State of New Hampshire
Division of Procurement and Support Services
Bureau of Purchase and Property
25 Capitol Street, State House Annex
Concord, NH 03301-6398

Date: **6/9/16**

Bid No.: **7-17**

Date of Bid Opening: **6/27/16**
Time of Bid Opening: **11:00 AM (EST)**

YOU MAY EMAIL YOUR BID TO ROBERT LAWSON AT: EMAIL PRCHWEB@NH.GOV

BID INVITATION FOR: T-WALL MODULAR RETAINING WALL – SUPPLY ONLY

[Insert name of signor]_____, on behalf of _____ [insert name of entity submitting bid (collectively referred to as "Vendor") hereby submits an offer as contained in the written bid submitted herewith ("Bid") to the State of New Hampshire in response to BID # 7-17 at the price(s) quoted herein in complete accordance with the bid.

Vendor attests to the fact that:

1. The Vendor has reviewed and agreed to be bound by the Bid.
2. The Vendor has not altered any of the language or other provisions contained in the Bid document.
3. The Bid is effective for a period of 180 days from the Bid Opening date as indicated above.
4. The prices Vendor has quoted in the Bid were established without collusion with other vendors.
5. The Vendor has read and fully understands this Bid.
6. Further, in accordance with RSA 21-I:11-c, the undersigned Vendor certifies that neither the Vendor nor any of its subsidiaries, affiliates or principal officers (principal officers refers to individuals with management responsibility for the entity or association):
   a. Has, within the past 2 years, been convicted of, or pleaded guilty to, a violation of RSA 356:2, RSA 356:4, or any state or federal law or county or municipal ordinance prohibiting specified bidding practices, or involving antitrust violations, which has not been annulled;
   b. Has been prohibited, either permanently or temporarily, from participating in any public works project pursuant to RSA 638:20;
   c. Has previously provided false, deceptive, or fraudulent information on a vendor code number application form, or any other document submitted to the state of New Hampshire, which information was not corrected as of the time of the filing a bid, proposal, or quotation;
   d. Is currently debarred from performing work on any project of the federal government or the government of any state;
   e. Has, within the past 2 years, failed to cure a default on any contract with the federal government or the government of any state;
   f. Is presently subject to any order of the department of labor, the department of employment security, or any other state department, agency, board, or commission, finding that the applicant is not in compliance with the requirements of the laws or rules that the department, agency, board, or commission is charged with implementing;
   g. Is presently subject to any sanction or penalty finally issued by the department of labor, the department of employment security, or any other state department, agency, board, or commission, which sanction or penalty has not been fully discharged or fulfilled;
   h. Is currently serving a sentence or is subject to a continuing or unfulfilled penalty for any crime or violation noted in this section;
   i. Has failed or neglected to advise the division of any conviction, plea of guilty, or finding relative to any crime or violation noted in this section, or of any debarment, within 30 days of such conviction, plea, finding, or debarment; or
   j. Has been placed on the debarred parties list described in RSA 21-I:11-c within the past year.

This document must be signed by a person who is authorized to legally obligate the responding vendor. A signature on this document indicates that all State of New Hampshire terms and conditions are accepted by the responding vendor and that any and all other terms and conditions submitted by the responding vendor are null and void, even if such terms and conditions have terminology to the contrary. The responding vendor shall also be subject to State of New Hampshire terms and conditions as stated on the reverse of the purchase order.

Authorized Signor's Signature _____ **Authorized Signor's Title** _____

NOTARY PUBLIC/JUSTICE OF THE PEACE

COUNTY: _____ **STATE:** _____ **ZIP:** _____

On the _____ day of _____, 2016, personally appeared before me, the above named _____, in his/her capacity as authorized representative of _____, known to me or satisfactorily proven, and took oath that the foregoing is true and accurate to the best of his/her knowledge and belief.

In witness thereof, I hereunto set my hand and official seal.

_____ **(Notary Public/Justice of the Peace)**

My commission expires: _____ **(Date)**

Form P31-A

Unless specifically amended or deleted by the Division of Procurement and Support Services, the following General Terms and Conditions apply to this Bid and any resulting Purchase Order or Contract.

GENERAL CONDITIONS AND INSTRUCTIONS:

NATURE OF, AND ELIGIBILITY TO RESPOND. This bid invitation is submitted in accordance with Chapter 21-1, and rules promulgated thereunder, and constitutes a firm and binding offer. A bid may not be withdrawn unless permission is obtained from the Bureau of Purchase and Property.

Bids may be issued only by the Bureau of Purchase and Property and are not transferable.

SAMPLES AND DEMONSTRATIONS. When samples are required they must be submitted free of costs and will not be returned. Items left for demonstration or evaluation purposes shall be delivered and installed free of charge and shall be removed at no cost to the State. Demonstration units shall not be offered to the State as new equipment.

BIDS. Bids must be received at the Bureau of Purchase and Property before the date and time specified for the opening. Bids must be submitted on this bid form or exact copies and must be typed or clearly printed in ink. Corrections must be initialed. Bids are to be made less Federal Excise Tax and no charge for handling unless required by law.

SPECIFICATIONS. Vendors must submit on items as specified. Proposed changes must be submitted in writing and received at the Bureau of Purchase and Property at least five (5) business days prior to the bid opening, unless otherwise specified in the RFB timeline. Vendors shall be notified in writing if any changes to the specifications are made.

AWARD. The award will be made to the responsible Vendor submitting a conforming bid meeting specifications at the lowest cost unless other criteria are noted in the bid. Unless otherwise noted, the award may be made by individual items.

If there is a discrepancy between the unit price and the extension, the unit price will prevail.

When identical low bids are received the award will be made in accordance with the Administrative Rules.

Discounts will not be considered in making award but may be offered on the Invoice for earlier payment and will be applicable on the date of completion of delivery or receipt of Invoice, whichever is later. On orders specifying split deliveries, discounts will apply on the basis of each delivery or receipt of Invoice, whichever is later.

PATENT INFRINGEMENT. Any responding vendor who has reason to believe that any other responding vendor will violate a patent should such responding vendor be awarded the contract shall set forth in writing, prior to the date and time of opening, the grounds for his belief and a detailed description of the patent.

ASSIGNMENT PROVISION. The responding vendor hereby agrees to assign all causes of action that it may acquire under the antitrust laws of New Hampshire and the United States as the result of conspiracies, combinations, or contracts in restraint of trade which materially affect the price of goods or services obtained by the state under this contract if so requested by the State of New Hampshire.

FEDERAL FUNDS. This Division of Plant and Property Management, under RSA 21-1:14, VIII shall assure the continuation or granting of federal funds or other assistance not otherwise provided for by law by following the Federal Procurement Standards.

STATE'S OPTIONS: The Bureau of Purchase and Property reserves the right to reject or accept all or any part of any bid, to determine what constitutes a conforming bid, to award the bid solely as it deems to be in the best interest of the State, and to waive irregularities that it considers not material to the bid.

PUBLIC INFORMATION: The responding vendor hereby acknowledges that all information relating to this bid and any resulting order (Including but not limited to fees, contracts, agreements and prices) are subject to these laws of the State of New Hampshire regarding public information.

PERSONAL LIABILITY: The responding vendor agrees that in the preparation of this bid or the execution of any resulting contract or order, representatives of the State of New Hampshire shall incur no liability of any kind.

PROOF OF COMPLIANCE. The responding vendor may be required to supply proof of compliance with proposal specifications. When requested, the responding vendor must immediately supply the Bureau of Purchase and Property with certified test results or certificates of compliance. Where none are available, the State may require independent laboratory testing. All costs for such testing certified test results or certificate of compliance shall be the responsibility of the responding vendor.

FORM OF CONTRACT. The terms and conditions set forth in any additional Terms and Conditions by the Bureau of Purchase and Property are part of the bid and will apply to any contract awarded the responding vendor unless specific exceptions are taken and accepted and will prevail over any contrary provisions in Terms and Conditions submitted by the responding vendor.

CONTRACT TERMS AND CONDITIONS

1. The State of New Hampshire, acting through the Division of Procurement and Support Services, engages the firm or individual ("the Vendor") to perform the services and/or sale of goods, described in the attached State documents, if any, and the Vendor's bid or quotation, both of which are incorporated herein by reference.

2. COMPLIANCE BY VENDOR WITH LAWS AND REGULATIONS. In connection with the performance of this agreement, the Vendor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which shall impose any obligation or duty upon the Vendor, including, but not limited to civil rights and equal opportunity laws.

3. TERM. The contract, and all obligations of the parties thereunder, shall become effective on a specified date and shall be completed in their entirety prior to a specified date. Any work undertaken by the Vendor prior to the effective date shall be at his sole risk and, in the event that the contract shall not become effective, the State shall be under no obligation to reimburse the Vendor for any such work.

4. CONTRACT PRICE. The contract price, a payment schedule and a maximum limitation of price shall be as specified by the bid invitation and the Vendor's bid. All payments shall be conditioned upon receipt, and approval by the State, of appropriate vouchers and upon satisfactory performance by the Vendor, as determined by the State. The payment by the State of the Contract Price shall constitute complete reimbursement to the Vendor for all expenses of any nature incurred by the Vendor in the performance by the Vendor and complete payment for the Services. The State shall have no other liability to the Vendor.

5. DELIVERY. If the vendor fails to furnish items and/or services in accordance with all requirements, including delivery, the state may re-purchase similar items from any other source without competitive bidding, and the original vendor may be liable to the state for any excess costs.

6. INVOICING. All invoices must be in triplicate showing Order Number, Unit and Extension Prices and discounts allowed. A separate invoice shall be submitted for each order. Unless otherwise noted on the invitation to bid or purchase order, payment will not be due until thirty (30) days after all services have been completed, or all items have been delivered, inspected and accepted or the invoice has been received at the agency business office, whichever is later.

7. PERSONNEL.
7.1. The Vendor shall disclose in writing the names of all owners (5% or more), directors, officers, employees, agents or subcontractors who are also officials or employees of the State of New Hampshire. Any change in this information shall be reported in writing within fifteen (15) days of their occurrence.

7.2. The person signing this agreement on behalf of the State, or his or her delegee ("Contracting Officer") shall be the State's representative for purposes of this agreement. In the event of any dispute concerning the interpretation of this agreement, the Contracting Officer's decision shall be final.

8. EVENT OF DEFAULT; REMEDIES.
8.1. Any one or more of the following acts or omissions of the Vendor shall constitute an event of default hereunder ("Events of Default"):

8.1.1. failure to deliver the goods or services satisfactorily or on schedule; or

8.1.2. failure to submit any report required hereunder; or

8.1.3. failure to perform any of the other covenants and conditions of this agreement.

8.2. Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1. give the Vendor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this agreement, effective two (2) days after giving the Vendor notice of termination; and

8.2.2. give the Vendor a written notice specifying the Event of Default and suspending all payments to be made under this agreement and ordering that the portion of the Contract Price, which would otherwise accrue to the Vendor during the period from the date of such notice until such time as the State determines that the Vendor has cured the Event of Default, shall never be paid to the Vendor; and

8.2.3. set off against any other obligation the State may owe to the Vendor any damages the State suffers by reason of any Event of Default; and

8.2.4. treat the agreement as breached and pursue any of its remedies at law or in equity, or both.

9. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event, or any subsequent Event. No express failure of any Event of Default shall be deemed a waiver of any provision hereof. No such failure or waiver shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other default on the part of the Vendor.

10. VENDOR'S RELATION TO THE STATE. In the performance of this agreement the Vendor is in all respects an independent Vendor, and is neither an agent nor an employee of the State. Neither the Vendor nor any of its officers, employees, agents or members shall have authority to bind the State nor are they entitled to any of the benefits, workmen's compensation or emoluments provided by the State to its employees.

11. ASSIGNMENT AND SUBCONTRACTS. The Vendor shall not assign, or otherwise transfer any interest in this agreement without the prior written consent of the State. No work required by this contract shall be subcontracted without the prior written consent of the State.
If a vendor is unable to complete delivery by the date specified, he must contact the using agency. However, the agency is not required to accept a delay to the original delivery date. All deliveries are subject to inspection and receiving procedure rules as established by the State of New Hampshire. Deliveries are not considered accepted until compliance with these rules has been established. State personnel signatures on shipping documents shall signify only the receipt of shipments. All deliveries shall be FOB Destination.

12. INDEMNIFICATION. The contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based on, resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Vendor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant shall survive the termination of this agreement.

12.1 PATENT PROTECTION. The seller agrees to indemnify and defend the State of New Hampshire from all claims and losses resulting from alleged and actual patent infringements and further agrees to hold the State of New Hampshire harmless from any liability arising under RSA 382-A:2-312(3). (Uniform Commercial Code).

13. TOXIC SUBSTANCES. In compliance with RSA 277-A known as the Workers Right to Know Act, the vendor shall provide Material Safety Data Sheets with the delivery of any and all products covered by said law.

14. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given below.

15. AMENDMENT. This agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto.

16. CONSTRUCTION OF AGREEMENT AND TERMS. This agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns.

17. ADDITIONAL PROVISIONS. The additional provisions (if any) have been set forth as Exhibit "A" hereto.

18. ENTIRE AGREEMENT. This agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings relating hereto.

BID INVITATION FOR:
T-WALL MODULAR RETAINING WALL - SUPPLY ONLY

PURPOSE:
The purpose of this bid invitation is to establish a contract(s) in the form of a purchase order(s) for supplying the State of New Hampshire with the item(s) indicated in the "Offer" section of this bid invitation, in accordance with the requirements of this bid invitation and any resulting order. This will be a one-time order with delivery required to the location indicated in the F.O.B. section of this bid invitation.

INSTRUCTIONS TO VENDOR:
Read the entire bid invitation prior to filling it out. Complete the pricing information in the "Offer" section (detailed information on how to fill out the pricing information can be found in the "Offer" section); complete the "Vendor Contact Information" section; and finally, fill out, sign, and notarize page 1 of the bid invitation.

BID SUBMITTAL:
All bids must be submitted on this form or an exact copy, must be typed or clearly printed in ink and must be received on or before the date and time specified on page 1 of this bid under "Bid closing". Interested parties may submit a bid to the State of New Hampshire Bureau of Purchase and Property by **email to PRCHWEB@NH.GOV**. All bids must be clearly marked with bid number, date due and purchasing agent's name.

IF YOU ARE EXPERIENCING DIFFICULTIES EMAILING YOUR BID OR YOU WISH TO VERIFY THAT YOUR BID RESPONSE HAS BEEN RECEIVED, PLEASE CALL (603) 271-2201 AND ASK A PURCHASING ASSISTANT FOR ASSISTANCE OR TO CHECK ON THE STATUS OF YOUR BID RESPONSE.

TIMELINE:
The timeline below is provided as a general guideline and is subject to change. Unless stated otherwise, consider the dates below a "no later than" date.

6/9/2016	Bid Solicitation distributed on or by
6/17/2016	Last day for questions, clarifications, and/or requested changes to bid
6/27/2016	11:00 (EST) AM Bid Opening
7/11/2016	Estimated Notification(s) of Award to apparent low bidder/s

GOVERNING TERMS AND CONDITIONS:
A responding bid that has been completed and signed by your representative will constitute your company's acceptance of all State of New Hampshire terms and conditions and will legally obligate your company to these terms and conditions.

A signed response further signifies that from the time the bid is published (bid solicitation date and time) until a contract is awarded, no bidder shall offer or give, directly or indirectly, any gift, expense reimbursement, or honorarium, as defined by RSA 15-B, to any elected official, public official, public employee, constitutional official, or family member of any such official or employee who will select, evaluate, or award the RFB.

Furthermore, a signed response signifies that any terms and/or conditions that may be or have been submitted by the Vendor are specifically null and void and are not a part of this bid invitation or any awarded purchase order, even if said terms and/or conditions contain language to the contrary.

PUBLIC DISCLOSURE OF BID OR PROPOSAL SUBMISSIONS:
Generally, the full contents of any bid or proposal (including all materials submitted in connection with it, such as attachments, exhibits and addenda) become public information upon completion of final contract or purchase order negotiations with the selected vendor. Certain information concerning bids or proposals, including but not limited to pricing or scoring, is generally available to the public even before this time, in accordance with the provisions of RSA 21-G: 37.

To the extent consistent with applicable state and federal laws and regulations, as determined by the State, including, but not limited to, RSA Chapter 91-A (the "Right-to-Know" Law), the State will, after final negotiations with the selected vendor are complete, attempt to maintain the confidentiality of portions of a bid or proposal that are clearly and properly marked by a Vendor as confidential. Any and all information contained in or connected to a bid or proposal that a Vendor considers confidential must be clearly designated in the following manner:

1. If the Vendor considers a portion of a page of a submission confidential, it shall highlight those portions of the page in yellow and note "confidential" beside the highlighting. Use of any other term, such as "proprietary", "not for public use", or "for client's use only", is *not* acceptable.

2. If a Vendor considers one or more full pages of a submission confidential, it may either highlight and mark those pages as noted above or, in the alternative, place those pages in a separate envelope marked "confidential," clearly noting to which section or part of the bid or proposal the segregated materials pertain.

You must also provide a letter to the person listed as the point of contact for this RFB or RFP, identifying the specific page number and section of the information you consider to be confidential information and provide your rationale for each designation.

The State shall have no obligation to maintain the confidentiality of any portion of a bid, proposal or related material, which is not marked in accordance with the foregoing provisions. It is specifically understood and agreed that the Vendor waives any claim of confidentiality as to any portion of a response to this RFB or RFP that is not marked as indicated above, and that unmarked (or improperly marked) submissions may be disseminated to any person, without limitation. Marking an entire bid, proposal, attachment or full sections thereof confidential without taking into consideration the public's right to know will neither be accepted nor honored by the State. Bids or proposals submitted with markings not in conformity with the foregoing provisions of this request for submission, or submitted without an explanation of the Vendor's rationale for a confidentiality designation, may be deemed not to comply with the requirements of the bid or proposal (subject to correction and cure).

Notwithstanding any provision of this request for submission to the contrary, proposed pricing will be subject to public disclosure REGARDLESS of whether or not marked as confidential.
If a request is made to the State by any person or entity to view or receive copies of any portion of a proposal and if disclosure is not prohibited under RSA 21-G:37 or any other applicable law or regulation, Vendors acknowledge and agree that the State may disclose any and all portions of the proposal or related materials which is not marked as confidential. In the case of bids, proposals or related materials that contain portions marked confidential, the State will assess what information it believes is subject to release; notify the Vendor that the request has been made; indicate what, if any, portions of the proposal or related material will not be released; and notify the Vendor of the date it plans to release the materials. The State is not obligated to comply with a Vendor's designation regarding confidentiality.

By submitting a bid or proposal, the Vendor agrees that unless it obtains and provides to the State, prior to the date specified in the notice described in the paragraph above, a court order valid and enforceable in the State of New Hampshire, at its sole expense, enjoining the release of the requested information, the State may release the information on the date specified in the notice without any liability to the Vendor.

Notwithstanding RSA 91-A:4, no information shall be available to the public, or to the members of the general court or its staff concerning specific responses to this bid invitation from the time this bid is published until the closing date for responses.

From the closing date of the bid until the award is made is considered "quiet time." Bidders may not discuss their bid or anything specifically pertaining to the bid with any State entity (other than personnel from the Bureau of Purchase and Property) including the requesting/customer agency(ies). If found in violation of this part, the bidder shall be found non-compliant and will no longer be allowed to proceed in the award process.

VENDOR CERTIFICATIONS:
All Vendors must be duly registered as a vendor authorized to conduct business in the State of New Hampshire.

- STATE OF NEW HAMPSHIRE VENDOR APPLICATION: Prior to bid award, Vendors must have a completed Vendor Application Package on file with the NH Bureau of Purchase and Property. See the following website for information on obtaining and filing the required forms (no fee: *http://DAS.NH.Gov/Purchasing*

REQUEST FOR CHANGES AND/OR CLARIFICATION:
Any Questions must be submitted by an individual authorized to commit their organization to the Terms and Conditions of this bid. Submissions must clearly identify the bid Number, the Vendor's name and address and the name of the person submitting the question. Any questions, clarifications, and/or requested changes must be received in writing at the Bureau of Purchase and Property no later than 4:00 PM as listed in the timeline above. Questions shall not be submitted to anyone other than the Purchasing Agent or his/her representative. Bidders that submit questions verbally or in writing to any other State entity or State personnel shall be found in violation of this part and may be found non-compliant.

Questions must be submitted by E-mail to Robert Lawson at the following address: robert.lawson@NH.Gov.

ADDENDA:
In the event it becomes necessary to add to or revise any part of this bid prior to the scheduled submittal date, the NH Bureau of Purchase and Property will post on our web site any Addenda. Before your submission and periodically prior to the RFB closing, **check the site for any addenda** or other materials that may have been issued affecting the bid. The web site address is *http://das.nh.gov/Purchasing/vendorresources.asp.*

WARRANTY REQUIREMENTS:
Successful Vendor shall be required to warranty all of the equipment awarded to Vendor for a period of not less than one year from the date the items are received, inspected and accepted by the State of New Hampshire. The warranty shall cover 100% of all parts, shipping, labor, travel, lodging and expenses.

BID PRICES:
Bid prices must be in US dollars and must include delivery and all other costs required by this bid invitation. Special charges, surcharges, or fuel charges of any kind (by whatever name) may not be added on at any time. Any and all charges **must be built into your bid price** at the time of the bid. If there is a discrepancy between the unit price and the extension price in a response to an RFP, RFB or RFQ, the unit price shall be binding upon the bidder.

PAYMENT:
Payments shall be made via ACH. Use the following link to enroll with the State Treasury:
http://www.nh.gov/treasury/Divisions/DocsForms/Tforms.htm?inc=P

AWARD:
The award shall be made to the responsible Vendor meeting the criteria established in this RFB and providing the lowest cost in total. The State reserves the right to reject any or all bids or any part thereof and add/delete locations to the contract price. If an award is made it shall be, in the form of a State of New Hampshire Purchase Order (s).

BID RESULTS:
Bid results may be viewed when available, once the award has been made, on our web site only at:
http://das.nh.gov/purchasing.

For Vendors wishing to attend the bid Opening: **Names of the Vendors submitting responses and pricing will be made public**.

TERMINATION:
The State of New Hampshire shall have the right to terminate the purchase contract at any time by giving the successful Vendor a thirty (30) day written notice.

F.O.B.:
The F.O.B. shall be destination to the following delivery point: Weare, NH

Exact address to be determined at a later date.

REQUISITION NO.: #TBD

RETURNED GOODS:
The successful Vendor must resolve all order and invoice discrepancies within five business days from notification. Products returned due to quality issues, duplicate shipments, over-shipments, etc. must be picked up by the successful Vendor within ten business days of notification with no restocking or freight charges, and must be replaced with specified products or the agency will be refunded/credited for the full purchase price. Unauthorized substitutions for any products are not allowed.

Standard stock products ordered in error by the State of New Hampshire must be returned for full credit within fifteen business days of receipt. Products must be in re-saleable condition (original container, unused) and there will be no restocking fee charged for these products. The using agency will be responsible for any freight charges to return these items to the successful Vendor.

SPECIFICATION COMPLIANCE:
Vendor's offer must meet or exceed the required specifications as written. The State of New Hampshire shall be the sole determining factor of what meets or exceeds the required specifications.

Unless otherwise specified by the Bureau of Purchase and Property in this bid invitation document, all products and equipment offered by the Vendor must be new (and of the current model year, if applicable); shall not be used, rebuilt, refurbished; shall not have been used as demonstration products and equipment, and shall not have been placed anywhere for evaluation purposes.

The manufacturers and/or product numbers indicated are the only ones that are acceptable under this bid invitation.

SPECIFICATIONS

S P E C I A L P R O V I S I O N

SECTION 592 – PRECAST CONCRETE MODULAR WALL

Item 592.31 – Precast Concrete Modular Wall

Description

1.1 This work shall consist of furnishing and delivering a precast concrete modular (PCM) retaining wall system in accordance with these specifications and in close conformance with the lines, grades, design and dimensions established by the Engineer. The PCM wall consists of precast concrete modules, concrete shear keys and other items as defined in these specifications or on the plans.

1.1.1 The PCM wall on this project shall consist of T-wall modules, supplied by a contractor licensed by the Neel Company to fabricate the proprietary system. On this project, the NHDOT will be responsible for the internal and external stability of the T-wall system. The contractor will provide shop drawings to the NHDOT (Brian Desfosses, Hwy Maintenance District 5, 603-666-3336).

1.1.2 The PCM module sizes are indicated in the Response Table in this bid. The module sizes include both 8 foot and 10 foot stems.

1.2 Approved Wall Systems. The proprietary PCM wall system approved for this project is the following:

T-Wall
Licensed by the Neel Company

1.3 Requirements for Supplier Prepared Design and Plans. There are no requirements for Contractor supplied plans and calculations for this project other than shop drawings prior to casting. The NHDOT is responsible for the internal and external stability of the T-wall.

Materials

2.1 The Contractor shall furnish the Engineer a Certificate of Compliance meeting the requirements of Section 106.04, certifying that the applicable materials comply with this section of the specifications. Materials not conforming to this section of the specifications shall not be used without the written consent of the Engineer.

2.2 Concrete Modules. Concrete modules shall have a minimum concrete cover on reinforcing steel of 1-1/2 inches (38 mm). Cement shall be Type II and shall conform to the requirements of AASHTO M 85. Concrete shall have a minimum compressive strength of 4000 psi at 28 days, and shall meet all other requirements of Concrete Class A as specified in Section 520. Modules shall be reinforced with uncoated, grade 60 steel bars meeting the requirements of ASTM A 615. Lifting devices shall be set in place prior to casting. All concrete components shall meet or exceed specifications listed in Section 520.

2.2.1 Testing and Inspection. Acceptability of the precast modules shall be determined on the basis of compliance with the properties specified for Class A concrete in Section 520, compliance with the requirements in Section 2.2 of this specification, and visual inspection. The Contractor shall furnish all necessary facilities and access for the Engineer to sample, test and inspect the modules in an expeditious and satisfactory manner. The Contractor shall furnish all necessary facilities and shall perform sampling and testing to measure the compressive strength of the concrete in an expeditious and satisfactory manner as outlined in Section 2.2.7.

2.2.2 Casting. The concrete in each module shall be placed without interruption and shall be consolidated by the use of an approved vibrator, supplemented by such hand tamping as may be necessary to force the concrete into the corners of the forms and to prevent the formation of stone pockets or cleavage planes. Clear form oil or release agent shall be used throughout the casting operation.

2.2.3 Curing. The reinforced concrete units shall be cured for a sufficient length of time so that the concrete will develop the specified compressive strength.

2.2.4 Removal of Forms. The forms shall remain in place until they can be removed without damage to the module.

2.2.5 Concrete Finish. The concrete surface for the front face shall have a finish as specified in the plans. The rear face of the module shall be free of open pockets of aggregate and surface distortions in excess of 1/4 inch.

2.2.6 Tolerances. All modules shall be manufactured within the following tolerances with respect to the dimensions shown on the shop drawings referenced in Section 1.1.1 above:

A. Module Dimensions – All module dimensions shall be within 1/4 inch.

B. Module Squareness – The module stems or sidewalls shall be perpendicular with respect to the module face in both the horizontal and vertical planes. The acceptable horizontal tolerance shall not exceed 1 inch measured at the end of the stem or sidewalls at its furthest location from the module face. The acceptable vertical tolerance shall not exceed 1/4 inch measured at the end of the stem or sidewalls at its furthest location from the module face.

C. Module Face Squareness – Squareness, as determined by the difference between the two diagonals, shall not exceed 1/2 inch for modules up to 10 feet in width and 3/4 inch for modules wider than 10 feet.

D. Module Face Surface Finish – Surface defects on smooth-formed surfaces, measured on a length of 5 feet shall not exceed 1/4 inch. Surface defects on textured-finished surfaces, measured on a length of 5 feet shall not exceed 5/16 inch.

2.2.7 Compressive Strength. Acceptance of the concrete modules, with respect to compressive strength, shall be determined on the basis of production lots. A production lot is defined as a group of modules that shall be represented by a single set of compressive strength samples and shall consist of not more than 20 modules or a single day's production, whichever is less.

2.2.7.1 During the production of the modules, the manufacturer shall randomly sample the concrete in accordance with AASHTO T 141. A single set of compressive strength samples, consisting of a minimum of four cylinders, shall be made for every production lot.

2.2.7.2 For every compressive strength sample, a minimum of two cylinders shall be cured in the same manner as the modules and tested at 7 days or less. The average compressive strength of these cylinders, when tested in accordance with AASHTO T 22, will determine the initial strength of the concrete. In addition, a minimum of two cylinders shall be cured in accordance with AASHTO T 23 and tested at 28 days. The average compressive strength of these cylinders, when tested in accordance with AASHTO T 22, will determine the compressive strength of the production lot.

2.2.7.3 If the initial strength test result indicates a compressive strength greater than or equal to the required 28-day strength, then this test result will be utilized as the compressive strength test results for that production lot, and the requirement for testing at 28 days will be waived for that particular production lot.

2.2.7.4 Acceptance of a production lot will be made if the compressive strength test result is greater than or equal to the required 28-day strength. If the compressive strength test results are less than the required 28-day strength, the acceptance of the production lot will be based on its meeting the following acceptance criteria in its entirety:

A. Ninety percent of the compressive strength test results for the overall production shall exceed 1.0375 times the required 28-day strength.
B. The average of any six consecutive compressive strength test results, including the one in question, shall exceed 1.0625 times the required 28-day strength.
C. No individual compressive strength test result shall fall below 0.9 times the required 28-day strength.

2.2.7.5 In the event that a production lot fails to meet the specified compressive strength requirements, the production lot shall be rejected. Such rejection shall prevail unless the Contractor, at no cost to the Department, obtains and submits evidence of a type acceptable to the Engineer that the strength and quality of the concrete placed in the modules within a production lot is acceptable. If such evidence consists of tests made on cores taken from the modules within the production lot, the cores shall be obtained and tested in accordance with AASHTO T 24.

2.2.8 Rejection. Modules shall be subject to rejection because of failure to meet any of the requirements specified above. In addition, any or all of the following defects may be sufficient cause for rejection:

A. Defects that indicate imperfect molding.
B. Defects indicating honeycombed or open-texture concrete.
C. Defects in the physical characteristics of the concrete, such as broken or chipped concrete.

2.2.9 The Engineer shall determine whether spalled, honeycombed, chipped or otherwise defective concrete shall be repaired or be cause for rejection. Repair of concrete, if allowed, shall be done in a manner satisfactory to the Engineer. Repair to concrete surfaces which will be exposed to view after completion of construction must be approved by the Engineer.

2.2.10 Marking. The date of manufacture, the production lot number, and the piece-mark shall be clearly marked on the back side of each module.

2.2.11 Handling, Storage and Shipping. All modules shall be handled, stored and shipped in such a manner as to prevent cracks, fractures and excessive bending stresses.

2.3 Reinforcing Steel. Reinforcing steel shall conform to Section 544.

2.4 Joint Materials. Joint materials between modules shall be as specified.

2.5 Concrete Shear Keys. The concrete shear keys used interlock the modules shall be standard T-wall shear keys with a minimum 28 day strength of 2500 psi.

2.6 Water Repellent. Water repellent (Silane-Siloxane) applied to the PCM modules shall meet the material and construction requirements of Item 534.3.

Construction Requirements

3.1 Coordination Meeting. A coordination meeting shall be held prior to initiating the PCM wall construction and related work. The purpose of the meeting shall be to review all aspects of the PCM wall construction and to facilitate coordination between all parties involved. Individuals attending the meeting shall include the Engineer, the PCM wall supplier representative, the Project Engineer from the Geotechnical Section, and all other personnel deemed appropriate by the previously mentioned personnel.

3.2 Wall Supplier's Representative. The Contractor shall make the necessary arrangements with the wall supplier to have a technical representative on the project to supervise the initial construction of the wall. The technical representative shall also be required to be on-site at any time during wall construction as requested by the Engineer. (Prior to beginning work, contractor shall provide a Certificate of Insurance showing Worker's Compensation coverage)

Method of Measurement

4.1 The accepted quantity of precast concrete modular retaining wall will be measured by the square foot of wall surface area. Water repellent applied to the modules will be included in the square foot cost.

Basis Of Payment

5.1 The accepted quantity of precast concrete modular retaining wall will be paid for at the contract price per square foot when delivered and accepted on site by the Engineer.

OFFER:
Successful Vendor hereby offers to sell the required items to the State of New Hampshire at the following price(s):

SEE ATTACHED SPREADSHEET

Delivery Time:
Successful Vendor agrees to complete delivery of items within 40 days after receipt of Purchase Order or sooner. Prices offered must include all products and delivery costs.

VENDOR CONTACT INFORMATION:
The following information is for this office to be able to contact a person knowledgeable of your bid response, and who can answer questions regarding it:

Contact Person	Telephone Number	Toll Free Telephone Number
Fax Number	E-mail Address	Company Website
Vendor Company Name		DUNS #
Vendor Address		

Note: To be considered, bid must be signed and notarized on front cover sheet in the space provided.

RESPONSE TABLE

Line Item	Qty.	Unit of Measure	Description	Unit Price	Extended Price
1	187.5	SF	PRECAST CONCRETE T-WALL SECTIONS A. (15) 8' long single stem T-Wall Sections: Supplied with T-Wall shear keys, Sill Seal, Amoco fabric and T-Wall horizontal asphalt material		
2	275	SF	B. (22) 10' long single stem T-Wall sections: Supplied with T-Wall shear keys, Sill Seal, Amoco fabric and T-Wall horizontal asphalt material		
3	80	EACH	Shear Keys (assuming 2 per) 200' of Blue Foam		
4	1	Roll	Amoco Filter Fabric (Vertical Joints) 6' W x 300' L		
5	12	Roll	Sill Seal - Runner Coil (Cardboard strips - Horizontal Joints) 5-1/2" W x 50' L x 1/2" thick		
				TOTAL	