

March 13, 2018

Joseph F. McDonough, P.E.
Director of Facilities Maintenance Department
Town of Wellesley
888 Worcester Street, Suite 370
Wellesley, Massachusetts 02482

Re: St Paul School Swing Space Study

Final Letter Report

SMMA No. 14015.05

Dear Joe:

After our tour of the St. Paul School and Parish Center on February 8, 2018, SMMA has prepared this letter report to document discussions, decisions and observations from the day of the tour. This report further serves the purpose of presenting preliminary cost information for the repair or renovation of the existing buildings for use as potential swing space for students (grades K-5) from the Hardy, Hunnewell, and Upham Schools.

The scope of our work includes the visual assessment of the existing school and Parish Hall buildings, using existing blue prints to prepare hand sketches as needed for the development of a preliminary construction cost estimate based on professional judgment and experience.

The criteria set forth by the Town was to make the existing school useable for WPS students for up to an 8 year period starting in 2021 and to confirm how many K-5 students from HHU schools can be reasonably accommodated in the two St Paul's buildings.

Included with this report are the following attachments:

- Preliminary Project Cost Estimate, dated March 13, 2018
- Concept Design Estimate, dated March 5, 2018
- Swing Space Analysis, completed by FMD, dated February 2018 v.3
- Photographs of original School Building blueprints, date unknown

ENROLLMENT

The preliminary study indicates that 12 classrooms can be reasonably accommodated within the existing classroom facility (see attached plans) creating a two section school (two classrooms per grade grades K through 5). The Hunnewell and Upham Schools are currently two-section schools with October 2017 enrollments of 248 and 236 students respectively – the average grade level size for Hunnewell is 41.5 students in grades 1-5 or roughly 21 students per classroom and 20 in each Kindergarten classroom. At Upham, a slightly smaller school, the average is 39.8 or 40 students per grade, 20 per classroom grades 1-5 and 19 per Kindergarten classroom. Based on current enrollment projections and class sizes, the St Paul classroom building can reasonably support a population of up to 280 students – particularly given the support spaces available in the facility's two buildings. Note that the Hardy school's 2017-18 population is 295, slightly higher than the ideal Wellesley Public Schools class size prorated at the St. Paul's facility.

SITE VISIT

Representatives from the Town Facilities Department, the Parish, the School District, the Design Consultant and the Cost Estimating Consultant walked through both school buildings to review the condition of the facilities, discuss the approach to the repair or renovations, and to review the use and layout of spaces. A consensus was reached early on during the site visit that there would be a three-tiered approach to estimating the scope: Repair, Minor Renovation and Major Renovation.

SUMMARY OF RECOMMENDATIONS

The following sections start with a description of the space reconfigurations and uses, and then describe some of the nuances in each of the repair, minor renovation and major renovation cost groups.

Building Program and Space Planning

The Town's Facilities Department prepared an initial layout of spaces prior to the site visit, for the team's consideration during the walk-through. Through design team, School District and Town discussion as existing conditions were observed, the space layout was modified. At the conclusion of the site visit, the School District had a few open items they wanted to discuss with their staff and educators, and had an independent, follow-up site visit. After the two site visits, the final space layout included with this report was arrived at for use as a basis of the swing space analysis.

The program for the buildings would be comprised of twelve K through 5th grade classrooms (two classrooms per grade), a music room, library, speech, psychology, support and administrative spaces, and a gymnasium. The swing space was planned for a 220 student capacity in two buildings.

The intent behind the configuration of spaces was to make the existing school building into the classroom building with a centrally located administration, staff and nurse area on the 2nd floor. Speech, psychology and student support spaces would also be housed in this building for ease of access by teachers, administrators and students. The Parish Hall building would house the gym (existing), cafeteria, library and music rooms.

SCHOOL BUILDING - OPTION 1: REPAIRS

Summary: The Option 1 cost group is intended to capture the most limited building upgrades possible. All minimum code requirements would be met in this scenario with the exception of a certain, limited number of items that would need to be brought to the attention of the local Authority Having Jurisdiction (AHJ) for approval or waiver.

Accessibility (incl. door hardware) and Egress: In this scenario, the building would receive a new elevator and elevator lobby with access to all floors, the egress stairs would be made code compliant by establishing a 1-hour rated stairwell which can only be accessed from the corridor and by replacing the existing hand-/guardrails. All door hardware would be replaced.

Toilet Rooms: Existing toilet rooms would be updated to comply with Accessibility regulations and plumbing code. One new single-user toilet room would be added in the administrative area. Consistent with the mechanical section of this option, the existing toilet room unit ventilators would remain as-is.

Fire Protection and Alarm: Fire protection upgrades would include a new sprinkler system, emergency and exit lighting, fire alarm and control panel. Security upgrades would also be included.

Roofing: Per the Town of Wellesley's Facility Department, the roof is beyond its useful life and is to be replaced in this and all other scenarios.

Interior Finishes and Asbestos Containing Material (ACM) Abatement: The flooring and ceilings would remain as is (no abatement) with the exception of an allowance of 100 SF of abatement and new floor tile for areas that are damaged and friable.

Program Changes: Student lockers will be provided throughout the school, the blackboards will be overlaid with whiteboards, the ACM piping would be concealed by providing a new soffit, and new classrooms and support spaces would be established in the lower level either through new construction or conversion efforts. This work is included in all scenarios.

Mechanical Systems: The repair only solution strictly includes replacing the roof vents/fans. The existing boiler (in good condition) would remain as well as all existing unit ventilators.

Electrical Systems: Upgrades are limited to the inclusion of new public address (PA), master clock, and telephone and data systems. These upgrades apply to all scenarios.

Potential waiver requests: Items not included that would necessitate AHJ approval include, (1) doing no work to the existing stair nosings, (2) replacing the existing non-compliant drinking fountains with vendor-provided bubblers and (3) approval to continue using the existing boiler room metal stair for access and exit.

SCHOOL BUILDING - OPTION 2: MINOR RENOVATIONS

Summary: The Option 2 cost group or scenario is intended to capture the aforementioned building upgrades, to require only one waiver approval by the AHJ, and to include additional minor upgrades that exceed minimum requirements.

Accessibility (incl. door hardware) and Egress: This scope is identical to the scope included in the Option 1: Repair scenario. Additionally, the stair treads/nosings would be made code compliant by installing a strip on the underside of the nosing and the existing metal stair in the lower level boiler room would be replaced with a new code compliant stair.

Toilet Rooms: Existing toilet rooms would be updated to comply with MAAB accessibility regulations and plumbing code. Two new single-user toilet rooms would be added—one in the administrative area on the First Floor and one in the existing storage room on the Second Floor. Consistent with the mechanical scope of this option, the existing toilet room unit ventilators would be refurbished and retro-commissioned.

Fire Protection and Alarm: This scope is identical to Option 1: Repair scenario.

Roofing: This scope is identical to Option 1: Repair scenario. (The roof requires replacement.)

Interior Finishes and Asbestos Containing Material (ACM) Abatement: The ceilings would remain as is (no abatement) but the ACM floor tile would be covered, excluding corridors, stairs and bathrooms.

Program Changes: This scope is identical to Option 1: Repair scenario.

Mechanical Systems: This scenario includes leaving the existing boiler (in good condition) as-is, adding a second boiler for redundancy and reconditioning and retro-commissioning the existing unit ventilators throughout the building.

Electrical Systems: Upgrades include a new public address (PA), master clock, and telephone and data systems. Additionally, this option includes the upgrade of the existing switchgear, power, branch and distribution systems.

Potential waiver requests: This option strictly requires the AHJ to approve use of a vendor-provided bubbler in lieu of a built-in accessible drinking fountain.

SCHOOL BUILDING - OPTION 3: MAJOR RENOVATIONS

Summary: The Option 3 cost group or scenario is intended to capture the aforementioned building upgrades, to not require any waiver approvals by the AHJ, and to include additional major upgrades including full floor and ceiling ACM abatement measures.

Accessibility (incl. door hardware) and Egress: This scope is identical to the scope included in the Option 2 Minor Renovation scenario.

Toilet Rooms: Existing toilet rooms would be updated to comply with Accessibility regulations and plumbing code. Two new single-user toilet rooms would be added—one in the administrative area on the First Floor and one in the existing storage room on the Second Floor. Additionally, the existing toilet room in the former egress hall, adjacent to the Kindergarten room would be upgraded for student or adult use (to be decided at a later date). Consistent with the mechanical scope of this option, the existing toilet room unit ventilators would be replaced.

Fire Protection and Alarm: This scope is identical to the scope included in the Options 1 and 2 Repair and Minor Renovation scenarios.

Roofing: This scope is identical to the scope included in the Options 1 and 2 Repair and Minor Renovation scenarios.

Interior Finishes and Asbestos Containing Material (ACM) Abatement: The existing flooring and ceilings would be abated and replaced with new acoustical ceiling tile (ACT) and vinyl composition tile (VCT) flooring.

Program Changes: Student lockers will be provided throughout the school, the blackboards will be overlaid with whiteboards, the ACM piping would be concealed by providing a new soffit, and new classrooms and support spaces would be established in the lower level either through new construction or conversion efforts. This work is included in all scenarios.

Mechanical Systems: This scenario includes replacing the existing boiler (in good condition), adding a second boiler for redundancy and replacing the existing unit

ventilators throughout the building. This option also includes the replacement of the existing compressor located in the boiler room.

Electrical Systems: This option includes all work outlined in Option 2 in addition to the replacement of lighting and controls throughout the building.

Potential waiver requests: Not applicable.

PARISH HALL - ALL WORK

The Parish Hall work was developed without three-tiered options due to the newer condition of the existing building, the limited amount of renovation required and the absence of ACM and code compliance issues.

In summary, the work at the Parish Hall consists of making the building accessible by adding a new ramp with switchback at the main entrance, adding a platform lift with enclosure to access the lower level, and replacing door hardware on existing toilet rooms and back-of-house rooms. The toilet rooms would be upgraded to meeting accessibility and plumbing code regulations. The Lower Level rooms would be reconfigured to house the music room, library and cafeteria. Lighting would be reconfigured as needed to support new room layout.

TIMELINE

The following timeline was provided by the Town for planning purposes and to inform the escalation rate applied to the cost estimate.

Feasibility Start	July 1, 2018
Design & permitting Start	January 1, 2019
Bids-in-Hand	March 1, 2020
Construction Complete	May 1, 2021

PRELIMINARY COST ESTIMATE

The construction cost estimate for the repair or renovation of the buildings was kept separate by building so that code implications could be evaluated on a *by building* basis. An overview of the costs are provided here. The detailed estimate can be found in the enclosure.

Although the cost categories are broken up into Repair, Minor Renovation and Major Renovation, it is at the Client's discretion to change the work in each category.

School Building

	Option 1: Repair	Option 2: Minor Renovation	Option 3: Major Renovation
ADA/Life Safety Code Compliance	\$1,537,450	\$1,609,950	\$1,888,263
Roofing	\$176,250	\$176,250	\$176,250
Interior Construction	\$209,750	\$348,538	\$449,698
Mechanical and Electrical Services	\$108,405	\$579,898	\$849,698
Contingency and Markups	\$678,000	\$831,000	\$980,000
Escalation	\$245,000	\$323,000	\$396,000
Total	\$2,927,855	\$3,868,635	\$4,739,425

Parish Hall

	All work
Main Entry	\$22,500
Egress Stairs	\$62,625
Door Hardware	\$13,500
Toilet Rooms	\$51,550
Program Changes	\$60,000
Contingency and Markups	\$90,000
Escalation	\$28,000
Total	\$328,175

SMMA developed a preliminary total project cost sheet with the Town of Wellesley Facilities Department that captures additional “soft costs” the Town should budget to execute this project. The total project cost to be budgeted for each Option is as follows:

- **Option 1** School Building, incl. Parish Hall scope: **\$4,760,588**
- **Option 2** School Building, incl. Parish Hall scope: **\$6,215,127**
- **Option 3** School Building, incl. Parish Hall scope: **\$7,260,075**

See *Preliminary Total Project Cost sheet in enclosure for detailed breakdown of soft costs.*

ASSESSED VALUES (2018)

The following 2018 assessed values were provided by the Town and are instrumental in determining the extent of the code compliance measures that must be implemented in the case of a building renovation. The key threshold is 30% of the assessed value:

School:	\$5,376,500	30% of Assessed Value = \$1,612,950
Parish Hall:	\$1,978,000	30% of Assessed Value = \$ 593,400

PRELIMINARY CODE CONSIDERATIONS

The major code considerations that must be considered during a renovation are (1) the requirement to bring the entire building into full MAAB accessibility compliance should the cost of the work exceed 30% of the building's full and fair cash value per 521 CMR and (2) the requirement to provide a new sprinkler system throughout the building when total floor area of the building (and its addition) exceeds 7,500 GSF or renovation costs exceed 33% of the assessed building value per M.G.L Chapter 148 Section 26G.

School Building

Due to the cost and square-footage of the renovation, the entire building must comply with 521 CMR and a sprinkler system must be installed.

Parish Hall

Accessibility: Due to the cost of the renovation exceeding \$100,000 but not exceeding the full and fair cash value of the building, the work being performed is required comply with 521 CMR and an accessible public entrance, accessible toilet room, telephone and drinking fountain shall also be provided.

Fire Protection: M.G.L. Chapter 148 Section 26G stipulates that "[e]very building or structure, including any additions or major alterations(*) thereto, which totals, in the aggregate, more than 7,500 gross square feet in floor area shall be protected throughout with an adequate system of automatic sprinklers in accordance with the provisions of the state building code." It is recommended that the exact square-footage of the existing building be obtained, as it is currently estimated at 8,000 GSF. Should it in fact exceed 7,500 GSF, the local Fire Department may enforce this law.

(*) Major alterations are interpreted as any alteration work that exceeds 33% of the assessed building value or 33% of the gross building square-footage. The work in the Parish hall does not currently exceed the 33% assessed value threshold, however, it can be assumed that the work does exceed the 33% gross building square-footage threshold--being that the scope includes one of two floors of the Parish Hall (est. 4,000 GSF each).

It is recommended that the exact square-footage of the existing building be determined to validate these assumptions and that the head of the Fire Department be consulted for their interpretation. Currently, the Parish Hall estimate does not include new sprinkler system. Assume an additional \$55,000 in construction cost should a sprinkler system be required.

Very truly yours,

SMMA



Kristen Olsen, AIA
Project Manager

Preliminary Project Budget

St. Paul's Classroom and Parish Building Renovations Wellesley, MA

based on 21,950 SF (Classroom Bldg)
and 4,000 SF (Parish Bldg - Bsmt)

Grades K-5 - 220 Students

Estimated Construction Cost

Option 1) Classroom Building Repairs	\$2,927,855	
Option 2) Classroom Building Minor Renovation	\$3,868,635	
Option 3) Classroom Building Major Renovation	\$4,739,425	
4) Parish Hall Renovation	\$328,175	
		\$3,256,030 Opt 1+4
		\$4,196,810 Opt 2+4
		\$5,067,600 Opt 3+4

Estimated Costs for Furnishings and Equipment

a.) Educational Furnishings and Equipment (FFE)	\$264,000	
b.) Technology Equipment (equipment)	\$264,000	
c.) Library Books - (reuse existing)	\$0	
		\$528,000

Architects/Engineers Fee

a). Basic Services Fee to be included in Lump Sum Fee	\$325,603	Opt 1+4	10.0% fee
	\$419,681	Opt 2+4	
	\$506,760	Opt 3+4	
b). Additional Services to be included in Lump Sum Fee			
Food Service Consultancy	\$0		
Acoustics and Sound System Consultancy	\$0		
Code Consultancy	\$10,000		
Security Consultancy	\$0	use Town vendor	
Detailed Cost Estimating	\$15,000		
Hardware Consultancy	\$12,000		
Local Site Permitting	\$75,000		
Sustainable Design Consultancy	\$0		
FFE Consultancy	\$5,000		
Educational Technology Consultancy	\$5,000		
Documentation of Existing Building	\$0		
	Subtotal (b. only)	\$122,000	
			\$447,603 Opt 1+4
			\$541,681 Opt 2+4
			\$628,760 Opt 3+4
	Total Lump Sum Fee		\$628,760 Opt 3+4

Additional Services

Topographic Survey and Utilities Research	\$8,000
Geotechnical Consultancy	\$0
Geoenvironmental Consultancy	\$0
Traffic Consultancy	\$12,000
Hydrant Flow test	\$0
State and Federal Site Permitting	\$0
Hazardous Material Consultancy	\$20,000

Subtotal **\$40,000**

Miscellaneous Projects Costs and Expenses

a.) Clerk of Works - Full Time Clerk for 12 months	\$153,600
b.) OPM (incl. Commissioning Agent) - 12 hrs/wk	\$122,800
c.) Legal counsel	\$10,000
d.) Advertising expenses	\$5,000
e.) Moving expense (incl. removal of St Paul's & reuse of some existing WPS furniture)	\$25,000
f.) Storage	\$0
g.) Printing of bid and construction documents	\$10,000
h.) Structural Peer Review	\$10,000
i.) LEED Fees	\$0
j.) Construction testing	\$20,000
k.) Utility Backcharges	\$0
l.) Owner Contingency 10% of estimated soft costs	\$132,555

Subtotal **\$488,955**

Bidding and Construction Contingency

a.) Construction Contingency 10% of estimated construction cost	\$162,802	Opt 1+4
b.) Construction Contingency 10% of estimated construction cost	\$419,681	Opt 2+4
c.) Construction Contingency 10% of estimated construction cost	\$506,760	Opt 3+4
TOTAL ESTIMATED PROJECT COST	\$4,760,588	Opt 1+4
	\$6,215,127	Opt 2+4
	\$7,260,075	Opt 3+4



Wellesley School District
St. Paul's School and Parish Hall
Wellesley, MA

March 5, 2018

Concept Design Estimate

Architect:

SMMA
1000 Massachusetts Ave
Cambridge, MA 02138
(800) 487 4894

Cost Estimator:

Daedalus Projects Incorporated
1 Faneuil Hall Marketplace
South Market Bldg., Suite 4195
Boston, MA 02109
(617) 451 2717

INTRODUCTION

Project Description:

Analysis and comparison of Re-Use Feasibility Study Options for K-5th grade school program

Option 1. Repairs: limited repair/replacement

Option 2. Minor Renovation: moderate repair/replacement

Option 3. Major Renovation: major repair/replacement

Work identified in Repair column assumes approval of limited code compliance variances by building official

Buildings considered as two separate Projects

School Building

Parish Hall

Project Particulars:

Documents received from SMMA and Town of Wellesley

Swing Space Analysis Wellesley FMD - February 2018 v.3

Photographs of School Building Floor Plan Blueprints

AHERA Report dated September 10, 2013 prepared by Covino Environmental Associates, Inc.

Daedalus Projects, Inc. site visit February 8, 2018

Detailed quantity takeoff from these resources where possible

Daedalus Projects, Inc. experience with similar projects of this nature

Discussion and review with SMMA and their Design Team

Project Assumptions:

The project will be publicly bid amongst General Contractors

It has been assumed that no less than 4 bids will be received. Bids can be expected to be significantly higher if fewer bids are received

Both School Building and Parish Hall will be unoccupied during construction

Site and adjacent building(s) will be occupied during entire construction period

Unit rates are escalated to mid-point of construction duration and utilizing open shop labor rates

Operation during normal business hours

Lay-down/storage area, jobsite shed and trailers, and construction site entrance will be located adjacent to Project area

Temporary electrical and water site utility connections will be available. General Conditions value includes utility connections and consumption costs

Noise and vibration disturbances are anticipated and will be minimized or avoided during normal business hours

Subcontractor's markups have been included in each unit rate. Markups cover the cost of field overhead, home office, and Subcontractor's profit

Design and Pricing Contingency markup is an allowance for unforeseen design issues, design detail development and specification clarifications

General Conditions covers supervision, general facilities to support Project, and site office overheads that are not attributable to the direct trade costs

Project Requirements value covers scaffolding, staging and access, temporary protection, and cleaning

Fee markup is calculated on a percentage of direct construction costs

Start of new construction is assumed March 1, 2020 for construction duration of 14 months and completion May 1, 2021

Escalation at a rate of 4% per year has been calculated from now to the start of construction, and carried in the Main Summary

INTRODUCTION

Construction Cost Estimate Exclusions:

- Salvage of equipment and moveable furnishing items
 - Building Permit
 - Escalation from now to start of construction
 - Work beyond the boundary of the site
 - Site or existing condition surveys and investigations
 - Architectural/Engineering; Designer and other Professional fees, testing, printing, surveying
 - Owner's administration; legal fees, advertising, permitting, Owner's insurance, administration, interest expense
 - Owner's site representation and project administration
 - Project costs; utility company back charges prior to construction, construction of swing space and temporary facilities, program related phasing, relocation
 - Owner furnished and installed products; computer networking, desks, chairs, furnishings, equipment, artwork, loose case goods and other similar items
 - Third Party testing and commissioning
 - Police details and street/sidewalk permits
-

SCHOOL BUILDING MAIN SUMMARY

ELEMENT	Repairs		Minor Renovation		Major Renovation	
SCHOOL BUILDING						
Direct Trade Cost Details						
ADA / Life Safety Code Compliance		\$1,537,450		\$1,609,950		\$1,888,263
Roofing		\$176,250		\$176,250		\$176,250
Interior Construction		\$209,750		\$348,538		\$449,215
Mechanical And Electrical Services		\$108,405		\$579,898		\$849,698
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Direct Trade Cost Sub Total		\$2,031,855		\$2,714,635		\$3,363,425
Design and Pricing Contingency	15%	\$305,000	15%	\$408,000	15%	\$505,000
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Direct Trade Cost Total		\$2,336,855		\$3,122,635		\$3,868,425
General Conditions, Project Requirements Fee	11% 3.75%	\$258,000 \$88,000	10% 3.50%	\$313,000 \$110,000	9% 3.25%	\$349,000 \$126,000
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Estimated Construction Cost Total		\$2,682,855		\$3,545,635		\$4,343,425
Escalation from now to start of construction	9%	\$245,000	9%	\$323,000	9%	\$396,000
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School Building Estimated Construction Cost at Bid Date		\$2,927,855		\$3,868,635		\$4,739,425
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SCHOOL BUILDING DIRECT TRADE COST SUMMARY

ELEMENT	Repairs	Minor Renovation	Major Renovation
New Elevator and Vestibule	\$521,025	\$521,025	\$521,025
Egress Stairs	\$222,600	\$262,200	\$262,200
Door Hardware	\$27,800	\$27,800	\$27,800
Toilet Rooms	\$497,580	\$530,480	\$586,580
Fire Protection	\$159,138	\$159,138	\$351,200
Plumbing	\$2,850	\$2,850	\$33,000
Low Voltage Electrical Systems	\$106,458	\$106,458	\$106,458
ADA / LIFE SAFTEY CODE COMPLIANCE	\$1,537,450	\$1,609,950	\$1,888,263
Roofing	\$176,250	\$176,250	\$176,250
ROOFING	\$176,250	\$176,250	\$176,250
Flooring, Floor Finishes	\$3,500	\$140,288	\$240,965
Program Changes	\$206,250	\$208,250	\$208,250
INTERIOR CONSTRUCTION	\$209,750	\$348,538	\$449,215
Mechanical System	\$21,000	\$108,550	\$221,600
Electrical System	\$87,405	\$471,348	\$628,098
MECHANICAL AND ELECTRICAL SERVICES	\$108,405	\$579,898	\$849,698
Direct Trade Cost SubTotal	\$2,031,855	\$2,714,635	\$3,363,425

SCHOOL BUILDING DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	Repairs		Minor Renovation		Major Renovation		
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
9	Total GSF		21,950	GSF					
10	Existing Building		20,950	GSF					
11	New Elevator and Vestibule Addition		1,000	GSF					
12									
13	ADA / LIFE SAFTEY CODE COMPLIANCE								
14									
15	New Elevator and Vestibule								
16	Concrete foundations, slab on grade	GSF	\$50.00	250	\$12,500	250	\$12,500	250	\$12,500
17	elevator pit, misc. metals	LS	\$15,000.00	1	\$15,000	1	\$15,000	1	\$15,000
18	Glazed/opaque exterior façade	SF	\$110.00	1,715	\$188,650	1,715	\$188,650	1,715	\$188,650
19	cut new opening in former exterior façade, patch and match	LOC	\$10,000.00	3	\$30,000	3	\$30,000	3	\$30,000
20	shaftwall, partitions, doors	SF	\$25.00	1,715	\$42,875	1,715	\$42,875	1,715	\$42,875
21	Flat membrane roofing, elevator vent	GSF	\$30.00	250	\$7,500	250	\$7,500	250	\$7,500
22	Flooring, ceiling finishes	GSF	\$12.50	1,000	\$12,500	1,000	\$12,500	1,000	\$12,500
23	Elevator; MRL, passenger, 4-stop, 2-opening cab	LS	\$165,000.00	1	\$165,000	1	\$165,000	1	\$165,000
24	MEP&FP	GSF	\$20.00	1,000	\$20,000	1,000	\$20,000	1,000	\$20,000
25	relocate under-window unit ventilator	UNIT	\$9,000.00	3	\$27,000	3	\$27,000	3	\$27,000
26	New Elevator And Vestibule Total				\$521,025		\$521,025		\$521,025
27									
28	Egress Stairs								
29	Remove stair railing, replace with new code compliant	FLT	\$9,000.00	4	\$36,000	4	\$36,000	4	\$36,000
30	install new stair tread / nosing cover	EA	\$450.00			88	\$39,600	88	\$39,600
31	Block off classroom door leading to stairwell	OPEN	\$1,250.00	2	\$2,500	2	\$2,500	2	\$2,500
32	Remove egress storefront and doors	LOC	\$1,050.00	2	\$2,100	2	\$2,100	2	\$2,100
33	Add new egress storefront, doors, hold-open hardware	LOC	\$41,000.00	2	\$82,000	2	\$82,000	2	\$82,000
34	Remove egress storefront and doors, replace with new; Entry	LOC	\$50,000.00	2	\$100,000	2	\$100,000	2	\$100,000
35	Egress Stairs Total				\$222,600		\$262,200		\$262,200
36									
37	Door Hardware								
38	Replace classroom door hardware w/lever set	LEAF	\$900.00	13	\$11,700	13	\$11,700	13	\$11,700
39	toilet room	LEAF	\$850.00	6	\$5,100	6	\$5,100	6	\$5,100
40	office, admin	LEAF	\$900.00	6	\$5,400	6	\$5,400	6	\$5,400
41	back of house, support	LEAF	\$800.00	7	\$5,600	7	\$5,600	7	\$5,600
42	Door Hardware Total				\$27,800		\$27,800		\$27,800
43									
44	Toilet Rooms								
45	Gut demo partitions, fixtures, accessories	RMS	\$3,000.00	6	\$18,000	6	\$18,000	6	\$18,000
46	Remove tile flooring, patch concrete floor, install new tile flooring	SF	\$27.00	1,290	\$34,830	1,290	\$34,830	1,290	\$34,830
47	Patch walls and ceiling, prep and repaint	SF	\$2.00	5,800	\$11,600	5,800	\$11,600	5,800	\$11,600
48	New toilet fixture, partition compartment, accessories	FIX	\$7,350.00	25	\$183,750	25	\$183,750	25	\$183,750
49	New urinal, privacy screen	FIX	\$6,250.00	14	\$87,500	14	\$87,500	14	\$87,500
50	New vanity sink, soap dispenser, mirror	FIX	\$6,200.00	12	\$74,400	12	\$74,400	12	\$74,400
51	New towel dispenser/waste receptacle	FIX	\$750.00	6	\$4,500	6	\$4,500	6	\$4,500
52	Refurbish unit ventilator unit	EA	\$3,150.00			6	\$18,900		
53	Replace unit ventilator unit	EA	\$9,000.00					6	\$54,000
54	Replace toilet exhaust	EA	\$3,500.00	6	\$21,000	6	\$21,000	6	\$21,000
55	New single-user room in former egress vestibule; Kindergarten	RMS	\$21,000.00					1	\$21,000
56	New single-user room; Staff	RMS	\$26,000.00	1	\$26,000	2	\$52,000	2	\$52,000
57	Replace toilet fixtures; Second Floor	RMS	\$12,000.00	1	\$12,000				
58	Replace janitor sink, new mop rack, repaint	RMS	\$8,000.00	3	\$24,000	3	\$24,000	3	\$24,000
59	Toilet Rooms Total				\$497,580		\$530,480		\$586,580
60									
61	Fire Protection								
62	Wet-pipe fire suppression system	GSF	\$5.50	21,950	\$120,725	21,950	\$120,725	21,950	\$120,725
63	Asbestos abatement at ceiling finish penetration	GSF	\$0.25	21,950	\$5,488	21,950	\$5,488		
64	Asbestos abatement ceiling finish	SF	\$5.00					21,950	\$109,750
65	Patch ceiling, match existing	SF	\$1.50	21,950	\$32,925	21,950	\$32,925		
66	New ceiling finish	SF	\$5.50					21,950	\$120,725
67	Fire Protection Total				\$159,138		\$159,138		\$351,200
68									

SCHOOL BUILDING DIRECT TRADE COST DETAILS

ELEMENT	UNIT	UNIT RATE	Repairs		Minor Renovation		Major Renovation	
			Quantity	Cost	Quantity	Cost	Quantity	Cost
69 Plumbing								
70 Remove drinking fountain, install new vendor bubbler	FIX	\$950.00	3	\$2,850	3	\$2,850		
71 Remove drinking fountain, install new ADA drinking fountain/bottle filler	FIX	\$8,250.00					3	\$24,750
72 Replace classroom sink; Kindergarten	FIX	\$8,250.00					1	\$8,250
73 Plumbing Total				\$2,850		\$2,850		\$33,000
74								
75 Low Voltage Electrical Systems								
76 Emergency and exit lighting	GSF	\$0.50	21,950	\$10,975	21,950	\$10,975	21,950	\$10,975
77 Fire alarm; control panel, devices, cabling	GSF	\$3.25	21,950	\$71,338	21,950	\$71,338	21,950	\$71,338
78 Security; rough-in conduit, backboxes	GSF	\$1.10	21,950	\$24,145	21,950	\$24,145	21,950	\$24,145
79 Low Voltage Electrical Systems Total				\$106,458		\$106,458		\$106,458
80								
81								
82 ROOFING								
83								
84 Roofing								
85 Replace membrane roofing	SF	\$25.00	7,050	\$176,250	7,050	\$176,250	7,050	\$176,250
86 Roofing Total				\$176,250		\$176,250		\$176,250
87								
88								
89 INTERIOR CONSTRUCTION								
90								
91 Flooring, Floor Finishes								
92 Abatement, replacement - qty provided	SF	\$35.00	100	\$3,500				
93 Egress stair; terrazzo - no work	SF		1,065		1,065		1,065	
94 Boiler room; etr	SF		830		830		830	
95 replace metal stair	FLT	\$3,000.00			1	\$3,000	1	\$3,000
96 Cover all floor finishes, excluding corridors, stairs, bathrooms	SF	\$7.50			18,305	\$137,288		
97 Full abatement, replacement of flooring with new VCT	SF	\$13.00					18,305	\$237,965
98 Flooring, Floor Finishes Total				\$3,500		\$140,288		\$240,965
99								
100 Program Changes								
101 New student locker	EA	\$450.00	220	\$99,000	220	\$99,000	220	\$99,000
102 Overlay blackboard w/new whiteboard	EA	\$5,000.00	11	\$55,000	11	\$55,000	11	\$55,000
103 Modify soffit/window head to conceal piping; Lower Level	LF	\$100.00	100	\$10,000	100	\$10,000	100	\$10,000
104 <i>Demo, new flooring, partitions, doors, paint</i>								
105 convert Storage to Classroom	RMS	\$2,100.00	1	\$2,100	1	\$2,100	1	\$2,100
106 new Support in Existing Classroom	RMS	\$2,400.00	1	\$2,400	1	\$2,400	1	\$2,400
107 convert Play Room to Classroom	RMS	\$10,000.00	3	\$30,000	3	\$30,000	3	\$30,000
108 convert Supplies to Support	RMS	\$500.00	1	\$500	1	\$500	1	\$500
109 convert Kitchen to Speech	RMS	\$2,250.00	1	\$2,250	1	\$2,250	1	\$2,250
110 convert Meter Room to Psychology	RMS	\$5,000.00	1	\$5,000	1	\$5,000	1	\$5,000
111 convert single Toilet Room to Storage	RMS	\$2,000.00			1	\$2,000	1	\$2,000
112 Program Changes Total				\$206,250		\$208,250		\$208,250
113								
114								
115 MECHANICAL AND ELECTRICAL SERVICES								
116								
117 Mechanical System								
118 Boiler; existing to remain / do nothing	UNIT		1					
119 existing to remain, add additional boiler for redundancy (qty 1)	UNIT	\$55,000.00			1	\$55,000		
120 replace boiler, add additional boiler for redundancy (qty 2)	LS	\$100,000.00					1	\$100,000
121 Replace compressor	UNIT	\$10,000.00					1	\$10,000
122 Under-window room unit; existing to remain	UNIT		9					
123 recondition unit in place	UNIT	\$3,150.00			9	\$28,350		
124 replace unit, new pneumatic control	UNIT	\$9,000.00					9	\$81,000
125 Replace roof fan	UNIT	\$5,000.00	4	\$20,000	4	\$20,000	4	\$20,000
126 Subcontractor Trade burdens and markups		5%		\$1,000		\$5,200		\$10,600
127 Mechanical System Total				\$21,000		\$108,550		\$221,600
128								

SCHOOL BUILDING DIRECT TRADE COST DETAILS

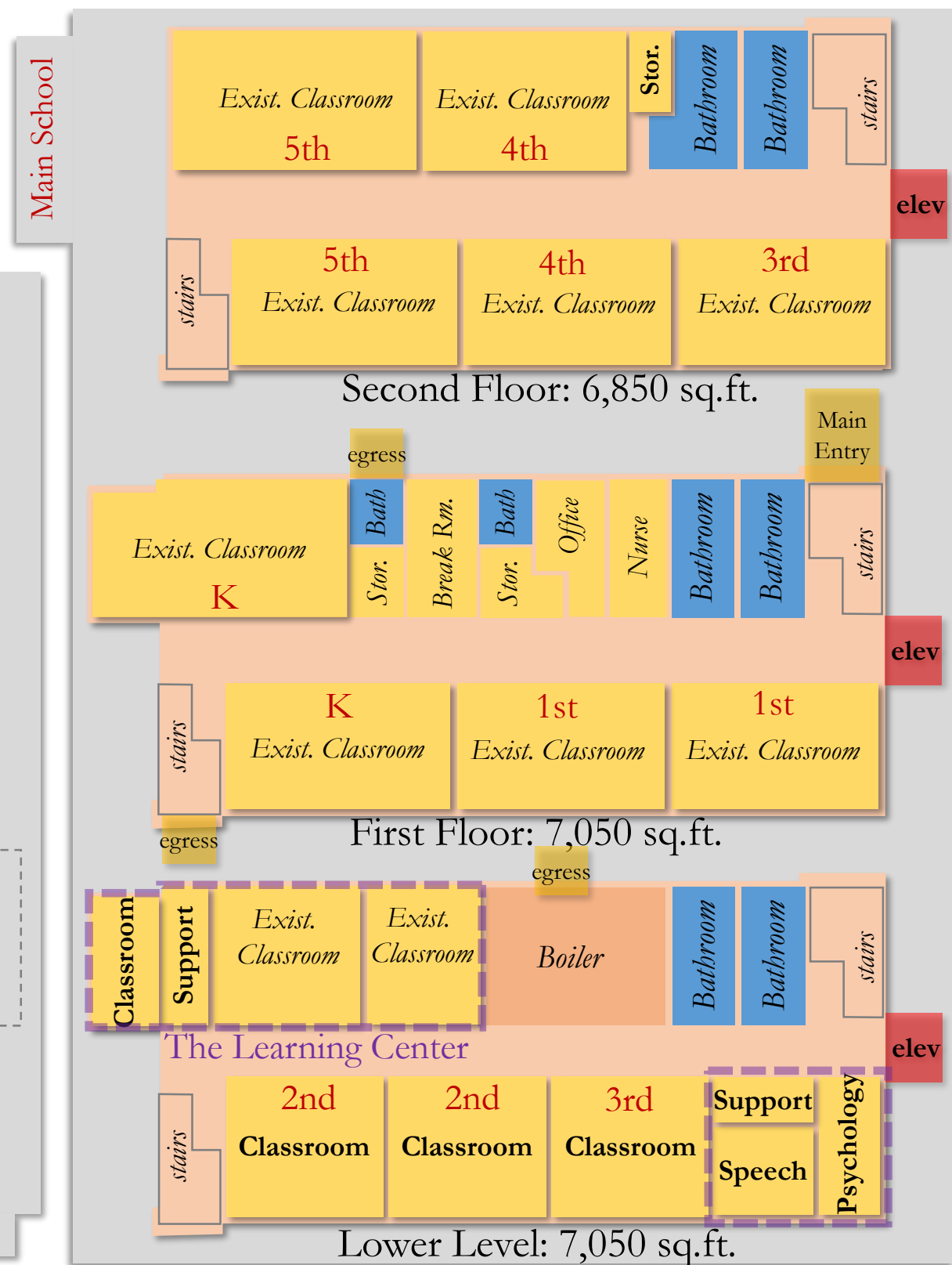
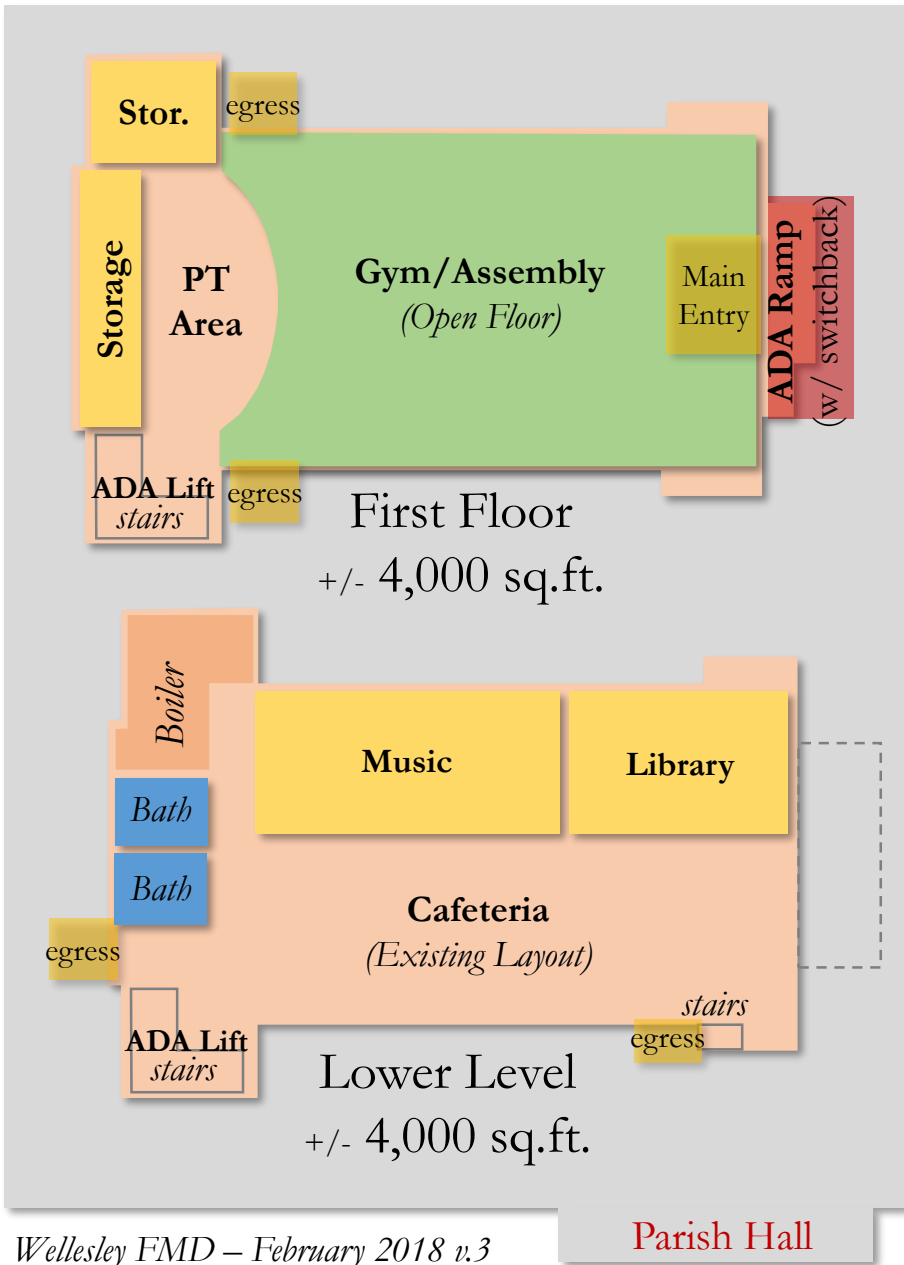
ELEMENT	UNIT	UNIT RATE	Repairs		Minor Renovation		Major Renovation	
			Quantity	Cost	Quantity	Cost	Quantity	Cost
129 Electrical System								
130 Demo, make safe	GSF	\$0.65			21,950	\$14,268	21,950	\$14,268
131 Gear, distribution, equipment wiring	GSF	\$10.00			21,950	\$219,500	21,950	\$219,500
132 Lighting and controls	GSF	\$7.00					21,950	\$153,650
133 Power and branch devices	GSF	\$6.50			21,950	\$142,675	21,950	\$142,675
134 Public address/Master Clock	GSF	\$1.15	21,950	\$25,243	21,950	\$25,243	21,950	\$25,243
135 Tele/data/CATV; rough-in cable tray, conduit, backboxes	GSF	\$2.25	21,950	\$49,388	21,950	\$49,388	21,950	\$49,388
136 Temporary lighting and power (GC/PR)	GSF	\$0.50	21,950	\$10,975	21,950	\$10,975	21,950	\$10,975
137 Subcontractor Trade burdens and markups		2%		\$1,800		\$9,300		\$12,400
138 Electrical System Total				\$87,405		\$471,348		\$628,098
139								
140								
141								

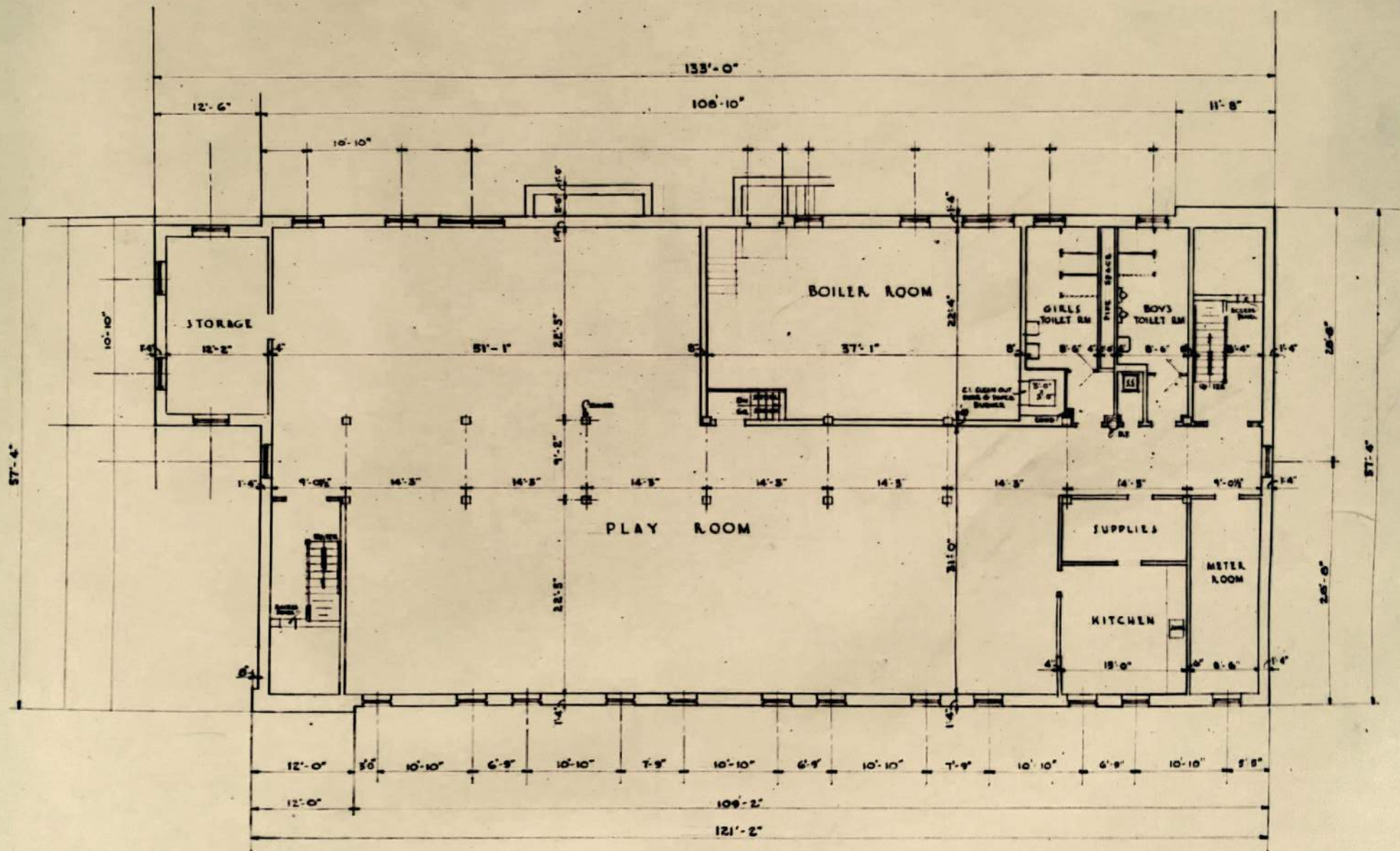
PARISH HALL DIRECT TRADE COST DETAILS

ELEMENT	QUANTITY	UNIT	UNIT RATE	TOTAL
8 Main Entry				
9 Add new ramp w/switchback	300	GSF	\$75.00	\$22,500
10 Main Entry Total				\$22,500
11				
12 Egress Stairs				
13 Demo wood framed stair	1	FLT	\$1,500.00	\$1,500
14 upper landing	75	GSF	\$15.00	\$1,125
15 New lift, platform, enclosure	1	LS	\$40,000.00	\$40,000
16 Rebuild egress stair around new lift	1	FLT	\$5,000.00	\$5,000
17 Power, heating ventilation	1	LS	\$15,000.00	\$15,000
18 Egress Stairs Total				\$62,625
19				
20 Door Hardware				
21 Replace toilet room door hardware w/lever set	2	LEAF	\$850.00	\$1,700
22 office, admin	6	LEAF	\$900.00	\$5,400
23 back of house, support	8	LEAF	\$800.00	\$6,400
24 Door Hardware Total				\$13,500
25				
26 Toilet Rooms				
27 Gut demo partitions, fixtures, accessories	2	RMS	\$2,000.00	\$4,000
28 Remove tile flooring, patch concrete floor, install new tile flooring	235	SF	\$30.00	\$7,050
29 Patch walls and ceiling, prep and repaint	1,200	SF	\$2.00	\$2,400
30 New toilet fixture, accessories	2	FIX	\$6,100.00	\$12,200
31 New vanity sink, soap dispenser, mirror	2	FIX	\$6,200.00	\$12,400
32 New towel dispenser/waste receptacle	2	FIX	\$750.00	\$1,500
33 Add new venting, new heat pump	2	EA	\$6,000.00	\$12,000
34 Toilet Rooms Total				\$51,550
35				
36 Program Changes				
37 Convert Admin/Existing Classroom to Music and Library	2	RMS	\$10,000.00	\$20,000
38 Convert Lower Level to Cafeteria - allowance provided	1	AL	\$20,000.00	\$20,000
39 Lighting reconfiguration	4,000	GSF	\$5.00	\$20,000
40 Program Changes Total				\$60,000
41				
42				
43 Direct Trade Cost Sub Total				\$210,175
44 Design and Pricing Contingency	25%			\$53,000
45 General Conditions, Project Requirements	10%			\$27,000
46 Fee	3.50%			\$10,000
47 Escalation from now to start of construction	9.10%			\$28,000
48				
49				
50 Parish Hall Estimated Construction Cost Total				\$328,175
51				
52				

Swing Space Analysis

Saint Paul's School & Parish Hall
502 Washington Street





BASEMENT FLOOR PLAN
SCALE 1/8" = 1'-0"

SCHOOLBUILDING FOR ST. PAUL
WELLESLEY, MASS.
MOST REVEREND RICHARD

133'-0"

12'-6"

11'-6"

2'-6" 7'-4 3/4" 2'-3 1/2" 14'-7" 7'-4 3/4" 3'-8" 7'-4 3/4" 3'-9 1/2" 7'-4 3/4" 3'-1 1/2" 6'-1" 6'-1"

KINDERGARTEN

TEACHER'S ROOM

OFFICE

CLINIC

BOYS TOILET RM

GIRLS TOILET RM

STAIR HALL #2

SUPPLIES

14'-7"

42'-0"

4'-3 1/2" 3'-0" 4'-1"

12'-0"

15'-10"

8'-10"

12'-4"

11'-6"

1'-0"

6'-1"

2'-6" 7'-4 3/4" 2'-3 1/2"

12'-6"

C

O

R

R

I

D

O

R

6'-1"

1'-0"

8'-8"

34'-0"

34'-0"

34'-0"

1'-0"

CLASS ROOM #1

CLASS ROOM #2

CLASS ROOM #3

W.A.R.D.R.O.B.

W.A.R.D.R.O.B.

W.A.R.D.R.O.B.

U.V.

U.V.

U.V.

1'-0" 14'-7" 3'-0" 14'-7" 4'-0" 14'-7" 3'-0" 14'-7" 4'-0" 14'-7" 3'-0" 14'-7" 3'-8"

12'-0"

109'-2"

121'-2"

PLAN OF FIRST FLOOR.

