize forest floor disturbance; and
      5. Maintain native understory vegetation and downed woody debris.
   ii. Cape Cod style-curbing or no curbing options shall be used on new roads to facilitate amphibian passage\(^2\).
(c) For work not complying with the requirements in (b) above, applicants shall submit an application to the Corps for at least Category 2 review with information on directional buffers in accordance with the VP Directional Buffer Guidance document\(^2\). Conservation of the unimpacted area within the VP Management Area will often be required.
(d) GC 2 requires applicants to delineate or approximately identify on the project plans all waters of the U.S., which include vernal pools. Appendix A, Page 1 lists VP Category 1 thresholds.

29. Invasive Species.
(a) The introduction, spread, or the increased risk of invasion of invasive plant or animal species on the project site, into new or disturbed areas, or areas adjacent to the project site caused by the site work is prohibited (see Appendix E, Paragraph 6).
(b) Unless otherwise directed by the Corps, all applications for Category 2 inland projects and Category 2 coastal fill projects proposing fill in Corps jurisdiction shall include an Invasive Species Control Plan (ISCP) (see Appendix E, Paragraph 6).

30. Cranberry Development Projects. For cranberry development projects authorized under the GP, the following conditions apply:
(a) If a cranberry bog is abandoned for any reason, the area must be allowed to revert to natural wetlands unless an Individual Permit is obtained from the Corps allowing the discharge of fill for an alternate use.

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\(^1\) The Corps VP Management Area, which includes the VP and a 750’ radius from the VP’s edge, is defined at Appendix A, Endnote 5.

\(^2\) Appendix E, 10(a)-(d) provides links to the state’s Significant Wildlife Habitat regulations and references that provide impact minimization measures to reference when designing projects.

\(^3\) The no disturbance requirement in the VP envelope [see (b)(i)(1)], and (b)(i)(2), do not apply to temporary impacts associated with construction mats in previously disturbed areas of existing utility project (e.g., transmission lines, gas pipelines) or linear transportation project (e.g., roads, highways, railways, trails, airport runways and taxiways) right-of-ways provided there is a Vegetation Management Plan that avoids, minimizes and mitigates impacts to aquatic resources.
(b) No stream diversion shall be allowed under Category 1 of this GP.
(c) No impoundments of intermittent or perennial streams shall be allowed under Category 1 and an application to the Corps is required for at least Category 2 review.
(d) The project shall be designed and constructed to not cause flood damage on adjacent properties.

31. Inspections. The permittee shall allow the Corps to make periodic inspections at any time deemed necessary in order to ensure that the work is being or has been performed in accordance with the terms and conditions of this GP. The Corps may also require post-construction engineering drawings for completed work or post-dredging survey drawings for any dredging work. To facilitate these inspections, the permittee shall complete and return to the Corps:
- For Category 1 projects, the Category 1 Notification Form (Appendix B).
- For Category 2 projects, the 1) Work-Start Notification Form and 2) Compliance Certification Form whenever either is provided with a Category 2 authorization letter.

32. Maintenance.
(a) The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit.
(b) This does not include maintenance of dredging projects. Each maintenance dredging event exceeding the Category 1 thresholds (see Appendix A, Page 6) requires a new written Corps authorization unless an unexpired, written Corps authorization specifies that the permittee may “dredge and maintain” an area for a particular time period. Category 1 or 2 maintenance dredging includes only those areas and depths previously authorized and dredged.
(c) Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2) (see Appendix A, Endnote 7).

33. Property Rights. This PGP does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

34. Transfer of GP Verifications. When the structures or work authorized by this GP are still in existence at the time the property is transferred, the terms and conditions of this GP, including any special conditions, will continue to be binding on the entity or individual who received the GP verification, as well as the new owner(s) of the property. The permittee may transfer responsibilities and obligations under the GP verification to the new owner by submitting a letter to the Corps (see Appendix D for address) to validate the transfer. A copy of the GP verification must be attached to the letter and the letter must contain the following statement and signature: “When the structures or work authorized by this GP are still in existence at the time the property is transferred, the terms and conditions of this GP, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this GP and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

35. Modification, Suspension, and Revocation. This GP or any work authorized under Category 1 or 2 may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the United States.

36. Restoration Directive. The permittee, upon receipt of a notice of revocation of authorization under this GP, shall restore the wetland or waterway to its former condition without expense to the United States and as directed by the Secretary of the Army or his authorized representative. If the permittee fails
to comply with such a directive, the Secretary or his designee may restore the wetland or waterway to its former condition, by contract or otherwise, and recover the cost from the permittee.

37. Special Conditions. The Corps may independently, or at the request of the Federal resource agencies, impose other special conditions on a project authorized pursuant to this GP that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all conditions of the authorization, including special conditions, constitutes a permit violation and may subject the permittee to criminal, civil, or administrative penalties and/or an ordered restoration.

38. False or Incomplete Information. If the Corps makes a determination regarding the eligibility of a project under this GP and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee, the GP authorization shall not be valid and the U.S. government may institute appropriate legal proceedings.

39. Abandonment. If the permittee decides to abandon the activity authorized under this GP, unless such abandonment is merely the transfer of property to a third party, he/she may be required to restore the area to the satisfaction of the Corps.

40. Enforcement Cases. This GP does not apply to any existing or proposed activity in Corps jurisdiction associated with an on-going Corps or EPA enforcement action, until such time as the enforcement action is resolved or the Corps and/or EPA as appropriate determines that the activity may proceed independently without compromising the enforcement action.

41. Duration of Authorization. This GP expires on October 11, 2015. Activities authorized under this GP that have commenced (i.e., are under construction) or are under contract to commence before this GP expires will have until October 11, 2016 to complete the activity under the terms and conditions of the current GP.

42. Previously Authorized Activities.
(a) Projects that have received authorization (Category 1 or 2) from the Corps and that were completed under the previous PGPs, nationwide permits, regional general permits or letters of permission, shall remain authorized.
(b) Activities authorized pursuant to 33 CFR Part 330.3 ("Activities occurring before certain dates") are not affected by this GP.
(c) Any work not commenced nor completed that was authorized in a written letter from the Corps under the PGP in effect between October 11, 2005 and October 11, 2010 remains authorized subject to the terms and general conditions of this GP along with any special conditions in the authorizing written letter.

43. NEPA Compliance. The Maine PGP was authorized in full compliance with Council for Environmental Quality ("CEQ") NEPA regulations. The Corps has determined that individual permit actions taken under the terms and conditions of the PGP are not a major federal action significantly affecting the quality of the human environment.

[Signature]
District Engineer
Date

Maine GP
18
October 2010
# APPENDIX A: DEFINITION OF CATEGORIES

## A. INLAND WATERS AND WETLANDS

**Inland Waters and Wetlands:** Waters that are regulated under Section 404 of the Clean Water Act, including rivers, streams, lakes, ponds and wetlands, and excluding Section 10 Navigable Waters of the U.S. The jurisdictional limits are the ordinary high water (OHW) mark in the absence of adjacent wetlands, beyond the OHW mark to the limit of adjacent wetlands when adjacent wetlands are present, and the wetland limit when only wetlands are present. For the purposes of this GP, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands\(^1\) to tidal waters are reviewed in the Navigable Waters section. (See II. Navigable Waters on page 4 below.)

Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project.

All Category 1 and 2 projects must comply with all of this GP’s applicable terms (Pages 1 – 4) and general conditions (Pages 5–18).

### ACTIVITY

<table>
<thead>
<tr>
<th>CATEGORY 1</th>
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<tbody>
<tr>
<td><strong>(a) NEW FILL/EXCAVATION DISCHARGES</strong></td>
<td><strong>(b) – (e) below for other thresholds that may be relevant to your project.)</strong></td>
</tr>
</tbody>
</table>

1. <15,000 square feet (SF) (in LURC or DEP territories) of inland waterway and/or wetland fill and associated secondary impacts\(^2\) (e.g., areas drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Construction mats are considered as fill. [See General Condition (GC) 18(g).]

   **Provided:**
   - Historic fill + proposed impact area <15,000 SF and subdivision fill complies with GC 5, Single and Complete Projects.
   - No work in special aquatic sites (SAS)\(^3\) other than wetlands.

2. Construction mats\(^4\) of any area necessary to conduct activities that were previously authorized, authorized under Category 1, or not subject to regulation (see Endnote 7). Authorized construction mats must be in place for <3 months, removed immediately upon work completion, and the wetlands must be restored (see GC 19).

3. For work in Vernal Pool (VP) Management Areas (includes VPs)\(^5\):
   - See GC 2 and Appendix C for VP delineation requirements.
   - See GC 28 to determine if work qualifies for Category 1 or 2.
   - See Appendix E, Page 3 for VP documents providing mitigation guidance.

1. ≥15,000 square feet (SF) (in LURC or DEP territories) to <3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Mechanical clearing without grubbing or other soil disturbance >3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps.

2. Specific activities with impacts of any area ≥15,000 SF required to affect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Wetlands must be restored in place.

3. Temporary structures, work, and discharges (including construction mats\(^6\)) ≥15,000 SF necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps, authorized under Category 1, or not subject to Corps regulation. GCs 16-19 are particularly relevant.

See GC 2 and Appendix C for wetland delineation requirements.
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<th>ACTIVITY</th>
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</table>
| (b) BANK STABILIZATION PROJECTS      | 1. Inland bank stabilization <500 FT long and <1 CY of fill per linear foot below OHW, provided:  
                                                                            • ≤1 cubic yard of fill per linear foot placed along the bank waterward of ordinary high water.  
                                                                            • Work complies with the GCs (GC 20 in particular), including:  
                                                                               o No structures angled steeper than 1H:1V allowed. Only rough-faced stone or fiber roll revetments allowed.  
                                                                               o No in-stream work involving fill or excavation in flowing waters (see GC 22(h)).  
                                                                               • In-stream work limited to Jul 15 - Oct 1 [see GC 22 (l)].  
                                                                               • No work in vernal pools\(^5\) or SAS\(^3\).  
                                                                               • GC 10 Endangered Species and GC 11 Essential Fish Habitat are particularly relevant.  
                                                                                                                                     | 1. Inland bank stabilization ≥500 FT long and/or ≥1 CY of fill per linear foot, or any amount with fill in wetlands.                                                                                                                                                                                                                          |
| (c) RIVER/STREAM/BROOK WORK & CROSSINGS and WETLAND CROSSINGS | 1. River, stream and brook work and crossings:  
                                                                            • Must comply with GC 22 in particular, including:  
                                                                               o No slip lining [see GC 22 (g)].  
                                                                               o No in-stream work involving fill or excavation in flowing waters [see GC 22(h)].  
                                                                               o In-stream work limited to Jul 15 - Oct 1 [see GC 22 (l)].  
                                                                               • No work in riffles and pools\(^3\).  
                                                                               • No stream relocations.  
                                                                               • No dams or dikes\(^6\).  
                                                                               • Work in areas designated as Atlantic salmon critical habitat or occupied by listed Atlantic salmon, or any other area occupied by a listed species is not eligible for Category 1 (see GC 10).  
                                                                               • No work in EFH streams except for the activities stated in GC 11.  
<pre><code>                                                                                                                                 | 1. Work not qualifying for Category 1.                                                                                                                                                                                                                                                                                               |
</code></pre>
<p>|                                      | 2. Wetland crossings must comply with the particularly relevant GC 23.                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                            |</p>
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| (d) REPAIR, REPLACEMENT, & MAINTENANCE OF AUTHORIZED FILLS | 1. Repair or maintenance of existing, currently serviceable, authorized fills with no expansion or change in use:  
   - Conditions of the original authorization apply  
   - Minor deviations in fill design allowed.  
   - The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage.  | 2. Replacement of non-serviceable fills, or repair/maintenance of serviceable fill, with expansion <3 acres, or with a change in use. |
| (e) MISCELLANEOUS | 1. Activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS³ must typically be restored in place at the same elevation.  
   2. Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. This excludes any biological sampling devices. Structures may not restrict movement of aquatic organisms.  
   3. Survey activities, such as core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, exploratory trenching, soil surveys, sampling, and historic resources surveys (but not recovery). Exploratory trenches must be restored in accordance with GC 19. The construction of temporary pads is authorized provided the discharge doesn’t exceed 25 CY. This doesn’t authorize permanent structures or the drilling and the discharge of excavated material from test wells for oil and gas exploration (the plugging of such wells is authorized).  
   4. Any work not commenced nor completed that was authorized in a written letter from the Corps under the PGP in effect between October 11, 2005 and October 11, 2010. The terms and general conditions of this GP apply along with any special conditions in the written authorization. | 1. Aquatic habitat restoration, establishment, and enhancement of wetlands and riparian areas and the restoration and enhancement of streams and other open waters with impacts of any area ≥15,000 SF, provided those activities result in net increase in overall aquatic resource functions and services.  
   2. Projects where an EIS is required by the Corps are not eligible for Category 2. |
### II. NAVIGABLE WATERS

**Navigable Waters of the United States:** Waters that are subject to the ebb and flow of the tide and/or the tidal and non-tidal portions of the Federally designated navigable waters (the Penobscot River, Kennebec River, and Lake Umbagog) (Section 10 Rivers and Harbors Act of 1899). The jurisdictional limits are the mean high water (MHW) line in tidal waters and the ordinary high water (OHW) mark in non-tidal portions of the federally designated navigable rivers. For the purposes of this GP, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands\(^1\) to tidal waters are also reviewed in this Navigable Waters section.

Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project. All Category 1 and 2 projects must comply with all of this GP’s applicable terms (Pages 1 - 4) and general conditions (Pages 5 - 18).

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<th>ACTIVITY</th>
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<tr>
<td>(a) FILL</td>
<td>1. Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the U.S., including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided the U.S. Coast Guard authorizes such discharges as part of the bridge permit or appropriate approval. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization.</td>
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<td>2. Bank stabilization projects &lt;200 linear feet:</td>
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<td>• ≤1 cubic yard of fill per linear foot placed along the bank waterward of high tide line. No fill or equipment will occur in SAS(^3).</td>
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<td>• Work conducted in the intertidal zone must be conducted in-the-dry during low water, or between Nov. 8 – Apr. 9.</td>
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<td>• No structures angled steeper than 1H:1V and only rough-faced stone or fiber roll revetments allowed.</td>
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<td>• No driving of piles or sheeting.</td>
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<td>3. For 1 and 2 above:</td>
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<td></td>
<td>• Project proponents must contact the USFWS for work on coastal beaches to ensure no impacts to piping plovers, roseate terns or their habitat [see GC 10(b)ii].</td>
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<td>1. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided:</td>
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<td>• Temporary or permanent fill in eelgrass(^{14}) &lt;1000 SF.</td>
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<td>• Permanent fill in SAS (excluding eelgrass(^{14})) &lt;4300 SF.</td>
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<tr>
<td>(b) STREAM WORK &amp; CROSSINGS, and WETLAND CROSSINGS</td>
<td>1. No new fill for crossings allowed.</td>
<td>1. New crossings or replacement crossings that do not fit the (c) Repair and Maintenance activity below.</td>
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<td>ACTIVITY</td>
<td>CATEGORY 1</td>
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</table>
| (c) REPAIR AND MAINTENANCE WORK | 1. Repair, replacement in-kind, or maintenance of existing, currently serviceable, authorized structures or fills:  
- Conditions of the original authorization apply.  
- No substantial expansion or change in use.  
- Must be rebuilt in same footprint, however minor deviations in structure design allowed.  
- The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. Minor deviations for work involving piles shall adhere to one of the 4 methods in a - d below:  
a. Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or  
b. Must be drilled and pinned to ledge, or  
c. Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or  
d. Impact hammers limited to one hammer and <50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles <12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile, and  
- For b – d above:  
  o In-water noise levels shall not exceed >187dB SEL re 1µPa or 206dB peak re 1µPa at a distance >10m from the pile being installed, and  
  o In-water noise levels >155dB peak re 1µPa shall not exceed 12 consecutive hours on any given day and a 12 hour recovery period (i.e., in-water noise below 155dB peak re 1µPa) must be provided between work days. | 1. Replacement of non-serviceable structures and fills or repair/maintenance of serviceable structures or fills, with fill, replacement or expansion <1 acre, or with a change in use. |
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<tr>
<th>ACTIVITY</th>
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</table>
| (d) DREDGING AND ASSOCIATED DISPOSAL | 1. Maintenance dredging\(^{10}\) for navigational purposes <1,000 CY with upland disposal. Includes return water from upland contained disposal area, provided:  
- Proper siltation controls are used.  
- Dredging & disposal operation limited to Nov. 8 – Apr. 9.  
- No impact to SAS\(^{3}\).  
- No dredging in intertidal areas.  
- No dredging in areas considered occupied by listed Atlantic salmon [see GC 10(b)(ii)].  
- For dredging in waters outside of Atlantic salmon critical habitat, applicants must contact NMFS (Appendix D) to ensure no impacts to listed species such as shortnose sturgeon.  
- Project proponents must contact the USFWS for work on coastal beaches to ensure no impacts to piping plovers, roseate terns or their habitat [see GC 10(c)]. | 1. Maintenance dredging\(^{10}\) \(\geq1,000\) CY, new dredging <25,000 CY, or projects not meeting Category 1. Includes return water from upland contained disposal areas. Disposal includes:  
- Upland.  
- Beach nourishment (above mean high water) of any area provided dredging’s primary purpose is navigation or sand is from an upland source.  
- Open water & confined aquatic disposal, if Corps finds the material suitable. |
| | 2. Beach nourishment associated with dredging when the primary purpose is not navigation requires at least a Category 2 review. | 2. Beach nourishment associated with dredging when the primary purpose is not navigation requires at least a Category 2 review. |
| | 3. Maintenance or new dredging\(^{10}\) and/or disposal in or affecting a SAS\(^{3}\) requires an Individual Permit. See II(a) above for dredge disposal in wetlands or waters. | 3. Maintenance or new dredging\(^{10}\) and/or disposal in or affecting a SAS\(^{3}\) requires an Individual Permit. See II(a) above for dredge disposal in wetlands or waters. |
| (e) MOORINGS | 1. Private, non-commercial, non-rental, single-boat moorings, provided:  
- Authorized by the local harbormaster/town.  
- Not associated with any boating facility.\(^{11}\)  
- Boat or mooring not located in a Federal Navigation Project\(^{12}\) other than a Federal Anchorage\(^{12}\). Moorings in Federal Anchorage not associated with a boating facility\(^{11}\) and are not for rent.  
- No interference with navigation.  
- No new moorings located in SAS\(^{3}\). Prior to installation of moorings, a site-specific eelgrass survey should be conducted to document that eelgrass is not present.  
- When existing, authorized moorings in SAS\(^{3}\) are going to be replaced, they shall be replaced with elastic mooring systems that prevent mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems where practicable. | 1. Moorings associated with a boating facility\(^{11}\). An eelgrass\(^{14}\) survey may be required. |
| | 2. Minor relocation of previously authorized moorings and moored floats, provided:  
- Authorized by the local harbormaster/town.  
- Not located in SAS\(^{3}\)  
- No interference with navigation.  
- Cannot be relocated into a Federal Navigation Project\(^{12}\) other than a Federal Anchorage\(^{12}\) | 2. Moorings that don’t meet the terms in Category 1 and don’t require an Individual Permit. This includes private moorings with no harbormaster or means of local approval. |
<p>| | 3. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits(^{13}) of a Federal Channel(^{12}). (See Appendix F.) The buffer zone is equal to 3 times the authorized depth of that channel. | 3. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits(^{11}), or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project(^{12}), except those in Federal Anchorages(^{12}). For 1-4 above, siting of new individual moorings in SAS(^{3}), including eelgrass(^{14}), should be avoided to the maximum extent practicable. If SAS(^{3}) cannot be avoided, plans should show elastic mooring systems that prevent mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems, where practicable. |</p>
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<tr>
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<tbody>
<tr>
<td>(f) STRUCTURES AND FLOATS</td>
<td>1. Reconfiguration of existing, authorized structures or floats.</td>
<td>1. Private structures or floats, including floatways/skidways, built to access waterway (seasonal and permanent)</td>
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<tr>
<td>Provided:</td>
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<td>For 1 &amp; 2 above, compliance with the following design standards is not required but recommended:</td>
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<tr>
<td>a.</td>
<td>Provided:</td>
<td>• Pile-supported structures ≤400 SF, with attached floats totaling ≤200 SF.</td>
</tr>
<tr>
<td>Piles shall adhere to one of the 4 methods in (i) –(iv) below:</td>
<td></td>
<td>• Bottom anchored floats ≤200 SF.</td>
</tr>
<tr>
<td>i.</td>
<td></td>
<td>• Structures are ≤4’ wide and have at least a 1:1 height:width ratio.</td>
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<td>Piles installed in-the-dry during low water or in-water between Nov. 8th - Apr. 9th, or</td>
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<td>• Floats supported a minimum of 18” above the substrate during all tides.</td>
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<td>ii. Must be drilled and pinned to ledge, or</td>
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<td>• Structures &amp; floats not located within 25’ of any eelgrass.</td>
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<tr>
<td>iii. Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or</td>
<td></td>
<td>• Moored vessels not positioned over SAS.</td>
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<tr>
<td>iv. Impact hammers limited to one hammer and &lt;50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles ≤12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile.</td>
<td></td>
<td>• No structure located within 25’ of the riparian property boundary without written approval from the abutter(s).</td>
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<td>b. For (ii) – (iv) above:</td>
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<td>• No structure extends across &gt;25% of the waterway width at mean low water.</td>
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<td>i. In-water noise levels shall not exceed &gt;187dB SEL re 1µPa or 206dB peak re 1µPa at a distance &gt;10m from the pile being installed, and</td>
<td></td>
<td>• Not located within the buffer zone of the horizontal limits of a Corps Federal Navigation Project (FNP) (App. F). The buffer zone is equal to three times the authorized depth of that FNP.</td>
</tr>
<tr>
<td>ii. In-water noise levels &gt;155dB peak re 1µPa shall not exceed 12 consecutive hours on any given day and a 12 hour recovery period (i.e., in-water noise below 155dB peak re 1µPa) must be provided between work days.</td>
<td></td>
<td>3. An Individual Permit is required for structures or floats, including floatways/skidways, located such that they and/or vessels docked or moored at them are within the horizontal limits of a Corps Federal Navigation Project (see App. F).</td>
</tr>
<tr>
<td>c. For (i) –(iv) above:</td>
<td></td>
<td>4. An Individual Permit is required for structures &amp; floats associated with a new or previously unauthorized boating facility.</td>
</tr>
<tr>
<td>i. Work is not eligible for Category 1 if conducted in tidal portions of the Penobscot river upstream of a line extending from Turner point in Castine to Moose Point (formerly squaw point) on Cape Jellison in Stockton Springs or in tidal portions of the Kennebec or Androscoggin Rivers upstream of a line extending from Doubling point in Arrowsic to Hospital Point in West Bath.</td>
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<td>ACTIVITY CATEGORY 1</td>
<td>CATEGORY 2</td>
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<tr>
<td>(g) MISCELLANEOUS</td>
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<tr>
<td>1. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided they are removed within 30 days after use is discontinued.</td>
<td>1. Structures or work in or affecting tidal or navigable waters, that are not defined under any of the previous headings listed above. Includes, but is not limited to, utility lines, aerial transmission lines, pipelines, outfalls, boat ramps, floatways/skidways, bridges, tunnels and horizontal directional drilling activities seaward of the mean high water line.</td>
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<tr>
<td>2. The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard. (See 33 CFR 66, Chapter I, subchapter C).”</td>
<td>2. Shellfish/finfish (other than Atlantic salmon), or other aquaculture facilities with no more than minimal individual and cumulative impacts to environmental resources or navigation. –Aquaculture guidelines are provided at: <a href="http://www.maine.gov/dmr/aquaculture/index.htm">www.maine.gov/dmr/aquaculture/index.htm</a>.</td>
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<td>3. Activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS³ must typically be restored in place at the same elevation.</td>
<td>3. Specific activities with impacts of any area required to affect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Wetlands must typically be restored in place at the same elevation to qualify.</td>
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<tr>
<td>4. Fish and wildlife harvesting, enhancement, and attraction devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, and clam and oyster digging, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). This does not authorize artificial reefs or impoundments and semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks. No activity that results in a hazard to navigation. Note: A Category 1 Notification Form is not required for these devices and activities.</td>
<td>4. Aquatic habitat restoration, establishment and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services.⁸</td>
<td></td>
</tr>
<tr>
<td>5. Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. Structures may not restrict movement of aquatic organisms. No activity results in a hazard to navigation.</td>
<td>5. Projects where an EIS is required by the Corps are not eligible for Category 2.</td>
<td></td>
</tr>
<tr>
<td>6. Survey activities such as exploratory drilling, surveying and sampling activities, excluding any biological sampling devices. Does not include oil and gas exploration and fill for roads or construction pads. No activity results in a hazard to navigation. Applicants must contact NMFS to ensure no impacts to listed species.</td>
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<td>ACTIVITY</td>
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<tr>
<td>(g) MISCELLANEOUS (continued)</td>
<td>7. Shellfish seeding (brushing the flats) projects.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Marine railway work not eligible for maintenance (i.e. not currently serviceable or in non-compliance) may be replaced “in-kind” with minor deviations provided:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Work is in the intertidal zone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- No fill expansion below high tide line.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Work conducted in-the-dry during low water or in-water between Nov. 8 – Apr. 9.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Test plots &lt;100 SF for the planting of wetland species native to the area. No grading, no structures, no plant growing devices and no interference with navigation, which require at least Category 2 review.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. Any work not commenced nor completed that was authorized in a written letter from the Corps under the PGP in effect between October 11, 2005 and October 11, 2010. The terms and general conditions of this GP apply along with any special conditions in the written authorization.</td>
<td></td>
</tr>
</tbody>
</table>

**Endnotes/Definitions**

1 **Bordering and Contiguous Wetlands:** A bordering wetland is immediately next to its adjacent waterbody and may lie at, or below, the ordinary high water mark (mean high water in navigable waters) of that waterbody and is directly influenced by its hydrologic regime. Contiguous wetlands extend landward from their adjacent waterbody to a point where a natural or manmade discontinuity exists. Contiguous wetlands include bordering wetlands as well as wetlands that are situated immediately above the ordinary highwater mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under “II. Navigable Waters.”

2 **Direct, Secondary, and Cumulative Impacts/Effects:**

**Direct Impacts:** The immediate loss of aquatic ecosystem within the footprint of the fill.

**Secondary Impacts:** These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities. Some examples of secondary effects on an aquatic ecosystem are a) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, b) septic tank leaching and surface runoff from residential or commercial developments on fill, and c) leachate and runoff from a sanitary landfill located in waters of the U.S. Put another way, secondary effects are those impacts outside the footprint of the fill that arise from and are associated with the discharge of dredged or fill material, including the operation of an activity or facility associated with the discharge. Examples may include habitat fragmentation; interruption of travel corridors for wildlife (for example, for amphibians that migrate to and from seasonal or vernal pools used as breeding habitat); hydrologic regime changes; and impacts from operation and maintenance activities for constructed facilities; such as noise/lighting, storm water runoff, and road kill of wetland dependent wildlife. Using the directions contained in the guidelines, we consider the circumstances of a proposed discharge and the project of which it is a part to evaluate the scope, extent, severity, and permanence of direct, secondary, and cumulative adverse effects upon the aquatic ecosystem.
Cumulative Impacts: The extent of past, present, and foreseeable developments in the area may be an important consideration in evaluating the significance of a particular project's impacts. Although the impacts associated with a particular discharge may be minor, the cumulative effect of numerous similar discharges can result in a large impact. Cumulative impacts should be estimated only to the extent that they are reasonable and practical.

3 Special Aquatic Sites: Includes wetlands and saltmarsh, mudflats, riffles and pools, and vegetated shallows (predominantly comprised of eelgrass in Maine).

4 Construction Mats: Constructions, swamp and timber mats (herein referred to as “construction mats”) are generic terms used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from a variety of materials in various sizes. A timber mat consists of large timbers bolted or cabled together. Corduroy roads, which are not considered to be construction mats, are cut trees and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like construction mats, they are considered as fill whether they’re installed temporarily or permanently.

5 Vernal Pools: A vernal pool, also referred to as a seasonal forest pool, is a temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet or outlet and no viable populations of predatory fish. A vernal pool may provide the primary breeding habitat for wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculatum*), blue-spotted salamanders (*Ambystoma laterale*), and fairy shrimp (*Eubranchipus* sp.), as well as valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species. A vernal pool intentionally created for the purposes of compensatory mitigation is included in this definition. For the purposes of this GP, the presence of any of the following species in any life stage in any abundance level/quantity would designate the waterbody as a vernal pool: fairy shrimp, blue spotted salamanders, spotted salamanders or wood frogs. The Corps may determine during a Category 2 review that a waterbody should not be regulated as a VP the spring or fall high water mark, and includes any vegetation growing within the depression), Vernal Pool Envelope (area within 100 FT of the VP Depression’s edge) and Critical Terrestrial Habitat (area within 100-750 FT of the Vernal Pool Depression’s edge). [*Note: Critical Terrestrial Habitat is defined as 100 -750 FT on page 243 of the document “Science and Conservation of Vernal Pools in Northeastern North America,” Calhoun and deMaynadier, 2008, which is referenced in Appendix E, page 3, Paragraph 10(b).

6 Water Diversions: Water diversions are activities such as bypass pumping or water withdrawals. Temporary flume pipes, culverts or cofferdams where normal flows are maintained within the stream boundary’s confines aren’t water diversions. “Normal flows” are defined as no change in flow from pre-project conditions. Maintenance: a) In accordance with 33 CFR 323.4(a)(2), any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404 of the CWA: “Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design.” Otherwise, the following work is regulated and subject to the Category 1 or 2 thresholds in Appendix A above: The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 – “Activities occurring before certain dates,” provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure’s configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make repair, rehabilitation, or replacement are authorized. e) Currently serviceable means usable as is or with some maintenance, but not so degraded as to essentially require reconstruction. d) No seaward expansion for bulkheads or any other fill activity is considered Category 1 maintenance. e) Only structures or fills that were previously authorized and are in compliance with the terms and condition of the original authorization can be maintained as a non-regulated activity under 33 CFR 323.4(a)(2), or in accordance with the Category 1 or 2 thresholds in Appendix A. f) The state’s maintenance provisions may differ from the Corps and may require reporting and written authorization from the state. g) Contact the Corps to determine whether stream crossing replacements require a written application to the Corps for at least a Category 2 review.

8 Aquatic Habitat Restoration, Establishment and Enhancement: The Corps will decide if a project qualifies and must determine in consultation with federal and state agencies that the net effects are beneficial. The Corps may refer to Nationwide Permit 27 published in the 3/12/07 Federal Register. Activities authorized here may include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement
of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands in inland waters; the construction of open water areas; the construction of native shellfish species habitat over unvegetated bottom for the purpose of habitat protection or restoration in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

9 **Brushing the Flats**: The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats to enhance recruitment of soft-shell clams (*Mya arenaria*).

10 **Maintenance Dredging**: This includes only those areas and depths previously authorized by the Corps and dredged.

11 **Boating Facilities**: Facilities that provide for a fee, rent, or sell mooring space, such as marinas, yacht clubs, boat clubs, boat yards, town facilities, dockominiums, etc.

12 **Federal Navigation Projects (FNPs)**: FNPs are comprised of Federal Channels and Federal Anchorages. See Appendix F for their location and contact the Corps for more information. “Horizontal Limits” is the outer edge of an FNP. “Buffer Zone” is equal to three times the authorized depth of that channel.

13 **Horizontal Limits**: The outer edge of a Federal Navigation Project (FNP). See Appendix F and contact the Corps for information on FNP’s.

14 **Eelgrass (Zostera marina)**: A type of rooted aquatic vegetation that exists in intertidal and shallow subtidal areas known as vegetated shallows. See [www.nero.noaa.gov/hcd/](http://www.nero.noaa.gov/hcd/) for eelgrass survey guidance.

15 **Structures**: The height of structures shall at all points be equal to or exceed the width of the deck. For the purpose of this definition, height shall be measured from the marsh substrate to the bottom of the longitudinal support beam.
Appendix B: Category 1 Notification Form
(for all Inland and Navigable Water Projects in Maine subject to Corps jurisdiction)

Two (2) weeks before work commences, submit this to the following mailing address or complete the form at www.nae.usace.army.mil/reg, “State General Permits,” “Maine.” Call (207) 623-8367 with any questions.

Maine Project Office
U.S. Army Corps of Engineers
New England District
675 Western Avenue #3
Manchester, Maine 04351

State Permit Number: ____________________________________________
Date of State Permit: ____________________________________________
State Project Manager: ____________________________________________

Permittee: ______________________________________________________
Address, City, State & Zip: ________________________________________
Phone(s) and Email: _____________________________________________

Contractor: ______________________________________________________
Address, City, State & Zip: ________________________________________
Phone(s) and Email: _____________________________________________

Consultant/Engineer/Designer: ____________________________________
Address, City, State & Zip: ________________________________________
Phone(s) and Email: _____________________________________________

Wetland/Vernal Pool Consultant: ________________________________
Address, City, State & Zip: ________________________________________
Phone(s) and Email: _____________________________________________

Project Location/Description: _____________________________________
Address, City, State & Zip: ________________________________________
Latitude/Longitude Coordinates: _________________________________
Waterway Name: _______________________________________________
Work Description: ______________________________________________

Provide any prior Corps permit numbers: ______________________________

Proposed Work Dates: Start: __________________ Finish: ______________

Area of wetland impact: ________ SF (leave blank if work involves structures & no fill in Navigable Waters)
Area of waterway impact: ________ SF (leave blank if work involves structures & no fill in Navigable Waters)
Area of compensatory mitigation provided: __________ SF

Work will be done under the following Appendix A categories (circle all that apply):
I. Inland Waters and wetlands: a b c d e
II. Navigable Waters: a b c d e f g

Your name/signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions of Category 1 of the Maine General Permit.

Permittee Printed Name: __________________________________________
Permittee Signature: _____________________________________________ Date: ______________

Maine GP – Appendix B

October 2010
Appendix C: Information Typically Required for Department of the Army Permits
(Category 2 & Individual Projects)

The following information may not be necessary for all projects. For a more comprehensive checklist, go to www.nae.usace.army.mil/reg “Forms” and then “Application and Plan Guideline Checklist.” Please check with our Maine office for project-specific requirements at (207) 623-8367.

**All Projects:**
- Corps application form ([ENG Form 4345](#)) as appropriate.
- Photographs of wetland/waterway to be impacted.
- Purpose of the project.
- Legible, reproducible black and white (no color) plans no larger than 11”x17” with bar scale. Provide locus map and plan views of the entire property.
- Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- In navigable waters, show mean low water (MLW) and mean high water (MHW) elevations. Show the high tide line (HTL) elevations when fill is involved. In other waters, show ordinary high water (OHW) elevation.
- On each plan, show the following for the project:
  - Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. Don’t use local datum. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean low lower water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
  - Horizontal state plane coordinates in U.S. survey feet based on the [insert state grid system] for the [insert state] [insert zone] NAD 83.
- Show project limits with existing and proposed conditions.
- Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the ordinary high water in inland waters and below the high tide line in coastal waters.
- Delineation of all waterways and wetlands on the project site, including vernal pools:
  - Use federal delineation methods and include Corps wetland delineation data sheets. See GC 2; Endnotes 1, 3 and 14 in Appendix A; and [www.nero.noaa.gov/hcd](http://www.nero.noaa.gov/hcd) for eelgrass survey guidance.
  - Appendix A, (e) Moorings, contains eelgrass survey requirements for the placement of moorings.
  - Labels on the plans should indicate whether the federal wetland is also a ME DEP “Wetlands of Special Significance,” i.e, coastal wetland, great pond, or one of the eight “Freshwater Wetlands of Special Significance” such as “Critically imperiled or imperiled community,” “Significant wildlife habitat,” etc. [see Appendix E, 10(a)].
- For activities involving discharges of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized, and either a statement describing how impacts to waters of the U.S. are to be compensated for (or a conceptual or detailed mitigation plan) or a statement explaining why compensatory mitigation should not be required for the proposed impacts. Please contact the Corps for guidance.
Provide information on secondary and cumulative effects associated with the project (see GC 3).

Indicate that application materials were submitted to the Maine Historic Preservation Commission (MHPC) and the appropriate tribes (see Section 3(d) on Page 4).

The name(s) of federal endangered and threatened “listed species or habitat” present in the action area (see GC 10 and Appendix E).

Identify and describe potential impacts to Essential Fish Habitat (see GC 11).

Invasive Species Control Plan (see GC 29).

**Information typically required for dredging projects:**

- Sediment testing, including physical (e.g., grain-size analysis), chemical and biological testing. For projects proposing open water disposal, applicants are encouraged to contact the Corps as early as possible regarding sampling and testing protocols. Sampling and testing of sediments without such contact should not occur and if done, would be at the applicant’s risk.
- The area in square feet and volume of material to be dredged below mean high water.
- Existing and proposed water depths.
- Type of dredging equipment to be used.
- Nature of material (e.g., silty sand).
- Any existing sediment grain size and bulk sediment chemistry data for the proposed or any nearby projects.
- Information on the location and nature of municipal or industrial discharges and occurrence of any contaminant spills in or near the project area.
- Shellfish survey.
- Location of the disposal site (include locus sheet).
- Identify and describe potential impacts to Essential Fish Habitat (see GC 11).
- Delineation of submerged aquatic vegetation (e.g., eelgrass beds).
Appendix D: Contacts and Tribal Areas of Interest

1. FEDERAL

U.S. Army Corps of Engineers
Maine Project Office
675 Western Avenue #3
Manchester, Maine 04351
(207) 623-8367; (207) 623-8206 (fax)

Bridge Permits
Commander (obr)
First Coast Guard District
One South Street - Battery Bldg
New York, New York 10004
(212) 668-7021; (212) 668-7967 (fax)

Federal Endangered Species
U.S. Fish and Wildlife Service
Maine Field Office
17 Godfrey Drive, Suite 2
Orono, Maine 04473
(207) 866-3344; (207) 866-3351 (fax)

Federal Endangered Species
National Marine Fisheries Service
Maine Field Office
17 Godfrey Drive Suite 1
Orono, ME 04473
(207) 866-7379; (978) 866-7342 (fax)

Wild and Scenic Rivers
National Park Service
North Atlantic Region
15 State Street
Boston, Massachusetts 02109
(617) 223-5203

Federal Endangered Species & EFH
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, Massachusetts 01930
(978) 281-9102; (978) 281-9301 (fax)

2. STATE OF MAINE

Maine Department of Environmental Protection (for State Permits & Water Quality Certifications)

Division of Land Resource Regulation
Bureau of Land and Water Quality
17 State House Station
Augusta, Maine 04333
(207) 287-7688

Eastern Maine Regional Office
106 Hogan Road
Bangor, Maine 04401
(207) 941-4570

Southern Maine Regional Office
312 Canco Road
Portland, Maine 04103
(201) 822-6300

Northern Maine Regional Office
1235 Central Drive - Skyway Park
Presque Isle, Maine 04769
(207) 764-0477

Maine Land Use Regulation Commission (LURC) (www.maine.gov/doc/lurc/offices.html)

22 State House Station
Augusta, Maine 04333-0022
(207) 287-2631; (207) 287-7439 (fax)

106 Hogan Rd, Suite 7
Bangor, Maine 04401
(207) 941-4052; (207) 941-4222 (fax)

Lakeview Drive
P.O. Box 1107
Greenville, Maine 04441
(207) 695-2466; (207) 695-2380 (fax)

45 Radar Road
Ashland, ME 04732-3600
(207) 435-7963; (207) 435-7184 (fax)

191 Main Street
East Millinocket, ME 04430
(207) 746-2244; (207) 746-2243 (fax)
3. HISTORIC PROPERTIES

Maine Historic Preservation Commission (MHPC)
State House Station 65
Augusta, Maine 04333-0065
(207) 287-2132; (207) 287-2335 (fax)

Houlton Band of Maliseet Indians
Attn: Sharri Venno, Environmental Planner
88 Bell Road
Littleton, Maine 04730
(207) 532-4273, x215; (207) 532-1883 (fax)
envplanner@maliseets.com

Passamaquoddy Tribe of Indians
Pleasant Point Reservation
Attn: Donald Soctomah, THPO
P.O. Box 343
Perry, Maine 04667
(207) 853-2600; (207) 853-6039 (fax)

Aroostook Band of Micmacs
Attn: Victoria Higgins, Chief
7 Northern Road
Presque Isle, Maine 04769
(207) 764-1972; (207) 764-7667 (fax)

Passamaquoddy Tribe of Indians
Indian Township Reservation
Attn: Donald Soctomah, THPO
P.O. Box 301
Princeton, Maine 04668
(207) 796-2301; (207) 796-5256 (fax)

Penobscot Indian Nation
Indian Island Reservation
Attn: Ms. Bonnie Newsom, THPO
12 Wabanaki Way
Indian Island, Maine 04468
(207) 817-7471; (207) 817-7450 (fax)

4. ORGANIZATIONAL WEBSITES:

Army Corps of Engineers, N.E. District
www.nae.usace.army.mil/reg
www.usace.army.mil/CECW/Pages/cecw_reg.aspx
www.epa.gov/owow/wetlands
www.nmfs.noaa.gov
www.fws.gov/mainefieldoffice
www.nps.gov/rivers/index.html
www.maine.gov
www.maine.gov/dep
www.maine.gov/doc/lurc
www.maine.gov/dmr/aquaculture/index.htm
Appendix E: Additional References

1. GC 2: Federal Jurisdictional Boundaries.
   (b) The USFWS publishes the 1988 National List of Plant Species that Occur in Wetlands ([www.nwi.fws.gov](http://www.nwi.fws.gov)).


2. GC 5: Single and complete project means the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For example, if construction of a residential development affects several different areas of a headwater or isolated water, or several different headwaters or isolated waters, the cumulative total of all filled areas should be the basis for deciding whether or not the project will be covered by Category 1 or 2. The Independent utility test is used to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

3. GC 10: Threatened and Endangered Species.
   (a) The following NMFS site must be referenced to ensure that listed species or critical habitat are not present in the action area [GC 10(b)] or to provide information on federally-listed species or habitat [GC 10(e)]: [www.nero.noaa.gov/prot_res/esp/ListE&Tspec.pdf](http://www.nero.noaa.gov/prot_res/esp/ListE&Tspec.pdf). Contact the USFWS for information to check for the presence of listed species (see Appendix D for contact information).
   (b) The Endangered Species Act Consultation Handbook – Procedures for Conducting Section 7 Consultations and Conferences, defines action area as “all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. [50 CFR 402.02].”

4. GC 11: Essential Fish Habitat.
   As part of the PGP screening process, the Corps may coordinate with NMFS in accordance with the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act to protect and conserve the habitat of marine, estuarine and anadromous finfish, mollusks, and crustaceans. This habitat is termed “Essential Fish Habitat (EFH)”, and is broadly defined to include “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” There are EFH waters throughout inland and coastal waters in Maine. For additional information, see the EFH regulations 50 CFR 600 at [www.nero.noaa.gov/hcd](http://www.nero.noaa.gov/hcd) including the “Guide for EFH Descriptions” at [www.nero.noaa.gov/hcd/list.htm](http://www.nero.noaa.gov/hcd/list.htm). Additional information on the location of EFH can be obtained from NMFS (see Appendix D for contact information).

5. GC 16: Avoidance, Minimization and Compensatory Mitigation.
   (a) See [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) and then “Mitigation” to view the April 10, 2008 “Final Compensatory Mitigation Rule” (33 CFR 332) and related documents. The Q&A document states: “In order to reduce risk and uncertainty and help ensure that the required compensation is provided, the rule establishes a preference hierarchy for mitigation options. The most preferred option is mitigation...
bank credits, which are usually in place before the activity is permitted. In-lieu fee program credits are 
second in the preference hierarchy, because they may involve larger, more ecologically valuable 
compensatory mitigation projects as compared to permittee-responsible mitigation. Permittee-
responsible mitigation is the third option, with three possible circumstances: (1) conducted under a 
watershed approach, (2) on-site and in kind, and (3) off-site/out-of-kind.
(b) Compensatory mitigation may take the form of wetland preservation, restoration, enhancement, 
creation, and/or in lieu fee (ILF) for inclusion into the Natural Resources Mitigation Fund for projects 
in DEP and LURC territories. Avoidance of wetland impacts will reduce the ILF dollar total for 
applicants. The ILF compensation program was established to provide applicants with a flexible 
compensation option over and above traditional permittee responsible compensation projects. See the 
Maine ILF Agreement at www.nae.usace.army.mil/reg, “Mitigation” and then “Maine,” or 

6. GCs 19 and 29: Invasive Species.
(a) Information on what are considered “invasive species” is provided in our “Compensatory 
Species” section has a reference to our “Invasive Species Control Plan (ISCP) Guidance” document, 
located at www.nae.usace.army.mil/reg under “Invasive Species,” which provides information on 
preparing an ISCP.
(b) The June 2009 “Corps of Engineers Invasive Species Policy” is at 
www.nae.usace.army.mil/reg under “Invasive Species” and provides policy, goals and objectives.

7. GC 20: Bank Stabilization.
This generally eliminates bodies of water where the reflected wave energy may interfere with or 
impact on harbors, marinas, or other developed shore areas. A revetment is sloped and is typically 
employed to absorb the direct impact of waves more effectively than a vertical seawall. It typically has 
a less adverse effect on the beach in front of it, abutting properties and wildlife. See the Corps Coastal 
Documents” for design and construction guidance.

(a) Projects should be designed and constructed to ensure long-term success using the most recent 
manual located at www.nae.usace.army.mil/reg under “Stream and River Continuity,” currently 
“Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-
Stream Crossings, by the U.S. Forest Service.” Section 5.3.3 is of particular importance. Sections 
7.5.2.3 Construction Methods and 8.2.11 Stream-Simulation Bed Material Placement both show 
important steps in the project construction.
(b) For more information on High-Quality Stream Segments and their components see:
   i. High-Quality Stream Segments are shown at www.maine.gov/dep/gis/datamaps.
   ii. Class A Waters or Class AA Waters: 
      www.mainelegislature.org/legis/statutes/38/title38sec465.html, and 
      www.mainelegislature.org/legis/statutes/38/title38sec467.html.
(c) The Massachusetts Dam Removal and the Wetland Regulations guidance may be used to evaluate 
the positive and negative impacts of culvert replacement, including the loss of upstream wetlands, 
which may be offset by the overall benefits of the river restoration. See www.nae.usace.army.mil/reg 
and then “Stream and River Continuity.”
(d) The ME DOT’s document “Waterway and Wildlife Crossing Policy and Design Guide for Aquatic 
Organism, Wildlife Habitat, and Hydrologic Connectivity,” 3rd Edition, July 2008, may be used to
evaluate impacts to aquatic, wildlife and surface water resources when designing, constructing, repairing and maintaining stream crossings. Note: Adherence to this DOT document does not ensure compliance with this GP. Projects must comply with the requirements of this GP including GC 22 and the Corps General Stream Crossing Standards contained therein.

www.maine.gov/mdot/environmental-office-homepage/fishpassage/3rd%20edition%20-
%20merged%20final%20version%207-01-08a1.pdf.

(e) GC 22(f): The Skidder Bridge Fact Sheet at www.nae.usace.army.mil/reg under “Stream and River Continuity” may be a useful temporary span construction method.

9. GC 23: Wetland Crossings. The Maine DEP’s crossing standards are at 06-096 DEP, Chapter 305: Permit by Rule, 9) Crossings (utility lines, pipes and cables).


(a) The state’s Significant Wildlife Habitat rules (Chapter 335, Section 9(C) “Habitat management standards for significant vernal pool habitat”) are located at

www.maine.gov/dep/blwq/docstand/nrpapage.htm#rule under “Rules.”

(b) The following documents provide conservation recommendations:


ii. Science and Conservation of Vernal Pools in Northeastern North America, Calhoun and deMaynadier, 2008. Chapter 12, Conservation Recommendations section, Page 241, is particularly relevant. (Available for purchase via the internet. Chapter 12 is available on Corps website*.)


(c) Cape Cod Curbing: For smaller roads and driveways, the most important design feature to consider is curbing. Granite curbs and some traditional curbing can act as a barrier to amphibian and hatchling turtle movements. Large numbers of salamanders have been intercepted in their migrations by curbs and catch basins. Use of Cape Cod curbs rather than traditional curbing may be one solution. Alternatively, where storm water management systems require more traditional curbing, it may be possible to design in escape ramps on either side of each catch basin. Cape Cod curbing is shown on Page 35 of the document cited in 10.b.i above. Bituminous material is not required; other materials such as granite are acceptable.

(d) The VP Directional Buffer Guidance document is located at www.nae.usace.army.mil/reg under: 1) “State General Permits” and then “Maine,” and 2) “Vernal Pools.”

11. GC 32: Maintenance. River restoration projects that are designed to accommodate the natural dynamic tendencies of the fluvial system are maintained in accordance with the project’s design objectives (Category 1) or the Corps authorization letter (Category 2). These projects are generally designed to support and implement channel assessment and management practices that recognize a stream’s natural dynamic tendencies.
Appendix F: Corps Projects in Maine