

CONTRACT DOCUMENTS AND SPECIFICATIONS

For

**Library Courtyard Renovation
BID #47-23**

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City of Portsmouth, New Hampshire

Prepared by:
City of Portsmouth
Engineering Division
Public Works Department

Bid #47-23 Library Courtyard Renovation

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CITY OF PORTSMOUTH
Portsmouth, New Hampshire
Department of Public Works

Library Courtyard Renovation

INVITATION TO BID

Sealed bid proposals, plainly marked, **Library Courtyard Renovation Project**, Bid Proposal #47-23 **on the outside of the mailing envelope as well as the sealed bid envelope**, addressed to the Finance/Purchasing Department, 3rd Floor, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until **2:00 p.m. on Tuesday April 30, 2024** at which time all bids will be publicly opened and read aloud.

This project consists of removing brick pavers and reinstalling them in a different configuration. In addition, new plantings and sod will be furnished and installed.

Information for this project may be obtained from the City's web site: cityofportsmouth.com/finance/purchasing.htm, by emailing the Finance/Purchasing Department at purchasing@cityofportsmouth.com. Addenda to this bid document, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will **NOT** be sent directly to vendors. Questions may be addressed to the Purchasing Coordinator.

There will be a mandatory walkthrough on Wednesday, April 17, 2024 at 1:00 p.m. Contractors must attend to submit a bid. Questions about this project must be submitted in writing to purchasing@cityofportsmouth.com **before 4:00 p.m. on Monday April 22, 2024.**

Answers to questions will be posted as an addendum by **Wednesday April 24, 2024** and posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. The project is to be completed within 60 days once work has begun. All sections of the work shall be completed by terms of the contract. Liquidated damages shall be assessed at \$100.00 per day.

Bidders must determine the quantities of work required and the conditions under which the work will be performed.

The City reserves the right, after bid opening and prior to awarding the contract, to modify the amount of the work in the event that bids exceed budgeted amounts. The City of Portsmouth further reserves the right to reject any or all bids, to waive technical or legal deficiencies, to re-bid, and to accept any bid that it may deem to be in the best interest of the City. Contract execution is contingent upon available funding.

Each Bidder shall furnish a bid security in the amount of ten percent (10%) of the bid. The Bid Security may be in the form of a certified check drawn upon a bank within the State of New Hampshire or a bid bond executed by a surety company authorized to do business in the State of New Hampshire, made payable to the City of Portsmouth, N.H.

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INSTRUCTIONS TO BIDDERS

BIDDING REQUIREMENTS AND CONDITIONS

1. Special Notice to Bidders

Appended to these instructions is a complete set of bidding and general contract forms. These forms may be detached and executed for the submittal of bids. The plans, specifications, and other documents designated in the proposal form will be considered as part of the proposal, whether attached or not.

The bidders must submit a statement of bidder's qualifications, if requested, subsequent to bid opening but prior to award.

Addenda to this proposal, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to firms. Contractors submitting a proposal should check the web site daily for addenda and updates after the release date. Firms should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification

2. Interpretation of Quantities in Bid Schedules

The quantities appearing in the bid schedule are approximate only and are prepared for the comparison of bids. Payment to the contractor will be made only for actual work performed and accepted in accordance with the contract. Any scheduled item of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided, and no claim for loss, anticipated profits or costs incurred in anticipation of work not ultimately performed will be allowed due to such increase or decrease.

3. Examination of Plans, Specifications and Site Work

The bidder is expected to examine carefully the site of the proposed work, the plans, standard specifications, supplemental specifications, special provisions and contract forms before submitting a proposal. The submission of a bid shall be considered conclusive evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the contract. It will be conclusive evidence that the bidder has also investigated and is satisfied with the sources of supply for all materials.

Plans, surveys, measurements, dimensions, calculations, estimates and statements as to the condition under which the work is to be performed are believed to be correct, but the contractors must examine for themselves, as no allowance will be made for any errors or inaccuracies that maybe found therein.

4. Familiarity with Laws

The bidder is assumed to be familiar with all federal and state laws, local by-laws, ordinances and regulations which in any manner affect those engaged or employed on the work or affect the materials or equipment used in the work or affect the conduct of the work. Accordingly, Bidder, if awarded the contract, shall be obligated to perform the work in conformity with said laws, by-laws, ordinances and regulations. If Bidder shall discover any provision in the plans or specifications which is in conflict with any such law, by-law, ordinance or regulation the bidder shall forthwith report it to the engineer in writing.

5. Preparation of Proposal

a) The bidder shall submit its proposal upon the forms furnished by the Owner. The bidder shall specify a lump sum price in figures, for each pay item for which a quantity is given and shall also show the products of

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the respective prices and quantities written in figures in the column provided for that purpose and the total amount of the proposal obtained by adding the amount of the several items. All words and figures shall be in ink or typed.

If a unit price or a lump sum bid already entered by the bidder on the proposal form is to be altered it should be crossed out with ink, the new unit price or lump sum bid entered above or below it and initialed by the bidder, also with ink.

b) The bidder's proposal must be signed with ink by the individual, by one or more general partners of a partnership, by one or more members or officers of each firm representing a joint venture; by one or more officers of a corporation, by one or more members (if member-managed) or managers (if manager-managed) of a limited liability company, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, the name and post office address must be shown, by a partnership the name and post office address of each general and limited partner must be shown; as a joint venture, the name and post office address of each venturer must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles and business addresses of the president, secretary and treasurer.

6. Nonconforming Proposals

Proposals will be considered nonconforming and may be rejected at the Owner's sole discretion for any of the following reasons:

- If the proposal is on a form other than that furnished by the Owner, or if the form is altered or any portion thereof is detached.
- If there are unauthorized additions, conditional or altered bids, or irregularities of any kind which may tend to make the proposal or any portion thereof incomplete, indefinite or ambiguous as to its meaning.
- If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award; or
- If the proposal does not contain a unit price for each pay item listed except in the case of authorized alter pay items.

7. Proposal Guaranty

No proposal will be considered unless accompanied by a bid bond, surety, or similar guaranty of the types and in an amount not less than the amount indicated in the Invitation to Bid. All sureties shall be made payable to the "City of Portsmouth, NH ". If a bid bond is used by the bidder, it shall be:

- In a form satisfactory to the Owner.
- With a surety company licensed, authorized to do business in, and subject to the jurisdiction of the courts of the State of New Hampshire; and
- Conditioned upon the faithful performance by the principal of the agreements contained in the sub-bid or the general bid.

In the event any irregularities are contained in the proposal guaranty, the bidder will have four business days (not counting the day of opening) to correct any irregularities. The corrected guaranty must be received by 4:00 p.m. If irregularities are not corrected to the satisfaction of the Owner, the Owner, in its sole discretion, may reject the bid.

8. Delivery of Proposals

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When sent by mail, the sealed proposal shall be addressed to the Owner at the address and in the care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened.

9. Withdrawal of Proposals

A bidder will be permitted to withdraw their proposal unopened after it has been submitted if the Owner receives a request for withdrawal in writing prior to the time specified for opening the proposals.

10. Public Opening of Proposals

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

11. Disqualification of Bidders

Any or all of the following reasons may be deemed by Owner in its sole discretion as being sufficient for the disqualification of a bidder and the rejection of their proposal:

- More than one proposal for the same work from an individual, firm, or corporation under the same or different name.
- Evidence of collusion among bidders.
- Failure to submit all required information requested in the bid specifications.
- Lack of competency or of adequate machinery, plant or other equipment, as revealed by the statement of bidder's qualification or otherwise.
- Uncompleted work which, in the judgment of the owner, might hinder or prevent the prompt completion of additional work if awarded.
- Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts.
- Default or unsatisfactory performance on previous contracts; or
- Such disqualification would be in the best interests of the Owner.
- Failure to attend mandatory walkthrough.

12. Material Guaranty and Samples

Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the construction of the work, and the Owner may, in its sole discretion, reject the bid based on the contents of the statement or as a result of the failure of the bidder to submit the statement.

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AWARD AND EXECUTION OF CONTRACT

1. Consideration of Proposals

a) After the proposals are opened and read, they will be compared on the basis of the total price for all sections of work to be charged to perform the work and any such additional considerations as may be identified in the bid documents. The results of such comparisons will be immediately available to the public. In case of a discrepancy between the prices written in words and those written figures, the prices written in words shall govern. In case of a discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and unit bid prices, the latter shall govern.

b) The Owner reserves the right to reject any or all proposals, to waive technicalities or to advertise for new proposals, if, in the sole discretion of the Owner, the best interest of the City of Portsmouth will be promoted thereby.

2. Award of Contract

Within 30 calendar days after the opening of proposals, if a contract is to be awarded, the award will be made to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified, in writing, via email at the address provided on the proposal that their bid has been accepted and that the bidder has been awarded the contract.

The award shall not be considered official until such time that a Purchase Order, fully executed contract or an award letter has been issued by the Finance Director. No presumption of award shall be made by the bidder until such documents are in hand. Verbal notification of award is not considered official. Any action by the bidder to assume otherwise is done so at Bidder's own risk and the City will not be held liable for any expense incurred by a bidder that has not received an official award.

Determination of the lowest bidder will be based on the total price for the work described on the bid proposal form. Due to fluctuating prices and possible budget limitations, the City reserves the right to delete portions of the work, including certain tasks.

3. Cancellation of Award

The Owner reserves the right to cancel the award of any contract at any time before the execution of such contract by all parties without any liability of the Owner.

4. Return of Proposal Guaranty

All proposal guaranties, except those of the three lowest bidders, will be returned upon request following the opening and checking of the proposals. The proposal guarantees the three lowest bidders will be returned within ten days following the award of the contract if requested.

5. Contract Bond

At the time of the execution of the contract, the successful bidder shall furnish:

- Labor and materials payment bond in the amount of 100 percent of the contract amount.

Each bond shall be: (1) in a form satisfactory to the Owner; (2) with a surety company licensed and authorized to do business and with a resident agent designated for services of process in the State of New Hampshire; and (3) conditioned upon the faithful performance by the principal of the agreements contained in the original bid. All premiums for the contract bonds are to be paid by the contractor.

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6. Execution and Approval of Contract

The successful bidder is required to present all contract bonds, to provide proof of insurance, and to execute the contract within 10 days following receipt of the City's notification of acceptance of the bid. No contract shall be considered as in effect until it has been fully executed by all parties.

7. Failure to Execute Contract

Failure to execute the contract and file an acceptable bond within 10 days after notification of acceptance of bid shall be just cause for the cancellation of the award and the forfeiture of the proposal guarantee which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. The award may then be made to the next lowest responsible bidder, or the work may be re-advertised as the Owner may determine in its sole discretion.

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PROPOSAL FORM

Library Courtyard Renovation

CITY OF PORTSMOUTH, N.H.

To the City of Portsmouth, New Hampshire, herein called the Owner.

The undersigned, as Bidder, declares as follows:

1. The only parties interested in the bid as Principals are named herein.
2. This bid is made without collusion with any other person, firm or corporation.
3. No officer, agent or employee of the Owner is directly or indirectly interested in this bid.
4. The bidder has carefully examined the site of the proposed work and fully is informed and satisfied as to the conditions there existing, the character and requirements of the proposed work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this bid, and the bidder has carefully read and examined the Drawings, Agreement, Specifications and other Contract Documents therein referenced to and knows and understands the terms and provisions thereof.
5. And the bidder understands that the quantities of work tabulated in the bid or indicated on the Drawings or in the Specifications or other Contract Documents are only approximate and are subject to increase or decrease or deletion as deemed necessary by the Engineer. Any such changes will not be justification for any penalty or increase in contract prices; and bidder agrees that, if the Bid is accepted the bidder will contract with the Owner, as provided in the Contract Documents, this Bid Form being part of said Contract Documents, and that the bidder will perform all labor, services, plant, machinery, apparatus, appliances, tools, supplies and all other things required by the Contract Documents in the manner and within the time therein set forth, and that the bidder will take in full payment therefore the following item prices, to wit:

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PROPOSAL continued

TOTAL LUMP SUM BID:

Total in Figures \$ _____

In Words \$ _____

Laborer hourly rate: _____

Supervisor Hourly rate: _____

Material Unit cost for additional Brick pavers _____

Number of Days to Complete Project: _____

The undersigned agrees that for extra work, if any, performed in accordance with the terms and provisions of the Contract Documents, the bidder will accept compensation as stipulated therein.

Date

Company

By: _____
Signature

Business Address

Title: _____

City, State, Zip Code

Telephone: _____

The Bidder has received and acknowledged Addenda No. _____ through _____.

All Bids are to be submitted on this form and in a sealed envelope, plainly marked on the outside with the Bidder's name and address and the Project name as it appears at the top of the Proposal Form.

By: _____
Signature

In order to follow the City's sustainability practices, future bid invitations/specifications may be sent electronically. Please provide an email address as to where I could email future bid invitations/specifications of this type. Thank you in advance for your cooperation.

Email Address: _____

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CITY OF PORTSMOUTH CORONAVIRUS GRANT RECIPIENT TERMS AND CONDITIONS

Coronavirus Local Fiscal Recovery Fund Grant monies (SFLRF/ARPA) are being used for this project/work. Therefore, selected contractor/vendor/firm will be required to comply with the requirements associated with the monies in the performance of the project or work, see section 603(c) of the Social Security Act (the Act) and associated regulations, guidance and executive orders. Those requirements are as follows:

- (i) Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 C.F.R. Part 200;
- (ii) Universal Identifier and System for Award Management, 2 C.F.R. Part 25;
- (iii) Reporting Subaward and Executive Compensation Information, 2 C.F.R. Part 170;
- (iv) OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Non-procurement), 2 C.F.R. Part 180;
- (v) Recipient Integrity and Performance Matters 2 C.F.R. Part 200 and Appendix XII;
- (vi) Government-wide Requirements for Drug-Free Workplace, 31 C.F.R. Part 21;
- (vii) New Restrictions on Lobbying, 31 C.F.R. Part 21;
- (viii) Uniform Relocation Assistance and Real Property Acquisitions Act of 1970; and
- (ix) Generally applicable federal environmental laws and regulations.

The City further encourages contractor/vendor/firm to adopt and enforce on-the-job seatbelt policies and programs for when operating company-owned, rented, or personally owned vehicles, and to adopt and enforce policies that ban text messaging while driving pursuant to Executive Orders 13043 and 13513 respectively.

Contractor/vendor/firm must assure compliance with statutes and regulations prohibiting discrimination including but not limited to Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.), the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328), and Protections for Whistleblowers in accordance with 41 U.S.C. § 4712. More specifically, contractor/vendor/firm and its subcontractors and other agents shall comply with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this contract or agreement. Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made a part of this contract/ agreement.

SFLRF/ARPA funds do not themselves require compliance with the Davis Bacon Act. However, when the project or work includes funding from sources that do require compliance with the David Bacon Act, the David Bacon Act requirements will apply along with Executive Orders 11625 and 12432 (Concerning Minority Business Enterprise) and 12438 (Concerning Women's Business Enterprise) when applicable.

CONTRACTOR/VENDOR/FIRM

Duly Authorized Signature

Date

Printed Name and Title

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STATEMENT OF BIDDER'S QUALIFICATIONS

Note: This is a required submittal, fill out completely.

All questions must be answered, and the data given must be clear and comprehensive. This statement must be notarized. Add separate sheets if necessary

1. Name of Bidder
2. Permanent Main Office Address
3. Form of Entity
4. When Organized
5. Where Organized
6. How many years have you been engaged in the contracting business under your present name; also state names and dates of previous firm names, if any.
7. Contracts on hand; (schedule these, showing gross amount of each contract and the approximate anticipated dates of completion).
8. General character of work performed by your company.
9. Have you ever failed to complete any work awarded to you? ____ (no) ____ (yes). If so, where and why?
10. Have you ever defaulted on a contract?
____ (no) ____ (yes). If so, where and why?
11. Have you ever failed to complete a project in the time allotment according to the _____ Contract Documents?
____ (no) ____ (yes). If so, where and why?
12. List the most important contracts recently executed by your company, stating approximate cost for each, and the month and year completed.
13. List your major equipment available for this contract.
14. List your key personnel such as project superintendent and foremen available for this contract.
15. List any subcontractors whom you will use for the following
(unless this work is to be done by your own organization, if so please state).
 - a. demolition/ salvage _____
 - b. plantings _____
 - c. brick pavers _____
 - d. sitework _____

(The City reserves the right to approve subcontractors for this project)
16. With what banks do you do business?
 - a. Do you grant the Owner permission to contact this/these institutions?
____ (yes) ____ (no).

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STATEMENT OF BIDDERS QUALIFICATIONS (continued)

b. Latest Financial Statements, certified audited if available, prepared by an independent certified public accountant, may be requested by Owner. If requested, such statements must be provided within five (5) business days, or the bid proposal will be rejected. Certified Audited Statement are preferred. Internal statements may be attached only if independent statements are not prepared.

Dated at _____ this _____ day of _____, 20__.

Name of Bidder

BY _____

TITLE _____

State of _____

County of _____

_____ being duly sworn, deposes and

says that the bidder is _____ of _____
(Name of Organization)

and answers to the foregoing questions and all statements contained therein are true and correct.

Sworn to before me this ____ day of _____, 20__.

Notary of Public

My Commission expires _____

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BID SECURITY BOND

(This format is provided for convenience, actual Bid Bond is acceptable in lieu of, if compatible.)

KNOW ALL BY THESE PRESENTS, that we the undersigned

_____, as Principal, and

_____, as Surety, are hereby

held and firmly bound unto _____

IN THE SUM OF \$100.00 (one hundred dollars) per day.

as liquidated damages for payment of which, well and truly to be made we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is such that whereas the Principal has submitted to the

_____ A CERTAIN Bid attached hereto and hereby made a part hereof to enter into a contract in writing, hereinafter referred to as the "AGREEMENT" and or "CONTRACT", for

NOW THEREFORE,

- (a) If said Bid shall be rejected or withdrawn as provided in the INFORMATION FOR BIDDERS attached hereto or, in the alternative,
- (b) If said Bid shall be accepted and the Principal shall duly execute and deliver the form of AGREEMENT attached hereto and shall furnish the specified bonds for the faithful performance of the AGREEMENT and/or CONTRACT and for the payment for labor and materials furnished for the performance of the AGREEMENT and or CONTRACT,

then this obligation shall be void , otherwise it shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder in no event shall exceed the amount of this obligation.

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BID SECURITY BOND (continued)

The Surety, for value received, hereby agrees that the obligation of said surety and its bond shall be in no way impaired or affected by any extensions of the time within such BID may be accepted and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the parties hereto have duly executed

this bond on the _____ day of _____, 20__.

(Name of Principal) L.S.

(SEAL)

BY _____

(Name of Surety)

BY _____

CONTRACT AGREEMENT

Library Courtyard Renovation

THIS AGREEMENT made as of the _____ in the year **2024**, by and between the City of Portsmouth, New Hampshire (hereinafter call the Owner) and _____. (hereinafter called the Contractor),

WITNESSETH; that the Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE I - WORK - The Contractor shall perform all work as specified or indicated in the Contract Documents. The Contractor shall provide, at Contractor's expense, all labor, materials, equipment, and incidentals as may be necessary for the expeditious and proper execution of the Project.

ARTICLE II - ENGINEER - The Director of Public Works or authorized representative will act as City Engineer in connection with completion of the Project in accordance with the Contract Documents.

ARTICLE III - CONTRACT TIME - The work shall commence in accordance with the Notice to Proceed. It is anticipated this Work will be completed by July 30, 2024.

ARTICLE IV - CONTRACT PRICE - Owner shall pay Contractor for work designated by the Owner as shown in the Contract Documents. Owner makes no representation that Owner will undertake all the repairs estimated in the bid proposal form. The Contractor will be paid only for work performed in accordance with the Contract Documents as shown under item prices in the Bid Proposal.

ARTICLE V - PAYMENT - Partial payments will be made in accordance with the Contract Documents. Upon final acceptance of the work and settlement of all claims, Owner shall pay the Contractor the unpaid balance of the Contract Price, subject to additions and deductions provided for in the Contract Documents.

ARTICLE VI - RETAINAGE - To insure the proper performance of this Contract, the Owner shall retain **ten percent** of the monthly payments claimed by the Contractor until 50% of the original contract work is invoiced and approved by the City. Once the Contractor has invoiced more than 50% of the original contract value, provided that the Contractor has satisfied the City regarding the quality and timeliness of the work and provided further that there is no specific cause for withholding additional retainage, no further amount will be withheld. Upon substantial completion of the work the amount of retainage shall be reduced to 2% of the total contract value plus any additional retainage amounts required by the City based on the City's estimate of the fair value of any remaining punch list items. Any additional retainage held for punch list items shall be held until such time as all items on the punch list are repaired or completed to the City's acceptance. The final 2% of retainage shall be held until the warranty period has expired.

ARTICLE VII - LIQUIDATED DAMAGES – Owner anticipates 75 working days to complete the Work. In event the Contractor fails to successfully execute the work within the specified contract time the Owner shall assess the Contractor liquidated damages in the amount of **one hundred dollars (\$100)** for each calendar day beyond the specified completion date. Liquidated damages shall be deducted from the Contract Price prior to final payment of the Contractor.

CONTRACT AGREEMENT (continued)

ARTICLE VIII – CONTRACT DOCUMENTS – The Contract Documents which comprise the contract between Owner and Contractor are attached hereto and made a part hereof and consist of the following:

- 8.1 This Agreement
- 8.2 Contractor’s Bid and Bonds
- 8.3 Notice of Award, Notice to Proceed
- 8.4 Instruction to Bidders
- 8.5 General Requirements, Control of Work, Temporary Facilities, Measurement and Payment, Standard Specifications
- 8.6 Insurance Requirements
- 8.7 Standard and Technical Specifications
- 8.8 Drawings
- 8.9 Special Provisions
- 8.10 Any modifications, including change orders, duly delivered after execution of this Agreement.

ARTICLE IX – TERMINATION FOR DEFAULT – Should contractor at any time refuse, neglect, or otherwise fail to supply a sufficient number or amount of properly skilled workers, materials, or equipment, or fail in any respect to prosecute the work with promptness and diligence, or fail to perform any of its obligations set forth in the Contract, Owner may, at its election, terminate the employment of Contractor, giving notice to Contractor in writing of such election, and enter on the premises and take possession, for the purpose of completing the work included under this Agreement, of all the materials, tools and appliances belonging to Contractor, and to employ any other persons to finish the work and to provide the materials therefore at the expense of the Contractor.

ARTICLE X – INDEMNIFICATION OF OWNER – Contractor shall defend, indemnify and hold harmless Owner and its officials and employees from and against all suits, claims, judgments, awards, losses, costs or expenses (including without limitation attorneys’ fees) to the extent arising out of or relating to Contractor’s alleged negligence or breach of its obligations or warranties under this Contract. Contractor shall defend all such actions with counsel satisfactory to Owner at its own expense, including attorney’s fees, and will satisfy any judgment rendered against Owner in such action.

ARTICLE XI – PERMITS – The Contractor shall secure at its own expense, all permits and consents required by law as necessary to perform the work and shall give all notices and pay all fees and otherwise comply with all applicable City, State, and Federal laws, ordinances, local by-laws, rules, and regulations.

ARTICLE XII – INSURANCE – The Contractor shall secure and maintain, until acceptance of the work, insurance with limits not less than those specified in the Contract.

ARTICLE XIII – NONDISCRIMINATION – Any entity that enters into a contract for goods or services with the City of Portsmouth or any of its boards, agencies, departments and any recipient of city funds shall implement an employment nondiscrimination policy prohibiting discrimination in hiring, discharging, promoting, or demoting, matters of compensation, or any other employment-related decision or benefit on account of actual or perceived race, ethnicity, color, religion, national origin, gender, disability, age, military status, sexual orientation, gender identity, gender expression, or marital or familial status; and not discriminate in the performance

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of the contract on account of actual or perceived race, ethnicity, color, religion, national origin, gender, disability, age, military status, sexual orientation, gender identity, gender expression, or marital or familial status.

ARTICLE XIV – MISCELLANEOUS –

- A. Owner and Contractor shall not, without the prior written consent of the other, assign, sublet or delegate, in whole or in part, any of its rights or obligations under any of the Contract Documents; and specifically, not assign any monies due, or to become due, without the prior written consent of Owner.
- B. Owner and Contractor each bind itself, its partners, successors, assigns and legal representatives to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents.
- C. The Contract Documents constitute the entire Agreement between Owner and Contractor and may only be altered amended or repealed by a duly executed written instrument.
- D. The laws of the State of New Hampshire shall govern this Contract without reference to the conflict of law principles thereof.
- E. The venue for any dispute shall be the Rockingham County Superior Court unless the parties otherwise agree.

IN WITNESS WHEREOF, the parties hereunto executed this AGREEMENT the day and year first above written.

BIDDER:

BY: _____

TITLE: _____

CITY OF PORTSMOUTH, N.H.

BY: _____
Karen S. Conard

TITLE: City Manager

NOTICE OF INTENT TO AWARD

Bid #47-23 Library Courtyard Renovation

Date:

TO:

IN AS MUCH as you were the low, responsible bidder for work entitled:

Library Courtyard Renovation

You are hereby notified that the City intends to award the aforesaid project to you.

Immediately take the necessary steps to execute the Contract and to provide required bonds and proof of insurance within fifteen (15) calendar days from the date of this Notice.

The City reserves the right to revoke this Notice if you fail to take the necessary steps to execute this Contract.

City of Portsmouth
Portsmouth, New Hampshire

Bid #47-23 Library Courtyard Renovation

NOTICE TO PROCEED

DATE:

PROJECT: **Library Courtyard Renovation**

TO: _____

YOU ARE HEREBY NOTIFIED TO COMMENCE WORK IN ACCORDANCE

WITH THE AGREEMENT DATED, _____ ALL WORK SHALL BE COMPLETED PRIOR

TO _____.

CITY OF PORTSMOUTH, N.H.

BY: Peter H. Rice

TITLE: Public Works Director

ACCEPTANCE OF NOTICE

RECEIPT OF THE ABOVE NOTICE TO PROCEED IS HEREBY ACKNOWLEDGED BY

This the _____ day of _____ 20__

By: _____

Title: _____

Bid #47-23 Library Courtyard Renovation

CHANGE ORDER

Change Order # _____

Date of Issuance: _____

Owner: CITY OF PORTSMOUTH, N.H

Contractor: _____

You are directed to make the following changes in the Contract Documents:

Description:

Purpose of Change Order:

Attachments:

CHANGE IN CONTRACT PRICE

CHANGE IN CONTRACT TIME

Original Contract Price:

Original Completion Date:

\$ _____

_____ Days

Contract Price prior to this Change Order:

Contract Time prior to this Change Order:

\$ _____

_____ Days

Net Increase of this Change Order:

Net Increase or Decrease of this Change Order:

\$ _____

_____ Days

Contract Price with all approved Change Orders:

Contract Time with all approved Change Orders:

\$ _____

_____ Days

RECOMMENDED:

by _____

by _____

by _____

PW Director

Deputy Finance Director

Finance Director

APPROVED:

APPROVED:

by _____
City Manager

by _____
Contractor .

Bid #47-23 Library Courtyard Renovation

LABOR AND MATERIAL PAYMENT BOND

(This format provided for convenience, actual Labor and Material Bond is acceptable in lieu, if compatible)

Bond Number _____

KNOW ALL BY THESE PRESENTS:

that _____

as Principal, hereinafter called Principal or Contractor, and _____ (Surety Company) a corporation organized and existing under the laws of the State of

_____ and authorized to do business in the State of New Hampshire hereinafter called Surety, are held and firmly bound unto the City of Portsmouth, N.H. Obligee, hereinafter called Owner, for the use and benefit of claimants as herein below defined, in the

amount of _____ Dollars (\$ _____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____ entered into a

contract with Owner for _____ in accordance with drawings and specifications prepared by the Public Works Department, 680 Peverly Hill Road, Portsmouth, N.H. 03801, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract and for the hire of all equipment, tools, and all other things contracted for or used in connection therewith, then this obligation shall be void, otherwise it shall remain in full force and effect, subject however, to the following conditions:

(1) A claimant is defined as one having a direct contract with the Principal or, with a subcontractor of the Principal for labor, material, equipment, or other things used or reasonably required for use in the performance of the Contract. "Labor and material" shall include but not be limited to that part of water, gas, power, light, heat, oil and gasoline, telephone service or rental of equipment applicable to the Contract.

(2) The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such a claimant, may sue on this bond for the use of such claimant, prosecute the suit by final judgment for such sum or sums as may be

Bid #47-23 Library Courtyard Renovation

LABOR AND MATERIAL PAYMENT BOND (continued)

justly due claimant and have execution thereon. The Owner shall not be liable for the payment of any such suit or any costs or expenses of any such suit, and principal and surety shall jointly and severally indemnify, defend and hold the Owner harmless for any such suit, costs or expenses.

(3) No suit or action shall be commenced hereunder by any claimant:

(a) Unless Claimant, other than one having a direct contract with the Principal, shall have given notice to all the following:

The Principal, the Owner and the Surety above named, within six (6) calendar months after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the State of New Hampshire save that such service need not be made by a public officer.

(b) After the expiration of one (1) year following the date on which Principal ceased all work on said contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

(c) Other than in a State court of competent jurisdiction in and for the county or other political subdivision of the State in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere. (4) The amount of this bond may be reduced by and to the extent of any payment of payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed on record against said improvement, whether or not claim for the amount of such lien by presented under and against this bond.

Signed and sealed this _____ day of _____, 20 _____. In the presence of:

(Witness) BY: _____
(Principal) (Seal)

(Surety Company)

(Witness) BY: _____
(Title) (Seal)

Note:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized Officer or Officers.

If this bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his Power of Attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Agreement.

Bid #47-23 Library Courtyard Renovation

CONTRACTOR'S AFFIDAVIT

STATE OF _____:

COUNTY OF _____:

Before me, the undersigned, a _____
(Notary Public, Justice of the Peace)

in and for said County and State personally appeared, _____
(Individual, Partner, or duly authorized representative of Corporate)

who, being duly sworn, according to law deposes and says that the cost of labor, material, and equipment and outstanding claims and indebtedness of whatever nature arising out of the performance of the Contract between

CITY OF PORTSMOUTH, NEW HAMPSHIRE

and _____
(Contractor)

of _____

Dated: _____

has been paid in full for Construction of: **Library Courtyard Renovation**

(Individual, Partner, or
duly authorized
representative of
Corporate Contractor)

Sworn to and subscribed
before me this _____ day
of _____ 20____

Bid #47-23 Library Courtyard Renovation

CONTRACTOR'S RELEASE

KNOW ALL BY THESE PRESENTS that _____

(Contractor) of _____, County of _____ and State of

_____ does hereby acknowledge

that _____ (Contractor)

has on this day had, and received from the CITY OF PORTSMOUTH NEW HAMPSHIRE, final and completed payment for the Construction of:

Library Courtyard Renovation

NOW THEREFORE, the said _____
(Contractor)

for myself, my heirs, executors, and administrators) (for itself, its successors and assigns) do/does by these presents remise, release, quit-claim and forever discharge the City of Portsmouth, New Hampshire, its successors and assigns, of and from all claims and demands arising from or in connection with the said Contract dated _____, and of and from all, and all manners of action and actions, cause and causes of action and actions, suits, debts, dues, duties, sum and sums of money, accounts, reckonings, bonds, bills, specifications, covenants, contracts, agreements, promises, variances, damages, judgments, extents, executions, claims and demand, whatsoever in law of equity, or otherwise, against the City of Portsmouth, New Hampshire, its successors and assigns, which (I, my heirs, executors, or administrators) (it, its successors and assigns) ever had, now have or which (I, my heirs, executors, or administrators) (it, its successors and assigns) hereafter can shall or may have, for, upon or by reason of any matter, cause, or thing whatsoever; from the beginning of record time to the date of these presents.

IN WITNESS WHEREOF,

Contractor:

By: _____

print name of witness: _____

Its Duly Authorized _____

Dated: _____

Bid #47-23 Library Courtyard Renovation

GENERAL REQUIREMENTS

SCOPE OF WORK

1. INTENT OF CONTRACT

The intent of the Contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies required to complete the work in accordance with the terms of the Contract. The Contractor shall be required to conform to the intent of the plans and specifications. No extra claims shall be allowed for portions of the work not specifically addressed in the plans and specifications but required to produce a whole and complete project, such work will be considered subsidiary to the bid items.

2. INCIDENTAL WORK

Incidental work items for which separate payment is not measured includes, but is not limited to, the following items:

- a. Clearing, grubbing and stripping (unless otherwise paid for)
- b. Clean up
- c. Plugging existing sewers and manholes
- d. Signs
- e. Mobilization/Demobilization (unless otherwise paid for)
- f. Restoration of property
- g. Cooperation with other contractors, abutters and utilities
- h. Utility crossings, (unless otherwise paid for)
- i. Minor items - such as replacement of fences, guardrails, rock wall, etc.
- j. Steel and/or wood sheeting as required
- k. Accessories and fasteners or components required to make items paid for under unit prices or lump sum items complete and functional

3. ALTERATION OF PLANS OR OF CHARACTER OF WORK

The Owner reserves the right, without notice to Surety, to make such alterations of the plans or of the character of the work as may be necessary or desirable to complete fully and acceptably the proposed construction; provided that such alterations do not increase or decrease the contract cost. Within these cost limits, the alterations authorized in writing by the Owner shall not impair or affect any provisions of the Contract or bond and such increases or decreases of the quantities as a result from these alterations or deletions of certain items, shall not be the basis of claim for loss or for anticipated profits by the contractor. The contractor shall perform the work as altered at the contract unit price or prices.

4. EXTRA WORK ITEMS

Extra work shall be performed by the Contractor in accordance with the specifications and as directed and will be paid for at a price as provided in the Contract documents or if such pay items are not applicable than at a price negotiated between the contractor and the Owner or at the unit bid price. If the Owner determines that extra work is to be performed, a change order will be issued.

5. CHANGE ORDERS

The Owner reserves the right to issue a formal change order for any increase, decrease, deletion, or addition of work or any increase in contract time or price. The contractor shall be required to sign the change order and it shall be considered as part of the Contract documents.

Bid #47-23 Library Courtyard Renovation

6. FINAL CLEANING UP

Before acceptance of the work, the contractor shall remove from the site all machinery, equipment, surplus materials, rubbish, temporary buildings, barricades and signs. All parts of the work shall be left in a neat and presentable condition. On all areas used or occupied by the contractor, regardless of the contract limits, the bidder shall clean up all sites and storage grounds.

The items prescribed herein will not be paid for separately but shall be paid for as part of the total contract price.

7. ERRORS AND INCONSISTENCY IN CONTRACT DOCUMENTS

Any provisions in any of the Contract Documents that may be in conflict with the paragraphs in these General Requirements shall be subject to the following order of precedence for interpretation.

1. Technical Specifications will govern General Requirements.
2. Special Provisions will govern Technical Specifications.
3. Plans will govern Special Provisions, Technical Specifications, and General Requirements.

Bid #47-23 Library Courtyard Renovation

CONTROL OF WORK

1. AUTHORITY OF ENGINEER

(a) All work shall be done under supervision of the City Engineer and to the City Engineer's satisfaction. The City Engineer will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work; all questions that may arise as to the interpretation of the plans and specifications; and all questions as to the acceptable fulfillment of the Contract by the Contractor.

(b) The City Engineer will have the authority to suspend the work wholly or in part for such periods as he may deem necessary due to the failure of the Contractor to correct conditions unsafe for workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for conditions considered unsuitable for the prosecution of the work, including unfit weather; or for any other condition or reason deemed to be in the public interest. The Contractor shall not be entitled any additional payments arising out of any such suspensions.

(c) The Owner reserves the right to demand a certificate of compliance for a material or product used on the project. When the certificate of compliance is determined to be unacceptable to the City Engineer the Contractor may be required to provide engineering and testing services to guarantee that the material or product is suitable for use in the project, at its expense (see Sample of Certificate of Compliance).

2. PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPES

(a) The Contractor shall use every precaution to prevent injury or damage to wires, poles, or other property of public utilities; trees, shrubbery, crops, and fences along and adjacent to the right-of-way, all underground structures such as pipes and conduits, within or outside of the right-of-way; and the Contractor shall protect and carefully preserve all property marks until an authorized agent has witnessed or otherwise referenced their location.

(b) The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.

(c) When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or as a result of the failure to perform work by the Contractor, the Contractor shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing rebuilding, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

(d) The Contractor shall paint with tree paint all scars made on fruit or ornamental trees by equipment, construction operations, or the removal of limbs larger than one inch in diameter. Damaged trees must be replaced if so determined by the City Arborist, at his or her sole discretion.

(e) If the Contractor fails to repair, rebuild or otherwise restore such property as may be deemed necessary, the Owner, after 48 hours' notice, may proceed to do so, and the cost thereof may be deducted from any money due, or which may become due the Contractor under the contract.

(f) It is the intent of the Parties that the Contractor preserve, to as great an extent as possible, the natural features of the site.

Bid #47-23 Library Courtyard Renovation

3. MAINTENANCE DURING CONSTRUCTION

The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work carried out day by day, with adequate equipment and workers to ensure that the structure is kept in satisfactory conditions at all times.

4. SAFETY PRECAUTIONS

Upon commencement of work, the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions necessary to ensure the safety of employees on the site, other persons who may be affected thereby, including the public, and other property at the site or adjacent thereto.

5. PERMITS

It will be the responsibility of the Contractor to obtain all permits required for the operation of equipment in, or on, all city streets and public ways.

6. BARRICADES, WARNING SIGNS AND TRAFFIC OFFICERS

(a) The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Roadway closed to traffic shall be protected by effective barricades. Obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to control and direct traffic in a proper manner, as approved by the engineer.

(b) The Contractor will be held responsible for all damage to the work from traffic, pedestrians, animals or any other cause due to lack of adequate controlling devices.

(c) The Contractor shall provide such police officers as the City Engineer deems necessary for the direction and control of traffic within the site of project.

The work prescribed herein will not be paid for separately but will be paid for as part of the Contract Price unless specifically appearing as a bid item.

Bid #47-23 Library Courtyard Renovation

TEMPORARY FACILITIES

1. STORAGE FACILITIES

(a) The Contractor shall not store materials or equipment in a public right-of-way beyond the needs of one working day. Equipment and materials shall be stored in an approved location.

(b) The Contractor shall protect all stored materials from damage by weather or accident and shall insure adequate drainage at and about the storage location.

(c) Prior to final acceptance of the work all temporary storage facilities and surplus stored materials shall be removed from the site.

2. SANITARY FACILITIES

(a) The Contractor shall provide for toilet facilities for the use of the workers employed on the work.

(b) Temporary toilet facilities may be installed provided that the installation and maintenance conform with all State and local laws, codes, regulations and ordinances governing such work. They shall be properly lit and ventilated and shall be kept clean at all times.

(c) Prior to final acceptance of the work all temporary toilet facilities shall be removed from the site.

3. TEMPORARY WATER

The Owner will provide temporary access to water for Contractor construction operations.

4. TEMPORARY ELECTRICITY

The Owner will provide temporary access to electricity for Contractor construction operations.

Bid #47-23 Library Courtyard Renovation

INSURANCE REQUIREMENTS

Insurance shall be in such form as will protect the Contractor from all claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract whether such operation by himself or by anyone directly or indirectly employed by him.

AMOUNT OF INSURANCE

- A) Commercial General Liability:
Bodily injury or Property Damage - \$2,000,000
Per occurrence and general aggregate
- B) Automobile and Truck Liability:
Bodily Injury or Property Damage - \$2,000,000
Per occurrence and general aggregate

Additionally, the Contractor shall purchase and maintain the following types of insurance:

- A) Workers' Comprehensive Insurance coverage in at least statutorily required amounts for all people employed by the Contractor to perform work on this project.
- B) Contractual Liability Insurance coverage in the amounts specified above under Comprehensive General Liability.
- C) Product and Completed Operations coverage to be included in the amounts specified above under Comprehensive General Liability.

ADDITIONAL INSURED

All liability policies (including any excess policies used to meet coverage requirements) shall include the City of Portsmouth, New Hampshire as named Additional Insured.

- 1) The contractor's insurance shall be primary in the event of a loss.
- 2) The Additional Insured endorsement must include language specifically stating that the entity is to be covered for all activities performed by, or on behalf of, the contractor, including the City of Portsmouth's general supervision of the contractor.
- 3) The city of Portsmouth shall be listed as a Certificate Holder and Additional Insured. The City shall be identified as follows:

City of Portsmouth
Attn: Legal Department
1 Junkins Avenue
Portsmouth, NH 03801

Bid #47-23 Library Courtyard Renovation

MEASUREMENT AND PAYMENT

1. MEASUREMENT OF QUANTITIES

- (a) All work completed under the contract will be measured according to the United States standard measure.
- (b) The method of measurement and computation to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice. Unless otherwise stated all quantities measured for payment shall be computed or adjusted for "in place" conditions.
- (c) Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of 9 square feet or less. Unless otherwise specified, transverse measurements for area computations will be the dimensions shown on the plans or ordered in writing.
- (d) Structures will be measured according to lines shown on the plans or as ordered unless otherwise provided for elsewhere in the specifications.
- (e) In computing volumes of excavation, embankment, and borrow, the average end area method will be used. Where it is impracticable to measure by the cross-section method, acceptable methods involving three-dimensional measurement may be used. When measurement of borrow in vehicles is permitted, the quantity will be determined as 80 percent of the loose volume.
- (f) In computing volumes of concrete, stone and masonry, the prismatic method will be used. The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois.
- (g) Except as specified below, all materials that are measured or proportioned by weight shall be weighed on scales which the Contractor has had sealed by the State or by a repairman registered by the Commissioner of Agriculture. All weighing shall be performed in a manner prescribed under the Rules and Regulations of the Bureau of Weights and Measures of the New Hampshire Department of Agriculture.
- (h) Weighing materials on scales located outside New Hampshire will be permitted for materials produced or stored outside the state, when requested by the Contractor and approved. Out-of-state weighing in order to be approved, must be performed by a licensed public weigh master or a person of equal authority in the state concerned on scales accepted in the concerned state.
- (i) Each truck used to haul material being paid for by weight shall bear a plainly legible identification mark, and if required, shall be weighed empty daily at such times as directed.
- (j) When material is weighed, the individual weight slips, which shall be furnished by the Contractor, for trucks, trailers, or distributors, shall show the following information: the date; the project; the material or commodity; the dealer or vendor; the Contractor or Subcontractor; the location of the scales; the vehicle registration number or other approved legible identification mark; the tare and net weights, with gross weights when applicable; and the weigher's signature or his signed initials.
- (k) The right is reserved to weigh any truck, trailer, or distributor, at locations designated, before and after making deliveries to the project.
- (l) The term "lump sum" when used as an item of payment will mean complete payment for the work described in the item.

Bid #47-23 Library Courtyard Renovation

MEASUREMENT AND PAYMENT (continued)

(m) When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories, so as to provide the item complete and functional. Except as may be otherwise provided, partial payments for lump sum items will be made approximately in proportion to the amount of the work completed on those items.

(n) Material wasted without authority will not be included in the final estimate.

2. SCOPE OF PAYMENT

(a) The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials and for performing all work under the contract in a complete and acceptable manner and for all risk, loss, damage or expense of whatever character arising out of the nature of the work or the prosecution thereof.

(b) The Contractor shall be liable to the Owner for failure to repair, correct, renew or replace, at his own expense, all damage due or attributable to defects or imperfections in the construction which defects or imperfections may be discovered before or at the time of the final inspection and acceptance of the work.

(c) No monies, payable under the contract or any part thereof, except the first estimate, shall become due or payable if the Owner so elects, until the Contractor shall satisfy the Owner that the Contractor has fully settled or paid all labor performed or furnished for all equipment hired, including trucks, for all materials used, and for fuels, lubricants, power tools, hardware and supplies purchased by the Contractor and used in carrying out said contract and for labor and parts furnished upon the order of said Contractor for the repair of equipment used in carrying out said contract; and the Owner, if he so elects, may pay any and all such bills, in whole or in part, and deduct the amount of amounts so paid from any partial or final estimate, excepting the first estimate.

3. COMPENSATION FOR ALTERED QUANTITIES

(a) Except as provided for under the particular contract item, when the accepted quantities of work vary from the quantities in the bid schedule the Contractor shall accept as payment in full, so far as contract items are concerned, at the original contract unit prices for the accepted quantities of work done. No allowance will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense on the part of the Bidder and subsequent loss of expected reimbursements therefore or from any other cause.

(b) Extra work performed will be paid for at the contract bid prices or at the price negotiated between the Owner and the Contractor if the item was not bid upon. If no agreement can be negotiated, the Contractor will accept as payment for extra work, cost plus 15% (overhead and profit). Costs shall be substantiated by invoices and certified payroll.

4. PARTIAL PAYMENTS

Partial payments of work accepted by the City will be made on a monthly basis during the contract period minus the retainage amount. See Article VI of the Contract Agreement regarding retainage schedule.

5. FINAL ACCEPTANCE

Upon due notice from the Contractor of presumptive completion of the entire project, the City Engineer will make an inspection. If all construction provided for and contemplated by the contract is found complete to his satisfaction, this inspection shall constitute the final inspection and the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

Bid #47-23 Library Courtyard Renovation

MEASUREMENT AND PAYMENT (continued)

If, however, the inspection discloses any work in whole or in part, as being unsatisfactory, the City Engineer will give the Contractor the necessary instructions for correction of such work, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such an event, the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

6. ACCEPTANCE AND FINAL PAYMENT

(a) When the project has been accepted and upon submission by the Contractor of all required reports, completed forms and certifications, the Owner will review the final estimate of the quantities of the various classes of work performed. The Contractor may be required to certify that all bills for labor and material used under this contract have been paid.

(b) The Contractor shall file with the Owner any claim that the Contractor may have regarding the final estimate at the same time the Contractor submits the final estimate. Failure to do so shall be a waiver of all such claims and shall be considered as acceptance of the final estimate. From the total amount ascertained as payable, an amount equal to two percent (2%) of the whole will be deducted and retained by the Owner for the guaranty period.

(c) All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

7. GENERAL GUARANTY AND WARRANTY OF TITLE

(a) Neither the final certification of payment nor any provision in the contract nor partial or entire use of the improvements embraced in this Contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express or implied warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner will give notice of defective materials and work with reasonable promptness.

(b) No material, supplies or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease purchase or other agreement by which an interest therein or in any part thereof is retained by the Seller or supplier. The Contractor shall warrant good title to all materials, supplies and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have the right to a lien upon any improvements or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontractors and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

8. NO WAIVER OF LEGAL RIGHTS

(a) Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or be stopped from recovering from the Contractor or his Surety, or both, such overpayment as it may sustain by

MEASUREMENT AND PAYMENT (continued)

Bid #47-23 Library Courtyard Renovation

failure on the part of the Contractor to fulfill his obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

(b) The Contractor, without prejudice to the Contract shall be liable to the terms of the Contract, shall be liable to the Owner for latent defects, fraud or such gross mistakes as may amount to fraud, and as regards the Owner's right under any warranty or guaranty.

9. TERMINATION OF CONTRACTOR'S RESPONSIBILITY

Whenever the improvement provided for by the Contract shall have been completely performed on the part of the Contractor and all parts of the work have been released from further obligations except as set forth in his bond and as provided in Section 8 above.

Bid #47-23 Library Courtyard Renovation

TECHNICAL SPECIFICATIONS

- 020000 SITEWORK – GENERAL**
- 024119 SELECTIVE STRUCTURE DEMOLITION**
- 321400 BRICK PAVING**
- 650 PLANTING - GENERAL**

Bid #47-23 Library Courtyard Renovation

SECTION 02000 SITEWORK - GENERAL

PART 1 - GENERAL

1.01 DESCRIPTION OF THE WORK:

- A. The Contractor shall provide all materials, equipment, and labor, and perform all operations necessary to prepare the site for construction; provide or relocate utilities required; excavation (earth and rock) and grading; installation of brick pavements, bases; and landscaping.
- B. Remove and salvage brick pavers for reuse in a new configuration.
- C. Remove and dispose of lawn area and loam below.
- D. Excavate undisturbed soil beneath the proposed brick terrace to achieve proper final grade for new brick pavers.
- E. Site dewatering and erosion control during construction if applicable
- F. Installation and relocation drain.
- G. Installation of aggregate subbase and base courses.
- H. Loaming, mulching, and landscaping.
- I. Erosion control measures as needed to minimize flow of silt and other material from disturbed areas into existing waterways.
- J. Other site features including paving, benches, etc., all as described in the documents.

1.04 CONSTRUCTION SEQUENCE:

- A. To mitigate the impact of site erosion the Contractor shall sequence construction as described by any required State or City Site Dewatering and Erosion Control measures.
- B. The Contractor shall schedule and coordinate his work with all effected utilities and other contractors as directed by the Owner's Representative.

END OF SECTION

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SECTION 024119 - SELECTIVE STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Items indicated to be removed and salvaged remain Owner's property. Remove, clean, and deliver to Owner's designated storage area.
- B. Comply with EPA regulations and hauling and disposal regulations of authorities having jurisdiction.
- C. The owner will occupy the building immediately adjacent to the selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- D. It is not expected that hazardous materials will be encountered in the Work. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Owner. Owner will remove hazardous materials under a separate contract.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 DEMOLITION

- A. Maintain services/systems indicated to remain and protect them against damage during selective demolition operations. Before proceeding with demolition, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of the building.
- B. Locate, identify, shut off, disconnect, and cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
- C. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- D. Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain or construction being demolished.
- E. Provide temporary weather protection to prevent water leakage and damage to structure and interior areas.
- F. Protect walls, ceilings, floors, and other existing finish work that are to remain. Erect and maintain dustproof partitions. Cover and protect furniture, furnishings, and equipment that have not been removed.
- G. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.
- H. Promptly remove demolished materials from Owner's property and legally dispose of them. Do not burn demolished materials.

END OF SECTION 024119

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SECTION 321400 – BRICK PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification sections, apply to this section.

1.2 SUMMARY

- A. Provide all labor, materials and equipment as necessary to complete all work as indicated on the Drawings and specified herein.
- B. This Section includes:
 - 1. Brick pavers.
 - 2. Prepared subgrade.
 - 3. Subbase.
 - 4. Fabric layer.
 - 5. Sand leveling course.

1.3 QUALITY ASSURANCE

- A. Comply with Section 2000 requirements.
- B. Materials and methods of construction shall comply with the following standards:
 - 1. Brick Institute of America, (BIA): Technical Notes on Brick Construction.
 - 2. American Society for Testing and Materials, (ASTM).
- C. Installation: Performed only by skilled workers with satisfactory record of performance on completed projects of comparable size and quality.
 - 1. Before starting brick paving, provide a sample panel using materials, patterns, and joints indicated for project work.
 - a. Build panel at the site of full thickness and approximately 5 ft. by 5 ft. Provide the range of color, texture, and workmanship proposed for the work. Correct and rebuild sample panel until Owner's acceptance of the work. The approved sample panel may be a part of the work and remain in place.
 - b. Location as directed by the Owner.

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1.4 SUBMITTALS

- A. Furnish samples, manufacturer's product data, test reports, and materials certifications for metal edge restraints, sand and gravel.

1.5 WARRANTY

- A. Contractor agrees that by acceptance of this work and in consideration thereof, and for each of the Subcontractors, binds them to the guarantees and warranties called for. Work to be free from defective workmanship for 2 years after the date of final acceptance.
- B. Warranty shall include filling of paver joints 1 year after installation at no additional cost.
- C. If within warranty period, it is found that the warranted work needs to be repaired or changed because of the use of defective materials, equipment, or inferior workmanship, or work not in accordance with the terms of the Agreement, the Contractor, upon notification, shall promptly and without additional expense to the Owner:
 - 1. Place such warranted work in a satisfactory condition.
 - 2. Repair or replace damage to the Project, or contents thereof, which is a result of such unsatisfactory warranted work.
 - 3. Repair or replace work, materials, and equipment that are disturbed in fulfilling the warranty, including disturbed work, materials, and equipment that may have been warranted under another Contract.
- D. Should the Contractor fail to proceed promptly in accordance with the warranty, the Owner may have such work performed at the expense of the Contractor and sureties.
- E. Contractor shall execute and deliver to the Owner, before final payment, a written warranty subject to the stipulations and provisions above.

PART 2 – PRODUCTS

2.1 BRICK PAVERS

- A. Remove, clean and stack existing pavers for reuse. Brick salvaged for reuse will conform to the following requirements:
 - 1. Warpage: Shall not exceed 1/16-inch for each 6 inches of brick length when measured in accordance with ASTM C67 Section 12.
 - 2. Efflorescence: When units are tested in accordance with Section 10 of Methods C67, the rating for efflorescence shall not be more than "slightly effloresced."
 - 3. Chippage: Maximum permissible extent of chippage from edges shall be 1/4-inch; from corners shall be 3/8-inch. The aggregate length of chips on a single unit shall not exceed 10% of the perimeter of the exposed face of the brick.

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4. Dimensional Tolerances: Brick pavers shall conform to ASTM grade PX. The brick to be selected will be approximately 2-1/4-inch x 4-inch x 8-inch.

2.2 SUBBASE

A. Base Course: minimum 8-inch type 304.3 crushed gravel base directly on undisturbed soil.

Base Course Gradation	
Item No.	304.3
Sieve Size	
6"	---
5"	---
4"	---
3 1/2"	---
3"	100
2 1/2"	---
2"	95 – 100
1 1/2"	---
1"	55 – 85
3/4"	---
1/2"	
#4	27 – 52
# 200 (In Sand Portion)*	0 – 12
# 200 (In Total Sample)	---

B. Leveling Course: 2" Clean, coarse, concrete sand (not mason sand), with the following gradation limits:

1. Sieve Size: 3/4-inch; Percent Passing: 100.
2. Sieve Size: 4; Percent Passing: 90 to 100.
3. Sieve Size: 8; Percent Passing: 80 to 95.
4. Sieve Size: 16; Percent Passing: 55 to 85.
5. Sieve Size: 50; Percent Passing: 10 to 35.
6. Sieve Size: 200; Percent Passing: 0 to 5.

2.3 SEPARATOR FABRIC

A. AMOCO Landscape Fabric; or approved equal.

2.4 JOINT SAND

A. RG Polymeric Locking Joint Sand, supplied by Brickscape, or approved equal.

2.5 EDGE RESTRAINTS

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A. Stainless Steel or Aluminum.

PART 3 - EXECUTION

3.1 PLACEMENT

A. All labor and materials shall conform to the State of New Hampshire Standard Specifications for Road and Bridge Construction, Section 608.

B. The brick terrace shall pitch 2% from perimeter to drain.

C. The Contractor shall install metal edging to hold the bricks in place. Such edging shall be installed per the manufacturer's recommendations.

D. The contractor shall install a silt sack to prevent brick dust from entering the drainage collection system during construction. The area will be swept daily to keep reduce dust levels.

E. 2" Leveling Course: Spread evenly over gravel base and screed to a level that will produce the required finished elevation when the brick pavers have been placed and vibrated.

F. Separator Fabric: Secure over concrete base drainage openings, as well as over leveling course. Locate to minimize seams, where seams are necessary, and overlap fabric 6-inch minimum.

G. Brick Pavers:

1. Lay brick in herringbone field pattern with borders similar to existing, and as approved by the Owner.

2. To minimize need for small brick segments, review brick layout with Owner.

3. Brick row alignments shall be uniform and straight. . Joints between units shall not exceed 1/8".

4. Brick shall be cut to a straight, even surface without cracks or chips. All half bricks will be snapped if possible and all efforts will be made to keep brick dust to a minimum. All cuts not made by snapping will be wet cut.

5. Vibrate to final level by 2 or 3 passes of a vibrating plate compactor. After the first vibration, joint sand shall be swept into joints. To avoid scratching, do not pass vibrating plate over brick with sand on the surface. Execute additional passes of the plate vibrator.

6. Sweep fill the joints again if necessary to completely fill joints. Surplus material shall then be swept from the surfaces and the entire site left clean. The finished surface shall 2% grade and shall not vary by more than 1/8 -inch when tested with a 10-foot board at any surface location.

H. Install joint sand the full depth of the joints as shown in the manufacturer's specifications.

1. Water the pavers in a manner that will activate the polymeric binder without washing the sand away.

END OF SECTION 321400

SECTION 650 -- PLANTING - GENERAL

Description

1.1 This specification includes general requirements that apply to all types of planting, including trees, shrubs, vines and ground cover plants, irrespective of type. Deviations from these general requirements will be shown in the specific requirements for each type.

1.2 This work also includes furnishing and installing landscaping materials, including all layout, fertilizing, soil conditioning, staking, guying, watering, excavating, weeding, herbicides, fungicides, pesticides, refertilizing as necessary, replanting as needed, and stake and guy removal after the establishment period, as shown on the plans or as ordered.

MATERIALS

2.1 Plants.

2.1.1 General.

2.1.1.1 Plant material shall meet the current specifications of the “American Standard for Nursery Stock” as published by the American Association of Nurserymen unless otherwise specified.

2.1.1.2 All plants shall be first class and shall be representative of their normal species or varieties. All plants must have a good, healthy, well-formed upper growth and a large, fibrous, compact root system.

2.1.1.3 All plants shall be nursery grown stock that has been transplanted unless shown as “seedlings”, or root pruned at least once every 4 years. Plant hardiness shall be found acceptable by the Engineer as specified compared to the zone of origin. A declaration of facts as to the region of growth shall be furnished when ordered.

2.1.1.4 Unless otherwise specified, so-called exposed or “bare root” material will be accepted. Container grown plants may be given in lieu of balled and burlapped plants, provided they meet the current specifications in the American Standard for Nursery Stock.

2.1.1.5 Any non-bid substitution of plant material shall be acceptable only if the bid item(s) is unavailable. Requests for plant substitutions and proof of unavailability shall be given to the Engineer in writing one month prior to the beginning of the planting season.

2.1.2 Names and Marking.

2.1.2.1 All scientific and common plant names of the items specified shall conform with the current edition of “Hortus Third” compiled by the staff of the L. H. Bailey Hortorium, Cornell University. All plants **delivered shall be true to name.**

2.1.2.2 Each bundle, or each plant, when not tied in bundles, shall be legibly and properly labeled. Care shall be taken throughout the operation to keep each plant species or variety segregated and labeled. The Engineer may reject at any time any plant material of questionable nomenclature.

2.1.3 Inspection.

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2.1.3.1 All plants shall be free from plant diseases and insect pests and shall follow all applicable State and Federal laws with respect to inspection for plant diseases and infestations.

2.1.3.2 Plant material may be inspected in the nursery or collecting fields before it is dug. The Contractor shall supply a list of suppliers in sufficient time so the Engineer may inspect nurseries on a timely basis. Approval to move nursery material to the project site shall not be considered as Acceptance. The Contractor shall notify the Engineer not less than 48 hours in advance of delivery of **plants.**

2.1.3.3 All planting stock shall conform to the laws of New Hampshire and shall be inspected before removal from the nursery, by authorized Federal, State or other authorities as may be required in the area where the nursery is located. The invoice or order for each shipment of plants shall have the project name and number and the quantity and variety of plant material delivered. An inspection certificate shall certify that the plants are free of disease and insect pests of all kinds and shall go with each shipment. Disease certificates and delivery slips shall be given to the Engineer upon arrival of the plant material at the point of delivery.

2.1.3.4 For purchase of material from nurseries within New Hampshire, information about inspection for plant disease and pest infestations is available from the New Hampshire Department of Agriculture. Inspection of plants from outside New Hampshire is controlled by the United States Department of Agriculture and information is available from the United States Department of Agriculture, Animal & Plant Health Inspection Service.

2.1.4 Digging, Handling, and Packing.

2.1.4.1 General. Plants shall be dug with care and skill. Special precautions shall be taken to avoid any unnecessary injury to, or removal of fibrous roots from the plants. Each species or variety shall be managed and packed in the approved manner for that particular plant. All precautions shall be taken to ensure the arrival of the plants at the project site in good condition for successful growth.

2.1.4.2 Balled and burlapped plants. The ball shall be firm and, unless a manufactured ball is allowed, shall be composed of the original and undisturbed soil in which the plant has been grown. The plant shall be managed in such a manner that the soil in the ball will not drop away from the roots and will not cause stripping of the small, fine-feeding roots. The ball shall be wrapped with burlap or other approved material and tightly laced to hold the desired shape. Plastic ball wrap material shall not be allowed.

No balled plants will be accepted if the ball is cracked or broken. A substitute for burlap may be approved provided it can be shown that the material is tight enough to retain the soil ball securely. During planting operations material which will not readily disintegrate in the ground shall be removed or extensively cut to allow the roots to grow through freely.

2.1.4.3 Bare-root plants. The roots of bare-rooted stock shall be carefully packed in sphagnum moss, moist straw, or other suitable material that will ensure the arrival of plants in an acceptable condition.

2.1.5 Shipment.

2.1.5.1 Arrangements shall be made as far as practical to have plants delivered as the planting pits or beds are ready for them.

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2.1.5.2 Plants which have heated or sweated at any time, or have been broken, fractured, scraped, or bruised, will be rejected.

2.1.5.3 All local, state, or federal laws related to the shipping of plants shall be strictly complied with.

2.1.6 Measurement.

2.1.6.1 Measurement will be made by the practice prescribed in the current edition of the "American Standard for Nursery Stock" published by the American Association of Nurserymen.

2.2 Blank.

2.3 Blank.

2.4 Layout marking material shall be clean 1" x 1" x 4 ft. high hardwood lumber stakes, wire type flagging, 1" minimum width plastic flagging or other approved material.

2.5 Plant support materials shall conform to the following unless otherwise specified.

2.5.1 Vertical stakes shall be hardwood lumber stakes or posts 2" x 2" minimum square or 1-1/2" diameter minimum round of the length required as shown on the plans. Hub stakes shall be 2" x 2" x 30" minimum square hardwood lumber.

2.6 Water used in the planting or care of vegetation shall be free from any substance injurious to plant life.

2.7 Antidesiccant shall be of an approved emulsion which will supply a film over plant surfaces, permeable enough to permit the exchange of gases but inhibit the passage of water vapor.

2.8 Fertilizer.

2.8.1 Fertilizer shall be a standard commercial grade fertilizer conforming to all State and Federal regulations and to the standards of the Association of Official Agricultural Chemists. The analysis shall represent respective percentages of nitrogen, phosphoric acid, and potash.

2.8.1.1 All fertilizer shall be identified by labels and shall show the following:

- (a) Guaranteed analysis.
- (b) Name and address of the guarantor of the fertilizer.
- (c) Type or brand.
- (d) Net weight.

2.8.1.2 Dry fertilizer for other than acid-loving plants shall have an analysis of 10-6-4 (preferred), 10-3-6, or 10-5-5, or with written permission, a substitute may be furnished. In any case, a minimum of 50 percent of the nitrogen shall be water-insoluble (50 percent WIN).

2.8.1.3 Water-soluble fertilizer shall be completely water soluble. Fertilizer for other than acid-loving plants shall contain the following minimum percentages of available elements by weight: nitrogen, 16 percent, phosphoric acid, 19 percent, potash, 16 percent. The total available nutrients shall be at least 55 percent by weight.

2.8.1.4 Fertilizer for acid-loving plants shall be formulated for acid-loving plants such as rhododendrons, azaleas, and blueberries. Dry fertilizer for such plants shall have a minimum analysis of 7-7-7 or as approved. Water-soluble fertilizer for such plants shall have an analysis in the range of

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2.11 Mulches.

2.11.1 Wood chips shall be obtained primarily from disease-free green hardwood, shall be 1/4” in nominal thickness, and 50 percent shall have an area of not less than 1 sq. in. nor more than 6 sq. in. Not more than 2 percent shall consist of leaves, twigs, or shavings, and it shall be free of materials injurious to plant growth. Wood chip mulch must be approved prior to use. Where wood chips are specified, bark may only be used when permitted.

2.11.2 Bark mulch shall be bark chippings graded to be approximately 3/8 to 2” in width. The chippings shall not have been stored so long and under such conditions that the material has decomposed sufficiently so that it has lost its fibrous texture. Bark mulch must be approved as to grading and condition prior to its use. Where bark mulch is specified, wood chips may only be used when allowed.

2.11.3 Other mulch material may be used upon approval.

2.12 Loam Backfill.

2.12.1 Loam will be “**Super Loam**”, a 75/25 blend of screened loam and Gro-Max Compost by **York Woods Tree and Products** or approved equal.

2.12.2 When allowed, compost or individual components of the loam backfill may be added directly to the approved plant pits.

Construction Requirements

3.1 Planting Seasons.

3.1.1 Unless otherwise directed, seasons for planting shall be within the following dates:

Deciduous/Evergreen Material: Spring - April 1 to June 30

Fall - August 15 to November 15

3.1.2 Preparations for planting may begin earlier than the specified season, and if approved, planting work may continue beyond the specified time limits. Permission to extend planting dates shall be requested in writing to the Engineer at least 10 working days before the end of the planting season. The request shall include a legitimate reason for the extension. Any expected shortages of plant material shall be brought to the attention of the Engineer upon discovery.

However, the Engineer may require that all plants planted out of season, except deciduous material planted prior to April 1 and after November 15, shall be balled, burlapped, and dead or damaged branches removed.

3.1.3 No planting shall be done when the site or weather is unsatisfactory for planting, unless allowed.

3.2 Delivery and Inspection.

3.2.1 A preliminary check will be made of all plants at the time of delivery for the condition of the plants and general conformity to the specifications. A more thorough inspection of individual plants will be made just prior to planting. No plants shall be planted which have not received this inspection. To facilitate this inspection, the Contractor shall inform the Engineer, at least 24 hours in advance, as to what plants are to be planted and in what location. Any plants planted without receiving this inspection will be rejected and if rejected must be removed and replaced with inspected stock.

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3.2.2 Due to the difficulty of identifying dormant plants and to the effect of handling on the health and vigor of plants, only conditional approval will be given to plants in preliminary and intermediate inspections. Inspection will continue throughout the life of the Contract up to the time of Acceptance. Plants discovered at any time which are not true to name, do not conform to the specifications, show evidence of improper handling or lack of proper care, or which appear to be in a seriously unhealthy condition for any other reason must be removed from the project site at once and replaced by acceptable plants as soon as the planting season allows.

3.2.2.1 Subject to approval of the Engineer, plants which show minor infestations of insects or disease appearing after planting may be treated in lieu of being replaced.

3.2.3 At least 3 working days before digging any collected or plantation-grown material, the Contractor shall notify the Engineer of the time and place of digging so that inspection of the work and of the material may be made by the Engineer.

3.3 Protection and Temporary Storage.

3.3.1 The Contractor shall keep all plant material moist and protected from drying out. Protection shall be provided during the time the plants are in transit, in temporary storage, or on the project site awaiting planting.

3.3.2 Unless otherwise approved by the Engineer, plants delivered, but not scheduled for immediate planting, shall be protected as follows:

(a) Bare-root plants shall be heeled-in in moist soil in a satisfactory manner. All plants heeled-in shall be properly maintained by the Contractor until planted.

(b) Balled and burlapped plants shall have the earth balls covered with wood chips or other suitable material and shall be kept in a moist condition.

3.3.3 The Contractor shall exercise the utmost care in loading, unloading, or handling of plants to prevent injuries to the branches or to the roots of the plants. The solidity of balled and burlapped plants shall be carefully preserved.

3.3.4 While plants with exposed roots are being transported to and from heeled-in beds, or are being distributed in planting beds, or are awaiting planting after distribution, the Contractor shall protect the roots from drying out by means of wet canvas, burlap, or straw, and watering, if necessary. The means employed shall be satisfactory and shall depend on weather conditions and the length of time the roots must remain out of the ground.

3.4 Layout.

3.4.1 The Engineer may adjust plant material locations to meet field conditions. Project plant material locations and bed outlines shall be delineated (flagged, marked, staked, etc.) on site by the Contractor, per the plan, for review and approval by the Engineer. Plant locations may be adjusted by the Engineer to meet local site conditions. All layout marking material required shall be furnished by the Contractor.

3.4.2 Ten working days prior to the start of planting work on the project, the Contractor shall provide a planting schedule to be used in establishing priorities in laying out plant locations. The Contractor shall give at least 2 working days' notice of any deviations from this schedule. The Engineer will not be responsible for any delays or inconvenience resulting from the Contractor's failure to follow the above procedure.

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3.4.3 An artificial appearance in the layout scheme is generally not desired. Except where uniform spacing may be required, as in the case of snow-control planting and the like, some variation in spacing is essential and care must be taken to avoid straight lines and uniform spacing unless directed otherwise.

3.5 Excavation.

3.5.1 Excavation for plant pits shall not begin before the approved loam backfill is available on the project.

3.5.2 Holes for plant material shall be excavated at the indicated locations and shall be a minimum width or 2 times the root ball diameter. The width of the planting pit shall be double that of the root system or ball. Plant pit requirements are shown on the planting detail sheet.

3.5.2.1 Trenching may be ordered for special sites such as long narrow medians. Trenches shall be the same depth as the root ball/potted container. The width of the trench shall be double that of the root system or ball.

3.5.3 Surplus excavated material or material unsuitable for backfill or saucer construction shall be removed from the site as soon as practicable or disposed of as ordered.

3.5.4 When rock or boulders over 1/3 cubic yard in size are encountered in digging plant pits, the Contractor shall notify the Engineer, who will change the location of the plants. No excavation of rock or boulders over 1/3 cubic yard in volume will be required.

3.5.5 If topsoil on the planting site is acceptable as loam, the topsoil encountered in the excavation may be used for loam backfill when it is kept separate from the subsoil. Soil amendments may be required. See 2.12.4.

3.5.6 In certain areas of poor drainage or heavy soil, the Engineer may require that the soil excavated from the plant pit be spread on the ground next to the pit and neatly distributed so as to raise the grade of the area to provide better surface drainage.

Where shown on the plans or directed, such pits may also require ditches. When ditches are required, they shall be included as a part of the cost of the plant. Beds constructed by trench method must be raised sufficiently to permit drainage to flow alongside and not into the bed.

3.6 Setting Plants.

3.6.1 General.

3.6.1.1 Plants shall be set to depths appropriate to the various types of material, local drainage, and the special requirements of each. In general, plants shall be placed on undisturbed soil so that the root crown is even with or slightly higher than the ground level. Roses and budded or grafted plants shall be set at least 3" below their previous earth line or as directed.

3.6.1.2 As shown on the planting detail sheets, the ground around the plants shall be graded and rims shall be constructed at the edge of the plant pit for each plant, forming a saucer capable of holding sufficient water to give the root system a good soaking.

Saucer rims shall be tamped so as to be durable enough to allow several years of watering if necessary. To prevent the growth of weeds and noxious grasses, the rims shall be constructed from soil removed

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from the plant pits. Imported loam for backfill shall not be used in the construction of the plant saucer rims and every effort shall be made to prevent spillage of loam in the planting area.

3.6.1.2.1 Saucers shall be inspected and approved by the Engineer prior to placement of mulch.

3.6.2 Planting and Backfilling Bare-Root Plants.

3.6.2.1 Prepared backfill soil shall be placed in the plant pit to the required minimum depth and very slightly tamped. Plants shall then be placed in the center of the pit and roots properly spread out in a natural position. All broken or damaged roots shall be cleanly cut back to healthy root growth.

3.6.2.2 Backfill soil shall then be carefully worked around and over the roots, with thorough watering. Care shall be taken to avoid the bruising or breaking of roots.

3.6.3 Planting and Backfilling Balled and Burlapped Plants.

3.6.3.1 Plants of this type shall be handled and placed in holes in such a manner that the soil of the ball will not be loosened.

After the hole has been partly backfilled and the soil watered under and around the ball, the burlap and ties at the top of the root ball shall be cut away and removed to avoid girdling, and the remaining burlap slit on the sides and adjusted to prevent the formation of air pockets and the basket cut and loosened. Backfilling and watering shall then be completed in a manner to avoid loosening the soil of the root ball.

3.6.4 Planting and Backfilling Potted Plants.

3.6.4.1 All containers shall be carefully removed prior to planting. Pot-bound material shall be subject to rejection if proper root pruning cannot be accomplished in a manner acceptable to the Engineer.

3.7 Fertilizing.

3.7.1 Initial fertilization shall consist of the use of dry fertilizer, water-soluble fertilizer, or a combination of both as permitted.

3.7.1.1 Dry fertilizer, when not included in the loam backfill, including fertilizer for acid-loving plants as appropriate, shall be uniformly mixed with the loam used as backfill about the plants at the following rates:

(a) Trees: 1-1/2 lb. /in. of caliper.

(b) Shrubs: 1/4 lb./ft. of height.

(c) Vines: 1/2 lb. per vine.

3.7.1.2 Water-soluble fertilizer, when ordered by the Engineer, including fertilizer for acid-loving plants as appropriate, shall be dissolved in water at the rate recommended by the manufacturer. The thoroughly mixed solution shall be applied at the time of initial planting after the water used for backfill soaking has leached away. Care shall be taken to prevent washing plant saucers away either during the original watering or while applying water-soluble fertilizer.

3.7.1.2.1 The fertilizer solution shall be applied at the following rates:

(a) Seedling plants, except coniferous: 1 pint per plant.

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(b) Plants up to 2 ft. in height shall receive 4 quarts.

(c) Plants over 2 ft. and up to 6 ft. shall receive 6 quarts.

3.7.2 Refertilization.

3.7.2.1 Unless otherwise ordered, up to two refertilizations shall be done using a water-soluble fertilizer applied in conjunction with watering or by itself. No refertilization will be allowed between August 1 and plant dormancy and between frozen ground and April 1.

3.7.2.2 All plants except seedlings and root plantings shall be fertilized at least once between April 1 and August 1 with water-soluble fertilizer mixed and applied in accordance with 3.7.1.2 or as directed when applied with a watering. Dry fertilizer for acid-loving plants may be used for such plants provided it is dissolved in sufficient water to make a workable solution and the solution is applied around the outside drip line of the branches at the rate of 1/4 lb./ft. of height of shrub.

3.7.2.3 When the Contract period extends spring to spring, all plants except seedlings and root cuttings shall receive an additional application of fertilizer in the spring prior to Acceptance.

3.8 Watering.

3.8.1 Watering equipment shall be on the project prior to planting and shall be available at any time during the life of the project. This equipment shall provide enough water to thoroughly soak the plant material root systems for the entire project within 48 hours. Watering equipment shall be equipped with a regulating device on the end of the hose to provide the operator with the ability to control the flow and pressure of water. Plants shall be watered immediately following planting, preferably when two thirds of the backfill has been placed so all air pockets are removed, and the plant properly set. Then a later watering to thoroughly soak the root system shall be performed within 24 hours of planting. Thereafter, watering shall be done every week throughout the growing season unless otherwise directed.

3.10 Antidesiccant Spray shall be used when directed.

3.11 Pruning.

3.11.1 Pruning of dead or damaged branches shall be done preferably before or immediately after planting in such a manner as to preserve the natural character of each plant. All pruning shall be done by experienced personnel with properly conditioned equipment and in keeping with accepted horticultural practice.

3.12 Mulching.

3.12.1 Within 48 hours of planting a plant, unless a longer period is allowed, mulch material shall be furnished and placed over all pit or saucer areas of individual trees, shrubs, and vines, and over the entire area of shrub beds to the depth indicated on the plans. Mulch material shall either be bark mulch or wood chips. Saucers shall be inspected prior to placement of mulch or chips.

3.13 Restoration and Cleanup.

3.13.1 Where existing areas have been damaged or scarred during planting operations, the disturbed areas shall be restored to their original condition as directed at no additional cost to the Department. Mowing may be required when directed by the Engineer to ensure complete slope restoration. All debris, spoil piles, containers and the like shall be cleaned up and the project left in an acceptable

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condition after each planting season. All slopes shall be left in a smooth condition with ruts and excavated soils removed and areas regraded as required.

3.14 Establishment Period.

3.14.1 The acceptability of the plant material furnished and planted as specified will be determined at the end of the establishment period. The period of establishment shall begin as soon as all plants are planted and shall extend for 1 year or until the date of Acceptance, whichever date is later. During this period, the Contractor shall continuously monitor the condition and general health of the plantings and initiate all horticultural practices necessary to maintain plants in a healthy condition including watering, fertilization, weeding, pesticide application, rodent control, pruning, repairing saucers, adding mulch, adjusting guys and stakes, and replacement of unacceptable plants, together with such other work as may be ordered. At the end of the establishment period, all guys, stakes, and hubs shall be removed, unless otherwise directed.

3.14.1.1 Weeding shall be a minimum of 1 ft. beyond the limit of the saucers. Planting beds shall be weeded in their entirety.

3.14.2 An inspection will be made by the Contractor and the Engineer immediately prior to or early in the planting season following the original planting season to determine the condition of the plant material. Dead plants, diseased plants, plants lacking sufficient vigor, or plants showing evidence of sizable die-back shall be replaced. Unacceptable plant material must be removed promptly from the project.

3.14.3 The Engineer may require that replacement plants that are not dormant or that are planted late in the planting season shall be sprayed as directed with an approved Antidesiccant.

3.14.4 Except as provided in 2.1.1.5, all replacement plantings shall be of the same kind and size as originally specified. The use of more loam and more initial fertilizer may be waived by the Engineer; otherwise, replacement plantings shall be handled, planted, and maintained in the same manner specified for the original plantings.

3.15 Herbicides, Insecticides, and Fungicides.

3.15.1 The Engineer may order, or the Contractor may request, the use of an approved herbicide at planting locations when it is determined that the chemical control of weeds is necessary.

3.15.2 The Engineer may order, or the Contractor may request, the use of a suitable insecticide or fungicide when it is determined that infestations of insects or plant disease require the use of such material.

3.15.3 All herbicides, insecticides, and fungicides shall be applied as prescribed by their manufacturer and in accordance with New Hampshire laws. The Contractor shall either possess from the New Hampshire Pesticide Control Board the proper registrations and permits for the application of such materials or have the applications made by an approved, qualified firm holding such registrations and permits. Copies of all permits in connection with such materials shall be furnished to the Engineer. All pesticide applications within the right-of-way or project limits will require a special permit from the New Hampshire Department of Agriculture, Division of Pesticide Control.

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3.16 Protection Against Rodents.

3.16.1 Rodent protection is a required part of plant care during the life of the Contract. An approved rodenticide shall be used on all plants that are susceptible to rodent damage. Approval for the proposed rodenticide and for the method of application must be obtained from the New Hampshire Department of Agriculture, Division of Pesticide Control and copies of the approval shall be furnished to the Engineer. A mixture of wood alcohol and rosin may be used in the absence of an approved rodenticide.

Method of Measurement

4.1 Plant material will be measured by the number of units of plants in healthy condition, of the specified sizes and species, furnished and planted.

4.2 Landscaping will be measured as a unit. A unit will include furnishing and installing landscaping materials, including all layout, fertilizing, soil conditioning, staking, guying, watering, excavating, weeding, herbicides, fungicides, pesticides, refertilizing as necessary, replanting as needed, and stake and guy removal after the establishment period, as shown on the plans or as ordered.

Basis of Payment

5.1 When substitutions are approved, payment will be by supplementary agreement.

5.2 Excessive damage due to heavy insect infestations, if all reasonable precautions are taken by the Contractor, will be reason for consideration of extra payment for approved replacements.

5.3 The accepted quantity of landscaping unit will be paid for at the Contract lump sum price complete in place.

5.3.1 The Contractor shall submit a "Bill of Materials" for approval in accordance with 105.02 at least three weeks prior to starting the landscaping item. The "Bill of Materials" shall include a unit price breakdown of planting materials. Once approved, this list will be used as a basis to adjust the landscaping item if substitution of plant material is required.

5.3.1.1 Anticipated shortages in any particular plant material shall be brought to the attention of the Engineer. Upon such discovery, the Contractor shall promptly request plant material substitution in writing. The request shall include at least five (5) Certified Nursery sources that were contacted for confirmation. The Contractor shall also submit the price of the proposed substitute material.

5.3.1.2 Upon approval of the substitute plant material, the Engineer will adjust the unit price, either increase or decrease, by multiplying the number of substituted plants by the difference between the base plant price and the substituted plant price. The result will then be divided by the unit price to come up with the new adjusted unit.

END OF SECTION