



CITY OF PORTLAND, MAINE

DEPARTMENT OF PUBLIC SERVICES

CONTRACT AND SPECIFICATIONS
for
***Forest Avenue, Congress Street and
Chestnut Street Lighting***

BID NUMBER: 9611

DATED: June 6, 2011

RECEIVED

AUG 31 2011

Dept. of Building Inspections
City of Portland Maine

FOREST AVENUE, CONGRESS STREET AND CHESTNUT STREET LIGHTING

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NOTICE**

**BID NUMBER: 9611
CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC SERVICES**

NOTICE TO CONTRACTORS

Sealed proposals, addressed to Purchasing, Room 103, City Hall, 389 Congress Street, Portland, Maine 04101, and endorsed on the outside of the envelope with the name of the Bidder, Contract Name and Bid Number will be received until 3:00 p.m. (prevailing time) on Wednesday, June 22, 2011 at which time they will be publicly opened and read.

**PROJECT NAME: FOREST AVENUE, CONGRESS STREET AND CHESTNUT STREET
LIGHTING Bid # 9611**

LOCATION: Forest Avenue, Congress Street and Chestnut Street

OUTLINE OF WORK: Removal of existing street lighting, and provision of new street and sidewalk lighting, along separate sections of Forest Avenue and Congress Street, as well as the provision of new sidewalk lighting fixtures for two existing lighting poles at Monument Square. Also included is the provision on new street lighting along a section of Chestnut Street. The project shall include new light base foundations, modification of existing light base foundations, utility trenching and associated backfill, repair of disturbed pavement and sidewalk surfaces, underground conduit and wiring, new light poles with street and sidewalk luminaires, and new lighting control panels with *Central Maine Power Company* metering.

The above-named plans, specifications and proposal forms may be seen at the Engineering Office, Department of Public Services, 55 Portland Street, Portland, Maine; or in the Purchasing Office, City Hall, Room 103, 389 Congress Street, Portland, Maine, phone (207) 874-8654, fax 874-8652 or e-mail to JRL@portlandmaine.gov . Plans and proposal books are available for purchase at the Purchasing Office, Room 103, City Hall, upon payment in advance of \$50.00 for each set of plans and proposal book or \$75.00 for each set of plans and proposal book to be mailed. Such payment will not be refunded. Each prospective bidder will be required to obtain from the City each copy of the proposal form and plan set. Partial sets will not be issued.

CITY OF PORTLAND, MAINE

Advertise: Portland Press Herald, June 6, 2011

NOTICE TO BIDDERS

Bid No. 9611
CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC SERVICES

PROJECT: **FOREST AVENUE, CONGRESS STREET AND CHESTNUT STREET LIGHTING,
Bid # 9611)**

Sealed bids for the above project, addressed to Purchasing office, City Hall, Room 103, 389 Congress Street, Portland, Maine 04101, and clearly marked on the outside of the envelope with the name of the bidder, project title and bid number, will be received until 3:00 p.m. (prevailing time) on June 22, 2011, at which time they will be publicly opened.

Questions regarding this bid shall be made in writing only and be sent to the Purchasing Office, being received no later than five working days prior to the bid opening. They may be hand delivered, mailed, e-mailed to mff@portlandmaine.gov or faxed to 207-874-8652. Questions that result in modifications to the bid's specifications will be in the form of a written addendum and sent to all bid holders on registered in the Purchasing Office.

Bids from vendors not registered with the Purchasing Office may be rejected; receipt of this document directly from the City of Portland indicates registration. Should a vendor receive this Request from a source other than the City, please contact 207-874-8654 to ensure that your firm is listed as a vendor for this bid.

Late, unsigned bids or bids submitted electronically shall not be accepted. Bids shall remain open to acceptance for sixty (60) days from their opening. Three (3) complete copies of your bid submission, including any descriptive literature, shall be submitted on the forms provided and in an envelope plainly marked on the outside with the bid's title and number.

The successful bidder shall agree to defend, indemnify and save the City harmless from all losses, costs or damages caused by its acts or those of its agents, and, before signing the contract, will produce evidence satisfactory to the City's Corporation Counsel of coverage for General Public and Automobile Liability insurance in amounts not less than \$400,000 per person, for bodily injury, death and property damage, protecting the contractor and the City, and naming the City as an additional insured from such claims, and shall also procure Workers' Compensation insurance.

The contractor shall supply the City with a Performance Bond, and Labor and Material Payment Bond, each in the amount of the contract price, guaranteeing one hundred percent (100%) performance of the contract, 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.

Prior to any payment by the City, the contractor may be required to supply the City with a Waiver of Lien – Material and Labor for the total awarded contract cost, guaranteeing payment in full for all labor and materials used or required in connection with the work described in this bid. The City may also require waivers of lien, signed by individual subcontractors, with requests for progress payments. Any mechanic's lien or any other lien which may be filed against the premises which are the subject of the 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. 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 and costs which may be incurred by it in substituting a bond in place of the lien.

Materials and equipment purchased for permanent installation in this project are exempt from the State of Maine Sales and Use tax and from all Federal Excise taxes. Each bidder shall take this exception into account in calculating his bid price for the work.

The contractor shall furnish all labor, materials, fixtures, supplies, equipment and transportation necessary to do the work as specified. Work shall be conducted in an orderly manner and all work shall be performed in accordance with best trade policy and in conformance with pertinent OSHA, Local, State and Federal Government regulations. Contractors will be responsible for acquiring all necessary permits, licenses and pay all associated fees (including dump disposal fees and disposal taxes, if applicable), unless otherwise specified herein.

NOTE: All work on this project shall be completed within **90 calendar days**.

Equal Employment Opportunities. Vendor shall comply fully with the Nondiscrimination and Equal Opportunity Provisions of the Workforce Investment Act of 1998, as amended (WIA, 29 CFR part 37); the Nontraditional Employment for Women Act of 1991; title VI of the Civil Rights Act of 1964, as amended; section 504 of the Rehabilitation Act of 1973, as amended; the Age Discrimination Act of 1975, as amended; title IX of the Education Amendments of 1972, as amended; and with all applicable requirements imposed by or pursuant to regulations implementing those laws, including but not limited to 29 CFR part 37.

The contractor shall erect, and maintain at all times, any and all safeguards necessary for the protection of life and property of all maritime, pedestrian and vehicular traffic, where applicable.

Pursuant to City procurement policy and ordinance, the City is unable to contract with businesses or individuals who are delinquent in their financial obligations to the City. These obligations may include but are not limited to real estate and personal property taxes and sewer user fees. Bidders who are delinquent in their financial obligations to the City must do one of the following: bring the obligation current, negotiate a payment plan with the City's Treasury office, or agree to an offset which shall be established by the contract which shall be issued to the successful bidder.

It is the custom of the City of Portland, Maine to pay its bills 30 days following equipment delivery and acceptance, and following the receipt of correct invoices for all items covered by the purchase order. In submitting bids under these specifications, bidders should take into account all discounts, both trade and time allowed in accordance with this payment policy and quote a net price. The City is exempt from the State's sales and use tax as well as all Federal excise taxes.

The City of Portland, Maine, reserves the right to reject any and all bids should it be deemed for the best interest of the City to do so. The City reserves the right to substantiate proposer's qualifications, capability to perform, availability, past performance record and to verify that bidders are current in their obligations to the City.

June 6, 2011
Matthew F. Fitzgerald
Purchasing Manager

PROPOSAL

Bid No. 9611
CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC SERVICES

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: Matthew F. Fitzgerald, Purchasing Manager
City Hall, Room 103
389 Congress Street
Portland ME 04101

Dear Mr. Fitzgerald:

The undersigned having carefully examined the site of the work; the Plans; "State of Maine Department of Transportation Standard Specifications," Revision of December, 2002, including all current amendments or revisions thereof; the Supplemental Specification, Special Provisions; Contract Agreement and Contract Bonds contained herein for the **Forest Avenue, Congress Street and Chestnut Street Lighting** 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" sheet number two of this book, **Forest Avenue, Congress Street and Chestnut Street Lighting**, 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":

This Proposal may be accepted by the City of Portland 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. 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. The unit price will be used regardless of final quantity.

BASE BID						
Item No.	Quantity	Item with Unit Bid Price Written in Words	Dollars	Cents	Dollars	Cents
203.20	125 c.y.	Common excavation @ _____ _____ Per Cubic Yard				
203.26	25 c.y.	Gravel Borrow @ _____ _____ Per Cubic Yard				
206.061	10 c.y.	Structural Earth Excavation, drainage & minor structures (overdepth) @ _____ _____ Per Cubic Yard				
304.09	30 c.y.	Aggregate Base Course crushed, Type "A" @ _____ _____ Per Cubic Yard				
608.15	100 s.y.	Brick Sidewalk @ _____ _____ Per Square Yard				
609.38	96 l.f.	Reset Existing Curb @ _____ _____ Per Linear Foot				
609.41	96 l.f.	Remove and Stack Curb @ _____ _____ Per Linear Foot				
609.51A	12 s.y.	Reset Existing Cobblestone (Paver Block) @ _____ _____ Per Square Yard				

626.22	202 l.f.	2-inch Non-Metallic Conduit @ _____ _____ Per Linear Foot				
626.23	56 l.f.	4-inch Non-Metallic Conduit @ _____ _____ Per Linear Foot				
626.24	50 l.f.	4-inch Steel Conduit @ _____ _____ Per Linear Foot				
626.36	11 ea.	Modify Existing Foundation Bases @ _____ _____ Per Each				
626.37	1 ea.	Foundations for New Bases @ _____ _____ Per Each				
626.38	1 ea	Lower Existing Foundation Bases @ _____ _____ Per Each				
629.05	40 hour	Hand Labor, Straight Time @ _____ _____ Per Hour				
629.06	24 hour	Mason @ _____ _____ Per Hour				
631.105	24 hour	Air Tool and Compressor, including Operator @ _____ _____ Per Hour				

631.122	40 hour	Backhoe - ½ cubic yard, including Operator @ _____ _____ Per Hour				
631.171	40 hour	Truck, Small, including Operator @ _____ _____ Per Hour				
631.4	48 hour	25-35 Ton Crane, including Operator @ _____ _____ Per Hour				
631.36	60 hour	Foreman @ _____ _____ Per Hour				
634.04	1070 l.f.	Cable Installation @ _____ _____ Per Linear Foot				
634.08	3 ea	Electrical Service/ Lighting Control Box @ _____ _____ Per Each				
634.09	1 ea	Electrical Sidewalk Box @ _____ _____ Per Each				
634.162	11 ea	Remove Existing Pole @ _____ _____ Per Each				
634.163	11 ea	Remove and Reinstall Existing Signs @ _____ _____ Per Each				

634.2101	8 ea	Conventional Lighting Standard – Type 1 @ _____ _____ Per Each				
634.2102	4 ea	Conventional Lighting Standard – Type 2 @ _____ _____ Per Each				
634.2103	2 ea	Conventional Lighting Standard – Type 3 @ _____ _____ Per Each				
654.08	1 ea	Density Tests @ _____ _____ Per Each				
		TOTAL AMOUNT OF BASE BID PROPOSAL, WRITTEN AND IN FIGURES BASED ON ESTIMATE OF QUANTITIES – BASIS OF PROJECT AWARD				

ALTERNATE BID # 1						
Item No.	Quantity	Item with Unit Bid Price Written in Words	Dollars	Cents	Dollars	Cents
203.20	40 c.y.	Common excavation @ _____ _____ Per Cubic Yard				
304.09	12 c.y.	Aggregate Base Course crushed, Type "D" Roadway @ _____ _____ Per Cubic Yard				
608.15	50 s.y.	Brick Sidewalk @ _____ _____ Per Square Yard				

626.21	85 l.f.	2-inch Steel Conduit @ _____ _____ Per Linear Foot				
626.22	107 l.f.	2-inch Non-Metallic Conduit @ _____ _____ Per Linear Foot				
629.05	24 hour	Hand Labor, Straight Time @ _____ _____ Per Hour				
629.06	12 hour	Mason @ _____ _____ Per Hour				
631.105	12 hour	Air Tool and Compressor, including Operator @ _____ _____ Per Hour				
631.122	16 hour	Backhoe - ½ cubic yard, including Operator @ _____ _____ Per Hour				
631.171	24 hour	Truck, Small, including Operator @ _____ _____ Per Hour				
631.36	40 hour	Foreman @ _____ _____ Per Hour				
634.04	870 l.f.	Cable Installation @ _____ _____ Per Linear Foot				

631.4	24 hour	25-35 Ton Crane, including Operator @ _____ _____ Per Hour				
634.2104	6 ea	Conventional Lighting Standard – Type 4 @ _____ _____ Per Each				
654.08	1 ea	Density Tests @ _____ _____ Per Each				
		TOTAL AMOUNT OF ALTERNATE BID #1 PROPOSAL, WRITTEN AND IN FIGURES BASED ON ESTIMATE OF QUANTITIES.				

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.

SECOND: If this Proposal is accepted, the undersigned shall execute the Contract Agreement and furnish satisfactory Contract Bonds under the conditions stipulated in the Specifications within twelve (12) calendar days from the date of the Notice of Award of the Contract.

THIRD: To begin work on the date specified in the Engineer's "Notice to Commence Work" as stated in Subsection 108.02 of the Standard Specifications and to prosecute said work in such a manner as to complete it within the time limits given in the Special Provisions. Further, that moneys will be deducted as liquidated damages at the rate specified in Subsection 108.09 "Schedule of Liquidated Damages" for each day that the work shall remain uncompleted after the time herein specified for completion of the work.

FOURTH: 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 hereby declares that any person(s) employed by the City of Portland, Maine, who has direct or indirect personal or financial interest in this proposal or in any portion of the profits which may be 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 contract. 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 to you. If in doubt as to status or interest, please disclose to the extent known).

Respectfully submitted this _____ day of _____, 20 _____

IF AN INDIVIDUAL, SIGN HERE

Name of Bidder _____

Soc. Sec. No. _____

Signature of Bidder _____

Address _____

IF A FIRM OR PARTNERSHIP, SIGN HERE

Signature of Bidder _____

Name of Firm or Partnership _____

Business Address _____

Names and Addresses of Members of Firm or Partnership:

Federal Tax ID No. _____

(Signatures for a Corporation on next page)

IF A CORPORATION, SIGN HERE

Name of Bidder _____

Authorized Signature _____
(name) (title)

Business Address _____

Incorporated under the Laws of the State of _____

Names and Addresses of Officers of the Corporation:

President _____

Secretary _____

Treasurer _____

_____ SS

Federal Tax ID No. _____

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 Supplier

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 PORTLAND
AND**

(CONTRACTOR)

AGREEMENT entered into this _____ day of _____, 2011, by and between the **CITY OF PORTLAND**, a body politic and corporate located in the County of Cumberland, State of Maine, (hereinafter the "**CITY**"), and _____, located at _____ (hereinafter the "**CONTRACTOR**").

WITNESSETH

WHEREAS, the **CITY** did advertise a Request for Bids by Bid # 9611, entitled Forest Avenue, Congress Street and Chestnut Street Lighting; and

WHEREAS, the **CONTRACTOR** did under date of June 22, 2011 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 Forest Avenue and Congress Street lighting project (hereinafter the "Work"), in accordance with the specifications contained in the Notice and Specifications issued to the Contractors under date of June 6, 2011 by the Purchasing Manager for the City of Portland, and also in accordance with **CONTRACTOR**'s Proposal dated June 22, 2011. 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 part of this Agreement; and in conformance with the State of Maine, Department of Transportation Standard Specifications for Highways and Bridges, 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.

A copy of said Notice and Specifications and **CONTRACTOR**'s Proposal are attached to this Agreement and made a part hereof as Exhibits A and B respectively. The restatement of any of the terms contained in the Notice and Specifications or Proposal shall not be deemed to waive any terms not so restated. If a disagreement is found between the said attachments and this document, then this document shall govern; provided, however, that this document and its attachments shall be construed to be supplemental to one another to the extent possible.

2. **CONTRACTOR** covenants and agrees that all Work performed and furnished hereunder shall be free from all defects, and that all Work shall be performed in a good workmanlike manner. Unless a longer warranty period is specified in the attachments hereto, all Work provided hereunder shall be warranted by **CONTRACTOR** for one (1) full year from the date of completion of all Work hereunder and acceptance thereof by the **CITY**.
3. For the performance of all terms and conditions of this Agreement, **CITY** will pay **CONTRACTOR** _____ Dollars (\$ _____ .00) in full payment for **CONTRACTOR's** performance.
4. If the total amount due to **CONTRACTOR** under this Agreement exceeds One Hundred Twenty-Five Thousand Dollars (\$125,000), **CONTRACTOR** shall supply the **CITY** with a performance bond, and labor and materials payment bond, each in the amount of _____ Dollars (\$ _____ .00), guaranteeing one hundred per cent (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 and shall be issued by a bond company licensed to do business in the State of Maine.
5. **CITY** reserves the right to require **CONTRACTOR** to provide waivers of lien for labor and materials prior to the issuance of final payment by the **CITY**.
6. Prior to the execution of this Agreement, **CONTRACTOR** shall procure and maintain Public Liability Insurance coverage and Automobile Insurance coverage in amounts of not less than Four Hundred Thousand Dollars (\$400,000.00) combined single limit for bodily injury, death, and property damage, naming the **CITY** as an additional insured thereon, and shall also procure Workers' Compensation Insurance coverage. **CONTRACTOR** shall furnish and thereafter maintain certificates evidencing such coverage, which certificates shall guarantee thirty (30) days' notice of termination of insurance from insurance company or agent.
7. To the fullest extent permitted by law, the **CONTRACTOR** shall defend, indemnify and hold harmless the **CITY**, its 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.
8. **CONTRACTOR** will begin Work upon issuance of a notice to proceed issued by the **CITY** and complete the Work by _____, 2011. The time set for such completion may be extended only by written consent of the **CITY's** Director of Public Services (hereinafter referred to as the "Director").
9. Any mechanic's lien or any other lien which may be filed against the premises which are subject of this Agreement 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.
10. 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 Agreement. 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.

- 11. In the event that any dispute as to the amount, nature or scope of the work required under this Agreement, the decision and judgment of the responsible CITY official will be final and binding.
- 12. 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 Director.
- 13. CITY may withhold ten percent (10 %) of each invoice amount as retainage until the Work is completed and accepted by CITY.
- 14. 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.
- 15. 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.
- 16. Out of concern for the public, CITY employees and CONTRACTOR's employees, all work performed by CONTRACTOR shall be in conformance with pertinent OSHA, local, state and federal government regulations.
- 17. Any disputes arising out of or in the course of this Agreement, which are not settled by mutual agreement of the parties, shall be resolved in the courts of the State of Maine.

IN WITNESS WHEREOF, the said CITY OF PORTLAND has caused this Agreement to be signed and sealed by Pat Finnigan, its Acting 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 PORTLAND

BY: _____
Pat Finnigan
Its Acting City Manager

CONTRACTOR

By: _____

(Print or type name)

Its _____

Approved as to Form:

Approved as to funds:

Date:

Addressee

NOTICE OF AWARD
RE: FOREST AVENUE, CONGRESS STREET AND CHESTNUT STREET LIGHTING

Dear

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

A pre-construction conference will be scheduled for a later date, in the Engineering Office, 55 Portland Street. Please be prepared to execute the contract within twelve (12) calendar days of this letter, as per page _____ of 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: insurance coverages for Contractor's Public Liability Insurance shall have \$400,000 limits. The standard Certificate of Insurance forms shall have the cancellation statement edited. The words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company" shall be crossed out. 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 874-8300, extension _____.

Sincerely,
CITY OF PORTLAND

Project Engineer

ACCEPTANCE OF NOTICE

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

By _____ Title _____

this the _____ day of _____, 20 _____.

pc: City Engineer

Date:

Addressee

NOTICE TO COMMENCE WORK - FOREST AVENUE, CONGRESS STREET AND CHESTNUT STREET LIGHTING

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 with _____ consecutive days thereafter. The date of completion of all work is therefore _____.

Sincerely,
CITY OF PORTLAND

Project Engineer

ACCEPTANCE OF NOTICE

Receipt of the Above NOTICE TO COMMENCE WORK is hereby acknowledged and a copy returned to the City of Portland.

By _____ Title _____
this the _____ day of _____, 20 _____.

pc: City Engineer
FINAL INSPECTION
RE: FOREST AVENUE, CONGRESS STREET AND CHESTNUT STREET LIGHTING

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 Portland 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 874-8300, extension _____.

Sincerely,
CITY OF PORTLAND

Project Engineer/Inspector

pc: Director of Public Services
Project File

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 FOREST AVENUE, CONGRESS STREET AND CHESTNUT STREET LIGHTING, City of Portland, County of Cumberland, 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 Portland 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 _____

STANDARD SPECIFICATIONS

The City of Portland, Maine has adopted for this project the "State of Maine, Department of Transportation, Standard Specifications (for) Highways and Bridges, Revisions of December 2002", including all current additions or modifications thereof.

The Contract Agreement, Special Provisions and Supplemental Specifications contained hereinafter shall take precedence and shall govern in any case of conflict with the Standard Specifications.

SPECIAL PROVISIONS

The following Supplemental Specifications and Special Provisions shall amend the "State of Maine, Department of Transportation, Standard Specifications, Revision of December, 2002". 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

No construction work shall be performed during the following hours, without prior written approval from the Commissioner.

- A. From September 1 of any year through May 31 of the following year, no construction work shall be performed between 7:00 p.m. of any day and 7:00 a.m. of the following day.
- B. From June 1 of any year through August 31 of the same year, no construction work shall be performed between 8:00 p.m. of any day and 7:00 a.m. of the following day.
- C. On Saturdays, Sundays, and legal holidays, construction work shall not be performed before 8:00 a.m.

Construction shall not interfere with the normal flow of traffic on arterial streets. The full inbound roadway lane width shall be maintained between 7:00 a.m. and 9:00 a.m. and the full outbound roadway lane width shall be maintained between the hours of 3:30 p.m. and 6:00 p.m.

The definition of work for the purpose of this provision 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 water and gas utility service and transmission lines. 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 Abutters

Abutters shall be notified by the Contractor sufficiently in advance of any construction affecting driveways, sidewalks, or utilities.

4. Existing 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 Engineer 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 that are not called for 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, or replaced as deemed necessary by City Arborist at no additional cost to the City.

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.

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 Federal Highway Administration, an agency of the U.S. Department of Transportation.

A traffic plan may be included in the plan set, but responsibility for preparation of the actual plan shall be the contractor's. The Contractor must submit his/her traffic plan to the City of Portland Transportation Engineer for review and approval, 3 working days prior to the pre-construction meeting.

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 Portland, Department of Public Services will establish a single construction layout. This layout will include PK Nails at fifty foot stations. 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 or bracing required for the satisfactory installation of drainage structures and pipes shall be considered as incidental to the appropriate bid item, and not paid for separately.

10. Waste Areas

The disposal of waste and surplus materials 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. Pre-construction Conference

A conference will be held at 55 Portland Street, Portland, Maine within ten (10) 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 offering suggestions to the Contractor concerning 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 conference 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 contract completion dates. 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 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 presence of Portland Police will be a determination made by the Traffic Engineer based on the contractors submitted traffic control plan. If Police are required, the City will hire and reimburse them. The Police Department requires 48 hours notice for any Police detail onsite.

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. Contractor 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 roadway subbase concurrent to trench backfilling operation if the street is not being reconstructed.

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 settlement in excess of ¼-inch, cracking or opening of pavement joints. Repair may include overlay, removal of unacceptable material and complete replacement, joint sealing or re-cutting

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 Portland's Street Excavation Ordinance

The Contractor is hereby advised that all work shall conform to the regulations of Chapter 25 of the Municipal Code, "Excavations in Public Places", as currently amended. The Contractor shall be responsible for obtaining the Street Opening Permit for this project; however, no street opening fee will be charged. The Contractor will be required to obtain an Excavator's License from the City and maintain this license for the duration of the project. The Contractor will be required to pay the normal Excavator's License fees to the City to obtain this license.

21. Record Drawings

The Contractor shall keep daily records of all changes in the work, ties to all new service connections, and elevations of all inverts. The Contractor shall maintain a record of all service lateral locations and locations of buried fittings, etc., throughout the project. Such locations shall be recorded by 3 ties from fixed permanent points. Prior to requesting final payment, the Contractor shall submit the records in triplicate bound form. The records shall be clearly legible and include the street, tax map, lot number and reference contract drawing number. A blank form to be used by the Contractor for recording record ties is included in this section.

Prior to final payment the Contractor SHALL be required to submit location of all structures using GPS, As-Built Plans on mylar and on CD/DVD in digital format to the Public Services Department, Engineering Division for review and approval. Plans shall be drafted utilizing AutoCAD (version 2004 or later) software and plotted on mylar drafting film sized at 24" x 36". Scanned images of marked up plans are not an acceptable substitute for an AutoCAD drawing file. As-Built plans shall meet the requirements outlined in the document titled "Engineering Design and As-Built Plan Submission Requirements for Infrastructure Construction, Subdivisions, Site Development, and Accepting Streets. Public Services Department - Engineering Division" as established by the Project Engineer responsible for the Engineering Archives located at the City of Portland, Department of Public Services, Engineering Division.

22. Waste Material

All demolition and construction 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. All demolition and construction waste material not reused or resold by the Contractor must be disposed of at the City of Portland's Riverside Recycling Facility. Transportation and disposal fees associated with the proper disposal of all waste materials generated by the project at Riverside are the responsibility of the Contractor. Location and contact information for Riverside Recycling Facility is as follows:

Riverside Recycling Facility
910 Riverside Street
Portland, ME 04103
(207) 797-6200

23. Quality Assurance

The Contractor shall be responsible at all times for maintaining quality assurance during performance of his work. Particular attention to compaction shall be paid during backfilling operations. Strict adherence to Section 203.11 and 304.04 of the Standard Specifications will be required when backfilling trenches, preparing subgrade, and placing subbase and base gravels.

In-place density tests of the backfill material shall be conducted by an independent testing laboratory. The amount and frequency of testing shall follow the requirements of Section 654. A minimum of one density test per 50 feet of trench may be required. The Contractor shall be

responsible for procuring and paying for the testing services, when provided for in contract.

The use of an independent testing laboratory, by the Contractor, shall receive prior approval from the City Inspector. Payment will be made under Item 654.08 - Density Test.

24. Sanitary Facilities

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

25. Bids

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

26. Subsurface Soils Information

All subsurface soils information, including but not limited to ledge, boring, refusal, or groundwater elevations, is approximate only and is shown on the Drawings for design purposes only and the convenience of the Contractor. 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.

27. Unauthorized Use of Fire Hydrants

In conformance with the Maine Department of Human Services, the Portland Water District requires the use of an approved air gap or reduced pressure zone back flow prevention device to assure the protection of the public water supply when filling tank trucks, street sweepers, jet machines or any other related equipment, or any other needs that require a connection to a public or private hydrant. Contractors working for the City are required to apply to the Portland Water District for a hydrant meter and back flow prevention device. All costs associated with temporary water meters and backflow prevention devices shall be considered incidental.

28. Anti-Idling Policy

Please note, following Special Provisions of the Bid Document we have included a copy of the City's Administrative Regulation #25 regarding the City's Anti-Idling Policy. Although this Policy is directed to City Employees regarding the use of City Vehicles, we as a City, along with its citizenry, request your compliance as well. It is our goal to protect and preserve the natural environment and improve the air quality in the City of Portland. As a business partner of our City and a responsible organization we will expect and greatly appreciate your assistance in this effort.

29. 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.

City of Portland

Anti-Idle Policy

Purpose:

To inform all City employees of the need to eliminate unnecessary idling of vehicles in order to reduce the cost of City operations and to reduce emissions created by City vehicles. Our goal is to protect and preserve the natural environment and improve air quality in the City of Portland.

Policy:

It is the policy of the City of Portland to continually improve the efficient use of vehicle fuels in an effort to reduce operating costs and emissions. City vehicles will not be permitted to idle unnecessarily. Operators of City equipment will adhere to the following standards:

- 1) Idling is prohibited (with the limited exceptions listed below) when the ambient temperature is above 32 degrees F.
- 2) 10 minute maximum idle time limit when ambient temperature is 32 F and below
- 3) Vehicles will not be left idling when the operator is out of the vehicle (with the limited exceptions listed below)

For the health and safety of operators, there will be occurrences when vehicles will be left running. Examples include protection from the elements or for the use of the vehicle safety features (including the use of air conditioning in street sweepers to keep dust out of the cab).

Exceptions

Due to the emergency nature of some City operations, the following exceptions will apply to this policy:

- Emergency response vehicles when responding to an emergency
- Fire vehicles which must maintain onboard medication at a specific temperature
- Vehicles whose batteries may be discharged because of onboard electrical equipment (i.e. emergency lights, radar, computers, etc.)

Non-Compliance

After a reasonable period of education about this new policy, employees will be subject to progressive discipline under AR 25 if they do not comply with this policy.

SUPPLEMENTAL SPECIFICATIONS
DIVISION 100
GENERAL PROVISIONS

The provisions of Division 100 of the Standard Specifications shall apply with the following additions or modifications:

SECTION 101 DEFINITIONS AND TERMS:

- 101.11 Commissioner: This subsection is amended by the addition of the following:
Commissioner shall mean the Director of Public Services, City of Portland, Maine.
- 101.24 Department: This subsection is amended by the addition of the following: whenever the word "Department" or the words "Highway Department" or "Department of Transportation" or the words or phrases which, by context or usage are clearly intended to mean the same thing, appear in the Standard Specifications, Special Provisions or in or on any plan or other contract document, they shall mean the City of Portland, Department of Public Services.
- Department: - shall mean the Department of Public Services, City of Portland, Maine acting through its Director or through his duly authorized representative.
- 101.27 Engineer: This subsection is revised to read as follows: The City Engineer, City of Portland, Public Services Department, acting directly or through his duly authorized representatives, who are responsible for the inspection of the construction.

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:

- 102.01 Qualifications of Bidder: This subsection is amended by the following: The lowest acceptable bidder prior to the award, who has not submitted a "Questionnaire and Financial Statement for Bidder" within the preceding 5 years or upon request of the Department, shall be required to fill out the form as a precondition to award of the contract. The City reserves the right to reject an otherwise acceptable bidder based upon the information contained in said "Questionnaire and Financial Statement for Bidders" and to inquire of the next lowest acceptable bidder. A sample of said Questionnaire is provided by the Engineering Office.
- 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.
- 102.03 Method of Obtaining Plans, Specifications, and Proposal Forms:
- The subsection is revised to read as follows: Plans, Specifications and Proposal Forms may be seen at the Engineering Office, Department of Public Services, 55 Portland Street, Portland, Maine or may be obtained at the Purchasing Office, Room 103, City Hall, upon payment as specified in the published "Notice to Contractors".
- 102.07 Examination of Plans, Specifications, Special Provisions and Site of Work:
- This subsection shall be amended by the addition of the following paragraph: No oral interpretation will be given to the contract documents. All requests for interpretations or for the use of products or methods other than those described in the specifications shall be submitted in writing to the Purchasing 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.

SUPPLEMENTAL SPECIFICATIONS (continued)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS: (continued)

102.08 Preparation of Proposal:

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

102.11 Delivery of Proposals:

This subsection is revised 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 Purchasing, Room 103, City Hall, 389 Congress Street, Portland, Maine 04101. 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.

SECTION 103 AWARD AND EXECUTION OF CONTRACT:

103.02 Award of Contract:

This subsection shall be revised 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 he has been awarded the contract.

103.05 Performance and Payment Bonds:

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 Portland, Maine.

103.08 Insurance:

This subsection reads as follows: Before work is started under the contract, the Contractor will be required to file with the City of Portland, 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:** With respect to the operations he performs and also those performed for him by subcontractors, the Contractor shall carry regular Contractor's Public Liability Insurance, and Contractor's Protective Public Liability Insurance, including underground hazard and collapse each covering bodily injury liability of not less than four hundred thousand dollars (\$400,000.). The insurance certificate shall also name the City as additional insured on Liability portions (not W/C).

SUPPLEMENTAL SPECIFICATIONS (continued)

SECTION 103 AWARD AND EXECUTION OF CONTRACT: (continued)

103.08 Insurance: (cont.)

- (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 injury to or destruction of property in one accident or occurrence.
- (f) 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.
- (g) 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.
- (h) 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.
- (i) 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.
- (j) 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.
- (k) 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.
- (l) 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 Portland, 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.

SECTION 104 SCOPE OF WORK:

- 104.08 Final Cleaning Up: Before final acceptance, the highway, bridges, streams, structures, lawns, property adjacent to the project and grounds occupied by the Contractor in connection with the work shall be cleaned of all rubbish, excess material, temporary structures and equipment and the ground graded to match the surrounding terrain and seeded and mulched if required. All parts of the work shall be left in an acceptable condition.
- 104.09 Basis of Payment: No payment will be made for the final clean-up and the cost thereof shall be considered incidental to the appropriate item.

SUPPLEMENTAL SPECIFICATIONS (continued)

SECTION 105 CONTROL OF WORK:

105.06 Cooperation with Utilities: This subsection shall be revised with the addition of the following: At points where the Contractor's operations are adjacent to properties of railways, telephone, gas, water and/or power companies, or are adjacent to other property, damage to which might result in considerable expense, loss or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

It is anticipated that utility poles will not be relocated prior to commencement of contract work. The Contractor is advised to schedule his work to accommodate the possibility of utility pole obstructions.

The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable, and the duplication or rearrangement work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted.

No person, firm, or corporation, including City forces, shall make or cause to be made any opening or excavation in a City Street, way, or public place until contact has been made with all utilities to locate any existing underground gas, water, telephone, power or other installations within said street, way or public place. When gas or other flammable service to buildings is discontinued, the existing service line for such service shall be terminated at a point outside the building.

In the event of interruption to water or utility services as a result of accidental breakage, or as a result of being exposed or supported, the Contractor shall promptly notify the proper authority. He shall cooperate with the same authority in the restoration of such service as promptly as possible.

Water lines, gas lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals and all other utility appurtenances within the limits of the proposed construction are to be moved by the owners without expense to the Contractor, unless otherwise provided for, or as noted in the plans.

SUPPLEMENTAL SPECIFICATIONS (continued)

The Contractor shall ascertain the location of existing utilities and any other necessary information by direct inquiry at the office of the following utility owners:

Electric:

Central Maine Power Company
162 Canco Road
Portland ME 04103
ATT: Ms. Breanna Pierce
Mr. Tom Atwood

Water:

Portland Water District
225 Douglass Street
Portland ME 04101
ATT: Mr. John Arnold
Mr. Frank Meader

Telephone:

FairPoint
5 Davis Farm Road
Portland ME 04103
ATT: Mr. John Caprio

Fire Alarm:

Portland Fire Department - Electric
109 Middle Street
Portland ME 04101
ATT: Mr. Ben Diaz

Gas:

Unitil
1075 Forest Avenue
Portland ME 04103
ATT: Mr. Sam Murray

Cable TV:

Time Warner Cable
118 Johnson Road
Portland ME 04102
ATT: Mr. Glenn Raymond

Railroad:

Pan Am Railways
Iron Horse Park
North Billerica, MA 01862
ATT: Mr. Mike McDonough

Sewer:

Engineering Section
Dept. of Public Services
55 Portland Street
Portland ME 04101
ATT: Mr. John Emerson

Oil

Portland Pipeline Corp.
P.O. Box 2590
South Portland, ME 04106
ATT: Mr. Ralph Wink

Oil

Mobile Pipeline Corp.
675 Brooks Avenue
Rochester, NY 14619
(716) 527-6160
ATT: Mr. Eugene P. Graves

World Communications

MCI World Communications
One City Center
4th Floor
Portland, ME 04101
ATT: Mr. Allen Heald
Mr. Dennis Grivois

The completeness of the above listing is not guaranteed by the City of Portland.

105.09 Authority and Duties of Resident Engineer or Resident Inspector: The Resident Engineer or Resident Inspector will not be responsible for nor issue directions regarding the Contractor's safety precautions or programs; nor will he issue directions relative to, or assume control over any aspect of the methods, techniques or procedures of construction.

SUPPLEMENTAL SPECIFICATIONS (continued)

SECTION 107 LEGAL RELATIONS WITH AND RESPONSIBILITY TO PUBLIC:

107.11 Barricades and Warning Signs: The Contractor shall provide, erect and maintain necessary barricades, suitable and sufficient lights, signs and other traffic control devices, and shall take necessary precautions for the protection of the work and safety of the public. Obstructions shall be lighted during hours of darkness. Highways closed to traffic, as approved by the Traffic Engineer, shall be blocked off by approved barricades and lights.

The Contractor shall provide, erect and maintain adequate warning signs as specified herein. Warning signs, barricades, lights, temporary signals, and other protective devices shall be constructed and erected in accordance with the plans furnished. In the absence of specific plans or instructions such devices shall conform to those outlined in the latest edition of the "Manual of Uniform Traffic Control Devices for Streets and Highways" - Part V, prepared by the National Joint Committee on Uniform Control Devices.

All other signs shall be furnished by the Contractor. The signs shall be placed as follows:

- (a) "Highway Under Construction" or "Bridge Under Construction" signs shall be conspicuously placed at least 200 feet but not more than 500 feet from each end of the project. Additional "Highway Under Construction" or "Bridge Under Construction" signs shall be placed on intersecting side roads or streets at a distance of at least 200 feet from the intersection.
- (b) "Construction Ahead" signs shall be placed at a distance of 500 to 1,500 feet in advance of the "Highway Under Construction" signs. Additional "Construction Ahead" signs shall be erected on intersecting side streets or roads at a distance of at least 200 feet from the intersection.
- (c) "Work Area" signs shall be erected, moved and re-erected and maintained at each location and placed to provide maximum visibility and effectiveness during working hours.

If no item is included in the contract proposal for this work, then this work shall be incidental to all other items.

SUPPLEMENTAL SPECIFICATIONS (continued)

SECTION 109 MEASUREMENT AND PAYMENT:

- 109.07 Partial Payments: The second paragraph of this subsection shall be revised to read as follows: From the amount for payment shown on each progress estimate, will be deducted ten per cent (10%) and the balance, less all previous payments, will be certified for payment. Thereafter, no additional deductions will be made from progress payments, except as provided in Subsection 107.15 of these Specifications. Once fifty per cent (50%) of the Contract has been paid, no more deductions or retainage will be made on each subsequent progress payment, for the remainder of the contract.
- 109.10 Acceptance and Final Payment: This subsection is revised by adding the following paragraph: Prior to final payment, the Contractor and the Engineer shall jointly inspect the project to assure completion of all items, and the Contractor shall supply the Engineer with a marked up set of plans indicating all changes and additions made during construction. A Certificate of Completion will be sent to the Contractor. The Contractor shall guarantee the project for a period of one year from date of completion.

SUPPLEMENTAL SPECIFICATIONS
SECTION 203
EXCAVATION AND EMBANKMENT

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

203.01 DESCRIPTION:

Paragraph (b) Rock Excavation shall be modified to read: "each having a volume of one-half cubic yard or more".

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.

203.041 EXPLOSIVES:

The Contractor shall keep explosives on the site only in such quantity as may be needed for the work under way and only during such time as they are to be used. He shall notify the Engineer, in advance, of his intention to store and use explosives. Explosives shall be stored in a secure manner and separate from all tools. Caps or detonators shall be safely stored at a point over 100 feet distant from the explosives. When the need for explosives has ended, all such materials remaining on the work shall be promptly removed from the premises.

The Contractor shall observe all municipal ordinances and State and Federal laws relating to the transportation, storage, handling, and use of explosives. In the event that any of the above mentioned laws, ordinances, or regulations require a licensed blaster to perform or supervise the work of blasting, said licensed blaster shall, at all times, have his license on the work and shall permit examination thereof by the Engineer or other officials having jurisdiction.

203.042 BLASTING PRECAUTIONS:

All operations involving explosives shall be conducted with all possible care to avoid injury to persons and property. Blasting shall be done only with such quantities and strengths of explosives and in such manner as will break the rock approximately to the intended lines and grades and yet will leave the rock not excavated in an unshattered condition. Care shall be taken to avoid excessive cracking of the rock upon or against which any structure will be built, and to prevent injury to existing pipes or other structures and property above or below ground. Rock shall be well covered with logs or mats, or both, when required. Sufficient warning shall be given to all persons in the vicinity of the work before a charge is exploded.

All blasting shall be completed within a distance of 50 feet before any portion of a masonry structure is placed or any pipe is laid.

Any site where electric blasting caps are located or where explosive charges are being placed or have been placed shall be designated as a "Blasting Area". A "Blasting Area" within three hundred (300) feet of any traveled way shall be marked by approved signs with information similar to the following:

"BLASTING AREA - TURN OFF RADIO TRANSMITTERS"

and on the reverse side:

"END OF BLASTING AREA"

SUPPLEMENTAL SPECIFICATIONS
SECTION 203 (cont.)
EXCAVATION AND EMBANKMENT

203.042 BLASTING PRECAUTIONS: (continued)

The Contractor shall notify each public utility company having structures in proximity to the site of the work of his intention to use explosives and such notice shall be given sufficiently in advance to enable the companies to take such steps as they may deem necessary to protect their property from injury. Such notice shall not relieve the contractor of responsibility for any damage resulting from his blasting operations.

All persons within the danger zone of blasting operations shall be warned by the Contractor, and no blasting shall be done until the zone is cleared. Flagmen, furnished by the Contractor, shall be so stationed as to stop all approaching traffic during blasting operations.

The Contractor shall be liable for all damages to persons or property caused by blasting or explosions, or arising from neglect to properly guard and protect the excavations and all portions of the work, and he shall wholly indemnify the Owner against all claims on such account. No compensation will be allowed the Contractor in any event, or under any circumstances, for loss incurred by him or arising from his neglect to fully comply with these requirements.

203.043 EXCESS ROCK EXCAVATION:

If rock is excavated beyond the limits of payment indicated in the drawings, specified, or authorized in writing by the Engineer, the excess excavation, whether resulting from over-breakage or other causes, shall be backfilled, by the Contractor at no additional cost to the City, as specified below in this section.

In pipe trenches, excess excavation below the elevation of the top of the bedding, cradle, or envelope shall be filled with material of the same type, placed and compacted in the same manner, as specified for bedding, cradle, or envelope. Excess excavation above said elevation shall be filled with earth as specified in the specifications at no additional cost to the City.

203.044 BLASTING RECORDS:

The Contractor shall keep and submit to the Engineer an accurate record of each blast. The record shall show the general location of the blast, the depth and number of drill holes, the kind and quantity of explosives used, and other data required for a complete record.

203.045 SHATTERED ROCK:

If the rock below normal depth is shattered due to drilling or blasting operations of the Contractor, and the Engineer considers such shattered rock to be unfit for foundations, the shattered rock shall be removed and the excavation shall be backfilled with concrete as required, except that in pipe trenches crushed stone may be used for backfill, if approved. All such removal and backfilling shall be done by the Contractor, at no additional cost to the City.

203.046 PREPARATION OF ROCK SURFACES:

The Contractor shall remove all dirt and loose rock from the designated areas and shall clean the surface of the rock thoroughly, using steam to melt snow and ice, if necessary. Water in depressions shall then be removed as required so that the whole surface of the designated area can be inspected to determine whether seams or other defects exist.

The surface of rock foundations shall be left sufficiently rough to bond well with the masonry and embankments to be built thereon; and, if required, shall be cut to rough benches or steps.

SUPPLEMENTAL SPECIFICATIONS

SECTION 203 (continued) EXCAVATION AND EMBANKMENT

Before any masonry or embankment is built on or against the rock, the rock shall be scrupulously freed from all vegetation, dirt, sand, clay, boulders, scale, excessively cracked rock, loose fragments, ice, snow, and other objectionable substances. Picking, barring, wedging, streams of water under sufficient pressure, stiff brushes, hammers, steam jets, and other effective means shall be used to accomplish this cleaning. All free water left on the surface of the rock shall be removed.

203.047 REMOVAL OF BOULDERS:

Piles of boulders or loose rock encountered within the limits of earth embankments shall be removed to a suitable place of disposal.

203.048 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.

Surplus excavated rock shall be disposed of as specified in Section 203.06, "Waste Areas".

203.049 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: Surplus Earth and Rock Excavation, Trees, Stumps and other Material,

The disposal of surplus earth and rock unacceptable as trench backfill materials and excavated rock shall be the responsibility of the contractor. The disposal of trees, stumps, stubs and brush shall be the responsibility of the Contractor.

If the disposal site is within private property, the Contractor shall be required to obtain written permission from the landowner for use of the disposal site for the above mentioned materials. A copy of the permission shall be provided to the Engineer. The Contractor or landowner shall obtain a dumping permit at 55 Portland Street.

Cobblestones, bricks and curbing removed shall remain the property of the City and shall be delivered to, after removing all excess granular materials therefrom, an approved City stockyard as directed by the City's Project Engineer or City Inspector.

Payment of work listed in this subsection shall be considered incidental to the appropriate item.

SUPPLEMENTAL SPECIFICATIONS
SECTION 203 (continued)
EXCAVATION AND EMBANKMENT

203.18 METHOD OF MEASUREMENT:

Test pits will be measured by the cubic yard.

In the fourth paragraph of this section, the sentence stating "when measured in vehicles, the quantity for payment shall be 90 per cent of the quantity determined for earth", the 90 shall be amended to 80.

203.19 BASIS OF PAYMENT:

The accepted quantity of test pit excavation will be paid for at the contract unit price per cubic yard. Payment shall be full compensation for furnishing all labor, materials and equipment necessary for excavation, backfilling, pavement replacement, disposal of materials and the protection of the utilities.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
203.20	Common Excavation	Cubic Yard
203.26	Gravel Borrow	Cubic Yard

SUPPLEMENTAL SPECIFICATIONS
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.

- (c) 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 (4) 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" as defined in the fourth (4) paragraph of Section 206.02 of the Supplemental Specifications, provided the maximum allowable horizontal dimensions do not exceed the payment limit, dimension "A", as indicated on the Typical Trench Detail.

SUPPLEMENTAL SPECIFICATIONS
SECTION 206 (continued)
STRUCTURAL EXCAVATION

206.04 METHOD OF MEASUREMENT: (continued)

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 Gravel Borrow and paid for under Pay Item 203.26.

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.

"Drag Boxes". if utilized by the Contractor will be allowed; however, no payment will be made for any excess excavation or backfill material used beyond the payment limit, dimension "A", as shown on the Typical Trench Detail.

Excavated materials suitable for backfill shall be used to backfill normal excavations incidental to this section. Disposal of surplus excavated materials shall be in accordance with Section 203.06, Waste Areas.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
206.061	Structural Earth Excavation Drainage and Minor Structures (overdepth)	Cubic Yard

SUPPLEMENTAL SPECIFICATIONS
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:

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.

304.07 BASIS OF PAYMENT:

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

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
304.09 Aggregate Base Course - Crushed, Type "A"	Cubic Yard

SUPPLEMENTAL SPECIFICATIONS
SECTION 608
SIDEWALKS

The provisions of Section 608 of the Standard Specifications shall apply with the following additions and modifications:

BRICK:

608.10 DESCRIPTION:

This work shall consist of the construction of brick sidewalks and driveways on bituminous concrete base in accordance with these specifications and in reasonably close conformity with the lines and grades as shown on the plans.

608.11 MATERIALS:

Materials shall conform to the requirements of the various subsections of the specifications listed below:

Used Brick: The Contractor shall salvage existing bricks from the project area as specified in Section 203 of the Supplemental Specifications. The Engineer shall have full authority in the choice of brick to be disposed of.

The discarded brick shall become the property of the City and shall be delivered by the Contractor to an approved City stockyard as directed by the City's Project Engineer or City Inspector.

New Brick: Conform to the various subsections of the specifications listed below.

Brick - Brick shall conform to requirements of ASTM Standard Specifications for Building Brick (made of clay or shale) Designation C62-66 for Grade SW with the following modifications:

- (a) The absorption limits shall be from 8 to 12 per cent for the average of 5 bricks.
- (b) The compressive strength shall not be less than 8000 pounds per square inch (psi).
- (c) The modulus of rupture shall not be less than 1000 pounds per square inch (psi).
- (d) The bricks shall be No. 1, wire cut type for paving.

Bricks shall be of standard size (2-1/4" x 3-3/4" x 8") with permissible variations not to exceed 1/16" in depth, 1/8" in width or 1/4" in length.

Bricks shall be as manufactured by the Morin Brick Co. of Danville, Maine or an approved equal. Prior to ordering the brick, samples shall be submitted in whole straps to show color range.

All base courses and joints shall conform to the applicable subsections of Division 700 of the Standard Specifications.

608.12 CONSTRUCTION METHODS:

- a. Subgrade: The subgrade for the sidewalks and driveways shall be shaped parallel to the proposed surface of the walks and drives and shall be thoroughly compacted. All depressions occurring shall be filled with a suitable material and again compacted until the surface is smooth and hard.
- b. Foundation: After the subgrade has been prepared, a foundation of crushed gravel shall be placed upon it. After being thoroughly compacted, the foundation shall have a thickness as shown on the plans and typical details and shall be parallel to the proposed surface of the work.

SUPPLEMENTAL SPECIFICATIONS
SECTION 608 (continued)
SIDEWALKS

- c. Bituminous Base: A layer of hot bituminous pavement grading "B" shall be spread upon the properly prepared crushed gravel. After being thoroughly compacted, the bituminous base course shall have a minimum thickness of two (2") inches and shall be parallel to the proposed finish grade.
- d. Sand-Cement Base: A layer of sand-cement base course material one (1") inch in thickness shall be spread upon the properly prepared bituminous base course. The course shall be thoroughly compacted and present a hard smooth surface parallel to the proposed finished slope and grade of the walks and drives. The ratio shall be six (6) parts of washed mortar sand to one (1) part Portland Cement.
- e. Brick Placement: After the sand base course has been properly prepared, the brick shall be placed in the pattern shown on the plans and typical details. The brick shall be placed as closely together as possible and the sand joints between the brick shall be no wider than that allowed by the natural texture of the brick itself. NO OPEN JOINTS WILL BE ALLOWED. Brick shall be saw cut to fit spaces requiring less than a whole brick. No cut brick shall be less than two (2") inches in length. A journeyman brick mason shall supervise all brick placement.

After the bricks are carefully set upon the properly prepared sand-cement base, a plank or heavy sheet of plywood covering several course of brick shall be placed upon the bricks and carefully rammed with a heavy hammer until the bricks reach a firm, unyielding bed and present a surface of the proper slope and grade. Any divergence from line and grade shall be corrected by taking up and relaying the bricks. After the ramming of the bricks, a sufficient amount of sand-cement shall be spread over the surface and thoroughly swept or raked so as to fill the joints. All surplus sand-cement remaining on the sidewalk and driveway after the joints have been properly filled, shall be carefully removed by sweeping. Care shall be taken to avoid raking out the joints during removal of excess sand-cement. A final application of sand only shall be spread on the sidewalk. The application of sand shall then be removed by sweeping while the aforementioned precautions are being exercised.

A 12" wide bituminous strip shall be placed at the gutter line and at the back edge of the brick driveway as a transition between the brick and adjoining surfaces.

608.13 METHOD OF MEASUREMENT:

Brick Sidewalks and Driveways will be measured by the square yard of finished surface complete in place.

608.14 BASIS OF PAYMENT:

The accepted quantity of brick sidewalk and brick driveway will be paid for at the contract unit price per square yard complete in place. This price shall include the cost of excavation including removal of existing sidewalk and driveway, and all labor, materials, and equipment necessary to satisfactorily complete the work. The bituminous strip at back edge of driveway shall be incidental to brick driveway.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
608.15 Brick Sidewalk	Square Yard

SUPPLEMENTAL SPECIFICATIONS
SECTION 609
NEW CURBING

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

609.03 CONSTRUCTION REQUIREMENTS:

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.

609.082 REMOVING AND STACKING VERTICAL CURBING, TERMINAL CURBING, TRANSITION SECTIONS, CURB INLETS, AND CURB CORNERS (TYPE 1):

The Contractor shall be responsible for the removal without damage, cleaning and stacking at an approved City stockyard, all straight and curved curbing, terminal sections and curb corners which are designated to be removed and stacked (R & S). Removal of curbing so designated shall be in accordance with the requirements of Subsection 609.08.

Each section of straight curbing shall have its overall length painted legibly and plainly on one end. Each section of circular curbing shall have its overall arc length and radius painted on one end.

Removing and stacking curb or edging shall include all labor, equipment, tools and materials for excavating, removing, cleaning, backfilling, handling, stacking and any incidental work necessary.

609.09 METHOD OF MEASUREMENT:

All proposed new straight and circular curb to be set and existing curb to be reset will be measured by the linear foot along the face of the curb, complete in place. Tipdown curb will be measured by each, complete in place. Curb removed and stacked will be measured by the linear foot as stacked at the Congress Street City Stockyard.

609.10 BASIS OF PAYMENT:

The accepted quantity of reset existing curb will be paid for at the contract unit price, complete in place. This price shall include the cost of excavation and all labor, materials and equipment necessary to satisfactorily complete the work. The accepted quantity of curb removed and stacked shall be paid for at the contract unit price per linear foot.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
609.38 Reset Existing Curb	Linear Foot
609.41 Remove and Stack Curb	Linear Foot

SUPPLEMENTAL SPECIFICATIONS
SECTION 609A
COBBLESTONE (Paver Block)

609A.01 DESCRIPTION:

This work shall include removing and re-installing existing cobblestone (Paver Block) in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans, details and cross sections.

609A.02 MATERIALS AND INSTALLATION:

Existing Paver Blocks (Cobblestones) shall be used. The installation by the Contractor shall be in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans, details and cross sections. Paver blocks shall be set to give maximum exposure of the Paver Blocks (i.e. 8" nominal face exposed at the surface with the 4" nominal side as a depth).

609A.08 RESETTING COBBLESTONE:

Sufficient subbase/subgrade shall be excavated to allow placement of a minimum of three inches (3") of compacted Type "A" crushed gravel, over which a minimum of two inches (2") of Portland Cement concrete shall be placed wet. Paver blocks (cobblestones) shall be placed on the wet cement concrete to the correct grade with a joint spacing of approximately 3/4 inch. The joints shall be wet mortared with Portland Cement mortar. The Paver Blocks (Cobblestones) shall be set with the four inch (4") nominal side as depth and the eight inch (8") nominal face exposed at the surface. All surplus mortar and/or concrete shall be cleaned from the Paver Blocks (cobblestones) surface.

609A.09 METHOD OF MEASUREMENT:

Cobblestone (Paver Block) shall be measured by the square yard of finished surface, complete in place.

609A.210 BASIS OF PAYMENT:

The accepted quantity of cobblestone (Paver Block) shall be paid for at the Contract unit price per square yard.

<u>Pay Item</u>	Payment will be made under:	<u>Pay Unit</u>
609.51A	Reset Existing Cobblestone (Paver Block)	Square Yard

SUPPLEMENTAL SPECIFICATIONS
SECTION 626
FOUNDATIONS, CONDUIT AND JUNCTION BOXES
FOR HIGHWAY SIGNING, LIGHTING AND SIGNALS

The provisions of Section 626 of the Standard Specifications shall apply with the following additions and modifications.

626.01 DESCRIPTION

This work shall consist of furnishing, installing, or modifying concrete foundations and conduit for highway lighting in accordance with these specifications and plans.

626.02 GENERAL

Installation of conduit methods and locations shall be approved by the Central Maine Power Company.

626.021 MATERIALS

Materials shall meet the requirements specified in the following Subsection of Division 700 - Materials:

Reinforcing Steel	709.01
Steel Conduit	715.02
Non-Metallic Conduit	715.03

626.022 EQUIPMENT LIST AND DRAWINGS

Provide scale drawings and details for anchor bolt installation methods for both new foundations as well as for modified existing foundations. For modified foundations, provide details showing adapter plates for accommodation of new lighting poles to existing anchor bolts.

626.03 CONSTRUCTION FOUNDATIONS

Coordinate excavation for foundations with existing underground utilities. Where conflicts are found with existing utilities, make all practical efforts to install new work to produce a minimum impact on existing conditions. Where relocation of existing utilities is deemed necessary, obtain approval from affected utility supplier in advance of commencing relocation work.

626.034 CONCRETE FOUNDATIONS

Anchor bolts for new lighting poles shall be of size and diameter as required and as detailed on the Contract Drawings.

626.04 METHOD OF MEASUREMENT

Provision of new foundations will be measured by the single unit, including concrete and steel reinforcing. Steel and non-metallic conduit will be measured per linear feet.

SUPPLEMENTAL SPECIFICATIONS
SECTION 626 (continued)
FOUNDATIONS, CONDUIT AND JUNCTION BOXES
FOR HIGHWAY SIGNING, LIGHTING AND SIGNALS

626.05 BASIS OF PAYMENT

The accepted quantity of new foundations will be paid for at the contract unit price for each foundation. Payment shall be full compensation for the complete installed foundation.

The accepted quantity of existing foundations to be modified will be paid for at the contract unit price for each foundation. Payment shall be full compensation for the complete installation of foundation modifications.

The accepted quantity of existing foundations to be cut and lowered beneath the sidewalk level will be paid for at the contract unit price for each foundation. Payment shall be full compensation for the complete effort to lower foundations.

Payment will be made for the total number of linear feet of each type of underground conduit actually furnished, installed and accepted at the contract unit price per linear foot. This price shall include the cost of furnishing and installing the conduit; pull wire; fittings; labor; equipment and incidentals necessary to complete the work including concrete encasement.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
626.22 2-inch Non-Metallic Conduit	Linear Feet
626.23 4-inch Non-Metallic Conduit	Linear Feet
626.24 4-inch Steel Conduit	Linear Feet
626.36 Modify Existing Foundation Bases	Each
626.37 Foundations for New Bases	Each
626.38 Lower Existing Foundation Bases	Each

SUPPLEMENTAL SPECIFICATIONS
SECTION 629
HAND LABOR

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

629.04 BASIS OF PAYMENT:

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

SUPPLEMENTAL SPECIFICATIONS
SECTION 631
EQUIPMENT RENTAL

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

631.08 BASIS OF PAYMENT:

Payment will be made under:		
<u>Pay Item</u>		<u>Pay Unit</u>
631.105	Air Tool and Compressor (including operator)	Hour
631.122	All Purpose Excavator (including operator)	Hour
631.171	Truck - Small (including operator)	Hour
631.122	Backhoe - ½ cubic yard, including Operator	Hour
631.36	Foreman	Hour
631.40	25-35 Ton crane (including operator)	Hour

SUPPLEMENTAL SPECIFICATIONS
SECTION 634
HIGHWAY LIGHTING

The provisions of Section 634 of the Standard Specifications shall apply with the following additions and modifications:

634.01 DESCRIPTION

This work shall consist of removal of existing street light poles and luminaires, and furnishing and installing new lighting poles with fixed street and sidewalk luminaires. Also, remove and reinstall existing traffic/parking signs on new poles.

634.02 GENERAL

Lighting poles shall be provided as detailed on the Contract Drawings. Power connection for new lighting poles at Congress Street shall be obtained by a new metered service contracted with the *Central Maine Power Company*. Power connection for new lighting poles at Forest Avenue shall be obtained by a new metered service contracted with *Central Maine Power Company*. Power connections for the existing lighting poles at Monument Square where new luminaires are to be provided are existing within the lighting pole. Power connection for new lighting poles at Chestnut Street shall be obtained from an existing metered service contracted with the *Central Maine Power Company*. Installation of new poles shall be in full accordance with the details shown on the Contract Drawings. Street luminaires shall be "Esplanade" style decorative luminaires as manufactured by *Holophane Lighting*, rated to operate a 250-watt metal halide lamp. Sidewalk luminaires shall be a reduced scale version of the "Esplanade" style luminaires as manufactured by *Holophane Lighting*, rated to operate a 70-watt metal halide lamp. *New Congress Street, Forest Avenue, and Monument Square lighting poles and luminaires shall be furnished by Holophane Lighting to match exactly those previously installed under the Congress Street Lighting Program. New Chestnut Street lighting poles and luminaires shall be furnished by Holophane Lighting to match exactly those previously installed under the Chestnut Street Lighting Program.*

634.021 MATERIALS

Materials shall meet the requirements specified in the following Subsection of Division 700 - Materials:

Secondary Wiring	715.07
Luminaires, Lamps, and Ballasts	715.08
Photo-Electric Control	715.10
Aluminum Mast Arm and Bracket Arm	720.02
Anchor Bolts	720.07
Lighting Control Box	715.11

634.024 LIGHT STANDARDS

For the purposes of establishing the design weight and projected area of luminaires, the manufacturer's actual data for the specified luminaires shall be used.

SUPPLEMENTAL SPECIFICATIONS
SECTION 634 (continued)
HIGHWAY LIGHTING

634.03 CONSTRUCTION REQUIREMENTS

In addition to the requirements set forth in the Standard Specifications, the Contractor shall arrange the work such that during the removal of existing lighting poles at Congress Street, and the installation of any new lighting poles, no more than two street lights are left overnight out of operation at any one time. Furthermore, no section of Congress Street, Forest Avenue, or Chestnut Street shall be left overnight without either the existing, or new, street lighting in operation.

634.04 CABLE INSTALLATION

All cable servicing lighting poles shall be furnished and installed under this contract. The Contractor shall furnish and install cable, and shall make connections at the base of poles to underground service cables.

634.05 LIGHT STANDARD

Steel lighting poles and bracket arms shall be galvanized prior to application of polyester powder coat paint finish. Provide in-line fuse block and fuse for circuit wiring.

634.051 REMOVING LIGHT STANDARDS

Existing lighting poles shall be removed by the Contractor and delivered to the City of Portland Traffic Division. Existing light fixtures will be removed by the *Central Maine Power Company*.

634.052 REMOVING AND REINSTALLING SIGNS

Existing street name, traffic and parking signs which are indicated on the plans to be relocated to new poles shall be carefully removed and attached to new poles with existing hardware.

634.06 LUMINAIRES

Luminaires as furnished by the *Holophane Lighting Company*: borosilicate glass refractors, with polyester powder coat paint finish, and photocell control. Street light luminaires shall be *Holophane* model ES250MH12A1PR, with socket to match photometric test #47384. Sidewalk luminaires shall be *Holophane* model ESP70DMH12A5 with medium-base lamp socket fitted with a metal halide lamp.

634.08 ELECTRICAL SERVICE

The utility service will be 120 volt, 2 wire. A lighting control box shall be provided to facilitate service for lights at the new street lights at Forest Avenue, Monument Square and at Congress Street. The lighting control boxes shall consist of a NEMA3R aluminum enclosure painted to match the pole/luminaire color (RAL 6012), 20 ampere/1-pole circuit breakers, wiring termination lugs, and exterior utility company meter socket. The lighting control boxes shall be as manufactured by *APX Enclosures, Inc.*, model TC412516.

634.081 BONDING AND GROUNDING

A separate, green insulated ground conductor shall be provided to extend from the luminaires to a ground lug at the inside base of each pole.

634.092 METHOD OF MEASUREMENT

Removal of existing poles and removal/reinstallation of signs will be measured by the single unit. New light standards will be measured by the single unit, complete in place and accepted, including luminaires, lamps, poles, internal wiring, anchor bolts, and cast bracket arms/decorative base covers.

SUPPLEMENTAL SPECIFICATIONS
SECTION 634 (continued)
HIGHWAY LIGHTING

634.093 BASIS OF PAYMENT

The accepted quantity of Type 1, 2 and 4 light standards will be paid for at the contract unit price each for the number of standards by each type. Payment shall be full compensation for the light standard, pole wiring, ballasts, lamps, luminaires, cast arms and base, and all incidentals necessary to complete the work.

The accepted quantity of service arrangements will be paid for at the contract unit price for each service location. Payment shall be full compensation for the service including conduit, wire, lighting control box, concrete base and service metering.

The accepted quantity of existing lighting poles to be removed will be paid for at the contract unit price for the number of poles. Payment shall be full compensation for removing the existing pole and delivering it to the City; for removing and disposing of existing luminaires; and for removing existing banner mounting hardware and delivering it to the City.

The accepted quantity of existing Type 3 lighting poles to be modified will be paid for at the contract unit price for the number of poles. Payment shall be full compensation for ballasts, lamps, luminaires, and all incidentals necessary to complete the work.

The accepted quantity of existing traffic/parking signs to removed and relocated will be paid for at the contract unit price for the number of signs. Payment shall be full compensation for removal and reinstallation of each sign.

Payment will be made for the total number of linear feet of wiring cables actually furnished, installed and accepted at the contract unit price per unit price. This price shall include the cost of furnishing and installing wiring conductors, terminations, labor, equipment and incidentals necessary to complete the work.

<u>Pay Item</u>	<u>Pay Unit</u>
634.04 Cable Installation	Linear Feet
634.08 Electrical Service/ Lighting Control Box	Each
634.09 Electrical Sidewalk Box	Each
634.162 Remove Existing Pole	Each
634.163 Remove and Reinstall Existing Signs	Each
634.2101 Conventional Lighting Standard – Type 1 (Forest Avenue Street Lights)	Each
634.2102 Conventional Lighting Standard – Type 2 (Congress Street Lights)	Each
634.2103 Conventional Lighting Standard – Type 3 (Monument Square Lights)	Each
634.2104 Conventional Lighting Standard – Type 4 (Chestnut Street Lights)	Each

SUPPLEMENTAL SPECIFICATIONS
SECTION 654
SOIL BACKFILL COMPACTION TESTING

654.01 DESCRIPTION:

This work shall consist of furnishing an approved certified soil testing laboratory, when required, to conduct in-place density tests of backfill materials in the field and all related laboratory tests. The testing shall be bid under the appropriate line item.

654.02 GENERAL:

Upon completion of the field test, the results shall be made available to the City Inspector on site. Copies of all test results shall be transmitted to the Engineering Department of the City of Portland.

The minimum in-place densities shall meet or exceed the laboratory maximum density as determined by ASTM D 1557 - 78 as follows:

Embankment	Ninety per cent	(90%)
Trench Backfill	Ninety-two per cent	(92%)
Aggregate Base Course and Aggregate Subbase Course	Ninety-five per cent	(95%)

654.03 METHOD OF MEASUREMENT:

Density tests will be measured by each conducted. If the initial tests do not meet the specifications, the areas shall be re-tested at no additional cost to the City.

654.04 BASIS OF PAYMENT:

The accepted quantities of density tests will be paid for at the contract unit price per each.

Payment will be made under:		
<u>Pay Item</u>		<u>Pay Unit</u>
654.08	Trench Density Tests	Each

SUPPLEMENTAL SPECIFICATIONS
DIVISION 700
MATERIAL DETAILS

The following are revisions and additions to the Material Details Division of the Standard Specifications, Highways and Bridges, Revision of December 2002. Provisions contained herein shall be considered to supplement or supersede those portions of the Standard Specifications as they apply to the Contract.

The GENERAL STATEMENT of this Division is hereby revised to read as follows;
All materials which are to be used in the work for which there is no prescribed testing by the project inspectors or other certified laboratories, the Contractor shall, prior to final acceptance as specified in subsection 105.17(b), submit a Materials Certification Letter similar to:

Company Letterhead

Mr. _____ Resident Date _____
Address _____ Project No. _____
_____ Town _____

"This is to certify that the below listed materials, which are incorporated into the above designated project, comply with the pertinent specified material requirements of the contract. Processing, project testing and inspection control of raw materials are in conformity with the applicable drawings and/or standards of all articles furnished. (List only those items used.)

- Electrical Conduit
- Electrical Cable
- Luminaires and Supports
- Lighting Control Box

All records and documents pertinent to this letter and not submitted herewith shall be maintained available by the undersigned for a period of not less than three (3) years from the date of completion of the project.

The Materials Certification letter shall be signed by a person having legal authority to bind the Contractor.

Materials for which the above Certificate is acceptable may be subject to random sampling and testing by the City. Certified materials which fail to meet specification requirements may not be accepted.

SUPPLEMENTAL SPECIFICATIONS
SECTION 715
LIGHTING MATERIAL

715.04 PREWIRED CONDUIT:

The use of pre-wired conduit is not permitted.

715.07 SECONDARY WIRING:

Provide all secondary wiring.

715.08 LUMINAIRE, LAMP AND BALLAST:

Luminaires shall be manufactured by *Holophane Unique Solutions* and shall be constructed of a cast aluminum housing and refractor-holder latch on the street side and hinge with safety catch on the house side of the luminaire, and a detachable reflector with heat resisting gasketing between the housing and refractor. Luminaires shall mount by a slip-fitter manufactured by the luminaire manufacturer.

Refractors for luminaires shall be prismatic, borosilicate glass.

Street luminaire ballasts shall be peak lead autotransformer, high power-factor reactor type. Provide single-lamp ballasts which shall have a minimum starting temperature of minus 20 degrees F. Ballasts shall be:

- a. Designed to operate on voltage system to which they are connected.
- b. Constructed so that open circuit operation will not reduce the Ballast operating characteristics shall be as follows:

	70 Watt <u>Metal Halide</u>	250 Watt <u>Metal Halide</u>
Nominal Primary Voltage	120	120
Starting Line Current (Amps)	1.80	≤2.55
Operating Line Current (Amps)	0.85	2.55
Input Wattage (Watt)	95	280
Secondary Open Circuit Voltage	245	317
Power Factor	>90%	>90%
Lamp Voltage Regulation (±5% line voltage variation)	±12%	
Lamp Voltage Regulation (±10% line voltage variation)		±8%

Lamps shall be of the type and wattage-rating indicated below. Lamps used shall conform to the lamp designations as listed in the latest edition of the *IESNA Lighting Handbook*.

ANSI & MFG Lamp Designation

<u>ANSI</u>	<u>MFG.</u>	<u>Wattage</u>	<u>Ballast #</u>	<u>Lumens</u>	<u>Lamp Life (Hrs)</u>
M98-70/U	MXR70/U/MED	70	M98	5500	12000
M58PG(PH)250U	MVR250/U	250	M58	21500	10000

SUPPLEMENTAL SPECIFICATIONS
SECTION 715 (continued)
LIGHTING MATERIAL

715.10 PHOTO ELECTRIC CONTROL

The photo electric sensing control unit shall be installed integrally within the street light pole assembly. It shall be manufactured by the luminaire manufacturer, and it shall be wired to control all luminaires on the lighting standard (one street light; two sidewalk lights).

715.11 SERVICE EQUIPMENT

Lighting control box shall be as manufactured by *APX Enclosures, Inc.*, model TC412516, or approved equal. The box shall be furnished complete with a hinged locking front door; internal mounting panel; wiring terminal blocks; a service entrance rated, 20 ampere, single-pole thermal magnetic circuit breaker with an AIC rating of 100K at 120 VAC; a pedestal box base and a *Central Maine Power Company* service meter. The enclosure shall be as follows:

- a. NEMA 3R rated.
- b. 14 gage stainless steel construction.
- c. Lockable hinged front door with flanges on all four sides.
- d. Gasketed, stainless steel door handle with provisions for padlock. Door hinge shall be continuous stainless steel with 0.25" pin.

Secondary service grounding in full accordance with NFPA 70 and *The Central Maine Power Company* shall be provided as part of the lighting control box system. Provide a #4 bare copper ground conductor and a 5/8" diameter by 8' – 0" long copper clad steel ground rod at each lighting control box.