

TOWN OF ARLINGTON REQUEST FOR DESIGNER PROPOSAL (RFP)

RFP #17-36 HARDY SCHOOL ADDITION

1. Introduction, Construction Cost, Fee and Availability of RFP

The Town of Arlington, Massachusetts, ("Owner"), acting through the Permanent Town Building Committee (PTBC) is seeking the services of a qualified "Designer" within the meaning of the Massachusetts Designer Selection Law M.G.L. Chapter 7C, Sections 44 through 58, to provide professional design and construction administration services as outlined in this RFP for the Hardy School Addition ("School") 52 Lake Street, Arlington, Massachusetts ("Project").

The Owner is seeking design services which will include the schematic design, design development, construction contract documents, bidding, award of construction contract(s), construction administration, final closeout and warranty period for the Project.

Pursuant to M.G.L. Chapter 7, Section 40N, and the Owner's Affirmative Action Plan, the Minority/Women Business Enterprise Plan and the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program the Designer must agree to contract with minority and women-owned businesses as certified by the Supplier Diversity Office (SDO) formerly known as the State Office of Minority and Women Business Assistance (SOMWBA). The amount of participation that shall be reserved for such enterprises shall not be less than seventeen and nine tenths percent (17.9%) of the contract price for combined minority business enterprises (MBE) and women-owned business enterprises (WBE). Applicants must include a reasonable representation of both MBE and WBE firms that meets or exceeds the combined goal. Proposed MBE/WBE participation plans that include solely MBE or solely WBE participation, or do not include a reasonable amount of participations from MBE and WBE firms to meet the combined goal, will not be considered responsive. Applications from MBE and WBE firms as prime designers are encouraged. Where the prime Designer is an SDO certified MBE or WBE, the Designer must bring a reasonable amount of participation by a firm or firms that hold the certification which is not held by the prime Designer on the project.

The minority and women-owned business enterprises must be selected from those categories of work identified in Section 6 of this RFP or be assigned to tasks required under Basic Services as specifically set forth in the Contract for Designer Services as amended. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet their MBE/WBE goals. Consultants to the prime Designer can

team within their disciplines in order to meet the MBE/WBE goals but must state this relationship on the organizational chart (Section 6 of the designer application form).

For additional information on Designer qualifications see Sections 5 in this RFP.

The estimated total construction budget for the Project is \$ 2,700,000. The fee for the project is not to exceed \$350,000.

The complete Requests for Designer Services, including attachments, may be downloaded on or after 12:00 PM on May 31, 2017 from the Town website, reference: RFP #17-36.

The Town website is: <u>http://www.arlingtonma.gov/purchasing.</u>

Please send email notification to Domenic Lanzillotti @dlanzillotti@town.arlington.ma.us upon downloading the RFP in order for the Owner to have a record of who has downloaded the documents.

2. Project Description and Objectives

The Hardy School is located at 52 Lake Street. It is located in a residential neighborhood in East Arlington. The structure is three floor levels, with play structures and a parking lot on site.

The existing school is overcrowded and the Town has determined that a three story, six classroom addition is necessary to meet the needs of the student population.

Project Objectives include:

- Reviewing the documentation of existing conditions at the Hardy School;
- Reviewing the conceptual design previously developed by HMFH architects, and its constructability;
- Engaging with the community to integrate addition with existing building and site.
- Collaborating with the OPM to develop a detailed comprehensive Project Schedule to achieve specified start and completion milestones. The Project Schedule anticipates a construction start in November 2017 and completion in time for occupancy of the School for the 2018-2019 school year.
- Ensuring that the educational program is fully understood and incorporated into the process;
- Developing a design that is of high quality, efficient, cost effective, includes sustainable design principles, and conforms to the educational program and complies with all applicable regulatory requirements including the Massachusetts Stretch Code.
- Developing accurate and complete cost estimates, during the design phases and coordinating with the independent OPM cost estimates, including Life Cycle Costs (LCC) of operating the school as it relates to future operational budgets.
- Collaborating with the OPM to help the Owner determine whether the CM-at-Risk delivery Method should be used for the Project and if found appropriate provide documents for CM-at-Risk, Ch. 149A delivery method for the project, including ability to provide early bid packages for fast-track project, and assisting in the selection of the CM if that project delivery method is selected.
- Engage all stakeholders from project outset and ensure a collaborative approach is maintained throughout the design process.

3. Scope of Services

The Designer will be required to execute the Massachusetts School Building Authority (MSBA) standard Contract for Designer Services (Contract), a copy of which is incorporated herein by reference. **The standard contract will be amended by the Town as this is not an MSBA funded project.** The required scope of services is set forth in the Contract. When the project delivery method is decided (Design/Bid/Build or CM-at-Risk), the Contract will be amended accordingly. Copies of Designer Services Contract Amendments for Design/Bid/Build and CM-at-Risk are incorporated herein by reference. The Designer's Basic Services consist of the tasks described in the Contract for Designer Services, as amended for a non-MSBA funded project, and this RFP including all investigative work (to the extent provided for in the Contract), design work, preparation of construction documents, bidding period administration, construction administration, and other related work reasonably inferred in the opinion of the Owner as being necessary to meet the project's stated scope and goals.

During the schematic design and design development phases of the project, the Owner will require working with an advisory group to focus on integration of the addition with the existing building and site.

The use of Building Information Modeling (BIM) is seen as advantageous to delivering project goals. The Designer shall advise the Owner on their use of BIM or alternative methods and, at no additional cost, shall prepare all Instruments of Services in a form suitable for use in a BIM model for design, construction, commissioning, and building operations and maintenance. The Designer shall indicate their ability to utilize a BIM model if created by another party such as the GC or CM for use in, but not limited to, mechanical coordination and construction administration.

This RFP will be appended to and become part of the Contract for Designer Services. Any Designer selected as a result of this RFP will be required to execute the amended Contract for Designer Services and any applicable amendments that are attached hereto.

The Designer should review the proposed project as included in the RFP. The Designer shall meet as required with the Permanent Town Building Committee (PTBC,) School Department, OPM and other officials (elected or volunteer) throughout the project to develop a thorough understanding of the project and to update the community on progress.

Basic Services include, but are not limited to, verification of existing building including building dimensions, details and general existing conditions, cost estimating, all architecture as well as traffic, civil, site development, sanitary, mechanical, electrical, plumbing, fire protection, structural, site planning and landscape architecture, basic environmental permitting, graphics, lighting design, acoustics, data and communication, educational consultants; any specialty consultants for laboratory, library/media center and kitchen space, code consultants, accessibility, energy evaluations including the coordination of energy rebates, detailed cost estimates, LEED and sustainable design consultants; Furniture, Fixtures & Equipment (FF&E) including programming, specifications, procurement and coordination of installation; assessments of geotechnical, geo-environmental and hazardous material information; preparation of construction documents; developing and issuing of early bid packages, if needed; bidding and administering the construction contract documents and other design and consulting services incidental and required to fulfill the project goals. Please refer to Article 7 of the Contract and any amendment for a complete summary of Basic Services.

Extra and reimbursable expenses are defined in Articles 8 and 9 of the Contract in Attachment B. Any extra or reimbursable expenses must be approved in writing in advance.

4. Project Phases and Work Plan:

Work under this RFP is divided into the Project Phases as listed in Article 7 of the standard Contract as amended and as may be augmented in this RFP. Each Project Phase will consist of one or more required submissions, and may include site visits, meetings with the Owner, PTBC, Owner's Project Manager and others, as well as other tasks as described.

The total duration of the Contract is estimated as follows. The Owner's target date is construction completion and occupancy for the start of the school year in September of 2018.

Schematic Design Phase/Site Plan Approval:	1 month
Design Development/Construction Documents/Bidding Phase:	3 months
Construction Phase:	10 months

Actual durations may vary depending upon the agreed upon solution, the extent of required document revisions, the time required for regulatory approvals, and the construction contractor's performance. Such variances in estimated time will not, in and of themselves, constitute a justification for an increased fee for Basic Services, nor are they a substitute for the performance time requirements shown below.

The Designer will create a schedule for individual phases of the project including Schematic Design, Design Development, Construction Documentation, Bidding, Construction and Close Out within the first week of the project commencement. The Owner, through the OPM will review each submission and, if acceptable, provide notice to the Designer to proceed to the next phase.

The anticipated contract period will be from June 2017 through the completion of Construction, Punchlist and Closeout in October 2019.

5. Minimum Requirements, Additional and Evaluation Criteria

All Designers responding to this RFP must certify in their cover letter that the Designer meets the following minimum requirements. Any Designer that fails to include such certification in its response, demonstrating that these criteria have been met, will be rejected without further consideration. To be eligible for selection, the Designer must meet **all** of the following qualifications.

- A. Be a qualified Designer within the meaning of the Massachusetts Designer Selection Law, M.G.L. Chapter 7C, Sections 44 through 58, employing a Massachusetts registered *architect* responsible for and being in control of the services to be provided pursuant to the Contract.
- **B.** The Massachusetts registered *architect* responsible for and being in control of the services to be provided has successfully completed the Massachusetts Certified Public Purchasing Official Program seminar "Certification for School Project Designers and Owner's Project Managers" as administered by the Office of the Inspector General of the Commonwealth of Massachusetts, and be able to provide a certification as evidence thereof.

C. Pursuant to M.G.L. Chapter 7, Section 40N, the Designer must agree to contract with minority and women-owned businesses as certified by the Supplier Diversity Office (SDO) formerly known as the State Office of Minority and Women Business Assistance (SOMWBA), and to comply with the Owner's equivalent municipal policies. The amount of participation that shall be reserved for such enterprises shall not be less than seventeen and nine tenths percent (17.9%) of the design contract price for combined minority business enterprises and women-owned business enterprises. Applicants must include a reasonable representation of both MBE and WBE firms that meets or exceeds the combined goal.

The Owner will consider the following additional criteria in evaluating proposals:

- a. Prior similar experience best illustrating current qualifications for the specific project.
- b. Past performance of the firm, if any with regard to public, private, Department of Elementary and Secondary Education-funded, and Renovation projects across the Commonwealth, with respect to:
 - i. Quality of project design.
 - ii. Quality, clarity, completeness and accuracy of plans and contract documents.
 - iii. Ability to meet established program requirements within allotted budget and to design to budget.
 - iv. Ability to meet schedules including submission of design and contract documents, processing of shop drawings, contractor requisitions and change orders.
 - v. Coordination and management of consultants.
 - vi. Working relationship with contractors, subcontractors, local awarding authority and local officials.
- c. Current workload and ability to undertake the contract based on the number and scope of projects for which the firm is currently under contract.
- d. The identity and qualifications of the consultants who will work on the project.
- e. Demonstrated ability to lead a collaborative team approach to the project.
- f. Demonstrated ability to provide documents for CM-at-Risk, M.G.L. c. 149A, CM-at-Risk delivery method for the project, including ability to provide early bid packages for fast-track project.
- g. The financial stability of the firm.
- h. The qualifications of the personnel to be assigned to the project.
- i. Geographical proximity of the firm to the project site or willingness of the firm to make site visits and attend local meetings as required by the client.
- j. Additional criteria that the Owner considers relevant to the project.

Evaluation Criteria

All proposals meeting the minimum criteria/qualifications will then be evaluated based upon the specific comparative evaluation criteria. The following point schedule will be utilized:

Highly advantageous 5 points: Response excels on the specific criterion

Advantageous 3 points: Response meets evaluation standard for the criterion

Least Advantageous 1 point: Response does not fully meet the criterion or leaves a question or issue not fully addressed

Does Not Meet 0 points: * Does not address the criterion

* Proposal is automatically eliminated from further consideration if "0 points" is received in any category.

A. Addition Experience: Successful experience of firm with existing school building additions while a building is occupied in the Commonwealth of Massachusetts over the last five (5) years:

• Experience in completing four (4) or more school addition projects will be considered Highly Advantageous (5 points)

• Experience in completing three (3) school addition projects will be considered Advantageous (3 points)

• Experience in completing one (1) but less than three (3) school addition projects will be considered Least Advantageous (1 point)

• No experience with school addition projects will be considered as Does Not Meet (0 points and elimination from further consideration)

B. Schedule Commitment: Ability of firm to begin work immediately and maintain an intensive schedule to meet the Town's timetable as it relates to quality of design, efficiency of design, sustainable design, cost effectiveness, bidding, and construction oversight:

• Available by mid-June 2017 to begin contract work and demonstrated ability to devote sufficient resources to complete the project according to the Town's timetable will be considered Highly Advantageous (5 points)

• Submitted information provided leaves unsure of ability to devote sufficient resources and to meet the Town's timetable will be considered Advantageous (3 points)

• Demonstrated limited ability to devote sufficient resources to complete the project in accordance with Town's timetable, and limited availability by mid-June 2017 to begin contract work, will be considered Least Advantageous (1 point)

• Unable to devote sufficient resources to meet the project's timetable will be considered as Does Not Meet (0 points and elimination from further consideration)

C. Team and Key Staff: Qualifications and involvement of key personnel to be assigned to this project and the experience of such personnel in relation to successfully completing the role of DESIGNER for projects similar in size and/or nature:

• Key staff that have at least seven (7) years of relevant experience in design and construction of buildings or an individual within the firm having nine (9) years relevant experience in design and construction of buildings in the public sector in the Commonwealth of Massachusetts will be considered Highly Advantageous (5 points)

• Key staff that have at least five (5) years of relevant experience in design and construction of buildings or an individual within the firm having seven (7) years relevant experience in design and construction of buildings in the public sector in the Commonwealth of Massachusetts will be considered Advantageous (3 points)

• Key staff that have less than five (5) years of relevant experience in design and construction of buildings or an individual within the firm having less than five (5) years relevant experience in design and construction of

buildings in the public sector in the Commonwealth of Massachusetts will be considered Does Not Meet (0 points and elimination from further consideration)

D. Quality of References: References will be evaluated to identify the ability and quality of previous work as a DESIGNER on public building projects in the Commonwealth of Massachusetts over the last five (5) years:

• Achieving successful DESIGNER experience from six (6) or more previous contracts will be considered Highly Advantageous (5 points)

• Achieving successful DESIGNER experience from three (3) but less than six (6) previous contracts will be considered Advantageous (3 points)

• Achieving successful DESIGNER experience from one (1) but less than three (3) previous contract will be considered Least Advantageous (1 point)

• No successful experience in any previous DESIGNER contract will be considered as Does Not Meet (0 points and elimination from further consideration)

E) Quality of Written Materials: Responses will be reviewed in conjunction with any materials provided to determine relative quality, readability, responsiveness to RFP, and understanding of the project and the role of the DESIGNER:

• Proposals that organize their response according to the minimum and comparative criteria in the RFP, make it easy to evaluate the response, communicate a work plan that demonstrates the manner in which the DESIGNER oversees the work as it relates to the quality, efficiency, sustainability and cost effectiveness of design, and demonstrate an understanding of the project will be considered Highly Advantageous (5 points)

• Proposals that demonstrate an understanding of the role of the DESIGNER in similar projects, and that demonstrate an understanding of this project but do not organize their response according to the minimum and comparative criteria will be considered Advantageous (3 points)

• Proposals that demonstrate an understanding of the role of the DESIGNER in similar projects, but do not demonstrate an understanding of this project, and have multiple spelling and/or grammatical errors will be considered Least Advantageous (1 point)

• Proposals that simply reiterate the preliminary scope of services or do not demonstrate an understanding of the role of the DESIGNER for this project, and have multiple spelling and/or grammatical errors will be considered as Does Not Meet (0 points and elimination from further consideration)

6. Consultant Team

In evaluating proposals, the Owner will consider the members of the proposed design team. Identify those member(s) of the proposed design team who will be responsible for the following categories of work where applicable: (Firm's name, individual's name and professional registration or license number, as applicable, must be listed in the application for each category of work, as well as whether the firm is SDO certified as an MBE and/or WBE).

- a. Architecture
- b. Environmental Permitting
- c. Geotechnical Engineering
- d. Site Survey
- e. Hazardous Materials
- f. Civil Engineering
- g. Structural Engineering
- h. Landscape Architecture
- *i.* Fire Protection Engineering
- *j. Plumbing Engineering*
- k. HVAC Engineering
- *l. Electrical Engineering*
- m. Lighting Consultant
- n. Energy Modeling
- o. Data/Communications Consultant
- p. Food Service Consultant
- q. Acoustical Consultant
- r. Specifications Consultant
- s. Library/Media Consultant
- t. Sustainable/Green Design/Renewable Energy Consultant
- u. Cost Estimating
- v. Accessibility Consultant
- w. Traffic Consultant
- x. Furniture, Fixtures and Equipment Consultant
- y. Code Consultant
- z. Security Consultant

Applicants must address each category of work listed above in their application whether it is to be performed by in-house staff or by sub-consultant(s).

Failure to address <u>each</u> category may result in the elimination of the applicant from consideration on this project.

Applicants should not list any consultants other than those for the categories of work listed above.

The minority and women-owned business enterprises must be selected to perform services addressing the categories of work listed above or be assigned to tasks required under Basic Services as specifically set forth in the Contract for Designer Services as amended. Consultants other than those proposed for the categories of work listed above or required to perform Basic Services may not be used for purposes of meeting M/WBE requirements. Applicants are strongly encouraged to utilize multiple disciplines and firms to meet their MBE/WBE goals. Consultants to the prime Designer can team within their disciplines in order to meet the MBE/WBE goals but must state this relationship on the organizational chart (Section 6 of the designer application form).

7. Selection Process and Schedule

Process:

a. The Owner will perform a review of all responses as follows:

- i. The Owner will be responsible for reviewing each Respondent's proposal to determine if they have met the minimum criteria established in the RFP. Respondents who do not meet the minimum criteria will not be further considered.
- ii. The Owner will review the Respondents' applications and check the necessary references.
- b. The Owner will score each proposal that has met the minimum criteria based on the weighted evaluation criteria identified in the RFP.
- c. Based on the initial scores the Owner will rank the Respondents and short-list a minimum of three (3) Respondents.
- d. The Owner will schedule interviews with the short-listed Respondents. Each short-listed Respondent will be given an opportunity to make a brief presentation on their experience and capabilities to successfully provide the required project management services. The owner will have an opportunity to discuss the responses and ask questions.
- e. Following the interview the Owner will develop final rankings based, in part on, the weighted Evaluation Criteria in the RFP and on additional information obtained during the interviews.
- f. The Owner will notify the first-ranked Respondent.
- g. If the Owner is unable to sign a contract with the first-ranked selection, the Owner will then notify the second-ranked selection and so on, until a contract is successfully executed.
- h. The Owner may re-advertise the RFP if fewer than three responses are received.

Schedule:

- a. The following is a tentative schedule of the selection process, subject to change at the Owner's discretion.
 - <u>May 31, 2017</u> Advertise RFP in Central Register of the Commonwealth of Massachusetts, the Arlington Advocate and post at Town Hall.
 - June 7, 2017 Voluntary walk thru/tour of the Hardy School, at 3:00 PM.
 - June 12, 2017 Questions from Respondents due to Owner by 4:00 PM
 - June 14, 2017 Responses to Designer Questions posted to Town website by 3:00 PM
 - June 22, 2017 Designer Proposals due to Owner by 1:00 PM

8. Proposal Due Date and Requirements

Persons or firms interested in applying must meet the following requirements:

a. Responses to the Request for proposal for Designer Services must be clearly labeled "Designer Services for Hardy School Addition" Proposals must be submitted in one (1) Hard Copy and one (1) electronic form (PDF).

- b. Applications must be accompanied by a concise electronic cover letter that is a maximum of two pages in length. The cover letter must include the certifications as noted in Section 6 of this RFP. (A copy of the MCPPO certification should be attached to the cover letter as well as any SDO letters.)
- **c.** Applicants may supplement this proposal with graphic materials and photographs that best demonstrate design capabilities of the team proposed for this project subject to the page limitations as set forth in the Standard Designer Application Form.

d. The Owner assumes no responsibility or liability for late delivery or receipt of Responses. All Responses received after the stated submittal date and time will be judged to be unacceptable and will not be reviewed.

9. Questions & Additional Information

Any questions concerning this Request for proposal must be submitted to the Owner to the attention of Domenic Lanzillotti (dlanzillotti@town.arlington.ma.us.) Questions must be submitted by EMAIL only. **The deadline for receipt of questions is by 4:00 PM June 12, 2017.** Responses will be posted to the Town website by 3:00 PM on June 14, 2017.

Any additional information or addenda will be posted on the Town website. It is the responsibility of the Applicant to check the website for any additional information or addenda.

10. Pre-Proposal Meeting

All interested parties should attend a voluntary briefing session / walk thru at the existing Hardy School, 52 Lake Street, Arlington, MA. scheduled for June 7, 2017 at 3:00 PM **EST.** Meet at the main entrance on Brooks Avenue.

11. Requirements for Content of Response:

Submit one (1) Hard Copy and one (1) electronic version in PDF.

All responses shall be:

- Presented in an organized and clear manner;
- Must include the required forms in Attachment C.
- Must include all required certifications in Attachment D.
- Must include the following information:
- A. Cover letter shall be a maximum of two pages in length and include:
 - 1. An acknowledgement of any addendum issued to the RFP.
 - 2. An acknowledgement that the Respondent has read the RFP. Respondent shall note any exceptions to the RFP in its cover letter.
 - 3. An acknowledgement that the Respondent has read the Standard Contract and Standard Amendments. Respondent shall note any exceptions to the Standard Contract and/or Standard Amendments in its cover letter.
 - 4. A specific statement regarding compliance with the minimum requirements identified in Section 5 of this Request for proposal to include identification of registration, number of years of experience and where obtained (as supported by the resume section of Attachment C), as well as the date of the MCPPO certification. (A copy of the MCPPO certification should be attached to the cover letter).
 - 5. A description of the Respondent's organization and its history.

- 6. The signature of an individual authorized to negotiate and execute the Contract for Designer Services, in the form that is attached to the RFP, on behalf of the Respondent.
- 7. The name, title, address, e-mail and telephone number of the contact person who can respond to requests for additional information.
- B. Evaluation Criteria: The response shall address the Respondent's ability to meet all items noted in the "Evaluation Criteria" Section.

12. Certifications:

Respondents will be required to submit certifications required in M.G.L. c. 7C, §51(d)(1)-(iv).

13. Not to Exceed Fee Explanation:

The Owner, has determined the not to exceed fee for services based upon an evaluation of the level of effort required, job complexity, specialized knowledge required, estimated construction cost, comparison with past project fees, and other considerations. As construction cost is but one of several factors, a final construction figure in excess of the initial construction estimate will not, in and of itself, constitute a justification for an increased in fee.

14. Other Provisions

A. Public Record

All responses and information submitted in response to this RFP are subject to the Massachusetts Public Records Law, M.G.L. c. 66, § 10 and c. 4, § 7(26). Any statements in submitted responses that are inconsistent with the provisions of these statutes shall be disregarded.

B. Waiver/Cure of Minor Informalities, Errors and Omissions

The Owner reserves the right to waive or permit cure of minor informalities, errors or omissions prior to the selection of a Respondent, and to conduct discussions with any qualified Respondents and to take any other measures with respect to this RFP in any manner necessary to serve the best interest of the Owner and its beneficiaries.

C. Communications with the Owner

The Owner's Procurement Officer for this Request for Proposal is Domenic Lanzillotti,

Name: Address: Phone: Email:

Respondents that intend to submit a response are prohibited from contacting any of the Owner's staff other than Mr. Lanzillotti. An exception to this rule applies to Respondents that currently do business with the Owner, but any contact made by such persons with the Owner must be limited to that current business, and must not relate to this RFP. In addition, such respondents shall not discuss this RFP with any of the Owner's consultants, legal counsel or other advisors.

FAILURE TO OBSERVE THIS RULE MAY BE GROUNDS FOR DISQUALIFICATION.

D. Costs

The Owner is not liable for any costs incurred by any Respondent in preparing a response to this RFP or for any other costs incurred prior to entering into and only in accordance with a Contract between the Respondent and the Owner.

E. Withdrawn/Irrevocability of Responses

Applicants may withdraw an application as long as the written request to withdraw is received by the Town of Arlington, c/o Domenic Lanzillotti, prior to the time and date of the proposal opening.

F. Rejection of Responses, Modification of RFP

The Owner reserves the right to reject any and all responses if the Owner determines, within its own discretion, that it is in the Owner's best interests to do so. This RFP does not commit the Owner to select any Respondent, award any contract, pay any costs in preparing a response, or procure a contract for any services. The Owner also reserves the right to cancel or modify this RFP in part or in its entirety, or to change the RFP guidelines. A Respondent may not alter the RFP or its components.

G. Subcontracting and Joint Ventures

Respondent's intention to subcontract or partner or joint venture with other firm(s), individual or entity must be clearly described in the response.

H. Validity of Response

Submitted responses must be valid in all respects for a minimum period of ninety (90) days after the submission deadline.

FURTHER INFORMATION

ATTACHMENTS:

Attachment A: Hardy Study for Renovations / Arlington, MA / February 14, 2017

Attachment B: (Incorporated by Reference)

Base Contract for Designer Services; (http://www.massschoolbuildings.org/sites/default/files/editcontentfile/Guidelines_Forms/Contracts_Forms/Base%20Contract%20v_02_25.pdf) Base Designer Contract Amendment for Design/Bid/Build; (http://www.massschoolbuildings.org/sites/default/files/editcontentfile/Guidelines_Forms/Contracts_Forms/DBB%20v_02_25.pdf) Base Designer Contract Amendment for CM-at-Risk (http://www.massschoolbuildings.org/sites/default/files/edit-contentfile/Guidelines_Forms/Contracts_Forms/CM-R%20v_02_25.pdf)

Attachment C:

Standard Designer Application Form for Municipalities and Public Agencies not within DSB Jurisdiction (Updated July 2016)

Attachment D:

Required Certifications

- Certificate of Non-Collusion/Tax Compliance
- Proof of Registration by the Commonwealth of Massachusetts an architect or professional engineer (if applicable)
- Demonstrated ability to secure general liability insurance, worker's compensation, and automobile insurance for all proposed staff that will be involved in the project
- List all claims, including insurance claims and claims in litigation or adjudicatory process or settled, brought by or against the firm/individual in the past three (3) years. Including for each the reason for the claim, name (s) of claimant(s) and outcomes.

Hardy Elementary School Addition

February 14, 2017

HARDY ELEMENTARY SCHOO



Submitted to: Adam Chapdelaine Town Manager Town of Arlington



Builders and Construction Managers Shawmut Design and Construction 560 Harrison Avenue Boston, MA 02118 Telephone 617-622-7000 Facsimile 617-622-7001

February 14, 2017

Mr. Adam Chapdelaine Town Manager Town of Arlington 730 Massachusetts Avenue Arlington, MA 02476

Dear Mr. Chapdelaine,



I am pleased to provide Shawmut's Conceptual Preconstruction Report for the proposed classroom addition at Hardy Elementary School. This report includes conceptual budgets and a preliminary schedule to provide a comprehensive view of the project. The included budgets are based on the Expansion Study completed by HMFH Architects and address design alternatives "1b" and "1c" as defined within it. We have included a summary and comparison sheet detailing the total budget by division for each design alternative, in addition to a detailed budget breakdown for each.

As a starting place for planning, we have assumed the project would go into full design this summer such that design completion, final pricing and procurement could be scheduled to support an early spring 2018 date for start of construction. Our schedule addresses design, permitting, GMP development and construction and assumes a direct progression through each of these phases in order to optimize project schedule and cost. We would, of course be glad to discuss whatever schedule best suits the approval sequence, funding requirements and operational constraints of the Town of Arlington and Arlington Public Schools.

We look forward to reviewing this report with you and the Permanent Town Building Committee and will plan to incorporate your feedback in an updated report as appropriate.

Thank you very much for including Shawmut in this process!

Sincerely,

Dilip X Corroy

Philip Conroy Project Manager

LC. In

Ryan Lynch Project Executive

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Conceptual Estimate HMFH Architects Study (Dec -21-2016) Hardy Elementry School Project # 170148

Alternatives 1B & 1C		lternitive 1B-				Alternitive 1C-		
Addition to existing class room wing		v 2 Lvl Addition	\$	/ sf	r	New 3 Lvl Addition		\$ / sf
	1101	3.600 SF			ſ	5,400 SF		
PROJECT REQUIREMENTS		05 700	\$	26.58			e	18.06
DEMOLITION	<u> </u>	<u>95,700</u> 24,000	\$ \$	26.58		\$ 97,500 \$ 28,000		
CONCRETE	\$	84,526	\$	23.48		<u>\$ 20,000</u> \$ 84,864	_	
MASONRY	ŝ	159,000	\$	44.17		\$ 213,300	_	
STRUCTURAL STEEL	\$	144,991	\$	40.28		\$ 216,768		
MISCELLANEOUS METALS	\$	9,000	\$	2.50		\$ 13,500	\$	2.50
ROUGH CARPENTRY	\$	25,200	\$	7.00		\$ 37,800	_	
FINISH CARPENTRY / MILLWORK	\$	20,000	\$	5.56		\$ 30,000		
WATERPROOFING / AVB / INSULATION	<u> </u>	35,500	\$	9.86		<u>\$ 49,100</u>	_	9.09
WOOD SIDING	<u> </u>		\$	- 19.79	_	<u>\$</u> - \$ 71,260	\$	-
ROOFING SPRAY-APPLIED FIREPROOFING	<u>\$</u>	71,260	\$ \$	2.25	_	\$ 71,260 \$ 6,683	_	
PENETRATION FIRESTOPPING	5	3,600	5 \$	1.00		<u>\$ 0,085</u> \$ 5,400	_	
CAULKING / JOINT SEALANTS	\$	5,400	\$	1.50		\$ 5,400 \$ 8,100		
DOORS, FRAMES & HARDWARE	\$	6,000	\$	1.67	_	\$ 9,000	_	
ENTRANCES / STOREFRONTS	\$	-	\$	-		\$ -	\$	-
WINDOWS	\$	105,060	\$	29.18		\$ 139,050	\$	25.75
GLASS & GLAZING / WINDOWS / ENTRANCES	\$	2,000	\$	0.56		\$ 3,000		
DRYWALL	\$	125,625	\$	34.90		\$ 192,750	_	35.69
TILE & STONE	\$	-	\$	-	_	\$ -	\$	-
ACOUSTICAL CEILINGS	<u> </u>	19,800	\$	5.50		<u>\$ 24,300</u>		4.50
WOOD FLOORING	<u> </u>	-	\$	-	_	<u> </u>	\$	-
CARPET & RESILIENT FLOORING RESINOUS FLOORING	<u>\$</u>	48,600	\$	13.50		<u>\$ 72,900</u> \$ -	\$ \$	13.50
PAINTING & WALLCOVERING	5	13,800	\$ \$	3.83		<u> </u>		3.72
MISC. SPECIALTIES	\$	14,000	s	3.89		\$ 20,100 \$ 21,000	_	3.89
RESIDENTIAL APPLIANCES	\$	-	s	-		<u>\$ 21,000</u> \$ -	\$	-
EQUIPMENT	ŝ	-	\$	-		\$ -	\$	-
FURNISHINGS	\$	-	\$	-		\$ -	\$	-
WINDOW TREATMENT	\$	5,100	\$	1.42		\$ 6,750	\$	1.25
ELEVATORS	\$	-	\$	-	_	s -	\$	
FIRE PROTECTION	\$	23,509	\$	6.53		\$ 30,023	_	
PLUMBING	<u> </u>	21,190	\$	5.89		<u>\$ 21,190</u>		
HVAC	\$	146,960	\$	40.82	_	<u>\$ 213,190</u>		
ELECTRICAL TEL-DATA	<u>\$</u>	<u>95,620</u> 10,000	\$ \$	26.56		\$ 122,730 \$ 15,000	_	
SECURITY	5	10,000	5 S	-		<u>\$ 15,000</u> \$ -	3 \$	2.70
SITEWORK	\$	72,584	\$	20.16		<u> </u>	÷	
PILES	\$	-	\$	-	_	\$ <u>,,,,,,,,,,,,,,,,</u>	\$	
LANDSCAPE / HARDSCAPE	ŝ	28,628	\$	7.95		\$ 28,628		
TOTAL DIRECT COSTS	\$	1,424,753		395.76		\$ 1,859,669	_	344.38
Design & Estimating Contingency 10.	0% \$	142,475				\$ 185,967		
	0% \$	142,473				\$ 183,967 \$ 20,456		
Permits N		15,072				\$ 20,430 \$ -		
GL Insurance 1.0		15,829				\$ 20,661		
Builders Risk 0.3	5% \$	5,540				\$ 7,231		
Construction Contingency 3.0		47,962				\$ 62,603		
General Conditions	\$	210,000				\$ 210,000		
Pre-Con	\$	15,000				\$ 15,000	1	
Fee 3.		49,567				\$ 64,698		
Escalation Estimated Construction 1Q 2018 4.		66,089				\$ 86,263		
Tax N		-	e	554		\$ - • • • • • • •	¢	460
TOTAL CONSTRUCTION COST	\$	1,992,888	\$	554		\$ 2,532,548	\$	469



This Proposal is Based on and Includes the Following:

- 1.) The following documents where used for pricing, Consultants reports dated December 21, 2016
- 2.) The basis of design used for the estimate is a steel frame structure with 6" metal stud walls with exterior brick cavity wall
- 3.) The basis of design for alternatives B1 & C1 is an extension to the existing wing
- 4.) The basis of design used for the estimate is a steel framed flat EDPM roof
- 5.) Fire Protection System is assumed connected to existing
- 6.) HVAC system control is local vs. tied to BMS
- 7.) The class room casework is without a sink

The Following Items are Excluded from this estimate:

- 1.) Hazardous materials testing and abatement.
- 2.) Utility and service company fees and charges, (Assumed no system up grade required)
- 3.) Costs of construction usage for temporary water, gas, and electric.
- 4.) Police and/or construction site security details.
- 5.) Building shut-down fees.
- 6.) Soils testing and LSP services.
- 7.) Rock, ledge and unsuitable soils.
- 8.) Sales tax. & Permit
- 9.) Providing a Historic Restoration Specialist
- 10.) Sustainable Design & Management Requirements (LEED Certification)
- 11.) Foundation Restoration
- 12.) Repointing of existing exterior veneer
- 13.) 3-D BIM Drawing
- 14.) Removal and storage artwork, furniture
- 15.) Exclude work related to the existing elevator
- 16.) Exclude work related to the athletic surfaces
- 17.) AV Equipment

Allowances included in this budget:

1.) See estimate detail for allowances

Alternates: SEE ALTERNATES TAB

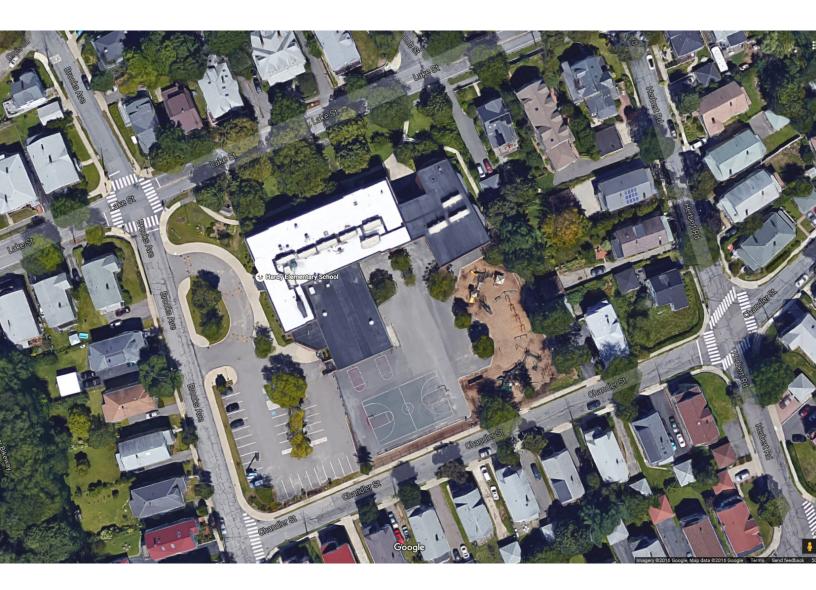
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HARDY ELEMENTARY SCHOOL STUDY FOR EXPANSION

ARLINGTON PUBLIC SCHOOLS ARLINGTON, MA

DRAFT

December 21, 2016



HMFH ARCHITECTS

130 Bishop Allen Drive, Cambridge, MA 02139 617 492 2200 hmfh.com

Hardy Elementary School Study for Expansion

Arlington Public Schools Draft December 2016

Introduction

The Arlington Schools are experiencing an on-going increase in student enrollment and this is most acutely experienced at the elementary schools in East Arlington. Based upon previous analysis, it has been approved to construct a six-classroom addition to Thompson School, this is scheduled to be complete in September 2017. Similarly, the Hardy School requires analysis to assist in determining the best approach to accommodate the anticipated increase in enrollment. Hardy is reaching capacity. The school administration has requested professional assistance to study options to accommodate the student enrollment growth.

HMFH Architects, Inc.'s role is to assess the conditions and recommend alternatives to accommodate the impact of enrollment growth. The space planning tasks include: -review of existing space use and site availability for expansion; -using the most up to date enrollment projections by McKibben Demographic Research, assess the need for and the timeframe of providing additional classrooms; -and, working with the School Department, develop alternatives for how best to accommodate the increase of students.

The study will assess temporary modular classrooms (lease vs. purchase) vs. permanent construction.

It is not a task of this study to analyze redistricting alternatives. Currently, the district has significant buffer zones to assist with maintaining balanced school capacities. Hardy School is in East Arlington and the nearest elementary school is Thompson, which is also experiencing high student enrollment. The only elementary school with some available capacity is Stratton School, which is located to the north-west corner of Arlington, its location would require an immense redistricting effort that would have an impact on many in the Arlington school district.

Enrollment Forecast

Per the August 2016 enrollment forecast for Hardy, by school year 2020-21 the student population will have increased by 43 students. This increase is a "bubble" starting at the current year's kindergarten class of 94 students and generally moves up through the grades. After the peak year, it is forecasted (McKibben, August 2016) to be seven more school years before the enrollments return to the current population.

Note: enrollment forecasts are set to be updated based on actual numbers but this information is not yet available at the time of this report. Per the Hardy School Principal, current enrollment is 451, this is higher than the August forecasted enrollment of 447 students.

Additionally, it is worth noting that the potential development of the Mugar Property in East Arlington is not factored into the forecasts.

Several independent analyses have tried to determine what the potential impact of the Mugar development would have on the Arlington Public Schools' enrollment, and particularly to Hardy School. The kindergarten through fifth grade of the Hardy School population would experience the greatest impact. A proportional comparison of the number of beds in East Arlington to the number of students attending the schools yielded an 11-22 student increase, a comparison of a similar development by the same developer of the Mugar Property yielded a 54-student increase. Another possible scenario is as follows:

The potential development = 219 units in total 104 one-bedroom 92 two-bedroom 23 three-bedroom

It seems plausible that:

- all 23 three-bedrooms would have an average of two children each = 46
- half of the two-bedrooms would have an average of 1 child each = 46
Therefore, there is the potential for a total of 92 additional students in the school system, and even if only two-thirds are at the elementary grades (it seems likely young families with elementary aged children are the higher percentage of those moving in to Arlington versus families with high school age children), this would increase the Hardy population by as many as 62 students.

If the Mugar Development receives approval to proceed, the complex would be open as soon as 2019. And while all units will not be fully occupied on day one, it is likely to be fully occupied within two to two and a half years. This enrollment increase in combination with the projected forecast would mean the Hardy population will increase to the identified "peak" year and remain at this increased student population for the foreseeable future and certainly at least to the current final forecasted school-year of 2031-32.

Process

Site Visit / Meeting with the Principal

HMFH re-visited Hardy School, touring the interior and exterior of the building to assess the existing conditions. The building is well-maintained and fully occupied, with each available space appropriate for use by teachers and students in use. The visit enabled HMFH to review the physical interior spaces (in terms of size and location within the building) and to learn how each space is currently being used. There are four kindergarten classrooms, 17 classrooms for grades 1 through 5, and rooms for art and music. There are also smaller sized rooms used for ELL, special education, reading, math intervention, OT, PT, speech and language, after-school program, and teacher's workroom). The classrooms for grades 1-5 range in size from 720 to 850 square feet, and while below current state-funding guidelines of 900 square feet, are adequate. The gymnasium size of approximately 5,075 square feet is below state guidelines of 6,000 square feet, upon discussion with the school principal, appears adequate for the current and forecasted enrollment. The cafeteria seating has been expanded onto the "stage". The expanded cafeteria has seating for a maximum of 168 students. The cafeteria with the stage area is just approximately 1,800 square feet, this is considerably below state guidelines. For a school population of 500 students (and with two lunch periods), the guidelines are for 3,750 square feet. This increases to 4,125 square feet if enrollment increases to 550 students. With three lunch periods, and by building code requirements (if it were built new today), the current cafeteria would accommodate 120 students. The current seating configuration is very tight. Increased enrollments will pose scheduling challenges.

The school property abuts public streets on three sides and residences on the fourth side. The outdoor amenities include 33 parking spaces, a drop-off loop, a large black top play area inclusive of a basketball court, and an area with multiple play structures that accommodate various ages. There is a small student garden in the north-west corner of the site and the front of the school, along Lake Street, is open space with mature trees. The property is 2.54 acres. The black top area is expansive but well-used, as are the play structures. The front of the site is not used for any school activities.

Capacity Analysis

Hardy School was reviewed in terms of its current capacity and space use. Capacity is determined by the number of classroom spaces, plus a review of the specialist spaces and shared use spaces and their ability to serve the educational needs. Hardy has 4 kindergartens and 17 classrooms for grades 1-5, and designated art and music classrooms.

A method of determining building capacity is to calculate the number of kindergarten and general classrooms available multiplied by the number of students per room, for this purpose a range of 22-25 students per room is used, therefore Hardy has a range of 396-450 students that can be accommodated; the current enrollment is at 451. Based on these calculations, even at the increased class sizes, Hardy is currently at capacity.

Currently there are 21 classrooms (four kindergarten classrooms, four at grades 1 and 2; three at grades 3, 4, and 5). Just last year a teacher's workroom/ conference room was converted to a general classroom and is greatly under sized for this purpose. Additionally, now the school is without sufficient work and conferencing space. Per the enrollment forecast, by the peak year (2020-21), which shows a nearly even spread of students throughout the grades (81-83-84-84-74) all but one grade will require four classes per grade, **this requires an increase of three classrooms** from 21 to 24. If the classroom quantity does not increase, then the class size will increase to as high as 28 students per room.

Expansion Potential

Hardy has expansion potential at the back of the school. Expansion may occur either from the southern end of the classroom wing or at a location near to the gymnasium. A classroom addition that extends the classroom wing would need to align with each of the existing floor levels and maintain the existing stairwell as the egress path. To align with the existing floor levels, the first floor of the expansion would need to be half a floor level below grade. Also, to expand at this location, the nearest play structure will need to be removed.

A classroom addition near the gymnasium is possible because the gymnasium does not have low windows therefore there would be no worry of blocking the access to light and views (other possible locations at the black top area would block access to light and views from educational spaces). The expansion at the blacktop would include an extension of the existing corridor, would maintain the current egress from the gymnasium, and accessibility would be maintained with a new ramp. A diagram showing these locations are provided in **Appendix A**.

And while there is available open space at the front of Hardy School, we have not identified this as a good expansion location for the following reasons:

-the access points (existing doorways) are not level either with the existing site grades at the front of the school or at the interior, making an accessible connection challenging

-the full length of the front of the school is programmed with educational spaces requiring windows for natural light and views, any addition at this location would require being placed a distance from the windows and would therefore be too close to Lake Street -any addition at the front would block the formal, historic façade of the school building and require removal of the mature trees along Lake Street

Alternatives

As noted previously, additional classrooms are required to serve the forecasted student enrollments, with or without the development of the Mugar Property. The need for an increase in classroom quantity will be for, at minimum, six years beyond the peak school year of 2020-21. This is an important factor that will inform future planning. Modular classrooms may be leased or purchased. It is common understanding in the modular industry that if modular classrooms are needed for longer than a five-year period it is more cost effective to purchase the classrooms rather than lease them. For this reason, the alternatives suggested include either the purchase of modular classrooms or the construction of a permanent addition.

The enrollment forecast shows the "bubble" impacts one out of the six elementary grades as early as the next school year (2017-18), two out of the six grades in the following year (2018-19), three out of six grades in 2019-20. Beginning in 2017, Hardy will need one additional classroom for each of the next three years as the current "3-classroom" grades graduate out. "Impact" is defined as grades requiring four classrooms. And this does not include the increase to enrollments if the Mugar Development proceeds.

When a grade population reaches 80 students or higher there is 27 or more students per class if there are only three classrooms per grade. This prompts the need to have a fourth classroom per grade. A diagram illustrating when and which grade level will need a fourth classroom is in **Appendix B**. This diagram is an overlay of the August 2016 Enrollment Forecast by McKibben Demographic Research.

Alternatives for consideration are:

Alternative 1A: purchase four modular classrooms (3 for classrooms, 1 for specials) Alternative 1B: construct four-classroom addition (3 for classrooms, 1 for specials) Alternative 1C: construct six-classroom addition

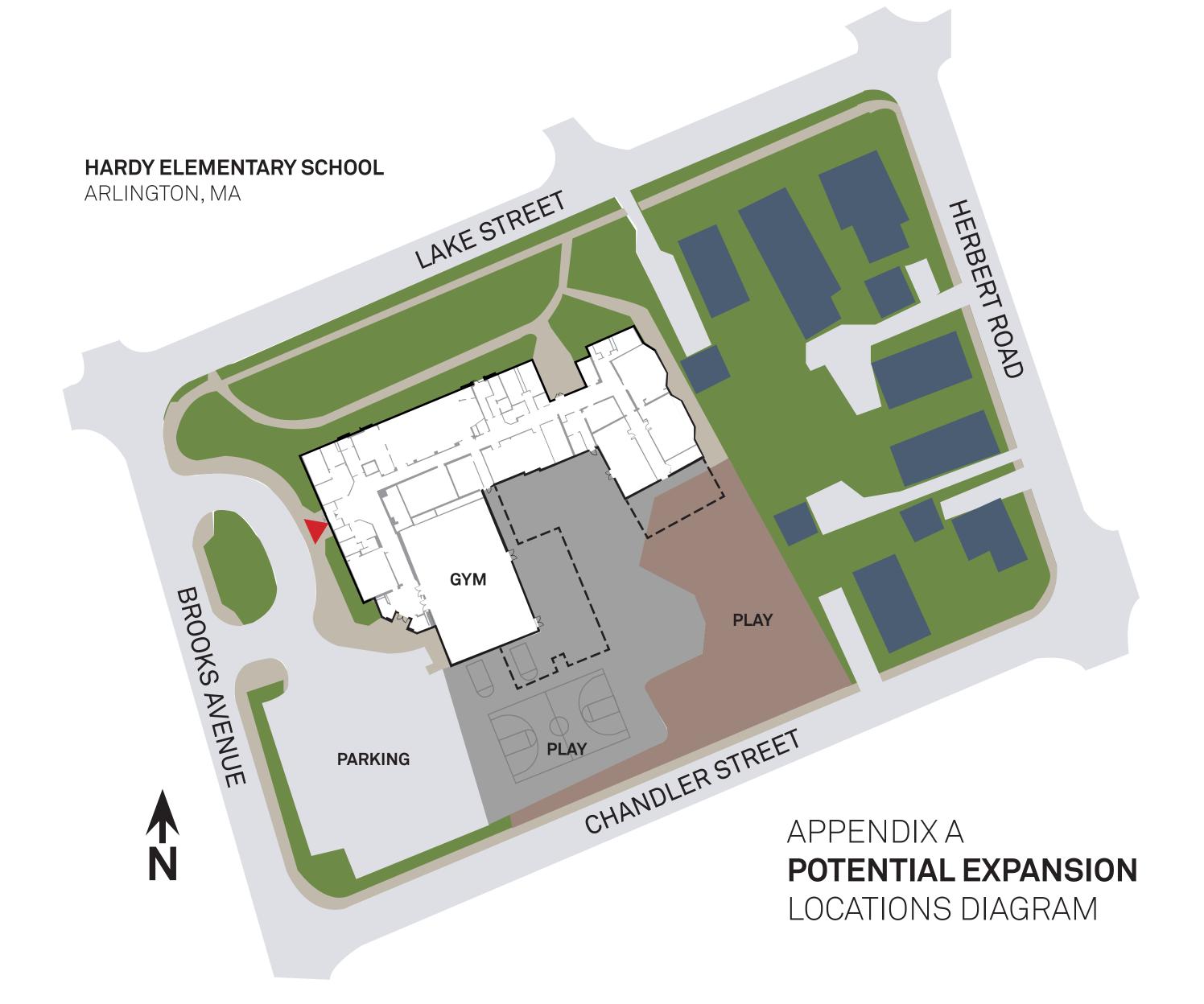
Alternative 1A provides four modular classrooms on the black top play area at the back of the school. A new modular corridor would be constructed to connect the classrooms to the school building via an existing corridor and two doors to the gymnasium. A small exterior ramp is required to replace the existing ramp to be removed. Four classrooms are shown and priced, but a fifth classroom may "fit" as well. The quantity of four was selected to provide a comparison between Alternatives 1A and 1B. Note: modular construction has a shorter expected use period than permanent construction. Experience has shown the modular construction begins to fail within five years, typically with roof leaks. A diagram of Alternative 1A -Modular Addition is provided in **Appendix C**.

Alternative 1B provides a four-classroom addition that extends the existing classroom wing. The permanent addition would be constructed of two stories with the lowest floor partially below grade to align with the existing floor levels. Permanent construction is built to last for 50 years and typically extends beyond this. A diagram of Alternative 1B – Permanent Addition is provided in **Appendix D**.

Alternative 1C provides a six-classroom addition that extends the existing classroom wing. The permanent addition would be constructed of three stories with the lowest floor partially below grade to align all the existing floor levels. Permanent construction is built to last for 50 years and typically extends beyond this. This alternative has been developed for the following reasons:

-it is cost effective to build all three floors at one time vs. deciding to add a third floor later -while three to four classrooms are projected to satisfy the enrollment needs, additional educational space may be used for much needed special education programs and additional space for ELL programs.

Cost comparisons have been developed for each of the alternatives. Additionally, pricing for Alternative 2 has been developed for the incremental approach of purchasing one modular classroom per year. This approach will ultimately cost more than Alternative 1A due to escalation and mobilization costs. A spreadsheet showing the cost comparisons of the alternatives is in **Appendix E**.

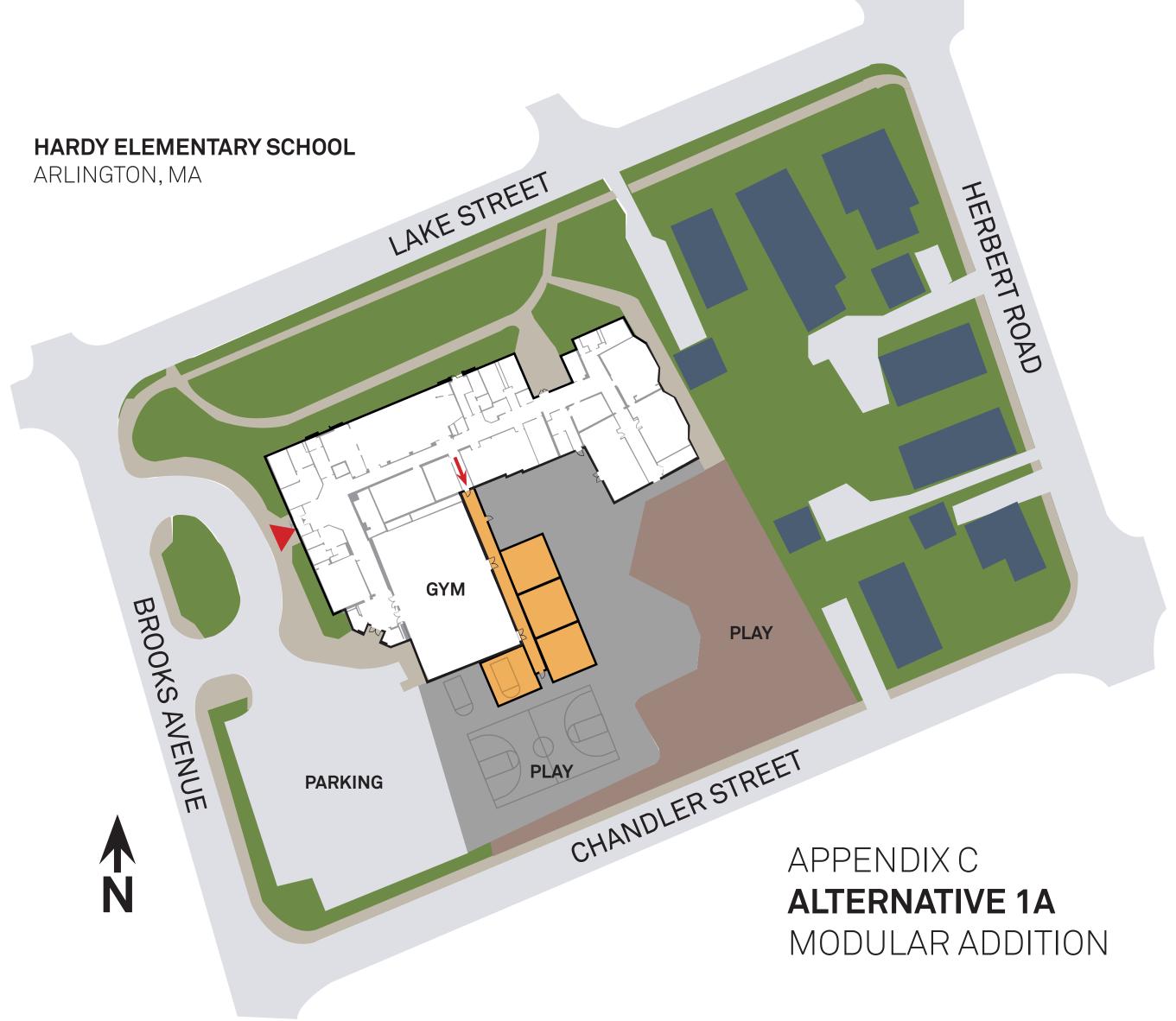


Hardy Elementary August 2016

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32
K 1 2 3 4	42 65 57 69 56	64 46 65 58 64	67 62 47 59 55	65 67 71 49 58	82 69 68 68 46	85 81 67 61 71	94 81 76 63 59	89 90 80 74 61	87 87 89 78 72	85 85 86 87 76	81 83 84 84 84	79 82 82 82 81	77 80 83 83 83	75 79 81 84 81	74 77 80 82 82	72 76 78 81 80	71 74 77 79 79	70 73 75 78 77	69 72 74 76 76	68 71 74 75 75	67 70 73 75 74	66 69 72 74 74
5	40	56	60	53	59	48	74	57	59	70	74	81	79	78	79	80	78	77	75	75	74	73
Total K-5	329	353	350	363	392	413	447	451	472	489	490	487	482	478	474	467	458	450	442	438	433	428
Total K-5 Change % Change	329	353 24 7.3%	350 -3 -0.8%	363 13 3.7%	392 29 8.0%	413 21 5.4%	447 34 8.2%	451 4 0.9%	472 21 4.7%	489 17 3.6%	490 1 0.2%	487 -3 -0.6%	482 -5 -1.0%	478 -4 -0.8%	474 -4 -0.8%	467 -7 -1.5%	458 -9 -1.9%	450 -8 -1.7%	442 -8 -1.8%	438 -4 -0.9%	433 -5 -1.1%	428 -5 -1.2%

APPENDIX B

FORECASTED GRADES **REQUIRING 4 CLASSROOMS EACH**





Rough Project Cost Comparisons

Hardy Elementary School Expansion:

Alternative 1A 4 Modular Classrooms - Purchased for School Year 2017-18	low 1,375,000	high 1,472,000
Alternative 1B 4-Classroom Addition (~3,600 SF) Constructed for School Year 2018-19	1,404,000	1,620,000
Alternative 1B 6-Classroom Addition (~5,400 SF) Constructed for School Year 2018-19	2,106,000	2,430,000
Alternative 2 - Incremental Approach		
1 Modular Classroom - Purchased for School Year "1"	524,500	555,300
1 Modular Classroom - Purchased for School Year "2"	440,475	465,675
1 Modular Classroom - Purchased for School Year "3"	461,450	487,850
1 Modular Classroom - Purchased for School Year "4"	378,925	399,625
Total for 4 Modular Classrooms over 4 Years:	1,805,350	1,908,450



onceptual	Estimate

Estimate Detail

SHAWMUT Alternitive 1B- New 2 Lvl Addition
Design and Construction

liga and Construction						
FRADE	QTY	UNIT	UNIT PRICE		TOTAL COST	COMMENTS
PROJECT REQUIREMENTS	3,600			\$	95,700	
General Requirements	3,600	sf	1.00	\$	3,600	
Survey Equipment & Supplies	1	ls	3,500	\$	3,500	
Project Signage	1	ls	1,500	\$	1,500	
Temporary Toilets	7	mon	600	\$	4,200	
Adjacent Building Perimeter Protection	7	mon	500	\$	3,500	
Temporary Fire Protection & Ext.	7	mon	500	\$	3,500	
Safety Compliance Material & Labor	7	mon	1,000	\$	7,000	
Ladders, ramps & Stairs (Temporary) Temporary Building Enclosures	1	ls	10,000	\$ \$	10,000	
Small Tools and Equipment / Storage	1	mon ls	4,000 4,500	э \$	4,000 4,500	
Progress Photographs	7	mon	300	\$	2,100	
Rubbish Removal & Dumpster	10	ea	650	\$	6,500	
Interim Clean-up	60	day	680	\$	40,800	
Trash Chutes & Hoppers	NIC					
Winter Protection	NIC					
General Weather Protection	1	mon	1,000	\$	1,000	
Snow Removal	NIC					
DEMOLITION	3,600			\$	24,000	
Removal of MEP work (Cut & Cap)	40	hrs	160.00	\$	6,400	
Remove interior / exterior 4man crew	5	cd	2,400.00	\$	12,000	
Equipment for demo Dumpsters	5 1	day	500.00 700.00	\$ \$	2,500 700	
Temp protection of existing surfaces	500	ea sf	2.00	ծ Տ	1,000	
Salvage & Storage	500	mon	200.00	ծ Տ	1,000	
	,		200.00	\$	-	
				\$	-	
CONCRETE	3,600			\$	84,526	
Foundation						
First Floor Foundation						
Floor Repair from plumbing	10		600.00	\$	6,000	
Footings Spread 1x3		cy cy	\$450.00	\$	10,000	
Foundation walls - high walls ov 4	22	cy	\$550.00			
-	22	cy		\$	12,222	
Foundation walls - high walls ov 8'	30	cy	\$650.00	\$	19,259	
Isolated column footings	4	cy	\$550.00	\$	2,200	
Piers	4	cy	\$600.00	\$	2,400	
6" slab on grade	1,800	sf	\$6.00	\$	10,800	
Water based curing compound	1,800	sf	\$0.25	\$	450	
Install base plates, anchor bolts	10	ea	\$200.00	\$	2,000	
Pump, crane and misc. accessories	1	ls	\$5,000.00	\$	5,000	
Misc. equipment pads	1	ls	\$2,000.00	\$	2,000	
4" slab on deck	1,800	sf	\$6.00	\$	10,800	
Water based curing compound B-1	3,600	sf	\$0.25	\$	900	
Vapor barrier under slab / control / exp joint on grade	1,980	sf	\$0.25	\$	495	
MASONRY	3,600			\$	159,000	
Brick Veneer	4,080	sf	35.00	\$	142,800	
Scaffolding & Planks Exterior	3,600	sf	4.50	\$	16,200	
See AVB / Ins trades				\$	-	
				\$	-	
		1		\$	-	
STRUCTURAL STEEL	3,600	1	l.	\$	144,991	
Building Steel		tons	\$4,000.00	\$	57,600	
Building Steel Columns W (Assumed, Mixed Based on Location)	14.4		6100000	\$	36,000	
-	14.4 9.0	tons	\$4,000.00	Ψ	,	
Columns W (Assumed, Mixed Based on Location)		tons tons	\$4,000.00 \$4,000.00	\$	27,000	
Columns W (Assumed, Mixed Based on Location) Hortizontal 2nd floor	9.0					
Columns W (Assumed, Mixed Based on Location) Hortizontal 2nd floor Hortizontal W roof Misc. Dunnage etc.	9.0 6.8	tons	\$4,000.00	\$	27,000 4,000	
Columns W (Assumed, Mixed Based on Location) Hortizontal 2nd floor Hortizontal W roof	9.0 6.8 1.0	tons tons	\$4,000.00 \$4,000.00	\$ \$	27,000	
Columns W (Assumed, Mixed Based on Location) Hortizontal 2nd floor Hortizontal W roof Misc. Dunnage etc. Connections, plates, fasteners - 10% of tonnage	9.0 6.8 1.0 1.5	tons tons	\$4,000.00 \$4,000.00	\$ \$	27,000 4,000	
Columns W (Assumed, Mixed Based on Location) Hortizontal 2nd floor Hortizontal W roof Misc. Dunnage etc. Connections, plates, fasteners - 10% of tonnage Bent Plates / Pour Stops Metal Deck	9.0 6.8 1.0 1.5 Incl	tons tons tons	\$4,000.00 \$4,000.00 \$3,000.00	\$ \$ \$	27,000 4,000 4,523	
Columns W (Assumed, Mixed Based on Location) Hortizontal 2nd floor Hortizontal W roof Misc. Dunnage etc. Connections, plates, fasteners - 10% of tonnage Bent Plates / Pour Stops	9.0 6.8 1.0 1.5	tons tons	\$4,000.00 \$4,000.00	\$ \$	27,000 4,000	

Conceptual Estimate Estimate Detail SHAWMUTAIternitive 1B- New 2 Lvl Addition						Hardy Elementry Schoo Town of Arlington M 14-Feb-1
TRADE	QTY	UNIT	UNIT PRICE	TOT CO		COMMENTS
Other Crane Mats / Safety Protection / Control & Flag Men Safety railings for fall protection @ deck perimeter	1 200	ls lf	\$2,500.00 \$6.00	\$ \$ \$	2,500 1,200	
MISCELLANEOUS METALS	3,600			\$	9,000	
Misc Metals				\$	_	
Misc allowance / Lintels / Etc.	3,600	sf	2.50	\$	9,000	
ROUGH CARPENTRY	3,600			\$	25,200	
Rough Carpentry (General Trades) Floor & Openings temp walls Wall Blocking & Div 8,10,12 Install	3,600 3,600	sf sf	1.00 6.00	\$ \$	3,600 21,600	
wan blocking & Div 6,10,12 listan	5,000	51	0.00	\$ \$	-	
FINISH CARPENTRY / MILLWORK	3,600			\$	20,000	
Interior Finish Carpentry Class room casework allowance	4	ea	5,000.00	\$ \$	- 20,000	
WATERPROOFING / AVB / INSULATION	3,600			\$	35,500	
Exterior walls / Cavity wall 2" Rigid / AVB Damp proof foundation	4,250	sf sf	8.00 1.00	\$ \$	34,000 600	
Insulate floor perm.	600 600	sf	1.50	\$ \$ \$	900 -	
WOOD SIDING	3,600			\$	-	
ROOFING	3,600			\$	71,260	
EPDM Roof / 4 ' Insulation / Gyp sheathing	1,800	sf	30.00	\$	54,000	
Parapet wall cap AL Sheet metal flashing	200 230	sf lf	15.00 12.00	\$ \$	3,000 2,760	
Metal roof leaders / scupper Expansion joints	100 180	lf lf	25.00 50.00	\$ \$	2,500 9,000	
				\$ \$ \$	-	
				\$	-	
SPRAY-APPLIED FIREPROOFING	3,600			\$ \$	8,100	
Spray-Applied Fireproofing	3,600	sf	2.25	3 \$ \$ \$	8,100 - -	Columns & Beams
PENETRATION FIRESTOPPING	3,600			\$	3,600	
Penetration Fire stopping	3,600	sf	1.00	\$ \$	3,600	
				\$ \$ \$	-	
CAULKING / JOINT SEALANTS	3,600	1		\$	5,400	
Caulking	3,600	sf	1.50	\$ \$ \$	5,400	
DOORS, FRAMES & HARDWARE	3,600			\$	6,000	
D1 - Flush HM door	4	ea	550.00	\$	2,200	
Single Frames Hardware	4 4	ea ea	350.00 600.00	\$ \$	1,400 2,400	
ENTRANCES / STOREFRONTS	3,600			\$	-	
AL Windows	3,600	sf	100.00		105,060 102,000	
AL windows Flashing & Sealing	255	si lf	12.00	\$ \$ \$ \$	3,060	
				\$ \$ \$	-	

Conceptual Estimate Estimate Detail SHAWMUT Alternitive 1B- New 2 Lvl Addition						Hardy Elementry Scho Town of Arlington M 14-Feb-
TRADE	QTY	UNIT	UNIT PRICE		OTAL COST	COMMENTS
GLASS & GLAZING	3,600			\$	2,000	
Door / Borrow Lite	40	sf	50.00	\$ \$	2,000	
DRYWALL	3,600			\$	125,625	
Wall Types Exterior wall assembly LMG, Ins, 5/8 gyp Ivl 3 finish, Dens Glass	6,000	sf	18.00	\$ \$	- 108,000	
Interior wall soon rated gyp Misc soffits in existing cooridor / MEP	1,125 500	sf sf	9.00 10.00	\$ \$	10,125 5,000	
Touch Up Allowance @ Reno Area	1	ea	2,500.00	\$ \$	2,500	
TILE & STONE	3,600			\$	-	
ACOUSTICAL CEILINGS	3,600			\$	19,800	
ACT	3,600	sf	5.50	\$ \$	19,800 -	
WOOD FLOORING CARPET & RESILIENT FLOORING	3,600			\$	-	
	3,600	of	9.00	\$ \$	48,600	
Flooring alowance new Vapor Mitigation New SOG	3,600	sf sf	9.00 4.50	5 5 5	32,400 16,200 -	
RESINOUS FLOORING	3,600			\$	-	
PAINTING & WALLCOVERING	3,600	1		\$	13,800	
Interior walls / frames / ceilings Touch Up Allowance @ Reno Area	3,600 1	sf ls	3.50 1,200.00	\$ \$ \$	12,600 1,200	
MISC. SPECIALTIES	3,600			\$	14,000	
Misc classroom items / brds / screens / etc.	4	ea	3,500.00	\$ \$	14,000	
EQUIPMENT FOOD SERVICE EQUIPMENT	3,600 3,600			\$ \$	-	
FURNISHINGS	3,600			\$	-	
WINDOW TREATMENT	3,600			\$	5,100	
Window Treatment Manual	1,020	sf	5.00	\$ \$ \$	5,100	
LABORATORY CASEWORK	3,600			\$ \$	-	
SPECIAL CONSTRUCTION	3,600			\$	-	
ELEVATORS FIRE PROTECTION	3,600 3,600			<u>\$</u> \$	- 23,509	
FIRE PROTECTION	3,000				23,309	
Assume existing Heads Wet FP Heads	34	hd	\$85.0	\$	2,914	
Pipe & Fittings					_,,	
Wet Branch Piping Distribution	343	lf	\$19.0	\$	6,514	
Wet Main Piping Distribution (2 1/2" Sprinkler Pipe Loop) Conn & Tie to existing	100 1	lf ls	\$45.0 \$3,000.0	\$ \$	4,500 3,000	
General			6000.0	6	000	
Calculations, Engineering, Drawings State Permits & Fees	1	md ls	\$980.0 \$1,200.0	\$ \$	980 1,200	
Misc Bracing & Fire Stopping	3,600	ls	\$1,200.0	\$	3,600	
Flow Test	1	ls	\$800.0	\$ \$	800	
PLUMBING Excludes bathroom modifications	3,600	_		\$	21,190	
General						
Coordination Drawings Project Management	3	md	728.00 728.00	\$ \$	2,184	
Project Management Coring/Firestopping start up and testing	1 0 1	md md md	728.00 728.00 728.00	\$ \$ \$	728 - 728	
Natural Gas Piping						

Conceptual Estimate Estimate Detail SHAWMUTAIternitive 1B- New 2 Lvl Addition						Hardy Elementry Schot Town of Arlington M 14-Feb-
TRADE	QTY	UNIT	UNIT PRICE		OTAL COST	COMMENTS
1/2" Natural Gas Piping to new DX units HVAC Connections gas supply	200 1	lf ea	35.00 300.00	\$ \$	7,000 300	
Roof Drainage Roof drains	2	ea	2,500.00	\$	5,000	
4 "piping	100	lf	50.00	\$	5,000	
Final connections to existing	1	ea	250.00	\$ \$	250	
				\$	-	
HVAC	3,600			\$	146,960	
General						
General						
Independent Testing & Balancing	3,600	sf	0.65	\$	2,340	
Hoisting and Rigging	1	ls Md	\$2,000.0 \$800.0	\$ \$	2,000 800	
Coordination Drawings Project Management	5	Md	\$1,100.0	э \$	5,500	
Startup, Testing & Commissioning Process	1	Md	\$1,100.0	\$	1,100	
Fees & Permits						
Vibration Isolation & Seismic Restraint	3,600	sf	\$0.5	\$	1,800	
Radon Venting System allowance	NIC					
Bonding	1	ls	1,500.00	\$	1,500	
Heat & Cooling Equipment / Systems						
DX Unit Roof Top	12	ton	\$2,000.0	\$	24,000	
VAV	4	ea	\$1,500.0	\$	6,000	
Final connections						
Final Connections	3,600	sf	\$0.7	\$	2,520	
Sheet Metal						
Galvanized Supply, Return & Exhaust Air Sheet Metal	3,600	lbs	\$11.0	\$	39,600	
Outside Air Duct tie to existing	500	lbs	\$15.0	\$	7,500	
Furnish Fire/Smoke Dampers	4	ea	\$550.0	\$	2,200	
Grilles	100	sf	\$15.0	\$	1,500	
Installation labor on DX	1	ea	\$1,800.0	\$	1,800	
Insulation	2.000	c	¢11.0	¢	20 (00	
Mechanical Equipment & Fitting Insulation	3,600	sf	\$11.0	\$	39,600	
Local Controls	3,600	sf	\$2.0	\$	7,200	
ELECTRICAL	3,600			\$	95,620	
	5,000				,0,020	
General Electrical Requirements Permit Fee(s)	NIC			l		
Bond & Misc	3,600	sf	\$0.50	\$	1,800	
Temporary Electrical Requirements	2 (00	. 6	¢1.00	e	2 (00	
Temporary Light & Power Temporary Power to SDC Trailer/Office	3,600 1	sf ls	\$1.00 \$3,500.00	\$ \$	3,600 3,500	
Temporary Fire Alarm	3,600	sf	\$0.50	\$	1,800	
Power up grade at distribution Redistribution / replace / TBD for addition allowance	1	ls	\$5,000.00	\$	5,000	
Feeder - 200 amp 3-ph 208/120	100	15 1f	\$250.00	\$	25,000	
Branch Circuit Wiring						
GENERAL POWER & LIGHTING BCW						
20Amp Commercial Grade Duplex Receptacle	7	ea	\$180.00	\$	1,296	
20Amp Commercial Grade Combination Duplex/USB Receptacle	4	ea	\$190.00	\$	684	
120V Power to Fire Smoke Damper	1	ls la	\$1,000.00 \$1,500.00	\$ \$	1,000	
Equipment	1	ls	\$1,500.00	э	1,500	
Lighting Controls						
GENERAL SWITCHING (SP) Switch	4	ea	\$180.00	\$	720	

Conceptual Estimate Estimate Detail SHAWMUT Alternitive 1B- New 2 Lvl Addition miga ad Contraction						Hardy Elementry School Town of Arlington MA 14-Feb-17
TRADE	QTY	UNIT	UNIT PRICE		FOTAL COST	COMMENTS
(SP/SP oc) Switch	4	ea	\$280.00	\$	1,120	
Fire Alarm						
FIRE ALARM EQUIPMENT	3,600	sf	\$3.50	\$	12,600	
Exstend existing system						
Lighting Lighting allowance	3,600	sf	\$10.00	\$	36,000	
	5,000	51	\$10.00	\$	-	
TEL-DATA	3,600			\$	10,000	
Tel-Data	4	ea	2,500	\$	10,000	
			,	\$	-	
				\$ \$	-	
SECURITY SITEWORK	3,600 3,600			\$ \$	- 72,584	
EARTHWORK	5,000			φ	12,304	
Site Prep						
Dust control / Street sweeping Site Access / Modify Utilities	4	wks ls	\$500.00 \$22,000.00	\$ \$	2,000 22,000	
Site fence / ersion control / relocate playground / protect	1	ls	\$10,000.00	\$ \$	10,000	
General Earthwork			P2 C2 C2	¢	0.000	
Tree & Stump removal Site Cuts to Fills	1 400	ea cy	\$2,500.00 \$10.00	\$ \$	2,500 4,000	
Site Cuts to Dispose Offsite	400	cy	\$16.00	\$	6,400	
Hand ex ftg's at existing	20	cy	\$75.00	\$	1,500	
6" Dense Graded Crushed Stone under grass block pavers & cobble gutter		cy	\$32.00	\$	-	
Finegrade Paved Area Foundation						
Prep for SOG & Footings	1,500	sf	\$3.50	\$	5,250	
Over-Excavate existing Fill & Stockpile on site & protect	22	cy	\$22.00	\$	489	
Over-Excavate existing Fill & Dispose excess offsite Backfill basement foundation w/ off site structural material	10 89	cy	\$14.00 \$40.00	\$ \$	140 3,556	
Soil Retention / Shoring System	NIC	cy	\$40.00	φ	5,550	
Mass Rock - Hammer	NIC					
Rock Removal In Place	NIC		075.00	¢	7.00	
Excavate & BF under slab-on-grade interior / untilities Winter Conditions	10 NIC	cy	\$75.00	\$	750	
Under SOG Venting Radon	NIC					
Underpinning Concrete	NIC					
UTILITIES						
Storm Drainage	200	lf	\$50.00	\$	10,000	
4" Perf. Foundation Drain - Includes Pipe						
Sewer Drainage	NIC					
Water Service	NIC					
Gas Service						
Relocation of existing utilities	1	allw	\$4,000.00	\$	4,000	
Site Electrical	NIC					
Telecommunications	NIC		_			
Excavate & BF under slab-on-grade interior / untilities		cy	\$75.00	\$	-	
	2.60			e		
PILES LANDSCAPE	3,600 3,600			<u>\$</u> \$	28,628	

Conceptual Estimate Estimate Detail SHAWMUT Alternitive 1B- New 2 Lvl Addition						Hardy Elementry School Town of Arlington MA 14-Feb-17
TRADE	QTY	UNIT	UNIT PRICE		FOTAL COST	COMMENTS
Planter bed restoration around new addition - Soil, Mulch, Annuals, trees Hardscape	3,000	sf	6.00	\$	18,000	
Site Concrete at new exit 4" Concrete Pavement - Walkways with WWM for Reinforcing	500	sf	6.00	\$	3,000	
ASPHALT PAVING						
Asphalt Paving repair						
1-1/2" Bit Top Course - Drive	111	sy	15.00	\$	1,667	
1-1/2" Bit Binder Course - Drive	122	sy	14.00	\$	1,711	
Bit Roadway Patching	10	ton	175.00	\$	1,750	
Line Striping - Stalls	1	ls	2,500.00	\$	2,500	
		Ţ		\$	-	
				\$ \$	-	
TOTAL DIRECT COSTS				\$	1,424,753	

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Co	onc	ept	ual	E	stin	nate
			_			

Estimate Detail

IRADE	QTY	UNIT	UNIT PRICE		TOTAL COST	COMMENTS
PROJECT REQUIREMENTS	5,400			\$	97,500	
				\$	-	
General Requirements	5,400	sf	1.00	\$	5,400	
Survey Equipment & Supplies	1	ls	3,500	\$	3,500	
Project Signage	1	ls	1,500	\$	1,500	
Temporary Toilets	7	mon	600	\$	4,200	
Adjacent Building Perimeter Protection	7	mon	500	\$	3,500	
Temporary Fire Protection & Ext.	7	mon	500	\$	3,500	
Safety Compliance Material & Labor	7	mon	1,000	\$	7,000	
Ladders, ramps & Stairs (Temporary)	1	ls	10,000	\$	10,000	
Temporary Building Enclosures	1	mon	4,000	\$	4,000	
Small Tools and Equipment / Storage	1 7	ls	4,500	\$ \$	4,500	
Progress Photographs Rubbish Removal & Dumpster	10	mon ea	300 650	э \$	2,100 6,500	
Interim Clean-up	60	day	680	\$	40,800	
Trash Chutes & Hoppers	NIC	uay	000	φ	40,000	
Winter Protection	NIC					
General Weather Protection	1	mon	1,000	\$	1,000	
Snow Removal	NIC		1,000	Ψ	1,000	
				\$	-	
				\$	-	
				\$	-	
DEMOLITION	5,400			\$	28,000	
Permoval of MEP work (Cut & Con)	50	he	160.00	\$	8,000	
Removal of MEP work (Cut & Cap)		hrs				
Remove interior / exterior 4man crew Equipment for demo	6 5	cd day	2,400.00 500.00	\$ \$	14,400 2,500	
Equipment for demo Dumpsters	5	day ea	500.00 700.00	\$ \$	2,500	
Temp protection of existing surfaces	500	sf	2.00	\$	1,000	
Salvage & Storage	7	mon	200.00	\$	1,000	
Salvage & Stolage	7	mon	200.00	φ	1,400	
ONCRETE	5,400			\$	84,864	
CONCRETE						
Foundation						
First Floor Foundation						
Floor Repair from plumbing	10	су	600.00	\$	6,000	
Footings Spread 1x3	22	cy	\$450.00	\$	10,000	
Foundation walls - high walls ov 4	22	cy	\$550.00	\$	12,222	
Foundation walls - high walls ov 8'	30	су	\$650.00	\$	19,259	
Isolated column footings	4	су	\$550.00	\$	2,200	
Piers	4	cy	\$600.00	\$	2,400	
6" slab on grade	1,800	sf	\$6.00	\$	10,800	
Water based curing compound		sf	\$0.25			
	1,800	1		\$	450	
Install base plates, anchor bolts	10	ea	\$200.00	\$	2,000	
Pump, crane and misc. accessories	1	ls	\$5,000.00	\$	5,000	
Misc. equipment pads	1	ls	\$2,000.00	\$	2,000	
4" slab on deck	1,782	sf	\$6.00	\$	10,692	
Water based curing compound B-1	5,400	sf	\$0.25	\$	1,350	
Vapor barrier under slab / control / exp joint on grade	1,960	sf	\$0.25	\$	490	
				\$	-	
				\$	-	
(100) TH	:					
IASONRY	5,400			\$	213,300	
Brick Veneer	5,400	sf	35.00	\$	189,000	
Scaffolding & Planks Exterior	5,400	sf	4.50	\$	24,300	
See AVB / Ins trades				\$	-	Carry in div 7
	I			1		
TRUCTURAL STEEL	5,400	1		\$	216,768	
uilding Steel						
-	I	1		1		
Columns W (Assumed, Mixed Based on Location) Hortizontal 2nd floor	21.6 13.5	tons	\$4,000.00 \$4,000.00	\$ \$	86,400 54,000	

Conceptual Estimate Estimate Detail

Stawmur SHAWMUT Alternitive 1C- New 3 Lvl Addition

TRADE	QTY	UNIT	UNIT PRICE		TOTAL COST	COMMENTS
Hortizontal W roof	10.1	tons	\$4,000.00	\$	40,500	
Mise. Dunnage etc.	1.0	tons	\$4,000.00	\$	4,000	
Connections, plates, fasteners - 10% of tonnage	2.3	tons	\$3,000.00	\$	6,784	
Bent Plates / Pour Stops	Incl					
Metal Deck						
vietai Deck						
1st floor	1,782	sf	\$3.50	\$	6,237	
1st floor	1,782	sf	\$4.00	\$	7,128	
Roof Deck	1,782	sf	\$4.50	\$	8,019	
Other						
Crane Mats / Safety Protection / Control & Flag Men	1	ls	\$2,500.00 \$6.00	\$	2,500	
Safety railings for fall protection @ deck perimeter	200	lf	\$0.00	\$ \$	1,200	
				\$	-	
				\$	-	
MISCELLANEOUS METALS	5,400			\$	13,500	
Misc Metals				\$	-	
Misc allowance / Lintels / Etc.	5,400	sf	2.50	\$ \$	13,500	
ROUGH CARPENTRY	5,400			\$	37,800	
Rough Carpentry (General Trades) Floor & Openings temp walls Wall Blocking & Div 8,10,12 Install	5,400	sf sf	1.00 6.00	\$ \$	5,400	
wall Blocking & Div 8,10,12 Install	5,400	SI	0.00	5 \$	32,400	
				\$	-	
				\$ \$	-	
FINISH CARPENTRY / MILLWORK	5,400			\$	30,000	
Interior Finish Carpentry Class room casework allowance	6	ea	5,000.00	\$ \$	30,000	
	0	cu	5,000.00	\$	-	
				\$	-	
WATERPROOFING / AVB / INSULATION	5,400			\$	49,100	
Exterior walls / Cavity wall 2" Rigid / AVB	5,950	sf	8.00	\$	47,600	
Damp proof foundation Insulate floor perm.	600 600	sf sf	1.00 1.50	\$ \$	600 900	
				\$	-	
WOOD SIDING	5,400			\$	-	
ROOFING	5,400			\$	71,260	
EPDM Roof / 4 ' Insulation / Gyp sheathing	1,800	sf	30.00	\$ \$	- 54,000	
Parapet wall cap AL	200	sf	15.00	\$	3,000	
Sheet metal flashing	230	lf	12.00	\$	2,760	
Metal roof leaders / scupper	100	lf	25.00	\$	2,500	
Expansion joints	180	lf	50.00	\$ \$	9,000	
SPRAY-APPLIED FIREPROOFING	5,400			\$	6,683	
Spray-Applied Fireproofing	2,970	sf	2.25	\$	6,683	Columns & Beams
				\$ \$	-	
PENETRATION FIRESTOPPING	5,400	1				
			1.00	\$ ¢	5,400	
Penetration Fire stopping	5,400	sf	1.00	\$ \$	5,400	
				\$ \$	-	
	I	1				
CAULKING / JOINT SEALANTS	5,400			\$	8,100	
Caulking	5,400	sf	1.50	\$ \$	8,100	
				\$	-	
				\$	-	
DOORS, FRAMES & HARDWARE	5,400			\$	9,000	
	6	ea	550.00	\$	3,300	
D1 - Flush HM door			250.00	÷.	A 100	
DI - Flush HM door Single Frames Hardware	6	ea ea	350.00 600.00	\$ \$	2,100 3,600	

Estimate Detail HAWMUTAIternitive 1C- New 3 Lvl Addition ga and Construction						Town of Arlington MA 14-Feb-17
TRADE	QTY	UNIT	UNIT PRICE		TOTAL COST	COMMENTS
NTRANCES / STOREFRONTS	5,400			\$	-	
VINDOWS	5,400		100.00	\$	139,050	
AL Windows Flashing & Sealing	1,350 338	sf lf	100.00 12.00	\$ \$	135,000 4,050	
	550		12.00	\$	-	
				\$	-	
BLASS & GLAZING	5,400			\$	3,000	
Door / Borrow Lite	60	sf	50.00	\$	3,000	
				\$	-	
RYWALL	5,400			\$	192,750	
Wall Types Exterior wall assembly LMG, Ins, 5/8 gyp lvl 3 finish, Dens Glass	9,000	sf	18.00	\$ \$	- 162,000	
Interior walls non rated gyp	2,250	sf	9.00	\$	20,250	
Misc soffits in existing cooridor / MEP	800	sf	10.00	\$	8,000	
Touch Up Allowance @ Reno Area	1	ea	2,500.00	\$	2,500	
				\$	-	
ILE & STONE	5,400			\$	-	
ACOUSTICAL CEILINGS	5,400			\$	24,300	
ACT	5,400	sf	4.50	\$ \$	24,300	
	5 400	11				
VOOD FLOORING CARPET & RESILIENT FLOORING	5,400 5,400			\$ \$	- 72,900	
looring alowance new	5,400	sf	9.00	\$	48,600	
Vapor Mitigation New SOG	5,400	sf	4.50	\$	24,300	
				\$ \$	-	
ESINOUS FLOORING	5,400			\$		
AINTING & WALLCOVERING	5,400	1		ŝ	20,100	
Interior walls / frames / ceilings	5,400	sf	3.50	\$	18,900	
Touch Up Allowance @ Reno Area	1	ls	1,200.00	\$ \$	1,200	
AISC. SPECIALTIES	5 400					
Misc classroom items / brds / screens / etc.	5,400	ea	3,500.00	\$ \$	21,000 21,000	
			-,	\$		
QUIPMENT	5,400			\$	-	
OOD SERVICE EQUIPMENT URNISHINGS	5,400			\$	-	
VINDOW TREATMENT	5,400 5,400			\$ \$	- 6,750	
Window Treatment				\$	-	
Manual	1,350	sf	5.00	\$ \$	6,750	
				\$	-	
				\$ \$	-	
				\$	-	
ABORATORY CASEWORK	5,400			\$	-	
PECIAL CONSTRUCTION LEVATORS	5,400 5,400			<u>\$</u> \$	-	
IRE PROTECTION	5,400			\$	30,023	
IRE PROTECTION						
leads						
Wet FP Heads	51	hd	\$85.0	\$	4,371	
ripe & Fittings						
Wet Branch Piping Distribution	514	lf	\$19.0	\$	9,771	
Wet Main Piping Distribution (2 1/2" Sprinkler Pipe Loop)	100	lf	\$45.0	\$	4,500	
Conn & Tie to existing	1	ls	\$3,000.0	\$	3,000	
General						
Calculations, Engineering, Drawings	1	md	\$980.0	\$	980	
State Permits & Fees	1	ls	\$1,200.0	\$	1,200	
Misc Bracing & Fire Stopping	5,400	ls	\$1.0	\$	5,400	
Flow Test	1	ls	\$800.0	\$	800	
		1				i i

Conceptual Estimate Estimate Detail HAWMUT Alternitive 1C- New 3 Lvl Addition						Hardy Elementry Schu Town of Arlington 1 14-Feb
TRADE	QTY	UNIT	UNIT PRICE		TAL OST	COMMENTS
PLUMBING	5,400	T		\$	21,190	
General						
Coordination Drawings Project Management	3	md md	728.00 728.00	\$ \$	2,184 728	
Coring/Firestopping	0	md	728.00	\$	-	
start up and testing	1	md	728.00	\$	728	
Excludes bathroom modifications						
Natural Gas Piping						
1/2" Natural Gas Piping to new DX units HVAC Connections gas supply	200	lf ea	35.00 300.00	\$ \$	7,000 300	
		ł		ļ		
Roof Drainage						
Roof drains	2	ea	2,500.00	\$	5,000	
4 "piping Final connections to existing	100	lf ea	50.00 250.00	\$ \$	5,000 250	
Final connections to existing	1	ea	230.00	\$	230	
				\$	-	
IVAC	5,400			\$	213,190	
General						
Independent Testing & Balancing	5,400	sf	0.65	\$	3,510	
Hoisting and Rigging	1	ls	\$2,000.0	\$	2,000	
Coordination Drawings	1	Md	\$800.0	\$	800	
Project Management Startup, Testing & Commissioning Process	5	Md Md	\$1,100.0 \$1,100.0	\$ \$	5,500 1,100	
Fees & Permits	1	Iviu	\$1,100.0	φ	1,100	
Vibration Isolation & Seismic Restraint	5,400	sf	\$0.5	\$	2,700	
Radon Venting System allowance	NIC				,	
Bonding	1	ls	1,500.00	\$	1,500	
			-,		-,	
Heat & Cooling Equipment / Systems	10	4	¢2 000 0	¢	26,000	
DX Unit Roof Top VAV	18 6	ton ea	\$2,000.0 \$1,500.0	\$ \$	36,000 9,000	
		- Cu	\$1,000.0	Ŷ	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Final connections Final Connections	5,400	sf	\$0.7	\$	3,780	
	5,100	51	ψ0.7	Ψ	5,700	
Sheet Metal						
Galvanized Supply, Return & Exhaust Air Sheet Metal	5,400	lbs	\$11.0	\$	59,400	
Outside Air Duct tie to existing	700	lbs	\$15.0	\$	10,500	
Furnish Fire/Smoke Dampers Grilles	6 140	ea sf	\$550.0 \$15.0	\$ \$	3,300 2,100	
Installation labor on DX	140	ea	\$1,800.0	\$	1,800	
	-			Ť	-,	
Insulation						
Mechanical Equipment & Fitting Insulation	5,400	sf	\$11.0	\$	59,400	
Local Controls	5,400	sf	\$2.0	\$	10,800	
	, , , , , , , , , , , , , , , , , , ,	ļ			,	
ELECTRICAL	5,400	1		\$	122,730	
Canaral Flactrical Requirements		ĺ				
General Electrical Requirements Permit Fee(s)				l		
Bond & Misc	5,400	sf	\$0.50	\$	2,700	
Temporary Electrical Requirements Temporary Light & Power	5,400	sf	\$0.50	\$	2,700	
Temporary Power to SDC Trailer/Office	1	ls	\$3,500.00	\$	3,500	
Temporary Fire Alarm	5,400	sf	\$0.50	\$	2,700	
		Í				
Power up grade at distribution			ØF 000 00	¢	5 000	
Redistribution / replace / TBD for addition allowance Feeder - 200 amp 3-ph 208/120	1 100	ls lf	\$5,000.00 \$250.00	\$ \$	5,000 25,000	
100ar - 200 amp 3-pit 200/120	100	11	\$230.00	¢	25,000	
		ĺ				
Branch Circuit Wiring		4				

Conceptual Estimate Estimate Detail SHAWNUT Alternitive 1C- New 3 Lvl Addition					Hardy Elementry Schoo Town of Arlington M 14-Feb-1
TRADE	QTY	UNIT	UNIT PRICE	TOTAL COST	COMMENTS
GENERAL POWER & LIGHTING BCW 20Amp Commercial Grade Duplex Receptacle 20Amp Commercial Grade Combination Duplex/USB Receptacle 120V Power to Fire Smoke Damper Equipment	11 5 1 1	ea ea ls ls	\$180.00 \$190.00 \$1,000.00 \$1,500.00	\$ 1,944 \$ 1,026 \$ 1,000 \$ 1,500	
Lighting Controls GENERAL SWITCHING (SP) Switch OCCUPANCY / PHOTO SENSORS	6	ea	\$180.00	\$ 1,080	
(SP/SP oc) Switch Fire Alarm	6	ea	\$280.00	\$ 1,680	
FIRE ALARM EQUIPMENT Exstend existing system	5,400	sf	\$3.50	\$ 18,900	
Lighting Lighting allowance	5,400	sf	\$10.00	\$ 54,000 \$ -	
TEL-DATA	5,400			<u>\$</u> - \$15,000	
	5,400			<u> </u>	
Telecommunications	6	ea	2,500	\$ 15,000 \$ - \$ - \$ -	
SECURITY	5,400			s - s -	
SITEWORK EARTHWORK	5,400			\$ 77,784	
Site Prep Dust control / Street sweeping Site Access / Modify Utilities Site fence / ersion control / relocate playground / protect	4 1 1	wks ls ls	\$500.00 \$22,000.00 \$10,000.00	\$ 2,000 \$ 22,000 \$ 10,000	
General Earthwork Tree & Stump removal Site Cuts to Fills	1 600	ea cy	\$2,500.00 \$10.00	\$ 2,500 \$ 6,000	
Site Cuts to Dispose Offsite Hand ex ftg's at existing 6" Dense Graded Crushed Stone under grass block pavers & cobble gutter Finegrade Paved Area	600 20	cy cy cy	\$16.00 \$75.00 \$32.00	\$ 9,600 \$ 1,500 \$ -	
Foundation Prep for SOG & Footings Over-Excavate existing Fill & Stockpile on site & protect Over-Excavate existing Fill & Dispose excess offsite Backfill basement foundation w/ off site structural material	1,500 22 10 89	sf cy cy cy	\$3.50 \$22.00 \$14.00 \$40.00	\$ 5,250 \$ 489 \$ 140 \$ 3,556	
Soil Retention / Shoring System Mass Rock - Hammer Rock Removal In Place Excavate & BF under slab-on-grade interior / untilities Winter Conditions	NIC NIC NIC 10 NIC	су	\$75.00	\$ 750	
Under SOG Venting Radon Underpinning Concrete	NIC NIC				
UTILITIES					
Storm Drainage 4" Perf. Foundation Drain - Includes Pipe	200	lf	\$50.00	\$ 10,000	
Sewer Drainage	NIC				

TRADE	QTY	UNIT	UNIT PRICE		TOTAL COST	COMMENTS
Vater Service	NIC					
Gas Service						
Relocation of existing utilities	1	allw	\$4,000.00	\$	4,000	
ite Electrical	NIC					
lecommunications	NIC			\$	-	
ILES	5 400					
ANDSCAPE	5,400 5,400			<u>s</u>	- 28,628	
				1	,	
Planter bed restoration around new addition - Soil, Mulch, Annuals, trees	3,000	sf	6.00	\$	18,000	
Iardscape						
ite Concrete at new exit						
4" Concrete Pavement - Walkways with WWM for Reinforcing	500	sf	6.00	\$	3,000	
4 Concrete Favement - waikways with w with for Kennorcing	500	51	0.00	¢	3,000	
ASPHALT PAVING						
Asphalt Paving repair						
1-1/2" Bit Top Course - Drive	111	sy	15.00	\$	1,667	
1-1/2" Bit Binder Course - Drive	122	sy	14.00	\$	1,711	
Bit Roadway Patching	10	ton	175.00	\$	1,750	
Line Striping - Stalls	1	ls	2,500.00	\$	2,500	
		ļ		\$	-	
				\$ \$	-	

tivity ID	Activity Name	Orig Dur	Rem Start Dur	Finish	2017 2018 2019 2020 F M M J Jul A S Oct N D J F M A M J Jul A S Oct N D J F M A M J Jul A S Oct N D J F M A M J Jul A S Oct N D J F M A M J Jul A S Oct N D J F M A M J Jul A S Oct N D J F M A M J Jul S Oct N D J F M A M J Jul S Oct N D J F M M J Jul S O
TOWN OF	ARLINGTON - HARDY ELEMENTARY				V 30+Aug+18, TOWN OF ARLINGTON - HARDY ELEMENTARY
	LEMENTARY SCHOOL STUDY FOR EXPANSION				08-Feb-17, HARDY ELEMENTARY \$CHOOL \$TUDY FOR EXPANSION
A4 550	HMFH STUDY FOR EXPANSION DOCUMENT RELEASED	1	1 12-Dec-16	12-Dec-16	FH STUDY FOR EXPANSION DOCUMENT RELEASED
A4 530	SHAWMUT RESPONSE TO HMFH STUDY	1	1 02-Feb-17	02-Feb-17	SHAWMUT RESPONSE TO HMFH STUDY
A4 580	SHAWMUT REVIEW HMFH STUDY WITH PROJECT TEAM	1	1 08-Feb-17	02-1 eb-17	
	STRUCTION	•	1 001 0011	0010011	196
					18-7 16-Jun-17, HARDY SCHOOL - ARLINGTON - CM RFP DELIVERABLES
	CHOOL - ARLINGTON - CM RFP DELIVERABLES			10 M 17	
A1 000	RFP ISSUED - ARLINGTON - CM AT RISK 149A	0	0	19-May-17	 ♦ RFP ISSUED - ARLINGTON - CM AT RISK 149A ♦ RFP RESPONSE DUE TO ARLINGTON
A1010	RFP RESPONSE DUE TO ARLINGTON	0	0 00 1 47	05-Jun-17	SC DEFINES SHORT LIST OF CM FIRMS
A1020	SC DEFINES SHORT LIST OF CM FIRMS	0	0 08-Jun-17	08-Jun-17	I SHORT LIST OF CM FIRMS THE SBC
A1 030 A1 040	SHORT LIST OF CM FIRMS PRESENTS TO THE SBC SBC APPROVED SELECTION	0	0 09-Jun-17 0 09-Jun-17	09-Jun-17 09-Jun-17	I SBC APPROVED SELECTION
A1040	ANTICIPATED AWARD - CONSTRUCTION MANAGEMENT SERVICES	0	0 16-Jun-17	16-Jun-17	ANTICIPATED AWARD - CONSTRUCTION MANAGEMENT SERVICES
		0			SECTION OF SHAWMUT FOR CONSTRUCTION MANAGEMENT SERVICES
A1 060	SECTION OF SHAWMUT FOR CONSTRUCTION MANAGEMENT SERVICES	U	0 16-Jun-17	16-Jun-17	
	TRUCTION PERIOD TEAM MEETINGS				176- 01-Mar-18, PRECONSTRUCTION PERIOD TEAM MEETINGS
A1070	KICK OFF MEETING FOR PRECONSTRUCTION	0	0 20-Jun-17	20-Jun-17	
A1 080	PRECONSTRUCTION TEAM MEETINGS (REPORTS TO ON SITE START)	176	176 20-Jun-17	01-Mar-18	
A1 090	PRECONSTRUCTION TEAM MEETINGS COMPLETE	0	0	01-Mar-18	
	ON PROJECT DELIVERABLES				11-Dec-17, CM PRECON PROJECT DELIVERABLES
DOCUME	NT DEVELOPMENT				115 ⁻ ▼ 11-Dec-17, DOCUMENT DEVELOPMENT
					25 02-Aug-17, SCHEMATIC DOCUMENT DEVELOPMENT
A1100	SCHEMATIC CONSTRUCTION DOCUMENTS COMPLETED	0	0 28-Jun-17	28-Jun-17	SCHEMATIC CONSTRUCTION DOCUMENTS COMPLETED
A1110	CONTROL BUDGET REVIEW PERIOD FOR SD DOCUMENTS	18	18 29-Jun-17	25-Jul-17	
A1160	ARLINGTON TEAM APPROVAL OF CONTROL BUDGET AND E/R PHASING	2	2 26-Jul-17	27-Jul-17	I ARLINGTON TEAM APPROVAL OF CONTROL BUDGET AND E/R PHASING
A1170	SET BASELINE FOR CONSTRUCTION SCHEDULE	2	2 01-Aug-17	02-Aug-17	
A1180	MILESTONE FOR PHASING PLAN, SCHEDULE, AND CONTROL BUDGET APPROVAL	0	U	02-Aug-17*	MILESTONE FOR PHASING PLAN, SCHEDULE, AND CONTROL BUDGET APPROVAL 56 14 18-Sep-17, DESIGN DEVELOPMENT
A1190	DEVELOPMENT DESIGN DEVELOPMENT DOCUMENTS	30	30 28-Jun-17	09-Aug-17	
A1130	DD COST ESTIMATE SET DUE TO COST ESTIMATORS AT SHAWMUT AND THIRD PA	0	0 10-Aug-17	10-Aug-17	DD COST ESTIMATE SET DUE TO COST ESTIMATORS AT SHAWMUT AND THIRD PARTY
A2000	DESIGN AND CONSTRUCTABILITY REVIEW (THIRD PARTY)	18	18 10-Aug-17	05-Sep-17	
A2020	DESIGN AND CONSTRUCTABILITY REVIEW (MIRCH ARTH)	18	18 10-Aug-17	05-Sep-17	DESIGN AND CONSTRUCTABILITY REVIEW (SDC)
A2030	DESIGN AND CONSTRUCTABILITY REVIEW (CX AGENT)	18	18 10-Aug-17	05-Sep-17	DESIGN AND CONSTRUCTABILITY REVIEW (CX AGENT)
A2040	PROJECT DESIGN SUMMARY/ANALYSIS	18	18 10-Aug-17	05-Sep-17	PROJECT DESIGN SUMMARY/ANALYSIS
A2070	SHAWMUT DRAFT VE REVIEW DOCUMENT - COMPLETE	0	0	05-Sep-17	SHAWMUT DRAFT VE REVIEW DOCUMENT - COMPLETE
A2050	SHAWMUT COST ESTIMATES DUE TO PROJECT TEAM	0	0 06-Sep-17	06-Sep-17	I SHAWMUT COST ESTIMATES DUE TO PROJECT TEAM
A2080	REVIEW OF ESTIMATES BY PROJECT TEAM	0	0 06-Sep-17	06-Sep-17	I REVIEW OF ESTIMATES BY PROJECT TEAM
A2090	COST ESTIMATES COMPLETE - RECONCILE- PROJECT TEAM	5	5 06-Sep-17	12-Sep-17	COST ESTIMATES COMPLETE - RECONCILE - PROJECT TEAM
A2100	RECONCILED COST ESTIMATES DUE	2	2 06-Sep-17	07-Sep-17	I RECONCILED COST ESTIMATES DUE
A2060	THIRD PARTY COST ESTIMATES DUE TO PROJECT TEAM	0	0 06-Sep-17	06-Sep-17	I THIRD PARTY COST ESTIMATES DUE TO PROJECT TEAM
A2110	SCHOOL BUILDING COMMITTEE MEETING TO VOTE ON VE ITEMS - DATE TBD IF RE	0	0	07-Sep-17	SCHOOL BUILDING COMMITTEE MEETING TO VOTE ON VE ITEMS - DATE TBD IF REQ'D
A2130	BUILDING COMMITTEE MEETING (REVIEW DD SCOPE, SCHEDULE, AND BUDGET)	1	1 08-Sep-17	08-Sep-17	I BUILDING COMMITTEE MEETING (REVIEW DD SCOPE, SCHEDULE, AND BUDGET)
A2150	DESIGN DEVELOPMENT PERIOD COMPLETE	0	0	08-Sep-17	
A4290	ARLINGTON TOWN MEETING - PROJECT FUNDING APPROVAL	0	0 18-Sep-17	18-Sep-17	I ARLINGTON TOWN MEETING - PROJECT FUNDING APPROVAL
60% CON	STRUCTION DOCUMENT DEVELOPMENT				61
A2210	60% CONSTRUCTION DEVELOPMENT DOCUMENTS COMPLETED	40	40 10-Aug-17	05-Oct-17	
A2220	CONSTRUCTABILITY UPDATE AND SCHEDULE REVIEW - PROJECT TEAM	15	15 06-Oct-17	26-Oct-17	CONSTRUCTABILITY UPDATE AND SCHEDULE REVIEW - PROJECT TEAM
A2230	SHAWMUT VE DOCUMENT COMPLETE	15	15 06-Oct-17	26-Oct-17	SHAWMUT VE DOCUMENT COMPLETE
Primavera Sy	/stems. Inc.				Shawmut Design and Construction
	Completed				Shawmut Design and Construction
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					F M A M J Jul A S Oct N D J F M Apr M J Jul A S Oct N D J F M Apr M J Jul A S Oct N D J F M A M J Jul A S Oct N D J F M A M J
40.050	60% COST ESTIMATE (THIRD PARTY)	15	15 06-Oct-17	26-Oct-17	60% COST ESTIMATE (THIRD PARTY)
A2250	60% COST ESTIMATE (SHAWMUT)	15	15 06-Oct-17	26-Oct-17	60% COST ESTIMATE (SHAWMUT)
A2260	ESTIMATE AND DOCUMENT RECONCILIATION PERIOD	5	5 30-Oct-17	03-Nov-17	ESTIMATE AND DO CUMENT RECONCILIATION PERIOD
90% CONST	RUCTION DOCUMENT DEVELOPMENT				39 01-Dec 17, 90% CONSTRUCTION DOCUMENT DEVELOPMENT
A2320	90% CONSTRUCTION DEVELOPMENT DOCUMENTS COMPLETED	25	25 06-Oct-17	09-Nov-17	90% CONSTRUCTION DEVELOPMENT DOCUMENTS COMPLETED
A2330	90% REVIEW BY PROJECT TEAM	14	14 13-Nov-17	01-Dec-17	90% REVIEW BY PROJECT TEAM
	TRUCTION DOCUMENT DEVELOPMENT				20
	100% CONSTRUCTION DOCUMENTS RECORD SET/BID SET COMPLETED	20	20 13-Nov-17	11-Dec-17	100% CONSTRUCTION DOCUMENTS RECORD SET/BID SET COMPLETED
A2360	TEAM REVIEW OF 100% CONSTRUCTION DOCUMENT RECORD SET	1	1 11-Dec-17	11-Dec-17	I TEAM REVIEW OF 100% CONSTRUCTION DOCUMENT RECORD SET
	LOPMENT AND APPROVAL	· ·			120-24-Jan-18, GMP DEVEL OPMENT AND APPROVAL
	EASE GMP #1				100
	EARLY RELEASE CD SET/60% (GMP #1 SET) COMPLETED - READY FOR BID	0	0	05-Oct-17	EARLY RELEASE CD SET/60% (GMP #1 SET) COMPLETED + READY # OR BID
	SHAWMUT SCOPE DEVELOPMENT FINALIZED	20	20 06-Oct-17	02-Nov-17	SHAWMUT SCOPE DEVELOPMENT FINALIZED
-	CATION OF TRADE CONTRACTORS				50 12-Oct-17, PREQUALIFICATION OF TRADE CONTRACTORS
A2390	TEAM DEVELOP RFQ FOR GMP #1 PREQUAL	28	28 03-Aug-17	12-Sep-17	TEAM DEVELOP RFQ FOR GMP #1 PREQUAL
	SUBMIT ADD TO CENTRAL REGISTER	20	20 13-Sep-17	10-Oct-17	SUBMIT ADD TO CENTRAL REGISTER
A2410	SPQ'S DUE AT TOWN HALL	1	1 11-Oct-17	11-Oct-17	I \$PQ'\$ DUE AT TOWN HALL
A2420	FINAL LIST OF APPROVED SUBCONTRACTORS COMPLETE	1	1 12-Oct-17	12-Oct-17	FINAL LIST OF APPROVED SUBCONTRACTORS COMPLETE
GMP #1 TRA	ADES BIDDING				25 12-Dec-17, GMP #1 TRADES BIDDING
A2430	TRADE CONTRACTORS SUBMIT QUESTIONS	0	0 03-Nov-17	03-Nov-17	1 TRADE CONTRACTORS SUBMIT QUESTIONS
A2440	DEADLINE TO ANSWER QUESTIONS	0	0 20-Nov-17	20-Nov-17	I DEADLINE TO ANŚWER QUESTIONS
A2450	FILED SUB TRADE BID DUE AT TOWN HALL	0	0 12-Dec-17	12-Dec-17	I FILED SUB TRADE BID DUE AT TOWN HALL
GMP #1 NON	N TRADES BIDDING	, , , , , , , , , , , , , , , , , , , ,	,		20-V 05-Dec-17, GMP,#1 NON TRADES BIDDING
A2460	NON TRADE INVITATION TO BID	0	0 03-Nov-17	03-Nov-17	1 NON TRADE INVITATION TO BID
A2470	NON TRADE BIDS DUE TO SHAWMUT	0	0 05-Dec-17	05-Dec-17	I NON TRADE BIDS DUE TO SHAWMUT
GMP #1 DEV	/ELOPMENT & APPROVAL	1		1	10-V 26-Dec-17, GMP #1 DEVELOPMENT & APPROVAL
A2480	DESCOPE NON TRADE BIDS & COMPILE GMP #1	10	10 12-Dec-17	26-Dec-17	DE\$COPE NON TRADE BIDS & COMPILE GMP #1
A2490	APPROVALS COMPLETE ARLINGTON TEAM GMP #1	0	0	26-Dec-17	APPROVALS COMPLETE ARLINGTON TEAM GMP #1
BID 100% C	ONSTRUCTION DOCUMENT SET GMP #2				71-24-Jan-18, BID 100% CONSTRUCTION DOCUMENT \$ET GMP#2
A2 500	100% CD SET COMPLETED - READY FOR BID	0	0	11-Dec-17	♦ 100% CD SET COMPLETED - READY FOR BID
	FICATION PROCESS				37 05-Dec-17, PRE-QUALIFICATION PROCESS
	TEAM DEVELOP TRADE BID REQ WITH SHAWMUT	0	0 12-Oct-17	12-Oct-17	TEAM DEVELOP TRADE BID RFQ WITH SHAWMUT
A2520	ADVERTISE FOR PRE-QUALIFICATION FOR TRADE BIDS	0	0 12-Oct-17	12-Oct-17	ADVERTISE FOR PRE-QUALIFICATION FOR TRADE BIDS
	ADD APPEARS	20	20 12-Oct-17	08-Nov-17	ADD APPEARS
	RFQ DUE	1	1 09-Nov-17	09-Nov-17	
A2 540	PROJECT TEAM REVIEW AND QUALIFY TRADE BIDDERS	1			PROJECT TEAM REVIEW AND QUALIFY TRADE BIDDERS
		10	10 20-Nov-17	04-Dec-17	
	NO TIFY QUALIFIED TRADE BIDDERS	1	1 05-Dec-17	05-Dec-17	
TRADE BIDD				11 Dec 47	25
A2570	ISSUE BID DOCS TO PRINT HOUSE/BID DOCS ON LINE	0	0	11-Dec-17	+1
A2580	LAST DAY TO ISSUE RIDER B WITH CHANGES	0	U	11-Dec-17	◆ LAST DAY TO ISSUE RIDER B WITH CHANGES
A2590	LAST DAY FOR POTENTIAL ADDENDUM	0	0	11-Dec-17	↓ LAST DAY, FOR POTENTIAL ADDENDUM
	BID PROJECT WITH QUALIFIED TRADE BIDDERS	0	0 13-Dec-17	13-Dec-17	BID PROJECT WITH QUALIFIED TRADE BIDDER\$
A2610	FILED SUBCONTRACTOR WALK THROUGH	0	0 13-Dec-17	13-Dec-17	FILED SUBCONTRACTOR WALK THROUGH
A2620	FILED SUBCONTRACTORS QUESTIONS DEADLINE	1	1 20-Dec-17	20-Dec-17	I FILED SUBCONTRACTORS QUESTIONS DEADLINE
A2630	DEADLINE TO ANSWER FILED SUBCONTRACTORS QUESTIONS	1	1 29-Dec-17	29-Dec-17	DEADLINE TO ANSWER FILED SUBCONTRACTORS QUESTIONS
A2640	BID OPENING FOR TRADE BIDS	0	0	15-Jan-18	♦ BID OPENING FOR TRADE BIDS
A2650	EVALUATE TRADE BID SUBMISSIONS	2	2 16-Jan-18	17-Jan-18	I EVALUATE TRADE BID SUBMISSIONS
NON-TRADE	E BIDDERS				25 18-Jan-18, NON-TRADE BIDDERS
A2660	NON TRADE INVITATION TO BID	0	0 12-Dec-17	12-Dec-17	I NONTRADE INVITATION TO BID
Primavera Syste	Completed				Shawmut Design and Construction
nt Date: 23-Jan e: 2 of 4				_	OF ARLINGTON - HARDY ELEMENTARY RFP RESPONSE SCHEDULE - PRECONSTRUCTION SHAW

Activity ID	Activity Name	Orig Dur	Rem Start Dur	Finish	2017 F M A M J Jul A S Oct N D	2018 J F M Apr M J Jul A S Oct N D J F M
A2670	NON TRADE BID DUE	0	0 18-Jan-18	18-Jan-18		I NON TRADE BID DUE
GMP #2 D	EVELOPMENT AND APPROVAL					5 24-Jan-18, GMP #2 DEVELOPMENT AND APPROVAL
A2680	DESCOPE BIDS AND COMPILE DRAFT GMP #2	2	2 18-Jan-18	19-Jan-18		I DESCOPE BIDS AND COMPILE DRAFT GMP #2
A2690	DRAFT GMP REVIEW BY PROJECT TEAM	2	2 18-Jan-18	19-Jan-18		I DRAFT GMP REVIEW BY PROJECT TEAM
A2700	ASSEMBLE FINAL GMP #2	0	0 23-Jan-18	23-Jan-18		I AS\$EMBLE FINAL GMP #2
A2710	FINAL EXECUTION GMP #2	0	0	24-Jan-18		◆ FINAL EXECUTION GMP #2
PERMITTI	ING PHASE				4	••••••••••••••••••••••••••••••••••••••
PERMITTI	NG ARLINGTON				4	••••••••••••••••••••••••••••••••••••••
DEPARTM	IENT REVIEW AND APPROVAL				11	23-Jan-18, DEPARTMENT REVIEW AND APPROVAL
A2 720	DPW FINAL REVIEW AND APPROVAL	4	4 03-Jan-18	08-Jan-18		DPW FINAL REVIEW AND APPROVAL
A2 730	HEALTH DEPARTMENT FINAL REVIEW AND APPROVAL	4	4 09-Jan-18	12-Jan-18		HEALTH DEPARTMENT FINAL REVIEW AND APPROVAL
A2 740	FIRE DEPARTMENT FINAL REVIEW AND APPROVAL	4	4 15-Jan-18	18-Jan-18		FIRE DEPARTMENT FINAL REVIEW AND APPROVAL
A2750	CONSERVATION FINAL REVIEW AND APPROVAL	3	3 19-Jan-18	23-Jan-18		CONSERVATION FINAL REVIEW AND APPROVAL
BUILDING	DEPARTMENT					26 01-Mar-18, BUILDING DEPARTMENT
A2810	PERMIT DOCUMENTS COMPLETED (100% CONSTRUCTION DOCUMENTS)	0	0	23-Jan-18	\top	◆ PERMIT DOCUMENTS COMPLETED (100% CONSTRUCTION DOCUM
A2 820	PREPARE APPLICATION	0	0	23-Jan-18		◆ PREPARE APPLICATION
A2 830	SUBMIT APPLICATION TO ISD	0	0	23-Jan-18		SUBMIT APPLICATION TO ISD
A2 840	ARLINGTON AHJ PERMIT APPLICATION REVIEW	25	25 24-Jan-18	28-Feb-18		ARLINGTON ANJ PERMIT APPLICATION REVIEW
A2 850	ARLINGTON AHJ PERMIT APPLICATION APPROVAL LETTER RECEIVED	0	0	28-Feb-18		ARLINGTON ANJ PERMIT APPLICATION APPROVAL LETTER
A2 860	PERMITTING COMPLETE	0	0	01-Mar-18		◆ PERMITTING COMPLETE
A2 870	BUILDING AND PLANNING BOARD PERMITS COMPLETE	0	0	01-Mar-18		BUILDING AND PLANNING BOARD PERMITS COMPLETE
BUILDING	G CONSTRUCTION CONTRACT AND PROCUREMENT	PERIOD			119	15-Jun-18, BUILDING CONSTRUCTION CONT
SUBCONT	RACTOR LOI AND CONTRACT RELEASE PERIOD				30	07-Feb-18, SUBCONTRACTOR LOI AND CONTRACT RELEASE PE
A2880	RELEASE PHASE I GMP #1 EARLY RELEASE	5	5 27-Dec-17	03-Jan-18		RELEASE PHASE I GMP #1 EARLY RELEASE
A4 300	RELEASE PHASE II GMP #2 REMAINING SCOPE	10	10 25-Jan-18	07-Feb-18		RELEASE PHASE II GMP #2 REMAINING SCOPE
SUBMITTA	AL, APPROVALS, PRODUCT PROCUREMENT			J	11/	15-Jun-18, SUBMITTAL, APPROVALS, PROD
	RELEASE GMP #1 PROCUREMENT				8	30-Apr-18, CRITIÇAL RELEASE GMP #1 PROCUREM
A2 900	DEMOLITION	20	20 04-Jan-18	31-Jan-18		
A3 000	ROOFING	40	40 04-Jan-18	01-Mar-18		ROOFING
A2 920	MAKE-SAFE	20	20 04-Jan-18	31-Jan-18		MAKE-SAFE
A2930	TEMPORARY POWER/LIGHTING	20	20 04-Jan-18	31-Jan-18		TEMPORARY POWER/LIGHTING
A2 940	TEMPORARY PROTECTION	20	20 04-Jan-18	31-Jan-18		TEMPORARY PROTECTION
A2 950	FENCING AND JOB SITE SET UP	15	15 04-Jan-18	24-Jan-18		FENCING AND JOB SITE SET UP
A2 960	STRUCTURAL STEEL	60	60 04-Jan-18	29-Mar-18		STRUCTURAL STEEL
A2970	STRUCTURAL DETAILS/MISC METAL	60	60 04-Jan-18	29-Mar-18		STRUCTURAL DETAILS/MISC METAL
A4 220	CONCRETE	50	50 04-Jan-18	15-Mar-18		
A2 980	MASONRY	50	50 05-Jan-18	16-Mar-18		MASONRY
A3 060	WINDOWS	80	80 05-Jan-18	30-Apr-18		windows
	D RELEASE PHASE II GMP #2 PROCUREMENT		I	· ·		90
A4230	MEP EQUIPMENT	75	75 07-Feb-18	24-May-18		
A2 990	MILLWORK	80	80 08-Feb-18	04-Jun-18		MILLWORK
A3010	DRYWALL/FRAMING	40	40 08-Feb-18	05-Apr-18		
A3 020	ACOUSTICAL CEILINGS	60	60 08-Feb-18	04-May-18		AÇOUŞTICAL CEILINGS
A3 030	FLOORING	60	60 08-Feb-18	04-May-18		
A3 040	PAINT AND WALL COVERING	70	70 08-Feb-18	18-May-18		PAINT AND WALL COVERING
A4 240	MEP COORDINATION	40	40 08-Feb-18	05-Apr-18		MEP COORDINATION
A3 070	TELE-DATA INFRASTRUCTURE (MDF AND IDF EQUIPMENT)	80	80 22-Feb-18	15-Jun-18		TELE-DATA INFRASTRUCTURE (MDF AND I

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RFP RESPONSE SCHEDULE - PRECONSTRUCTION

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ctivity ID	Activity Name	Orig R	em Start	Finish	2017	2018	2019	2020
		Dur í	Dur		F M A M J Jul A S Oct N D .	J F M Apr M J Jul A S Oct N D	J F M A M J Jul A S Oct N D	J F M A M J Jul
A3 080	AV PROGRAM	80	80 22-Feb-18	15-Jun-18		AV PROGRAM		
A3 090	FURNITURE AND SPECIALTIES	80	80 22-Feb-18	15-Jun-18		FURNITURE AND SPECIALTI	ES	
A4 250	MEP ROUGH	40	40 29-Mar-18	24-May-18		MEP ROUGH		
ON SITE	CONSTRUCTION						TE CONSTRUCTION	
A4 560	ON SITE START - MOBILIZE	1	1 02-Mar-18	02-Mar-18		1 ON SITE START + MOBILIZE		
A4 590	EXCAVATION AND UTILITIES	20	20 02-Mar-18	29-Mar-18		EXCAVATION AND UTILITIES		
A4 600	FOUNDATION	15	15 16-Mar-18	05-Apr-18		FOUNDATION		
A4 610	STRUCTURAL STEEL AND FLAT WORK	15	15 03-Apr-18	24-Apr-18		STRUCTURAL STEEL AND FLAT WO	RK	
A4 620	EXTERIOR FACADE ROUGH	25	25 20-Apr-18	24-May-18		EXTERIOR FACADE ROUGH		
A4 630	EXTERIOR FACADE FINISH	40	40 04-May-18	29-Jun-18		EXTERIOR FACADE FINISH		
A4 640	INTERIOR ROUGH	35	35 25-May-18	16-Jul-18				
A4 650	INTERIOR FINISH	45	45 18-Jun-18	20-Aug-18				
A4 660	PUNCHLIST/COMMISSIONING	20	20 24-Jul-18	20-Aug-18			ISSIONING	
A4 670	FINAL CLOSE OUT	18	18 07-Aug-18	30-Aug-18*		FINAL CLOSE OL	μ	

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Proj: 170148-PRE Print Date: 23-Jan-17

Milestone • Completed Remaining

page: 4 of 4

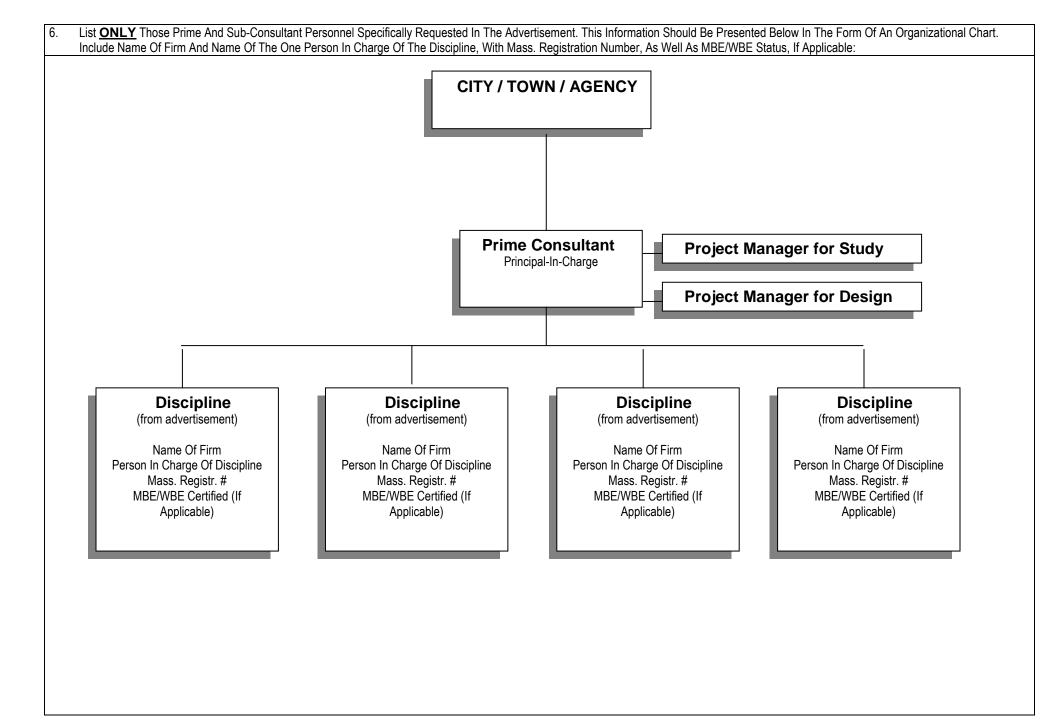
Critical Remaining Summary - Completed Shawmut Design and Construction

TOWN OF ARLINGTON - HARDY ELEMENTARY

RFP RESPONSE SCHEDULE - PRECONSTRUCTION



Commonwealth of Massachusetts1.Standard Designer ApplicationForm for Municipalities and PublicAgencies not within DSBJurisdiction (Updated July 2016)	Project Name/Location For Which Firm Is Fili	ıg:	2. Project # This space for use by Awarding Authority only.	
3a. Firm (Or Joint-Venture) - Name and Addres 3b. Date Present and Predecessor Firms Were Estimation		 Name Of Proposed For Study: (if applicat For Design: (if applicat 3f. Name and Address Item 3a Above: 	ble)	rom
3c. Federal ID #: 3d. Name and Title Of Principal-In-Charge Of The	Project (MA Registration Required):	3g. Name and Address	s Of Parent Company, If Any:	
Email Address: Telephone No:	Fax No.:	 (2) SDO Certified W (3) SDO Certified M (4) SDO Certified Set (5) SDO Certified Vertified Vertified	inority Business Enterprise (MBE) /oman Business Enterprise (WBE) linority Woman Business Enterprise (M/WBE) ervice Disabled Veteran Owned Business Enterprise (SDVOBE) eteran Owned Business Enterprise (VBE)	
	estion #3a Above By Discipline (List Each Person		Image: Average Number Employed Throughout The Preceding 6 achusetts Registrations): Image: Average Number Employed Throughout The Preceding 6 achusetts Registrations): Image: Average Number Employed Throughout The Preceding 6 Image: Average Number Preceding 7 Image: Average Number Preceding 7 <td< th=""><th></th></td<>	
5. Has this Joint-Venture previously worked toge	ther? Yes	D No		·



7.	Brief Resume of ONLY those Prime Applicant and Sub-Consultant personnel requested in the Ac persons listed on the Organizational Chart in Question # 6. Additional sheets should be provided in the format provided. By including a Firm as a Sub-Consultant, the Prime Applicant certifies the	d only	as required for the number of Key Personnel requested in the Advertisement and they must be
a.	Name and Title Within Firm:	a.	Name and Title Within Firm:
b.	Project Assignment:	b.	Project Assignment:
C.	Name and Address Of Office In Which Individual Identified In 7a Resides: MBE I WBE WBE I SDVOBE VBE I VBE I I	C.	Name and Address Of Office In Which Individual Identified In 7a Resides: MBE Image: Comparison of the second
d.	Years Experience: With This Firm: With Other Firms:	d.	Years Experience: With This Firm: With Other Firms:
e.	Education: Degree(s) /Year/Specialization	e.	Education: Degree(s) /Year/Specialization
f.	Active Registration: Year First Registered/Discipline/Mass Registration Number	f.	Active Registration: Year First Registered/Discipline/Mass Registration Number
g.	Current Work Assignments and Availability For This Project:	g.	Current Work Assignments and Availability For This Project:
h.	Other Experience and Qualifications Relevant To The Proposed Project: (Identify Firm By Which Employed, If Not Current Firm):	h.	Other Experience and Qualifications Relevant To The Proposed Project: (Identify Firm By Which Employed, If Not Current Firm):

э.	But Not More Than 5 Projects). Project Name And Location	b. Brief Description Of Project And	C. Client's Name, Address And Phone	d. (Completion	e. Project Cost (In Thousands)		
	Principal-In-Charge	Services (Include Reference To Relevant Experience)	Number (Include Name Of Contact Person)		Date (Actual Or Estimated)	Construction Costs (Actual, Or Estimated If Not Completed)	Fee for Work for Which Firm Was Responsible	
1)								
<u></u>								
(2)								
3)								
(4)								
(5)								

Sub-Consultant Name:						
a. Project Name and Location	b. Brief Description Of Project and	c. Client's Name, Address And Phone	d. Completion	e. Project Cost (In Thousands)		
Principal-In-Charge	Services (Include Reference To Relevant Experience	Number. Include Name Of Contact Person	Date (Actual Or Estimated)	Construction Costs (Actual, Or Estimated If Not Completed)	Fee For Work For Which Firm Was/Is Responsible	
(1)						
(2)						
(3)						
(4)						
(5)						

# of Total Projects:			# of Active Projects:	Total Construction Cost (In Thousands) of Active Projects (excluding studies):							
Role P, C, JV *	Phases St., Sch., D.D., C.D.,A.C.*	Project Name,	Location and Principal-In-Charge	Awarding Authority (Include Contact Name and Phone Number)	Construction Costs (In Thousands) (Actual, Or Estimated If Not	Completion Date (Actual or Estimated) (R)Renovation or (N)New					
		1.									
		2.									
		3.									
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		10.									
		11.									
		12.									

* P = Principal; C = Consultant; JV = Joint Venture; St. = Study; Sch. = Schematic; D.D. = Design Development; C.D. = Construction Documents; A.C. = Administration of Contract

10.	If Needed, Up To Three, AREAS OF EXPERIENC	Double-Sided 8 1/2" X	(11" Supplementary She			Your Firm And That Of Yo OURAGED TO RESPON		
11.	Professional Liability Inst	urance:						
	Name of Company		Aggregate Amount		Policy Number		Expiration Date	
12.	Have monies been paid YES or NO. If YES, plea						and in excess of \$50,	000 per incident? Answer
13.	Name Of Sole Proprietor	Or Names Of All Fire	m Partners and Officers:					
	Name a. b. c.	Title	MA Reg #	Status/Discipline	Name d. e. f.	Title	MA Reg #	Status/Discipline
14.	If Corporation, Provide N				Neme	Title	MA Dec #	Status/Dissipling
	Name a. b. c.	Title	MA Reg #	Status/Discipline	Name d. e. f.	Title	MA Reg #	Status/Discipline
15.	Names Of All Owners (S	tocks Or Other Owne	ership):					
	Name And Title a. b. c.	% Ownership	MA. Reg.#	Status/Discipline	Name And Title d. e. f.	% Ownership	MA. Reg.#	Status/Discipline
16.		al Laws, or that the se	ervices required are limite	ed to construction manag	ement or the preparatio			defined in Chapter 7C, ost estimates or programs.
	Submitted by (Signature) —				Printed Name and Title			Date

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group of individuals.

(Signature of individual submitting bid or proposal)

(Name of individual submitting bid or proposal)

Name of Business

Date

Pursuant to M.G.L. Chapter 62C, Section 49A, I certify under the penalties of perjury that I have complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

Social Security Number or Federal Identification Number Signature of Individual or Responsible Corporate Officer and Title

NON-COLLUSION FORMS MUST BE SIGNED AND SUBMITTED WITH BID