



PROJECT SPECIFICATIONS

for

Auburn Industrial Park Auburn, MAINE

Prepared By:

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Prepared For:

City of Auburn
60 Court Street
Auburn, Maine 04210
EDA Award Number 01-01-14171

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AUBURN INDUSTRIAL PARK

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PROJECT DIRECTORY OF CONTACTS

1. Owner:
Auburn Business Development Corp.
P.O. Box 1188
Lewiston, Maine 04243

City of Auburn
60 Court Street
Auburn, ME 04210
2. EDA Coordinator:
Alan S. Manoian 207-333-6601 ext. 1214
City of Auburn
60 Court Street
Auburn, Maine 04210
3. Director of Public Works:
Denis D'Auteuil (207) 333-6601 ext 2151
296 Gracelawn Road
Auburn, Maine 04210
4. City Engineer:
Dan Goyette, P.E. (207) 333-6601 ext. 1134
City of Auburn
60 Court Street
Auburn, Maine 04210
5. Director of Economic
Development:
Roland Miller
City of Auburn
60 Court Street
Auburn, Maine 04210
6. Design Engineer:
Sebago Technics, Inc.
250 Goddard Road-Suite B
Lewiston, ME 04240
(207) 200-2126
Chris Branch, P.E.
7. Superintendent
Water & Sewerage District
P.O. Box 414
Auburn, ME
04212-041413.
(207)784-6469
John Storer
8. Dig Safe:
1-888-344-7233

ADVERTISEMENT: NOTICE TO CONTRACTORS

AUBURN BUSINESS DEVELOPMENT CORPORATION

June 21, 2013

Dear Bidder:

The City of Auburn is accepting written proposals for the **Auburn Industrial Park**. The City reserves the right to accept or reject any or all proposals in whole or in part and to waive any informality the City may determine necessary. The City also reserves to itself the exclusive right to accept any proposal when it is deemed by the City to be in its best interest. The City of Auburn is governed by Title 1 M.R.S.A. § 401-410, otherwise known as the Freedom of Information Act, which considers bid specifications as public documents. In awarding any proposal, the City may consider, but not be limited to, any of the following factors: Bidder qualifications, price, experience, financial standing with the City, warranties, references, bonding, delivery date, and service of Bidder. Vendors/Contractors shall be current on all amounts due to the City of Auburn prior to the City entering into any contract agreement. All proposals must include FOB to Auburn, Maine unless otherwise specified.

Proposals will not receive consideration unless submitted in accordance with the following instructions to bidders. Please mark sealed envelopes plainly: **"Auburn Industrial Park – Bid #2013-033"**.

Any contract or contracts awarded under the Advertisement for Bids will be funded in part by a grant from the U.S. Department of Commerce- Economic Development Administration (EDA). The total amount of federal funding included in the project financing will be \$1,707,573.00 which represents a portion of the total project costs to include design, construction, project inspection and management of the project. Neither the United States nor any of its departments, agencies, or employees is or will be party to this advertisement or any resulting contract.

Bid packages will be available beginning on Monday, June 24th, 2013. Documents can be obtained electronically on the City of Auburn's website. www.auburnmaine.gov Questions regarding this Request for Bids should be directed to Chris Branch P.E., Project Engineer, at (207) 200-2126 or cbranch@sebagotechnics.com. **A mandatory pre-bid will be held on July 16nd, 2013, at 2:00pm in Council Chambers, Auburn City Hall.**

Please submit your proposal to the City of Auburn by 2:00 p.m. **Thursday, July, 25th 2013**. Proposals must be delivered to **Derek Boulanger, Facilities Manager/Purchasing Agent, 60 Court Street, Auburn, Maine 04210** on or before the date and time appointed. No proposals will be accepted after the time and date listed above. Proposals will be opened at 2:00 p.m. on that date.

Sincerely,

Derek Boulanger
Facilities Manager/Purchasing Agent

CONDITIONS AND INSTRUCTIONS TO BIDDERS

1. Bidders shall use the enclosed bid form for quotations. Whenever, in bid forms, an article is defined by using a trade name or catalog number, the term "or approved equal", if not inserted, shall be implied.
2. Submit a separate unit price for each item unless otherwise specified in the bid request. Award will be made on a basis of each item, or as a group, whichever is in the best interest of the City. Prices stated are to be "delivered to destination".
3. Bid proposals must be completed in full, in ink and must be signed by firm official. Bid proposal must **be notarized** prior to bid being sealed and will be disqualified if not notarized. Bids may be withdrawn prior to the time set for the official opening
4. Bids will be opened publicly. Bidders or representatives may be present at bid opening.
5. Awards will be made to the lowest responsible bidder, considering the quality of the materials, date of delivery, cost which meets specification and is in the best interest to the City of Auburn.
6. All transportation charges, including expense for freight, transfer express, mail, etc. shall be prepaid and be at the expense of the vendor unless otherwise specified in the bid.
7. The terms and cash discounts shall be specified. Time, in connection with discount offered, will be computed from date of delivery at destination after final inspection and acceptance or from date of correct invoice, whichever is later.
8. The City is exempt from payment of Federal Excise Taxes on the articles not for resale, Federal Transportation Tax on all shipments and Maine Sales Tax and Use Taxes. Please quote less these taxes. Upon application, exemption certificate will be furnished with the Purchase Order when required.
9. No contract may be assigned without the written consent of the Finance Director or her designate. The contract shall not be considered valid until a purchase order has been issued to the successful bidder.
10. Please state **"Auburn Industrial Park - Bid #2013-033"** on submitted, sealed envelope.
11. The City of Auburn reserves the right to waive any formality and technicality in bids whichever is deemed best for the interest of the City of Auburn.
12. All work shall be completed by **June 30th, 2014**. Liquidated damages of **\$500/calendar day** will be assessed on uncompleted work.
13. The City of Auburn will pay for police officers if they are required for traffic control.
14. Granite curbing shall be backfilled with a 1,500 psi concrete slurry to an elevation even with the top of the asphalt base course. Slurry material shall also be able to flow 3-4" under the curbing.

GENERAL CONDITIONS

1. Equal Employment Opportunity

The City of Auburn is an Equal Opportunity Employer and shall not discriminate against an applicant for employment, and employee or a citizen because of race, color, sex, marital status, physical and/or mental handicap, religion, age, ancestry or natural origin, unless based upon a bona-fide occupation qualification. Vendors and contractor or their agents doing business with the City shall not violate the above clause or the Civil Rights Acts of 1964. Violations by vendors shall be reviewed on a case-by-case basis and may mean an automatic breach of contract or service to the City of Auburn.

2. Save Harmless

The Bidder agrees to protect and save harmless the owner from all costs, expenses or damages that may arise out of alleged infringement of patents of materials used.

3. Subcontracting

The Bidder shall not subcontract any part of the work or materials or assign any monies due it without first obtaining the written consent of the municipality. Neither party shall assign or transfer its interest in the contract without the written consent of the other party.

4. Warranty

The Bidder warrants that all work will be of good quality and free from faults and defects, and in conformance with the specifications. All work not so conforming to these standards may be considered defective. The Bidder agrees to be responsible for the acts and omissions of all of its employees and all subcontractors, their agents and employees, and all other persons performing any of the work under a contract with the Bidder.

5. Bonds, Retainage and Payments

A bid bond shall be submitted with appropriate bid forms in the amount of 5% of the total contract value. Also, payment and performance bonds will be required from the contractor who is awarded this contract. Retainage in the amount of 10% will be held from each progress payment and shall be released at the discretion of the Project Engineer. Payments shall be made by the City to the Contractor 30 days after receipt of the request for payment.

6. Contractors and sub-contractors should note that this project is being partially funded in part by Economic Development (EDA) funds. As such, the resulting contractor and subcontractors will be required to meet all additional requirements of the EDA funds.

7. Minority and Woman Business Enterprises Requirements

Each bidder shall take special notice of the Guidance for use of Minority and Woman Business Enterprises in sub-agreements. Failure to complete the requirements of this program may result in finding that the bidder is non-responsible and therefore, not entitled to award of this contract. Complete requirements are detailed in the Bid Documents.

8. Nondiscrimination in Employment and Labor Standards

Bidders on this work will be required to comply with the President's Executive Order No. 11246 and amendments or supplements to that Order. Specifically, bidders and contractors shall abide by the following:

- a. Contractors and subcontractors will not discriminate in employment practices
- b. Bidders must submit with their initial bid a signed Compliance Statement
- c. Bidders must, if requested, submit a Compliance Report
- d. Successful bidders must, if requested, submit a list of all subcontractors and a statement that their practices and policies are in conformity with Executive Order No. 11246.
- e. Successful bidders must comply in all respects with the contract provisions regarding nondiscrimination.

9. Federal Requirements

The Contractor must comply with all the Safety and Health Regulations (CFR29 part 1926 and all subsequent amendments) as promulgated by the US Department of Labor on June 24, 1974, the Department of Labor Regulations relating to Copeland "Anti-Kickback Act (18 U.S.C. 874) as supplemented by 29 CFR part 3, Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by 29 CFR part 5, and Occupational Safety and Health Standards (OSHA) (29 CFR part 1910).

The Contractor must comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), Section 508 of the Clean Water Act (33 U.S.C. 1368), and Executive Order 11738. Contractors are urged to become familiar with the requirements of these regulations.

The Contractor must comply with all requirements of the EDA Program. These include but are not limited to the Buy American Clause, Federal Wage Rates (Davis-Bacon) and obtaining of a Duns number.

The successful bidder must furnish within 10 calendar days after the Notice of Award the required number of copies of the signed Agreement, plus a Certification of Non-Segregated Facilities, 100% Performance Bond, 100% Payment Bond, a Completed Attachment C or D of the Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) Regulations and a complete list of sub-bidders and begin execution of this contract within 10 calendar days following the Notice to Proceed.

INSTRUCTIONS TO CONTRACTORS

1. **Balanced Bid**

All unit price bid amounts shall be balanced. Balanced bid shall be, within reason, close to current industry standard rate for each unit. The Owner may disqualify any bids for being unbalanced. In the event a disagreement arises between the Owner and Bidder as to what constitutes an unbalanced bid, the final determination shall be made by the Engineer.

2. **Safety Standards and Accident Prevention**

With respect to all work performed under this contract, the contractor shall:

- a) Comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, No.75, Saturday, April 17, 1971.
- b) Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.
- c) Maintain at his/her office or other well known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or a doctor's care of persons (including employees), who may be injured on the job site. In no case shall employees be permitted to work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.

3. **Bid Submission Requirement**

- a) EDA Bidder's Certification Sheet (Attachment E)
- b) Bid Spread Sheets
- c) Bid Bonds
- d) Bid Contract
- e) Experience Statement

INFORMATION FOR CONTRACTORS

1) PRICE

The City of Auburn, Maine (herein called the "City"), invites Bids on the forms attached hereto, all blanks in which must be appropriately filled in.

The City may consider informal, any Bid not prepared and submitted in accordance with the provisions hereof, and may waive any informalities in, or reject, any and all Bids. Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. No CONTRACTOR may withdraw a Bid within sixty (60) days after the actual date of the opening hereof.

All blank spaces for Bid prices must be filled in using ink, indicating figures, with the unit price for the item or the lump sum for which the Bid is made.

2) PREPARATION OF BID

By the deadline of the Bid submittals, each CONTRACTOR will be presumed to have inspected the sites and to have read and to be thoroughly familiar with the Contract Documents including all addenda. The failure or omission of any CONTRACTOR to examine the sites or to receive any form, instrument, or documents shall in no way relieve any CONTRACTOR from any obligation with respect to his Bid.

The CONTRACTOR shall make his Bid from his own examinations and estimates, and shall not hold the City, its agents, employees or independent Engineer or his agents, hired by the City, responsible for or bound by any schedule. If any error in any Plan, Drawing, Specification or direction, relating to anything to be done under the contract, comes to his knowledge, he should report it at once to the City.

3) PROPOSAL SECURITY

Each Bid must be accompanied by a deposit of 5% of the amount proposed. This may be a properly certified check, bank treasurer's check, bank money order, cash, or Bid Bond. Checks and money orders shall be made payable to the City of Auburn. Such deposits will be returned to CONTRACTORS within a reasonable time after signing of the contract.

4) ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Specifications, or other Contract Documents will be made to any CONTRACTOR orally. Every request for such interpretation should be in writing, addressed to the Submit technical questions in writing to the attention of: Chris Branch P. E. @ 207 200-2126, e-mail: cbranch@sebagotechncs.com no later than 5 business days before the scheduled bid opening. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Specifications which, if issues, will be mailed, emailed, or faxed to all prospective CONTRACTORS, at the respective addressed furnished for such purposes. Failure of any CONTRACTOR to receive any such addendum or interpretations shall not relieve any CONTRACTOR from any obligation under his Bid as submitted.

All addenda so issued shall become part of the Contract Documents.

5) AWARD OR REJECTION OF PROPOSALS

The CONTRACTOR to whom the award is made will be notified upon City review and approval of the bid. The City, however, reserves the right to reject any and all bids and to waive any informality in bids received, and to accept any bids whenever such rejection, waiver or acceptance is in the interest of the City. The City also reserves the right to reject the Bid of a CONTRACTOR who has previously failed to perform properly or complete on time contracts of a similar nature, or a Bid of a CONTRACTOR who is not in a position to perform the Contract. It is the intent of the City to award the project to the lowest responsive responsible bidder.

6) EXEMPTION FROM SALES TAX

All materials used in the construction that becomes a permanent part of the facility are exempt from the Maine State Sales Tax. The CONTRACTOR must comply with the regulations of the Bureau of Taxation.

7) TIME OF COMPLETION

The Contractor shall prosecute the work continuously until completion. All work under this contract shall be completed and ready for City acceptance by the dates specified herein after the notice to commence work.

8) DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

If the successful CONTRACTOR fails to sign and return the contract with the required certification of insurance within 14 calendar days after the date of the notice of award, his Bid will lapse at the election of the City and his Bid deposit shall be forfeited and retained by the City as an agreed amount of liquidated damages. Should any CONTRACTOR withdraw his Bid prior to contract signing, his deposit will be retained by the City as an agreed amount of liquidated damages.

9) PERMITS

Contractor shall be responsible for compliance with all State and Federal laws regarding natural resource protection, including the requirements set forth in MRSA Title 38, Chapter 420-C, Erosion and Sedimentation Control. As a minimum, the work shall comply with standard practices set forth in the "Maine Erosion and Sediment Control Handbook for Construction: Current publication of the Best Management Practices" prepared by Maine Department of Environmental Protection and requirements of the project plans. The City of Auburn has obtained a MDEP & USACOE pertaining wetland fills and stream crossing.

10) ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with all State and local environmental protection requirements, including, but not limited to control of dust from excavations and spillage of materials on highways and dust from rock drilling operations; compliance with local ordinances on burning; control of erosion and washing of materials, excavated slopes and embankments, and prevention of stream turbidity from dewatering and general earthwork operations, as further detailed in paragraph under "Permits", above; and obtaining and complying with any permits which may be required for disposal of excess construction excavation materials off-site.

11) LIST OF MATERIAL SUPPLIERS, SUBCONTRACTORS, EQUIPMENT SUPPLIERS

The Contractor shall supply to the City a complete list of all material suppliers, subcontractors and equipment suppliers at the time of the Contract signing. Failure to do so may result in the Contractor being disqualified from the Bid. In any event the project completion date will not be extended.

12) PAYMENT OF WORK

The Contractor shall be paid for the work performed under the provisions of this contract upon supplying signed lien waivers from all materials suppliers, subcontractors and/or equipment suppliers.

13) BONDS REQUIRED

- A. Bid Bond - The Contractor shall provide with his bid a Bid Bond, certified check or bank Check in an amount equal to 5% of the total bid price.
- B. Performance Bond - A performance bond is required for this project.
- C. Payment Bond - A payment bond is required for this project.

14) OTHER

If any items contained herein are found to be in conflict with other provisions the Contract Documents, the stricter provision shall apply.

15) Or EQUAL CLAUSE

Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item or substitution is permitted, other items of material or equipment of other Suppliers may be submitted to the City for review under the circumstances described below:

If in the City's sole discretion an item of material or equipment proposed by the Contractor is functionally equal to that named and sufficiently similar so that no change in related work will be required, it may be considered by the City as an "or equal" item. A proposed item of material or equipment will be considered functionally equal to an item so named if:

In the exercise of reasonable judgment the City determines that: 1) it is at least equal in quality, durability, appearance, strength, and design characteristics; 2) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and The Contractor certifies that: 1) there is no increase in cost to the City; and 2) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

16) Special Legal Requirements

- 16.1 Any awarded contract will be funded in part by EDA Program. Neither the Economic Development Administration nor any of its departments, agencies, or employees is or will be a party to this Agreement. The word "AGENCY" has the meaning assigned in the General Conditions, as modified in the Supplemental Conditions.
- 16.2 Nondiscrimination in Employment: Each Bidder will be required to comply with the President's Executive Order No. 11246 and any amendments or supplements to this Executive Order. The basic requirements for bidders to comply with this order to provide Affirmative Action to Ensure Equal Employment Opportunity for Minorities and Women individuals in the construction industry are summarized as follows:

- A. Contracts for work under this proposal will obligate the contractors and the subcontractors not to discriminate in employment practices.
- B. Bidders must submit with their initial bid a signed statement as to whether they have previously performed work subject to the President's Executive Order No. 11246, or any preceding similar Executive Order.
- C. Bidders must, if requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the contract.
- D. Successful bidders must, if requested, submit a list of all subcontractors who will perform work on the project, and written signed statements from authorized agents on the project, and written signed statements from authorized agents of labor pools with which they will or may deal for employees on the work together with supporting information to the effect that such labor pool's practices and policies are in conformity with Executive Order No. 11246.
- E. Successful bidders must be prepared to comply in all respects with the contract provisions regarding non-discrimination.

The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as established by the U.S. Department of Labor.

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

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4. 3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed.

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 a 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.

The contractor shall provide written notification to the appropriate Regional Office of the Office of 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; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

16.3 Minority and Women Business Enterprises Requirements: Each Bidder will be required to comply with the Minority and Women Business Enterprise (MBE & WBE) Regulations, (43 CFR 60.220). Each Bidder shall execute and submit from Section 0080 SC-20, Attachment A or B, as applicable, within 10 days after the Bid Opening. The Contractor will take all necessary affirmative steps to assure that minority

firms, women's business enterprises, and labor surplus area firms are used when possible. Affirmative steps shall include:

- A. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- B. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- C. Dividing total requirements, when economically feasible into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprise;
- D. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises; and
- E. Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce.
- F. Requiring the Prime Contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (i) through (v) of this section.

The goals for this project shall be a minimum of **0.5% MBE and 6.9% WBE** subcontractor participation. If these goals are not met the successful bidder must demonstrate a good faith effort in meeting the goals. In addition, the Contractor shall submit to the Owner, a compliance report, (Form 334) listing the MBEs and WBEs, their work and the proposed amount of payment to each required to satisfy the requirements of this contract.

NOTE: The most recent copy of the Maine Department of Transportation's "Certified Disadvantaged Business Enterprise Directory" is available on the internet at the following address:
<http://www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php>

- 16.4 Department of Labor Regulations: The contractor must comply with all the Safety and Health Regulations (CFR29 Part 1926 and all subsequent amendments) as promulgated by the US Department of Labor on June 24, 1974; the Department of Labor Regulations relating to Copeland "Anti-Kickback Act (18 U.S.C. 874) as supplemented by 29 CFR Part 3; Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by 29 CFR Part 5, and Occupational Safety and Health Standards (OSHA) (20 CFR Part 1910). Contractors are urged to become familiar with the requirements of these regulations.
- 16.5 Environmental Regulations: The Contractor must comply with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857 (h)), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738 and Environmental Protection Agency regulations (40 CFR Part 15). Contractors are urged to become familiar with the requirements of these regulations.

PROPOSAL

CITY OF AUBURN, MAINE

PROJECT: Auburn Industrial Park

Proposal of _____
Name

Address

The name and address shown on the above lines shall be the official name and address of the person, partnership or corporation submitting this bid and shall agree with the "Signature of Bidder" in the case of an individual; the "Name of Firm or Partnership" in the case of a firm or partnership; the "Name of Bidder" in case of a corporation.

TO: Derek, Boulanger Purchasing Agent
Finance Department
60 Court Street
Auburn, Maine 04210

Dear Mr. Boulanger

The undersigned having carefully examined the site of the work; the Bidding Documents and the following Addenda, receipt of which is hereby acknowledged:

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____

The Plans; Standard Specifications, including all current amendments or revisions there of; the Notices and Information to Contractors, Supplemental Specification, Special Provisions; Contract Agreement and Contract Bonds contained herein for the identified project on which proposals will be received until the time specified in the "Notice to Contractors", this work being situated at the location described in the "Notice to Contractors", and in case of award, do(es) hereby propose and offer to enter into a contract to supply all the materials, tools, equipment and labor required to perform and construct the whole of the work in strict accordance with the terms and conditions of this contract at the unit prices stated in the following "Schedule of Items" submitted by the undersigned.

This Proposal may be accepted by the City of Auburn at any time within sixty (60) calendar days after opening of the bids.

(Fill out prices in ink, in writing and in figures; in case of a discrepancy between prices in writing and prices in figures, the writing shall govern. In case of discrepancy between total of items and total of bid amount stated, total of items shall govern. Use the pages in this document when submitting proposal and submit contract document intact.)

The pay items with quantities marked with an asterisk (*) on the bid sheets are for quantities that are indeterminate. The pay items with a quantity of 10* are for work not anticipated at time of bid. These items are part of the Contract Proposal and will also be used should any extra work be necessary. Actual quantities will be measured in the field or calculated from the contract drawings as approved by the City of Auburn. The unit price will be used regardless of final quantity.

Auburn Industrial Park

Bid Item	Spec. No. Pay Item	Quantity	Item with Unit Bid Price Written in Words	Unit Price In Figures	Amount In Figures
1	201.11	7 Per Acre	Clearing @ _____ _____ Per Acre	\$ _____	\$ _____
2	203.2001	Lump Sum	Common Excavation Plan Quantity @ _____ _____ Per Lump Sum	\$ _____	\$ _____
3	203.24	Lump Sum	Common Borrow, for Wetland Fill-Plan Quantity @ _____ _____ Per Lump Sum	\$ _____	\$ _____
4	203.241	Lump Sum	Common Borrow, for preload Plan Quantity @ _____ _____ Per Lump Sum	\$ _____	\$ _____
5	203.25	100* Cubic Yard	Granular Borrow, As Ordered by Resident @ _____ _____ Per Cubic Yard	\$ _____	\$ _____
6	203.26	Lump Sum	Gravel Borrow, for preload Plan Quantity @ _____ _____ Per Lump Sum	\$ _____	\$ _____
7	203.31	100* Cubic Yard	Crushed Stone (703.3 1 Type "A") (Overdepth or As Ordered by Resident) @ _____ _____ Per Cubic Yard	\$ _____	\$ _____

8	206.061	100* Cubic Yard	Structural Earth Excavation (Overdepth) @ _____ _____ _____ Per Cubic Yard	\$ _____	\$ _____
9	206.07	150* Cubic Yard	Structural Rock Excavation @ _____ _____ _____ Per Cubic Yard	\$ _____	\$ _____
10	304.09	3360 Cubic Yard	Aggregate Base Course – Crushed, Type “A” @ _____ _____ _____ Per Cubic Yard	\$ _____	\$ _____
11	304.10	9900 Cubic Yard	Aggregate Subbase Course – Gravel, Type “D” Gravel @ _____ _____ _____ Per Cubic Yard	\$ _____	\$ _____
12	403.207	2,630 Ton	Hot Mix Asphalt 19.0mm @ _____ _____ _____ Per Ton	\$ _____	\$ _____
13	403.208	2,200 Ton	Hot Mix Asphalt 12.5mm @ _____ _____ _____ Per Ton	\$ _____	\$ _____
14	603.140	3400 Linear Foot	12-inch Diameter PVC Sanitary Sewer @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
15	603.145	350 Linear Foot	6-inch Diameter PVC Sanitary Sewer Laterals @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
16	603.158	220 Linear Foot	12-inch Diameter PVC or HDPE Storm Drain Pipe @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____

17	603.159	350 Linear Foot	12-inch Diameter PVC or HDPE Culvert Pipe @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
18	603.179	200 Linear Foot	18-inch Diameter HDPE Storm Drain Pipe @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
19	603.198	60 Linear Foot	24-inch Diameter HDPE Storm Drain Pipe @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
20	603.199	90 Linear Foot	24-inch Diameter RCP Storm Drain Pipe @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
21	603.199	160 Linear Foot	30-inch Diameter RCP Storm Drain Pipe @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
22	603.201	20 Linear Foot	36-inch Diameter RCP Storm Drain Pipe @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
23	603.30	200 Linear Foot	42-inch Diameter RCP Storm Drain Pipe @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
24	604.07	18 Each	Install 4-foot Diameter Catch Basin @ _____ _____ _____ Per Each	\$ _____	\$ _____
25	604.15	2 Each	Install 4-foot Diameter Drain Manhole @ _____ _____ _____ Per Each	\$ _____	\$ _____

26	604.151	12 Each	Install 4-foot Diameter Sanitary Manhole @ _____ _____ _____ Per Each	\$ _____	\$ _____
27	605.091	1300 Linear Foot	6-inch Diameter Underdrain @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
28	605.121	1820 Linear Foot	15-inch Diameter Underdrain @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
29	605.131	620 Linear Foot	18-inch Diameter Underdrain @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
30	606.152	2200 Linear Foot	Guardrail Type 3b single rail @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
31	606.265	16 Each	Terminal End-Single Rail @ _____ _____ _____ Per Each	\$ _____	\$ _____
32	609.11	50 Linear Foot	Install New 5-inch Vertical Granite Curb, Type 1 – Straight @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
33	609.12	600 Linear Foot	Install New 5-inch Vertical Granite Curb, Type 1 – Circular @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
34	609.237	2 Each	Install New 5-inch – 7-foot Tipdown Curb, Type 1 @ _____ _____ _____ Per Each	\$ _____	\$ _____

35	609.261	16 Each	Transition Curb @ _____ _____ _____ Per Each	\$ _____	\$ _____
36	609.311	6000 Linear Foot	Bituminous Curb- Mold 2 @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
37	610.081	Lump Sum	Plain Riprap incl.Fabric and Bedding @ _____ _____ _____ Per Lump Sum	\$ _____	\$ _____
38	613.320	Lump Sum	Erosion Control Blanket-Plan Quantity @ _____ _____ _____ Per Lump Sum	\$ _____	\$ _____
39	615.071	Lump Sum	Loam, Seed & Mulch @ _____ _____ _____ Per Lump Sum	\$ _____	\$ _____
40	627.711	9600 Linear Foot	White or Yellow Pavement Marking Line- Plan Quantity @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
41	627.75	40 Square Foot	White or Yellow & Curb Marking @ _____ _____ _____ 40 Square Foot	\$ _____	\$ _____
42	629.05	10* Hour	Hand Labor, Straight Time @ _____ _____ _____ Per Hour	\$ _____	\$ _____
43	629.06	10* Hour	Mason, Straight Time @ _____ _____ _____ Per Hour	\$ _____	\$ _____

44	631.105	10* Hour	Air Tool and Compressor, Including Operator @ _____ _____ _____ Per Hour	\$ _____	\$ _____
45	631.12	10* Hour	All Purpose Excavator, Including Operator @ _____ _____ _____ Per Hour	\$ _____	\$ _____
46	631.13	10* Hour	Bulldozer, Including Operator @ _____ _____ _____ Per Hour	\$ _____	\$ _____
47	631.171	10* Hour	Truck, Small, Including Operator @ _____ _____ _____ Per Hour	\$ _____	\$ _____
48	631.22	10* Hour	Front End Loader, Including Operator @ _____ _____ _____ Per Hour	\$ _____	\$ _____
49	631.36	10* Hour	Foreman, Straight Time @ _____ _____ _____ Per Hour	\$ _____	\$ _____
50	652.39	Lump Sum	Work Zone Traffic Control @ _____ _____ _____ Per Lump Sum	\$ _____	\$ _____
51	653.22	300 Square Yard	Polystyrene Plastic Insulation @ _____ _____ _____ Per Square Yard	\$ _____	\$ _____
52	656.75	Lump Sum	Temporary Soil Erosion and Water Pollution Control @ _____ _____ _____ Per Lump Sum	\$ _____	\$ _____

53	659.1	Lump Sum	Mobilization Part 1 Not to exceed 2.5% of Part 1 @ _____ _____ Per Lump Sum	\$ _____	\$ _____
54	800.01	Lump Sum	Wet-pond complete In-place @ _____ _____ Lump Sum	\$ _____	\$ _____
55	801.03	Lump Sum	Approved Wetland Impact Fills, Complete In-place Plan Quantity @ _____ _____ Lump Sum	\$ _____	\$ _____
56	803.03	Lump Sum	Stream Mitigation @ _____ _____ Lump Sum	\$ _____	\$ _____
57	804.03	Lump Sum	EDA Project Sign @ _____ _____ Lump Sum	\$ _____	\$ _____
58	805.03	150 Linear Foot	Underground Conduit Installation @ _____ _____ Per Linear Foot	\$ _____	\$ _____

(Continued Next Page)

W-1		3400 Linear Feet	12-inch Ductile Iron Water Main @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
W-2		3400 Linear Feet	2-inch Water Main and Gate Valves @ _____ _____ _____ Per Linear Foot	\$ _____	\$ _____
W-3		300 Linear Feet	6-inch Ductile Iron Service Stubs @ _____ _____ _____ Per Each	\$ _____	\$ _____
W-4		300 Linear Feet	2-inch Service Stubs w/curb stops @ _____ _____ _____ Per Each	\$ _____	\$ _____
W-5		5 Each	Hydrant Assembly, Inc fitting, gate valve, and connecting pipe @ _____ _____ _____ Per Each	\$ _____	\$ _____
W-6		3 Each	12-inch Gate Valve @ _____ _____ _____ Per Each	\$ _____	\$ _____
W-7		8 Each	6-inch Gate Valve @ _____ _____ _____ Per Each	\$ _____	\$ _____
W-8		1 Each	12" x 12" Tapping Sleeve & Gate Valve @ _____ _____ _____ Per Each	\$ _____	\$ _____

Total Unit Prices	@ _____	\$ _____
	Total Unit Price Costs	

The undersigned also agrees as follows:

FIRST: To do any extra work, not covered by the above schedule of items, which may be ordered, and to accept as full compensation therefore such prices as may be agreed upon in writing by the Engineer and the Contractor; or in case no agreement is made, to accept as full compensation the amount determined upon a "force account" basis as provided in the M.D.O.T. Standard Specifications, Revision of December 2002 and any revisions thereto.

SECOND: To begin work on the date specified in the Engineer's "Notice to Commence Work" and to prosecute said work in such a manner as to complete the work as specified in the contract documents. Further, that monies will be deducted as liquidated damages at the rate specified in Subsection 107.7.2 "Schedule of Liquidated Damages" for each day that the work shall remain uncompleted after the time herein specified for completion of the work.

THIRD: That this offer is to continue open to acceptance until the formal contract is executed by the successful bidder of this work, and the City may at any time without notice accept this proposal whether any other proposal has previously been accepted or not. Provided, however, that the City will accept, in writing, one of the proposals made, or reject all proposals made, within sixty (60) calendar days after the date of opening of the proposals.

The undersigned as Bidder, declares that the only persons or parties interested in this Proposal are those named herein; that the bidder is not financially interested in, or otherwise affiliated in a business way with any other bidder on this contract; and that this Proposal is made without collusion with any other person, firm or corporation.

The undersigned declares that any person(s) employed by the Auburn Business Development Corp., Maine, who has direct or indirect personal or financial interest in this proposal or in any portion of the profits which maybe derived therefrom, has been identified and the interest disclosed by separate attachment. (Please include in your disclosure any interest which you know of. An example of a direct interest would be a City employee who would be paid to perform services under this proposal. An example of an indirect interest would be a City employee who is related to any officers, employees, principal or shareholders of your firm or you.) If in doubt as to status or interest, please disclose to the extent known.

Respectfully submitted this _____ day of _____, 2009

IF AN INDIVIDUAL, SIGN HERE

Signature of Bidder _____

Address _____

Telephone Number _____

Email Address _____

Soc. Sec. No. or Tax I.D. Number _____

(Signatures for a Firm, Partnership or Corporation on next page.)

PROPOSAL (continued)

IF A FIRM OR PARTNERSHIP, SIGN HERE

Signature of Bidder_____

Name of Firm or Partnership_____

Business Address_____

Telephone Number_____ Fax Number_____

Email Address_____

Soc. Sec. No. or Tax I.D. Number_____

Names and Addresses of Members of Firm or Partnership:

IF A CORPORATION, SIGN HERE

Name of Bidder_____

Authorized Signature_____

(name)

(title)

Business Address_____

Telephone Number_____ Fax Number_____

Email Address_____

Soc. Sec. No. or Tax I.D. Number_____

Incorporated under the Laws of the State of_____

Names and Addresses of Officers of the Corporation:

President_____

Secretary_____

Treasurer_____SS

Before me, personally appeared _____ and acknowledged
that the signature to the preceding bid is his/her signature in his/her official capacity.

Date: _____

Notary Public - Signature and Seal

ALL CORPORATIONS MUST SIGN THIS FORM
AND SUBMIT WITH THE BID PROPOSAL

(Insert copy of that part of the records of the corporation wherein authority is given to the officer of that corporation to sign this bid on behalf of the corporation.)

(date)

The above is a true copy of the records of the _____

Corporation, which records are in my legal custody.

Officer having custody of the records

_____ ss

Before me appeared, _____, _____

_____ of the _____ Corporation, and made

oath that the above statement is true.

Notary Public - Signature and Seal

NOTICE

(This Must Be Filled Out)

The full names and residences of all persons interested in this bid as principals are as follows: (In case of Corporation, include and identify President, Treasurer, Manager)

_____	_____
_____	_____
_____	_____

ALL CONTRACTORS SHALL FILL IN THE FOLLOWING INFORMATION
BEFORE SUBMITTING BID

	Name and Address of Contractor	Products to be Supplied
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____

	Name and Address of Contractor	Service or Trades to be Supplied	Anticipated \$ Amount
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
6	_____	_____	_____
7	_____	_____	_____

AGREEMENT BETWEEN THE
City Of AUBURN
AND
(CONTRACTOR)

AGREEMENT entered into this _____ day of _____, 2010 by and between the CITY OF AUBURN, a body politic and corporate, (hereinafter the "CITY"), and

(CONTRACTOR NAME) _____

Located at (ADDRESS) _____

(hereinafter the "CONTRACTOR").

W I T N E S S E T H

WHEREAS, the CITY did advertise by Bid, entitled Auburn Industrial Park WHEREAS, the CONTRACTOR did under date of _____, 2013 submit a Bid for such work; And WHEREAS, after due consideration of all the Proposals, the CITY did award the Bid to the CONTRACTOR; NOW THEREFORE, in consideration of the mutual promises made by each party to the other, the parties covenant and agree as follows:

1. The CONTRACTOR shall furnish all labor, materials, fixtures, supplies, equipment and transportation and shall perform all work required for the construction and completion of the referenced project in accordance with the specifications contained in the contract documents entitled AUBURN INDUSTRIAL PARK (hereinafter referred to as "Contract Documents") of which this Agreement is a part. All work shall be performed in strict conformance with the provisions of this Agreement, the Invitation for Bids, the CONTRACTOR's Proposal, General and Detailed Provisions, Plans, Supplemental Specifications, and Special and General Provisions of the Contract Documents which are attached hereto and made a part of this Agreement; and in conformance with the State of Maine, Department of Transportation Standard Specifications, Revision of December, 2002, except as amended herein, and including all current amendments or revisions thereof, all of which are made a part of this Contract. The restatement in this Contract of any of the terms of said Contract Documents and Standard Specifications shall not be deemed to waive any terms not so restated.
2. It is agreed that the quantities given in the "Schedule of Items" in the CONTRACTOR's Proposal Section of the Contract Documents will be used as the basis for determining the amount due under this Contract Agreement and for establishing the amount of the required Contract Performance Surety Bond and Contract Payment Surety Bond, and that the amount due under this Agreement so determined is \$ _____ (hereinafter referred to as the "Contract Price"). The CITY will have the right to increase or decrease the amount and extent of the work by giving reasonable notice in writing to the CONTRACTOR. The CITY will pay for the work performed and the materials furnished for any such increase and will calculate a proper reduction for any decrease in accordance with the unit prices specified in the "Schedule of Items" section of the CONTRACTOR's Proposal.
3. The City will retain 10% of each approved Progress Payment until the Work is approximately 50% complete. After construction is 50% complete and provided there is not specific cause for greater retainage, no further retainage will be withheld. Upon Substantial Completion, the amount of retainage will be reduced to 2% of the total amount due the Contractor plus any additional amount necessary to cover punch list items. The final 2% retainage may be held during the one-year warranty period as determined by the City.

The City may hold, temporarily or permanently, retainage as needed for reflect amounts due the City under the Contract and to assure timely Completion of the Work in Conformity with the Contract.

Upon Completion of Physical Work, the CONTRACTOR may request that the City reduce retainage. The City may grant or deny such request as it deems desirable and prudent. Otherwise, retainage will be held until Final Acceptance.

4. CONTRACTOR covenants and agrees that all work performed and materials used shall be free from all defects, and that all work be performed as specified.
5. CONTRACTOR shall supply the CITY with a performance bond, and labor and materials payment bond, each in the amount of the Contract Price guaranteeing one hundred percent (100%) performance of this Agreement, including the guarantee period and free and clear of any and all liens, attachments and encumbrances. All such bonds shall comply with the requirements of Maine State law.
6. The CITY reserves the right to require Waivers of Lien from subcontractors and/or suppliers prior to each progress payment made to CONTRACTOR pursuant to the terms of this Agreement.
7. Operations under the CONTRACT DOCUMENTS, whether such operations be by themselves or by any SUBCONTRACTOR under them, requires insurance to be written with a limit of liability of not less than \$1,000,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$1,000,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$500,000 for all property damage sustained by any one person in any one accident, and a limit of liability of not less than \$500,000 aggregate for any such damage sustained by two or more persons in any one accident.
8. To the fullest extent permitted by law, the CONTRACTOR shall defend, indemnify and hold harmless the CITY and Maine Department of Transportation (MDOT), their officers and employees, from and against all claims, damages, losses, and expenses, just or unjust, including but not limited to the costs of defense and attorneys' fees arising out of or resulting from the performance of the Agreement, provided that any such claims, damage, loss or expense (1) is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use therefrom, and (2) is caused in whole or in part by any negligent act or omission of the CONTRACTOR, anyone directly or indirectly employed by it, or anyone for whose act it may be liable.
9. Upon receipt of executed contracts, bonds, and insurance as required, the CITY will send an executed CITY contract and a "Notice to Commence Work" to the CONTRACTOR. The CONTRACTOR agrees to perform no work under this Agreement until it receives said Notice and to proceed and shall complete the work in its entirety by **June 30, 2014**. The time set for such completions may be extended only by written consent of the City Engineer of the Auburn Business Development Corp. (hereinafter referred to as the "ENGINEER"). It is agreed that the CITY will deduct, as liquidated damages, from any monies due or which may become due the CONTRACTOR for work performed, an amount specified in Section 107 for each day that the work may remain uncompleted after the times specified for the completion of the work.
10. Any mechanic's lien or any other lien which may be filed against the premises which are subject of this Contract by reason of the work described herein shall be defended (by counsel reasonably acceptable to the CITY) and promptly discharged by the CONTRACTOR at its own expense. The CITY may require the CONTRACTOR to provide a bond satisfactory to CITY and indemnify it against any lien and as substitution in place of a lien. If the CONTRACTOR should fail either to defend the CITY against the lien or to discharge it, then the CITY may do so at the CONTRACTOR's expense. In the event of such an undertaking by the CITY, the CONTRACTOR will promptly reimburse the CITY for all its costs and expenses in so doing including, but not limited to, reimbursement of the CITY's reasonable counsel fees, as well as costs which may be incurred by it in substituting a bond in place of the lien.

11. The CONTRACTOR shall perform the work to the satisfaction of the responsible CITY official who will have the right of inspection at all times, and whose approval and acceptance of the work will be a condition precedent to payments by the CITY under this Contract. CITY inspectors will have the authority to stop work in progress if such work is being done contrary to the plans, specifications, or engineering practice.
12. In the event that any dispute as to the amount, nature or scope of the work required under this Contract, the decision and judgment of the responsible CITY official will be final and binding.
13. The CONTRACTOR shall guarantee the work for a period of one (1) year for the faithful remedy of any defects due to faulty materials or workmanship and payment for any damage resulting therefrom.
14. CONTRACTOR shall keep accurate records of all services performed under this Agreement and shall submit such information to the CITY on a monthly basis. Payment for such services shall be made to CONTRACTOR not more than thirty (30) days after receipt of said forms and acceptance of the work by the ENGINEER.
15. The CITY may terminate this Agreement for cause by written Notice to the CONTRACTOR. In the event of such termination, CONTRACTOR shall not be entitled to any further payment under this Agreement from the date of receipt of said Notice.
16. The CITY will have the right to terminate this Agreement at any time for its convenience on prior written Notice to CONTRACTOR. If Agreement is terminated by the CITY for convenience, the CITY will pay the CONTRACTOR for all work performed and all materials purchased pursuant to this Agreement prior to receipt of said Notice.
17. Out of concern for the public, City employees, and CONTRACTOR employees, all work performed by CONTRACTOR shall be in conformance with pertinent OSHA, local, state, and federal requirements
18. Liquidated damages shall be assessed in accordance with Section 107 for each day that any portion of the work remains incomplete after the contract time has expired.

IN WITNESS WHEREOF, the said CITY OF AUBURN has caused this Agreement to be signed and sealed by Clinton Deschene, City Manager, thereunto duly authorized, and

_____ has caused this Agreement to be signed and sealed by _____, its _____, thereunto duly authorized, the day and year first above written.

WITNESS

City of Auburn

BY: _____

Clinton Deschene
City Manager

CONTRACTOR

BY: _____

(Print or type name)

It's _____

SAMPLE BID ADDENDUM

ADDENDUM #X

To Contract Documents For:

Auburn Industrial Park

**City of Auburn. Bid Number:
Project Dated: June 8, 2010**

Current Date: XXXX

The attention of bidders submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the Contractor's submitted material and the corresponding Contract when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

ALL BIDDERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED ON THE BID PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

**By Order of
The City of Auburn**

NOTE: Questions and Answers are listed on the following pages.

Receipt of **Addendum No. X** to the Auburn Business Development Corp.'s **BID: AUBURN INDUSTRIAL PARK** is hereby acknowledged.

COMPANY: _____

NAME: _____

SIGNED BY: _____ DATE: _____

PRINT NAME & TITLE: _____

ADDRESS: _____

Zip Code

SAMPLE SOLICITATION LETTER TO MBE/WBE FIRMS (See *)

Date: _____

From: _____
(Name of Contractor)

(Street Address)

(City, State and Zip Code)

(Fax #)

(E-mail Address)

To: _____
(Name of MBE or WBE firm)

(Street Address of MBE or WBE firm)

(City, State and Zip Code)

(Fax #)

(E-mail Address)

Please be advised that the City of Auburn, Maine; Department of Engineering, has solicited contractor's bids for the construction of the Project:

(Project Name)

The City of Auburn will open bids for said project on:

(Bid Opening Date)

We hereby invite you and solicit from you, as an MBE or WBE subcontractor and/or materialman, a sub-bid and/or materials price quote for all labor, services and/or materials which you are capable of providing to us for said project. We expect the amount of any such sub-bid and/or materials price quote to be both reasonable and competitive or we will not accept it.

Our name, business address and phone number are shown above. You may review the plans, specifications and other pertinent Contract Documents at our offices at above address at any time, during usual business hours, prior to the bid opening date.

We must receive your sub-bid and/or materials price quote, in writing, early enough, prior to the bid opening date, to permit us to reasonable review it and to act upon it.

If you need any information pertaining to the project or to a sub-bid and/or materials price quote to be submitted, please contact:

_____ at our offices during usual business hours.
(Contact & Phone Number)

*** If letter is mailed it must be sent USPS Certified Mail**

Please respond by fax or email back to this office as soon as possible.

_____ will _____ will not _____ be bidding on the above
(Name of Bidder) referenced project.

By: _____
(Signature) (Printed Name) (Date)

SAMPLE NOTICE OF INTENT TO AWARD

Date

Addressee

RE: NOTICE OF INTENT TO AWARD
Auburn Industrial Park

Dear

Your firm will be awarded the contract for the subject project for your total bid of \$_____. This letter will serve as notice of intent to award and that the contract documents are ready for signature.

A pre-construction conference will be scheduled for a later date, at Auburn City Hall, 205 Main Street, Auburn. Please be prepared to execute the contract within twelve (12) calendar days of this letter, as per the contract documents. You must have your firm's corporate seal on your person at the time of execution.

Separate performance and payment bonds in the full amount of the bid and the following insurance certificates shall be executed and presented for approval prior to execution of the contract documents: insurance coverages for Contractor's Public Liability Insurance shall have \$1,000,000 limits. The standard Certificate of Insurance forms shall have the cancellation statement edited. Evidence of proper Workers' Compensation Insurance and Blast Damage Insurance, if applicable, must also be presented for approval.

Should you have any questions pertaining to the above, please contact me at 207-284-9115.

Very truly yours,

CITY OF AUBURN

Clinton Deschene
City Manager

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged and a copy returned to the City of Auburn.

By _____ Title _____

this the _____ day of _____, 20 _____.

BOND # _____

SAMPLE CONTRACT PERFORMANCE BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____

_____, as principal, and _____

_____, a corporation duly organized

under the laws of the State of _____, and having a usual

place of business _____, as Surety, are held and firmly

bound unto the Treasurer of the City of Auburn Maine, Maine in the sum of _____

_____ (\$ _____

_____), to be paid to said Auburn Business Development Corp. or his successors in office, for which payment well and truly to be made, Principal and Surety bind themselves, their heirs, executors and administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in the foregoing contract shall promptly and faithfully perform the contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

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

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

WITNESSES:

Signature _____

Print Name Legibly _____

Signature _____

Print Name Legibly _____

SURETY ADDRESS:

TELEPHONE _____

SIGNATURES:

CONTRACTOR:

Print Name Legibly _____

SURETY:

Print Name Legibly _____

NAME OF LOCAL AGENCY:

ADDRESS: _____

TELEPHONE _____

SAMPLE CONTRACT PAYMENT BOND
(Surety Company Form)

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

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

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

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

WITNESSES:

Signature _____

Print Name Legibly _____

Signature _____

Print Name Legibly _____

SURETY ADDRESS:

TELEPHONE _____

SIGNATURES:

CONTRACTOR:

Print Name Legibly _____

SURETY:

Print Name Legibly _____

NAME OF LOCAL AGENCY:

ADDRESS: _____

TELEPHONE _____

SAMPLE NOTICE TO COMMENCE WORK

Date

Addressee

RE: NOTICE TO COMMENCE WORK
Auburn Industrial Park

Dear

You are hereby notified to commence work in accordance with the Agreement dated _____, 20 _____, on or before _____, 20 _____, and you are to complete the work no later than _____.

Before you may start any Work at the Site, you must deliver to the City certificates of insurance which you are required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must [add other requirements]:

- Preconstruction Conference
- Provide Shop Drawings
- Provide Emergency Phone Numbers
- Provide Traffic Control Plan
- Provide Project Schedule

Very truly yours,
CITY OF AUBURN

Dan Goyette P.E.
City Engineer

ACCEPTANCE OF NOTICE

Receipt of the Above NOTICE TO COMMENCE WORK is hereby acknowledged by:

_____ this the _____ day of _____, 20 _____.

By: _____

Title: _____

SAMPLE NOTICE OF FINAL COMPLETION

Date

Addressee

RE: NOTICE OF FINAL COMPLETION
AUBURN INDUSTRIAL PARK

Dear

The subject project was inspected on _____, by _____
_____, and was found to be fully completed in accordance with the contract plans and specifications.

The work is hereby approved and accepted by the City of Auburn as of _____, which begins the one year guarantee period. At this point it is essential that the city is provided with the attached statement and lien waiver *(as well as subcontractor/supplier lien waivers) certifying that all the obligations for equipment rentals, materials and supplies purchased, and labor employed on this project have been discharged. If you have any questions please feel free to call me at 284-9115.

Yours truly,
CITY OF AUBURN

Dan Goyette P.E.
City Engineer

WAIVER OF LIEN
MATERIAL OR LABOR

State of _____

County of _____

To all whom it may concern:

The undersigned _____ has been employed to furnish
_____ for the project known as
(PROJECT REFERENCE) _____,
City of Auburn, County of York, State of Maine.

The undersigned for and in consideration of the sum of \$ _____ and other good
and valuable consideration the receipt whereof is hereby acknowledged, do hereby waive and release any and all rights
and liens, or claim of right to lien on said above described project under the statutes of the State of Maine relating to
Mechanic's Lien on account of Labor or Material or both furnished or which may be furnished by the undersigned to or on
account of said _____ for said building and premises.

This Waiver of Lien shall become effective upon the issuance of a check by the City of Auburn payable to
_____ and _____ in the amount of
_____.

Given under oath, my hand and seal this _____ day of _____, 20 _____.

By: _____

(print or type name)

Its _____

Notarized: _____ this _____ day of _____,
20 _____.

My commission expires

WAIVER OF LIEN
(Subcontractor/supplier/employee)

The undersigned has performed labor and furnished materials and/or performed services for
(CONTRACTOR) _____

on behalf of the City of Auburn, in performance of the contractor's agreement of

(DATE) _____

with the City of Auburn for the

(REFERENCED PROJECT) _____.

In consideration of the sum of \$ _____, the undersigned hereby waives all rights and liens, including, but not limited to, liens pursuant to 10 M.R.S.A. Sec. 3251, et. Seq., which the undersigned may now or hereafter claim or assert against the above described building, appurtenance, wharf, pier and/or land; the above-described project; and the City of Auburn.

This Waiver of Lien shall become effective upon the issuance of a check by the City of Auburn payable to _____ in the amount of \$ _____.

IN WITNESS WHEREOF the undersigned has hereto set its hand this _____ day of _____, 20_____.

By: _____
(print or type name)

Its _____

State of Maine
_____,ss

Before me appeared _____ and acknowledged that the signature to the preceding waiver is his/her signature in his/her official capacity.

Date: _____

(Notary Public)

CONTRACT DOCUMENTS AND SPECIFICATIONS

The Auburn Industrial Park is being funded in part by (EDA) funds. As such, the resulting contractor and subcontractors will be required to meet all additional requirements of the EDA funds.

The City of Auburn, Maine has also adopted for this project the "State of Maine, Department of Transportation, Standard Specifications, Revision of December, 2002", including all current additions or modifications thereof, including the most recent version of the MDOT "Repair Specifications", Supplemental Specification (corrections, additions, and revisions to standard specifications), (herein referred to as "Standard Specifications"). A copy of the Standard Specifications can be found online at http://www.maine.gov/mdot/contractor-consultant-information/ss_standard_specification_2002.php

The City of Auburn has also made specific changes to the MDOT Standard Specifications to incorporate certain project provisions as provided in the contract documents. As such, the Contract Agreement, Contract Documents, Special Provisions and Supplemental Specifications contained hereinafter shall take precedence and shall govern in any case of conflict with the MDOT Standard Specification. Supplemental Specifications are modifications, additions and deletions to the Standard Specifications. Special Provisions are specifications in the contract that are for additional items not covered in the Standard Specifications.

See Geotechnical Report Attachment A, on the installation of sanitary sewer, water main, storm drains crossing culverts, embankment design, embankment settlement/preload, trench backfill, and roadway construction.

In the case of ambiguity, etc., the following components of the Contract Documents shall control in the following descending order of priority:

City of Auburn Bid Amendments (most recent to least recent)
Project Specific Permit Requirements
City of Auburn Special Provisions
City of Auburn Notes on Plans
City of Auburn Plans and Details
Attachment A -Geotechnical Report
City of Auburn Supplemental Specifications
MDOT Standard Specifications
MDOT Supplemental Specifications Updates

These attachments are included within this specification.

SPECIAL PROVISIONS

The following Supplemental Specifications and Special Provisions shall amend the "State of Maine, Department of Transportation, Standard Specifications, Revision of December, 2002," and the latest revision of the MDOT Supplemental Specifications. In case of conflicts, these Supplemental Specifications (1) and Special Provisions (2) shall take precedence and shall govern.

- (1) Supplemental Specifications - modifications, additions and deletions to the existing Standard Specifications.
- (2) Special Provisions - specifications in the contract which are for additional items not covered in the Standard Specifications.

1. Working Hours

Hours of operation: Monday - Friday, 7:30 A.M. to 7 P.M.-No work or site activity shall begin prior to 7A.M. No Sunday or Major Holiday work will be allowed

The definition of work for this specification shall include the starting or moving of equipment, machinery, or materials. Any day worked for four hours or more shall be considered a full working day.

2. Utility Coordination

The project includes construction in close proximity to utility services. The Contractor will be responsible for notifying utility representatives of the anticipated construction schedule. The Contractor will be responsible for all utility coordination, protection of existing infrastructure and any damages to existing utilities as a result of the work at no additional cost to the City.

3. Notification of Residents

Residents shall be notified by the Contractor sufficiently in advance of any construction affecting the resident's driveway and sidewalk to allow adequate time for his removal of personal vehicles. Locations of curb cuts for drive access affecting individual residents shall be brought to their attention.

4. Traffic Signs

All existing traffic signs which are to be removed during construction shall be carefully dismantled and the posts removed and shall be stacked in an area approved by the Engineer. The Contractor shall protect the signs from damage while in his possession and shall repair, at no additional cost to the City, any damages cause by his operations. Stop signs are to be maintained at their original locations at all times during the progress of the work.

Prior to the start of any construction work, the Contractor and City shall prepare a mutually acceptable inventory of all signs within the project limits which shall be used as a guide for replacement should signs be removed for construction purposes. The signs shall be inventoried by station location and approximate offset, legend of sign and post. This work shall be considered as subsidiary obligation of the contract for which no specific payment will be made.

5. Protection of Trees

The Contractor shall be responsible for the preservation of all trees on the project which are not called to be removed. Any trees damaged by the Contractor's operations shall be repaired using approved tree dressing or paint in accordance with the appropriate provisions of Section 201 of the Standard Specifications. The contractor shall be responsible for all costs for damaged trees and shall not be entitled to payment or compensation.

6. Maintenance and Protection of Traffic

The Contractor shall be responsible for the maintenance and protection of all vehicular and pedestrian traffic at all times during construction and shall erect suitable warning signs, flashers, barriers or temporary lighting devices of sufficient size and number to afford protection to the traveling public. The Contractor shall be held responsible for all damage to the work due to any failure of the warning devices to properly protect the work from the traffic, pedestrians or other causes. Responsibility for preparation of a traffic control plan shall be the contractor's. The Contractor must submit his/her traffic plan to the City of Auburn for review and approval, 3 working days prior to the pre-construction meeting. Guidelines for the construction and erection of barricades, lighting devices, warning signs, etc. may be found in the most recent edition of "Manual on Uniform Traffic Control Devices for Streets and Highways" published by the US Department of Transportation of the Federal Highway Administration. This work shall be paid under the Work Zone Traffic Control Pay Item. The contractor shall maintain one lane of traffic at all times and shall restore roadways to two lane traffic at the end of each work day.

7. Materials

Materials shall meet the requirements specified in the specifications. Equals shall be considered so long as the Contractor can supply sufficient product material and testing data to show that the equal meets or exceeds the performance data of the product identified on the contract documents.

8. Survey

The City of Auburn, Department of Engineering will provide the contractor with control points. The Contractor shall be responsible for maintaining these controls during construction and providing all additional survey required, which shall be done by a competent Engineer or Surveyor.

9. Sheeting and Bracing

Any sheeting and/or bracing required for the satisfactory installation of drainage and/or sanitary sewerage structures will not be paid for separately but shall be considered as incidental to the appropriate bid item.

10. Waste Areas

The disposal of waste and surplus material and slash from tree cutting shall be as outlined in Section 203.06 - Waste Areas of the Supplemental Specifications.

11. Occupational Safety and Health

The Contractor is hereby advised that all work to be furnished to the City shall be performed with equipment, methods, and use of personnel in conformance with the pertinent Occupational Safety and Health Act requirements of the State of Maine and with the regulations for construction as specified by the Department of Labor and Occupational Safety and Health Administration (OSHA) as currently amended.

12. Preconstruction Conference

A conference will be held at City of Auburn, within ten (10) business days after the awarding of the contract. At this time, the contractor will be required to submit a graphically illustrated schedule and a plan showing project activities. City officials and representatives of the various utility companies involved in the project will be present at this meeting. It is the purpose of this meeting to inform the various agencies of the proposed work schedule, and to give them the opportunity of discussing any difficulties and of offering suggestions to the Contractor concerning his proposed schedule in order that full cooperation may be reached.

13. Schedule of Operations

The contractor shall submit 3 days prior to the pre-construction meeting a detailed schedule showing the sequencing, critical path items, milestones and scheduling of the work. This schedule must show sufficient detail to insure compliance with the established completion dates above. Updates will be required as work progresses.

14. Setting of Pipes to Line and Grade

If laser beam equipment is used for laying storm drain and/or sanitary sewer pipe, frequent checks shall be made to assure close adherence to line and grade. If lasers are not used, batter boards are to be set at maximum twenty-five foot (25') intervals and grades transferred to the boards with a transit, level, or line level. Setting pipes to grade by use of "pop" levels or carpenter levels will not be permitted.

15. Extent of Open Excavation

The extent of excavation open at any one time shall be controlled by OSHA regulations and by existing conditions and location of work area.

16. Traffic Officers

The City will not provide traffic officers for this project. The contractor shall employ flaggers and shall be responsible for all traffic maintenance.

17. Limitation of Operations

The Contractor shall conduct the work at all times in such a manner and in such sequence as will assure the least interference with traffic. He shall not open up work to the prejudice or detriment of work already started. The Engineer may require the Contractor to finish a section on which work is in progress before work is started on any additional sections, if finishing such section is essential to public convenience.

The Contractor shall be required to construct his roadway subbase concurrent to his trench backfilling operation.

Waste and surplus material shall not be stockpiled, but shall be disposed of in areas as designated in Section 203.06, Waste Areas, of the Supplemental Specifications.

18. Dust Control For Street

Calcium chloride shall be spread only on disturbed unpaved areas. Calcium chloride shall not be spread on paved areas that are covered by granular material. These areas shall be swept clean of all granular material. Dust on paved areas shall be controlled with water before sweeping.

19. Trench Pavement Replacement

The Contractor shall be responsible for repairing any trench pavement that has experienced excess settlement, cracking or opening of pavement joints. Repair may include overlay, removal of unacceptable material and complete replacement, joint sealing or recutting pavement as required. This work may be necessary after final acceptance of the work and prior to expiration of the maintenance bond. This work shall be done at no additional cost to the City.

20. City of Auburn's Street Excavation

The Contractor shall be responsible for obtaining and completing the Street Opening Application through the public works office. The contractor will be obligated to pay all fees and provide a bond.

21. Questions Regarding Plan and Documents

Questions from prospective bidders relative to this Contract shall be directed to:

Submit technical questions in writing to the attention of: Chris Branch P. E. @ 207 200-2126, e-mail: cbranch@sebagotechnics.com no later than 5 business days before the scheduled bid opening.

Questions received after this time will not be addressed. Responses from the City that substantially alter this bid will be issued in the form of a written addendum to all bid holders registered at the City. Oral explanations or interpretations given before the award of this contract will not be binding. Receipt of any addenda must be acknowledged in writing as part of a proposal. Each bidder shall be responsible for ensuring that they have received any and all addenda. The City shall not assume responsibility for the receipt by the Contractor for any addenda.

22. As-Built Information

The Contractor shall keep daily records of all work. Upon completion of the project, the Contractor shall deliver to the Engineer Red lined As-Built Plans with all changes and required information. Final payment will not be made until Engineer receives the As-Built Plans and service lead information.

23. Waste Material

All waste material shall be removed from the site and the area left clean upon completion of work. Any equipment or structures damaged by the Contractor shall be repaired or replaced at no additional cost to the City. The Contractor shall notify the City of the final waste disposal location and if so located in the City shall be responsible to provide evidence of all necessary local fill permits and State permits at no extra cost to the City.

25. Quality Assurance

The Contractor shall be responsible at all times for maintaining top quality assurance during performance of his work. Particular attention to compaction shall be paid during backfilling operation. Strict adherence to Section 203 and 304 of the Maine Department of Transportation Standard Specifications will be required for all subgrade and subbase/base operations.

26. Sanitary Facilities

The Contractor shall provide self-contained toilet units in sufficient numbers for use of all persons involved in the work.

27. Bids

No bids shall be withdrawn within a period of sixty (60) days after the opening of the bids.

28. Subsurface Soils Information

The Contractor shall make his own investigations regarding the actual location and/or nature of such information and shall not rely on nor make claims for any extra payments based on the information shown on the drawings.

29. Unauthorized Use of Fire Hydrants

Use of fire hydrants shall be in accordance with Auburn-Saco Water District Requirements. The contractor is responsible for all requirements including cost. Any costs shall be considered incidental to the work.

30. Project Funding

Contractors and sub-contractors should note that this project is being funded in part by (EDA) funds. As such, the resulting contractor and subcontractors will be required to meet all additional requirements of the EDA funds.

31. Working Drawings

Submittals and shop drawings, defined as Working Drawings in the Standard Specifications Section 101.2 Definitions, shall be provided to the Engineer for review and approval. Requirements and timelines for working drawing review shall be in accordance with Section 105.7 of the Standard Specifications.

32. Davis Bacon Wage Rates

Federal Wage Rates, Davis-Bacon Act as amended (40 U.S. C 276a- 276a-5) apply to this project. All laborers and mechanics employed by contractors or subcontractors, including employees of other governments, on construction work assisted under this contract, and subject to the provisions of the federal acts and regulations listed in this paragraph, shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act. It is the responsibility of the Contractor, before bid opening, to request, if necessary, any additional information on Wage Rates for those trades people who are not covered by the applicable Wage Rates, but who may be employed for the proposed work under this contract. This project is being administered locally through the Maine Department of Transportation Locally Administered Projects Program. The contractor is responsible for becoming familiar with and utilizing the Elation Software the MDOT utilized for certified payrolls. The contractor shall complete the certified payrolls using the Elation Software weekly. Failure to utilize the Elation system will result in delays and nonpayment of contractor requisitions by the City.

SUPPLEMENTAL SPECIFICATIONS

SECTION 101

CONTRACT INTERPRETATION

Scope of Section

This Section contains abbreviations, definitions, and general rules of interpretation and shall apply with the following additions or modifications.

101.2 Definitions

Chief Engineer

The definition in the Standard Specifications shall be deleted and replaced with the following. Chief Engineer shall mean the City Engineer, City of Auburn, Maine, acting directly or through his or her duly authorized representatives, who are responsible for the design of the project.

Closeout Documentation

Submit the amount of monies paid to DBE subcontractors to meet Contract DBE goals with "DBE Goal Attainment Verification Form."

Commissioner

The definition in the Standard Specifications shall be deleted and replaced with the following: Commissioner shall mean the Director of Public Works, City of Auburn, Maine.

Department

The definition in the Standard Specifications shall be deleted and replaced with the following: Department shall mean the Department of Public Works, City of Auburn, Maine acting through its Director or through his duly authorized representative.

SECTION 102

BIDDING

Scope of Section

This Section includes requirements related to eligibility to Bid and the Bidding process from advertisement to Bids, through Bid Opening, to the analysis of Bids.

102.1.4 Qualifications of Bidder

The following paragraph will be added as Section 102.1.4: The City reserves the right to reject any bid if the evidence submitted by, or the investigation of such bidder, fails to satisfy the City that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein. The City reserves the right to reject any or all bids if it would be in the public interest to do so. "The City reserves the right to substantiate bidder's qualifications, capability to perform, availability, past performance record and verify that the bidder is current in its financial obligations to the City."

102.3 Examination of documents, site and other information

This subsection shall be amended by the addition of the following paragraph: Plans, Specifications and Proposal Forms may be examined on the City of Auburn website at www.auburnmaine.gov/pages/government/bid-notice. The contractor will need to download and print the documents to obtain design plans and bid specifications.

102.5.1 Questions from Bidders

This subsection shall be amended to read as follows: Bidders shall direct all technical or Engineering questions including requests for explanations or interpretation or for the use of products or methods other than those described in the specifications in writing to the City Planning Office not later than five (5) working days prior to the date designated for the opening of the bids. All answers to such requests will be made as addenda to the contract and will be issued in writing to all Bidders.

No oral interpretation will be given to the contract documents.

102.5.2 Bidder's Duty To Notify Department If Ambiguities Discovered

Bidders shall not take advantage of any ambiguity, error, omission, conflict, or discrepancy ("ambiguity, etc.") relating to the Bid Documents, Geotechnical Information, site conditions, or any other information that may significantly affect the cost, quality, Conformity, or timeliness of the Work. If a Bidder discovers any such ambiguity, etc., it must notify the Bid Contact Person immediately in writing. Failure to provide such notice constitutes a waiver of any claim for entitlement for additional compensation or time related to such ambiguity, etc.

102.7.1 Location and Time

This subsection shall be amended to read as follows: Each proposal shall be submitted, document intact, in a sealed envelope. The envelope shall be clearly marked to indicate the name of the Bidder, contract name, bid number and be addressed to Derek Boulanger Purchasing Agent at the Finance Department, Auburn City Hall, 60 Court Street Auburn, Maine 04210. Bid documents shall be in clearly marked sealed envelopes titled- AUBURN INDUSTRIAL PARK (2013); Proposals may be mailed or delivered in person, but they shall be filed prior to the time and at the place specified in the Notice to Contractors. Proposals received after the time for opening of bids will be returned to the bidder unopened.

102.7.2 Effects of Signing and Delivery of Bids

This subsection shall be amended by the addition of the following: Corporations will be required to affix their corporate seal on their proposals.

SECTION 103

AWARD AND CONTRACTING

Scope of Section

This Section includes requirements related to the final determination of Bid responsiveness and Award and execution of the Contract.

103.3.2 Notice of Determination

This subsection shall be amended by the addition of the following paragraph: The City reserves the right to reject any bid if the evidence submitted by, or the investigation of such bidder, fails to satisfy the City that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein. The City reserves the right to reject any or all bids if it would be in the public interest to do so. A proposal which includes a combination of abnormally low and abnormally high unit prices, which results in an unbalanced bid, may be rejected. "The City reserves the right to substantiate bidder's qualifications, capability to perform, availability, past performance record and then verify that the bidder is current in its financial obligations to the City."

103.4 Notice of Award

This subsection shall be amended to read as follows: The award of contract, if it be awarded, shall be made within sixty (60) days after the opening of proposals to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by mail at the address shown on his proposal, that his bid has been accepted and that it is the City's intent to award him the contract.

SECTION 104

GENERAL RIGHTS AND RESPONSIBILITIES

Scope of Section

This Section sets forth certain rights and responsibilities of the Department and the Contractor that are generally applicable to all contracts. This Section is not all inclusive and additional rights and responsibilities are set forth elsewhere in the Contract.

104.2.3 Authority of Project Manager and Resident

This subsection shall be amended by the addition of the following paragraph: The Resident Engineer or Resident Inspector will not be responsible for nor issue directions regarding the Contractor's safety precautions or programs; nor will they issue directions relative to, or assume control over any aspect of the methods, techniques or procedures of construction.

104.4.6 Utility coordination

A Pre-construction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications is not required.

AERIAL

No Aerial Utility adjustments are anticipated as part of this project. All above ground utility locations (hydrants, poles, guys, etc.) will be reviewed for compliance with the Department's Above Ground Pole Policy following the completion of the paving operation. Any above ground utility locations not meeting the Department's Above Ground Pole Policy will require relocation to the proper offset.

SUBSURFACE

Communication Companies may have buried cables within the project limits. These cables should not have any impact to construction because of the scope of work. If this scope changes in any way the Contractor shall notify the Communication Companies at least five (5) days prior to any excavating operations to allow the utility to determine the cable locations in that area. Any damage to the buried cable caused by the Contractor during construction shall be repaired at the contractor's expense.

GAS MAINS

No know gas mains are located within the project limits.

UTILITY SIGNING

Any utility working within the construction limits of this project shall ensure that the traveling public is adequately protected at all times. All work areas shall be signed, lighted, and traffic flaggers employed as determined by field conditions. All traffic controls shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, as issued by the Federal Highway Administration.

SAFE PRACTICES AROUND UTILITY FACILITIES

The Contractor shall be responsible for complying with M.R.S.A. Title 35-A, Chapter 7-A Sections 751 - 761 Overhead High-Voltage Line Safety Act. Prior to commencing any work that may come within ten (10) feet of any aerial electrical line; the Contractor shall notify the aerial utilities as per Section 757 of the above act.

DIG SAFE

The Contractor shall be responsible for determining the presence of underground utility facilities prior to commencing any excavation work and shall notify utilities of proposed excavation in accordance with M.R.S.A. Title 23 §3360-A, Maine "Dig Safe" System.

MAINTAINING UTILITY LOCATION MARKINGS

The Contractor will be responsible for maintaining the buried utility location markings following the initial locating by the appropriate utility or their designated representative.

Refer to Project Directory of Contacts

104.5.10 Warranty and Maintenance Bonds

This subsection shall be amended to read as follows: Warranty and Maintenance Bonds are be required of the Contractor or the subcontractor for specified items that the Department deems appropriate. The Bond must name the "City of Auburn" as a holder. The Contractor shall provide a copy of said bond to the Department as part of the projects closeout documentation prior to final acceptance. Should the subcontractor be required to provide a Warranty or Maintenance Bond, the Contractor hereby authorizes the Department to directly contact Landscape Subcontractor and/or its Surety in the event of a failure of the bonded item to perform as specified. The amount and duration of the Warranty and Maintenance bond for each project will be stated in the contract agreement.

SECTION 105

GENERAL SCOPE OF WORK

Scope of Section

This Section contains Work requirements that are generally within the scope of all Projects. These include provisions related to health and safety, traffic control, maintenance of Work, hauling of Materials and Equipment, construction surveying, Working Drawings, the environment, historic and archeological considerations, equal opportunity and civil rights, and other federal requirements. This Section is not all-inclusive. The scope of these items is often described more specifically and fully elsewhere in the Contract and in other specific items that appear elsewhere.

SECTION 106

QUALITY

Scope of Section

This Section contains general provisions related to the Quality of Work including roles, standards, Materials, Quality Control, Acceptance, Non-conforming Work, and warranties.

SECTION 108

PAYMENT

Scope of Section

This Section contains general provisions related to payment including measurement of quantities, progress payment, retainage, the right to withhold payment, and other payment-related items.

108.3 Retainage

This subsection reads as follows: The City will retain 10% of each approved Progress Payment. Upon Substantial Completion, the amount of retainage will be reduced to 2% of the total amount due the Contractor plus any additional amount necessary to cover punch list items. The final 2% retainage shall be held during the one-year warranty period.

The City may hold, temporarily or permanently, retainage as needed to reflect amounts due the City under the Contract and to assure timely Completion of the Work in Conformity with the Contract.

Upon Completion of Physical Work, the Contractor may request that the City reduce retainage. The City may grant or deny such request as it deems desirable and prudent. Otherwise, retainage will be held until Final Acceptance.

108.4.1 Price Adjustment for Hot Mix Asphalt

No price adjustments for hot mix asphalt will be permitted on this project. The contractors per ton bid price shall hold for the duration of this contract.

Hot Mix Asphalt: The quantity of hot mix asphalt will be determined from the quantity shown on the delivery slips collected on site by the City.

108.8 Final Payment

This subsection is revised by adding the following paragraphs: Prior to final payment the following will be accomplished:

- A. The Contractor and the Engineer shall jointly inspect the project to assure completion of all items including Punch List.
- B. The Contractor shall submit Record Drawings indicating all changes and additions made during construction.
- C. Waivers of Lien will be provided to the City for the project.
- D. The Contractor shall submit the Warranty and Maintenance Bonds in the amount specified in the contract.
- E. Contractor shall submit all Service Lateral Records.
- F. A Final Clean-up will be completed. No payment will be made for the final clean-up and the cost thereof shall be considered incidental to the appropriate item.
- G. A Final Acceptance Notification will then be forwarded to the Contractor for the project along with the Final Payment.

SECTION 110

INDEMNIFICATION, BONDING, AND INSURANCE

Scope of Section

This Section contains general requirements for indemnification, bonding, and insurance by the Contractor.

110.2 Bonding

This subsection is amended by the addition of the following: whenever the word "Treasurer of the State of Maine" appears in the Standard Specifications, it shall mean the City of Auburn, Maine.

110.3 Insurance

This subsection shall be amended to read as follows: Before work is started under the contract, the Contractor will be required to file with the City of Auburn, a Certificate of Insurance, executed by an insurance company or companies satisfactory to the City and licensed by the State of Maine Insurance Department to do business in the State of Maine, stating that the Contractor carries insurance in accordance with the following requirements and stipulations:

- A. Workers' Compensation Insurance: With respect to all the operations the Contractor performs and all those performed for him by subcontractors, the Contractor or the subcontractor shall carry Workers' Compensation Insurance or shall qualify as a self-insurer with the State of Maine Industrial Accident Commission, all in accordance with the requirements of the laws of the State of Maine.
- B. Commercial General Liability: Operations under the Contract Documents, whether such operations be by themselves or by any Subcontractor under them, requires insurance to be written with a limit of liability of not less than \$1,000,000 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$1,000,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of liability of not less than \$500,000 for all property damage sustained by any one person in any one accident, and a limit of liability of not less than \$500,000 aggregate for any such damage sustained by two or more persons in any one accident. The insurance certificate shall also name the City as additional insured on Liability portions (not W/C).
- C. Automobile Liability Insurance: The contractor shall carry Automobile Liability Insurance covering the operation of all motor vehicles, including those hired or borrowed, used in connection with the contract, covering bodily injury liability of not less than four hundred thousand dollars (\$400,000.) for all damages arising out of bodily injuries to or death of one person, and covering property damage liability for a limit of not less than four hundred thousand dollars (\$400,000.) for all damages arising out of injury to or destruction of property in one accident or occurrence.
- D. Blasting: When explosives are to be used in the prosecution of the work, the insurance required under paragraphs (b), (c), and (d) above shall also contain provisions for protection, in the amounts stated, against damage claims due to such use of explosives.
- E. Execution and Limitation: Each policy shall be signed by the President and Secretary of the insurance company and shall be countersigned by a licensed resident agent in the State of Maine as an authorized representative of the company.
- F. Claims: Each insurance policy shall state that the insurance company shall agree to investigate and defend the insured against all claims for damages, even if groundless.
- G. Compliance: with the requirements of this subsection may be met by procurement of insurance covering all work under contract with the City or may be met by procurement of separate insurance for each individual contract. In either case a Certificate of Insurance shall be filed for each contract to show evidence that all required insurance has been obtained.
- H. Termination or Change of Insurance: Each insurance policy shall be endorsed to provide that the insurance company shall notify the City by certified mail at least 30 days in advance of cancellations or of any change in the policy. No change shall be made without prior written approval of the City. The Contractor shall keep all the

required insurances in continuous effect until 31 days after the date of final acceptance of the project or until such time as may be established by the City.

- I. Contractual Liability Insurance: The Contractor shall carry Contractual Liability Insurance covering the liability he has assumed under the contract to indemnify and save harmless the City of Auburn, its officers and employees with respect to bodily injuries in or death of any person or persons or injury to or destruction of property. The limits for such insurance shall be not less than those specified for Commercial General Liability Insurance in paragraph (b) above.

- J. Separate performance and payment bonds in the full amount of the bid and the following insurance certificates shall be executed and presented for approval: insurance coverages for Contractor's Liability Insurance shall have \$1,000,000 limits. Evidence of proper Worker's Compensation Insurance and Blast Damage Insurance, if applicable, must also be presented for approval.

SECTION 203

EXCAVATION AND EMBANKMENT

The provisions of Section 203 of the Standard Specifications shall apply with the following additions and modifications:

203.01 Paragraph (a) shall be modified to read as follows:

- a. Common excavation shall consist of removing all material encountered in grading the project within the limits of construction and in driveways, which is not otherwise classified and paid for. Common excavation shall include the removing and disposing of boulders, solid mortared stone masonry, and concrete masonry when each is less than 2 m³ [2 yd³] in volume and all soft and disintegrated rock which can be removed with ordinary excavating machinery. It shall include grubbing, which consists of the removing and disposing of all stumps, roots, bushes, grass, turf or other objectionable material and it shall include berm ditches and cut slope downspouts.

Common excavation shall include muck removal, which shall consist of excavating and disposing of saturated or unsaturated mixtures of soils and organic matter not suitable for embankment foundation material regardless of moisture content.

203.04 General

The Contractor shall excavate rock if encountered to the lines and grades indicated on the drawings, shall dispose of the excavated material, and shall furnish acceptable material for backfill in place of the excavated rock, if required.

In general, rock in pipe trenches shall be excavated so as to be not less than six inches (6") from the pipe after it has been laid. If needed, before the pipe is laid, the trench shall be backfilled to the established trench profile with thoroughly compacted, suitable material or, when so specified or indicated on the drawings, with the same material as that required for bedding the pipe, furnished and placed at no additional cost to the City.

203.042 Disposal of Excavated Rock

Excavated rock may be used in backfilling trenches subject to the following limitations:

1. Pieces of rock larger than permitted under the section titled Excavation and Embankment. Section 203.01 shall not be used for this purpose.
2. The quantity of rock used as backfill in any location shall not be so great as to result in the formation of voids.
3. Rock backfill shall not be placed within 18 inches of the surface of the finish grade.

203.043 Backfilling Rock Excavations

When rock has been excavated and the excavation is to be backfilled, the backfilling above normal depth shall be done as specified under the “Excavation and Embankment, Section 203”. If material suitable for backfilling is not available in sufficient quantity from other excavations, the Contractor shall furnish suitable material from outside sources, under pay item 203.25 “Granular Borrow”.

203.06 Waste Area

This subsection is revised to read as follows:

1. Surplus Earth and Rock Excavation: The disposal of surplus earth and rock unacceptable as trench backfill materials and excavated rock shall be the responsibility of the Contractor.

203.18 Method of Measurement

In the fifth paragraph of this section, the sentence stating, “when measured in vehicles, the quantity for payment shall be 80 percent of the quantity determined for earth”.

203.19 Basis of Payment

This subsection shall be amended by the addition of the following paragraphs:

Payment shall be full compensation for furnishing all labor, materials and equipment necessary for excavation, test excavation, backfilling, pavement replacement, disposal of materials and the protection of the utilities.

Common Borrow used for preload can be later redistributed and used for embankment areas. There will be no direct payment for additional borrow used to fill and grade embankment areas.

There will be no direct measurement for common excavation. Common Excavation is a Lump Sum Item

Common Borrow, for Wetland Fill is Plan Quantity.

Payment will be made under:

Pay Item		Pay Unit
203.2001	Common Excavation Plan Quantity	Lump Sum
203.24	Common Borrow, for Wetland Fill-Plan Quantity	Lump Sum
203.241	Common Borrow, for Preload/Embankments Fill-Plan Quantity	Lump Sum
203.25	Granular Borrow, As Ordered by Resident Engineer	Cubic Yard
203.26	Gravel Borrow, for Preload	Lump Sum
203.31	Crushed Stone 703.11 (Type "A") (Overdepth)	Cubic Yard
203.10	Gravel Borrow	Cubic Yard

SECTION 206

STRUCTURAL EXCAVATION

The provisions of Section 206 of the Standard Specifications shall apply with the following additions and modifications:

206.01 Description

For Structural Earth Excavation, only that trench excavation for pipe below the established trench profile as indicated on the Typical Trench Detail shall be included under this section. Trench excavation to the established profile shall be considered as incidental to the appropriate pipe item.

For Structural Rock Excavation, the trench shall be excavated to the established trench profile as indicated on the Typical Trench Detail. The payment width for Structural Rock Excavation shall be as described in Section 206.04, of the Supplemental Specifications.

- (a) Drainage and Minor Structures shall include sewer and storm drain pipes, culverts, manholes and catch basins, structural plate culverts, box and pipe culverts, underdrains, berm ditches, cut slope down spout ditches, culvert end walls, concrete steps and other minor structures.
- (b) Special Backfill. The Contractor shall furnish, place and compact special backfill material as indicated on the plans or as directed and herein specified.

The special backfill shall be a sandy, granular material and shall meet the requirements of Section 703.06 (b) Aggregated Subbase – Sand of the Supplemental and Standard Specifications.

The special backfill shall be spread in layers of uniform thickness not exceeding eight inches (8”) before compaction and moistened and allowed to dry. Then it shall be thoroughly compacted by means of suitable power driven tampers or other power driven equipment to a uniform density of 95% of maximum density.

206.02 Construction Methods

The fourth (4th) paragraph of the Standard Specifications shall be modified to read as follows:

When the foundation is to be placed on solid rock, the rock shall be excavated to a firm surface, either level, stepped or serrated. In trenches for sewer and storm drain pipes, culverts, manholes, and catch basins, box and pipe culverts, structural plate pipes and structural plate pipe arches, when solid or disintegrated rock or boulders are encountered, the rock shall be excavated to a minimum depth of six inches (6”) below the bottom of the proposed pipe or structure, unless otherwise indicated on the plans or ordered. The six inch (6”) level below the bottom of the proposed pipe shall be defined as “Established Trench Profile”. For installation of underdrain, the rock shall be excavated to a minimum of three inches (3”) below the bottom of the proposed pipe, unless otherwise ordered. Underdrain shall be installed at the proper elevation in accordance with Section 605 and the typical underdrain detail.

206.04 Method of Measurement

Paragraph (a) of the Standard Specifications shall be deleted and the following paragraphs added.

When Structural Rock is encountered for sewer and storm drains, the quantity to be measured for payment will be the amount actually excavated to the “Established Trench Profile”

When Structural Rock is encountered for manholes and catch basins, headwalls, steps, structural plate pipes and arches and other drainage structures, other than sewer and storm drains and underdrains, the quantity to be measured for payment will be the amount actually excavated to the “Established Trench Profile”, provided the maximum allowable horizontal dimensions do not exceed those bounded by vertical surfaces eighteen inches (18”) outside the lines of the base as shown on the plans.

206.05 Basis of Payment

When material is needed for trench backfill below the established trench profile as indicated on the plans or as ordered, this material shall be crushed stone and paid for under Pay Item 203.31.

Material used for Special Backfill and Crushed Stone for Pipe Bedding shall be backfilled as indicated on the plans or as ordered, and shall be incidental to the cost of the pipe.

Pay Item	Payment will be made under:	Pay Unit
206.061	Structural Earth Excavation (Overdepth)	Cubic Yard
206.07	Structural Rock Excavation	Cubic Yard

SECTION 304

AGGREGATE BASE AND SUBBASE COURSE

The provisions of Section 304 of the Standard Specifications shall apply with the following additions and modifications:

304.02 Aggregate

This item is to furnish and install additional aggregate material required for full depth reconstruction of streets, bituminous driveway aprons and where the aggregate is not incidental to other items.

Sources of Aggregate and preliminary test results shall be submitted ten working days prior to any placement of material on the job. Failure of these preliminary tests will be grounds for rejection of material from that source. Aggregates will be tested on the job and shall meet these specifications as the material is incorporated into the work.

The maximum size stone for Aggregate Subbase Type D shall be 3”.

The Contractor option to substitute Type E Aggregate Subbase for Type D below 9” is not allowed on this project.

304.7 Basis of Payment

The cost of the laboratory tests which fail to meet the specifications shall be the responsibility of the Contractor.

The raking out of any large stones from the aggregate base course layer shall be incidental to the contract.

Aggregates placed for pipe trench backfill and trench repair are incidental to the pipe items and no separate payment will be made.

Pay Item	Payment will be made under:	Pay Unit
304.09	Aggregate Base Course – Crushed, Type “A”	Cubic Yard
304.10	Aggregate Subbase Course – Gravel, Type “D”	Cubic Yard

SECTION 401

HOT MIX ASPHALT PAVEMENTS

The provisions of MDOT Special Provision Division 400 Pavements, Section 401 Hot Mix Asphalt Pavement, dated March 10, 2010, shall apply with the following additions and modifications:

401.11 Preparation of Existing Surface

Add the following paragraphs.

Where pavement placed under this Contract joins an existing pavement, the existing pavement, when directed by the Engineer, shall be removed a minimum of 1' wide and 1-1/2" deep in order to provide a vertical butt joint. The butt joint shall also be tack coated.

All vertical cuts in existing pavements shall be treated with an approved asphaltic tack coat material. The surface of the joint once completed shall be flush with the existing pavement.

All work necessary for the construction of this joint shall be considered incidental to the related job items. Vertical joints in HMA 19.0 MM and HMA 12.5 MM shall be offset from each other horizontally by at least one foot (1').

All work under this section shall be considered incidental to this Contract.

SECTION 403

HOT BITUMINOUS PAVEMENT

The provisions of Section 403 of the Standard Specifications shall apply with the following additions and modifications:

403.05 Basis of Payment

Pay Item	Payment will be made under:	Pay Unit
403.207	Hot Mix Asphalt, 19.0 mm	Ton
403.208	Hot Mix Asphalt, 12.5 mm	Ton

SECTION 409

BITUMINOUS TACK COAT

The provisions of Section 409 of the Standard Specifications shall apply with the following additions or modifications and special provisions:

409.08 Method of Measurement:

The application of the bituminous tack coat shall be incidental to the application of Hot Bituminous Pavement and shall require no measurement or payment.

409.09 Basis of Payment:

The payment for this work shall be incidental to Hot Bituminous Pavement.

SECTION 603

PIPE CULVERTS AND STORM DRAINS

The provisions of Section 603 of the Standard Specifications shall apply with the following additions and modifications:

603.011 Description

This work shall consist of the construction of storm drains, sewer pipes by means of trenched or trenchless installation, casing pipe, service leads, force mains hereinafter referred to as "pipe" as shown on the plans, details, and specified herein.

The Contractor shall install locating/warning tape over the centerline of all sanitary, storm, and combined sewer pipes including main lines, service leads and catch basin laterals both within the right of way and outside of the established street as required by City ordinance. Both a green warning tape and a number 10 or 12 gauge single strand coated wire shall be installed at a maximum of 24 inches below finish surface grade for the entire length of the pipe. Magnetic warning tape may be used in place of the separate warning tape and wire. The end of all services stubs shall be recorded on the included sheet entitled Storm Sewer Service Location and submitted to the City upon completion of the work.

All connections shall be made in conformance with the Plumbing Code of the City of Portland and the Maine State Plumbing Code.

All culvert work within streams must take place between July 15th and September 30th.

603.012 Materials

This section shall be revised to read as follows:

Materials shall meet the requirements specified for the various subsections of the specifications and listed below:

Smooth Bore High Density Polyethylene (HDPE): Pipe shall meet the requirements of Standard Specifications Section 703.06 with the additions and modifications.

1. HDPE pipe shall meet all specifications per 4” -10”AASHTO standards M 252 and 12” – 24” Type C M 294.
2. HDPE pipe shall meet the ASTM F 405 standard for corrugated Polyethylene Tubing and fittings.
3. HDPE pipe shall meet the ASTM F 667 specifications for 8” thru 15” pipe.
4. HDPE pipe will have walls that are smooth bore.
5. All HDPE pipe shall have a soil-tight joint system that meets the ASTM F477 standard.
6. Couplings, Tee’s and fittings must meet AASHTO M294 standards. All connections must be a rubber gasket tight seal. No collared connections accepted. The gaskets shall be of a composition and texture that is resistant to common ingredients of storm water,

including oils and groundwater, and that will permanently endure the conditions of the proposed use

7. Acceptable Manufacturers include:
 - a. Advanced Drainage Systems
 - b. Hancor Technology
 - c. Lane Companies
 - d. Or equal to above

Polyvinyl Chloride (PVC) SDR-35 Pipe: Pipe shall meet the following requirements.

1. PVC SDR-35 pipe shall be Ring Type Sewer Pipe SDR-35.
 2. PVC SDR-35 pipe shall meet ASTM D3034 for sizes 4” thru 15”.
 3. PVC SDR-35 shall meet ASTM F-679 for sizes 18” thru 27”.
 4. PVC SDR-35 rubber seals shall meet ASTM D 3212.
 5. All fittings and pipe shall have a water tight push on joint and must meet the ASTM D3034 and ASTM D3212 standards.
 6. Minimum "pipe stiffness" at 4% deflection shall be 46 psi for all sizes when tested in accordance with ASTM D2421.
 7. All fittings and connectors shall meet ASTM D3034 and ASTM D 3212 Standards.
 8. Joints shall be push-on rubber gasketed “Bell and Spigot” type joints using factory installed elastomeric ring gaskets. The gaskets shall be securely fixed into place by the manufacturer so that they cannot be dislodged during joint assembly.
 9. The gaskets shall be of a composition and texture that is resistant to common ingredients of storm sewer, including oils and groundwater, and that will permanently endure the conditions of the proposed use.
 10. Where perforated pipe is used perforations will be ½” holes every 5” on center and two rows at 120° apart.
 11. Acceptable Manufacturers include:
 - a. J-M Manufacturing
 - b. IPEX
 - c. Or equal to above
-
1. The gaskets shall be of a composition and texture that is resistant to common ingredients of storm water, including oils and groundwater, and that will permanently endure the conditions of the proposed use.
 2. Standard retainer glands will not be permitted for use with class 150 PVC pipe.

Aggregate Base - Screened or Crushed

Stand. Spec. 703.06

(a) Aggregate Subbase – Sand

Stand. Spec. 703.06

(b) Crushed Stone for Pipe Bedding

Stand. Spec. 703.30

Granular Borrow for Trench Backfill

Stand. Spec. 703.19

603.031 Construction Requirements

603.0311 Polyvinyl Chloride (PVC) Sewer and Storm Drain Pipe and Fittings:

Each pipe length shall be inspected before being laid. Pipe shall be laid to conform to the lines and grades indicated on the drawings. Each pipe shall be so laid as to form a close joint with the next adjoining pipe and bring the inverts continuously to the required grade.

Bell holes shall be excavated or provided in the base material to receive the bell or coupling so that only the barrel of the pipe receives bearing pressure from the supporting material.

When each pipe has been properly bedded, enough of the backfill material shall be placed and compacted between the pipe and the sides of the trench to hold the pipe in correct alignment.

No pipe or fitting shall be permanently supported on blocks, wedges, boards or stones.

All joints shall be made in a dry trench and in accordance with the manufacturer's recommendations.

Pipe bundles shall be stored on a flat surface so as to support the barrels evenly. This is important as in hot weather PVC pipe will deflect or warp causing installing problems in line and grade. If a warped section is found, the Contractor shall not use such length of pipe.

In order to ensure proper compaction, alignment, and grade, and eliminate any construction problems that may be encountered, the Contractor shall be required to use only the 12-1/2 foot lengths of PVC pipe.

Pipe shall remain stacked in the original shipping bundles, and only pipe taken off the bundle for one day's laying shall be distributed along the trench.

PVC pipe will not bond to concrete or mortar and therefore connection to a cast-in-place or brick manhole and catch basin shall be made as shown on the pipe connection detail of the project plans.

603.0312 Smooth Bore High Density Polyethylene Storm Drain Pipe and Fittings:

Each pipe length shall be inspected before being laid. Pipe shall be laid to conform to the lines and grades indicated on the drawings. Each pipe shall be so laid as to form a close joint with the next adjoining pipe and bring the inverts continuously to the required grade.

When each pipe has been properly bedded, enough of the backfill material shall be placed and compacted between the pipe and the sides of the trench to hold the pipe in correct alignment.

No pipe or fitting shall be permanently supported on blocks, wedges, boards or stones.

All joints shall be made in a dry trench and in accordance with the manufacturer's recommendations.

603.13 Cleaning Inspection and Testing

603.131 General: Pipe may be inspected at the manufacturing plant, or on the work site and shall be subject to rejection at any time, even though sample pipe may have been accepted as satisfactory at the manufacturing plant.

All pipe shall be subject to thorough inspection and tests. All tests shall be made in accordance with the methods prescribed by, and the acceptance or rejections shall be based on, applicable ASTM specifications.

Pipe will be inspected upon delivery and all pipe which does not conform to the requirements of this contract will be rejected and shall be immediately removed from the work area by the Contractor.

Unsatisfactory pipe will be permanently rejected.

If such pipe is found in the pipeline, it shall be removed and replaced or encased in a Class A concrete collar or envelope as directed, at no additional cost to the City.

An inspection of the interior of all mainline pipe and catch basin lateral connections installed as part of the project shall be completed prior to final paving.

603.132 Cleaning

All storm drains shall be thoroughly cleaned with high pressure water jetting equipment.

Movable dams shall be permitted for the purpose of cleaning storm sewers. Movable dams shall be collapsible in case of upstream line surcharging, so the dam can be removed to allow flow to resume down the storm sewer line. Movable dams must be the same size as the inside diameter of the storm sewer line being cleaned, and have a flexible scraper attached so a thorough cleaning of debris is accomplished.

603.133 Final Storm Sewer Testing

Work Included:

- a. Final storm sewer testing work includes the performance of testing and inspecting each and every length of storm sewer pipe, pipe joint and each item of appurtenant construction.
- b. Perform testing at a time acceptable to the Engineer, which may be during the construction operations, after completion of all pipe laying operations.
- c. Provide all labor and equipment and any other necessary apparatus for the testing.

Execution:

- a. General:

1. All storm sewers and appurtenant work, in order to be eligible for acceptance, shall be subjected to tests that will determine the degree of horizontal and vertical alignment.
 2. Thoroughly clean and flush all storm sewer lines to be tested, prior to initiating test procedures.
 3. Perform all tests and inspections in the presence of the Engineer, or others assigned by the engineer, to ensure accuracy and compliance.
- b. Remedial Work:
1. Perform all work necessary to correct deficiencies discovered as a result of testing and or inspections.
 2. Completely retest all portions of the original construction on which remedial work has been performed.
- c. Alignment Tests:
1. Perform tests for the correctness of horizontal and vertical alignment on each and every length of gravity storm sewer pipeline between manholes.
 2. Alignment tests to be conducted after all pipe has been installed and backfilled.
 3. The observation test shall be conducted after all upstream work has been completed and the pipeline cleaned of debris.
 4. Notify the Engineer at least 24 hours in advance of the proposed observation testing.
 5. Introduce water into the storm sewer lines to be tested from the upstream manhole prior to the observation test but no more than 24 hours in advance of the test.
 6. Beam a source of light, acceptable to the Engineer, through the pipeline from both ends and the Engineer will directly observe the light in the downstream, and/or upstream manhole of each test section.
 7. The length of pipe between manholes, diameter of pipe and amount of light observed in the manhole at the end of each pipe section will determine acceptance of the alignment test by the Engineer.
 8. The amount of vertical and horizontal deflection shall not be greater than the ASTM allowance and (manufacture's recommendations) for the pipe being tested.
 9. NO STANDING WATER SHALL BE ALLOWED. The presence of standing water shall be cause for rejection of that pipe (including manhole) section.
 10. Improper alignment will be corrected by re-excavation and resetting of pipe.
- d. Pipe Deflection:
1. Pipe provided under this specification shall be installed so there is no more than a maximum deflection of 5.0 percent. Such deflection shall be computed by multiplying the amount of deflection (normal diameter less minimum diameter when measured) by 100 and dividing by the nominal diameter of the pipe.
 2. The Contractor shall wait a minimum of 30 days after completion of a section of storm sewer, including placement and compaction of backfill, before measuring the amount of deflection by pulling a specially designed gage assembly through the completed section. The gage assembly shall be in accordance with the recommendations of the pipe manufacturer and be acceptable to the Engineer.

3. Should the installed pipe fail to meet this requirement, the Contractor shall do all work to correct the problem as the Engineer may require without additional compensation.
- e. Television Inspection Tests (gravity storm sewers)
1. Where television inspection testing is required, test procedures shall be in compliance with the requirements outlined in Specification Section.
 2. No standing water shall be allowed. The presence of standing water may be cause for rejection of that pipe.
 3. Any standing water, detectable leaks, improper joints or any other unacceptable feature detected by the television inspection will be corrected by re-excavation and resetting pipe at no additional cost to the owner.

603.14 Method of Measurement

Pipes will be measured by the linear foot in place within the limits specified below.

For measurement purposes the end of the pipe in closed structures will be considered at the inside face of the wall, and in masonry headwalls it will be considered to be at least the face of the headwall.

603.15 Basis of Payment

The accepted quantities of pipe for culverts, drains and sewers will be paid for at the contract unit price per linear foot, complete in place.

Payment for trench excavation, including pavement removal, to the established trench profile indicated on the plans, with the exception of structural rock excavation, shall be considered incidental to the contract and now separate payment will be made.

All dewatering, sheeting, shoring, or temporary bracing required for trench excavation and to support adjacent utilities or structures is incidental to this item and no separate payment will be made.

Payment for approved undercuts below the established trench profile will be paid for under Item 206.061 - Structural Earth Excavation.

Rock excavation will be paid for as Structural Rock Excavation as specified in Section 206 of the Supplemental Specifications.

Backfilling of the trench shall be incidental to this item.

Full depth trench repair including granular backfill, aggregate subbase and base course, hot bituminous pavement as shown on the trench repair details, shall be incidental to this item.

Saw cutting pavement for trench excavation shall be incidental to this item.

If any excavation including a utility trench is extended to a depth of more than fifteen (15) feet, it will be necessary to have the sideslopes or trench sheeting and shoring designed by a professional engineer registered in the State of Maine. No extra payment will be made for the engineered sheeting and shoring methods, materials or equipment used by the Contractor. All trench stabilization shall be considered incidental to the applicable pay items.

The cost of locating/warning tape including installation shall be considered incidental to the appropriate pipe item.

The cost of Clay Anti-Seep Collar including installation shall be considered incidental to the appropriate pipe item.

The accepted quantity of service leads will be paid for at the contract unit price per linear foot of pipe installed, complete in place. The amount bid for each lateral shall be full compensation for furnishing all labor, equipment, tools, adapters, reducers, and materials necessary to satisfactorily connect all laterals.

Payment for trench excavation, with the exception of structural rock excavation, will be included in this Item.

Pipe bedding materials, filter fabric, backfilling and backfilling materials shall also be included in this item for payment.

Payment will be made under:

Pay Item		Pay Unit
603.158	12 Inch Diameter PVC or HDPE Storm Drain Pipe	Linear Foot
603.159	12 Inch Diameter PVC or HDPE Culvert	Linear Foot
603.179	18 Inch Diameter HDPE Storm Drain Pipe	Linear Foot
603.198	24 Inch Diameter HDPE Storm Drain Pipe	Linear Foot
603.200	24 Inch Diameter RCP Storm Drain Pipe	Linear Foot
603.201	36 Inch Diameter RCP Storm Drain Pipe	Linear Foot
603.30	42 Inch Diameter RCP Storm Drain Pipe	Linear Foot

SECTION 603.5

SANITARY SEWERS

The provisions of Section 603 of the Standard Specifications shall apply with the following additions and modifications:

603.011 Description

This work shall consist of the construction of sewer pipes by means of trenched or trenchless installation, casing pipe, service leads, force mains hereinafter referred to as "pipe" as shown on the plans, details, and specified herein.

The Contractor shall install locating/warning tape over the centerline of all sanitary, and combined sewer pipes including main lines, force mains service lateral both within the right of way and outside of the established street as required by City ordinance. Both a green warning tape and a number 10 or 12 gauge single strand coated wire shall be installed at a maximum of 24 inches below finish surface grade for the entire length of the pipe. Magnetic warning tape may be used in place of the separate warning tape and wire. The end of all services stubs shall be recorded on the included sheet entitled Storm and Sanitary Sewer Service Location and submitted to the City upon completion of the work.

All connections shall be made in conformance with the Plumbing Code of the City of Auburn and the Maine State Plumbing Code.

603.012 Materials

This section shall be revised to read as follows:

Materials shall meet the requirements specified for the various subsections of the specifications and listed below:

Polyvinyl Chloride (PVC) SDR-35 Pipe: Pipe shall meet the following requirements.

1. PVC SDR-35 pipe shall be Ring Type Sewer Pipe SDR-35.
2. PVC SDR-35 pipe shall meet ASTM D3034 for sizes 4" thru 15".
3. PVC SDR-35 rubber seals shall meet ASTM D 3212.
4. All fittings and pipe shall have a water tight push on joint and must meet the ASTM D3034 and ASTM D3212 standards.
5. Minimum "pipe stiffness" at 4% deflection shall be 46 psi for all sizes when tested in accordance with ASTM D2421.
6. All fittings and connectors shall meet ASTM D3034 and ASTM D 3212 Standards.
7. Joints shall be push-on rubber gasketed "Bell and Spigot" type joints using factory installed elastomeric ring gaskets. The gaskets shall be securely fixed into place by the manufacturer so that they cannot be dislodged during joint assembly.
8. The gaskets shall be of a composition and texture that is resistant to common ingredients of storm sewer, including oils and groundwater, and that will permanently endure the conditions of the proposed use.
9. Acceptable Manufacturers include:

- a. J-M Manufacturing
- b. IPEX
- c. Or equal to above

<u>Crushed Stone for Pipe Bedding</u>	Stand. Spec. 703.30
<u>Crushed Stone (overdepth)</u>	Stand Spec. 703.31
<u>Granular Borrow for Trench Backfill</u>	Stand. Spec. 703.19
<u>Pipe Insulation:</u> Shall be 2” Thick Extruded Polystyrene Insulation conforming to AASHTO M 230	

603.031 Construction Requirements

603.0311 Polyvinyl Chloride (PVC) Sewer Pipe and Fittings:

Each pipe length shall be inspected before being laid. Pipe shall be laid to conform to the lines and grades indicated on the drawings. Each pipe shall be so laid as to form a close joint with the next adjoining pipe and bring the inverts continuously to the required grade.

Bell holes shall be excavated or provided in the base material to receive the bell or coupling so that only the barrel of the pipe receives bearing pressure from the supporting material.

When each pipe has been properly bedded, enough of the backfill material shall be placed and compacted between the pipe and the sides of the trench to hold the pipe in correct alignment.

No pipe or fitting shall be permanently supported on blocks, wedges, boards or stones.

All joints shall be made in a dry trench and in accordance with the manufacturer's recommendations.

Pipe bundles shall be stored on a flat surface so as to support the barrels evenly. This is important as in hot weather PVC pipe will deflect or warp causing installing problems in line and grade. If a warped section is found, the Contractor shall not use such length of pipe.

In order to ensure proper compaction, alignment, and grade, and eliminate any construction problems that may be encountered, the Contractor shall be required to use only the 12-1/2 foot lengths of PVC pipe.

Pipe shall remain stacked in the original shipping bundles, and only pipe taken off the bundle for one day's laying shall be distributed along the trench.

PVC pipe will not bond to concrete or mortar and therefore connection to a cast-in-place or brick manhole and catch basin shall be made as shown on the pipe connection detail of the project plans.

603.13 Cleaning Inspection and Testing

603.131 General: Pipe may be inspected at the manufacturing plant, or on the work site and shall be subject to rejection at any time, even though sample pipe may have been accepted as satisfactory at the manufacturing plant.

All pipes shall be subject to thorough inspection and tests. All tests shall be made in accordance with the methods prescribed by, and the acceptance or rejections shall be based on, applicable ASTM specifications.

Pipe will be inspected upon delivery and all pipe which does not conform to the requirements of this contract will be rejected and shall be immediately removed from the work area by the Contractor.

Unsatisfactory pipe will be permanently rejected.

If such pipe is found in the pipeline, it shall be removed and replaced or encased in a Class A concrete collar or envelope as directed, at no additional cost to the City.

An inspection of the interior of all mainline pipe lateral connections installed as part of the project shall be completed prior to final paving.

603.133 Final Sanitary Sewer Testing

Work Included:

- a. Final storm and sanitary sewer testing work includes the performance of testing and inspecting each and every length of storm and sewer pipe, pipe joint and each item of appurtenant construction.
- b. Perform testing at a time acceptable to the Engineer, which may be during the construction operations, after completion of all pipe laying operations.
- c. Provide all labor and equipment and any other necessary apparatus for the testing.
- d. Provide a low pressure air test of the sanitary sewer line.

Execution:

- a. General:
 1. All sanitary sewers and appurtenant work, in order to be eligible for acceptance, shall be subjected to tests that will determine the degree of horizontal and vertical alignment.
 2. Thoroughly clean and flush all sanitary sewer lines to be tested, prior to initiating test procedures.
 3. Perform all tests and inspections in the presence of the Engineer, or others assigned by the engineer, to ensure accuracy and compliance.
- b. Remedial Work:
 1. Perform all work necessary to correct deficiencies discovered as a result of testing and or inspections.
 2. Completely retest all portions of the original construction on which remedial work has been performed.
- c. Alignment Tests:
 1. Perform tests for the correctness of horizontal and vertical alignment on each and every length of gravity sewer pipeline between manholes.
 2. Alignment tests to be conducted after all pipe has been installed and backfilled.
 3. The observation test shall be conducted after all upstream work has been completed and the pipeline cleaned of debris.
 4. Notify the Engineer at least 24 hours in advance of the proposed observation testing.

6. Beam a source of light, acceptable to the Engineer, through the pipeline from both ends and the Engineer will directly observe the light in the downstream, and/or upstream manhole of each test section.
 7. The length of pipe between manholes, diameter of pipe and amount of light observed in the manhole at the end of each pipe section will determine acceptance of the alignment test by the Engineer.
 8. The amount of vertical and horizontal deflection shall not be greater than the ASTM allowance and (manufacturer's recommendations) for the pipe being tested.
 9. NO STANDING WATER SHALL BE ALLOWED. The presence of standing water shall be cause for rejection of that pipe (including manhole) section.
 10. Improper alignment will be corrected by re-excavation and resetting of pipe.
- d. Pipe Deflection:
1. Pipe provided under this specification shall be installed so there is no more than a maximum deflection of 5.0 percent. Such deflection shall be computed by multiplying the amount of deflection (normal diameter less minimum diameter when measured) by 100 and dividing by the nominal diameter of the pipe.
 2. The Contractor shall wait a minimum of 30 days after completion of a section of storm sewer, including placement and compaction of backfill, before measuring the amount of deflection by pulling a specially designed gage assembly through the completed section. The gage assembly shall be in accordance with the recommendations of the pipe manufacturer and be acceptable to the Engineer.
 3. Should the installed pipe fail to meet this requirement, the Contractor shall do all work to correct the problem as the Engineer may require without additional compensation.
- e. Television Inspection Tests (gravity storm and sanitary sewers)
1. Where television inspection testing is required, test procedures shall be in compliance with the requirements outlined in Specification Section.
 2. No standing water shall be allowed. The presence of standing water may be cause for rejection of that pipe.
 3. Any standing water, detectable leaks, improper joints or any other unacceptable feature detected by the television inspection will be corrected by re-excavation and resetting pipe at no additional cost to the owner.
- f. Air Test:
- The pipe shall be pressurized to 5 pounds per square inch gauge (psig) greater than the pressure exerted by groundwater above the pipe. Once the pressure is stabilized, the minimum time allowable for the pressure to drop 1.0 psig shall be 5 minutes per every 100 feet of pipe plus (+) 5 minutes per each service connection.
- The test may be stopped if no pressure loss has occurred during the first 25% of the calculated testing time. If any pressure loss or leakage has occurred during the first 25% of the testing period, then the test shall continue for the entire test duration as outlined in this subparagraph or until failure.
- Add air until the internal air pressure of the sewer line is raised to approximately 5.5 psig. Allow the air pressure to stabilize. The pressure will normally drop until the temperature of the air in the line stabilizes.

603.14 Method of Measurement

Pipes will be measured by the linear foot in place within the limits specified below.

For measurement purposes the end of the pipe in closed structures will be considered at the inside face of the wall, and in masonry headwalls it will be considered to be at least the face of the headwall.

603.15 Basis of Payment

The accepted quantities of pipe for culverts, drains, sewers and laterals will be paid for at the contract unit price per linear foot, complete in place.

Payment for trench excavation, including pavement removal, removal of concrete road base and cobbles where present, removal of steel trolley rails where present and removal of existing storm drains and sewers to the established trench profile indicated on the plans, with the exception of structural rock excavation, shall be considered incidental to the contract and now separate payment will be made.

The installation of masonry plugs or PVC caps for pipes to be abandoned within the trench limits or in manholes is incidental to this item.

All dewatering, sheeting, shoring, or temporary bracing required for trench excavation and to support adjacent utilities or structures is incidental to this item and no separate payment will be made.

Payment for approved undercuts below the established trench profile will be paid for under Item 206.061 - Structural Earth Excavation.

Rock excavation will be paid for as Structural Rock Excavation as specified in Section 206 of the Supplemental Specifications.

Backfilling of the trench shall be incidental to this item.

Full depth trench repair including granular backfill, aggregate subbase and base course, hot bituminous pavement as shown on the trench repair details, shall be incidental to this item.

Saw cutting pavement for trench excavation shall be incidental to this item.

If any excavation including a utility trench is extended to a depth of more than fifteen (15) feet, it will be necessary to have the sideslopes or trench sheeting and shoring designed by a professional engineer registered in the State of Maine. No extra payment will be made for the engineered sheeting and shoring methods, materials or equipment used by the Contractor. All trench stabilization shall be considered incidental to the applicable pay items.

The cost of locating/warning tape including installation shall be considered incidental to the appropriate pipe item.

The accepted quantity of will be paid for at the contract unit price per linear foot of pipe installed, complete in place. The amount bid per linear foot shall be full compensation for furnishing all labor, equipment, tools, adapters, reducers, and materials necessary to satisfactorily connect all new and existing service laterals.

Payment for trench excavation, with the exception of structural rock excavation, will be included in this Item.

Pipe bedding materials, filter fabric, backfilling and backfilling materials shall also be included in this item for payment.

Payment will be made under:

Pay Item		Pay Unit
603.140	12 Inch Diameter PVC Sanitary Sewer	Linear Foot
603.145	6 Inch Diameter PVC Sanitary Sewer	Linear Foot

SECTION 604

MANHOLES, INLETS, AND CATCH BASINS

The provisions of Section 604 of the Standard Specifications shall apply with the following additions and modifications:

604.01 Description

This work shall consist of the construction, alteration, repair, or placement of manholes, inlets, and catch basins including covers, frames brick masonry, inverts and the application of waterproofing in conformance with the dimensions elevations and locations shown on the plans and specified herein.

604.02 Materials

This section shall be revised to read as follows:

Materials shall meet the requirements specified for the various subsections of the specifications and listed below:

604.021 Precast Concrete Manholes: Precast Manholes and Catch basins shall meet the requirements of Standard Specifications Section 604.02 with the additions and modifications.

604.0211 Quality Assurance:

A. Precast Manhole Basin Base, Barrel and Top Sections:

1. Conform to ASTM C478-97.
2. Average strength of 4,000 psi at 28 days.
3. Testing:
 - a. Determine concrete strength by tests on 6 inch by 12 in vibrated test cylinders cured in the same manner as the bases, barrels and tops.
 - b. Have tests conducted at manufacturer's plant or at an approved testing laboratory.
 - c. Have not less than 2 tests made for each 100 vertical feet of precast catch basin sections.

B. Precast Catch Basin Base, Barrel and Top Sections:

1. Conform to ASTM C478-72 (AASHTO M199-795) except as modified herein or as directed by the Engineer.
2. Average strength of 4,000 psi at 28 days.
3. Testing:
 - a. Determine concrete strength by tests on 6 inch by 12 in vibrated test cylinders cured in the same manner as the bases, barrels and tops.
 - b. Have tests conducted at manufacturer's plant or at an approved testing laboratory.
 - c. Have not less than 2 tests made for each 100 vertical feet of precast catch basin sections.

- C. Drain Manhole Frames and Covers:
 - 1. Manhole Covers: Acceptable Manufacturers:
 - a. East Jordan Iron Works: Type 1177, Round.
 - b. Approved equals.
 - 2. Dimensions and Style shall conform to the Drawings, Standard castings
 - a. Covers - solid with sewer in 3-inch letters diamond pattern.
 - b. Frame - 24-inch diameter clear opening, with flange bracing ribs.
 - c. Minimum weight of frame and cover shall be 430 lbs
 - 3. Made of cast iron conforming to ASTM A48-76, Class 30 minimum and shall have machined bearing surfaces to prevent rocking.
 - 4. Castings shall be smooth with no sharp edges.
 - 5. Constructed to support an HS-20 wheel loading.
- D. Catch Basin Frames and Covers
 - 1. Acceptable Manufacturers:
 - i. East Jordan Iron Works: Type 1177
 - 2. Made of cast iron conforming to ASTM A48-76, Class 30 minimum and shall have machined bearing surfaces to prevent rocking.
 - 3. Castings shall be smooth with no sharp edges.
 - 4. Constructed to support an HS-20 wheel loading.
- E. Masonry:
 - 1. Brick: Shall comply with ASTM Standard Specifications for Sewer Brick (made from clay or shale), Designation C32, for Grade SS, hard brick.
 - 2. Cement: ASTM C-150.
 - 3. Hydrated Lime: ASTM C-207.
 - 4. Sand: ASTM C33.
- F. Manhole Waterproofing:
 - 1. Acceptable Manufacturers:
 - a. Minwax Fibrous Brush Coat, Minwax Co., N.Y., N.Y.
 - b. Tremco 121 Foundation Coating, Tremco Mfg. Co., Newark, N.J.
 - c. Or equal.

604.0212 Products

- A. Dimensions: Dimensions, shall be as shown on the Drawings:
 - 1. Base & Riser Sections:
 - a. Diameter: As shown on the Drawings.
 - b. Length: As required.
 - c. Wall Thickness: Not less than 5 inches.
 - d. Joints: Bell-and-spigot or tongue-and-groove formed on machine rings to insure accurate joint surfaces.
 - 2. Tops:
 - a. Diameter: Eccentric cone type, 24 inches I.D. at top, 48 inches I.D. at bottom unless otherwise shown on the Drawings.
 - b. Length: 4 feet.
 - c. Wall thickness: Not less than 5 inches at the base, tapering to not less than 8 inches at the top.

- d. Joints: Bell-and-spigot or tongue-and-groove formed on machine rings to insure accurate joint surfaces.
 - e. Exterior face of cone sections shall not flare out beyond the vertical.
 - 3. Flat Slab Tops:
 - a. Location: Where shallow installations do not permit the use of a cone-type top and where indicated on the Drawings. Exterior face of cone sections shall not flare out beyond the vertical.
 - b. Slab thickness: Not less than 6 inches.
 - c. Constructed to support an HS-20 wheel loading.
- B. Precast Catch Basin Sections
 - 1. Use flat tops or eccentric cones as appropriate. Exterior face of cone sections shall not flare out beyond the vertical.
 - 2. Joints: Bell-and-Spigot or tongue-and-groove formed on machine rings to insure accurate joint surfaces.
 - 3. Constructed to support an HS-20 wheel loading.
 - 4. The base section shall have a 2-foot minimum and 3-foot maximum sump.
- C. Precast Catch Openings:
 - 1. Provide openings in the risers to receive pipes entering the catch basin of the types and materials shown on the plans.
 - 3. Make openings at the manufacturing plant or cut openings in the field.
 - 4. Provide flexible boot or solidly fill annular spaces around pipes entering the catch basin with non-shrink grout or other material approved by the City engineer.
 - 5. Size: To provide a uniform annular space between the outside wall of pipe and the riser.
 - 6. Location: To permit setting of the entering pipes at the correct elevations.
- D. Drain Manhole Openings:
 - 1. Provide openings in the risers to receive pipes entering the structure.
 - 2. Make openings at the manufacturing plant.
 - 3. Size: To provide a uniform annular space between the outside wall of pipe and riser.
 - 4. Location: To permit setting of the entering pipes at the correct elevations.
 - 5. Openings shall have a flexible watertight union between pipe and the manhole base.
 - a. Cast into the manhole base and sized to the type of pipe being used.
 - b. Type of flexible joint being used shall be approved by the Engineer. Install materials according to the Manufacturer's instructions.
 - 1. Lock Joint Flexible Manhole Sleeve made by Interpace Corporation.
 - 2. Kor N Seal made by National Pollution Control System, Inc.
 - 3. Press Wedge II made by Press-Seal Gasket Corporation.
 - 4. A-Lok Manhole Pipe Seal made by A-Loc Corporation.
 - 5. Or equivalent.
- E. Joints:
 - 1. Joint gaskets to be flexible self seating butyl rubber joint sealant installed according to manufacturer's recommendations. Install a double row of joint sealants for every manhole joint. For cold weather applications, use adhesive with joint sealant as recommended by manufacturer. Acceptable Materials:
 - a. Kent-Seal No. 2

- b. Ram-Nek
- c. Or equivalent.
- 2. Joints between precast sections shall conform to related standards and manufacturer's instructions.

F. Manhole Waterproofing:

- 1. The exterior surface of all manholes shall be given two coats of bituminous waterproofing material at a application rate of 75 to 100 square feet per gallon, per coat.
- 2. The coating shall be applied after the manholes have cured adequately and can be applied by brush or spray in accordance with the manufacturer's written instruction.
- 3. Sufficient time shall be allowed between coats to permit sufficient drying so that the application of the second coat has no effect on the first coat.

G. Masonry

- 1. Brick:
 - a. Sound, hard, uniformly burned, regular and uniform in shape and size, compact texture, and satisfactory to the Engineer.
 - b. Immediately remove rejected brick from the work.
 - 1. Adjust frame to grade with bricks laid flat with minimum of 2 course and a maximum of 5 courses. Contractor shall provide sufficient brick courses to allow frames to be adjusted to the future road profile grades shown on the plans.
- 2. Mortar:
 - a. Composition (by volume):
 - 1. 1 part portland cement.
 - 2. 1/2 part hydrated lime.
 - 3. 4-1/2 parts sand.
 - b. The proportion of cement to lime may vary from 1:1/4 for hard brick to 1:3/4 for softer brick, but in no case shall the volume of sand exceed 3 times the sum of the volume of cement and lime.
- 3. Cement shall be Type II portland cement.
- 4. Hydrated lime shall be Type S.
- 5. Sand:
 - a. Shall consist of inert natural sand.
 - b. Grading:

<u>Sieve</u>	<u>Percent Passing</u>
3/8-inch	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 50	10-30
No. 100	2-10
Fineness Modulus	2.3 - 3.1

604.03 Construction Requirements

This section shall be revised to read as follows:

A. Performance

1. Precast Manhole and Catch Basin Sections:
 - a. Perform jointing in accordance with manufacturer's recommendations and as specified or approved by the Engineer.
 - b. Install barrels and tops level and plumb.
 - c. Make all joints water tight. Apply two rows of joint gasket material per barrel joint.
 - d. Cut openings (as required) carefully to prevent damage to barrel sections and tops. Damaged barrel sections and tops shall be replaced by the Contractor at no additional expense to the City.
 - e. For cold weather applications, install joint sealant per manufacturer's recommendations.
 - f. Install manhole barrel sections and top so that the steps are in alignment.
2. Manhole Invert Channels
 - a. Smooth and semicircular in shape.
 - b. Make changes in direction of flow with smooth curves having a radius as large as permitted by the size of the manhole.
 - c. Stop the pipes at the inside face of the manhole where changes of direction occur.
 - d. Form invert channels and shelf with brick. Fill the void area for constructing the brick shelf with mortar. Stone, gravel, or other material will not be permitted to fill the void area for constructing the brick shelf.
 - e. Shape invert to make smooth transition in vertical grade.
 - f. Slope brick shelf towards the flow channel.
3. Masonry:
 - a. Laying Brick:
 - i. Use only clean bricks in brickwork for manholes and catch basins.
 - ii. Moisten the brick by suitable means until they are neither so dry as to absorb water from the mortar or so wet as to be slippery when laid.
 - iii. Lay each brick in a full bed and joint of mortar without requiring subsequent grouting, flushing, or filling, and thoroughly bond as directed.
 - iv. Construct all joints in a neat workmanlike manner, construct the brick surfaces inside the manholes so they are smooth with no mortar extending beyond the bricks and no voids in the joints. Maximum mortar joints shall be ½ inch.
 - b. Curing:
 - i. Protect brick masonry from drying too rapidly by using burlaps which are kept moist, or by other approved means.
 - ii. Protect brick masonry from the weather and frost as required.
4. Frames and Grates:
 - a. Set all frames in a full bed of mortar, true to grade and concentric with the catch basin opening.
 - b. Completely fill all voids beneath the bottom flange to make a watertight fit.

- c. Place a ring of mortar at least one inch thick around the outside of the bottom flange, extending to the outer edge of the catch basin all around its circumference.
- d. Clean the frame seats before setting the covers in place.
- 5. Plugging and Patching
 - a. Fill all exterior cavities with non-shrink grout and with bituminous waterproofing once the concrete and mortar has set.
 - b. Touch up damaged water proofing.
- 6. Bedding and Backfill:
 - a. Bedding material of manholes and catch basins shall be a minimum of 6 inches of crushed stone.
 - b. Crushed Stone: Shall be a uniform material consisting of clean, hard, and durable particles or fragments, free from vegetable or other objectionable matter, containing angular pieces, as are those which come from a mechanical crusher. Gradation requirements shall be as follows:

<u>Sieve</u>	<u>Percent Passing</u>
2 inch	100
1½ inch	95-100
¾ inch	35-70
⅜ inch	10-30
No. 4	0-5

- c. Backfill 18 inches all around manholes and catch basins with select fill.
- d. Select Fill: Shall consist of well graded granular material free of organic material, loam, wood, trash, snow, ice, frozen soil and other objectionable material and having no rocks with a maximum dimension of over 4 inches and meeting the following gradation requirements:

<u>Sieve</u>	<u>Percent Passing</u>
4 inch	100
3 inch	90-100
No. 4	20-55
No. 40	5-40
No. 200	0-8

Concrete Blocks shall not be used in any way in the construction or alteration modifications of manholes or catch basins.

All manhole bases, barrel sections and top sections shall be marked, by the manufacturer, with the appropriate manhole station (and offset if applicable) and the street name, if more than one street is incorporated within a single contract.

Special precautions shall be taken to provide adequate ventilation and attending personnel for the safety of all workers who may be required to enter existing sewers or sewers under construction.

It is emphasized to the Contractor that sanitary sewer and drainage construction under this contract shall be coordinated with existing sewer facilities so that continuous service and handling of existing flows is accomplished.

In the existing fifth paragraph, first sentence of that Subsection delete only “Metal frames and traps”, and substitute therefore “Metal frames, steps, other appurtenances, and traps”.

Catch basins shall be constructed as shown on the contract drawings. Unless otherwise indicated, catch basins shall have A-4 inlet stones which shall be incidental to the contract unit price of the structure.

After the manhole has been assembled in place, all lifting holes and all exterior joints shall be filled and pointed with an approved non-shrinking grout or approved bituminous mastic as shown on the construction drawings.

604.05 Method of Measurement

Under this subsection the following sections shall be amended as follows:

1. Subsection (a) of the Standard Specifications shall be deleted and the following paragraph shall be included:
 - a. Complete structures. Each catch basin and manhole will be measured per each complete.
 - b. Subsections (c),(d) and (e) of the Standard Specifications shall be deleted.
 - c. Each existing drainage structure to be abandoned or removed will be incidental to the installation of new drainage structures.
 - d. Each existing drainage structure to be removed and replaced with a new drainage structure will be considered as one unit, including inlet stone, pipe elbows or hoods where indicated, tipdowns, frame, grate, adjustment to grade, connection of underdrain to basin and installation of new inlet/outlet.

604.06 Basis of Payment

The following paragraphs shall be added:

The cost of excavation and backfill of all catch basins or manholes, either new, abandoned, or removed and/or replaced shall be included in the cost of the specific work for each type of structure.

The cost of maintaining flows in existing sewer lines and manholes and any maintenance and cleaning of said sewers that may be required as a result of new manhole installations shall be incidental to the related pay item and no separate payment for this work will be made.

Payment will be made under:

Pay Item

Pay Unit

604.07	Install 4 Foot Diameter Catch Basin	Each
604.15	Install 4 Foot Diameter Drain Manhole	Each
604.151	Install 4 Foot Diameter Sewer Manhole	Each

SECTION 609

CURB

The provisions of Section 609 of the Standard Specifications shall apply with the following additions and modifications:

609.01 Description

This work shall include all five inch (5") straight and circular Vertical Curb Type #1 to be set including new tipdown curb and transition curb. Material shall be in accordance with Section 712.04 except that drill holes through the curb will not be allowed.

609.03 Vertical Stone Curb, Terminal Section and Transition Sections

All joints of the curb shall have a four inch (4") by eight and one half inch (8-1/2") pad on the back side. The pad shall be filter fabric such as that used for underdrain or for roadway stabilization. The pad shall be placed in full contact with the curb from a half inch (1/2") below top of curb to two inches (2") below gutter grade and backfilled to hold in place.

609.09 Method of Measurement

All proposed new straight and circular curb to be set will be measured by the linear foot along the face of the curb, complete in place. Tipdown and transition curb will be measured by each, complete in place.

609.10 Basis of Payment

The accepted quantity of new curb will be paid for at the contract unit price, complete in place. This price shall include the cost of excavation, bedding, concrete slurry, and all labor, materials and equipment necessary to satisfactorily complete the work.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
609.11	Install New 5 Inch Vertical Granite Curb, Type 1 – Straight	Linear Foot
609.12	Install New 5 Inch Vertical Granite Curb, Type 1 - Circular	Linear Foot
609.237	Install New 5 Inch – 7 Foot Tipdown Curb, Type 1	Each
609.261	Install New 5 Inch – Transition Curb	Each
609.311	Bituminous Curb	Linear Foot

SECTION 610

RIP RAP

610.01 Description: This work shall include the following:

- a. Furnish all materials, labor and equipment necessary to install the all rip rap aprons, outfalls/stilling basins, and slopes. Rip Rap associated with the Wet-Pond shall include in the lump sum price for the Wet-Pond.
- b. Cost shall include all excavation, granular bedding, geotextile fabric, and plain rip rap as detail on design plans

633.02 Method of Measurement

The accepted rip rap will be paid for at the contract lump sum price. This cost includes full compensation for furnishing and installing all material, labor and equipment as shown in the included design plans.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
610.08	Plain Rip and Bedding	Lump Sum

SECTION 615

LOAM, SEED AND MULCH

The provisions of Section 615 of the Standard Specifications shall apply with the following additions and modifications:

615.01 Description

This work shall consist of loaming and seeding areas as shown on the plans or as required.

Loam and its applications shall conform to the requirements of Section 615 of the Standard Specifications. Loam shall have a finished depth of four (4") inches, unless noted otherwise, and shall be screened through a one (1") inch square mesh screen.

Seeding shall be Method Number 2 and shall conform to the requirements of Section 618 of the Standard Specifications. The Contractor shall be required to continually seed area of loam and seed until a satisfactory growth of grass is established.

If so required, all areas to be loamed and seeded shall be mulched with an approved wood cellulose fiber compatible with recommended hydroseeding practices. This mulch shall be applied simultaneously with the seed and shall be of sufficient quantity to protect the seed and hold moisture in to insure a satisfactory growth of grass.

The specifications for the wood cellulose fiber proposed to be used shall be presented to the Engineer for acceptance at least ten (10) days (working days) prior to the application thereof.

The Contractor shall also be responsible for mowing any and all areas loamed and seeded. The mowings will be required if deemed necessary to insure and maintain a satisfactory growth of grass and shall not exceed two mowings.

615.05 Method of Measurement

The first paragraph of this subsection will be modified as follows: Delete "per cubic yard" and replace with "per lump sum."

615.06 Basis of Payment

The accepted quantity of loam, seed and mulch will be paid for at the contract lump sum price. This price shall include the cost of excavation and all labor, materials, and equipment necessary to satisfactorily complete the work. All costs for watering, furnishing labor and equipment for mowing will not be paid for separately, but shall be considered as incidental to this pay item.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
615.071	Loam, Seed & Mulch	Lump Sum

SECTION 627

PAVEMENT MARKINGS

The provisions of Section 627 of the Standard Specifications shall apply with the following additions and modifications:

627.01 Description

This work shall consist of providing pavement lines and markings in all areas of roadway reconstruction and where existing pavement markings are damaged or removed by Contractor's operations. See notes contained on the plans.

627.10 Basis of Payment

The accepted quantity of pavement marking lines will be paid for at the plan quantity per linear foot.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
627.71	4" White Pavement Marking Line, Plan Quantity	Linear Foot
627.75	White or Yellow & Curb Marking	Square Foot

SECTION 629

HAND LABOR

The provisions of Section 629 of the Standard Specifications shall apply with the following additions and modifications:

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
629.05	Hand Labor, Straight Time	Hour
629.06	Mason, Straight Time	Hour

SECTION 631

EQUIPMENT RENTAL

The provisions of Section 631 of the Standard Specifications shall apply with the following additions and modifications:

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
631.105	Air Tool and Compressor (including operator)	Hour
631.12	All Purpose Excavator (including operator)	Hour
631.13	Bulldozer (including operator)	Hour
631.171	Truck - Small (including operator)	Hour
631.22	Front End Loader (including operator)	Hour
631.36	Foreman, Straight Time	Hour

SECTION 637

DUST CONTROL

637.01 Description:

This work shall consist of applying water and calcium chloride to control dust resulting from traffic and Contractor's operations.

637.06 Basis of Payment

The accepted will be paid for at the contract lump sum price. This cost includes full compensation for furnishing and applying water and calcium chloride as required.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
637.071	Dust Control	Lump Sum

SECTION 652

MAINTENANCE OF TRAFFIC

The provisions of Section 652 of the Standard Specifications shall apply with the following additions and modifications:

652.3.6 Traffic Control

Contractor shall maintain access to all drives during construction. Two-way traffic shall be maintained whenever possible on all streets. Alternating one-way flow will be permitted during certain construction operations with approval from the City.

652.7 Method of Payment

The accepted quantity of flagger time will be based upon the actual hours per daily flagger slip.

652.8 Basis of Payment

Preparation of traffic control plans, construction signage (including flashing arrow boards and variable message signs), barrels, cones, jersey barriers, flaggers, maintenance of traffic control devices, and other necessary incidentals to maintain traffic in accordance with the specifications and the MUTCD shall be paid for Lump Sum.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
652.38	Flaggers	Lump Sum
652.39	Work Zone Traffic Control	Lump Sum

SECTION 656

TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

The provisions of Section 656 of the Standard Specifications shall apply with no additions or modifications:

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
656.75	Temporary Soil Erosion and Water Pollution Control	Lump Sum

SECTION 659

MOBILIZATION

The provisions of Section 659 of the Standard Specifications shall apply with no additions or modifications.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
659.10	Mobilization	Lump Sum

DIVISION 700 - MATERIAL DETAILS
SECTION 703

AGGREGATES

The provisions of Section 703 of the Standard Specifications shall apply with the following additions and modifications:

703.06 (a) Aggregate Base:

Aggregate base - crushed, type "A" shall not contain particles of rock which will not pass the two inch (2") square mesh sieve.

703.06 (b) Aggregate Subbase:

Gravel subbase shall not contain particles of rock which will not pass the three inch (3") square mesh sieve, and shall conform to type "D" Aggregate, as listed in this subsection of the Standard Specifications.

703.18 Common Borrow:

Common borrow shall not contain any particle of bituminous material.

703.19 Granular Borrow:

Granular borrow shall contain no particles which will not pass a three inch (3") square mesh sieve.

703.20 Gravel Borrow:

Gravel borrow shall not contain particles of rock which will not pass three inch (3") square mesh sieve.

703.30 Crushed Stone for Pipe Bedding and Underdrain:

"Crushed Stone" shall be defined as rock of uniform quality and shall consist of clean, angular fragments of quarried rock, free from soft disintegrated pieces or other objectionable matter.

Crushed stone used as a bedding material for pipe and underdrain shall be uniformly graded and shall meet the following gradations.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieve
3/4 - inch-----	100
3/8 - inch-----	20 - 55
No. 4-----	0 - 10

For pipe sizes 42 inches and larger:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieve
1-1/4 - inch-----	100
3/8 - inch-----	20-55
No. 4-----	0-10

The stone shall be free from vegetable matter, lumps or balls of clay, and other deleterious substance.

SECTION 800

WETPOND AREA

800.01 Description

This work shall consist of the complete construction of the Wetpond Areas as shown on the attached plans, including the following:

- Excavation and Backfill
- Underdrain Pipes including Bedding and Filter Media
- Riprap Inlets and Outlets
- 10' wide Gravel Access Road
- Geotextile Fabric
- Control Structure and Connecting Outlet Pipes
- Gravel Bottom
- Borrow Material
- Erosion Control Blanket
- Entrance Gate

800.02 Basis of Payment

Wetpond area will be paid for at the Contractor's Lump Sum price. Such payment will be full compensation for the construction of the Wetpond area completed, including and not limited to all items described above.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
800.03	Wetpond Area	Lump Sum

SECTION 801

WETLAND IMPACT FILLS

801.01 Description

This work shall consist of grubbing and filling designated wetland impacts as shown on Lots 1 to 8. The wetlands shall be filled at least one foot above the existing top of bank surrounding the impacted area. In addition wetland fill shall be graded to eliminate any ponding of surface water. The wetland fill shall be installed to a height at least 12 inches above adjacent wetlands. This work shall include furnishing and installing common borrow fill, installing temporary haul road (if needed to reach impact area), and area restoration including seed & mulch.

801.02 Basis of Payment

The wetland fills will be paid for at the Contractor's Lump Sum price. Such payment will be full compensation for furnishing and installing common borrow fill completed in place.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
802.03	Wetland Fills	Lump Sum

SECTION 802

WATER SPECIFICATIONS

803.01 Description

The water materials will be obtained at no cost from the Auburn Water District. The pipe and some fittings will be delivered to the site and the other materials will be picked up, by the contractor at AWD, 268 Court St. Auburn Maine.

803.02 Method of Measurement

Linear foot price for water main, hydrant assembly, services stubs, gate valves, and tapping sleeve shall include all appurtenances necessary for installation. There is no separate payment for excavation, bedding, trust blocks, joint restraint, fitting, and all other labor, equipment and materials needed to have an operational system in place. Testing and Chlorinating/Disinfecting is incidental to all items.

803.03 Basis of Payment

The water main and its appurtenances will be paid for at the Contractor's Unit price. Such payment will be full compensation for furnishing and installing water mains, fitting, gate valves, tapping sleeve, and curb stops at the contractor's unit price

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
W1	12-inch Ductile Iron Water Main	Linear Foot
W2	2-inch Water Main and Gate Valves	Linear Foot
W3	6-inch Ductile Iron Service Stubs	Linear Foot
W4	2-inch Service Stubs w/curb stops	Linear Foot
W5	Hydrant Assembly, Inc fitting, gate valve, and connecting pipe	Each
W6	12-inch Gate Valve	Each
W7	6-inch Gate Valve	Each
W8	12" x 12" Tapping Sleeve & Gate Valve	Each

SECTION 803

Stream Mitigation

803.01 Description

The contractor shall mitigation the stream as described in Attachment “F”.

Additional Contractor Requirements:

- The Contractor shall be a Certified Contractor through the Maine Nonpoint Source Training and Resource Center.
- The Contractor shall have a minimum of 24 hours of training in Stream and Riparian Rehabilitation (list training provider).
- The Contractor shall have a minimum of 4 hours of Stream Habitat Improvement (list training provider).
- The Contractor shall have wetland delineation, wetland functional assessment and stream assessment capabilities.
- The contractor shall submit demonstrated experience with compensatory mitigation design and implementation involving creation, restoration, rehabilitation, enhancement, assessment and monitoring of wetlands, uplands, streams and vernal pools. The submittal shall include a description of the work, location of the work and who the work was done for.

Supplemental Stream Specifications:

- Prior to construction, all wetland and stream buffer areas shall be permanently marked in the field.
- Compensatory mitigation shall be initiated not later than 90 days after the project initiation with consideration for regulated restrictions for in stream work and completed not later than one year after the permitted wetland impacts unless the Corp-approved mitigation plan specifically states otherwise and compensation for the temporal impacts are appropriate.
- All work adjacent to the streams shall be done with Low Ground Pressure Equipment to minimize soil compaction and minimize overall disturbance.
- All work shall be done in compliance with MeDEP and USACOE permits issued for this project and all applicable laws, rules, and regulations.
- Stream mitigation work within the stream must take place between July 15th and September 30th.

803.02 Basis of Payment

The wetland fills will be paid for at the Contractor’s Lump Sum price. Such payment will be full compensation for mitigating stream as shown on Attachment F

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
809.03	Stream Mitigation	Lump Sum

SECTION 804

EDA PROJECT SIGN

804.01 Description

This work shall conform of EDA Specifications as show in Attachment G- Division 5.

804.02 Basis of Payment

The EDA Project Sign will be paid for at the Contractor's Lump Sum price. Such payment will be full compensation for furnishing and installing sign completed in place.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
804.03	EDA Project Sign	Lump Sum

SECTION 805

UNDERGROUND CONDUITS INSTALLATION

805.01 Description

This work shall conform to the Underground Cable Installation Detail shown on Sheet 12 of 12.

805.02 Basis of Payment

The Underground Conduit Installation will be paid for at the Contractor's linear foot price. Such payment will be full compensation for furnishing and installing all conduits in trench section also including sand bedding, and marker tape, completed in place.

Payment will be made under:

Pay Item

Pay Unit

805.03

Underground Conduit Installation

Linear Foot



ATTACHMENT A

Report on Subsurface and Support Investigation

March 11, 2010
07075

George M. Dycio, Economic Development Specialist
Auburn Business Development Corporation
P.O. Box 1188
Lewiston, ME 04243-1188

Report on Subsurface and Support Investigation
Proposed Access Road and Utilities, Auburn Industrial Park, Auburn, Maine

Dear George:

This report presents the results of our subsurface and support investigation for the proposed access road and utilities at the Auburn Industrial Park in Auburn, Maine.

Introduction

The site is located on the south side of Lewiston Junction Road and west of Kittyhawk Avenue in Auburn. The proposed access road extends approximately 3,100 feet from Lewiston Junction Road southeast into the industrial park. We understand that construction of the access road will include the installation of a 12-inch diameter PVC sewer and manholes, a 12-inch diameter ductile iron pipe water main and stormwater drains of HDPE having various diameters with associated structures. The roadway crosses several significant drainage swales at approximately Sta. 2+60; Sta. 14+25; Sta. 16+75; Sta. 18+40; Sta. 19+20; and Sta. 27+00. Cross drainage culverts will consist of reinforced concrete pipes (RCP) of various diameters. Fill heights of up to 14 feet will be required at the drainage swales. Depths below road surface to the inverts of pipes vary from 4.5 feet to 12.0 feet.

Subsurface Explorations

On January 14 and February 24, 2010, Gendron & Gendron (G&G) of Lewiston, Maine excavated 19 test pits, TP1 to TP18 and TP21. G&G excavated the test pits to depths below ground surface varying from 8.0 feet to 13.0 feet. Sebago Technics, Inc. monitored the test pits and prepared the logs included in Appendix A. Table 1 summarizes the results of test pits. G&G backfilled the test pits with the excavated soil.

Sebago Technics, Inc. determined the locations and ground surface elevations at test pits by survey methods.

The test pit logs and related information depict the subsurface conditions and water levels encountered at the locations and during the times indicated on the logs. Subsurface conditions at other locations may differ from those encountered in the test pits. The passage of time may result in a change in groundwater conditions at the test pits.

Subsurface Conditions

The test pits encountered five principal soil units at the site: forest mat, topsoil, sand, silt and clay. Encountered thickness and generalized descriptions of the strata encountered are presented below in order of increasing depth below ground surface. Due to the complexity of the deposition process, strata thickness will vary and may be absent at specific locations.

Forest Mat – Forest mat consists of leaves, pine needles and other organic debris. Encountered thickness varies from 0.1 foot to 0.2 foot.

Topsoil – Topsoil consists of brown silty SAND (SM) with roots. Encountered thickness varies from 0.3 foot to 1.0 foot.

Sand – Sand consists of gray brown to gray silty SAND (SM); to poorly-graded SAND (SP); to poorly-graded SAND with silt (SP-SM); to tan well-graded SAND with gravel (SW) deposited in a marine environment. Encountered thickness varies from 0.8 foot to more than 10.2 feet.

Silt – Silt consists of gray SILT with sand (ML); to sandy SILT (ML) deposited in a marine environment. Encountered thickness varies from 1.0 feet to greater than 5.8 feet.

Clay – Clay consists of gray brown mottled lean CLAY (CL); to gray lean CLAY (CL) deposited in a marine environment. Test pits penetrated up to 10.0 feet into the clay stratum.

Groundwater was encountered in the test pits at depths below ground surface varying from 2.0 feet to 6.0 feet. Observations of groundwater were made over a relatively short period of time and may not reflect the stabilized groundwater level. In addition, water levels at the site will vary with season, precipitation, temperature and construction activity in the area. Therefore, water levels during and following construction will vary from those observed in the borings.

Geotechnical Design Considerations

Pipe Support

We anticipate that the invert of pipes and structures will be located within the naturally deposited inorganic soils and fill. Based on the test pits and the anticipated invert depths, we anticipate the following subgrade soils at the invert of each pipe:

<u>MATERIAL</u>	<u>PIPELINE</u>	<u>APPROXIMATE LIMITS (STATION)</u>
Fill	Water	14+20 to 14+40
		16+75 to 16+95
		18+10 to 18+60
		18+95 to 19+35
		26+80 to 27+40

<u>MATERIAL</u>	<u>PIPELINE</u>	<u>APPROXIMATE LIMITS (STATION)</u>	
Fill	Water	29+40 to 29+65	
		30+85 to 31+05	
	Sewer	14+20 to 14+40	
		16+75 to 16+95	
		18+10 to 18+60	
		19+00 to 19+35	
		26+85 to 27+35	
		29+45 to 29+60	
		30+85 to 31+05	
		Storm Drain	2+66 to 2+79
14+10 to 14+60			
16+70 to 17+00			
18+00 to 18+65			
18+90 to 19+40			
26+80 to 27+40			
29+40 to 29+70			
30+80 to 31+00			
Sand	Water	0+15 to 11+60	
		14+40 to 14+65	
		16+65 to 16+75	
		16+95 to 17+30	
		17+80 to 18+10	
		18+60 to 18+95	
		19+35 to 19+60	
		21+60 to 26+80	
		27+40 to 29+40	
		29+65 to 30+85	
		Sewer	14+10 to 14+20
			14+40 to 14+65
	16+65 to 16+75		
	16+95 to 17+30		
	17+80 to 18+10		
	18+60 to 19+00		
	Sewer	19+35 to 19+55	
		22+15 to 26+85	
27+35 to 29+45			
29+60 to 30+85			

<u>MATERIAL</u>	<u>PIPELINE</u>	<u>APPROXIMATE LIMITS (STATION)</u>
Sand	Storm Drain	0+62 to 2+66
		9+00 to 14+10
		14+60 to 16+70
		17+00 to 18+00
		18+65 to 18+90
		19+40 to 20+00
		21+15 to 26+80
		27+40 to 29+40
		29+70 to 30+80
Clay	Water	11+60 to 14+20
		14+65 to 16+65
		17+30 to 17+80
		19+60 to 21+60
	Sewer	-0+21 to 14+10
		14+65 to 16+65
		17+30 to 17+80
		19+55 to 22+15
	Storm Drain	20+00 to 21+15

Soil strata limits were estimated by linear interpolation between test pits. Actual strata limits will vary from those indicated due to natural, non-linear variations between test pits.

Pipe Bedding

Sewer

We recommend that pipe bedding consist of ¾-inch crushed stone. Bedding should extend from 6 inches below the bottom of pipe up to the mid-height of the pipe. A non-woven geotextile separation fabric should be placed on the excavated subgrade and up the side walls of the excavation to the top of stone prior to placing bedding stone. We further recommend that low permeability dams of natural clay, bentonite or Portland cement concrete be constructed in the bedding. The maximum spacing of dams should be 300 feet to minimize groundwater flow through the bedding material.

Water

We recommend that the ductile iron water pipe be placed directly on the undisturbed subgrade without bedding.

Storm Drain

We recommend that pipe bedding consist of ¾-inch crushed stone. Bedding should extend from 6 inches below the bottom of pipe and a 6-inch thickness should completely surround the pipe. A non-woven geotextile separation fabric should be placed between the stone and the surrounding soil. We further recommend that low permeability dams of natural clay, bentonite or Portland cement concrete be constructed in the bedding. The maximum spacing of dams should be 300 feet to minimize groundwater flow through the bedding material.

Cross Culverts

We recommend that pipe bedding consist of ¾-inch crushed stone. Bedding should extend from 6 inches below the bottom of pipe up to the mid-height of the pipe. A non-woven geotextile separation fabric should be placed on the excavated subgrade and up the side walls of the excavation to the top of stone prior to placing bedding stone. We further recommend that at least one low permeability dam of natural clay, bentonite or Portland cement concrete be constructed in the bedding.

Trench Backfill

The utilities and cross culverts will be below the new roadway. We recommend the following special requirements pertaining to backfilling of the trenches below the paved roadway consistent with typical details:

1. From mid height of pipe to 12 inches above pipe, select granular fill.
2. From 12 inches above pipe to 29.5 inches below final grade, common fill.
3. For the minimum 29.5 inches below final grade; 18 inches of gravel fill subbase, 6 inches of gravel base, and 5.5 inches of hot mixed asphalt placed in two layers.

Select granular fill should consist of sand or gravel meeting the requirements of the Maine Department of Transportation Specifications for Highways and Bridges, 703.19 Granular Borrow. The maximum particle size should be 3 inches.

Common fill should consist of predominantly inorganic mineral soil free organic materials, loam, wood, trash and other objectionable material. The maximum particle size should be 10 inches. Common fill should be placed in uniform, approximately horizontal layers not to exceed 12 inches in loose measure. Each layer should be thoroughly compacted to at least 92 percent of the maximum dry density determined in accordance with ASTM Test Designation D1557. In our opinion, the silty to well-graded sand and the brown to gray brown clay will likely be acceptable for backfill. However, the saturated gray clay and silt excavated from the trench will be largely unworkable and unsuitable for use as trench backfill.

Roadway Design

Embankment Design

Roadway construction will include filling drainage swales (embankments) up to 14 feet high. We recommend that the embankments be constructed in general accordance with the latest edition of the State of Maine Department of Transportation (MDOT) Standard specifications, Section 203, with the variations outlined in the following paragraphs.

Unsuitable material including forest mat, topsoil, stumps, root balls and other organics should be removed prior to all filling and embankment construction. Typical depths below ground surface of forest mat and topsoil varies from 0.1 foot to 1.0 foot.

Due to the steep angle of the side slopes in fill areas, it is our opinion that the entire embankment should be compacted to the required density rather than some limited "core" portion of the fill. This can be specified by replacing Subsection 203.10, Paragraph 14, with the following paragraph: "Embankment fill should be placed in lifts which extend laterally beyond the limits of the design side slopes such that the specified degree of compaction is achieved within the limits of the completed embankment. The slopes should then be trimmed back to design dimensions."

The method specified in Subsection 203.12 should be adopted for embankments as a means of compaction control. However, the required level of compaction should be increased from 90 to 92 percent of the maximum dry density in accordance with AASHTO T180.

It is our opinion that that embankments constructed with 2 horizontal to 1 vertical (2:1) side slopes will be acceptable from an overall stability standpoint. However, these are relatively steep side slopes and will require slope protection to prevent surface erosion and sloughing, especially if the timing of the project is such that the grass seed does not have sufficient time to take root into embankment material. One method of minimizing erosion uses fiber reinforced topsoil and scarification of the embankment surface. A second method is to make small benches or serrations in the slopes and fill these serrations with topsoil. A third method to protect the surficial material is to cover the embankments with erosion protections mats.

Embankment Settlement

Filling in the drainage swales will require embankment fill over subgrades consisting of compressible marine clay. Settlement analyses indicate that up to 6 to 8 inches of settlement is expected in areas that require up to 14 feet of fill. We anticipate that approximately 50 percent of this settlement will occur during a construction period of two months and the post construction settlement of the embankments following utility construction will be on the order of 3 to 4 inches. We anticipate that settlement of this magnitude is not acceptable. We recommend that areas requiring 6 feet or more of fill be preloaded with an earth surcharge extending 6 feet above the bottom of pavement section. The surcharge should remain in place for a minimum of two months. Following removal of surcharge, we anticipate that settlement will be on the order 1.0 to 1.5 inches. We anticipate that settlement of this magnitude is acceptable. This settlement will be relatively long term settlement occurring over a period of 5 to 10 years following completion of construction. We therefore recommend that the drainage swales requiring more than 6 feet of fill be filled 6 feet above bottom of pavement section for a minimum period of two

months prior to removing surcharge to pavement section subgrade. Utility construction may then begin in these areas.

Pavement Section

We recommend the following pavement section for the roadway:

5.5 inches hot mix asphalt, placed in two layers (3 inches of 19mm HMA and 2.5 inches of 12.5mm HMA)
 6 inches screened or crushed gravel base course
 18 inches sand or gravel subbase course

Base and subbase course materials should conform to the following gradations:

Base Course

Screened or Crushed Gravel (Maine DOT Standard Specification, Highways and Bridges; Section 703.06a, Type A)

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
2 inches	100
1/2 inch	45 to 70
1/4 inch	30 to 55
No. 40	0 to 20
No. 200	0 to 5

Subbase Course

Sand or Gravel (Maine DOT, Section 703.06b, Type D)

<u>Sieve Size</u>	<u>Percent Finer by Weight</u>
6 inches	100
1/4 inch	25 to 70
No. 40	0 to 30
No. 200	0 to 7

All forest mat, topsoil and other organics should be removed from within the limits of new pavement.

Subbase course material should be placed in maximum 8-inch thick loose lifts and compacted at approximately optimum moisture content to a dry density of at least 95 percent of maximum dry density, as determined in accordance with ASTM Test Designation D1557. Base course material should be placed in one lift and compacted with a minimum of two coverages with self-propelled vibratory compaction equipment.

It should be noted that the subgrade soils may be frost-susceptible. Therefore, pavement roughness due to non-uniform frost movement may occur. To eliminate such non-uniform frost movement would require approximately 4.0 feet of fill subbase. However, it is common practice to tolerate seasonal movement to avoid the high cost of the added thickness of subbase.

Detention Pond

The detention pond will be constructed as a wet pond on the left side of the roadway between approximately Sta. 15+00 and Sta. 17+00. The pond will have a bottom at approximately El. 244; normal pool level at El. 248; an 8 feet wide crest at El. 254; and 3:1 interior side slopes with 2:1 exterior side slopes. Ground surface elevations within the limits of the crest vary from approximately El. 247 to El. 255. Berm fill heights of up to 7 feet and cuts of up to 5 feet will be required.

Based on subsurface conditions disclosed by test pits TP18 and TP21, we anticipate that a majority of the pond below normal pool level will be in lean clay. We recommend that any portion of the pond interior side slopes that occur in sand be lined with a minimum of 8 inches of clay up to El. 249. Clay should be placed at or no more than 3 percent above optimum moisture content and compacted using sheep's-foot or rubber tired compaction equipment. We anticipate that the gray brown mottled clay excavated from the pond and roadway construction will be workable and suitable for lining the pond. We recommend that fill required for berm construction consist of low permeability fill. We anticipate that the silty sand and gray brown lean clay excavated from the pond and roadway construction will be suitable for berm construction. We anticipate that the gray clay and silt will be unworkable due to high moisture content and will not be suitable for berm construction.

We recommend that interior side slopes within the range of pond level fluctuation be protected from erosion using composite turf reinforcement such as North American Green C350 or equivalent. We recommend that the remainder of interior side slopes and exterior side slopes be protected from surface erosion using erosion protection mats.

Construction Considerations

General

The primary purpose of this section of the report is to comment on items related to excavation, earthwork, dewatering and related geotechnical aspects of proposed construction. It is written primarily for the engineer having responsibility for preparation of plans and specifications. Since it identifies potential construction problems related to support and earthwork, it will also aid personnel who monitor the construction activity. The contractor must evaluate the construction problems on the basis of their own knowledge and experience in the Auburn, Maine area, and on the basis of similar projects in other localities, taking into account their proposed construction methods, procedures, equipment and personnel.

Dewatering

Based on groundwater levels observed in the test pits, dewatering will be required during excavation. We anticipate that water infiltrates the ground and is perched in the sand layer above the clay stratum. We anticipate that excavation will be made up to 9 feet below the groundwater level in silty sand and clay. In our opinion, groundwater and water from other sources can be controlled by open pumping from sumps and pumps within the excavation. Sumps and pumps should be installed with adequate filters to prevent the loss of fine-grained soil during pumping. Dewater must be done in a manner which preserves the undisturbed bearing condition of the subgrade soils and permits working "in-the-dry."

Trench Excavation and Lateral Support

We recommend that, at the contractor's option, open excavation may be used with trench sides flattened to stable side slopes, or with trench boxes for worker protection. Trench excavations should be made in accordance with all OSHA and other applicable regulatory agency requirements. Excavation to final grade should be completed with smooth blade equipment.

Detention Pond Excavation

Excavation for the detention pond will be made in clay soils. We recommend that excavation to final grade be completed with smooth blade equipment operating a minimum of 3 feet above the final excavation level.

Construction Monitoring

The support and backfill recommendations contained herein are based on the known and predictable behavior of properly engineered and constructed pipelines. Monitoring of the earthwork construction by personnel qualified by training and experience is recommended to enable the geotechnical engineer to keep in contact with procedures and techniques used in construction.

Limitations of Recommendations

This report has been prepared for specific application to the subject project in accordance with generally accepted geotechnical engineering practices. In the event that any changes in the nature, design or location of the roadway and utilities is planned, the conclusions and recommendations contained in this report should not be considered valid, unless the changes are reviewed and the conclusions of this report modified or verified in writing.

The recommendations presented herein are based in part on the data obtained from the referenced test pits. The nature and extent of variations between the test pits may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.

It has been a pleasure to work with you on this project. Please do not hesitate to contact us if you have any questions or need additional information.

Sincerely,

SEBAGO TECHNICS, INC.

Kenneth L. Recker, P.E.
Geotechnical Engineering Manager

KLR:klr/df

Enclosures:

Table I - Summary of Test Pits
Appendix A - Logs of Test Pits

Appendix A

Logs of Test Pits

Logs of Test Pits

**TABLE I
SUMMARY OF TEST PITS
PROPOSED ACCESS ROAD
AUBURN INDUSTRIAL PARK
AUBURN, MAINE**

Test Pit Number	Depth (Ft)	Location		Ground Sur. El. (Ft)	Depth to Water (Ft)	Strata Thickness (Ft)				
		Station	Offset			Forest Material	Topsoil	Sand	Silt	Clay
TP1	10.0	0+50	CL	258.8	NE	--	1.0	7.5	--	1.5*
TP2	8.2	2+40	CL	257.6	NE	--	0.9	6.1	--	1.2*
TP3	10.0	4+54	CL	261.4	4.0	--	1.0	8.0	1.0*	--
TP4	10.0	6+53	CL	260.3	NE	--	1.0	7.0	--	2.0*
TP5	10.0	8+54	CL	260.5	NE	--	1.0	6.0	--	3.0*
TP6	10.2	10+54	CL	259.7	3.0	--	0.9	6.1	--	3.2*
TP7	10.5	12+55	CL	260.0	NE	--	0.9	6.6	--	3.0*
TP8	10.0	14+30	22 RT	255.3	3.5	0.2	--	3.3	--	6.5*
TP9	8.0	16+53	11 LT	255.8	NE	0.1	--	1.9	--	6.0*
TP10	10.0	18+00	CL	254.8	NE	0.2	--	0.8	3.0	6.0*
TP11	10.0	20+50	CL	261.3	5.0	0.2	--	4.8	--	5.0*
TP12	10.0	22+50	CL	260.8	6.0	0.2	--	7.8	--	2.0*
TP13	10.0	24+50	CL	260.3	2.0	0.2	--	9.8*	--	--
TP14	12.0	26+80	CL	257.7	6.0	0.2	--	6.0	5.8*	--
TP15	10.0	29+21	3 LT	261.0	NE	0.1	--	6.9	1.0	2.0*
TP16	10.0	30+72	4 RT	259.5	NE	--	0.4	4.6	1.0	4.0*
TP17	10.5	32+07	8 RT	262.9	NE	--	0.3	10.2*	--	--
TP18	13.0	15+60	120 LT	248.0	2.5	0.1	--	2.9	--	10.0*
TP21	12.0	16+35	40 LT	254.5	NE	0.2	--	1.3	1.0	9.5*

NOTES:

1. NE INDICATES GROUNDWATER NOT ENCOUNTERED WITHIN DEPTH OF TEST PIT.
2. -- INDICATES STRATUM NOT ENCOUNTERED WITHIN DEPTH OF TEST PIT.
3. * INDICATES DEPTH OF PENETRATION INTO STRATUM.

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TEST PIT LOG

Test Pit No.
TP1
Page 1 of 1

PROJECT	PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	1/14/2010
EQUIPMENT	VOLVO EC160B	WEATHER	Sunny, 2-25 F

Ground El. 258.8 ft Location Sta. 0+50, CL Groundwater depths/entry rates (in/min):
El. Datum _____ Not encountered

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		1.0	SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-			5	80	15					
			SP-SM	Gray-brown mottled poorly-graded SAND with silt (SP-SM), mps = 0.02 in., damp				90	10					
2				-MARINE DEPOSITS-										
4														
		5.0	SM	Gray silty SAND (SM), frequent silt varves, mps = 0.02 in., wet				80	20					
6				-MARINE DEPOSITS-										
8														
		8.5	CL	Gray lean CLAY (CL), frequent sand seams, wet				15	85	N	M	M		
10				-MARINE DEPOSITS-										
				Bottom of exploration at 10.0 ft. below ground surface No refusal										
12														

Obstructions: _____ Remarks: _____

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth <u>10.0</u> Pit Length X Width <u>12.0 x 4.0</u>
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	-- =		
	over 24	-- =		

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INC.

TEST PIT LOG

Test Pit No.

TP2

Page 1 of 1

PROJECT PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK
 LOCATION LEWISTON JUNCTION ROAD, AUBURN, MAINE
 CLIENT AUBURN BUSINESS DEVELOPMENT CORPORATION
 CONTRACTOR GENDRON & GENDRON
 EQUIPMENT VOLVO EC160B

PROJECT NO. 07075
 PROJECT MGR. C. BRANCH
 FIELD REP K. B. STEPHENSON
 DATE 1/14/2010
 WEATHER Sunny, 2-25 F

Ground El. 257.6 ft Location Sta. 2+40, CL Groundwater depths/entry rates (in/min):
 El. Datum _____ Not encountered

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.9	SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-			5	80	15					
			SM	Gray-brown mottled silty SAND (SM), mps = 0.02 in., damp				85	15					
2				-MARINE DEPOSITS-										
4														
		5.0	SM	Gray silty SAND (SM), mps = 0.02 in., damp				85	15					
6				-MARINE DEPOSITS-										
		7.0	CL	Gray lean CLAY (CL), occasional sand seams, wet				10	90	N	M	M		
8				-MARINE DEPOSITS-										
				Bottom of exploration at 8.2 ft. below ground surface No refusal										
10														
12														

Obstructions: _____ Remarks: _____

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth <u>8.2</u> Pit Length X Width <u>11.0 x 4.0</u>
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	--	= _____	
	over 24	--	= _____	

TEST PIT LOG

PROJECT	PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	1/14/2010
EQUIPMENT	VOLVO EC160B	WEATHER	Sunny, 2-25 F

Ground El.	261.4	ft	Location	Sta. 4+54, CL	Groundwater depths/entry rates (in/min):	4.0 ft., slowly seeping
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test			
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
		1.0	SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-			5	80	15				
		1.5	SM	Rust-brown silty SAND (SM), mps = 0.1 in., damp -MARINE DEPOSITS-			15	70	15				
2			SM	Gray-brown mottled silty SAND (SM), mps = 0.02 in., damp -MARINE DEPOSITS-			85	15					
4		4.5	SM	Gray silty SAND (SM), frequent silt varves, mps = 0.02 in., damp -MARINE DEPOSITS-			80	20					
8		9.0	ML	Gray SILT with sand (ML), trace clay, mps = 0.01 in., damp -MARINE DEPOSITS-			20	80		L	L		
10				Bottom of exploration at 10.0 ft. below ground surface No refusal									

Obstructions:	Remarks:

Standing water in completed pit:		Boulders:			Test Pit Dimensions (ft):		
at depth	_____ ft.	Diameter (in.)	Number	=	Approx. vol. (cu. ft.)	Pit Depth	10.0
measured after	_____ hrs. elapsed	12 to 24	---	=	_____	Pit Length X Width	12.0 x 4.0
		over 24	---	=	_____		

TEST PIT LOG

PROJECT	PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	1/14/2010
EQUIPMENT	VOLVO EC160B	WEATHER	Sunny, 2-25 F

Ground El.	260.3	ft	Location	Sta. 6+53, CL	Groundwater depths/entry rates (in/min):	Not encountered
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test			
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity
		1.0	SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-			5	80	15				
			SM	Gray-brown mottled silty SAND (SM), mps = 0.02 in., damp -MARINE DEPOSITS-				85	15				
4		4.0	SM	Gray silty SAND (SM), frequent silt varves, mps = 0.02 in., damp -MARINE DEPOSITS-				80	20				
8		8.0	CL	Gray lean CLAY (CL), wet -MARINE DEPOSITS-				10	90	N	M	M	
10				Bottom of exploration at 10.0 ft. below ground surface No refusal									

Obstructions:	Remarks:

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth 10.0 Pit Length X Width 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	--	=	
	over 24	--	=	

SEBAGO
TECHNICS,
INC.

TEST PIT LOG

Test Pit No.

TP5

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PROJECT	PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	1/14/2010
EQUIPMENT	VOLVO EC160B	WEATHER	Sunny, 2-25 F

Ground El.	260.5	ft	Location	Sta. 8+54, CL	Groundwater depths/entry rates (in/min):	Not encountered
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		1.0	SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-			5	80	15					
			SM	Gray-brown mottled silty SAND (SM), mps = 0.02 in., damp				85	15					
				-MARINE DEPOSITS-										
		3.5												
			SM	Gray silty SAND (SM), mps = 0.02 in., damp				80	20					
				-MARINE DEPOSITS-										
		7.0												
			CL	Gray lean CLAY (CL), wet			10	90	N	M	M			
				-MARINE DEPOSITS-										
				Bottom of exploration at 10.0 ft. below ground surface No refusal										

Obstructions:	Remarks:

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth 10.0 Pit Length X Width 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	--	=	
	over 24	--	=	

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INC.

TEST PIT LOG

Test Pit No.

TP6

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PROJECT	PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	1/14/2010
EQUIPMENT	VOLVO EC160B	WEATHER	Sunny, 2-25 F

Ground El.	259.7	ft	Location	Sta. 10+54, CL	Groundwater depths/entry rates (in/min):	3.0 ft., slowly seeping
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel			Sand			Field Test						
					% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength			
		0.9	SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-			5	80	15								
			SM	Gray-brown mottled silty SAND (SM), mps = 0.1 in., damp			5	80	15								
2	S1			-MARINE DEPOSITS-													
		3.0	SP	Gray poorly-graded SAND (SP), mps = 0.02 in., damp					90	10							
4				Note: becomes silty with depth													
6				-MARINE DEPOSITS-													
		7.0	CL	Gray lean CLAY (CL), wet					10	90	N	M	M				
8				-MARINE DEPOSITS-													
10				Bottom of exploration at 10.2 ft. below ground surface No refusal													
12																	

Obstructions:	Remarks:

Standing water in completed pit:		Boulders:			Test Pit Dimensions (ft):	
at depth	_____ ft.	Diameter (in.)	Number	Approx. vol. (cu. ft.)	Pit Depth	10.2
measured after	_____ hrs. elapsed	12 to 24	--	= _____	Pit Length X Width	12.0 x 4.0
		over 24	--	= _____		

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TEST PIT LOG

Test Pit No.

TP7

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PROJECT	PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	1/14/2010
EQUIPMENT	VOLVO EC160B	WEATHER	Sunny, 2-25 F

Ground El.	260.0	ft	Location	Sta. 12+55, CL	Groundwater depths/entry rates (in/min):	Not encountered
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.9	SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-			5	80	15					
			SM	Gray-brown mottled silty SAND (SM), mps = 0.1 in., damp			5	80	15					
2				-MARINE DEPOSITS-										
4														
		5.0	SM	Gray silty SAND (SM), frequent silt varves, mps = 0.02 in., damp				80	20					
6				-MARINE DEPOSITS-										
		7.5	CL	Gray lean CLAY (CL), occasional sand partings, wet			5	95		N	M	M		
	S1			-MARINE DEPOSITS-										
10														
				Bottom of exploration at 10.5 ft. below ground surface No refusal										
12														

Obstructions:	Remarks:

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth 10.5 Pit Length X Width 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	--	=	
	over 24	--	=	

SEBAGO TECHNICS, INC.	<h1>TEST PIT LOG</h1>		Test Pit No. TP8
PROJECT <u>PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK</u>		PROJECT NO. <u>07075</u>	Page <u>1</u> of <u>1</u>
LOCATION <u>LEWISTON JUNCTION ROAD, AUBURN, MAINE</u>		PROJECT MGR. <u>C. BRANCH</u>	
CLIENT <u>AUBURN BUSINESS DEVELOPMENT CORPORATION</u>		FIELD REP <u>K. B. STEPHENSON</u>	
CONTRACTOR <u>GENDRON & GENDRON</u>		DATE <u>1/14/2010</u>	
EQUIPMENT <u>VOLVO EC160B</u>		WEATHER <u>Sunny, 2-25 F</u>	

Ground El. <u>255.3</u> ft	Location <u>Sta. 14+30, 22 RT</u>	Groundwater depths/entry rates (in/min): <u>3.5 ft., moderately seeping</u>
El. Datum _____	_____	

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.2		-FOREST MAT-										
			SM	Brown silty SAND (SM), roots, some wood and organic fibers, mps = 0.1 in., damp				5	80	15				
2				-MARINE DEPOSITS-										
		3.5		-MARINE DEPOSITS-										
4			CL	Gray lean CLAY (CL), occasional sand partings, wet Note: tree roots to 4.0 ft.				5	95	N	M	M		
6														
8				-MARINE DEPOSITS-										
10				-MARINE DEPOSITS-										
				Bottom of exploration at 10.0 ft. below ground surface No refusal										
12														

Obstructions:	Remarks: <u>edge of stream bank</u>

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders: <table style="margin:auto;"> <tr> <td>Diameter (in.)</td> <td>Number</td> <td>=</td> <td>Approx. vol. (cu. ft.)</td> </tr> <tr> <td>12 to 24</td> <td>---</td> <td>=</td> <td>_____</td> </tr> <tr> <td>over 24</td> <td>---</td> <td>=</td> <td>_____</td> </tr> </table>	Diameter (in.)	Number	=	Approx. vol. (cu. ft.)	12 to 24	---	=	_____	over 24	---	=	_____	Test Pit Dimensions (ft): Pit Depth <u>10.0</u> Pit Length X Width <u>12.0 x 4.0</u>
Diameter (in.)	Number	=	Approx. vol. (cu. ft.)											
12 to 24	---	=	_____											
over 24	---	=	_____											

PROJECT: PROPOSED ACCESS ROAD PROJECT NO.: 07075
 LOCATION: LEWISTON JUNCTION ROAD, AUBURN, MAINE PROJECT MGR.: C. BRANCH
 CLIENT: AUBURN BUSINESS DEVELOPMENT CORPORATION FIELD REP: K. B. STEPHENSON
 CONTRACTOR: GENDRON & GENDRON DATE: 2/24/2010
 EQUIPMENT: JOHN DEERE 200D LC WEATHER: Showers, 30s

Ground El. 255.8 ft Location Sta. 16+53, 11 LT Groundwater depths/entry rates (in/min):
 El. Datum _____ Not encountered

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.1		-FOREST MAT-										
			SM	Rust-brown silty SAND (SM), roots, mps = 0.1 in., damp			5	60	35					
				-MARINE DEPOSITS-										
2		2.0												
			CL	Gray-brown mottled lean CLAY (CL), frequent sand seams, mps = 0.02 in., damp				30	70	N	M	M		
4				-MARINE DEPOSITS-										
6		6.0												
			CL	Gray lean CLAY (CL), damp						100	N	M	M	
				-MARINE DEPOSITS-										
8														
				Bottom of exploration at 8.0 ft. below ground surface No refusal										
10														
12														

Obstructions: _____ Remarks: _____

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth 8.0 Pit Length X Width 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	--	=	
	over 24	--	=	

PROJECT	PROPOSED ACCESS ROAD	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	2/24/2010
EQUIPMENT	JOHN DEERE 200D LC	WEATHER	Showers, 30s

Ground El.	254.8	ft	Location	Sta. 18 + 00, CL	Groundwater depths/entry rates (in/min):	Not encountered
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.2		-FOREST MAT-										
			SM	Brown silty SAND (SM), roots, mps = 0.02 in., damp					60	40				
		1.0		-MARINE DEPOSITS-										
			ML	Gray sandy SILT (ML), mps = 0.02 in., damp				40	60		L	L		
2				-MARINE DEPOSITS-										
		4.0		-MARINE DEPOSITS-										
			CL	Gray-brown mottled lean CLAY (CL), frequent sand seams, mps = 0.02 in., damp				10	90	N	M	M		
				-MARINE DEPOSITS-										
6				-MARINE DEPOSITS-										
		7.0		-MARINE DEPOSITS-										
			CL	Gray lean CLAY (CL), damp						100	N	M	M	
8				-MARINE DEPOSITS-										
				-MARINE DEPOSITS-										
10				-MARINE DEPOSITS-										
				Bottom of exploration at 10.0 ft. below ground surface No refusal										
12				-MARINE DEPOSITS-										

Obstructions:	Remarks:

<u>Standing water in completed pit:</u> at depth _____ ft. measured after _____ hrs. elapsed	Boulders: <table style="margin: auto;"> <tr> <td><u>Diameter (in.)</u></td> <td><u>Number</u></td> <td>=</td> <td><u>Approx. vol. (cu. ft.)</u></td> </tr> <tr> <td>12 to 24</td> <td>--</td> <td>=</td> <td>_____</td> </tr> <tr> <td>over 24</td> <td>--</td> <td>=</td> <td>_____</td> </tr> </table>	<u>Diameter (in.)</u>	<u>Number</u>	=	<u>Approx. vol. (cu. ft.)</u>	12 to 24	--	=	_____	over 24	--	=	_____	<u>Test Pit Dimensions (ft):</u> Pit Depth _____ 10.0 Pit Length X Width _____ 12.0 x 4.0
<u>Diameter (in.)</u>	<u>Number</u>	=	<u>Approx. vol. (cu. ft.)</u>											
12 to 24	--	=	_____											
over 24	--	=	_____											

TEST PIT LOG

PROJECT	PROPOSED ACCESS ROAD	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	2/24/2010
EQUIPMENT	JOHN DEERE 200D LC	WEATHER	Showers, 30s

Ground El.	261.3	ft	Location	Sta. 20 + 50, CL	Groundwater depths/entry rates (in/min):	5.0 ft., moderately seeping
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.2		-FOREST MAT-										
			SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp				5	70	35				
		1.0		-MARINE DEPOSITS-										
		1.5	SM	Rust-brown silty SAND (SM), roots, mps = 0.1 in., damp -MARINE DEPOSITS-				5	70	35				
2			SP	Gray poorly-graded SAND (SP), mps = 0.1 in., rusty from 4.5 to 5.0 ft., damp				5	85	10				
				-MARINE DEPOSITS-										
4														
		5.0												
			CL	Gray lean CLAY (CL), frequent sand seams, mps = 0.02 in., damp					20	80	N	M	M	
6														
8														
10														
					Bottom of exploration at 10.0 ft. below ground surface									
					No refusal									
12														

Obstructions:	Remarks:

Standing water in completed pit:		Boulders:			Test Pit Dimensions (ft):	
at depth	_____ ft.	Diameter (in.)	Number	Approx. vol. (cu. ft.)	Pit Depth	10.0
measured after	_____ hrs. elapsed	12 to 24	---	= _____	Pit Length X Width	12.0 x 4.0
		over 24	---	= _____		

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TEST PIT LOG

Test Pit No.
TP12
Page 1 of 1

PROJECT	PROPOSED ACCESS ROAD	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	2/24/2010
EQUIPMENT	JOHN DEERE 200D LC	WEATHER	Showers, 30s

Ground El.	260.8	ft	Location	Sta. 22 + 50, CL	Groundwater depths/entry rates (in/min):	6.0 ft., flowing
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test									
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength					
		0.2		-FOREST MAT-															
			SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp				5	75	20									
		1.0		-MARINE DEPOSITS-															
		1.5	SP	Rust-brown poorly-graded SAND (SP), roots, mps = 0.1 in., damp -MARINE DEPOSITS-				5	85	10									
2			SP	Tan poorly-graded SAND (SP), mps = 0.1 in., frequent rusty discolorations to 3.5 ft, wet below 6.0 ft.					100										
4	S1																		
				-MARINE DEPOSITS-															
6																			
8		8.0	CL	Gray lean CLAY (CL), mps = 0.02 in., wet				10	90	N	M	M							
				-MARINE DEPOSITS-															
10				Bottom of exploration at 10.0 ft. below ground surface No refusal															
12																			

Obstructions:	Remarks: test pit walls collapse rapidly

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth 10.0 Pit Length X Width 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	--	=	
	over 24	--	=	

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TEST PIT LOG

Test Pit No.
TP13
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PROJECT	PROPOSED ACCESS ROAD	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	2/24/2010
EQUIPMENT	JOHN DEERE 200D LC	WEATHER	Showers, 30s

Ground El. 260.3 ft Location Sta. 24 + 50, CL Groundwater depths/entry rates (in/min):
El. Datum _____ 2.0 ft., flowing

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.2		-FOREST MAT-										
			SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp			5	75	20					
		1.5		-MARINE DEPOSITS-										
2		2.0	SP	Rust-brown poorly-graded SAND (SP), mps = 0.1 in., damp			5	90	5					
			SP	Tan poorly-graded SAND (SP), mps = 0.1 in., wet			5	95						
4				-MARINE DEPOSITS-										
6				-MARINE DEPOSITS-										
8		8.0	SM	Gray silty SAND (SM), mps = 0.02 in., wet				85	15					
10				-MARINE DEPOSITS-										
				Bottom of exploration at 10.0 ft. below ground surface No refusal										
12														

Obstructions: _____ Remarks: test pit walls collapse rapidly

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth _____ 10.0 Pit Length X Width _____ 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	__ =		
	over 24	__ =		

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TEST PIT LOG

Test Pit No.

TP14

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PROJECT PROPOSED ACCESS ROAD
 LOCATION LEWISTON JUNCTION ROAD, AUBURN, MAINE
 CLIENT AUBURN BUSINESS DEVELOPMENT CORPORATION
 CONTRACTOR GENDRON & GENDRON
 EQUIPMENT JOHN DEERE 200D LC

PROJECT NO. 07075
 PROJECT MGR. C. BRANCH
 FIELD REP K. B. STEPHENSON
 DATE 2/24/2010
 WEATHER Showers, 30s

Ground El. 257.7 ft Location Sta. 26 + 80, CL Groundwater depths/entry rates (in/min):
 El. Datum _____ 6.0 ft., moderately flowing

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test								
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength				
		0.2		-FOREST MAT-														
			SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp				5	80	15								
		1.0		-MARINE DEPOSITS-														
			SP	Light brown poorly-graded SAND (SP), mps = 0.1 in., wet				5	95									
2																		
				-MARINE DEPOSITS-														
		6.2		-MARINE DEPOSITS-														
			ML	Gray SILT with sand (ML), some clay, mps = 0.02 in., wet				15	85		L	L						
8																		
	S1			-MARINE DEPOSITS-														
10																		
12																		
					Bottom of exploration at 12.0 ft. below ground surface No refusal													
14																		

Obstructions: _____
 Remarks: test pit walls collapse rapidly

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed		Boulders: Diameter (in.) 12 to 24 _____ = _____ over 24 _____ = _____		Approx. vol. (cu. ft.) _____		Test Pit Dimensions (ft): Pit Depth _____ 12.0 Pit Length X Width _____ 12.0 x 4.0	
---	--	--	--	---------------------------------	--	--	--

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INC.

TEST PIT LOG

Test Pit No.

TP15

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PROJECT	PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	1/14/2010
EQUIPMENT	VOLVO EC160B	WEATHER	Sunny, 2-25 F

Ground El. 261.0 ft Location Sta. 29+21, 3 LT Groundwater depths/entry rates (in/min):
El. Datum _____ Not encountered

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test									
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength					
		0.1		-FOREST MAT-															
		0.4	SM	Dark brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-					10	75	15								
			SP-SM	Brown poorly-graded SAND with silt (SP-SM), mps = 0.1 in., damp					5	85	10								
2				Note: roots to 2.0 ft.															
4				-MARINE DEPOSITS-															
6																			
		7.0	ML	Gray-brown SILT (ML), mps = 0.01 in., damp						10	90		L	L					
8		8.0	CL	Gray lean CLAY (CL), trace fine sand, damp							100		N	M	M				
				-MARINE DEPOSITS-															
10				Bottom of exploration at 10.0 ft. below ground surface No refusal															
12																			

Obstructions: _____ Remarks: test pit walls collapse rapidly

Standing water in completed pit:		Boulders:			Test Pit Dimensions (ft):	
at depth _____ ft.	measured after _____ hrs. elapsed	Diameter (in.)	Number	Approx. vol. (cu. ft.)	Pit Depth	12.0
		12 to 24	--	=	Pit Length X Width	12.0 x 5.0
		over 24	--	=		

TEST PIT LOG

PROJECT PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK
 LOCATION LEWISTON JUNCTION ROAD, AUBURN, MAINE
 CLIENT AUBURN BUSINESS DEVELOPMENT CORPORATION
 CONTRACTOR GENDRON & GENDRON
 EQUIPMENT VOLVO EC160B

PROJECT NO. 07075
 PROJECT MGR. C. BRANCH
 FIELD REP K. B. STEPHENSON
 DATE 1/14/2010
 WEATHER Sunny, 2-25 F

Ground El. 259.5 ft Location Sta. 30+72, 4 RT
 El. Datum _____

Groundwater depths/entry rates (in/min):
 Not encountered

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.4	SM	Dark brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-				10	75	15				
		1.0	SM	Red-brown silty SAND (SM), roots, mps = 0.1 in., damp -MARINE DEPOSITS-				5	80	15				
			SP-SM	Light brown poorly-graded SAND with silt (SP-SM), mps = 0.1 in., damp				5	85	10				
2				-MARINE DEPOSITS-										
4				-MARINE DEPOSITS-										
		5.0	ML	Gray-brown SILT (ML), trace clay, mps = 0.02 in., damp				10	90		L	L		
6		6.0	CL	Gray lean CLAY (CL), trace fine sand, damp						100	N	M	M	
8				-MARINE DEPOSITS-										
10				Bottom of exploration at 10.0 ft. below ground surface No refusal										
12														

Obstructions:

Remarks:

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed		Boulders: Diameter (in.) Number = Approx. vol. (cu. ft.) 12 to 24 -- = over 24 -- =		Test Pit Dimensions (ft): Pit Depth 10.0 Pit Length X Width 12.0 x 4.0	
---	--	--	--	--	--

TEST PIT LOG

PROJECT	PROPOSED ACCESS ROAD, AUBURN INDUSTRIAL PARK	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	1/14/2010
EQUIPMENT	VOLVO EC160B	WEATHER	Sunny, 2-25 F

Ground El.	262.9	ft	Location	Sta. 32+07, 8 RT	Groundwater depths/entry rates (in/min):	Not encountered
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.3	SM	Brown silty SAND (SM), roots, mps = 0.1 in., damp -TOPSOIL-				10	75	15				
			SM	Red-brown silty SAND (SM), roots, mps = 0.1 in., damp				10	75	15				
		1.4		-MARINE DEPOSITS-										
			SM	Tan silty SAND (SM), mps = 0.1 in., damp				10	75	15				
		2.0		-MARINE DEPOSITS-										
2			SW	Tan well-graded SAND with gravel (SW), mps = 18 in., 5-10% oversized, damp	15	10	20	10	40	5				
4														
6	S1													
8														
10														
12														
					Bottom of exploration at 10.5 ft. below ground surface									
					No refusal									

Obstructions:	Remarks: Cobbles, small boulders at ground surface- former trail/road

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth _____ 10.5 Pit Length X Width _____ 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	8	=	
	over 24	--	=	

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TEST PIT LOG

Test Pit No.
TP18
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PROJECT	PROPOSED ACCESS ROAD	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	2/24/2010
EQUIPMENT	JOHN DEERE 200D LC	WEATHER	Showers, 30s

Ground El. 248.0 ft Location Sta. 15 + 60, 120 LT Groundwater depths/entry rates (in/min):
El. Datum _____ 2.5 and 4.0 ft., slowly sleeping

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test				
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
		0.1		-FOREST MAT-										
			SM	Brown silty SAND (SM), roots to 1.2 ft., mps = 0.1 in., damp			5	60	35					
		0.9		-MARINE DEPOSITS-										
			SM	Gray-brown mottled silty SAND (SM), frequent silt/clay seams, mps = 0.02 in., damp				70	30					
2				-MARINE DEPOSITS-										
		3.0		-MARINE DEPOSITS-										
			CL	Gray-brown mottled lean CLAY (CL), frequent sand seams, mps = 0.02 in., damp				20	80	N	M	M		
4				-MARINE DEPOSITS-										
		5.0		-MARINE DEPOSITS-										
			CL	Olive-gray lean CLAY (CL), wet						100	N	M	M	
6				-MARINE DEPOSITS-										
				-MARINE DEPOSITS-										
8				-MARINE DEPOSITS-										
		9.0		-MARINE DEPOSITS-										
			CL	Gray lean CLAY (CL), frequent dark streaks, wet						100	N	M	M	
10				-MARINE DEPOSITS-										
				-MARINE DEPOSITS-										
12				-MARINE DEPOSITS-										
				-MARINE DEPOSITS-										
14				Bottom of exploration at 13.0 ft. below ground surface No refusal										

Obstructions:	Remarks:

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth _____ 13.0 Pit Length X Width _____ 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	-- =		
	over 24	-- =		

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TEST PIT LOG

Test Pit No.
TP21
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PROJECT	PROPOSED ACCESS ROAD	PROJECT NO.	07075
LOCATION	LEWISTON JUNCTION ROAD, AUBURN, MAINE	PROJECT MGR.	C. BRANCH
CLIENT	AUBURN BUSINESS DEVELOPMENT CORPORATION	FIELD REP	K. B. STEPHENSON
CONTRACTOR	GENDRON & GENDRON	DATE	2/24/2010
EQUIPMENT	JOHN DEERE 200D LC	WEATHER	Showers, 30s

Ground El.	254.5	ft	Location	Sta. 16 + 35, 40 LT	Groundwater depths/entry rates (in/min):	Not encountered
El. Datum						

Depth (ft)	Sample ID	Stratum Change Depth (ft)	USCS Group Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, % oversized, max particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel		Sand			Field Test								
					% Coarse	% Fine	% Coarse	Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength				
		0.2		-FOREST MAT-														
			SM	Brown to rust-brown silty SAND (SM), roots to 1.3 ft., mps = 0.1 in., damp				5	60	35								
				-MARINE DEPOSITS-														
		1.5																
2			ML	Gray-brown mottled SILT with sand (ML), mps = 0.02 in., damp					20	80		L	L					
		2.5		-MARINE DEPOSITS-														
			CL	Gray-brown mottled lean CLAY (CL), frequent sand varves, mps = 0.02 in., damp					20	80		N	M					
4																		
				-MARINE DEPOSITS-														
6		6.0																
			CL	Gray lean CLAY (CL), damp								100	N	M	M			
8																		
10																		
12																		
14																		

Obstructions:	Remarks:

Standing water in completed pit: at depth _____ ft. measured after _____ hrs. elapsed	Boulders:			Test Pit Dimensions (ft): Pit Depth _____ 12.0 Pit Length X Width _____ 12.0 x 4.0
	Diameter (in.)	Number	Approx. vol. (cu. ft.)	
	12 to 24	--	=	
	over 24	--	=	



ATTACHMENT B

U.S. DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION

EDA CONTRACTING PROVISIONS

for

AUBURN INDUSTRIAL SUBDIVISION
EDA AWARD NUMBER 01-01-14171

June 2013

Attachment B Table of Contents

Division 1:	Davis-Bacon Wage Rates
Division 2:	Lobbying Certification and Restriction Forms
Division 3:	Requirements for Affirmative Action (EEO)
Division 4:	EDA Contracting Provisions for Construction Projects
Division 5:	EDA Construction Site Sign

Division 1

Davis-Bacon Wage Rates

Federal Labor Standards Provisions

U.S. Department of Housing
and Urban Development
Office of Labor Relations

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. 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 29 CFR 5.5(a)(1)(iv); 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 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee 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 HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee 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, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work 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. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. 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 HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, 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 subparagraph 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 HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee 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, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, 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.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

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 HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. 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) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. 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 the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, 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 subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) **Withholding for unpaid wages and liquidated damages.** HUD or its designee 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 contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph 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 subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 16.98	4.65
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.....	\$ 17.49	4.26
OPERATOR: Roller, Base (Ride Along).....	\$ 13.00	1.54
OPERATOR: Screed.....	\$ 19.58	5.95
OPERATOR: Sweeper.....	\$ 14.08	0.00
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.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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

Union Identifiers

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

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

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

Non-Union Identifiers

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

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

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

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

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

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

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

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

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END OF GENERAL DECISION

Division 2

Lobbying Certification and Restriction Forms

CONTRACT CLAUSE
NEW RESTRICTIONS ON LOBBYING

This contract, subcontract, or subgrant is subject to Section 319 of Public Law 101-121, which added section 1352, regarding lobbying restrictions, to Chapter 13 of Title 31 of the United States Code. The new section is explained in the common rule, 15 CFR Part 28 (55 FR 6736-6748, 2/26/90). Each bidder/applicant/recipient of this contract subcontract, or subgrant and subrecipients are generally prohibited from using Federal funds for lobbying the Executive or Legislative Branches of the Federal Government in connection with this Award.

Contract Clause Threshold

This Contract Clause regarding lobbying must be included in each application for a subgrant and in each bid for a contract or subcontract exceeding \$100,000 of Federal funds at any tier under the Federal Award.

Certification and Disclosure

Each applicant/recipient of a subgrant and each bidder/applicant/ recipient of a contract or subcontract exceeding \$100,000 of Federal funds at any tier under the Federal Award must file a "Certification Regarding Lobbying" and, if applicable, Standard Form LLL, "Disclosure of Lobbying Activities," regarding the use of any nonfederal funds for lobbying. Certifications shall be retained by the next higher tier. All disclosure forms, however, shall be forwarded from tier to tier until received by the Recipient of the Federal Award (grant), who shall forward all disclosure forms to the Federal agency.

Continuing Disclosure Requirement

Each subgrantee, contractor, or subcontractor that is subject to the Certification and Disclosure provision of this Contract Clause is required to file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such person. Disclosure forms shall be forwarded from tier to tier until received by the Recipient of the Federal Award (grant) who shall forward all disclosure forms to the Federal agency.

Indian Tribes, Tribal Organizations, or Other Indian Organizations

Indian tribes, tribal organizations, or any other Indian organizations, including the Alaskan Native organizations, are excluded from the above lobbying restrictions and reporting requirements, but only with respect to expenditures that are by such tribes or organizations for lobbying activities permitted by other Federal law. An Indian tribe or organization that is seeking an exclusion from Certification and Disclosure requirements must provide (preferably in an attorney's opinion) EDA with the citation of the provision or provisions of Federal law upon which it relies to conduct lobbying activities that would otherwise be subject to the prohibitions in and to the Certification and Disclosure requirements of Section 319 of Public Law No. 101-121. Note, also, that a non-Indian subgrantee, contractor, or subcontractor under an award (grant) to an Indian tribe, for example, is subject to the restrictions and reporting requirements.

CERTIFICATIONS REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER COVERED TRANSACTIONS AND LOBBYING

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 26, "Governmentwide Debarment and Suspension (Nonprocurement)" and 15 CFR Part 28, "New Restrictions on Lobbying."

1. DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION-LOWER TIER COVERED TRANSACTIONS

As required by Executive Order 12549, Debarment and Suspension, and implemented at 15 CFR Part 26, Section 26.510, Participants responsibilities, for prospective participants in lower tier covered transactions (except subcontracts for goods or services under the \$25,000 small purchase threshold unless the subtier recipient will have a critical influence on or substantive control over the award), as defined at 15 CFR Part 26, Sections 26.105 and 26.110 -

(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 participation in this transaction 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.

2. LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. 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.

Statement for loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification(s).

NAME OF APPLICANT

AWARD NUMBER AND/OR PROJECT NAME

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE

DATE

Division 3

Requirements for Affirmative Action (EEO)

**NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246 AND 41 CFR PART 60-4)**

The following Notice shall be included in, and shall be a part of all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000.

The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for minority participation for each trade	Goals for female participation for each trade
	0.5 %	6.9%

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

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a 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.

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 starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is:

State of _____
 County of _____
 City of _____

Division 4

EDA Contracting Provisions for Construction Projects

**U. S. DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION**



**EDA CONTRACTING PROVISIONS
FOR CONSTRUCTION PROJECTS**

These EDA Contracting Provisions for Construction Projects (EDA Contracting Provisions) are intended for use by recipients receiving federal assistance from the U. S. Department of Commerce - Economic Development Administration (EDA). They contain provisions specific to EDA and other federal provisions not normally found in non-federal contract documents. The requirements contained herein must be incorporated into all construction contracts and subcontracts funded wholly or in part with federal assistance from EDA.

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1. **DEFINITIONS**

Agreement – The written instrument that is evidence of the agreement between the Owner and the Contractor overseeing the Work.

Architect/Engineer - The person or other entity engaged by the Recipient to perform architectural, engineering, design, and other services related to the work as provided for in the contract.

Contract – The entire and integrated written agreement between the Owner and the Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

Contract Documents – Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents.

Contractor – The individual or entity with whom the Owner has entered into the Agreement.

Drawings or Plans – That part of the Contract Documents prepared or approved by the Architect/Engineer that graphically shows the scope, extent, and character of the Work to be performed by the Contractor.

EDA - The United States of America acting through the Economic Development Administration of the U.S. Department of Commerce or any other person designated to act on its behalf. EDA has agreed to provide financial assistance to the Owner, which includes assistance in financing the Work to be performed under this Contract. Notwithstanding EDA's role, nothing in this Contract shall be construed to create any contractual relationship between the Contractor and EDA.

Owner – The individual or entity with whom the Contractor has entered into the Agreement and for whom the Work is to be performed.

Project – The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

Recipient - An entity receiving Federal financial assistance from EDA, including any EDA-approved successor to the entity.

Specifications – That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

Subcontractor – An individual or entity having direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

Work – The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

2. **APPLICABILITY**

The Project to which the construction work covered by this Contract pertains is being assisted by the United States of America through federal assistance provided by the U.S. Department of Commerce - Economic Development Administration (EDA). Neither EDA, nor any of its departments, entities, or employees is a party to this Contract. The following EDA Contracting Provisions are included in this Contract and all subcontracts or related instruments pursuant to the provisions applicable to such federal assistance from EDA.

3. **FEDERALLY REQUIRED CONTRACT PROVISIONS**

- (a) Administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate (Contracts more than the simplified acquisition threshold - currently fixed at \$100,000. *See* 41 U.S.C. 403(11)).
- (b) Termination for cause and for convenience by the Recipient including the manner by which it will be effected and the basis for settlement (all contracts in excess of \$10,000).
- (c) Compliance with Executive Order 11246 of September 24, 1965, *Equal Employment Opportunity*, as amended by Executive Order 11375 of October 13, 1967 and as supplemented by Department of Labor regulations at 41 C.F.R. chapter 60 (applicable to all construction contracts awarded in excess of \$10,000 by recipients of federal assistance and their contractors or subrecipients).
- (d) Compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. § 874) as supplemented by Department of Labor regulations at 29 C.F.R. part 3 (all contracts and subgrants for construction or repair).
- (e) Compliance with the Davis-Bacon Act (40 U.S.C. § 3145) as supplemented by Department of Labor regulations at 29 C.F.R. part 5 (construction contracts in excess of \$2,000 awarded by Recipients and subrecipients).
- (f) Compliance with sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-330) as supplemented by Department of Labor regulations at 29 C.F.R. part 5. (construction contracts awarded by Recipients and subrecipients in excess of \$2,000, and in excess of \$2,500 for other contracts which involve the employment of mechanics or laborers)
- (g) EDA requirements and regulations pertaining to reporting.

(h) EDA requirements and regulations pertaining to patent rights with respect to any discovery or invention which arises or is developed in the course of or under such contract.

(i) EDA requirements and regulations pertaining to copyrights and rights in data.

(j) Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clear Air Act (42 U.S.C. § 7606), section 508 of the Clean Water Act (33 U.S.C. § 1368), Executive Order 11738, *Providing for Administration of the Clean Air Act and the Federal Water Pollution Control Act With Respect to Federal Contracts, Grants, or Loans*, and Environmental Protection Agency regulations at 48 C.F.R. part 15 (applicable to contracts, subcontracts, and subgrants of amounts in excess of \$ 100,000).

4. **REQUIRED PROVISIONS DEEMED INSERTED**

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion of correction.

5. **INSPECTION BY EDA REPRESENTATIVES**

The authorized representatives and agents of EDA shall be permitted to inspect all work, materials, payrolls, personnel records, invoices of materials, and other relevant data and records.

6. **EXAMINATION AND RETENTION OF CONTRACTOR'S RECORDS**

(a) The Owner, EDA, or the Comptroller General of the United States, or any of their duly authorized representatives shall, generally until three years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this contract for the purpose of making audit, examination, excerpts, and transcriptions.

(b) The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as paragraph (a) above. "Subcontract," as used in this clause, excludes purchase orders that do not exceed \$10,000.

(c) The periods of access and examination in paragraphs (a) and (b) above for records relating to (1) appeals under the disputes clause of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the Owner, EDA, or Comptroller General or any of their duly authorized representatives has taken exception shall continue until disposition of such appeals, litigation, claims, or exceptions.

7. **CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES**

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in a form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due to the Contractor in accordance with the progress schedule. The Contractor also shall furnish the Owner (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only to determine the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

8. **CONTRACTOR'S TITLE TO MATERIAL**

No materials, supplies, or equipment for the work shall be purchased by the Contractor or by any subcontractor that is subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants and guarantees that he/she has good title to all work, materials, and equipment used by him/her in the Work, free and clear of all liens, claims, or encumbrances.

9. **INSPECTION AND TESTING OF MATERIALS**

All materials and equipment used in the completion of the Work shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. Materials of construction, particularly those upon which the strength and durability of any structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for intended uses.

10. **"OR EQUAL" CLAUSE**

Whenever a material, article, or piece of equipment is identified in the Contract Documents by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard. Any material, article, or equipment of other manufacturers and vendors that will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Architect/Engineer, of equal substance and function. However, such substitution material, article, or equipment shall not be purchased or installed by the Contractor without the Architect/Engineer's written approval.

11. **PATENT FEES AND ROYALTIES**

(a) Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device that is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in

the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the Owner in the Contract Documents.

(b) To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Owner and the Architect/Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

12. CLAIMS FOR EXTRA COSTS

No claims for extra work or cost shall be allowed unless the same was done in pursuance of a written order from the Architect/Engineer approved by the Owner.

13. CONTRACTORS AND SUBCONTRACTORS INSURANCE

(a) The Contractor shall not commence work under this Contract until the Contractor has obtained all insurance reasonably required by the Owner, nor shall the Contractor allow any subcontractor to commence work on his/her subcontract until the insurance required of the subcontractor has been so obtained and approved.

(b) Types of insurance normally required are:

- (1) Workmen's Compensation
- (2) Contractor's Public Liability and Property Damage
- (3) Contractor's Vehicle Liability
- (4) Subcontractors Public Liability, Property Damage and Vehicle Liability
- (5) Builder's Risk (Fire and Extended Coverage)

(c) **Scope of Insurance and Special Hazards:** The insurance obtained, which is described above, shall provide adequate protection for the Contractor and his/her subcontractors, respectively, against damage claims that may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him/her and also against any of the special hazards that may be encountered in the performance of this Contract.

(d) **Proof of Carriage of Insurance:** The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates, and dates of expiration of applicable insurance policies.

14. **CONTRACT SECURITY BONDS**

(a) If the amount of this Contract exceeds \$100,000, the Contractor shall furnish a performance bond in an amount at least equal to one hundred percent (100%) of the Contract price as security for the faithful performance of this Contract and also a payment bond in an amount equal to one hundred percent (100%) of the Contract price or in a penal sum not less than that prescribed by State, Territorial, or local law, as security for the payment of all persons performing labor on the Work under this Contract and furnishing materials in connection with this Contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law. Before final acceptance, each bond must be approved by EDA. If the amount of this Contract does not exceed \$100,000, the Owner shall specify the amount of the payment and performance bonds.

(b) All bonds shall be in the form prescribed by the Contract Documents except as otherwise provided in applicable laws or regulations, and shall be executed by such sureties as are named in the current list of *Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies* as published in Treasury Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act. Surety companies executing the bonds must also be authorized to transact business in the state where the Work is located.

15. **LABOR STANDARDS - DAVIS-BACON AND RELATED ACTS**
(as required by section 601 of PWEDA)

(a) **Minimum Wages**

(1) All laborers and mechanics employed or working upon the site of the Work in the construction or development of the Project will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act at 29 C.F.R. part 3, the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at the 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 that 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 29 C.F.R.

§ 5.5(a)(1)(iv); 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 C.F.R. § 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 determined under 29 C.F.R. § 5.5(a)(1)(ii) 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.

(2) (i) Any class of laborers or mechanics to be employed under the Contract, but not listed in the wage determination, shall be classified in conformance with the wage determination. EDA shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(A) The work to be performed by the classification requested is not performed by a classification in the wage determination;

(B) The classification is utilized in the area by the construction industry; and

(C) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(ii) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and EDA or its designee 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 EDA or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210.

(iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and EDA or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), EDA or its designee shall refer the questions, including the views of all interested parties and the recommendation of EDA or its designee, to the Administrator for determination.

(iv) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(2)(ii) or (iii) 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.

(3) 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.

(4) 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.

(b) Withholding

EDA or its designee 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 in the construction or development of the Project, all or part of the wages required by the Contract, EDA or its designee may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. EDA or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

(c) Payrolls and basic records

(1) 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 in the construction or development of the Project. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b) (2) (B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 C.F.R. § 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, the plan or program is financially responsible, and the plan or program has been communicated in writing to the laborers or mechanics affected, and provide records that 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.

(2) (i) For each week in which Contract work is performed, the Contractor shall submit a copy of all payrolls to the Owner for transmission to EDA or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 C.F.R. part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose. It may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402; or downloaded from the U.S. Department of Labor's website at www.dol.gov/esa/forms/whd/index.htm. The prime Contractor is responsible for the submission of copies of payrolls by all subcontractors

(ii) 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:

(A) That the payroll for the payroll period contains the information required to be maintained under 29 C.F.R. § 5.5(a)(3)(i) and that such information is correct and complete;

(B) 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 29 C.F.R. part 3;

(C) 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.

(iii) 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 14(c)(ii) of this section.

(iv) 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 U.S. Code.

(3) The Contractor or subcontractor shall make the records required under paragraph 15(c)(1) of this section available for inspection, copying, or transcription by authorized representatives of EDA or its designee 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, EDA or its designee may, after written notice to the Contractor or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 C.F.R. part 5.12.

(d) Apprentices and Trainees.

(1) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a Project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) **Trainees.** Except as provided in 29 C.F.R. § 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 that 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's 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.

(3) **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, *Equal Employment Opportunity*, as amended, and 29 C.F.R. part 30.

(e) **Compliance with Copeland Anti-Kickback Act Requirements.** The Contractor shall comply with the Copeland Anti-Kickback Act (18 U.S.C. § 874 and 40 U.S.C. § 276(c)) as supplemented by Department of Labor regulations (29 C.F.R. part 3, "Contractors and Subcontractors on Public Buildings or Public Works Financed in Whole or in Part by Loans or Grants of the United States"). The Act provides that the Contractor and any subcontractors shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public facilities, to give up any part of the compensation to which they are otherwise entitled. The Owner shall report all suspected or reported violations to EDA.

(f) **Subcontracts.** The Contractor and any subcontractors will insert in any subcontracts the clauses contained in 29 C.F.R. §§ 5.5(a)(1) through (10) and such other clauses as EDA or its designee may require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 C.F.R. part 5.5.

(g) **Contract termination; debarment.** The breach of the contract clauses in 29 C.F.R. part 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a subcontractor as provided in 29 C.F.R. § 5.12.

(h) Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 C.F.R. parts 1, 3, and 5 are herein incorporated by reference in this contract.

(i) 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 C.F.R. parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and EDA or its designee, the U.S. Department of Labor, or the employees or their representatives.

(j) Certification of Eligibility.

(1) By entering into this Contract, the Contractor certifies that neither it nor any person or firm that 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 C.F.R. § 5.12(a)(1).

(2) 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 C.F.R. § 5.12(a)(1).

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. § 1001.

16. **LABOR STANDARDS - CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

As used in this paragraph, the terms “laborers” and “mechanics” include watchmen and guards.

(a) 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 that person 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.

(b) Violation; liability for unpaid wages, liquidated damages. In the event of any violation of the clause set forth in paragraph (a) of this section, the Contractor and any subcontractor responsible therefore 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 (a) 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 (a) of this section.

(c) **Withholding for unpaid wages and liquidated damages.** EDA or its designee 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 monies payable on account of work performed by the Contractor or subcontractor under any such Contract or any other federal contract with the same prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) of this section.

(d) **Subcontracts.** The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (a) through (c) 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 (a) through (c) of this section.

17. **EQUAL EMPLOYMENT OPPORTUNITY**

(a) The Recipient hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 C.F.R. chapter 60, which is paid for in whole or in part with funds obtained from EDA, the following equal opportunity clause:

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

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(3) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided advising the said labor union or workers representatives of the Contractor's

commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and pursuant to rules, regulations, and orders of the Secretary of Labor and will permit access to its books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally-assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulations or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor will include the portion of the sentence immediately preceding paragraph 17(a) (1) and the provisions of paragraphs 17(a)(1) through (6) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as EDA or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event the Contractor becomes involved in or is threatened with litigation with or by a subcontractor or vendor as a result of such direction by EDA or the Secretary of Labor, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

(8) The Recipient further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally-assisted construction work. Provided, however, that if the Recipient so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality, or subdivision of such government that does not participate in work on or under the Contract.

(9) The Recipient agrees that it will assist and cooperate actively with EDA and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish EDA and the Secretary of Labor such information as they may

require for the supervision of such compliance, and that it will otherwise assist EDA in the discharge of the EDA's primary responsibility for securing compliance.

(10) The Recipient further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a Contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by EDA or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the Recipient agrees that if it fails or refuses to comply with these undertakings, EDA may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this EDA financial assistance; refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

(b) Exemptions to Above Equal Opportunity Clause (41 C.F.R. chapter 60):

(1) Contracts and subcontracts not exceeding \$10,000 (other than Government bills of lading) are exempt. The amount of the Contract, rather than the amount of the federal financial assistance, shall govern in determining the applicability of this exemption.

(2) Except in the case of subcontractors for the performance of construction work at the site of construction, the clause shall not be required to be inserted in subcontracts below the second tier.

(3) Contracts and subcontracts not exceeding \$10,000 for standard commercial supplies or raw materials are exempt.

18. **CONTRACTING WITH SMALL, MINORITY AND WOMEN'S BUSINESSES**

(a) If the Contractor intends to let any subcontracts for a portion of the work, the Contractor shall take affirmative steps to assure that small, minority and women's businesses are used when possible as sources of supplies, equipment, construction, and services.

(b) Affirmative steps shall consist of:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources;

- (3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;
- (4) Establishing delivery schedules, where the requirements of the contract permit, which encourage participation by small and minority businesses and women's business enterprises;
- (5) Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies;
- (6) Requiring each party to a subcontract to take the affirmative steps of this section; and
- (7) The Contractor is encouraged to procure goods and services from labor surplus area firms.

19. **HEALTH, SAFETY, AND ACCIDENT PREVENTION**

(a) In performing this contract, the Contractor shall:

- (1) Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to their health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;
- (2) Protect the lives, health, and safety of other persons;
- (3) Prevent damage to property, materials, supplies, and equipment; and,
- (4) Avoid work interruptions.

(b) For these purposes, the Contractor shall:

- (1) Comply with regulations and standards issued by the Secretary of Labor at 29 C.F.R. part 1926. Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (40 U.S.C. § 3701 – 3708); and
- (2) Include the terms of this clause in every subcontract so that such terms will be binding on each subcontractor.

(c) The Contractor shall maintain an accurate record of exposure data on all accidents incident to work performed under this Contract resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 29 C.F.R. part 1904.

(d) The Owner shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the Work, shall be deemed sufficient notice of the noncompliance and corrective action required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to take corrective action promptly, the Owner may issue an order stopping all or part of the Work until satisfactory corrective action has been taken. The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.

(e) The Contractor shall be responsible for its subcontractors' compliance with the provisions of this clause. The Contractor shall take such action with respect to any subcontract as EDA, or the Secretary of Labor shall direct as a means of enforcing such provisions.

20. **CONFLICT OF INTEREST AND OTHER PROHIBITED INTERESTS**

(a) No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part hereof.

(b) No officer, employee, architect, attorney, engineer, or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the Project, shall become directly or indirectly interested personally in this Contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the Project.

(c) The Contractor may not knowingly contract with a supplier or manufacturer if the individual or entity who prepared the Contract Documents has a corporate or financial affiliation with the supplier or manufacturer.

(d) The Owner's officers, employees, or agents shall not engage in the award or administration of this Contract if a conflict of interest, real or apparent, may be involved. Such a conflict may arise when: (i) the employee, officer or agent; (ii) any member of their immediate family; (iii) their partner or (iv) an organization that employs, or is about to employ, any of the above, has a financial interest in the Contractor. The Owner's officers, employees, or agents shall neither solicit nor accept gratuities, favors, or anything of monetary value from the Contractor or subcontractors.

(e) If the Owner finds after a notice and hearing that the Contractor, or any of the Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of the Owner or EDA in an attempt to secure this Contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Contract, the Owner may, by written notice to the Contractor, terminate this Contract. The Owner may also pursue other rights and remedies that the law or this Contract

provides. However, the existence of the facts on which the Owner bases such findings shall be an issue and may be reviewed in proceedings under the dispute resolution provisions of this Contract.

(f) In the event this Contract is terminated as provided in paragraph (e) of this section, the Owner may pursue the same remedies against the Contractor as it could pursue in the event of a breach of this Contract by the Contractor. As a penalty, in addition to any other damages to which it may be entitled by law, the Owner may pursue exemplary damages in an amount (as determined by the Owner) which shall not be less than three nor more than ten times the costs the Contractor incurs in providing any such gratuities to any such officer or employee.

21. **RESTRICTIONS ON LOBBYING**

(a) This Contract, or subcontract is subject to section 319 of Public Law 101-121, which added section 1352, regarding lobbying restrictions, to chapter 13 of title 31 of the United States Code. The new section is explained in the common rule, 15 C.F.R. part 28 (55 FR 6736-6748, February 26, 1990). Each bidder under this Contract or subcontract is generally prohibited from using federal funds for lobbying the Executive or Legislative Branches of the Federal Government in connection with this EDA Award.

(b) **Contract Clause Threshold:** This Contract Clause regarding lobbying must be included in each bid for a contract or subcontract exceeding \$100,000 of federal funds at any tier under the EDA Award.

(c) **Certification and Disclosure:** Each bidder of a contract or subcontract exceeding \$100,000 of federal funds at any tier under the federal Award must file Form CD-512, *Certification Regarding Lobbying*, and, if applicable, Standard Form-LLL, *Disclosure of Lobbying Activities*, regarding the use of any nonfederal funds for lobbying. Certifications shall be retained by the Contractor or subcontractor at the next higher tier. All disclosure forms, however, shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.

(d) **Continuing Disclosure Requirement:** Each Contractor or subcontractor that is subject to the Certification and Disclosure provision of this Contract Clause is required to file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by such person. Disclosure forms shall be forwarded from tier to tier until received by the Recipient of the EDA Award, who shall forward all disclosure forms to EDA.

(e) **Indian Tribes, Tribal Organizations, or Other Indian Organizations:** Indian tribes, tribal organizations, or any other Indian organizations, including Alaskan Native organizations, are excluded from the above lobbying restrictions and reporting requirements, but only with respect to expenditures that are by such tribes or organizations for lobbying activities permitted by other federal law. An Indian tribe or organization that is seeking an exclusion from Certification and Disclosure requirements must provide EDA with the citation of the provision or provisions of federal law upon which it relies to conduct lobbying activities that would otherwise

be subject to the prohibitions in and to the Certification and Disclosure requirements of section 319 of Public Law No. 101-121, preferably through an attorney's opinion. Note, also, that a non-Indian subrecipient, contractor, or subcontractor under an award to an Indian tribe, for example, is subject to the restrictions and reporting requirements.

22. **HISTORICAL AND ARCHAEOLOGICAL DATA PRESERVATION**

The Contractor agrees to facilitate the preservation and enhancement of structures and objects of historical, architectural or archaeological significance and when such items are found and/or unearthed during the course of project construction. Any excavation by the Contractor that uncovers an historical or archaeological artifact shall be immediately reported to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the State Historic Preservation Officer (SHPO) for recovery of the items. See the National Historic Preservation Act of 1966 (80 Stat 915, 16 U.S.C. § 470) and Executive Order No. 11593 of May 31, 1971.

23. **CLEAN AIR AND WATER**

Applicable to Contracts in Excess of \$100,000

(a) **Definition.** "Facility" means any building, plant, installation, structure, mine, vessel, or other floating craft, location, or site of operations, owned, leased, or supervised by the Contractor or any subcontractor, used in the performance of the Contract or any subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the Administrator, or a designee, of the United States Environmental Protection Agency (EPA) determines that independent facilities are collocated in one geographical area.

(b) In compliance with regulations issued by the EPA, 2 C.F.R. part 1532, pursuant to the Clean Air Act, as amended (42 U.S.C. § 7401 *et seq.*); the Federal Water Pollution Control Act, as amended (33 U.S.C. § 1251 *et seq.*); and Executive Order 11738, the Contractor agrees to:

- (1) Not utilize any facility in the performance of this contract or any subcontract which is listed on the EPA List of Violating Facilities pursuant to 2 C.F.R. part 1532 for the duration of time that the facility remains on the list;
- (2) Promptly notify the Owner if a facility the Contractor intends to use in the performance of this contract is on the EPA List of Violating Facilities or the Contractor knows that it has been recommended to be placed on the List;
- (3) Comply with all requirements of the Clean Air Act and the Federal Water Pollution Control Act, including the requirements of section 114 of the Clean Air Act and section 308 of the Federal Water Pollution Control Act, and all applicable clean air and clean water standards; and

(4) Include or cause to be included the provisions of this clause in every subcontract and take such action as EDA may direct as a means of enforcing such provisions.

24. **USE OF LEAD-BASED PAINTS ON RESIDENTIAL STRUCTURES**

(a) If the work under this Contract involves construction or rehabilitation of residential structures, the Contractor shall comply with the Lead-based Paint Poisoning Prevention Act (42 U.S.C. § 4831). The Contractor shall assure that paint used on the Project on applicable surfaces does not contain lead in excess of the percentages set forth in Paragraphs (a) and (b) of this section. In determining compliance with these standards, the lead content of the paint shall be measured on the basis of the total nonvolatile content of the paint or on the basis of an equivalent measure of lead in the dried film of paint already applied.

(1) For paint manufactured after June 22, 1977, paint may not contain lead in excess of 6 one-hundredths of 1 percent (.0006) lead by weight.

(2) For paint manufactured on or before June 22, 1977, paint may not contain lead in excess of five-tenths of 1 percent lead by weight.

(b) As a condition to receiving assistance under PWEDA, recipients shall assure that the restriction against the use of lead-based paint is included in all contracts and subcontracts involving the use of federal funds.

(c) **Definitions**

(1) "Applicable surfaces" are those exterior surfaces which are readily accessible to children under seven years of age.

(2) "Residential structures" means houses, apartments, or other structures intended for human habitation, including institutional structures where persons reside, which are accessible to children under seven years of age, such as day care centers, intermediate and extended care facilities, and certain community facilities.

25. **ENERGY EFFICIENCY**

The Contractor shall comply with all standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public L. No. 94-163) for the State in which the Work under the Contract is performed.

26. **ENVIRONMENTAL REQUIREMENTS**

When constructing a Project involving trenching and/or other related earth excavations, the Contractor shall comply with the following environmental constraints:

(1) **Wetlands.** When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert wetlands.

(2) **Floodplains.** When disposing of excess, spoil, or other construction materials on public or private property, the Contractor shall not fill in or otherwise convert 100 year floodplain areas delineated on the latest Federal Emergency Management Agency (FEMA) Floodplain Maps, or other appropriate maps, i.e., alluvial soils on Natural Resource Conservation Service (NRCS) Soil Survey Maps.

(4) **Endangered Species.** The Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of the Contractor, the Contractor will immediately report this evidence to the Owner and a representative of EDA. Construction shall be temporarily halted pending the notification process and further directions issued by EDA after consultation with the U.S. Fish and Wildlife Service.

27. **DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSIONS**

As required by Executive Order 12549, *Debarment and Suspension*, and implemented at 2 C.F.R. part 1326, for prospective participants in lower tier covered transactions (except subcontracts for goods or services under the \$25,000 small purchase threshold unless the subrecipient will have a critical influence on or substantive control over the award), as defined at 2 C.F.R. part 1326.

(1) By entering into this Contract, and by further executing Form CD-512, the Contractor and subcontractors certify, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this Contract by any federal department or agency.

(2) Where the Contractor or subcontractors are unable to certify to any of the statements in this certification, the Contractor or subcontractors shall attach an explanation to this bid.

See also 15 C.F.R. §§ 14.13 or 24.35, as applicable.

28. **EDA PROJECT SIGN**

The Contractor shall supply, erect, and maintain in good condition a Project sign according to the specifications provided by EDA. To the extent practical, the sign should be a free standing sign. Project signs shall not be located on public highway rights-of-way. Location and height of signs will be coordinated with the local agency responsible for highway or street safety in the Project area, if any possibility exists for obstructing vehicular traffic line of sight. Whenever the EDA site sign specifications conflict with State law or local ordinances, the EDA Regional Director will permit such conflicting specifications to be modified so as to comply with State law or local ordinance.

Division 5

EDA Construction Site Sign

EDA PROJECT SIGN

The Contractor shall supply, erect, and maintain in good condition a project sign according to the specifications set forth below:

EDA SITE SIGN SPECIFICATIONS

Size: 4' x 8' x ¾"

Materials: Exterior grade/MDO plywood (APA rating A-B)

Supports: 4" x 4" x 12' posts with 2" x 4" cross branching

Erection: Posts shall be set a minimum of three feet deep in concrete footings that are at least 12" in diameter.

Paint: Outdoor enamel

Colors: Jet Black, Blue (PMS300), and Gold (PMS7406). Specifically, on white background the following will be placed:

The U. S. Department of Commerce seal in blue, black, and gold;

“EDA” in blue;

“U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT
ADMINISTRATION” in black;

“In partnership with” in blue;

(Actual name of the) “Investment Recipient” in black;

“PUTTING AMERICA TO WORK” in blue;

“Barack Obama, President of the United States” in black.

Lettering: Specific fonts are named below; positioning will be as shown on the attached illustration.

“U. S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT
ADMINISTRATION” use Bank Gothic Medium - **BANK GOTHIC MED**

“In partnership with” use Univers™ 55 Oblique - *Univers 55*

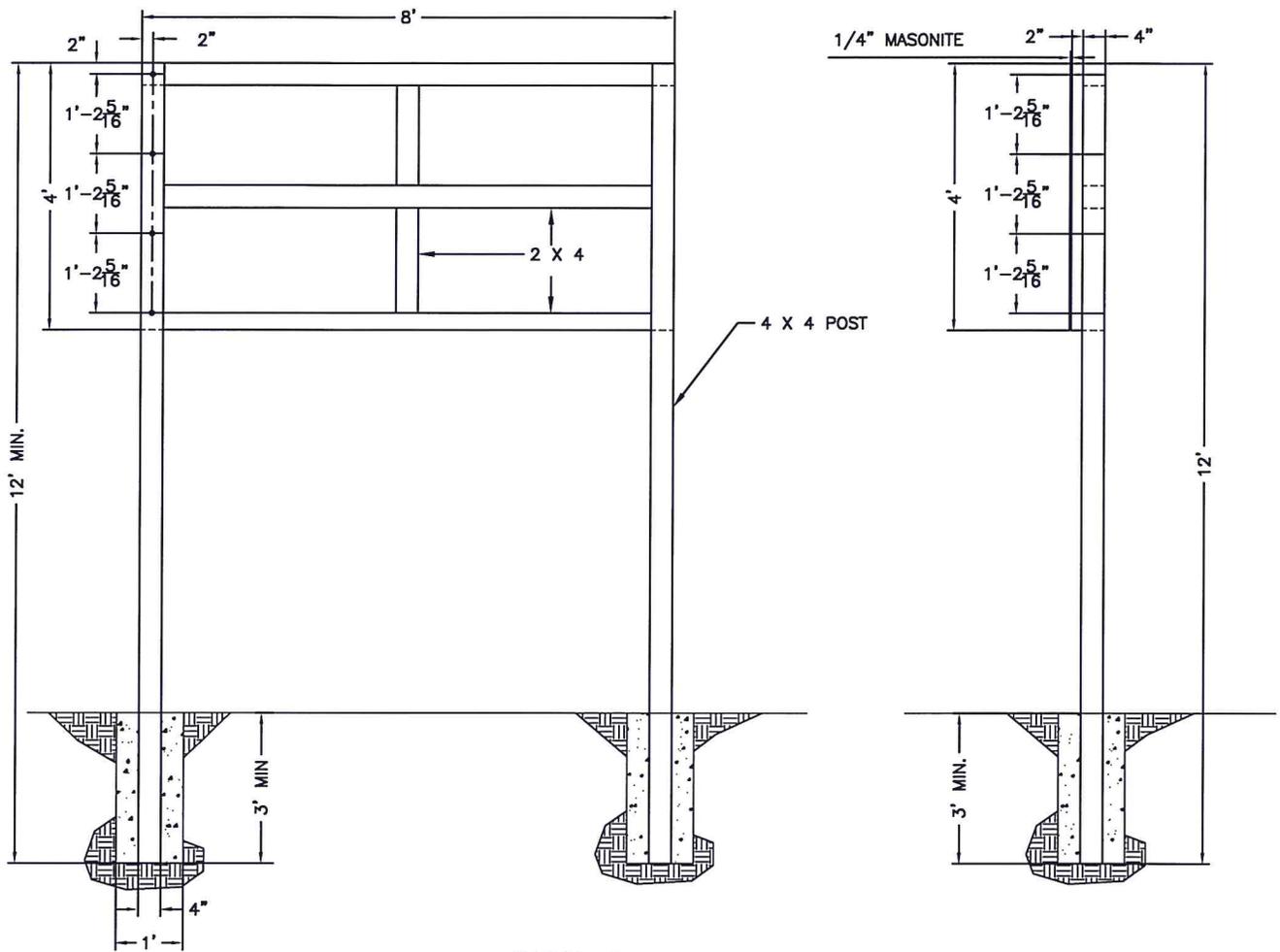
(Name of) “Investment Recipient” use Univers™ Extra Black 85 - **Univers 85**

“PUTTING AMERICA TO WORK” use Walkway Black - **Walkway**

“Barack Obama, President of the United States” use Univers™ 55 Oblique - *Univers 55*

Project signs will not be erected on public highway rights-of-way. If any possibility exists for obstruction to traffic line of sight, the location and height of the sign will be coordinated with the agency responsible for highway or street safety in the area.

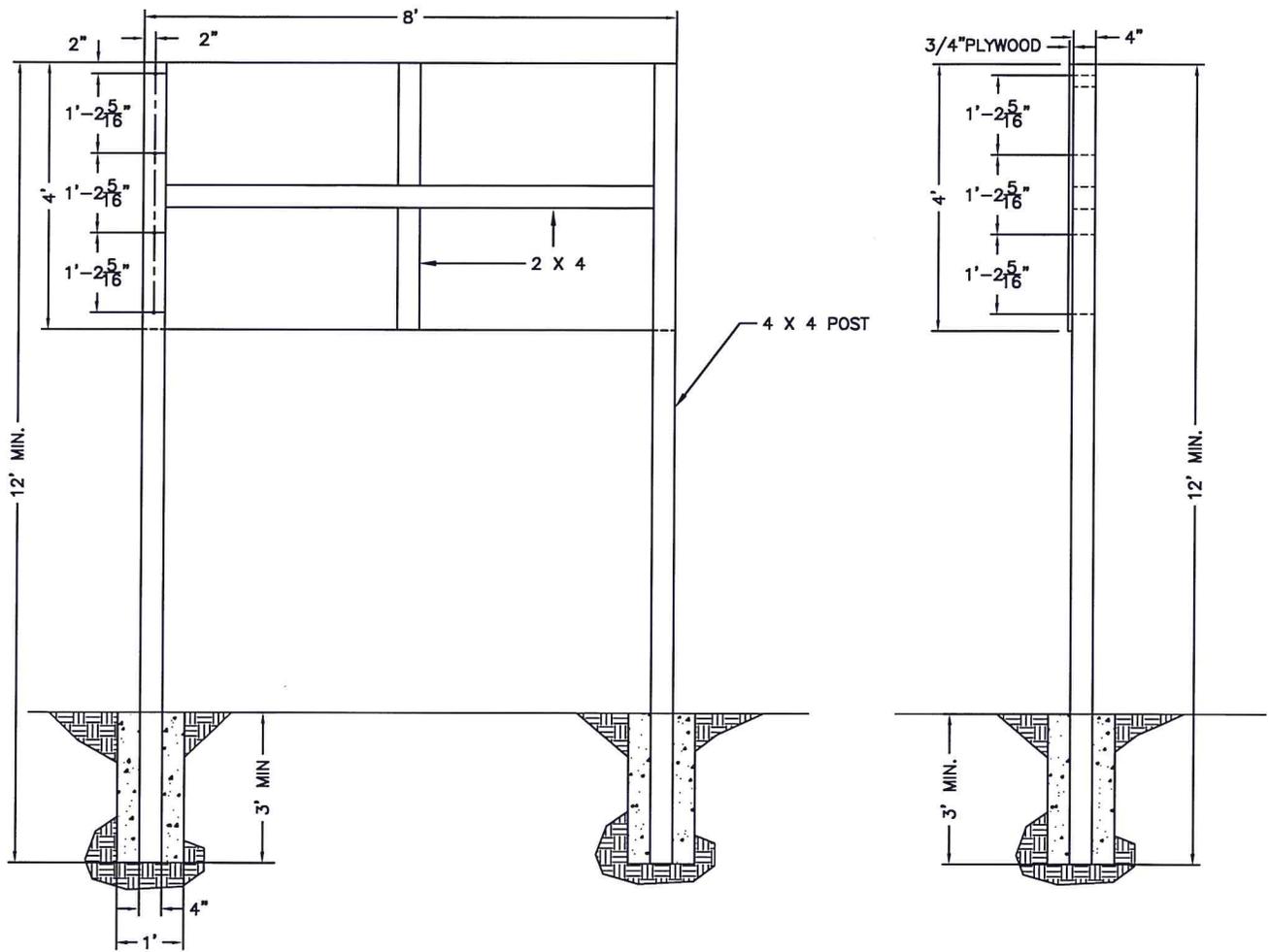
The EDA Regional Director may permit modifications to these specifications if they conflict with state law or local ordinances.



SIGN A
MASONITE SIGN
SCALE: 3/8" = 1'

PROJECT - SIGN A

ECONOMIC DEVELOPMENT ADMINISTRATION



SIGN B
 PLYWOOD SIGN
 SCALE: 3/8" = 1'

PROJECT - SIGN B

ECONOMIC DEVELOPMENT ADMINISTRATION



EDA

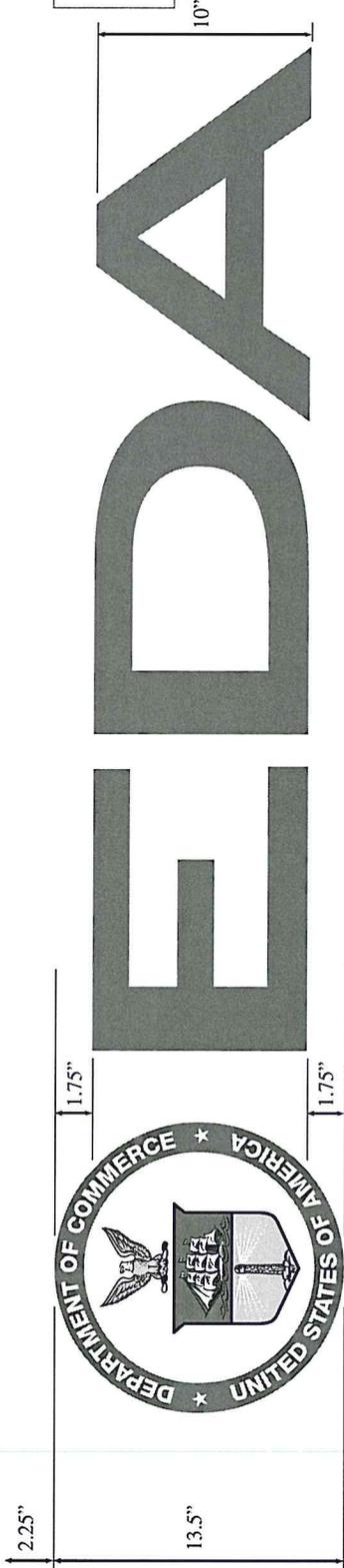
U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

Recipient Name

PUTTING AMERICA TO WORK

Barack Obama, President of the United States



Black
 Blue= PMS300
 Gold= PMS7406

U.S. DEPARTMENT OF COMMERCE ECONOMIC DEVELOPMENT ADMINISTRATION

In partnership with

Recipient Name

PUTTING AMERICA TO WORK

Barack Obama, President of the United States

- 2.0"
- 1.5"
- 4.0"
- 3.0"
- 3.0"
- 3.75"
- 3.0"
- 4.25"
- 2.0"
- 1.75"
- 4.0"



ATTACHMENT C

MBE/WBE Goals Having Been Met

MBE/WBE
Attachment C

THE MBE/WBE GOAL HAVING BEEN MET, the following information must be submitted:

MUNICIPALITY: _____ STATE: _____

SRF PROJECT NO.: _____ CONTRACT NO.: _____

- 1. Total dollar amount of the contract: \$ _____
- 2. Total dollar amount of the MBE participation: \$ _____
- 3. Percentage of MBE participation: % _____
- 4. Total dollar amount of WBE participation: \$ _____
- 5. Percentage of WBE participation: % _____
- 6. List of MBE/WBE subcontractors (fill out for each of MBE/WBE used):

List of MBE/WBE firms to be used.

Company Name	Contact Person	Phone	Type of Work	Amount

This attachment must be signed by an authorized representative of the bidder.

(Signature)

Name:
Title:
Address:
Phone:



ATTACHMENT D

MBE/WBE Goals Having Not Been Met

MBE/WBE
Attachment D
(page 1 of 2)

THE MBE/WBE GOAL NOT HAVING BEEN MET, the following information must be submitted:

MUNICIPALITY: _____ STATE: _____

SRF PROJECT NO.: _____ CONTRACT NO.: _____

A. MBE/WBE Participation:

- 1. Total dollar amount of the contract: \$ _____
- 2. Total dollar amount of the MBE participation: \$ _____
- 3. Percentage of MBE participation: % _____
- 4. Total dollar amount of WBE participation: \$ _____
- 5. Percentage of WBE participation: % _____

B. MBE/WBE Solicitation:

List each minority and women-owned firm (whether or not on the Loanee's Project List) to which a letter of solicitation was sent. It is suggested that correspondence be sent by certified or registered mail since the burden or proof of positive efforts to utilize MBE/WBE firms rests with the bidder.

A copy of each solicitation letter MUST be attached.

<u>Minority-Owned Firm Contacted</u>	<u>Women-Owned Firm Contacted</u>
1) _____	1) _____
2) _____	2) _____
3) _____	3) _____
4) _____	4) _____
5) _____	5) _____
6) _____	6) _____
7) _____	7) _____
8) _____	8) _____
9) _____	9) _____
10) _____	10) _____

MBE/WBE
Attachment D
(Page 2 of 2)

C. List all MBE/WBE firms to be used:

List of MBE/WBE firms to be used.

Company Name	Contact Person	Phone	Type of Work	Amount

D. List all MBE/WBE firms from which a bid or quotation was received which is not listed in Section C above and the reason the firm was not selected:

List of MBE/WBE firms not to be used.

Company Name	Contact Person	Phone	Reason Not Selected

This attachment must be signed by an authorized representative of the bidder.

(Signature)

Name:

Title:

Address:

Phone:



ATTACHMENT E

Certification for Prime Bidder

City Of Auburn

**CERTIFICATION OF CONTRACTOR REGARDING
EQUAL EMPLOYMENT OPPORTUNITY**

(For Prime Contracts Exceeding \$10,000)

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any other of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause, and if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven (7) calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION BY BIDDER

Name and address of bidder

1. Bidder has participated in a previous contract or subcontract subject to the EEO Clause.
 Yes No
2. Compliance reports were required to be filed in connection with such contract or subcontract.
 Yes No
3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.
 Yes No
4. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?
 Yes No

Name and Title of Authorized Representative (print or type)

Signature of Authorized Representative

Date

City of Auburn

**CERTIFICATION OF CONTRACTOR REGARDING
SEGREGATED FACILITIES**

(For Prime Contracts Exceeding \$10,000)

Name of Prime Contractor: _____

Project Name and Number: _____

The undersigned hereby certifies that:

- (a) No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964.

Name and Title of Authorized Representative (print or type)

Signature of Authorized Representative

Date



ATTACHMENT F

Stream Mitigation

AUBURN INDUSTRIAL SUBDIVISION STREAM CHANNEL RESTORATION

The existing conditions of the streams proposed for impact are not optimal. Based on the stream assessment conducted for the proposed impact area, there are limited values associated with the channels due to previous agricultural and logging activities. The riparian zone has been degraded by erosion and the introduction of invasive species. Although wildlife habitat is a principal function and value of the on-site wetlands, conditions are sub-optimal. By adding native plantings to the wetland riparian zone, cover and foraging opportunities will be improved for wildlife, such as amphibians, birds, and small mammals. As plantings mature, canopy cover in the riparian wetland will increase and help cool the water in the streams, providing better habitat for micro-invertebrates. An approximate 15-ft-wide area on either side of the stream channels will be planted with native shrubs to enhance the riparian area. These riparian areas contain an extensive section of invasive reed canary grass (*Phalaris arundinacea*), which does aid in sediment/toxicant retention and nutrient removal, but limits species diversity. Additional plantings to shade out the reed canary grass will, over time, eradicate this species to increase overall biodiversity, without reducing the wetland's ability to retain nutrients, sediments, and toxins. Another invasive species found in or adjacent to the streams on site is honeysuckle (*Lonicera spp.*). Removal of this species will be an aspect of the rehabilitation to this wetland. Planting of other species, especially woody species, will substantially decrease the likelihood of these problem species persisting in the restored wetland (see Planting Methodology).

The stream channels exhibit signs of significant erosion. The stream banks are either undercut, washed out, or lack consistent channel structure (see attached photos). In recent years, the stream watershed has experienced considerable up-gradient influence. Stabilization efforts will involve the placement of natural-material coir logs in the undercut or washed-out bank areas. Coir logs will be placed on both sides of the stream bank in Stream Restoration Area #1 (265 linear feet) where the channel is most eroded. Gravel substrate material will be added to this section of the stream as well. Coir logs will be placed where needed on alternating sides of the channel in Stream Restoration Area #2 (248 linear feet), Stream Restoration Area #3 (210 linear feet) and Stream Restoration Area #4 (405 linear feet). Native trees and shrubs will be planted adjacent to the banks in the stream restoration areas to aid in stabilization. Both sides of

the streams will be planted with speckled alder (*Alnus rugosa*), red osier dogwood (*Cornus stolonifera*), buttonbush (*Cephalanthus occidentalis*), and black willow (*Salix nigra*). The purpose of this riparian enhancement is to aid in the cooling of the water in the stream, provide habitat for stream dependent insects which are an important source of food for insect eating birds, and provide additional cover for wildlife using the stream as a watering area. Stream bank stabilization activities will contribute to the improvement of the riparian habitat, as well as the overall watershed.

Deed restrictions for the Auburn Industrial Subdivision will be drawn up to ensure that this area is protected, is in compliance with environmental permits and protected in perpetuity. An easement will be created for the stream channel enhancement and preservation areas. Additionally, the easement will allow for implementation of maintenance (if necessary), to provide monitoring and to control the re-introduction of invasives. Though this mitigation area is located in the development and this type of onsite mitigation is typically discouraged, this area is important because of the significant erosion and the spread of invasives from this area to the downstream habitat.



Stream Restoration Area #1



Stream Restoration Area #1

Auburn Industrial Subdivision, Off Lewiston Junction Rd, Auburn
PHOTOGRAPHS OF PROPOSED STREAM RESTORATION AREAS

Photographer: Mike Hartman

Date: 5/17/2010



Stream Restoration Area #1



Stream Restoration Area #1

Auburn Industrial Subdivision, Off Lewiston Junction Rd, Auburn
PHOTOGRAPHS OF PROPOSED STREAM RESTORATION AREAS

Photographer: Mike Hartman

Date: 5/17/2010



Stream Restoration Area #1



Stream Restoration Area #2 (Near AE-14)

Auburn Industrial Subdivision, Off Lewiston Junction Rd, Auburn
PHOTOGRAPHS OF PROPOSED STREAM RESTORATION AREAS

Photographer: Mike Hartman

Date: 5/17/2010



Stream Restoration Area #2



Stream Restoration Area #2

Auburn Industrial Subdivision, Off Lewiston Junction Rd, Auburn
PHOTOGRAPHS OF PROPOSED STREAM RESTORATION AREAS

Photographer: Mike Hartman

Date: 5/17/2010



Stream Restoration Area #3 (Near AF-10)



Stream Restoration Area #3

Auburn Industrial Subdivision, Off Lewiston Junction Rd, Auburn
PHOTOGRAPHS OF PROPOSED STREAM RESTORATION AREAS

Photographer: Mike Hartman

Date: 5/17/2010



Stream Restoration Area #3



Stream Restoration Area #3

Auburn Industrial Subdivision, Off Lewiston Junction Rd, Auburn
PHOTOGRAPHS OF PROPOSED STREAM RESTORATION AREAS

Photographer: Mike Hartman

Date: 5/17/2010



Invasive Honeysuckle Next to Channel

Auburn Industrial Subdivision, Off Lewiston Junction Rd, Auburn
PHOTOGRAPHS OF PROPOSED STREAM RESTORATION AREAS

Photographer: Mike Hartman

Date: 5/17/2010

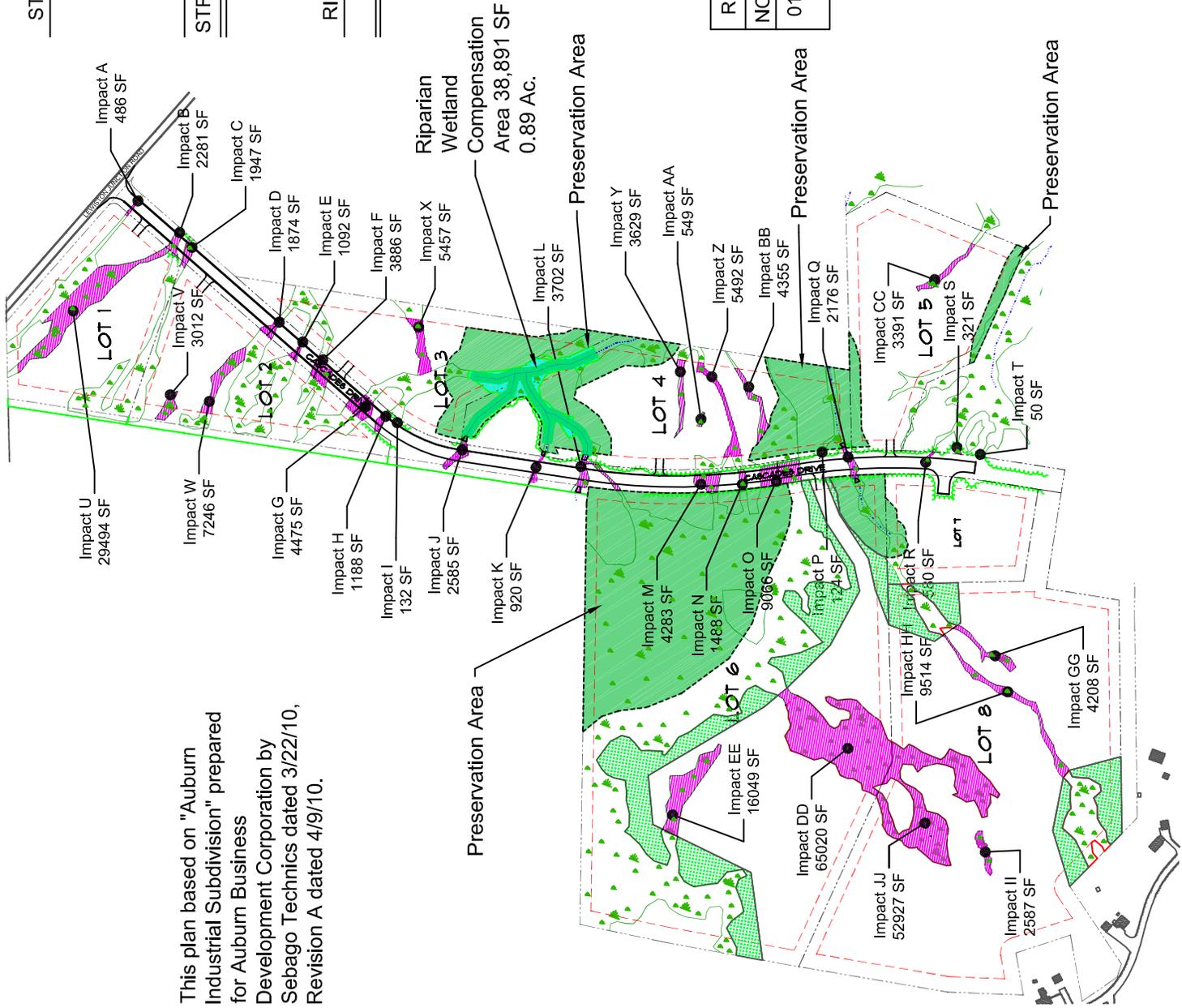
ON SITE PRESERVATION

Stream compensation at the development site will include preservation of 16.07 acres of land. The preservation area includes the riparian enhancement area of 0.89 acres used for stream channel compensation. The remaining 15.18 acres will be used towards compensation for the stream impacts for ACOE credits. These areas include 6.44 acres that are located within 100 feet of stream channels and 8.74 acres located beyond 100 feet of the stream channels. The deed restriction / no build areas will be flagged and restrictions will be recorded with the deeds to permanently restrict these areas from development. An easement will be created for the Stream Channel Enhancement and preservation areas.

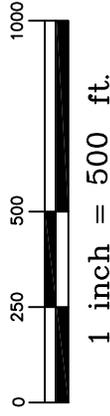
STREAM CHANNEL RESTORATION	LIN. FT.	RATIO	ACOE	ACOE CREDIT
STREAM RESTORATION AREA #1	265 LF	3:1	88.33 LF	
STREAM RESTORATION AREA #2	248 LF	3:1	82.67 LF	
STREAM RESTORATION AREA #3	210 LF	3:1	70.00 LF	
STREAM RESTORATION AREA #4	405 LF	3:1	135.00 LF	
STREAM RESTORATION AREA TOTALS	1,128 LF.		376.00 LF	

RIPARIAN WETLAND ENHANCEMENT	ACRES	ACOE	ACOE CREDIT
ENHANCEMENT - REHABILITATION	0.89 AC.	3:1	0.30

This plan based on "Auburn Industrial Subdivision" prepared for Auburn Business Development Corporation by Sebago Technics dated 3/22/10, Revision A dated 4/9/10.



GRAPHIC SCALE



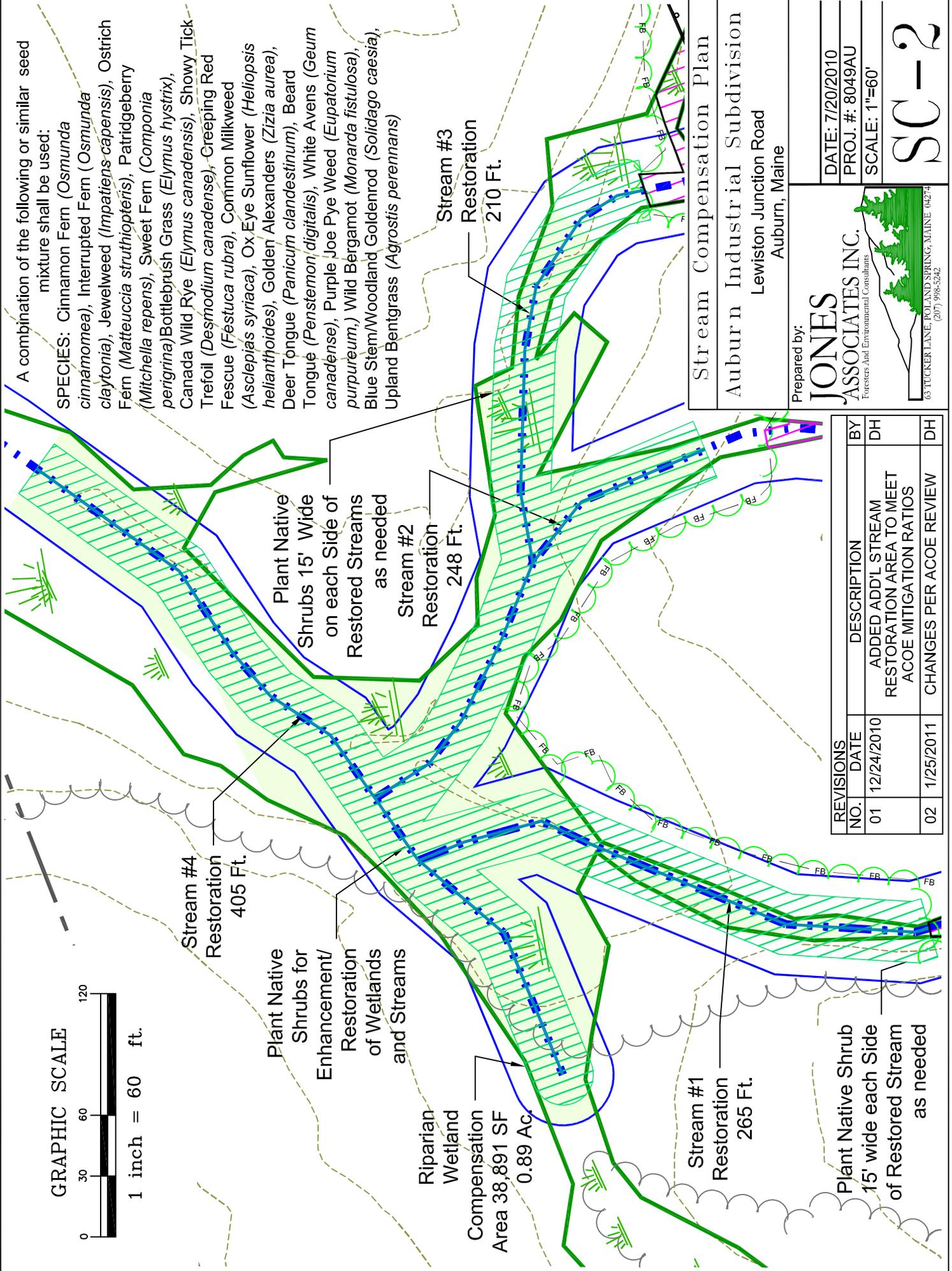
NO.	DATE	DESCRIPTION	BY
01	12/24/2010	ADDED ADD'L STREAM RESTORATION AREA TO MEET ACOE MITIGATION RATIOS	DH

Overall On Site
Stream Compensation Plan
Auburn Industrial Subdivision
Lewiston Junction Road
Auburn, Maine

Prepared by:
JONES ASSOCIATES INC.
Foresters and Environmental Consultants

63 TUCKER LANE, FOLAND SPRING, MAINE 04274
(207) 998-5242

DATE: 7/20/2010
PROJ. #: 8049AU
SCALE: 1"= 500'



A combination of the following or similar seed mixture shall be used:

SPECIES: Cinnamon Fern (*Osmunda cinnamomea*), Interrupted Fern (*Osmunda claytonia*), Jewelweed (*Impatiens capensis*), Ostrich Fern (*Matteuccia struthiopteris*), Patridgeberry (*Mitchella repens*), Sweet Fern (*Comptonia perigrina*), Bottlebrush Grass (*Elymus hystrix*), Canada Wild Rye (*Elymus canadensis*), Showy Tick Trefoil (*Desmodium canadense*), Greeping Red Fescue (*Festuca rubra*), Common Milkweed (*Asclepias syriaca*), Ox Eye Sunflower (*Helianthus helianthoides*), Golden Alexanders (*Zizia aurea*), Beard Tongue (*Panicum clandestinum*), Beard Tongue (*Penstemon digitalis*), White Avens (*Geum canadense*), Purple Joe Pye Weed (*Eupatorium purpureum*), Wild Bergamot (*Monarda fistulosa*), Blue Stem/Woodland Goldenrod (*Solidago caesia*), Upland Bentgrass (*Agrostis perennans*)

Stream Compensation Plan
Auburn Industrial Subdivision
 Lewiston Junction Road
 Auburn, Maine

Prepared by:
JONES ASSOCIATES INC.
 Foresters and Environmental Consultants

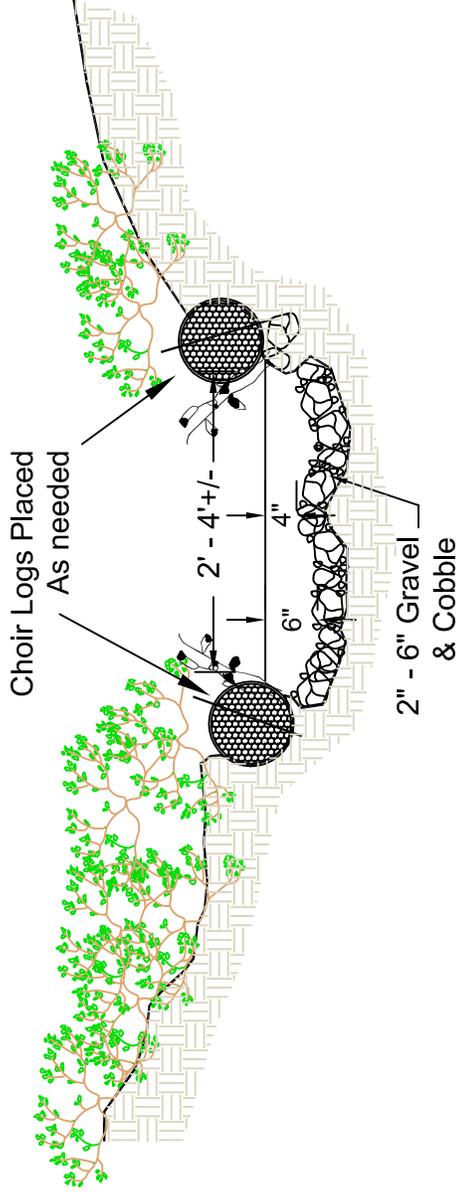
DATE: 7/20/2010
 PROJ. #: 8049AU
 SCALE: 1"=60'

63 TUCKER LANE, POOL AND SPRING, MAINE 04274
 (207) 998-5242

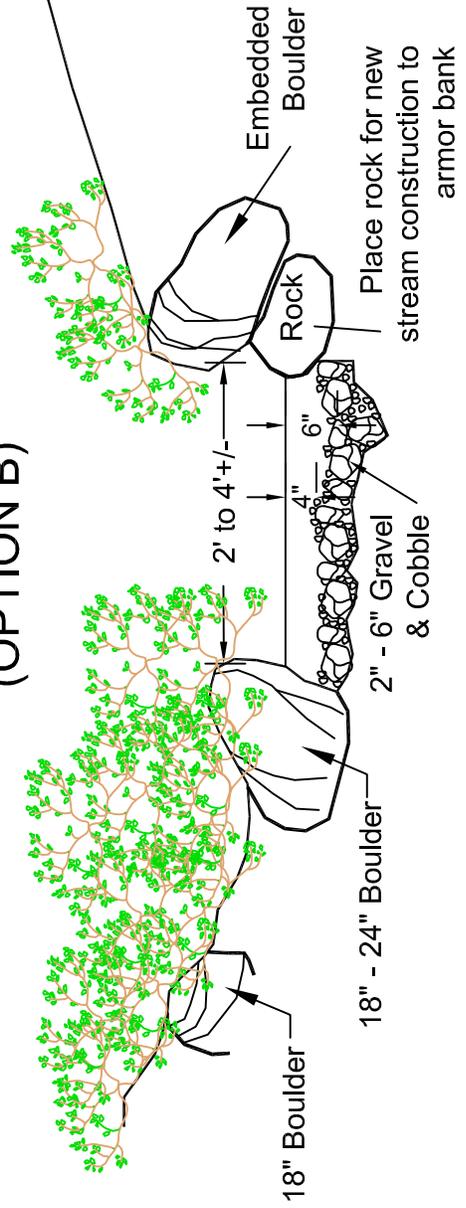
REVISIONS NO.	DATE	DESCRIPTION	BY
01	12/24/2010	ADDED ADD'L STREAM RESTORATION AREA TO MEET ACOE MITIGATION RATIOS	DH
02	1/25/2011	CHANGES PER ACOE REVIEW	DH

SC-2

TYPICAL STREAM CROSS SECTION (OPTION A)



TYPICAL STREAM CROSS SECTION (OPTION B)



Wetland species to be planted Within Riparian Enhancement Area

A combination of the following species to be planted
Total Density of Combined Species to be at
or greater than 600/acre in disturbed areas
All plants to be 8" - 16" Height Size

Streambank Plantings for Stabilization

Common Name	Scientific Name
Speckled Alder	<i>Alnus rugosa</i>
Buttonbush	<i>Cephalanthus occidentalis</i>
Black Willow	<i>Salix nigra</i>
Red Osier Dogwood	<i>Cornus stolonifera</i>

Streambank Plantings for Wildlife Foraging

Common Name	Scientific Name
Winterberry	<i>Ilex verticillata</i>
Nannyberry	<i>Viburnum lentago</i>
Arrowwood	<i>Viburnum dentatum</i>
High bush blueberry	<i>Vaccinium corymbosum</i>

Stream Compensation
Cross Section

Auburn Industrial Subdivision
Lewiston Junction Road
Auburn, Maine

Prepared by:

JONES
ASSOCIATES INC.
Foresters and Environmental Consultants

DATE: 7/20/2010
PROJ. #: 8049AU
NOT TO SCALE



SC-3



ATTACHMENT G

MDOT Supplemental Specification Updates

SUPPLEMENTAL SPECIFICATION

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

SECTION 101

CONTRACT INTERPRETATION

101.2 Definitions

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

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

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

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

SECTION 102

DELIVERY OF BIDS

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

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

SECTION 103

AWARD AND CONTRACTING

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

SECTION 104

GENERAL RIGHTS AND RESPONSIBILITIES

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

SECTION 105 GENERAL SCOPE OF WORK

Delete the entire Section 105.6 and replace with the following:

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

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

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

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

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

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

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

SECTION 106 QUALITY

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

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

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

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

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

SECTION 107 TIME

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

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

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

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

SECTION 108 PAYMENT

Remove Section 108.4 and replace with the following:

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

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

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

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

SECTION 109 CHANGES

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

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

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

109.5.1 Definitions - Types of Delays

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

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

109.7.3 Compensable Items Delete this Section entirely.

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

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

109.7.5 Force Account Work

C. Equipment

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

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

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

Add the following section;

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

SECTION 110

INDEMNIFICATION, BONDING, AND INSURANCE

Delete the entire Section 110.2.3 and replace with the following:

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

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

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

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

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

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

SECTION 202 REMOVING STRUCTURES AND OBSTRUCTIONS

202.02 Removing Buildings Make the following change to the last sentence in the final paragraph, change “...Code of Maine Regulations 401.” to “...Department of Environmental Protection Maine Solid Waste Management Rules, 06-096 CMR Ch. 401, Landfill Siting, Design and Operation.”

SECTION 203 EXCAVATION AND EMBANKMENT

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

Delete the entire Section 203.041 and replace with the following:

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

Methods of utilization may be any of the following:

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

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

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

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

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

SECTION 502 STRUCTURAL CONCRETE

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

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

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

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

502.10 Forms and False work

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

502.11 Placing Concrete

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

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

Second paragraph; delete the first two sentences.

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

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

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

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

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

SECTION 503

REINFORCING STEEL

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

SECTION 504

STRUCTURAL STEEL

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

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

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

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

SECTION 535

PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

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

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

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

SECTION 603

PIPE CULVERTS AND STORM DRAINS

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

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

SECTION 604

MANHOLES, INLETS, AND CATCH BASINS

604.02 Materials Add the following:

“Tops and Traps

712.07

Corrugated Metal Units	712.08
Catch Basin and Manhole Steps	712.09”

SECTION 605
UNDERDRAINS

605.05 Underdrain Outlets Make the following change:

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

SECTION 606
GUARDRAIL

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

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

SECTION 609
CURB

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

SECTION 610
STONE FILL, RIPRAP, STONE BLANKET,
AND STONE DITCH PROTECTION

Add the following paragraph to Section 610.02:

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

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

Definitions

703.32”

Add the following paragraph to Section 610.032.a.

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

Add the following paragraph to Section 610.032.b:

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

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

SECTION 615

LOAM

615.02 Materials Make the following change:

Organic Content

Humus

Percent by Volume

“5% - 10%”, as determined by Ignition Test

SECTION 618

SEEDING

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

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

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

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

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

SECTION 620

GEOTEXTILES

620.03 Placement Section (c)

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

First Paragraph: Replace first word “Non-woven” with “Woven monofilament”.
Second Paragraph: Replace second word “Non-woven” with “Erosion Control”.

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

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

620.09 Basis of Payment

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

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

SECTION 621
LANDSCAPING

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

SECTION 626
HIGHWAY SIGNING

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

SECTION 627
PAVEMENT MARKINGS

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

SECTION 637
DUST CONTROL

637.06 Basis of Payment Add the following after the second sentence of the third paragraph: “Failure by the Contractor to follow Standard Specification or Special Provision - Section 637 and/or the Contractor’s own Soil Erosion and Pollution Control Plan concerning Dust Control and/or the Contractor’s own Traffic Control Plan concerning Dust Control and/or visible evidence of excessive dust problems, as determined by the Resident, will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department’s Resident or any other representative of the Department reserves the right to

suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item. Additional penalties may also be assessed in accordance with Special Provision 652 - Work Zone Traffic Control and Standard Specification 656 - Temporary Soil Erosion and Water Pollution Control.”

SECTION 639 ENGINEERING FACILITIES

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

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

639.09 Telephone Paragraph 1 is amended as follows:

“The contractor shall provide **two** telephone lines and two telephones,....”

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

SECTION 652 MAINTENANCE OF TRAFFIC

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

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

FAP elements shall be capable of at least a 50 percent dimming from full brilliance. Full brilliance should be used for daytime operation and the dimmed mode shall be used for nighttime operation. FAP shall be at least 2.4 M x 1.2 M [96” x 48”] and finished in non-

reflective black. The FAP shall be interpretable for a distance not less than 1.6 km [1 mile].

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

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

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

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

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

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

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

“652.2.5 Portable Changeable Message Sign Trailer mounted Portable Changeable Message Signs (PCMS) must be of a type that has been submitted to AASHTO’s National Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of 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 15° viewing angle. Characters must be legible from a distance of at least 200 M [650 feet].

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

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

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

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

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

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

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

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

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

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

The Traffic Control Supervisor, or designee directly overseeing physical installation, adjustment, and dismantling of work zone traffic control, will ensure all personnel performing

those activities are trained to execute the work in a safe and proper manner, in accordance with their level of decision-making and responsibility.”

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

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

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

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

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

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

Add the following:

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

When lane shifts or lane closures require traffic to cross a permanent longitudinal rumble strip for more than 7 calendar days, the Contractor shall pave in the rumble strips in the area that

traffic will cross, unless otherwise directed by the Resident. Rumble strips shall be replaced prior to the end of the project, when it is no longer necessary to cross them.”

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

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

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

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

The Contractor shall have available portable floodlights for special areas.

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

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

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

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

Night Work lighting requirements:

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

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

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

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

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

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

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

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

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

652.8.2 Other Items Replace the first paragraph with the following: “The accepted quantities of flagger hours will be paid for at the contract unit price per hour for each flagging station occupied excluding lunch breaks, and for each approved breaker flagger. Overtime hours, as reported on the certified payrolls, will be paid an additional 30% of the bid price for 652.38. The computation and additional payment for overtime hours will occur during the project close-out process and will be paid as additional hours of 652.38 to the nearest ¼ hour. The contract unit price shall be full compensation for hiring, transporting, equipping, supervising, and the payment of flaggers and all overhead and incidentals necessary to complete the work.”
Replace the last paragraph with the following: “There will be no payment made under any 652 pay items after the expiration of the adjusted total contract time.”

SECTION 653 POLYSTYRENE PLASTIC INSULATION

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

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

SECTION 656

TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

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

ORIGINAL CONTRACT AMOUNT

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

SECTION 701

STRUCTURAL CONCRETE RELATED MATERIALS

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

SECTION 703

AGGREGATES

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

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

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

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

AGGREGATE GRADATION CONTROL POINTS

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

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

GRADATION CLASSIFICATION

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

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

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

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

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

Replace subsections 703.25 through 703.28 with the following:

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

703.26 Plain and Hand Laid Riprap Stone for riprap shall consist of hard, sound durable rock that will not disintegrate by exposure to water or weather. Stone for riprap shall be angular and rough. Rounded, subrounded or long thin stones will not be allowed. The maximum allowable length to width ratio will be 3:1. Stone for riprap may be obtained from quarries or by screening oversized rock from earth borrow pits. The minimum stone size (10 lbs) shall have an average dimension of 5 inches. The maximum stone size (200 lbs) shall have an average dimension of approximately 12 inches. Larger stones may be used if approved by the Resident. Fifty percent of the stones by volume shall have an average dimension greater than 9 inches (50 lbs).

703.27 Stone Blanket Stones for stone blanket shall consist of sound durable rock that will not disintegrate by exposure to water or weather. Stone for stone blanket shall be angular and rough. Rounded or subrounded stones will not be allowed. Stones may be obtained from

quarries or by screening oversized rock from earth borrow pits. The minimum stone size (300 lbs) shall have minimum dimension of 14 inches, and the maximum stone size (3000 lbs) shall have a maximum dimension of approximately 66 inches. Fifty percent of the stones by volume shall have average dimension greater than 24 inches (1000 lbs).

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

Add the following paragraph:

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

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

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

Rounded: Particles have smoothly curved sides and no edges”

SECTION 706

NON-METALLIC PIPE

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

SECTION 708

PAINTS AND 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 [$\frac{1}{2}$ in] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be one-piece construction. The lens material shall be plastic and meet the luminous transmission requirements of this specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20 foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall be provided to the Resident upon request without cost to the Department. All such samples shall be returned to the Contractor upon completion of the tests.

712.32 Copper Tubing Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.

712.33 Non-metallic Pipe, Flexible Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.

712.34 Non-metallic Pipe, Rigid Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D1785. Fittings shall be of the same material.

712.341 Metallic Pipe Metallic pipe shall be ANSI, Standard B36.10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

712.35 Epoxy Resin Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.

712.36 Bituminous Curb The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01 Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture.

Bituminous material for curb shall meet the requirements of Section 403 - Hot Bituminous Pavement.

712.37 Precast Concrete Slab Portland cement concrete for precast slabs shall meet the requirements of Section 502 - Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the plans and cross section and in accordance with the Standard Detail plans for Concrete Sidewalk Slab. The surface shall be finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

712.38 Stone Slab Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [½ in] under a 600 mm [2 ft] straightedge or over 25 mm [1 in] under a 1200 mm [4 ft] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set

on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [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.”