

A stylized graphic of a city skyline with various building heights, rendered in a light beige color, positioned behind the main title.

Massachusetts School Building Authority

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Module 4

Schematic Design

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INTRODUCTION

Module 4 – Schematic Design:

If the District has completed all tasks defined in Module 1 – Eligibility Period, Module 2 – Forming the Project Team, and Module 3 – Feasibility Study and received approval from the MSBA's Board of Directors (the "Board") to proceed into Schematic Design the District may now proceed with Schematic Design as outlined in this Module. Module 4 – Schematic Design is one of eight modules developed by the Massachusetts School Building Authority ("MSBA") that are intended to provide a guide to the procedures and approvals needed to work collaboratively with the MSBA. The "Program Overview" and listing of eight modules is provided in Appendix 4A for reference.

Welcome to Module 4 – Schematic Design

During Schematic Design, the District and its team collaborate with the MSBA to develop a robust schematic design of sufficient detail to establish the scope, budget, and schedule upon which to evaluate the basis for a proposed project, secure approval of the Proposed Project by the Board, receive Department of Elementary and Secondary Education approval of the Proposed Project for delivery of the District's special educational program, and obtain local authorization and financial support.

Module 4 begins with the Board's approval of the District's preferred solution and concludes with the Board's authorization of the MSBA's Executive Director to enter into a Project Scope and Budget Agreement and a Project Funding Agreement with the District for a specific project scope, budget and schedule. See this Module for additional detail.

Module 4 has been provided as a general guide for Districts and their teams to plan their work in a collaborative effort in accordance with the MSBA's procedures and requirements. This Module is not intended to replace and/or supersede MSBA regulations, agreements, or the services required by the Owner's Project Manager ("OPM") and/or Designer contracts. The Designer and OPM each shall be solely responsible for performing the services required by its contract with the District, respectively, and nothing in this Module shall be construed as relieving the Designer or OPM from its duties and responsibilities.

Schematic Design Participants should include, at a minimum, the following:

- **The School Building Committee**, as presented by the District and approved by the MSBA in its School Building Committee Approval form, along with elected officials and other District representatives that the District determines are necessary to demonstrate the educational and financial support of the city, town, or regional school district for the Proposed Project.
- **The Owner's Project Manager, ("OPM")** as selected by the District and approved by the MSBA in accordance with MSBA regulations and policies.

- **The Designer**, as selected locally by the District and approved by the MSBA for projects under \$5 million, or as selected through the MSBA's Designer Selection Panel for projects over \$5 million.
- **The MSBA**, through the assigned MSBA Project Manager and Project Coordinator.

Schematic Design Submittal Procedures

All documents and materials submitted to the MSBA during the course of Schematic Design must be transmitted by the OPM. The OPM is required to compile and coordinate all submittals, including those items required to be provided by the OPM and also those required to be provided by the Designer and/or the District.

For each submittal to the MSBA, the Designer and District must transmit the required materials to the OPM. The OPM shall compile the submittal with the items indicated in the Designer and OPM Contracts, confirm that the District's School Building Committee has officially approved the submittal, and verify its completeness and conformity to MSBA requirements. The OPM shall then forward this submittal to the assigned MSBA Project Coordinator along with a separate cover letter signed by the OPM. The cover letter shall include a certification from the OPM that (1) the OPM has reviewed and coordinated the materials, (2) the submittal is complete, (3) the Proposed Project as documented within the Schematic Design Submittal is within the District's budget, and (4) the District has approved the materials for submission to the MSBA.

Schematic Design Submittal– Submit two (2) binders of materials per this Module including two (2) sets of Schematic Design Drawings not exceeding 18" x 24", two (2) Schematic Design Project Manuals, and one (1) electronic file in PDF format.

The MSBA will not accept incomplete submittals, submittals that have not been reviewed by the OPM, or Schematic Design submittals for which the estimated project costs exceed the District's project budget. Updates to the Total Project Budget that do not reflect the scope and schedule represented in the Schematic Design Submittal will not be accepted. All value engineering activities must be complete, and the results incorporated into the Schematic Design Submittal documentation, prior to being submitted to the MSBA.

TABLE OF CONTENTS

4.0	Schematic Design	4
4.1	Schematic Design Submittal.....	5
4.1.1	Department of Elementary & Secondary Education Submittal	
4.1.2	Schematic Design Binder	
4.1.3	Schematic Design Project Manual	
4.1.4	Schematic Design Drawings	
4.2	Review and Approval of Schematic Design Submittal	13
4.2.1	MSBA Staff Review	
4.2.2	Facilities Assessment Subcommittee review	
4.2.3	Project Scope and Budget Conference	
4.2.4	MSBA Board approval	
4.3	Conclusion of Module 4	14

APPENDICES

4A.	Program Overview	
4B.	Department of Elementary & Secondary Education Submittal Requirements	
	o Cover Letter	
	o Special Education Adjacency Table	
4C.	Schematic Design Submittal Notification Template	
4D.	Sample Room Data Sheets	
4E.	MSBA Reimbursement Rate Calculations	
4F.	Total Project Budget Template	
4G.	Local Actions and Approval Certification Template	
4H.	Module 4 Schematic Design Checklist	

4.0 Schematic Design

With the Board's authorization, a District may proceed into Schematic Design of the preferred solution. Please remember that an authorization to proceed into Schematic Design is *not* an approval of a project and is limited to development of a robust schematic design that is based on the preferred solution, by the District, its OPM (for projects with estimated construction costs in excess of \$1.5 million), and its Designer. The Schematic Design Submittal, for which the content is described below, must be of sufficient detail to clearly define and document the scope, budget, and schedule. The Schematic Design Submittal informs the basis of the approved project scope, schedule, and Estimated Maximum Total Facilities Grant and Maximum Total Facilities Grant. The Schematic Design Submittal can also be used by the District to secure local authorization and financial support to allow the project to move forward. Invitation is not guaranteed for any particular Board Meeting; it is based on a mutual agreement between the District and its consultants and MSBA staff that the project proposed in the Schematic Design Submittal is ready for approval by both the Board and the local community. To qualify for any funding from the MSBA, local communities must follow the MSBA's statute and regulations, which require MSBA collaboration and approval at each step of the process. Moving forward in the MSBA's process requires collaboration with the MSBA, and communities that "get ahead" of the MSBA without MSBA approval will not be eligible for grant funding.

Due to the variety and nature of proposed solutions (e.g., repairs to a single building system, renovations to the entire facility, an addition, or a new school) each Schematic Design may vary slightly as to the specific requirements, scope, cost, and schedule. The particular requirements, scope, cost, and schedule of a Schematic Design will be outlined in the Feasibility Study Agreement between the District and the MSBA and in the Designer's proposed design work plan that is developed in accordance with the MSBA Standard Contract for Designer Services. The requirements may be based on many factors including the MSBA's review and evaluation of any previous studies, previous collaboration during Feasibility Study as well as any meetings and discussions between the District and the MSBA.

In order for the MSBA to enter into a Project Scope and Budget Agreement with the District, the District must:

- Submit a Schematic Design Submittal for the Proposed Project as described in Section 4.1 of this Module and by the deadline for the anticipated MSBA Board meeting as shown on the MSBA's website, and respond to any questions raised by MSBA staff;
- Attend a Project Scope and Budget Conference as described in Section 4.2 of this Module;
- Receive approval from the Board for its Proposed Project; and
- Return three (3) signed copies of the Project Scope and Budget Agreement as described in Module 5.

In order for the MSBA to enter into a Project Funding Agreement with the District, the District must secure local authorization and funding within 120 days of the Board's vote. In addition, the Commissioner of Education must certify that adequate provisions have

been made in the Proposed Project for children with disabilities. In order to establish that adequate provisions are included in the Proposed Project, the District, through its OPM, must provide to the MSBA a Department of Elementary and Secondary Education ("DESE") Submittal for the Proposed Project as described below.

4.1 Schematic Design Submittal

The purpose of the Schematic Design, which must be based on the preferred solution approved by the MSBA's Board of Directors, is to document in detail the scope, budget and schedule of the proposed project.

The Schematic Design Submittal shall include the following:

- Department of Elementary and Secondary Education (DESE) Submittal;
- Schematic Design Binder;
- Schematic Design Project Manual; and
- Schematic Design Drawings.

At least 10 business days prior to the MSBA deadline for District submittals, the OPM shall provide the following information via email to the MSBA as set forth in the Schematic Design Submittal Notification Template (refer to Appendix 4C):

- Designer's estimated construction cost;
- OPM's estimated construction cost;
- The estimated project cost;
- The District's project budget;
- Confirmation that the District and its consultants intend to submit the Schematic Design Submittal on or by the established MSBA deadline for District submittals, and that the submittal will include a completed Total Project Budget that reflects the project scope and reconciled project schedule as documented in the Schematic Design Submittal.

The MSBA will not accept Schematic Design Submittals for which the estimated project costs exceed the District's project budget. Updates to the Total Project Budget that do not reflect the scope and schedule represented in the Schematic Design Submittal documentation will not be accepted or if determined after submittal is returned. All value engineering activities must be complete, and the results incorporated into the Schematic Design Submittal documentation, prior to submitting to the MSBA.

4.1.1 Department of Elementary and Secondary Education (DESE) Submittal

Pursuant to G.L. c. 70B, § 6, the Massachusetts School Building Authority ("MSBA") shall make certain findings in order to designate a school project as an approved school project, one of which is that the Commissioner of Education has certified that "...adequate provisions have been made in the school project for children with disabilities, as defined in section 1 of chapter 71B." Proposed repair projects that do not include changes to the numbers or size of educational spaces or substantive changes in the grade configuration may not be required to provide a DESE Submittal. Refer to the District's Feasibility Study Agreement for clarification.

Without prior written approval by the MSBA, the MSBA will not execute a Project Funding Agreement with a District until the DESE has agreed in writing that the Proposed Project provides adequate provisions for school children with disabilities.

To meet this DESE requirement, the District must prepare a DESE Submittal, which the OPM shall submit to the MSBA. The MSBA will review for completeness and consistency before forwarding to the Department of Elementary and Secondary Education for review.

The DESE submittal shall be included in the tabbed Schematic Design binder as a removable "stand alone" submittal and shall include the following:

- Cover Letter;
- Special education delivery methodology;
- Signed Educational Space Summary and separate narrative;
- Floor Plans; and
- Adjacency Table

Refer to Appendix 4B for additional information regarding the DESE submittal.

4.1.2 Schematic Design Binder

In preparing the Schematic Design Submittal for the MSBA, the OPM shall compile the following information in the Schematic Design Binder tabbed to correspond to the Table of Contents:

- Introduction that presents a brief overview of the process undertaken to advance the preferred solution through Schematic Design. The following shall be included:
 - A brief summary of the preferred solution approved by the MSBA Board of Directors;
 - An overview of the process undertaken locally to educate the community, including key community outreach activities, committee meetings, and key votes and decisions;
 - The District's Total Project Budget for the proposed project and the steps necessary for the District to secure local funding;
 - An updated description of the project including grades to be served, size of the site, gross square feet of the proposed building (include gross square feet of both new construction and renovated areas as appropriate), Total Project Budget, list of alternates (if none, indicate as such), and construction delivery methodology (design/bid/build or Construction Manager at Risk); and
 - Any Visual Aids that may be suitable for presentation at the Board of Meeting of the following: Site Plan, Floor Plans, and an elevation. The plans shall also be submitted electronically as separate files for potential incorporation into the Board presentation; and
 - A copy of the MSBA Preferred Schematic Report review and corresponding District response.

- Final Design Program, including:
 - General and specific architectural characteristics desired;
 - Two signed copies of the educational space summary that reflects the current design (11" x 17" prints). The educational space summary shall delineate: all spaces with related square footage within the current school building, as applicable; all spaces associated with square footage planned in the new, replacement, or renovated areas of the proposed school building; and MSBA's guidelines that are unadulterated and based on the agreed upon design enrollment. If the educational space summary is different than the educational space summary submitted as part of the Preferred Schematic Report, include a separate narrative description of all changes and identify the reason for each change, e.g., minor adjustment resulting from building design efforts, adjusted floor plan, or programmatic change. Provide a space measurement analysis and Designer certification for the design verifying that the sum of all programmed floor areas plus all other floor areas equal the gross floor area of the Final Design Program;
 - Narrative describing how the proposed project supports each component of the District's educational program;
 - Instructional technology (existing and proposed);
 - Functional relationships and critical adjacencies that informed the basis of design;
 - Security and visual access requirements;
 - Confirmation that the persons responsible for implementation of the District's emergency procedures, and responding emergency medical, fire protection, and police agency representatives have been consulted in the planning process and any associated requirements have been included in the project.
 - Identification of any security related items particular to the District and/or the proposed project.
 - Verification that the following safety and security related issues have been reviewed and are in accordance with the District's procedures as noted above:
 - Main entrance design – describe District protocol for visitor entry and check-in related to the current design for visitors to remain in the vestibule versus a side sub-vestibule;
 - Classroom lockset hardware - confirm hardware functions are compatible with the District's protocols related to lockdown;
 - Classroom / Instructional spaces visibility - confirm that the inclusion of sidelights at entrance locations is compatible with the District's current standards related to visibility from corridors and whether any related vision control option measures are to be incorporated; and
 - Alternative entry locations - confirm project includes site and building signage, as may be required by District's emergency procedures, to identify locations where first responders may more directly reach a person needing

- medical attention; Knox Boxes; and provisions for building plans to be delivered to local fire and response agencies.
 - Confirm optimal surveillance of building and site.
 - Site development requirements – Provide a description of the total number of parking spaces, how they are distributed, and how the quantities were derived; and
 - Desired visual or aesthetic focal point or features of the school.
- Traffic Analysis – Provide an evaluation of existing traffic patterns, both on-site and off-site areas likely to be impacted by the project; congestion and safety concerns; identifies critical traffic issues to be addressed in the proposed project; and addresses changes in traffic volume and patterns anticipated as a result of the proposed project. Confirm that the findings and recommendations of the analysis are accounted for in the site plan(s), project budget, and project schedule. Describe any offsite work resulting from the proposed project and indicate if this work is to be performed by the District as part of the proposed project (please note that associated costs of off-site work will be deemed ineligible for reimbursement) or if the work is to be performed separately from the proposed project (e.g. under separate procurements and contracts). If the District and its consultants have determined that a traffic analysis is not required because there are no existing traffic issues to be addressed and the proposed project will not impact existing conditions provide a written description of the assessment and analysis used to make this determination.;
- Environmental and existing building assessment – Describe the additional site and building assessments that quantified the presence of unsuitable materials and scope of remediation efforts. Identify the estimated costs of the results of the testing in the cost estimate;
- Geotechnical and geo-environmental analysis – Describe the additional geotechnical analysis as may be required to establish soil conditions, remediation requirements and appropriate foundation requirements. Identify the estimated costs of the results of the testing in the cost estimate;
- Code analysis – Identify and determine the impact of all applicable federal, state, regional and local codes, regulations and ordinances, including a listing of permitting and other regulatory filing requirements;
- Utility analysis and soils analysis for on-site septic/sewage treatment facilities – Determine the availability and capacity of all required building utilities. Provide soils analysis and preliminary design for on-site septic/sewage treatment facilities, if required;
- Massing study – An analysis of the building’s integration into its surroundings and neighborhood with drawings, models, or photographs;
- Narrative building systems descriptions – Describe basic information relative to:
 - Sustainable design elements;
 - Building structure;
 - Plumbing & HVAC (Provide a preliminary life cycle cost analysis pursuant to the criteria of M.G.L. c. 149, § 44(m);
 - Fire Protection (verify adequate water capacity for new system and confirm if a fire pump will be required);
 - Electrical (including power, lighting, communications, fire alarm, video/CATV, security/surveillance); and
 - Information Technology.

- Sustainable Building Design Guideline documents:
 - Refer to the MSBA website for MSBA's current Sustainable Design Guidelines;
 - Completed Sustainable Building Design Guideline scorecard from the Designer showing the attempted credits to be included in the final design; and
 - Signed letter from the Designer including the following statement:
 - "This is an acknowledgement that the _____ School District has identified a goal of ____% additional reimbursement from the MSBA High Efficiency Green School Program. As their Designer, I have submitted a completed _____ scorecard showing all prerequisites and ____ attempted points, which will meet that goal."; and
 - "The scope of work for this project will include the construction elements and performance tasks to achieve that goal, and all subsequent documents, including but not limited to, specifications, drawings, and cost estimates will match the scope of work indicated in the submitted scorecard.";
- Analysis of the design's compliance with the Americans with Disabilities Act (ADA) and the Massachusetts Architectural Access Board requirements (MAAB);
- Room Data Sheets (Refer to Sample Room Data Sheets in Appendix 4D), including, but not limited to, the following:
 - Utility requirements – Include the number of electrical outlets needed and their desired locations. Identify specific water, gas, compressed air, and dry and wet waste disposal requirements, as applicable to the specific space;
 - Acoustic and lighting requirements;
 - Security Features – Lockdown hardware, concealment and escape options, operable shades or blinds, hardening materials, ventilation controls, alarm and communication systems interface as applicable to the occupancy;
 - Surface material performance requirements for floors, walls and ceilings (mounting height should be specific for size of students);
 - Bulletin case, writing board, and tack board requirements;
 - Wall maps, projection screens, chart rails, and other fixed teaching aids together with utilities, communications and control features, and teacher demonstration areas, if required;
 - Environmental requirements such as special ventilation/exhaust, natural lighting, special heating, and heat control;
 - Safety and health features, gas, compressed air, water, and automatic shut-off to specialized equipment. Include features such as:
 - emergency eyewash stations,
 - fume hoods, or ventilation in shops and laboratories.
 - instructor gas controls,
 - compressed air, and
 - water;
 - Note where automatic shutoff to specialized equipment is required, e.g.:
 - saws,
 - lathes,

- planers, and
 - grinders;
 - Audio-visual, television access, and public address requirements as well as computer equipment and stations;
 - Equipment, furnishings, and casework;
 - Internal areas and support spaces needed, including general storage requirements for each space;
 - Special graphics, colors, textures, and shapes (this is of particular importance for kindergarten, special education, pre-school, and primary classrooms);
 - Provisions for storage of staff and/or student garments and personal property;
 - Area needed for display of student projects and large and small project storage; and
 - Identify and describe any other requirement that may be unique to the activity setting.
- Proposed Construction Methodology – Describe the criteria and analysis used by the Owner’s Project Manager, in conjunction with the Designer, to compare the construction delivery methods provided in M.G.L. Chapters 149 and 149A for the Proposed Project. Include the relative advantages and disadvantages associated with each of the construction delivery methods and describe the key items that led to the District’s selection. If the District elected to proceed with the CM at Risk construction delivery method indicate when the application to proceed with the CM at Risk construction delivery method is to be submitted to the Office of the Inspector General and anticipated notice to proceed issued by the Office of the Inspector General. Confirm that the cost estimates, proposed project schedule, estimated reimbursement rate, and Total Project Budget Spreadsheet reflect the selected construction delivery method.
 - District’s anticipated reimbursement rate with incentive points (see Appendix 4E).
 - Total Project Budget spreadsheet (see Appendix 4F), to as much detail as the drawings and specifications permit, as required by the contract, and a summary of the cost reconciliation between the cost estimate of the Designer’s and the OPM’s estimates, as applicable. Identify separate costs for:
 - Existing facility demolition;
 - In-building hazardous material abatement;
 - Abatement of asbestos containing floor material;
 - Abatement of hazardous materials located outside of the building;
 - Site costs;
 - Off-site costs; and
 - Alternates.
 - Designer’s construction cost estimate – Unifomat II, Level 3 format with aggregated unit rates and quantities supporting each item and the CSI MasterSpec format to Summary Level;
 - Independent OPM construction cost estimate – Unifomat II, Level 3 format with aggregated unit rates and quantities supporting each item and the CSI MasterSpec format to Summary Level;
 - Updated Project Work Plan indicating changes or expansions associated with:
 - Project Directory
 - Roles and Responsibilities

- Communications and Document Control Procedures
- Designer's Work Plan
- Project schedule – The OPM shall provide a schedule in the form of a graphic representation (Gantt Chart) of the duration of all tasks, activities and phases of the design and construction processes against the progression of time from Feasibility Study through design, construction, substantial completion, occupancy, final completion and project close-out. Dependencies between activities and tasks shall be delineated. Individual tasks and activities shall be rolled up to the major project milestones. Highlight priority actions and activities that may have a major impact on the schedule. The project schedule must allow adequate time for document review by the Owner and the Authority. As a minimum, the schedule must include the following:
 - Local Appropriation/Execution of PS&B Agreement and Final PFA;
 - Sustainable Design Building milestones:
 - Project Registration
 - Provisional Review Submittal
 - Final Review Submission
 - Prequalification of Bidders/Selection of CM atRisk;
 - Design Development phase and submittal date;
 - 60% construction documents phase and submittal date;
 - 90% construction documents phase and submittal date;
 - Release of early packages, if applicable;
 - Release/advertisement of filed sub-bids;
 - Receipt of filed sub-bids;
 - Receipt of general contractor bids or execution of the guaranteed maximum price (GMP);
 - Notice to proceed for construction;
 - Key construction milestone dates and project phases;
 - Occupancy date;
 - Start and completion dates for demolition of the existing building;
 - Substantial completion;
 - Final Completion; and
 - Project Close-out.
- Local Actions and Approvals - as with other submittals to the MSBA, the Schematic Design Submittal must be reviewed and approved locally in accordance with the State Open Meeting Law prior to submittal to the MSBA. Public participation and local approval procedures and practices may vary by community and by project. The District must document local approval of the Schematic Design Submittal. The MSBA requires Districts to provide a certified copy of the School Building Committee Meeting ("SBC") Minutes from the meeting(s) at which the Schematic Design submittals were approved for submission to the MSBA. The Meeting Minutes must include the specific language of the vote and the results of the vote, stating the number of SBC Members who voted in favor of submittal to the MSBA, the number of opposed, and the number of abstentions. The District must also list SBC meeting dates, provide agendas, list specific stakeholders in attendance, provide a description of materials available for public review, and where those materials may be viewed. The MSBA also requires Districts to provide similar information for public

meetings and presentations conducted in addition to School Building Committee meetings. Refer to Appendix 4G "Local Actions and Approvals Certification Template" for additional information. A signed Local Actions and Approvals Certification on District Letterhead is required for MSBA staff to present the Proposed Project to the MSBA's Board of Directors for its consideration and approval.

4.1.3 Schematic Design Project Manual

The Schematic Design Project Manual shall be bound, (8.5" x 11") and include outline specifications in Uniformat Divisions that clearly define the scope of construction and establish the quality of materials, finishes, products, equipment and workmanship, and the special or unique conditions of construction. Provide a list identifying all proprietary items, if any, with an explanation for each item, how it is in the public interest that proprietary items are selected over non-proprietary equivalent items, and certification that local authorization for the use of proprietary items has complied with all state laws and local regulations, policies, and guidelines. If proprietary items are included in the Schematic Design to clarify the scope of work for the purposes of cost estimating, but are not intended to be incorporated into the final design, clearly identify this in the submittal within both the outline specifications and drawings as applicable.

4.1.4 Schematic Design Drawings

The Schematic Design drawings shall be bound 18" x 24" drawings and shall include the following:

- Existing Site Plan at a minimum scale of 1"=40' including:
 - Context
 - Property lines with bearings and distances
 - Site access
 - Existing paved areas and parking
 - Existing proposed parent and bus pick up and drop off lanes
 - Existing topography
 - Existing utilities locations
- Site development plan at a minimum scale of 1"=40' including:
 - Zoning setbacks
 - Site acreage
 - Wetlands information
 - Proposed topography
 - Proposed buildings and site features
 - Proposed paved areas and parking layout
 - Proposed parent and bus pick up and drop off areas
 - Ground floor elevations for all buildings
 - Proposed utilities and utility connections
 - Emergency equipment access
 - Future areas of expansion
- Schematic building floor plans of all floors and roof plans at a minimum scale of 1/8"=1'-0" with overall dimensions, gross square footage of each floor, and net

- square footage of each space, response to functional requirements of program, major and minor access, and circulation
- Interior elevations of a typical general classroom, and typical Pre-K/K classroom and typical Science classroom/lab as applicable
- Schematic exterior building elevations for all sides and orientations indicating all exterior finishes and fenestration.

4.2 Review and Approval of Schematic Design Submittal

4.2.1 MSBA Staff Review

After receiving a complete Schematic Design Submittal, the District and the MSBA shall work in collaboration to establish a proposed project scope, Total Project Budget, Estimated Basis of Total Facilities Grant, Estimated Maximum Total Facilities Grant, and schedule that may be recommended to the Board for approval. If the MSBA and the District cannot reach agreement, no Schematic Design will be forwarded to the Board for its consideration. The MSBA and the District will review the Proposed Project as documented in the Schematic Design Submittal to determine if there are actions that can be taken to reach consensus on a scope, budget, and schedule for the Proposed Project.

The MSBA review process for the Schematic Design Submittal includes:

- Written response comments based on staff review;
- Project Scope and Budget Conference with the District and their design team to discuss the project; and
- Written responses from the District addressing staff comments as required.

MSBA staff must complete its review of the submittal, and the District must submit responses to any questions or issues raised by the MSBA in a timeframe adequate to support the schedule for the Board meeting.

4.2.2 Facilities Assessment Subcommittee Review

At the MSBA's sole discretion, the District and its consultants may be required to present the proposed project at a Facilities Assessment Subcommittee meeting or to prepare additional project documentation should significant layout, educational program, or design changes arise during the Schematic Design process.

4.2.3 Project Scope and Budget Conference

The District will be invited to participate in a Project Scope and Budget Conference to review the status of all submittals, compliance with MSBA regulations and policies, discuss the scope, budget and schedule for the proposed project, and discuss the MSBA's Estimated Basis of Total Facilities Grant. If all concerns raised by the MSBA are addressed and the District understands and has no objection to the Estimated Basis of Total Facilities Grant and the Estimated Maximum Total Facilities Grant, the MSBA will proceed with a recommendation to the Board for Approval and provide the District with copies of the Project Scope and Budget Agreement to sign. If the District has any

questions, the District should contact the MSBA assigned Project Coordinator. Refer to Module 5 – Project Scope and Budget and Project Funding Agreements for additional information.

4.2.4 MSBA Board Approval

If all concerns raised by the MSBA are addressed and the District has confirmed understanding of, and has no objection to the Estimated Basis of Total Facilities Grant and the Estimated Maximum Total Facilities Grant MSBA staff will present the Proposed Project to the Board for its consideration and approval. If the Board approves the Proposed Project, MSBA staff will issue a Board Action Letter summarizing the Board's actions. For additional information on Project Scope and Budget and Project Funding Agreements – see Module 5.

4.3 Conclusion of Module 4

The District shall address any unresolved issues and submit any outstanding deliverables as directed by the MSBA. The District should maintain the Schematic Design Completion Checklist throughout the Schematic Design process as each step is submitted, reviewed and completed.

APPENDIX 4A

Program Overview

Program Overview

The Massachusetts School Building Authority's ("MSBA") grant program for school building construction and renovation projects is a non-entitlement competitive program based on need. The MSBA's Board of Directors (the "Board") approves grants based on need and urgency, as expressed by the City, Town, Regional School District, or independent agricultural and technical school ("District") and validated by the MSBA. Once the MSBA Board of Directors invites a District to participate in the MSBA's grant program, the collaborative process includes the following eight Modules:

Module 1 – Eligibility Period: The MSBA Board of Directors votes to invite a District into the Eligibility Period which initiates a 270-day period for the District to complete preliminary requirements including a certification of the District's understanding of the grant program rules, the formation of a School Building Committee, a summary of the District's existing maintenance practices; determination of a design enrollment; development of an educational profile, community authorization and funding to proceed, and execution of the MSBA's standard Feasibility Study Agreement. Districts that are able to complete these requirements may receive an invitation to collaborate with the MSBA to Conduct a Feasibility Study.

Module 2 – Forming the Project Team: Upon receipt of an invitation to collaborate with the MSBA to Conduct a Feasibility Study the District procures the team of professionals utilizing MSBA specific procurement processes, standard Request for Services ("RFS") templates, and standard Contracts to work with the District as the proposed project advances through the MSBA's grant process.

Module 3 – Feasibility Study: Upon successful conclusion of procurement of Owner's Project Management ("OPM") and Designer services a Kick-Off meeting is held to begin collaboration with the MSBA to document their educational program, generate an initial space summary, document existing conditions, establish design parameters, develop and evaluate alternatives, and recommend the most cost effective and educationally appropriate preferred solution to the MSBA Board of Directors for their consideration. During this phase, the Owner's Project Manager will submit on behalf of the District and its Designer a Preliminary Design Program and a Preferred Schematic Report. Approval by the MSBA Board of Directors is required for all projects to proceed into schematic design.

Module 4 – Schematic Design: The District and its team develop a robust schematic design of sufficient detail to establish the scope, budget and schedule for the proposed project. The MSBA generates a Project Scope and Budget Agreement that documents the project scope, budget, schedule and MSBA financial participation to forward to the MSBA Board of Directors for their approval.

Module 5 – Funding the Project: Once the MSBA Board of Directors has authorized the MSBA Executive Director to enter into a Project Scope and Budget Agreement and a Project Funding Agreement with the District, the District completes steps necessary to secure community authorization and financial support for the proposed project and enters into a Project Funding Agreement with the MSBA. With an executed Project Funding Agreement the District engages OPM and Designer services, and updates project budgets in Pro - Pay.

Module 6 – Detailed Design: Design Development, Construction Documentation & Bidding: The District and its team advance the design, generate construction documentation, procure bids and award a construction contract in accordance with the agreed upon project scope, budget and schedule as documented in the Project Funding Agreement, and the requirements contained in the MSBA's standard contracts for Owner's Project Management and Designer Services. The MSBA continues to monitor the project to ensure it remains on track and meets the expectation of both the District and the MSBA as defined in the Project Funding Agreement

Module 7 – Construction Administration: The MSBA continues to monitor progress of the project to confirm that it remains on track and meets the expectation of both the District and the MSBA as defined in the Project Funding Agreement.

Module 8 – Project Closeout: The MSBA performs a final audit to determine final total grant amounts and release final payment.

APPENDIX 4B

Department of Elementary and Secondary Education Submittal

Pursuant to Section 6 of G.L. c. 70B, the Massachusetts School Building Authority ("MSBA") shall make certain findings in order to designate a school project as an approved school project. In accordance with G.L. c. 70B, § 6(6) the Commissioner of Education must certify that "... adequate provisions have been made in the school project for children with disabilities, as defined in section 1 of chapter 71B." Repair projects without changes to the location, number, or size of educational spaces in the proposed project may not be required to provide a Department of Elementary and Secondary Education ("DESE") Submittal; please refer to the project Feasibility Study Agreement for clarification.

Without prior written approval by the MSBA, the MSBA will not execute a Project Funding Agreement with a District until the DESE has agreed in writing that the proposed project provides adequate provisions for school children with disabilities.

The Owner's Project Manager is required to compile and submit three complete hard copies and one electronic copy on a compact disc of the DESE Submittal to the MSBA. This submittal is to be included with the District's Schematic Design Submittal and shall not be submitted directly to the DESE. The MSBA will review for completeness and consistency before forwarding to the DESE for review.

The DESE submittal shall include the following:

- Cover Letter
- Special Education Delivery Methodology Letter
- Signed Educational Space Summary
- Floor Plans
- Special Education Adjacency Table

4B.1 Cover Letter

The cover letter, which is directed to the MSBA Director of Capital Planning and signed by the OPM, shall present a brief overview of the contents of the submittal and shall include the following:

- Name of the District and project school(s);
- Current District enrollment;
- Projected District enrollment as presented in the MSBA enrollment letter;
- Total School Enrollment, current, and MSBA agreed upon design enrollment;
- Grades served by the project school, current and proposed; and
- The date of the MSBA Board of Directors' meeting at which the District anticipates Board Approval of a Project Scope and Budget.

4B.2 Special Education Delivery Methodology Letter

The District must describe its Special Education delivery methodology in a letter that is directed to Matthew Deninger, Director of Resource Allocation Strategy and Planning, Department of Elementary and Secondary Education and signed by the Superintendent of Schools, the Principal of the subject school, and the Special Education Director for the District. The letter shall include descriptions of the following:

- Current program
- Proposed Program
- Specialized Programs

4B.2.1 Current Program

- Briefly describe the District's special education programs and methodology district-wide, including the number of special education students currently served;
- Specifically describe all special education programs serving an age range of students that would be appropriate to the grade range of the subject school building. Include a description of all special education services provided in the subject school building or other school buildings within the school district that serve the same grade levels; and
- Describe any deficiencies in the existing program that may have been identified locally or through state review.

4B.2.2 Proposed Program

- Describe any programs/services that will continue, those that will be eliminated and those that will be added or enhanced as a result of the proposed project. Include programs or services that will be moved within the District as a result of this construction plan and include the number of special education students that will be served in the subject school building;
- Identify any program/service needs that the District hopes to address in the proposed project;
- Provide the date of the last Coordinated Review Program and list any issues and/or problems identified in that review;
- Provide the current status and/or remedy of those issues identified as part of the review;
- Describe the local review process leading to the decision as to the number, type, and location of special education spaces within the planned building;
- Describe any special circumstances that led to the decision to locate self-contained special education classrooms and other support spaces in certain areas of the building; and
- Describe the grade and school configuration policies.

4B.2.3 Specialized Program

- Provide a description of all specialized programs that the District currently provides or participates in, both in and out of the District. Also describe any programs the District is planning to add to its current programs as part of the proposed school building project.
- Identify Collaborative(s) that the District currently participates in and how many students from the subject District are served by the Collaborative(s). If the District provides space for the Collaborative(s), identify District schools where collaborative space is currently housed, describe the spaces, programs, age span of the students for each, and any additional collaborative programs and spaces being planned as part of the proposed project. If the District does not currently house collaborative programs, or plan to house collaborative programs within the proposed project, describe the reason for this decision and any discussion had with the Collaborative Director.
- Describe alternative education programs that the District currently provides or participates in, and whether the programs will continue or be supported in the proposed project.
- Describe if and how the District delivers Pre-K or Early Childhood Special Education Programs, the location of these services, how or if these programs or services are offered to non - special education eligible students, how they are accessed, and whether these services are or will be accommodated in the proposed project.
- Describe any programs with other private or public entities and the relationships that exist with other entities that may impact the District's Special Educational Programs and if they are to be accommodated in the proposed project.

4B.3 Educational Space Summary

Provide an 11x17 signed-copy of the Educational Space Summary as preliminarily approved by the MSBA. The Educational Space Summary shall delineate all spaces by name with related square footage within the current school building, and, as applicable, all spaces associated with square footage planned in the new, replacement, or renovated areas of the proposed school building. The Educational Space Summary shall also match the floor plans and adjacency table referenced below. The MSBA's guidelines column of the Educational Space Summary spreadsheet shall not be altered and shall be based on the agreed upon design enrollment. The Educational Space Summary must reflect the schematic design being submitted to the MSBA for consideration as a proposed project. Septem

Submit a separate narrative description of all differences from the recommended preferred solution Educational Space Summary upon which the MSBA Board of Director's based its approval to proceed into Schematic Design and identify the reason for each change (e.g., minor adjustment resulting from building design efforts, adjusted floor plan, or programmatic change, etc.). If the space summary has not changed through subsequent design efforts, indicate as such.

4B.4 Floor Plans

Provide proposed floor plans that clearly identify the locations of all spaces within the planned school building. Only special education spaces must be highlighted in color and identified with a legend. Floor plans are to be submitted on 11x17 sheets minimum and electronic versions should be submitted as PDF documents. All spaces on the floor plan should be clearly labeled by name and/or grade level, as appropriate, and correlate to the spaces and square footage presented on the Educational Space Summary and special education adjacency table. For clarity, all special education spaces must also be designated with a large-font, capital letter, (e.g., A, B, C...). Include all self-contained classrooms and planned spaces for ancillary services for special needs school population within the planned building, (e.g., resource rooms, small group, therapy, life skills, adaptive physical education, etc.). Describe any additional accommodations within the planned spaces (e.g., partitions, self-contained bathrooms, sinks, etc.), that may be different from general classrooms.

If through design efforts and subsequent to the MSBA's Board of Director approval to proceed into schematic design, the conceptual floor plans change, include a separate narrative description of all changes and identify the reason for each (e.g., minor adjustment resulting from building design efforts, adjusted floor plan, or programmatic change, etc.).

4B.5 Special Education Adjacency Table

Complete and submit a Special Education Adjacency Table.. Each special education space must be listed and correspond to the room names and designations shown on the floor plans and Space Summary as well as be consistent with the special education narrative. Programs or spaces not offered on the MSBA space summary and/or unique to the District may be added to the Space Summary and to the Special Education Adjacency Table respectively, by inserting additional rows. The District must indicate the reasons for the locations and adjacencies and indicate how the proposed location supports the delivery of the proposed special education program. The Special Education Adjacency Table is to be completed on 8.5x11 sheets and in the format provided by the MSBA. The electronic version is to be submitted to the MSBA as a PDF document.

End

September 2018

Department of Elementary and Secondary Education Submittal Cover Letter

Template

Instructions: Complete and print cover letter onto OPM firm letterhead and submit two original signed versions of the cover letter and one electronic version to the MSBA for review and sign off. The MSBA will perform a review of the DESE submittal. If we have no questions regarding the submittal, the MSBA will forward the complete DESE package to the Massachusetts Department of Elementary and Secondary Education. Do not submit directly to the Massachusetts Department of Elementary and Secondary Education.

[Date]

Ms. Mary Pichetti
Director of Capital Planning
Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, Massachusetts 02109

Dear Ms. Pichetti:

The District is pursuing execution of a Project Scope and Budget Agreement for the MSBA approved schematic design of **[insert brief project scope]**. The District's **[insert year]** enrollment is **[insert #]**. The design enrollment for the proposed school project is **[insert # see executed design enrollment certification]**. The existing **[insert name]** school currently serves grades **[insert grades]** and is proposed to serve grades **[insert grades]**.

In accordance with G.L. c. 70 B, MSBA staff has assembled the documents required for the review of the special education program at **[insert school name]**. The following are attached per the 'Submittal Requirements':

1. A letter from Superintendent **[insert name]** of **[insert school district]** describing its special education program.
2. Proposed space summary that includes the existing facility, proposed spaces, and MSBA guidelines based on the agreed upon design enrollment. The first page of this summary indicates a total of **[insert #]** square feet of space dedicated to the delivery of special education.
3. The floor plans for the proposed **[insert #]** square foot **[insert school name]**.
4. A completed Special Education Adjacency Table

I have reviewed the attached documents and confirm that the District's School Building Committee has officially approved the attached submittal on (insert date of SBC meeting

September 2018

that approval was granted) and verify that the space summary match the floor plan and is complete and conform to the MSBA requirements as described in Module 4 – Schematic Design Guidelines.

Sincerely,

[Insert OPM]

[Insert OPM Title]

Appendix 4C

Schematic Design Submittal Notification Template

Instructions: Compose an email containing the following statement:

Dear (*MSBA Project Coordinator*):

The Owner’s Project Manager (“the OPM”) has received the two *Schematic Design* construction cost estimates for the (*insert school name*) school project (the “Project”), and offers the following:

Designer’s Estimated Construction Cost: \$ _____

OPM’s Independent Estimated Construction Cost: \$ _____

OPM’s Estimate of Project Cost: _____

District’s Project Budget: _____

The estimated project cost is within the District’s project budget and the District and its consultant will be forwarding a reconciled and complete Schematic Design Submittal, for which the Total Project Budget is based, on the schematic design documentation to the MSBA on _____, in anticipation of consideration at the MSBA Board of Directors Meeting scheduled for _____.

The District and its consultants understand that the MSBA will not accept Schematic Design Submittals for which the estimated project costs exceed the District’s budget or Total Project Budget updates that do not reflect the project scope included in the Schematic Design Submittal documentation. The District and its consultants further understand that all value engineering activities must be complete and the results incorporated into all of the Schematic Design Submittal documentation prior to submitting to the MSBA.

CLASSROOM – Grades 1 through 5

FUNCTIONAL CRITERIA

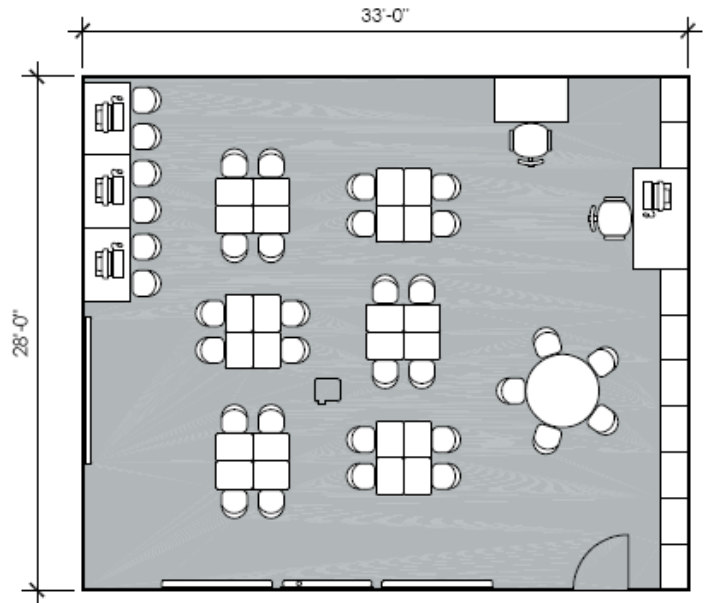
Description: General instructional classrooms for grades 1-5
Area: 925 SF net
Quantity: 24
Occupant Load: 26 (1 teacher, 1 aid, 24 students)

LOCATIONAL CRITERIA

Users: teachers, students
Adjacency: grades grouped
Orientation/Views:

TECHNICAL CRITERIA

Floor: VCT
Walls: Painted
Ceiling: Acoustical
Doors:
Lockset Hardware: Confirm hardware functions are compatible with the District's protocols related to lockdown.
Windows: required
Mechanical: low noise
Plumbing/FP:
Lighting:
Electrical: clock system
Communication: telephone, Internet access



FIXTURES/FURNISHINGS

Casework/Specialties:
Furnishings: 1 teacher's desk, 1 aid's desk, 2 task chairs, 24 student desks, 30 stacking chairs, 3 computer tables, small group tables
Equipment: 1 teacher's computer, 3 student computers, 1 printer, white boards, telephone
Shelving/Storage:

OTHER INFORMATION

Visibility: Confirm that the inclusion of sidelights at entrance locations is compatible with the District's current standards related to visibility from corridors and whether any related vision control option measures are to be incorporated.

Note: Include additional content as indicated in the MSBA Final Design Program criteria.

CLASSROOM – Kindergarten and Pre-Kindergarten

FUNCTIONAL CRITERIA

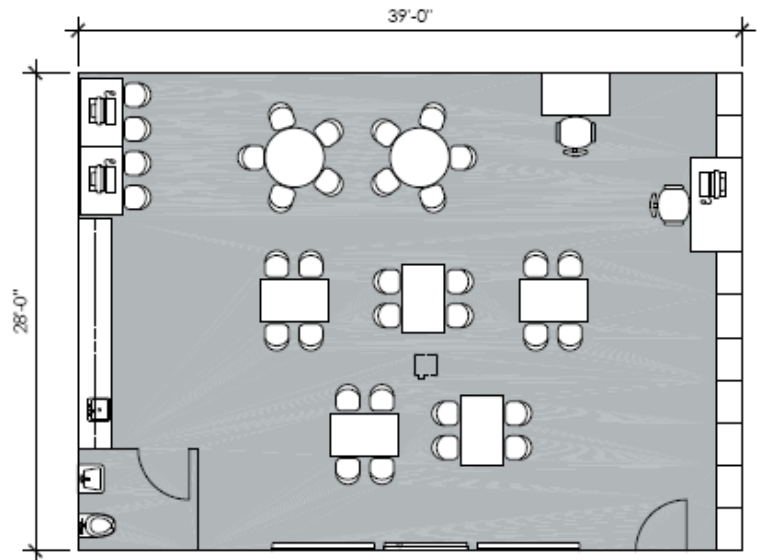
Description: Instructional classrooms Pre-K & Kindergarten
Area: 1,100 SF net
Quantity: 4
Occupant Load: 22 (1 teacher, 1 aid, 20 students)

LOCATIONAL CRITERIA

Users: teachers, students
Adjacency: grades grouped, ground floor
Orientation/Views:

TECHNICAL CRITERIA

Floor: VCT
Walls: Painted
Ceiling: Acoustical
Acoustical:
Doors:
Lockset Hardware: Confirm hardware functions are compatible with the District's protocols related to lockdown.
Windows: required
Mechanical: low noise
Plumbing/FP: CR sink, toilet room (lavatory & water closet)
Lighting:
Electrical: clock system
Communication: telephone, Internet access



FIXTURES/FURNISHINGS

Casework/Specialties:
Furnishings: 1 teacher's desk, 1 aid's desk, 2 task chairs, 20 student desks, 24 stacking chairs, 2 computer tables, small group tables
Equipment: 1 teacher's computer, 2 student computers, 1 printer, white boards, telephone
Shelving/Storage:

OTHER INFORMATION

Visibility: Confirm that the inclusion of sidelights at entrance locations is compatible with the District's current standards related to visibility from corridors and whether any related vision control option measures are to be incorporated.

Note: Include additional content as indicated in the MSBA Final Design Program criteria.

September 2018

GYMNASIUM

FUNCTIONAL CRITERIA

Description: Physical education, Sports activities space, occasional assemblies, community use
Area: 5,400 SF net
Quantity: 1
Occupant Load:

LOCATIONAL CRITERIA

Users: gym teacher, students, community, school teams, adaptive PE
Adjacency: Gym office, gym storage, OT/PT, playground, public toilets, night entry, ground floor
Orientation/Views: visual connection from corridor

TECHNICAL CRITERIA

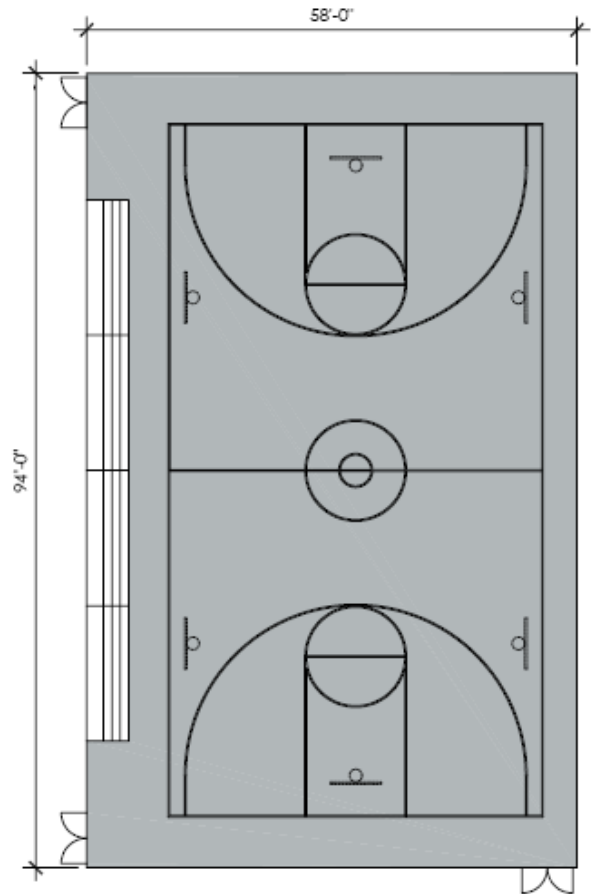
Floor: wood or epoxy
Walls: Painted block with some mats
Ceiling:
Acoustical:
Doors:
Windows: clerestory, glare control
Mechanical:
Plumbing/FP: drinking fountain
Lighting:
Electrical: clock system
Communication:

FIXTURES/FURNISHINGS

Casework/Specialties: pull-out bleachers
Furnishings:
Equipment: retractable basketball backboards, divider curtain
Shelving/Storage:

OTHER INFORMATION separate access for night use

Note: Include additional content as indicated in the MSBA Final Design Program criteria.



MAIN ENTRANCE

FUNCTIONAL CRITERIA

Description: Main approach and entrance, security area
Area: 575 SF
Quantity: 1
Occupant Load: N/A

LOCATIONAL CRITERIA

Users: Staff and students; visitors
Adjacency: Administration suite, security
Orientation/Views: Visitor parking, reception

TECHNICAL CRITERIA

Floor: ceramic tile, recessed mat
Walls: GWB, painted
Ceiling: GWB, painted
Acoustical: N/A
Doors: storefront / aluminum and glass
Windows: hollow metal
Mechanical:
Plumbing/FP:
Lighting: recessed cans
Electrical:
Communication: security and voice

FIXTURES/FURNISHINGS

Casework/Specialties: security desk
Furnishings:
Equipment:
Shelving/Storage:

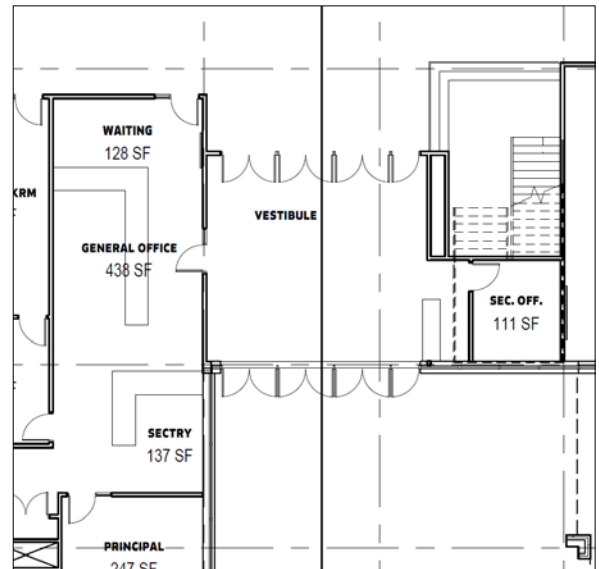
SECURITY FEATURES

Lockdown hardware: Confirm hardware functions are compatible with the District's protocols related to lockdown.
Concealment / Escape Options: Operable shades or blinds, hardening materials, ventilation controls, alarm and communication systems interface or applicable to the occupancy

Building signage
Knox box / Rapid entry system
Fire alarm control panel

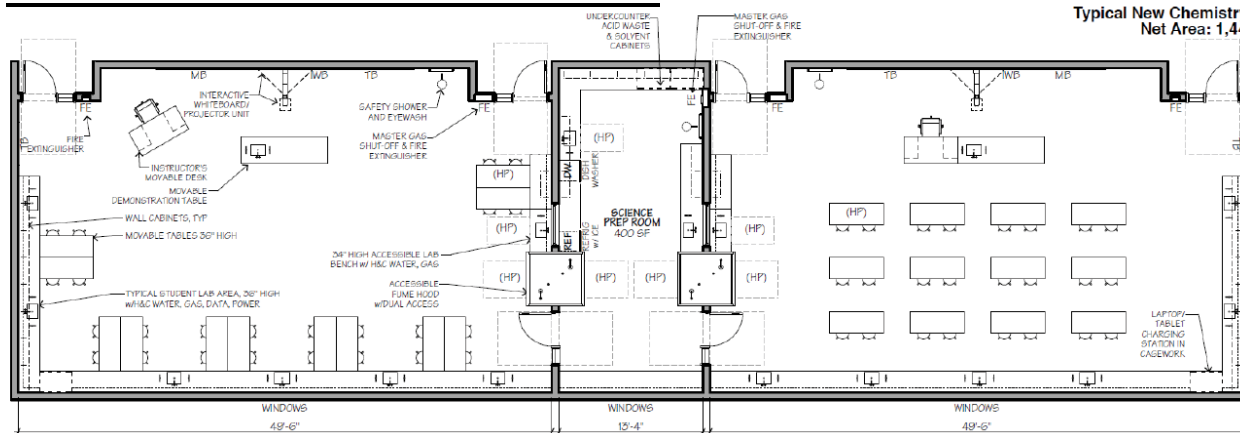
OTHER INFORMATION

Note: Include additional content as indicated in the MSBA Final Design Program criteria.



SCIENCE LAB – CHEMISTRY

Typical New Chemistry Lab
Net Area: 1,440 SF



FUNCTIONAL CRITERIA

Description: Chemistry classroom with lecture and lab desks.
 Area: 1,440 SF / Prep room – 400 SF (200 SF per class)
 Quantity: 4
 Occupant Load: 1 teacher, 24 students (60 SF per student)

LOCATIONAL CRITERIA

Users:
 Adjacency: First Floor main corridor, prep room, near central chemical storage room.
 Orientation/Views:

TECHNICAL CRITERIA

Floor: Rubber tile.
 Walls: Painted.
 Ceiling: Sound-absorptive ceiling tiles.
 Doors: Confirm hardware functions are compatible with the District's protocols related to lockdown.
 Lockset Hardware: Confirm hardware functions are compatible with the District's protocols related to lockdown.
 Windows: (HVAC) Heating and cooling purge fan.
 Mechanical: Sprinklered.
 Plumbing/FP: Indirect fluorescent lighting.
 Lighting: Electrical:
 Communication: Power: Convenience outlets per code.
 Security: Normal. (Extension of existing system to new addition.)
 Utility Shut-Offs: Gas, lab bench power, and water.

FIXTURES/FURNISHINGS - FIXED

Casework/Specialties:
 Furnishings:
 Equipment:
 Shelving/Storage:
 Other:
 ○ Perimeter counters with base cabinets, including 7 lab stations (one accessible), each with:

September 2018

- Sink, sized 18"x15"x6" deep (18"x15"x5" deep at HP location), with hot and cold water, connected to acid waste system.
- Gas turret with two nozzles each (total of 13 turrets required.)
- 120V power.
- Wall cabinets above with locking glass doors.
- One lab station shall be accessible with sink and single gas turret.
- Fume hood, double sided (shared with prep room with sink, gas, and power.
- Safety shower/eye wash with floor drain.
- Safety goggle sterilizer unit.

FIXTURES/FURNISHINGS - MOVABLE

Casework/Specialties:

Furnishings:

Equipment:

Shelving/Storage:

Other:

- Teacher demonstration counter with locking casters, portable services: gas and power.
- Teacher's desk, chair and storage.
- Counter height (36") student tables with epoxy tops for two (24"x60") with power strips and locking casters with stools (one accessible/adjustable table) – total: 12 tables, 24 stools.

FIXTURES/FURNISHINGS – PREP ROOM

Casework/Specialties:

Furnishings:

Equipment:

Shelving/Storage:

Other:

- Base cabinets with 2 sinks 18"x15" (one 10" deep, one 5" deep at HP station) with hot and cold water, gas, acid waste.
- Power at counter tops.
- Undercounter dishwasher.
- Access to shared fume hood.
- Safety shower/eye was with floor drain.
- Countertop distilled water generator.
- Undercounter acid and solvent storage cabinets.

OTHER INFORMATION

Visibility: Confirm that the inclusion of sidelights at entrance locations is compatible with the District's current standards related to visibility from corridors and whether any related vision control option measures are to be incorporated.

TECHNOLOGICAL CRITERIA

Telephone: Wall phone on teaching wall.
Data: Wi-Fi and lab bench mounted data outlets.
A/V: Presentation via interactive whiteboard/projector unit.
Clock/Speaker: Master clock and intercom systems. (Extensions of existing to new addition.)
Student Computers: 24 Tablet/laptop computers running Windows 8.
Docking/charging station located in classroom casework.

Note: Include additional content as indicated in the MSBA Final Design Program criteria.

APPENDIX 4E

MSBA Reimbursement Rate Calculation

M.G.L. c. 70B, §10 ("Chapter 70B") establishes the calculation of the reimbursement percentage to be used by the Massachusetts School Building Authority ("MSBA") to reimburse school districts for spending on approved school building projects.

Reimbursement Rate before Incentives

Pursuant to Chapter 70B, all approved projects are eligible for a base reimbursement rate of 31 percentage points. In addition to the base percentage points, the reimbursement formula includes the calculation of "ability-to-pay percentage points," which determines if a school district qualifies for any additional reimbursement percentage points being added to the base percentage, before any applicable incentive percentage points are factored into the reimbursement rate percentage. The ability-to-pay factors set forth in statute measure income (per capita income), property wealth (equalized property valuation per capita), and low income students (federal eligibility for free or reduced price lunch) in a district relative to the statewide average for each category. The ability-to-pay data is provided by the Department of Revenue (DOR) and the Department of Elementary and Secondary Education (DESE). Chapter 70B specifically allocates applicable reimbursement percentage points for the ability-to-pay factors, depending on the district's relation to the statewide average calculated for each category, as follows:

- EQV Property Wealth – between 0-28 percentage points (Source: DOR)
- Median Income Comparison – between 0-12 percentage points (Source: DOR)
- % of Students in Federal Free/Reduced Lunch – between 0-17 percentage points (Source: DOE)

The reimbursement rate included in the Feasibility Study Agreement is based on the reimbursement rate (not including any incentive points) in effect at the time the MSBA Board of Directors votes to invite the district to collaborate on a Feasibility Study for the proposed project.

Incentive Points

In addition to the base percentage and the "ability-to-pay percentage points," the MSBA, in its sole discretion, may award incentive percentage points in fractional amounts under one or more of the following categories as applicable:

- **Maintenance (0-2 points)** – Based on MSBA review of district provided materials regarding routine and capital maintenance programs. Contact the MSBA assigned Project Manager for incentive points associated with this category.
- **CM @ Risk (0 or 1 point)** – District will conditionally receive one (1) for the Construction Manager at Risk construction delivery method, subject to the District receiving approval from the Office of the Inspector General to utilize this method. If the project fails to secure this approval or elects to switch to the traditional Design-Bid Build Construction methodology, the MSBA will adjust the reimbursement amounts during its audit to reflect a reimbursement grant without the conditionally awarded point..

- **Newly Formed Regional School District (0-6 points)** – Up to Six (6) incentive percentage points may be allocated for a project at the site of a school facility that is a member of a Regional School District that was either (a) newly created as a result of working with the MSBA or (b) whose membership changed as a result of working with the MSBA and the MSBA determines that a project was avoided as a result of either the newly created district or a change in a district’s membership. Also, the MSBA may award one (1) incentive percentage point per grade, up to a maximum of three (3) incentive percentage points, for an existing Regional School District that adds grades to the existing regional grade structure. In order for the incentive points to be awarded all required authorizations must be documented.
- **Major Reconstruction or Reno/Re - use (up to 5 points)** – Up to five (5) incentive percentage points may be allocated for a renovation project that requires no new construction. Less than five (5) incentive percentage points may be allocated on a sliding scale that relates the percentage of gross square feet of renovated space to the total gross square feet of the total project. For example, if 50% of the total gross square feet of the complete project is renovated area, 2.5 incentive percentage points would be awarded.
- **Overlay Zoning District (0 or 1 point)** - District will receive one (1) incentive percentage point if the proposed project is located in an area that the Community has adopted a “smart growth zoning district” pursuant to M.G.L. c. 40R or c. 40S. In order to confirm eligibility for 1 Overlay Zoning District incentive point, a district must submit to the MSBA copies of the following items within the Schematic Design Binder:
 - A copy of the District’s application, as submitted to the Department of Housing and Community Development pursuant to M.G.L. c.40R §4, seeking a Letter of Eligibility confirming eligibility for financial incentives prior to the pursuit of local votes on a proposed smart growth zoning ordinance or bylaw, and;
 - A copy of the Letter of Eligibility (if applicable) as provided by the Department of Housing and Community Development pursuant to M.G.L. c.40R §4, and;
 - A copy of the local vote approving the smart growth zoning ordinance or bylaw, and;
 - A copy of the confirmation of approval of the smart growth zoning ordinance or bylaw as issued by the Department of Housing and Community Development pursuant to M.G.L. c.40R §4, and;
 - A copy of the most recent Certificate of Compliance (if the smart growth zoning ordinance or bylaw was approved more than one year previous to the MSBA review for incentive point eligibility) as issued by the Department of Housing and Community Development pursuant to M.G.L. c.40R §7.
- **Overlay Zoning 100 Units or 50% of units for one, two, or three family structures (0 or 0.5 point)** – One Half (0.5) incentive percentage point may be allocated if the zoning district provides 100 units or more of housing in one, two, or three family structures, or if 50% of the total housing units in the overlay zoning district are designated for one, two, or three family structures. To be eligible for the additional one half (0.5) incentive percentage point, a district must submit the following items within the Schematic Design Binder:
 - A copy of the local vote authorizing the number of total number of units in one, two or three family structures within the smart growth zoning district having

- received both local and Dept. of Housing and Community Development approval under M.G.L. c. 40R, and;
- o The percentage of units that one, two and three family structures represent of the total number of housing units authorized pursuant to the local vote approving the smart growth zoning district, and;
- o A status update on construction activity within the approved smart growth zoning district, including, but not limited to, the status of construction or occupancy of completed residential units within the approved smart growth zoning district.
- **Energy Efficiency – “Green Schools” (up to 2 points)** – Two (2) incentive percentage points will be conditionally awarded if the project targets building sustainable design levels contained in the MSBA’s Sustainable Building Design Policy, refer to MSBA web site for current guidelines. If the project fails to achieve the stated goals, the MSBA will adjust the reimbursement amounts during its audit to reflect a reimbursement grant without the conditionally awarded points.
- **Model Schools (up to 5 points)** – Requires invitation and approval to participate in MSBA’s Model School Program by MSBA Board of Directors. Upon approval, a District may receive up to five (5) incentive percentage points for participating in the Model School Program.

Anticipated Reimbursement Rate with Incentive Points

Provide the District’s anticipated reimbursement rate with incentive points in the following format. Incentive points are NOT applicable with repair projects.

Category	Reimbursement Points
Reimbursement Rate before Incentives (provided by the MSBA)	
Maintenance (provided by the MSBA)	
CM @ Risk	
Newly Formed Regional School District	
Major Reconstruction or Reno/Reuse	
Overlay Zoning District – c. 40R or c. 40S	
Overlay Zoning 100 Units or 50% units for one, two, and three family units	
Energy Efficiency – “Green Schools”	
Model Schools	
Total Incentive Points	
Anticipated MSBA Reimbursement Rate with Incentives	

Insert City/Town School Building Committee Reviewed on: Insert Date of SBC Review Date
 Insert School Name

Line Item	Description	Estimated Budget	Scope Items Excluded from the Estimated Basis of Maximum Facilities Grant or Otherwise Ineligible	Estimated Basis of Maximum Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹
Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)					
1	Feasibility Study Agreement	\$0		\$0	\$0
2	OPM Feasibility Study	\$0		\$0	\$0
3	AK&E Feasibility Study	\$0		\$0	\$0
4	Environmental & Site	\$0		\$0	\$0
5	Other	\$0		\$0	\$0
6	Feasibility Study Agreement Subtotal	\$0		\$0	\$0
7	Administration	\$0		\$0	\$0
8	Legal Fees	\$0		\$0	\$0
9	Owner's Project Manager	\$0		\$0	\$0
10	Design Development	\$0		\$0	\$0
11	Construction Contract Documents	\$0		\$0	\$0
12	Bidding	\$0		\$0	\$0
13	Construction Contract Administration	\$0		\$0	\$0
14	Closeout	\$0		\$0	\$0
15	Extra Services	\$0		\$0	\$0
16	Reimbursable & Other Services	\$0		\$0	\$0
17	Cost Estimates	\$0		\$0	\$0
18	Advertising	\$0		\$0	\$0
19	Permitting	\$0		\$0	\$0
20	Owner's Insurance	\$0		\$0	\$0
21	Other Administrative Costs	\$0		\$0	\$0
22	Administration Subtotal	\$0		\$0	\$0
23	Architecture and Engineering	\$0		\$0	\$0
24	Basic Services	\$0		\$0	\$0
25	Design Development	\$0		\$0	\$0
26	Construction Contract Documents	\$0		\$0	\$0
27	Bidding	\$0		\$0	\$0
28	Construction Contract Administration	\$0		\$0	\$0
29	Closeout	\$0		\$0	\$0
30	Other Basic Services	\$0		\$0	\$0
31	Basic Services Subtotal	\$0		\$0	\$0
32	Reimbursable Services	\$0		\$0	\$0
33	Construction Testing	\$0		\$0	\$0
34	Painting (over minimum)	\$0		\$0	\$0
35	Other Reimbursable Costs	\$0		\$0	\$0
36	Hazardous Materials	\$0		\$0	\$0
37	Geotech & Geo-Env.	\$0		\$0	\$0
38	Site Survey	\$0		\$0	\$0
39	Wetlands	\$0		\$0	\$0
40	Traffic Studies	\$0		\$0	\$0
41	Architectural/Engineering Subtotal	\$0		\$0	\$0
42	CM & Risk Preconstruction Services	\$0		\$0	\$0
43	Pre-Construction Services	\$0		\$0	\$0
44	Site Acquisition	\$0		\$0	\$0
45	Land / Building Purchase	\$0		\$0	\$0
46	Appraisal Fees	\$0		\$0	\$0
47	Recording fees	\$0		\$0	\$0
48	Site Acquisition Subtotal	\$0		\$0	\$0
49	Construction Costs	\$0		\$0	\$0
50	SUBSTRUCTURE	\$0		\$0	\$0
51	Foundations	\$0		\$0	\$0
52	Basement Construction	\$0		\$0	\$0
53	SHELL	\$0		\$0	\$0
54	SuperStructure	\$0		\$0	\$0
55	Exterior Closure	\$0		\$0	\$0
56	Exterior Walls	\$0		\$0	\$0
57	Exterior Windows	\$0		\$0	\$0
58	Exterior Doors	\$0		\$0	\$0
59	Roofing	\$0		\$0	\$0

ProRated 20% Exclusion
 \$0 -Administration
 \$0 -A/E Services
 \$0 -Miscellaneous Proj Costs
 \$0 Sum of Three Soft Costs
 Eligible Soft Costs
 Category
 \$0 -Administration
 \$0 -A/E Services
 \$0 -Site Acquisition
 \$0 -Miscellaneous Proj Costs
 \$0 FFE
 \$0
 Not included in this calculation: Owners Contingency
 \$0 Total Eligible Soft Costs

Construction Costs associated with Soft Cost Cap Calculation
 Construction Costs
 Category
 \$0 CM Preconstruction services
 \$0 -Construction Cost
 Not included in this calculation: -Construction Contingency
 \$0 Total Construction Cost
 20% Soft Cost Allowance
 \$0 Reimbursable Soft Cost
 \$0
 \$0 Eligible minus Reimbursable
 -If Eligible minus Reimbursable is negative OK.
 -If Eligible minus Reimbursable is positive enter value into Soft Costs that exceed 20% of Construction Cost below in the Ineligible column.

Construction Budget \$0
 Eligible Fees % of Total Construction
 \$0 #DIV/0!
 \$0 #DIV/0!
 OPM Value @ 3.50% Value > 3.5% \$0
 Designer Value @ 10.00% Value > 10% \$0

Insert City/Town School Building Committee Reviewed on: Insert Date of SBC Review Date
 Insert School Name

Interior Construction	Estimated Budget	Scope Items Excluded from the Estimated Basis of Maximum Facilities Grant or Otherwise Ineligible	Estimated Basis of Maximum Total Facilities Grant	Estimated Maximum Total Facilities Grant	Review Date
Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)					
60 INTERIORS					
61 Interior Construction	\$0				
62 Staircases	\$0				
63 Interior Finishes	\$0				
64 SERVICES					
65 Conveying Systems	\$0				
66 Plumbing	\$0				
67 HVAC	\$0				
68 Fire Protection	\$0				
69 ELECTRICAL					
70 EQUIPMENT & FURNISHINGS					
71 Equipment	\$0				
72 Furnishings	\$0				
73 SPECIAL CONSTRUCTION & DEMOLITION					
74 Special Construction	\$0				
75 Existing Building Demolition	\$0				
76 In-Bldg. Hazardous Material Abatement	\$0				
77 Asbestos Cont'g Floor Mat'l Abatement	\$0				
78 Other Hazardous Material Abatement	\$0				
79 BUILDING SITEWORK					
80 Site Preparation	\$0				
81 Site Improvements	\$0				
82 Site Civil / Mechanical Utilities	\$0				
83 Site Electrical Utilities	\$0				
84 Other Site Construction	\$0				
85 Scope Excluded Site Cost	\$0				
Construction Trades Subtotal	\$0				
87 Contingencies (Design and Pricing)	\$0	#DIV/0!			
88 D/B/B Sub-Contractor Bonds	\$0	#DIV/0!			
89 D/B/B Insurance	\$0	#DIV/0!			
90 D/B/B General Conditions	\$0	#DIV/0!			
91 D/B/B Overhead & Profit	\$0	#DIV/0!			
92 GMP Insurance	\$0	#DIV/0!			
93 GMP Fee	\$0	#DIV/0!			
94 GMP Contingency	\$0	#DIV/0!			
95 Escalation to Mid-Point of Construction	\$0	#DIV/0!			
96 Overall Excluded Construction Cost	\$0				
Construction Budget	\$0	#DIV/0!	#DIV/0!	#DIV/0!	
97 Alternates					
98 Ineligible Work Included in the Base Project	\$0				
99 Alternates Included in the Total Project Budget	\$0				
100 Alternates Excluded from the Total Project Budget	\$0				
Subtotal to be included in Total Project Budget	\$0				
102 Miscellaneous Project Costs	\$0				
103 Utility Company Fees	\$0				
104 Testing Services	\$0				
105 Swing Space / Modules	\$0				
106 Other Project Costs (Mailing & Moving)	\$0				
Misc. Project Costs Subtotal	\$0				
108 Furnishings and Equipment	\$0				
109 Furnishings	\$0				
110 Equipment	\$0				
111 Computer Equipment	\$0				
FF&E Subtotal	\$0				
113 Soft Costs that exceed 20% of Construction Cost	\$0				
114					
115					

Site Cost Reimbursement = Excluded 8.0% Eligible Site Costs
 Direct Site Cost \$0 \$0 Eligible Site Costs \$0 Eligible Site Costs
 Direct Building Cost \$0 \$0 Eligible Site Costs \$0 Eligible Site Costs

Scope Excluded Site Cost
 \$0 Reimbursable Site Cost
 \$0 Eligible minus Reimbursable
 If Eligible minus Reimbursable is negative OK. No ineligible needed
 If Eligible minus Reimbursable is positive enter value into Scope Excluded Site Cost

Construction Cost Reimbursement
 \$0 Eligible Demo
 \$0 Eligible Abatement
 \$0 Total Eligible Demo & Abatement
 #DIV/0! D&P % of Trades #DIV/0! Total \$/sf
 #DIV/0! Bonds #DIV/0! % of Trades #DIV/0! Eligible \$/sf
 #DIV/0! Insurance #DIV/0! % of Trades #DIV/0! Eligible \$/sf
 #DIV/0! Gen Cont #DIV/0! % of Trades #DIV/0! Eligible \$/sf
 #DIV/0! O&P #DIV/0! % of Trades #DIV/0! Eligible \$/sf
 #DIV/0! GMP Ins #DIV/0! % of Trades #DIV/0! Eligible \$/sf
 #DIV/0! GMP Fee #DIV/0! % of Trades #DIV/0! Eligible \$/sf
 #DIV/0! Escalation #DIV/0! % of Trades #DIV/0! Eligible \$/sf
 #DIV/0! Marked Up Demo & Abatement #DIV/0! % of Cumulative sum of Trades and Markups #DIV/0! Eligible Construction Cost

Proposed GSF: Manually enter eligible area if less than total area
 \$ 287 Reimbursable Construction Cost for New Construction \$/sf (subject to change)
 \$ Reimbursable Construction Cost

FFE Reimbursement
 \$0 Eligible FFE
 \$2,400 Reimbursable / Student (Subject to change)
 \$0 Reimbursable Cost
 \$0 Eligible Minus Reimbursable
 If Eligible minus Reimbursable is negative OK.
 If Eligible minus Reimbursable is positive enter value into Scope Excluded FFE Cost
 0.00 (0-2) Maintenance
 0.00 (0-1) CW @ Risk

Total Project Budget

Insert City/Town School Building Committee Reviewed on: Insert Date of SBC Review Date

Project Budget	Estimated Budget	Scope Items Excluded from the Estimated Basis of Maximum Facilities Grant or Otherwise Ineligible	Estimated Basis of Maximum Total Facilities Grant ¹	Estimated Maximum Total Facilities Grant ¹	#DIV/0!	#DIV/0!
----------------	------------------	---	--	---	---------	---------

116	\$0					
Board Authorization						
117	0	Design Enrollment				
118	0	Total Building Gross Floor Area (GSF)				
119	0	Total Project Budget (excluding Contingencies)				
120	#DIV/0!	Scope Items Excluded or Otherwise Ineligible				
121	#DIV/0!	Third Party Funding (Ineligible)				
122	\$0	Estimated Basis of Maximum Total Facilities Grant ¹				
123	0.00%	Reimbursement Rate				
124	#DIV/0!	Est. Max. Total Facilities Grant (before recovery) ¹				
125	\$0	Cost Recovery ²				
126	\$0	Estimated Maximum Total Facilities Grant ¹				
127	#DIV/0!					

0.00 (0-6) Newly Formed Regional School District
 0.00 (0-5) Major Reconstruction or Reno/Reuse type in rounded to 2 decimal places
 #VALUE!
 0 gsf Renovated or Existing to Remain
 1 gsf Total at Conclusion of Project
 0.00 (0-1) Overlay Zoning 40R and 40S
 0.00 (0-0.5) Overlay Zoning 100 units or 50% of units 1, 2, or 3 family structures
 0.00 (0-2) Energy Efficiency - "Green Schools"
 0.00 (5) Model Schools
0.00 Total Incentive Points

NOTES
 This template was prepared by the MSBA as a tool to assist Districts and consultants in understanding MSBA policies and practices regarding potential impact on the MSBA's calculation of a potential Basis of Total Facilities Grant and potential Total Maximum Facilities Grant. This template does not contain a final, exhaustive list of all evaluations which the MSBA may use in determining whether items are eligible for reimbursement by the MSBA. The MSBA will perform an independent analysis based on a review of information and estimates provided by the District for the proposed school project that may or may not agree with the estimates generated by the District using this template.

- Does not include any potentially eligible contingency funds and is subject to review and audit by the MSBA.
- The proposed demolition of the _____ School is expected to result in the MSBA recovering a portion of state funds previously paid to the District for the _____ project at the existing facilities completed in _____. The MSBA will perform an independent analysis based on a review of information and estimates provided by the District for the proposed school project that may or may not agree with the estimated cost recovery generated by the District and its consultants using this template.
- Pursuant to Section 3.20 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

128	\$0	Construction Contingency ³				
129	\$0	Ineligible Construction Contingency ³				
130	\$0	"Potentially Eligible" Construction Contingency ³				
131	\$0	Owner's Contingency ³				
132	\$0	Ineligible Owner's Contingency ³				
133	\$0	"Potentially Eligible" Owner's Contingency ³				
134	\$0	Total Potentially Eligible Contingency ³				
135	0.00%	Reimbursement Rate				
136	\$0	Potential Additional Contingency Grant Funds ³				
137	\$0	Maximum Total Facilities Grant				
138	\$0	Total Project Budget				

Appendix 4G

Module 4 Local Actions and Approval Certification Template

Instructions: Complete and print cover letter onto (City/Town/Regional School District) letterhead and submit one original signed version of the cover letter and one electronic version to the MSBA.

[Letterhead of City/Town/Regional School District]

[Date]

Ms. Diane Sullivan
Director of Program Management
40 Broad Street, Suite 500
Boston, Massachusetts 02109

Dear Ms. Sullivan:

The (*City/Town/Regional School District*) School Building Committee (“SBC”) has completed review of the Schematic Design Submittal for the (*insert school/project name*) school project and voted to approve and authorize the OPM to submit the Schematic Design related submittals to the MSBA for consideration on (*insert date of school building committee during which the vote to submit was conducted*). A certified copy of the SBC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed and abstained, are attached.

The SBC held (*insert number of SBC meetings*) meetings regarding the (*insert school/project name*) school project since the MSBA Board of Directors approved the District to proceed into Schematic Design on (*insert date of MSBA Board of Directors Meeting date*).

Insert a bulleted list of SBC meetings held to discuss and/or present to the public material related to the school project, and include the following information: who presented (if applicable), the time and location of the meeting, a summary of the concerns presented, and a list of the materials discussed or made available for public reviewed.

In addition to the SBC meetings listed above, the District held (*insert number of public meetings*) public meetings, which were posted in compliance with the Open Meeting Law, at which the (*insert school/project name*) school project was discussed.

Insert a bulleted list of all public meetings held to discuss and/or present to the public material related to the school project, and include the following information: who hosted

September 2018

the meeting (e.g., school committee, board of selectman), who presented (if applicable), the time and location of the meeting, a brief summary of the concerns presented, and a list of the materials discussed or made available for public review.

The meeting presentation materials, meeting minutes and summary materials as they relate to the (*insert school/project name*) school project are available locally for public review at (*insert location of materials (e.g. website, town hall, superintendent's office etc)*).

To the best of my knowledge the meetings listed above comply with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§18-25 and 940 CMR 29.00: Open Meetings.

The District has named (*insert name and title*) as the local point of contact to receive questions.

By signing this Local Action Certification, I hereby certify that, to the best of my knowledge and belief, that the information supplied by the District is true, complete and accurate.

By signing this Local Action Certification, I hereby certify that, to the best of my knowledge and belief, that the information supplied by the District is true, complete and accurate.

By signing this Local Action Certification, I hereby certify that, to the best of my knowledge and belief, that the information supplied by the District is true, complete and accurate.

By:

Title: Chief Executive Officer

Date:

By:

Title: Superintendent of Schools

Date:

By:

Title: Chair of the School Committee

Date:

Appendix 4H

Module 4 Schematic Design Checklist

The following checklist has been provided as a general guide for Districts and consultants in the performance of work associated with the requirements of the Feasibility Study Agreement, Module 4 – Schematic Design, OPM and Designer Contracts, practices, policies, and Project Advisories and is **not** to be submitted to the MSBA. This checklist is not intended to supersede the requirements of these documents or statutory and regulatory requirements.

Item	Date
Updated Work Plan approved by School Building Committee ("SBC")	
Reviewed Project Advisories	
Evaluation of Construction Delivery Method complete and District selected to proceed through Traditional Design-Bid-Build or CM at Risk construction delivery method	
District Response to PSR review comments submitted to MSBA	
Confirmed all DESE Submittal components align	
Schematic Design Submittal Notification email sent to MSBA assigned project coordinator	
SBC Reviewed and voted to approve submittal of the Total Project Budget to the MSBA	
SBC Vote to approve Schematic Design ("SD") Submittal and Local Actions and Approval Certification signed.	
Schematic Design Submittal submitted to the MSBA	
District Response to Schematic Design review comments submitted to MSBA	
Vote Language submitted to MSBA for review	
Updates to SBC submitted to MSBA (if applicable)	
Updates to OPM and Designer Organization Charts submitted to MSBA (if applicable)	
Copies of executed OPM and Designer Contract amendments (if applicable) submitted to the MSBA	
ProPay Budget Revision Request(s) submitted to MSBA (if applicable)	
Work plan updated and approved by SBC	
Project Scope and Budget Conference Complete	
District understands and agrees with Total Project Budget Template	
MSBA Board Approval	
MSBA Board Action Letter denoting approval of proposed project	