CONTRACT DOCUMENTS AND SPECIFICATIONS

for

Middle School Structural Reinforcement BID #41-16 John P. Bohenko, City Manager

TABLE OF CONTENTS

INVITATION TO BID	3
INSTRUCTION TO BIDDERS	4
AWARD AND EXECUTION OF CONTRACT	7
PROPOSAL	9
BID SECURITY BOND	12
BIDDER'S QUALIFICATIONS	13
CONTRACT AGREEMENT	15
NOTICE OF INTENT TO AWARD	18
NOTICE TO PROCEED	19
CHANGE ORDER	20
LABOR AND MATERIALS PAYMENT BOND	21
MAINTENANCE BOND	23
CONTRACTOR'S AFFIDAVIT	24
CONTRACTOR'S RELEASE	25
GENERAL REQUIREMENTS	26
CONTROL OF WORK	28
INSURANCE	30
TEMPORARY FACILITIES	31
MEASUREMENT AND PAYMENT	32
STANDARD SPECIFICATIONS	35
TECHNICAL SPECIFICATIONS	40
STATEMENT OF SPECIAL INSPECTIONS	59

City of Portsmouth Portsmouth, NH Department of Public Works

Middle School Structural Reinforcement

INVITATION TO BID

<u>Sealed</u> bid proposals, <u>plainly marked</u>, "Middle School Structural Reinforcement, Bid Proposal #41-16" <u>on the outside of the mailing envelope as well as the sealed bid envelope</u>, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until **April 21, 2016** at 2:00 p.m. at which time all bids will be publicly opened and read aloud. A mandatory pre-bid meeting will be held **April 8, 2016** at 7:00 a.m. at the Portsmouth Middle School, 155 Parrott Avenue, Portsmouth, N.H.

The work shall consist of selective concrete repairs and structural steel reinforcement of the poured concrete first floor deck in the 1930 building of the Portsmouth Middle School. Work must be performed when school is not in session beginning June 22, 2016, with Substantial Completion to be achieved by August 26, 2016. Liquidated damages shall be assessed at \$500.00 per day if Substantial Completion is delayed.

Contractors must have at least ten (10) years of successful experience on projects that include structural steel fabrication and installation. A bid bond, labor and materials bond and maintenance bond will be required for this work. Bidders must determine the quantities of work required and the conditions under which the work will be performed.

Specifications, drawings, and bid proposal forms may be obtained from the City website at http://www.cityofportsmouth.com/finance/purchasing.htm. Questions may be directed to Dan Hartrey, Facilities Project Manager at 610-7299. The deadline for questions is **4:30 p.m. April 13, 2016.** Addenda to this bid document, if any, including written answers to questions, will be posted by **4:30 p.m. April 18th** 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.

The City of Portsmouth 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.

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 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.

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.

The deadline for questions and additional information is **4:30 p.m. April 13, 2016**. Questions should be directed to Dan Hartrey, Facilities Project Manager (603) 610-7299.

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 have made himself or herself familiar with all federal and state laws and all local bylaws, 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, and the bidder, if awarded the contract, shall be obligated to perform the work in conformity with said laws, by-laws, ordinances and regulations notwithstanding its ignorance thereof. If the 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. <u>Preparation of Proposal</u>

- 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 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, his or her 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 in 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". 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 subbid 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

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 his or her 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. <u>Disqualification of Bidders</u>

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 his 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;
- Contractor lacks sufficient experience working with steel fabricators;
- Lack of competency or of adequate machinery, plant or other equipment, as revealed by the statement of bidders 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.

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.

AWARD AND EXECUTION OF CONTRACT

1. <u>Consideration of Proposals</u>

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.

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, mailed to the address on his or her proposal, that his or her 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 his/her own risk and the City will not be held liable for any expense incurred by a bidder that has not received an official award.

3. Reservation of Rights

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.

The City reserves the right to make inquires regarding the qualifications and reputation of the bidder. By submitting a bid proposal, bidder agrees to hold harmless the Owner and its employees and agents from any and all claims, actions, and damages arising from such investigation. Bidder may be requested to execute releases.

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 guaranties of the three lowest bidders will be returned within ten days following the award of the contract if requested.

5. Contract Bonds

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

Labor and materials payment bond in the sum equal to 100 percent of the contract amount.

At the time of project completion, the Owner may, in its sole discretion, permit the Contractor to substitute a Maintenance Bond in lieu of holding retainage for the entire guaranty period. If a bond is furnished it shall meet the following criteria:

• The bond shall be in an amount equal to 20 percent of the contract amount. Such bond shall guarantee the repair of all damage due to faulty materials or workmanship provided or done by the contractor. The guarantee shall remain in effect for a period of one (1) year after the date of final acceptance of the job by the Owner.

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.

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 acceptable bonds 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. Award may then be made to the next lowest responsible bidder, or the City may exercise its reserved rights including the rejection of all bids or re-advertisement.

PROPOSAL FORM

Middle School Structural Reinforcement

CITY OF PORTSMOUTH, N.H.

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

The undersigned, as Bidder, herein referred to as singular and masculine declares as follows:

1. All interested in the Bid as Principals are named herein.

1. Execute concrete repairs per specifications and drawings.

- 2. This bid is not made jointly, or in conjunction, cooperation or collusion with any other person, firm, corporation, or other legal entity;
 - 3. No officer, agent or employee of the Owner is directly or indirectly interested in this Bid.
- 4. The bidder has carefully examined the sites of the proposed work and fully informed and satisfied himself 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 Agreement, Specifications and other Contract Documents therein referred to and knows and understands the terms and provisions thereof;
- 5. The bidder understands that the quantities of work calculated in the Bid or indicated on the Drawings or in the Specifications or other Contract Documents are approximate and are subject to increase or decrease or deletion as deemed necessary by the Portsmouth City Engineer. Any such changes will not result in or be justification for any penalty or increase in contract prices; and 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 supply or perform all labor, services, plant, machinery, apparatus, appliances, tools, supplies and all other activities required by the Contract Documents in the manner and within the time therein set forth, and that the bidder will take in full payment therefor the following item prices;
- 6. It is the intention of this contract that the items listed above describe completely and thoroughly the entirety of the work as shown on the plans and as described in the specifications. All other items required to accomplish the above items are considered to be subsidiary work, unless shown as a pay item, to wit:

In Figures \$	
In Words	Dollars
2. Execute wall and framing repairs in the attic per drawing S1.1:	
In Figures \$	
In Words	Dollars

PROPOSAL FORM (Continued)

Fabricate and install structural steel reinforcement per drawings S1.0 and penetrations:	S2.0, including pipe
In Figures \$	
In Words	Dollar
3A . Fabricate and install ALTERNATE 1 structural steel reinforcement pe including pipe penetrations:	er drawings S1.0A and S2.0A,
In Figures \$	
In Words	Dollars
Contractor may choose items 1, 2 and 3 OR 1, 2 and 3A to accomplish the combetween either method with a zero dollar (\$0) figure for the method not used.	plete scope of work. Indicate
TOTAL for Items 1 through 3A, the Basis for the Bid In Figures \$	
In Words	Dollars
UNIT PRICING	
a. Unit price for (additional or less) concrete repairs cost pe	er linear foot:
In Figures \$	
In Words	
b. Unit price for (additional or less) pipe penetrations in ste	el:
In Figures \$	
In Words	

PROPOSAL FORM (Continued)

To Bidder: It is the intention of this contract that the items listed above describe completely and thoroughly the entirety of the work as shown on the plans and as described in the specifications. All items required to accomplish the above items are considered to be subsidiary work, unless shown as a pay item. 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	TITLE
STREET ADDRESS, CITY, STATE, ZIPCODE,	TELEPHONE NUMBER
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.

BID SECURITY BOND

(1nis forma	at provided for convenience, actual Bid Bond is acceptable in lieu of, if compatible.)	
KNOW AL	LL MEN BY THESE PRESENTS, that we the undersigned, a	S
Principal, a	and, as Surety, are hereby held and firmly bound unto	
	ed damages for payment of which, well and truly to be made we hereby jointly and severally bind our heirs, executors, administrators, successors and assigns.	[
The conditi	ion of this obligation is such that whereas the Principal has submitted to the	
	IN Bid attached hereto and hereby made a part hereof to enter into a contract in writing, hereinaft as the "AGREEMENT" and or "CONTRACT", for	er
NOW THE	EREFORE,	
	d Bid shall be rejected or withdrawn as provided in the INFORMATION FOR BIDDERS attached the alternative,	ed
AGREEMI the AGREI performanc remain in f	Id Bid shall be accepted and the Principal shall duly execute and deliver the form of ENT attached hereto and shall furnish the specified bonds for the faithful performance of EMENT and/or CONTRACT and for the payment for labor and materials furnished for the ce of the AGREEMENT and or CONTRACT, then this obligation shall be void, otherwise it shall left force and effect; it being expressly understood and agreed that the liability of the Surety for an ms hereunder in no event shall exceed the amount of this obligation.	
impaired or	r, for value received, hereby agrees that the obligation of said surety and its bond shall be in no war affected by any extensions of the time within such BID may be accepted, and said Surety does we notice of any such extension.	ay
IN WITNE	ESS WHEREOF, the parties hereto have duly executed this bond on the day o, 20	of
	L.S. (Name of Principal)	
(SEAL)		
	BY	
	(Name of Surety)	
	BY	
	Page 12	

STATEMENT OF BIDDER'S QUALIFICATIONS

Must be Supplied with Bid

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

1.	Name	of Bidder
2.	Perma	anent Main Office Address
3.	Form	of Entity
4.	When	Organized
5.	Wher	e Organized
6.		many years have you been engaged in the contracting business under your present name; also names and dates of previous firm names, if any.
7.	Gene	ral character of work performed by your company.
8.		you failed within the last seven years to complete any work awarded to you?(no)(yes). where and why?
9.		you defaulted on a contract within the last seven years?(no)(yes). where and why?
10.		you ever failed to complete a project in the time allotment according to the Contract Documents?(no)(yes). If so, where and why?
11.		ne most important contracts recently executed by your company, stating approximate cost for and the month and year completed.
12.	List y	our major equipment available for this contract.
13.	List y	our key personnel such as project superintendent and foremen available for this contract.
14. by yo proje	ur owr	ny subcontractors whom you would expect to use for this project (unless this work is to be done organization). The City reserves the right to approve or disapprove subcontractors for this
	a.	Structural Steel fabrication and installation
		Subcontractor:
	b.	Plumbing
		Subcontractor:
	c.	Masonry
		Subcontractor:

STATEMENT OF BIDDERS QUALIFICATIONS (continued)

15.	Contractor must have at least ten years prior experience in commercial structural steel projects. Describe that prior experience, identifying projects/contracts that have been successfully completed within the last five years.
Certirequ prop	st Financial Statements: The City reserves the right to request Bidders' latest Financial Statements. ified audited statements if available, prepared by an independent certified public accountant, may be ested by Owner. If requested, such statements must be provided within five (5) business days or the bid osal will be rejected. Certified Audited Statement are preferred. Internal statements may be used only if pendent statements were not prepared.
Date	ed at, 20
Non	ne of Bidder
	TITLE
	nty of
	being duly sworn, deposes and says that the bidder is
of	(Name of Organization) and answers to the foregoing questions and
all st	tatements contained therein are true and correct.
Swo	rn to before me thisday of, 20
	Notary of Public
	My Commission expires

CONTRACT AGREEMENT

Middle School Structural Reinforcement

THIS AGREEMENT made as of the ___ day of ___ in the year **2016**, 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 for the completion of the Project. The Contractor shall provide, at his expense, all labor, materials, equipment and incidentals as may be necessary for the expeditious and proper execution of the Project.

ARTICLE II - ENGINEER - The Engineer shall mean the Director of Public Works, or his authorized representative, who will act as engineer in connection with completion of the Project in accordance with the Contract Documents.

ARTICLE III - CONTRACT TIME - The work will commence and finish in accordance with the Notice to Proceed.

ARTICLE IV - CONTRACT PRICE - Owner shall pay Contractor for performance of the work in accordance with the Contract Documents.

ARTICLE V - PAYMENT - Upon final acceptance of the work and settlement of all claims, Owner shall pay the Contractor 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 (10%) percent of the Contract Price as specified in the Contract Documents.

ARTICLE VII - LIQUIDATED DAMAGES - In event the Contractor fails to Substantially Complete the work within the specified contract time, the Owner shall assess the Contractor liquidated damages in the amount of **five hundred dollars** (\$500.00) 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: Scope of Work, Control of Work, Insurance Requirements, Temporary Facilities, Measurement and Payment
- 8.6 Standard Specifications
- 8.7 Technical Specifications
- 8.8 Drawings
- 8.9 Any modifications, including change orders, duly delivered after execution of this Agreement.

In the event of a conflict, Technical Specification shall govern Drawings, Drawings shall govern Standard Specifications, and Standard Specifications shall govern General Requirements.

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 will indemnify Owner against all suits, claims, judgments, awards, loss, cost or expense (including without limitation attorneys' fees) arising in any way out of the Contractor's negligent performance of its obligations under this Contract. Contractor will defend all such actions with counsel satisfactory to Owner at its own expense, including attorneys' fees, and will satisfy any judgment rendered against Owner in such action.

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

- A. Neither Owner nor Contractor shall, 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 binds himself, his 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. Venue for any dispute shall be the Rockingham County Superior Court unless the parties otherwise agree.

IN WITNESS WHEREOF, the parties hereunto executed this

BIDDER:

AGREEMENT the day and year first above written.

TITLE: City Manager

BY:		
TITLE:		
	CITY OF PORTSMOUTH, N.H.	
BY:	John P. Bohenko	

NOTICE OF INTENT TO AWARD

Date:
To:
IN AS MUCH as you were the low responsible bidder for work entitled:
Middle School Structural Reinforcement
You are hereby notified that the City intends to award the above referenced project to you.
Immediately take the necessary steps to execute the Contract and to provide required bonds and proof of insurance within ten (10) 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

Judie Belanger, Finance Director

Title:_____

NOTICE TO PROCEED
DATE:
Middle School Structural Reinforcement
TO:
YOU ARE HEREBY NOTIFIED TO COMMENCE WORK IN ACCORDANCE
WITH THE AGREEMENT DATED,
WORK SHALL BE COMPLETED PRIOR TO August 26, 2016.
CITY OF PORTSMOUTH, N.H.
BY: Steve Bartlett TITLE: Business Administrator
ACCEPTANCE OF NOTICE
RECEIPT OF THE ABOVE NOTICE TO PROCEED IS HEREBY ACKNOWLEDGED BY
This theday of 20 By:

CHANGE ORDER

Change Order Number:	Date of Issuance:
Owner: CITY OF PORTSMOUTH, N.H	
Contractor:	
You are directed to make the following char Contract Documents:	nges in the
Purpose of Change Order:	
Attachments:	
CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIME
Original Contract Price: \$	Original Completion Date:
Contract Price prior to this Change Order:	Contract Time prior to this Change Order: days
Net Increase of this Change Order:	Net Increase of this Change Order: days
Contract Price with all approved Change Orders:	Contract Time with all approved Change Orders: days
RECOMMENDED: APPROVE	D: APPROVED:
bybyby_ Business Administrator City Finance	by City Manager Contractor

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 MEN BY THESE PRESENTS:
that
as Principal, hereinafter called 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 City of Portsmouth. on behalf of the City of Portsmouth , 1 Junkins Avenue, 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 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:

LABOR AND MATERIAL PAYMENT BOND (continued)

(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. 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	s day of _	, 20	In the presence of:
	BY:		
(Witness)		(Principal) (Seal)	
(Surety Company)		
	BY:		
(Witness)		(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.

MAINTENANCE BOND

At the Owner's election, a maintenance bond may be substituted for retainage at the completion of the project. If the Owner permits a maintenance bond, it shall be in the amount of **Twenty Percent** (20%) of the contract price with a corporate surety approved by the Owner. Such bond shall be provided at the time of Contract completion and shall guarantee the repair of all damage due to faulty materials or workmanship provided or done by the Contractor. This guarantee shall remain in effect for a period of one year after the date of final acceptance of the job by the Owner.

CONTRACTOR'S AFFIDAVIT

STATE OF:	
COUNTY OF:	
Before me, the undersigned, a(Notary Public, Justice of the land	Peace)
in and for said County and State personally appeared,(Individual, Partner, or duly authorized re	epresentative of Corporate)
who, being duly sworn, according to law deposes and says that	t the cost of labor, material, and equipment and
outstanding claims and indebtedness of whatever nature arising	g out of the performance of the Contract
between	
CITY OF PORTSMOUTH, NEW HAMPSHIRE	
and(Contractor)	
of	<u></u>
Dated:	
has been paid in full for Construction of: Middle School Struc	ctural Reinforcement
	(Individual, Partner, or duly authorized representative of Corporate Contractor)
Sworn to and subscribed before me thisday of 20	

CONTRACTOR'S RELEASE

KNOW ALL MEN BY THESE PRESENTS that

I,	{insert name},		
in my capacity as	{insert title}		
{insert name of Contractor}			
agree that upon receipt of the sum of \$	from the CITY OF		
PORTSMOUTH NEW HAMPSHIRE as fina	al and completed payment for the construction of:		
	_ {insert name of project}		
do hereby on behalf of	{name of Contractor} and its successors		
and assigns release, quit-claim and forever d	ischarge the City of Portsmouth, New Hampshire, its		
	s and demands arising from or in connection with the		
	and the contract dated All claims		
	all actions, causes, suits, debts, dues, duties, sums of		
•	pecifications, covenants, contracts, agreements,		
	er in law or equity against the City of Portsmouth, New		
<u>*</u>	has or may have, for, upon or by reason of any matter,		
cause, or thing whatsoever; from the beginning	ng of record time to the date of these presents.		
IN WITNESS WHEREOF,			
Witness	Contractor:		
	By:		
print name :	Its Duly Authorized		
Dated:			

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. General clean up
- b. Cleaning around the Middle School
- c. Signs & barricades
- d. Mobilization/Demobilization
- e. Restoration of property
- f. Cooperation with other contractors, abutters and utilities.
- g. Clearing, grubbing and stripping
- h. Steel and/or wood sheeting as required.
- i. Accessories and fasteners or components required to make 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 no agreement can be negotiated, the Contractor will accept as payment for extra work, cost plus 15% (overhead & profit). Costs shall be substantiated by invoices and certified payroll. 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.

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:

Technical Specification shall govern Drawings, Drawings shall govern Standard Specifications, and Standard Specifications shall govern General Requirements.

CONTROL OF WORK

1. AUTHORITY OF ENGINEER

- (a) All work shall be done under supervision of the City Engineer and to his 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 address and repair all scars, to the satisfaction of the City Engineer, 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, in 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.

CONTROL OF WORK (continued)

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

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 prosecuted 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.

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.

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) Comprehensive 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

Coverage requirements can be met with excess policies

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

- A) Full Workers Comprehensive Insurance coverage for all people employed by the Contractor to perform work on this project. This insurance shall at a minimum meet the requirements of the most current laws of the State of New Hampshire.
- 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 Insureds.

- 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) City of Portsmouth shall be listed as a Certificate Holder. The City shall be identified as follows:

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

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 a location approved by the Owner.
- (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

The Contractor shall provide toilet facilities for the use of the workers employed on the work. The location of toilet facilities to be used on site will be identified by Owner.

3. WATER FACILITIES

The Owner shall provide the Contractor with reasonable access to water facilities for construction operations. The Contractor at times may be responsible for providing water for project related needs.

4. TEMPORARY ELECTRICITY

The Owner shall provide the Contractor with reasonable access to electrical power necessary for construction operation at the site.

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 computations 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.
- (n) The term "lump sum" when used as an item of payment will mean complete payment for the work described in the item.

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, 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.

3. PAYMENT PROCEDURES

Submit Application for Payment after completion of Project closeout procedures with release of liens and supporting documentation. Include consent of surety to final payment and insurance certificates.

4. 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.

MEASUREMENT AND PAYMENT (continued)

5. PARTIAL PAYMENTS

Partial payments will be made on a monthly basis during the contract period. From the total amount ascertained as payable, an amount equivalent to ten percent (10%) of the whole will be deducted and retained by the Owner until such time as the work receives final acceptance.

6. FINAL ACCEPTANCE

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

If, however, the City Engineer's inspection discloses any work in whole or in part, as being unsatisfactory, the 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 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.

7. 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 ten percent (10%) of the whole will be deducted and retained by the Owner for the guaranty period. This retainage may be waived, at the discretion of the City, provided the required Maintenance Bond has been posted. After approval of the final estimate by the Owner, the Contractor will be paid the entire sum found to be due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the contract.
 - (c) All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

8. 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 there from 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

MEASUREMENT AND PAYMENT (continued)

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.

(c) At completion of project, Contractor to provide to Owner, written guarantee of one (1) year Workmanship warranty; and one (1) year Manufacturer's warranty.

9. 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 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.

10. 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.

STANDARD SPECIFICATIONS

SECTION 01100 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY OF WORK

- A. Execute repairs to the stems of the first floor concrete deck and reinforcing steel per drawings and technical specifications issued by Odeh Engineering.
- B. Fabricate and install structural steel below the first floor concrete deck per drawings and technical specifications issued by Odeh Engineering.
- C. Furnish and Install Structural repairs in the attic

1.2 WORK RESTRICTIONS

- A. During construction, Contractor will have limited use of area indicated as follows:
 - 1. Work in the basement may begin on June 22, 2016 and must be substantially completed by August 26, 2016.
 - 2. Work hours are 7:00 a.m. to 6:00 p.m. Monday through Friday unless otherwise approved in writing by the Owner.
 - 3. Construction equipment and vehicles are restricted to the rear of the building.

1.3 WORK IN OTHER DIVISIONS AND BY OTHER CONTRACTORS

- A. The Owner shall provide for coordination of the activities of the Owner's own forces, who shall cooperate with them. The Contractor shall participate with the Owner in reviewing their construction schedules. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement.
- B. If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Owner apparent discrepancies or defects in such construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acknowledgment that the Owner's or separate contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discovered.

END OF SECTION 01100

SECTION 01300 - ADMINISTRATIVE REQUIREMENTS

PART 1- GENERAL

1.1 PROJECT MANAGEMENT AND COORDINATION

A. Conduct progress meetings with Owner at Project site as needed.

1.2 SUBMITTAL PROCEDURES

- B. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
 - 2. Identify deviations from the Contract Documents.
 - 3. Submit each submittal electronically in PDF format.
- C. Include the following information on each submittal:
 - 1. Project name.
 - 2. Date.
 - 3. Name and address of Contractor.
 - 4. Name and address of subcontractor or supplier.
- D. Structural Engineer and Owner will review each action submittal, mark as appropriate to indicate action taken, and return copies less those retained. Compliance with specified requirements remains Contractor's responsibility.
- E. Construction Schedule Submittal Procedure:
 - 1. Submit schedule within 10 days after date established for Commencement of the Work. Distribute copies to Structural Engineer, Owner and parties required to comply with dates.

CONTRACTOR'S REVIEW

- A. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
- F. Proceed with execution of the Work, documented by applicable submittals, using only shop drawings, product data and samples indicating Structural Engineer's action.
- G. Submittal sent to the Structural Engineer without the Contractor's stamp of review, submittal shall be returned to the Contractor with no action taken by the Structural Engineer.

1.3 STRUCTURAL ENGINEER'S ACTION

- A. Except for submittals for the record or information, where action and return is required, the Structural Engineer will review each submittal, mark to indicate action taken, and return promptly.
- B. Except for submittals for the record or information, where action and return is required, the Structural Engineer will review each submittal, mark to indicate action taken, and return promptly.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. Product Data: Mark each copy to show applicable choices and options. Include the following:
 - 1. Data indicating compliance with specified standards and requirements.

- 2. Notation of coordination requirements.
- 3. For equipment data, include rated capacities, dimensions, weights, required clearances, and furnished specialties and accessories.
- B. Samples: Submit Samples finished as specified and identical with the material proposed. Where variations are inherent in the material, submit sufficient units to show full range of the variations. Include name of manufacturer and product name on label.

2.2 INFORMATION SUBMITTALS

A. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.

END OF SECTION 01300

SECTION 01701 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 CLOSEOUT SUBMITTALS

- A. Provide the following in electronic PDF format:
- B. Record Drawings: Maintain a set of the Shop Drawings as Record Drawings. Mark to show installation that varies from the Work originally shown, and provide a copy in PDF format on disc.
- C. Operation and Maintenance Data: Organize data into three-ring binders with identification on front and spine of each binder and pocket folders for folded sheet information and a PDF copy of O&M on disc. . Include the following:
 - 1. Manufacturer's product data information sheet
 - 2. Manufacturer's operation and maintenance information.
 - 3. Copies of warranties.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Examine substrates and conditions for compliance with manufacturer's written requirements including, but not limited to, surfaces that are sound, level, plumb, smooth, clean, and free of deleterious substances; substrates within installation tolerances; and application conditions within environmental limits. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Prepare substrates and adjoining surfaces according to manufacturer's written instructions, including, but not limited to, filler and primer application.
- C. Take field measurements as required to fit the Work properly. Where fabricated products are to be fitted to other construction, verify dimensions by field measurement before fabricating and, when possible, allow for fitting and trimming during installation.

3.2 CUTTING AND PATCHING

- A. Do not cut structural members or operational elements without prior written approval of Owner.
- B. For patching, provide materials whose installed performance will equal or surpass that of existing materials. For exposed surfaces, provide or finish materials to visually match existing adjacent surfaces to the fullest extent possible.

3.3 INSTALLATION

- A. Comply with manufacturer's written instructions for installation. Anchor each product securely in place, accurately located and aligned. Clean exposed surfaces and protect from damage. If applicable, prepare surfaces for field finishing.
- B. Clean Project site and work areas daily, including common areas.

3.4 FINAL CLEANING

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

3.5 CLOSEOUT PROCEDURES

- A. Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy the floors above without disruption from construction noise, dust, fumes or other construction related activities.
- B. Substantial Completion: Before requesting Substantial Completion inspection, complete the following:
 - 1. Submit specific warranties, maintenance agreements, and similar documents.
 - Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities.
 - 3. Submit Record Drawings and Specifications, operation and maintenance manuals and similar final record information.
 - 4. Deliver tools, spare parts, extra materials, and similar items.
 - 5. Advise Owner of changeover information related to Owner's occupancy, operation, and maintenance.
 - 6. Complete final cleaning requirements, including touchup painting.
 - 7. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- C. On receipt of a request for inspection, Owner will proceed with inspection or advise Contractor of unfulfilled requirements. Owner will prepare the Certificate of Substantial Completion after inspection or advise Contractor of items that must be completed or corrected before the certificate will be issued.
- D. Request inspection for certification of Final Completion, once the following are complete:
 - 1. Submit a copy of Substantial Completion inspection list stating that each item has been completed or otherwise resolved for acceptance.
 - 2. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- E. Owner will reinspect the Work on receipt of notice that the Work has been completed.
 - On completion of reinspection, Owner will prepare a final Certificate for Payment. If the Work is incomplete, Owner will advise Contractor of the Work that is incomplete or obligations that have not yet been fulfilled.

END OF SECTION 01701

TECHNICAL SPECIFICATIONS

SECTION 030130

REPAIR AND RESTORATION OF CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The GENERAL DOCUMENTS, as listed on the Table of Contents, and applicable parts of Division 1, General Requirements, shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.
- C. Attention is directed to UNIT PRICE section of the GENERAL DOCUMENTS for Add and Deduct Unit Prices for quantities of work related to the work under this Section.
- D. General Notes, Sections, Plans, Typical Details, and other notes indicated on the structural drawings. In cases of conflict, information indicated on the structural drawings shall govern.

1.2 SUMMARY

- A. This Section specifies cast-in place concrete repair work, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:
 - 1. Reinforced concrete one-way concrete joist and beam construction.
- B. Related Sections include the following:
 - 1. Division 5 Section "Structural Steel Framing" for interaction with and connection to repaired concrete construction.

1.3 DEFINITIONS

C. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume; subject to compliance with requirements.

1.4 SUBMITTALS

- D. Product Data: For each type of product indicated.
- E. Qualification Data: For Installer, manufacturer, and testing agency.
- F. Material Certificates: For each of the following, signed by manufacturers:
 - 1. Concrete restoration and repair materials.
 - 2. Bonding agents.
- G. Minutes of preinstallation conference.

1.5 QUALITY ASSURANCE

- H. Installer Qualifications: A qualified installer with a minimum of five years' experience in concrete repair and restoration using the type of materials and techniques specified.
- I. Material Manufacturer Qualifications: A manufacturer with a minimum of 20 years' experience in developing and manufacturing concrete repair and restoration products for the repair of concrete similar to the the repairs specified for this project.
- J. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."
 - 1. Before submitting concrete repair and restoration materials, require representatives of each entity directly concerned with concrete repair and restoration to attend, including the following:
 - Contractor's superintendent.
 - b. Concrete restoration and repair material manufacturer.
 - c. Concrete restoration and repair installation subcontractor.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufactures considered qualified with products understood to comply with these specifications are:
 - 1. SIKA Corporation of Lyndenhurst, N. J.
 - 2. Conproco Corporation of Dover, N.H.
 - Other Available Products: Subject to compliance with requirements and the approval of the Project Engineer, the contractor may submit alternate repair products, repair details and repair procedures for review and approval by the. The Contractor shall be responsible for the performance specification, engineering and application of all alternate repair products and procedures.

2.2 MATERIALS

- A. Concrete bonding primer for exposed existing concrete:
 - 1. Sika Armatec 110.
 - 2. Conpro Primer:
 - 3. Sonoprep Plus
 - 4. Approved equal

- B. Rust Inhibitive Primer for exposed steel elements
 - 1. Sika Armatec 110.
 - 2. EpoCem:
 - 3. ECB by Conproco
 - 4. Approved equal.
- C. Repair and Restoration Mortar:
 - 1. SikaTop 123.
 - 2. Conproco Set
 - 3. Approved equal.
- D. Reinforcing Armatures: Pre-threaded stainless steel ¼" diameter.
- E. Heavy Gauge Wire: 16 gauge stainless steel.

PART 3 - EXECUTION

3.1 CONCRETE RESTORATION AND REPAIR

- A. Where indicated and where required, Saw-cut concrete ½ in. deep minimum around the perimeter of the area to be repaired. Demolish and remove spalled, damaged, or otherwise separated portions of existing concrete to sound, undamaged concrete.
- B. Cut out and remove concrete as required to fully expose the partially exposed reinforcing bars, as detailed.
- C. Power wire brush exposed lengths of reinforcing bars in accordance with SSPC-SP-3, removing all mill scale and rust to bright original metal.
- D. Coat exposed existing reinforcing steel element surfaces with approved rust inhibitive primer.
- E. Prime all concrete surfaces to receive repair mortar with approved concrete bonding primer.
- F. Drill sound portions of remaining concrete and install approved stainless steel armatures and wire as detailed and required. Set armatures with approved epoxy.
- G. Install approved repair mortar, as detailed in succeeding lifts not exceeding ½". Scratch surfaces of lifts to bond succeeding lifts. Allow to cure overnight before applying successive lifts.

END OF SECTION 033000

SECTION 042113

BRICK MASONRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The GENERAL DOCUMENTS, as listed on the Table of Contents, and applicable parts of Division 1, General Requirements, shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.
- C. General Notes, Sections, Plans, Typical Details, and other notes indicated on the structural drawings. In cases of conflict, information indicated on the structural drawings shall govern.
- D. This Section includes the following:
 - 1. Standard Clay Brick Masonry.
 - 2. Mortar.

1.2 REFERENCES

- A. ANSI/ASTM C55 Concrete Building Brick.
- B. IMIAC International Masonry Industry All-Weather Council: Recommended Practices and Guide Specification for Cold Weather Masonry Construction.

1.3 SUBMITTALS

- A. Submit product data under provisions of Section 01340
- B. Submit product data for masonry units and fabricated wire reinforcement.

1.4 QUALIFICATIONS

A. Installer: Company specializing in performing the work of this Section with minimum five years documented experience.

1.5 REGULATORY REQUIREMENTS

A. Conform to UL Assembly No. requirements for fire rated masonry construction.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and protect products under provisions of Section 01600.
- B. Inspect units at job site before accepting.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Maintain materials and surrounding air temperature to minimum 50° degrees F prior to, during, and 48 hours after completion of masonry work...or...comply with Cold Weather Requirements: IMIAC – Recommended Practices and Specifications for Cold Weather Masonry Construction.

PART 2 - PRODUCTS

2.1 CONCRETE MASONRY UNITS

- A. Clay Brick Units: ASTM C216, Grade SW, Type FBS.
 - 1. Provide new solid brick to match existing face brick in size and colr as approved by Owner.
 - Initial Rate of Absorbtion: Less than 30 g/30 sq. in. per minute when tested per ASTM C67
 - 3. Efflorescence: provide brick tested in accordance with ASTM C67 rated as "non-

2.2 MORTAR MATERIALS

- A. Portland Cement: ASTM C150, Type I of II.
- B. Hydrated Lime: ASTM C207, Type S.
- C. Aggregate for Mortar: ASTM C144,
- D. Water: Potable.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine conditions, with installer present, for compliance with requirements for installation tolerances and other conditions affecting the performance of work
- B. Proceed with installation only after any unsatisfactory conditions have been corrected.

3.2 LAYING BRICK MASONRY

- A. Lay out coursing and bond patterns for solid brick masonry portions of walls, planning for uniform bed and head joint thicknesses. Avoid using cut units at corners and jambs and, where possible, at other locations.
- B. Bond Pattern: For four wythe thick walls, lay first two courses of each wythe as header-stretcher (running bond) courses. At each third course, lay header-stretcher courses bonding interior wythes to exterior wythes. Continue laying courses in this pattern.

3.3 COURSING

- A. Establish lines, levels and coursing indicated. Protect from displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.

3.4 PLACING AND BONDING

- A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.
- B. Buttering corners of joints or excessive furrowing of mortar joints are not permitted.
- C. Remove excess mortar as Work progresses.
- D. Interlock intersections and external corners unless shown otherwise.
- E. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustments must be made, remove mortar and replace.
- F. Perform jobsite cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

3.5 TOLERANCES

- A. Maximum Variation from Unit to Adjacent Unit: 1/32 inch.
- B. Maximum Variation from Plane of Wall: ¼ inch in 10 feet and ½ inch in 20 feet or more.
- C. Maximum Variation from Plumb: ¼ inch per story, non-cumulative; ½ inch in two stories or more.
- D. Maximum Variation from Level Coursing: 1/8 inch in 3 feet and ¼ inch in 10 feet; ½ inch in 30 feet.
- E. Maximum Variation of Joint Thickness: 1/8 inch in 3 feet.
- F. Maximum Variation from Cross Sectional Thickness of Walls: ¼ inch.

3.6 CLEANING

- A. Clean work under provisions of Section 01700.
- B. Remove excess mortar and mortar smears.
- C. Replace defective mortar. Match adjacent work.
- D. Clean soiled surfaces with cleaning solution.
- E. Use non-metallic tools in cleaning operations.

F.

3.7 PROTECTION OF FINISHED WORK

- A. Protect finished installation under provisions of Section 01500
- B. Without damaging completed work, provide protective boards at exposed external corners which may be damaged by construction activities.

END OF SECTION 042113

SECTION 051200

STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The GENERAL DOCUMENTS, as listed on the Table of Contents, and applicable parts of Division 1, General Requirements, shall be included in and made a part of this Section.
- B. Examine all Drawings and all other Sections of the Specifications for requirements therein affecting the work of this trade.
- C. General Notes, Sections, Plans, Typical Details, and other notes indicated on the structural drawings. In cases of conflict, information indicated on the structural drawings shall govern.

1.2 SUMMARY

- A. This Section includes the following:
 - Structural steel.
 - 2. Grout.
- B. Related Sections include the following:
 - 1. Division 1 Section "Quality Requirements" for independent testing agency procedures and administrative requirements.

1.3 DEFINITIONS

A. Structural Steel: Elements of structural-steel frame, as classified by AISC's "Code of Standard Practice for Steel Buildings and Bridges," that support design loads.

1.4 PERFORMANCE REQUIREMENTS

- A. Connections: Provide details of simple shear connections required by the Contract Documents to be selected or completed by structural-steel fabricator to withstand ASD-service loads indicated and comply with other information and restrictions indicated.
 - 1. Select and complete connections using schematic details indicated and AISC's "Manual of Steel Construction, Allowable Stress Design," Part 4.
 - 2. Engineering Responsibility: Fabricator's responsibilities include using a qualified professional engineer to prepare structural analysis data for structural-steel connections.

B. Construction: Type 2, simple framing.

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication of structural-steel components.
 - 1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
 - 2. Include embedment drawings.
 - 3. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld.
 - 4. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical high-strength bolted connections.
 - 5. For structural-steel connections indicated to comply with design loads, include structural analysis data prepared by the qualified professional engineer responsible for their preparation.
- C. Welding certificates.
- D. Qualification Data: For Installer and fabricator.
- E. Mill Test Reports: Signed by manufacturers certifying that the following products comply with requirements:
 - 1. Structural steel including chemical and physical properties.
 - 2. Bolts, nuts, and washers including mechanical properties and chemical analysis.
 - 3. Shop primers.
- F. Source quality-control test reports.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who participates in the AISC Quality Certification Program and is designated an AISC-Certified Erector, Category CSE.
- B. Fabricator Qualifications: A qualified fabricator who participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category Sbd.
- C. Welding: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code--Steel."
- D. Comply with applicable provisions of the following specifications and documents:
 - 1. AISC's "Code of Standard Practice for Steel Buildings and Bridges."
 - 2. AISC's "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design."
 - 3. AISC's "Specification for the Design of Steel Hollow Structural Sections."
 - 4. AISC's "Specification for Allowable Stress Design of Single-Angle Members."
 - 5. RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

E. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from erosion and deterioration.
 - 1. Store fasteners in a protected place. Clean and relubricate bolts and nuts that become dry or rusty before use.
 - Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.

1.8 COORDINATION

A. Furnish anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.

PART 2 - PRODUCTS

2.1 STRUCTURAL-STEEL MATERIALS

- A. W-Shapes: ASTM A 992/A 992M.
- B. Channels, Angles, M, S-Shapes: ASTM A 572/A 572M, Grade 50 (345).
- C. Plate and Bar: ASTM A 36/A 36M.
- D. Cold-Formed Hollow Structural Sections: ASTM A 500, Grade B C, structural tubing.
- E. Welding Electrodes: Comply with AWS requirements.

2.2 BOLTS, CONNECTORS, AND ANCHORS

- A. High-Strength Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, heavy hex steel structural bolts; ASTM A 563 (ASTM A 563M) heavy hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M) hardened carbon-steel washers.
- B. Headed Anchor Rods: ASTM F 1554, Grade 55, weldable, straight.
 - 1. Nuts: ASTM A 563 (ASTM A 563M) heavy hex carbon steel.
 - 2. Plate Washers: ASTM A 36/A 36M carbon steel.
 - 3. Washers: ASTM F 436 (ASTM F 436M) hardened carbon steel.

2.2 PRIMER

- C. Primer: Fabricator's standard lead- and chromate-free, nonasphaltic, rust-inhibiting primer.
- D. Galvanizing Repair Paint: MPI#18, MPI#19, or SSPC-Paint 20 ASTM A 780.

2.3 GROUT

A. Cement Grout: Portland cement, ASTM C 150, Type I; and clean, natural sand, ASTM C 404, Size No. 2. Mix at ratio of 1 part cement to 2-1/2 parts sand, by volume, with minimum water required for placement and hydration.

2.4 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC's "Code of Standard Practice for Steel Buildings and Bridges" and AISC's "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design."
 - 1. Camber structural-steel members where indicated.
 - 2. Identify high-strength structural steel according to ASTM A 6/ A 6M and maintain markings until structural steel has been erected.
 - 3. Mark and match-mark materials for field assembly.
 - 4. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.
- B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
 - 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1.
- C. Bolt Holes: Cut, drill, mechanically thermal cut, or punch standard bolt holes perpendicular to metal surfaces.
- D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
- E. Holes: Provide holes required for securing other work to structural steel and for passage of other work through steel framing members.
 - 1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning.
 - 2. Base-Plate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
 - 3. Weld threaded nuts to framing and other specialty items indicated to receive other work.

2.5 SHOP CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Snug tightened.

B. Weld Connections: Comply with AWS D1.1 for welding procedure specifications, tolerances, appearance, and quality of welds and for methods used in correcting welding work.

2.6 SHOP PRIMING

- A. Shop prime steel surfaces except the following:
 - Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches (50 mm).
 - 2. Surfaces to be field welded.
 - 3. Surfaces to receive sprayed fire-resistive materials.
 - 4. Galvanized surfaces.
- B. Painting: Apply a 1-coat, nonasphaltic primer complying with SSPC-PS Guide 7.00, "Painting System Guide 7.00: Guide for Selecting One-Coat Shop Painting Systems," to provide a dry film thickness of not less than 1.5 mils (0.038 mm).

2.7 GALVANIZING

- A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel according to ASTM A 123/ A 123M.
 - 1. Fill vent holes and grind smooth after galvanizing.
 - 2. Galvanize lintels attached to structural-steel frame and located in exterior walls.

2.8 SOURCE QUALITY CONTROL

- A. Owner will engage an independent testing and inspecting agency to perform shop tests and inspections and prepare test reports.
 - 1. Provide testing agency with access to places where structural-steel work is being fabricated or produced to perform tests and inspections.
- B. Correct deficiencies in Work that test reports and inspections indicate does not comply with the Contract Documents.
- C. Bolted Connections: Shop-bolted connections will be inspected according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
- D. Welded Connections: In addition to visual inspection, shop-welded connections will be tested and inspected according to AWS D1.1 and the following inspection procedures, at testing agency's option:
 - 1. Liquid Penetrant Inspection: ASTM E 165.
 - 2. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.
 - 3. Ultrasonic Inspection: ASTM E 164.
 - 4. Radiographic Inspection: ASTM E 94.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments, with steel erector present, for compliance with requirements.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place, unless otherwise indicated.

3.3 ERECTION

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC's "Code of Standard Practice for Steel Buildings and Bridges" and "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design."
- B. Base and Bearing Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting base and bearing plates. Clean bottom surface of base and bearing plates.
 - 1. Set base and bearing plates for structural members on wedges, shims, or setting nuts as required.
 - 2. Weld plate washers to top of base plate.
 - 3. Snug-tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of base or bearing plate before packing with grout.
 - 4. Promptly pack grout solidly between bearing surfaces and base or bearing plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure.
- C. Maintain erection tolerances of structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."
- D. Align and adjust various members forming part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
 - 1. Level and plumb individual members of structure.
- E. Do not use thermal cutting during erection.
- F. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.

3.4 FIELD CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Connection Type A Slip Critical.
- B. Weld Connections: Comply with AWS D1.1 for welding procedure specifications, tolerances, appearance, and quality of welds and for methods used in correcting welding work.
- 3.5 Comply with AISC's "Code of Standard Practice for Steel Buildings and Bridges" and "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design" for bearing, adequacy of temporary connections, alignment, and removal of paint on surfaces adjacent to field welds.

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified independent testing and inspecting agency to inspect field welds and high-strength bolted connections.
- B. Bolted Connections: Shop-bolted connections will be inspected according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
- C. Welded Connections: Field welds will be visually inspected according to AWS D1.1.
 - 1. In addition to visual inspection, field welds will be tested according to AWS D1.1 and the following inspection procedures, at testing agency's option:
 - a. Liquid Penetrant Inspection: ASTM E 165.
 - b. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.
 - c. Ultrasonic Inspection: ASTM E 164.
 - d. Radiographic Inspection: ASTM E 94.
- 3.7 Correct deficiencies in Work that test reports and inspections indicate does not comply with the Contract Documents.

3.8 REPAIRS AND PROTECTION

- A. Repair damaged galvanized coatings on galvanized items with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions.
- B. Touchup Painting: After installation, promptly clean, prepare, and prime or reprime field connections, rust spots, and abraded surfaces of prime-painted joists and accessories, bearing plates, and abutting structural steel.
 - 1. Clean and prepare surfaces by SSPC-SP 2 hand-tool cleaning or SSPC-SP 3 power-tool cleaning.
 - 2. Apply a compatible primer of same type as shop primer used on adjacent surfaces.
- C. Touchup Painting: Cleaning and touchup paint all surfaces.
- D. END OF SECTION 051200

SECTION 061100

STRUCTURAL ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Wood Framing General Notes, Sections, Plans, Typical Details, and other notes indicated on the structural drawings. In cases of conflict, information indicated on the structural drawings shall govern.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Framing with engineered wood products...
 - 2. Nails, bolts, and fasteners for securing items of rough carpentry.
 - 3. All other rough carpentry items, as required and not otherwise specified, to complete the Work, are to be furnished and installed under other trade sections of the Specifications.

1.3 DEFINITIONS

- A. Dimension Lumber: Lumber of 2 inches nominal or greater but less than 5 inches nominal in least dimension.
- B. Lumber grading agencies, and the abbreviations used to reference them, include the following:
 - 1. NLGA: National Lumber Grades Authority.

1.4 SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
 - 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.
 - 2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.

- Include copies of warranties from chemical treatment manufacturers for each type of treatment.
- B. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.
- C. Certification of Wood Preservative Treatment: Submit certificate stating name of preservative used, retention in pounds per cubic foot of lumber treated; certifying that the treated material conforms to paintability, drying time, and surface deposit requirements of Fed. Spec. TT-W-550 and TT-E-571. For water-borne preservative treated materials, verify that the moisture content upon shipment from the treatment plant does not exceed 15%.
- D. Research/Evaluation Reports: For the following, showing compliance with building code in effect for Project:
 - 1. Wood-preservative-treated wood.
 - 2. Engineered wood products.
 - 3. Oriented strand board products.
 - 4. Power-driven fasteners.
 - 5. Expansion anchors.
 - 6. Metal framing anchors.

1.5 QUALITY ASSURANCE

A. Source Limitations for Engineered Wood Products: Obtain each type of engineered wood product through one source from a single manufacturer.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Stack lumber flat with spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Engineered Wood Products: Provide engineered wood products acceptable to authorities having jurisdiction and for which current model code research or evaluation reports exist that show compliance with building code in effect for Project.
 - Allowable Design Stresses: Provide engineered wood products with allowable design stresses, as published by Manufacturer that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.

2.2 WOOD-PRESERVATIVE-TREATED LUMBER

- A. Preservative Treatment by Pressure Process: AWPA C2, except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPA C31 with inorganic boron (SBX).
 - Preservative Chemicals: Alkaline copper quaternary (ACQ) similar to Preserve as manufactured by Chemical Specialties, Inc. or equal. Materials shall contain no arsenic or chromium.

B. Retention Rates:

- 1. Above Ground: 0.25 0.40 pcf.
- 2. Below Ground: 0.40 pcf.
- C. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
- D. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- E. Application: Treat items indicated on Drawings, and the following:
 - Wood framing attached directly to the interior of below-grade exterior masonry or concrete
 walls
 - Wood framing members that are less than 18 inches above the ground in crawlspaces or unexcavated areas.
 - 3. Wood floor plates that are installed over concrete slabs-on-grade.

2.3 ENGINEERED WOOD PRODUCTS

- A. Laminated-Veneer Lumber: Structural composite lumber made from wood veneers with grain primarily parallel to member lengths, evaluated and monitored according to ASTM D 5456 and manufactured with an exterior-type adhesive complying with ASTM D 2559.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 -) Boise Cascade Corporation.
 - i) Georgia-Pacific.
 - ii) Louisiana-Pacific Corporation.
 - iii) Weyerhaeuser Company.
- B. Parallel-Strand Lumber: Structural composite lumber made from wood strand elements with grain primarily parallel to member lengths, evaluated and monitored according to ASTM D 5456 and manufactured with an exterior-type adhesive complying with ASTM D 2559.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - iv) Weyerhaeuser Company.

2.4 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
 - 3. Cants.
 - 4. Furring.
 - 5. Grounds.
- B. For items of dimension lumber size, provide Stud grade lumber or better with 15 percent maximum moisture content of any species.
- C. For blocking not used for attachment of other construction, Utility, Stud, or No. 3 grade lumber of any species may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.
- D. For blocking and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.
- E. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

2.5 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
 - Unless noted otherwise, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Lag Bolts: ASME B18.2.1.
- F. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
- G. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency.
 - 1. Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.

2.6 METAL FRAMING ANCHORS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Simpson Strong-Tie Co., Inc.
- B. Allowable Design Loads: Provide products with allowable design loads, as published by manufacturer, that meet or exceed those of products of manufacturers listed. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.
- C. Galvanized Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 coating designation.
 - 1. Use for interior locations where stainless steel is not indicated.
- D. Joist Hangers: U-shaped joist hangers with 2-inch- long seat and 1-1/4-inch- wide nailing flanges at least 85 percent of joist depth, or as specified on the structural drawings.
- E. Post Bases: Adjustable-socket type for bolting in place with standoff plate to raise post 1 inch above base and with 2-inch- minimum side cover, socket 0.062 inch thick, and standoff and adjustment plates 0.108 inch thick, or as specified on the structural drawings.
- F. Rafter Tie-Downs (Hurricane or Seismic Ties): Bent strap tie for fastening rafters or roof trusses to wall studs below, 2-1/4 inches wide by 0.062 inch thick (or as indicated on the structural drawings). Tie fits over top of rafter or truss and fastens to both sides of rafter or truss, face of top plates, and side of stud below.
- G. Floor-to-Floor Ties: Flat straps, with holes for fasteners, for tying upper floor wall studs to band joists and lower floor studs, 1-1/4 inches wide by 0.050 inch thick by 36 inches long (or as indicated on structural drawings)
- H. Hold-Downs: Brackets for bolting to wall studs and securing to foundation walls with anchor bolts or to other hold-downs with threaded rods and designed with first of two bolts placed seven bolt diameters from reinforced base. See structural drawings for acceptable sizes, location, and manufacturer.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Framing with Engineered Wood Products: Install engineered wood products to comply with manufacturer's written instructions.
- C. Metal Framing Anchors: Install metal framing to comply with manufacturer's written instructions.
- D. Do not splice structural members between supports, unless otherwise indicated.

- E. Sort and select lumber so that natural characteristics will not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- F. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
 - 1. Use inorganic boron for items that are continuously protected from liquid water.
 - 2. Use copper naphthenate for items not continuously protected from liquid water.
- G. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
 - 1. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.
 - 2. Stringer Spacing: At least 3 stringers for each 36-inch clear width of stair.

3.2 PROTECTION

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
- B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061000

Statement of Special Inspections Project: Middle School Structural Reinforcement BID#41-16 Location: 155 Parrott Street Portsmouth, NH 03801 Owner: City of Portsmouth, NH Owners' Address: One Junkins Avenue Portsmouth, NH03801 Architect of Record: Structural Engineer of Record (SER): Odeh Engineers, Inc. Building Code: International Building Code 2009; International Existing Building Code 2009 (Ordinary Repair) This Statement of Special Inspections is submitted as a condition for permit issuance in accordance with the Special Inspection requirements It includes a Schedule of Special Inspection Services applicable to this project as well as the name of the Special Inspections Coordinator and the identity of other approved agencies intended to be retained for conducting these inspections. This Statement of Special Inspections encompasses the following disciplines: Structural ■ ☐ Architectural Other: The Special Inspections Coordinator shall keep records of all inspections and shall furnish inspection reports to the Building Official, Structural Engineer of Record, and Architect of Record. Discovered discrepancies shall be brought to the immediate attention of the Contractor for correction. If such discrepancies are not corrected, the discrepancies shall be brought to the attention of the Building Official, Structural Engineer of Record, and Architect of Record. The Special Inspection program does not relieve the Contractor of his or her responsibilities. Interim reports shall be submitted on a MONTHLY basis to the Building Official, Owner, Structural Engineer of Record, and Architect of Record. A Final Report of Special Inspections documenting completion of all required Special Inspections and correction of any discrepancies noted in the inspections shall be submitted prior to issuance of a Certificate of Use and Occupancy. Job site safety and means and methods of construction are solely the responsibility of the Contractor. Statement of Special Inspections Prepared By: David J. Odeh March 11, 2016 (Type or Print Name) Date Signature Date

Owner's Authorization:

Building Official's Acceptance

Signature

Date

Date

Date

Schedule of Special Inspection and Testing Agencies

The following sheets comprise the required Schedule of divisions which require special inspections for this proje	Special Inspections for this project. The construction ct are as follows:
Soils and Foundations Cast-in-Place Concrete Precast Concrete Masonry x Structural Steel	 Cold-Formed Metal Framing Wood Construction Wind Resistance Seismic Resistance Special Cases

Special Inspection Agencies (Agent #)	Firm	Address, Telephone, E-mail
Special Inspections Coordinator	Odeh Engineers, Inc.	1223 Mineral Spring Avenue North Providence, RI 02904 (401) 724-1771 odehdj@odehengineers.com
2. Geotechnical Engineer	To be hired by owner N/A	
3. Field Inspector	To be hired by owner	
4. Testing Agency	To be hired by owner	
5. Other		

The Special Inspections Coordinator and Testing Agents shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official prior to commencing work.

Structural Steel

Agent #	Scope	Inspection Frequency
See Note 2 1	Review shop fabrication and quality control procedures.	P1
See Note 2 3	Review certified mill test reports and identification markings on wide-flange shapes, high strength bolts, nuts, cold formed steel deck, and welding electrodes.	P2
See Note 2 3	Verify bolt size and grade. Inspect installation and tightening of high strength bolts. Provide continuous inspection of bolts in slip-critical connections. Inspect per Section 9 of the RCSC "Specification for Structural Joints using A325 or A490 bolts".	С
AWS-CWI 3,4	Visually inspect all welds. Inspect pre-heat, post-heat, and surface preparation between passes. Shop Fillet Welds: 25% visual, 5% Witness Full Penetration: 100% via Ultrasonic Testing Field Welds: 100% visual, 15% Witness (see below) Provide continuous inspection of all complete and partial penetration groove welds, all multipass fillet welds, all single pass fillet welds > 5/16", and all plug and slot welds (see Notes 3 and 4 for additional requirements). Periodic inspection of single-pass fillet welds < 5/16" and floor and roof deck welds.	C (as indicated)
EIT 3	Inspect steel frame for compliance with Construction Drawings, including bracing, member configuration, and connection details.	P2
	See Note 2 3 See Note 2 3 AWS-CWI 3,4	See Note 2 3 Review certified mill test reports and identification markings on wide-flange shapes, high strength bolts, nuts, cold formed steel deck, and welding electrodes. See Note 2 3 Verify bolt size and grade. Inspect installation and tightening of high strength bolts. Provide continuous inspection of bolts in slip-critical connections. Inspect per Section 9 of the RCSC "Specification for Structural Joints using A325 or A490 bolts". AWS-CWI 3,4 Visually inspect all welds. Inspect pre-heat, post-heat, and surface preparation between passes. Shop Fillet Welds: 25% visual, 5% Witness Full Penetration: 100% via Ultrasonic Testing Field Welds: 100% visual, 15% Witness (see below) Provide continuous inspection of all complete and partial penetration groove welds, all multipass fillet welds, all single pass fillet welds > 5/16", and all plug and slot welds (see Notes 3 and 4 for additional requirements). Periodic inspection of single-pass fillet welds < 5/16" and floor and roof deck welds. EIT Inspect steel frame for compliance with Construction Drawings, including bracing, member configuration,

Inspection Frequency:

- C: Continuous
- P: Periodic Inspections:

All periodic inspections shall be performed in accordance with the "Structural Steel" Specification of the project specifications. Additional requirements are as follows:

- P1: If all requirements are met, only one inspection is required.
- P2: While steel erection operations are ongoing, daily inspections shall be performed, unless noted otherwise. This inspection frequency may be increased or decreased at the Special Inspections Coordinator's discretion for reasons such as steel erection schedule or quality of work observed.

Notes:

- Special Inspections Coordinator shall continuously monitor structural steel tests and inspections to assure conformance to Construction Documents; notify SER of any discrepancies immediately.
- Inspector shall have minimum of 5 years experience in the inspection of steel structures.
- Review material identification and manufacturer certificates for conformance of weld filler material with AWS Standards and AISC Manual of Steel Construction, LRFD/ASD, 13th ed., Section A3.5.
- Base metal exceeding 1.5 inches in thick and subject to through-thickness weld shrinkage shall be ultrasonically tested for discontinuities behind and adjacent to the welds after joint welding.
- Special Inspections of Fabricator is not required if Fabricator completes and submits the "Fabricator's Certificate of Compliance,"

Qualifications of Inspectors and Testing Technicians

The qualifications of all personnel performing Special Inspections and testing activities are subject to the approval of the Building Official. The credentials of all Coordinators, Inspectors and Testing Technicians shall be provided if requested.

It is recommended that the person administering the Special Inspections program be a Professional Engineer registered in the State of Rhode Island and experienced in the design of buildings.

Key for Minimum Qualifications of Inspection Agents:

When the Registered Design Professional in Responsible Charge deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation shall appear in the *Qualifications* column of the Schedule.

PE/SE Structural Engineer – a licensed SE or PE specializing in the design of building structures
PE/GE Geotechnical Engineer – a licensed PE specializing in soil mechanics and foundations
EIT Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineer

Engineer-In-Training – a graduate engineer who has passed the Fundamentals of Engineering examination OR someone who has a minimum of 5 years experience in the inspection of the stated division (submit qualifications for inspectors showing experience in stated divisions)

American Concrete Institute (ACI) Certification

ACI-CFTT Concrete Field Testing Technician – Grade 1

ACI-CCI Concrete Construction Inspector

ACI-LTT Laboratory Testing Technician – Grade 1&2

American Welding Society (AWS) Certification

AWS-CWI Certified Welding Inspector

American Society of Non-Destructive Testing (ASNT) Certification

ASNT Non-Destructive Testing Technician – Level II or III

International Code Council (ICC) Certification

ICC-SFSI Spray-Applied Fireproofing Special Inspector ICC-PCSI Prestressed Concrete Special Inspector

National Institute for Certification in Engineering Technologies (NICET)

NICET-CT Concrete Technician – Levels I, II, III & IV
NICET-ST Soils Technician - Levels I, II, III & IV

NICET-GET Geotechnical Engineering Technician - Levels I. II. III & IV

Exterior Design Institute (EDI) Certification

EDI-EIFS EIFS Third Party Inspector

- Qualifications of Inspection Agents may be indicated in the Schedule in instances where the Structural Engineer of Record deems such requirements are appropriate.
- Individual Inspector qualification requirements may be waived at the discretion of the Special Inspections Coordinator if the inspections are performed under the supervision of a licensed PE.

Contractor's Statement of Responsibility

"Statement of Special Inspections" must submit this "Contractor's Statement of Responsibility" prior to the start of any work. Project: Middle School Structural Reinforcement BID#41-16 Contractor's Name: Contractor's Address: Contractor's License No.: Contractor's Acknowledgment of Special Requirements I hereby acknowledge that control will be exercised to obtain conformance with the Construction Documents approved by the Building Official. Contractor's Provisions for Quality Control Procedures for exercising control within the Contractor's organization, the method and frequency of reporting, and the distribution of reports are attached to this Statement. Identification and qualifications of the persons exercising such control and their position(s) in the Contractor's organization are attached to this Statement. I hereby acknowledge that I understand that only stamped and approved shop drawings and construction contract documents shall be used onsite for installation and erection by the Contractor. Contractor's Acknowledgement of General Conditions I hereby acknowledge that I and all persons exercising control have received, read, and understand the "General Notes" within the Structural Drawings. I hereby acknowledge that I have received, read, and understand the special requirements contained in the Statement of Special Inspections and the requirements in this "Contractor's Statement of Responsibility". Company Principal Name Title

Each Contractor responsible for the construction or fabrication of a system or component designated in the

Date

Company Principal Signature