

FACILITIES COST ANALYSIS
May 2015

Tremont Montessori PK-8 School
for the
Cleveland Metropolitan School District
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Cleveland, Ohio 44114
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INTRODUCTION

The Scope of Work for the Cleveland Metropolitan School District includes an Assessment Report for Michael White PK-8 School and Tremont Montessori PK-8 School. The assessment is based upon the Ohio School Facilities Commission (OSFC) Assessment Guidelines to fully renovate the school building to current Ohio School Design Manual Standards and current building codes.

AVG performed the assessments of Michael White PK-8 School and Tremont Montessori PK-8 School on April 5, 2015 and April 10, 2015 respectively. The Assessment consisted of a walk-through of the complexes and review of the architectural drawings and site. The Assessment Report contains the following: a general description of the facility assessment and associated costs, site plan, existing and proposed converted floor plans, and Enhanced Environmental Hazards Assessment (conducted by OSFC in 2001).

MASTER PLANNING CONSIDERATIONS & SUMMARY OF COSTS

Tremont Montessori PK-8 School

- 1) The school is not fully utilized based on the current enrollments. Based on the existing square footage and OSFC square foot calculators, this school could accommodate approximately 950 PK-8 students. This extra square footage would be considered “excess space” by OSFC and will require the school district to pay 100% locally funded initiative’s (LFI’s) for the renovation work. The school will need to be programmed for close to 950 PK-8 students to avoid this LFI.
- 2) The site is very undersized compared to OSFC standards. For the current 577 students, the OSFC would recommend 16 acres for this school. For the projected 500 students, the site should be 15 acres. It was observed during the physical assessment that the parking lot was very congested during drop off time, with cars maneuvering around one another, students and parents walking in-between cars which are moving and parked, and cars parking in front of the entrances.
- 3) The kitchen is in the lower level, but the cafeteria (shared with auditorium) is on the 1st floor – thus students have to carry their lunch trays from the serving line up the stairs to the cafeteria.
- 4) The typical classrooms range in sizes – whereas some exceed the 900 s.f. recommendations by the OSDM, others are less than that.

Probable Renovations Costs

Tremont Montessori PK-8 School

A-W Renovations on Assessment Study: \$19,280,701.20

Renovation vs. Rebuilt Percentage: 71%



Building Assessment and Cost Analysis for

Tremont Montessori PK-8 School

May 18, 2015 – DRAFT - Prepared by
Architectural Vision Group, Ltd. (AVGL)

Tremont Montessori PK-8 School Building Assessment



- Tremont Montessori PK-8 School is composed of 119,744 SF
- Building Capacity = Approx. 950 PK-8 Students
- Current Enrollment = 577 students
- Future project target enrollment = 500 students
- OSFC Building SF for 500 PK-8 students (assume 350 ES and 150 MS) = 68,498 SF
- Existing Excess SF for 500 students (includes addition) = \$10 million Locally Funded Initiative (LFI)
- Renovation vs. Rebuild percentage = 71% (comparing renovation cost vs. cost of building new facility of same SF)



Tremont Montessori PK-8 School Building Assessment



- Option 1 - New Construction
Demolish existing buildings and then build a new PK-8 School onsite for 500 K-8 students.
- Option 2 – Renovate and Build Addition
Renovate existing buildings to OSFC and building code standards for 500 PK-8 students. Construct a new kitchen and cafeteria addition as per OSFC Design Manual Standards.



Tremont Montessori PK-8 Building Assessment



Option 1 – New Construction

Demolish existing building and then build a new PK-8 school on the existing school site.

- Build 68,498 SF new construction on existing school site for 500 students, grades PK-8.

68,498 SF x \$241.97 =

\$16,574,495.77

+ \$666,278.21 demo + abate existing structures

\$17,240,773.98 Total New Construction

Required LFI: \$ 0.00

OSFC Co-funded Share (68%): \$11,723,726.30

District Co-funded Share (32%): \$5,517,047.68

Swing Space LFI: TBD

Total District Cost: \$5,517,047.68

Tremont Montessori PK-8 Building Assessment



Option 2 –Renovation and Addition

Fully renovate existing Tremont School and construct kitchen/cafeteria addition for 500 PK-8 students

- Construct Addition: $6,961 \text{ SF} \times \$252.80/\text{SF} = \$1,759,740.80 \text{ LFI}$
- Renovate Existing 119,744 SF Cost: \$19,280,701.20 (approx. \$161.01 per SF)
- OSFC co-funded SF for 500 students: 68,498 SF
 $119,744 \text{ SF existing} - 68,498 \text{ SF OSFC co-funded} = 51,246 \text{ SF excess space (LFI). Excess Space LFI} = 51,246 \text{ SF} \times \$161.01 / \text{SF} = \$8,251,118.46$
- Total Renovation/Addition:
 $\$19,280,701.20 \text{ Reno} + \$1,759,740.80 \text{ Addition} = \$21,040,442.00$

\$21,040,442.00 Total Renovation / Addition

Excess Space LFI:	\$ 8,251,118.46
Kitchen/Cafeteria Addition LFI	<u>\$ 1,759,740.80</u>
Total LFI:	\$ 10,010,859.26

OSFC Co-funded Share

(68% of \$21,040,442.00 = \$14,307,500.56 - \$10,010,859.26 LFI): \$ 4,296,641.30

District Co-funded Share

(32% of \$21,040,442.00 = \$6,732,941.44 + \$ 10,010,859.26 LFI): \$16,743,800.70

Swing Space LFI: TBD

Total District Cost: \$16,743,800.70



Cleveland Metropolitan School District				County	Cuyahoga	Area	8
Tremont Montessori PK-8 School				Contact			
2409 W. 10th St.				Phone:			
Cleveland, Ohio				Date Prepared	5/13/2015		
				Prepared by:	Architectural Vision Group, Ltd.		
Addition	Date	HA *	Floors	Current SF			
Original Building	1917	no	4				
Addition 1	1924	no	4				
Gross Sq. Ft.				119,744			
FACILITIES	ASSESSMENT		Rating	Renovation Dollar Assessment			
				Tremont PK-8			
A. Heating System				\$ 4,085,665.28			
B. Roofing				\$ 306,201.20			
C. Ventilation/Air Conditioning				\$ -			
D. Electrical Systems				\$ 1,943,445.12			
E. Plumbing & Fixtures				\$ 98,000.00	Assessment/Master Planning Comments:		
F. Windows				\$ 6,480.00			
Structure							
G. Foundation				\$ -			
H. Walls & Chimneys				\$ 286,403.00			
I. Floors & Roofs				\$ -	Comparison 1:		
J. General Finishes				\$ 2,842,928.00	New Building Cost of same size	119,744	
K. Interior Lighting				\$ 598,720.00		X \$ 226.48	
L. Security System				\$ 341,270.40		\$ 27,119,621.12	
M. Emerg/Egress Lighting				\$ 119,744.00			
N. Fire Alarm System				\$ 179,616.00	Reno vs Rebuild Percentage:		71.10%
O. Handicapped Access				\$ 570,048.80			
P. Site Condition				\$ 522,846.36	Comparison 2:		
Q. Sewage System				\$ -	New Building Cost for 500 students	68,498	size of new bldg. per OSFC
R. Water Supply				\$ 35,000.00	(assume 300 ES + 150 MS)	\$ 241.97	
S. Exterior Doors				\$ -		\$ 16,574,496	
T. Asbestos				\$ 330,340.58			
U. Life Safety Code				\$ 743,180.08	Reno vs Rebuild Percentage:		116.33%
V. Loose Equipment				\$ 598,720.00			
W. Technology				\$ 1,178,280.96			
Subtotal				\$ 14,786,889.78			
X. a) Contingency 7%				\$ 1,035,082.28			
Total of Construction cost				\$ 15,821,972.06			
b) Soft costs 16.29%				\$ 2,577,399.25			
Renovation Cost				\$ 18,399,371.31			
Area 8 regional Cost factor - 104.79%				\$ 881,329.89			
TOTAL RENOVATION COST				\$ 19,280,701.20	Note: Cost to renovate is \$161.01 / SF		

General Description

Tremont School is a four-story, 119,744 SF, PK-8 Montessori school located on a small 2.7-acre urban site on the west side of Cleveland. The original portion of the 1917 building located on the northeastern wing was formally attached to another older school building which has been since demolished. This created a dead-end corridor situation on the upper three levels of the school.

In 1924, a large addition was constructed onto the remaining 1917 building which provided classrooms, and a second gymnasium. The facility is a brick building with attractively designed stone trim and marble entrance stairs. The facility features conventionally partitioned design, with masonry bearing backup walls, and plaster walls on the interior, which ranges in condition from good to poor. The facility is designed with several light wells to provide natural light to the lower level classrooms. The intermediate floor structure and roof structure is cast in place concrete. The roofing system is a single-ply membrane system which according to Ohio School Facilities Commission (OSFC), was installed in 2001.

The design of the four-story school creates some challenges to daily operation. For instance, the kitchen is located in the basement level and the cafeteria is in the first floor auditorium space. Thus, children must go down to the basement to the serving line and carry their lunch trays back to the first floor level. There are also two very small gymnasiums located on the lower level. Both are inadequate in terms of space and for today's physical education program requirements. The classrooms range in size from 750 SF to 1,000 SF compared to 900 SF as recommended by the OSFC.

Although the building is approaching 100 years old, it has been well maintained and has had improvements over the years. Improvements include reconstruction of the parapet walls along the entire upper perimeter of the building, new Ohio School Design Manual (OSDM) compliant windows, and new playground equipment and gardens on the north side of the site.

The electrical system for the facility is inadequate based on Ohio School Design Manual (OSDM) guidelines. There are minimal electrical outlets in the typical classroom, resulting in an excessive use of extension cords. The building has a minimal fire alarm system, which is not compliant with Ohio Building Code, OSDM or the NFPA. There is no fire suppression system provided in the building. In 2001, the OSFC conducted an Enhanced Environmental Assessment to determine what hazardous materials were present in the building. It was concluded that there are asbestos-containing floor tiles, duct insulation, pipe fittings, as well as acoustical ceiling tiles present in the building that require abatement. The overall building is not compliant with ADA accessibility requirements.



The undersized 2.7 acre site is located within a residential neighborhood. Traffic circulation is a problem. The parking lot was observed to be quite congested during the morning drop-off time, with parents and students walking amidst cars which were moving and/or being parked. There are no true car drop-off/pick-up zones. There is no bus loop and busing is done curbside on the east side of the building. Access onto the site is unrestricted, although there is some decorative wrought iron fencing present on site.

ITEM A: HEATING SYSTEM

Description

The existing system for the entire facility consists of three large fan units that also utilize a hot water coil for providing heat and ventilation to the school. These units appear to be 50+ years old and should be replaced. The hot water is provided from three (3) – Burnham Hot Water Boilers, each with 4,713 MBH input, 3,770 MBH output. These boilers are in fair shape and assuming they are 20-25 years old, they are approaching the end of their useful life and also should be replaced.



Fan Unit with Heating Coil



3 Boilers

There is no central air conditioning (AC) system, and the ventilation rates are not compliant with present building codes and the Ohio School Design Manual (OSDM). Each classroom utilizes pneumatic thermostats to modulate the dampers in the ductwork providing heated air from the fan heating unit. The pneumatic temperature control system appears to be part of the original construction and is in poor condition. This system does not include individual temperature controls in all spaces as required by the OSDM. Each classroom door is equipped with a door louver, and large gravity relief vents are located in the corridors. Many dampers were not operating correctly and many areas of the school lack the necessary controls and ventilation. The ductwork is not sized for cooling and is not configured for reuse when proper ventilation and cooling occurs.

The overall heating system is evaluated as being in safe, but very inefficient, working order and long-term life expectancy of the existing system is not anticipated.

Recommendations

Provide a new overall heating, ventilating and air conditioning system to achieve compliance with Ohio Building Code and OSDM standards. Convert to a ducted system with all required vertical and horizontal chases. Provide new DDC temperature controls to meet both the OBC and OSDM. (This is included in the HVAC system replacement cost).

Costs

HVAC system replacement: 119,744 SF x \$26.12 / SF =	\$3,127,713.28
New Ductwork: 119,744 SF x \$8.00 / SF =	<u>\$957,952.00</u>
Total =	\$4,085,665.28

ITEM B: ROOFING

Description



Coping joints exposed



Minor ponding

The school has a flat, single-ply membrane roof system, which is reported to have been installed in 2001 and is in fair condition. There were no reports of current leaking, though signs of past leaking were observed inside the building. The roof has exceeded the age requirements by the OSFC, and will require replacement. Access was gained via two roof ladders which lead to roof access doors. They are in poor condition. The roofs utilize a system of internal roof drains and scuppers for evacuation of storm water and appear in fair condition. Minor areas of ponding were observed on the roof during the physical assessment. The parapet walls are equipped with stone coping, which have deteriorating joints leading to water penetration within the walls. There is no covered walkway attached to this structure.

Recommendations

The roof requires replacement to meet Ohio School Design Manual (OSDM) guidelines for the age of system. It is recommended that two roof ladders and roof access doors be replaced due to poor condition. Metal coping should be installed over existing stone coping to prevent further water penetration.

Costs

Membrane roof replacement: 31,420 SF x \$8.70 / SF =	\$273,354.00
New access ladders (2): 34 LF x \$100.00/ LF =	\$3,400.00
New roof access doors: 2 units x \$2,000/unit =	\$4,000.00
Metal coping: 1,383 LF x \$18.40 / LF =	<u>\$25,447.20</u>
Total =	\$306,201.20

ITEM C: AIR CONDITIONING

Description

The facility is not equipped with a central air conditioning system.

The ventilation fans utilize O.A. intakes and shafts that appear to provide adequate volumes of outside air, however, the system is not capable of providing this air as required by the OSDM and OMC. The relief for these units occurs through door louvers and large relief shafts extending through each floor.



Rooftop gravity vent

There are three (3) through-the-wall air conditioning units serving the computer room and the library on the 3rd floor.

General building exhaust (rest rooms, storage rooms, custodial closets) have exhaust registers and associated fans. In many situations these fans are not operating and/or are in poor condition.

Recommendations

Provide an air conditioning system to meet the OMC and OSDM. This will include a new central boiler and chiller plant. Pricing included in Item A. Replace all general building exhaust fans. Pricing included in Item A.

ITEM D: ELECTRICAL

Description

The electrical system provided to the overall facility is a 240-volt 800-amp 3-phase 4-wire system with an updated Main Distribution Panel. Its installation date is unknown and it is in fair condition.

Power is provided to the building by a multiple utility-owned transformer located in the utility vault. Its condition is unknown as the vault is only accessible by utility company personnel. The panel system, installed in



Excessive use of extension cords

1917, is in poor condition and cannot be expanded to add additional capacity. There were some additional distribution panels added for technology upgrades.

Adequate outlets are not provided throughout the building for academic or cleaning services. The typical classroom contains approximately two (2) outlets. This creates an over-reliance on and an abundance of extension cords throughout the classroom ceiling areas. This is in violation of building codes. Also, the use of multi-outlet covers is used to supplement the lack of outlets. The overall building has lightning protection safeguards in place.

Recommendations

The entire electrical system requires replacement to meet Ohio School Design Manual guidelines for overall capacity and lack of OSDM required features. Adequate outlets should be provided throughout the building to meet OSDM requirements.

Provide an emergency generator, with funding included in the electrical system replacement.



Main Electrical Room

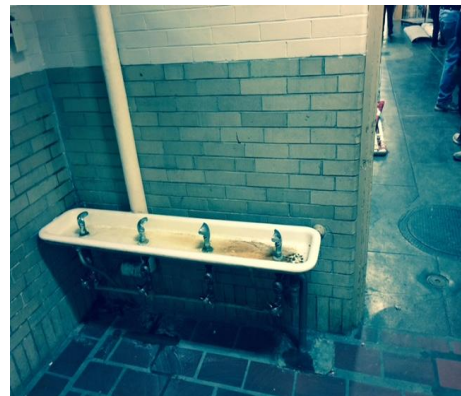
Costs

Electrical system replacement: 119,744 SF x \$16.23/ SF = \$1,943,445.12

ITEM E: PLUMBING

Description

service entrance is not equipped with a back-flow preventer. A water treatment system is not provided, though none is needed. The domestic water lines are in fair shape and do not need to be replaced. There is a booster system on the water main that provides adequate pressure to the building. The booster system is in fair condition, however it is reaching the end of its useful life and should be replaced. The facility is equipped with a gas fired hot water heater that has a 91-gallon capacity with 199 MBH gas input. The unit appears to be in fair condition, but also should be replaced due to its age.



Water fountain

The school contains six (6) Large Group Restrooms for boys, six (6) Large Group Restrooms for girls, no (0) Locker Room Restrooms for boys, no (0) Locker Room Restrooms for girls, and four (4) Restrooms for staff. The Boys' Large Group Restrooms contain no (0) ADA and seventeen (17) non-ADA floor mounted, flush valve toilets, no (0) ADA and fourteen (14) non-ADA wall mounted, flush valve urinals, as well as no (0) ADA and seventeen (17) non-ADA wall mounted lavatories.

The Girls' Large Group Restrooms contain no (0) ADA and twenty-five (25) non-ADA floor mounted, flush valve toilets, as well as no (0) ADA and eleven (11) non-ADA wall mounted lavatories.

Boys' Locker Room Restrooms contain no (0) ADA and no (0) non-ADA floor mounted, flush valve toilets, no (0) ADA and no (0) non-ADA, floor mounted, flush valve urinals, no (0) ADA and no (0) non-ADA wall mounted, lavatories, as well as no (0) ADA and no (0) non-ADA showers. Girls' Locker Room Restrooms contain no (0) ADA and no (0) non-ADA floor mounted, flush valve toilets, as well as no (0) ADA and no (0) non-ADA wall mounted lavatories, as well as no (0) ADA and no (0) non-ADA showers. Staff Restrooms contain no (0) ADA and five (5) non-ADA floor mounted, flush valve toilets, no (0) ADA and no (0) non-ADA urinals, as well as no (0) ADA and five (5) non-ADA wall mounted lavatories. The condition of all fixtures is rated fair.



Water fountain & mop sink

The facility is equipped with no (0) ADA and four (4) non-ADA drinking fountains, as well as no (0) ADA and nine (9) non-ADA electric water coolers, all of which are in poor condition. Adequate exterior wall hydrants are not provided.

Recommendations

Provide all new fixtures (lavatories, urinals, water closets) due to age and condition. Provide all new electric water coolers and water fountains. Provide new back-flow preventer. Replace domestic water heater. Note: All fixtures required to be ADA complaint are accounted for in Item O.

Costs

Back-flow preventer: 1 unit x \$5,000/unit =	\$5,000.00
Domestic water heater: 1 unit x \$5,100/unit =	\$5,100.00
Water closets (remove/replace): 36 units x \$1,500/unit =	\$54,000.00
Lavatory (remove/replace): 20 units x \$1,500/unit =	\$30,000.00
Urinals: 9 units x \$1,500/unit: 9 units x \$2,000/unit =	\$13,500.00
Electric water coolers/drink. fountains (remove/replace): 13 units x \$3,000/ea =	\$39,000.00
Total =	\$98,000.00

ITEM F: WINDOWS

Description

The overall facility is equipped with thermally-separated, aluminum frame, double-glazed insulated window system. Windows were installed approximately 15 years ago and are in good condition. The typical window is an operable double-hung type system. Windows are equipped with insect screens which are generally in good condition. Window system seals appear to be in good condition with no air or water infiltration observed or reported. Window system

hardware appears in good condition as well. The windows are equipped with surface-mounted shades in most spaces and these are in good condition. There was one glass block window observed on the west elevation which appears newer and is in good condition. This facility is not equipped with any curtain wall system.



Windows are insulated



Typical Windows

The exterior doors in the facility are equipped with double-glazed vision panels. However, the old wood frame transoms above the doors with single pane glass are still in place and are a source of energy loss to the building. The school does not contain any skylights.

Recommendations

Provide new window transoms due to age and type of system with new, compliant window system to be double-glazed with a thermally-separated frame.

Costs

New window transoms: 108 SF x \$60.00/SF = \$6,480.00

ITEM G: STRUCTURE – FOUNDATION

Description

The overall facility has concrete foundation walls on concrete footings which displayed no significant locations of differential settlement, cracking or leaking. No significant issues in relation to foundation spalling were encountered. No grading or site drainage deficiencies were noted around the perimeter of the structure.

Recommendations

Existing conditions require no renovation or replacement at the present time.



Concrete foundation walls in fair condition

ITEM H: STRUCTURE (WALLS AND CHIMNEYS)

Description

The overall facility has a brick veneer on load bearing masonry walls and a reinforced concrete frame type system. The facade displayed many locations of deterioration. Tuckpointing of mortar is required throughout. It appears that the top portion of the brick walls have been completely replaced around the roof perimeter. The exterior masonry does not have control joints, or adequate expansion joints. However, there does not appear to be any required as there is no indication of significant exterior masonry cracking or separation. Brick veneer masonry walls are not cavity walls. Weep holes are provided. The exterior masonry does not show signs of recent cleaning or sealing which is needed.

No locations of mold or efflorescence were observed. Architectural exterior accent materials consist of stone detailing which is aesthetically pleasing and generally in good condition. The majority of the interior walls are plaster and range in condition from good to poor. The window sills are stone and require caulking at the joints to prevent water infiltration. The exterior lintels are steel which are not galvanized and some of the lintels show signs of rust. Scraping and painting as regular maintenance is recommended by maintenance personnel. There are no canopies above entrances to evaluate. The school is not equipped with a loading dock.



Brick requires cleaning, sealing & tuckpointing



Lintels are beginning to rust

Recommendations

Provide tuckpointing, cleaning and sealing of exterior brick masonry. Re-pointing of stone window sills is required. Provide an allowance for minor stone masonry repairs at entrances and parapets.

Costs

Tuckpointing: 26,332.00 SF x \$5.25/ SF =	\$138,243.00
Exterior masonry cleaning: 52,664 SF x \$1.50/SF =	\$78,996.00
Exterior masonry sealing: 52,664 SF x \$1.00 / SF =	\$52,664.00
Repoint sill joints: lump sum =	\$1,500.00
Allowance for stone repairs: lump sum	<u>\$15,000.00</u>
Total =	\$286,403.00

ITEM I: STRUCTURE (FLOORS & ROOFS)

Description

The floor construction of the basement level is concrete construction. There is no crawl space. The floor construction of the intermediate floors is cast-in-place concrete, and they are in fair to good condition where observed. The roof construction of the overall facility is cast-in place type construction, but could not be observed for evaluation of condition.



Intermediate floor construction



Intermediate floor construction

Recommendations

Existing conditions require no renovation or replacement at the present time.

ITEM J: GENERAL FINISHES

Description

The overall facility features conventionally partitioned classrooms with wood-type flooring, plaster and brick (lower level) walls, and plaster and 2' x 4' lay-in ceilings. The condition of the finishes range greatly throughout the building from good to poor. Plaster damage was observed in many locations. Each typical classroom is provided with a cloak room with hooks and sometimes shelves for student storage. Casework is minimal to none and what is present is original. Wood casework is in worn-out condition. The classrooms have built-in type chalkboards and tackboards that are original to the building in most cases. Classroom doors are non-recessed and semi-recessed, louvered, old wood units – some of which have wired glass vision panels. Doors are equipped with old, knob type hardware. The corridors generally have quarry tile flooring, plaster walls and 2' x 4' lay-in and plaster (lower level) ceilings, which again, range in condition from good to poor. The only corridor equipped with lockers is the 4th floor, which is equipped with metal lockers in fair condition.



Damaged ceiling tiles



Damaged plaster ceiling

The large group restrooms have quarry tile floors, plaster and marble walls and plaster ceilings. They range in condition from good to worn. Toilet partitions are generally old metal units, with very few still having the original marble partitions in place.

The art program is located in the basement level and does not have a kiln. There are two small gyms in the basement level that are approximately 1,820 SF. The gyms have wood flooring in the ES-MS gym and vinyl asbestos flooring and carpet in the PK-K gym. Both feature 1'x 1' glued on ceilings which are in worn out condition. The walls in both gyms are brick. Neither gym has bleachers, and both gyms are equipped with 4 very worn fixed basketball backboards.

The media center is located on the upper floor level and is located in two converted classrooms where the wall in between has been removed. The media center has carpet over wood flooring, plaster walls and 2' x 4' lay in ceilings which are in fair condition. The school has an auditorium without fixed seating and is used as the school's cafeteria. It has the original wood flooring, brick walls and 2' x 4' lay in ceilings which are in worn condition. The stage also has the original wood flooring which requires replacement. The warming kitchen is located in the lower level and has quarry tile flooring, brick walls and plaster ceilings which are in fair condition. According to the kitchen staff, most equipment is over 25 years old. There is no walk-in freezer or cooler provided.



Restroom finishes



Typical corridor finishes



Gym finishes



Basement corridor



Auditorium/Cafeteria

Recommendations

Provide complete replacement of finishes and provide new casework due to condition and due to the installation of systems outlined in this report (such as HVAC system, electrical, technology, etc).

Provide replacement of toilet partitions and their accessories. Provide an allowance for plaster repairs in the walls and ceilings. Funding for replacement of interior doors is provided in Item O, including doors here noted as being in poor condition. Provide an art kiln and exhaust system. For a school funded by the Ohio School Facilities Commission, the building will be required to meet LEED Silver Certification. Because the building lacks wall insulation, furring out of existing exterior walls and providing insulation and abuse resistant GWB will be required in order to achieve credits for energy savings. To correct the separation of the kitchen and the cafeteria, an addition is proposed to accommodate those spaces. Convert existing auditorium/cafeteria into a gymnasium by providing bleachers in the gym for the middle school population, replace wood flooring and provide basketball backboards. Provide for lightweight concrete infill in all classrooms with wood flooring to support the new VCT flooring finish. Provide for replacement of the wood flooring on stage.

Costs

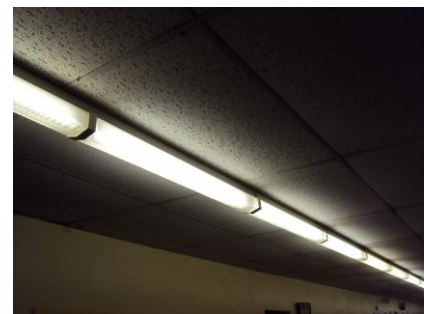
Complete replacement of finishes & casework: 119,744 SF x \$15.90/ SF =	\$1,903,929.60
Furring out of exterior walls: 52,664 SF x \$6.00/SF =	\$315,984.00
Toilet Partition replacement: 26 units x \$1,000/ SF =	\$26,000.00
Toilet accessory replacement: 119,744 SF x \$0.20 SF =	\$23,948.80
Art Kiln: 2 units x \$2,750 each (one for ES & one for MS)	\$5,500.00
Art kiln exhaust: 2 units x \$5,000/unit =	\$10,000.00
Wood floor replacement (aud., stage, 1 gym): 7,136 SF x \$12.85/SF =	\$91,697.60
Lightweight concrete floor infill at wood floor removal: 48,796 SF x \$8/SF =	\$390,368.00
Plaster repairs: lump sum =	\$20,000.00
New bleachers for middle school students: 150 seats x \$110/seat =	\$16,500.00
Basketball backboard replacement: 4 units x \$6,500/unit =	<u>\$39,000.00</u>
Total =	\$2,842,928.00

ITEM K: INTERIOR LIGHTING

Description

Typical lighting throughout the building is a mix of T-8 and T-12 Fluorescent indirect/direct, 2' x 4' lay-in, surface mounted fluorescent fixtures and some incandescent fixtures. The fixtures are in assorted conditions. Some areas have newer 2' x 4' T-8 fixtures installed.

The typical corridors in the building are equipped with T-8 strip fixtures with an acrylic lens in fair condition providing inadequate illumination. Typical classrooms are equipped with T-8 surface mounted fixtures in fair condition, providing inadequate

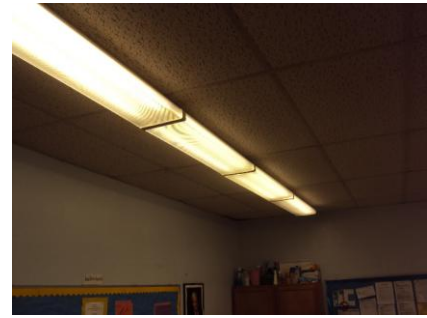


Typical corridor lighting fixture

illumination. There is also a lack of dual level switching in some areas. The gymnasium spaces are equipped with Metal Halide high bay fixtures in fair condition, providing inadequate illumination.

The Cafeteria/Auditorium area is equipped with Metal Halide high bay fixtures in fair condition, providing inadequate illumination. There is also a smaller dining area located on the lower level that is illuminated by 2 'x 4' T-8 lay-in type fixtures in good condition.

The Kitchen area is equipped with surface mounted wrap around fluorescent fixtures in fair condition, providing inadequate lighting levels as per code.



Typical classroom lighting fixture

Provide complete replacement of lighting system due to lighting levels, condition and lack of multilevel switching.

Costs:

Interior lighting replacement: 119,744 SF x \$5.00/SF = \$598,720.00

ITEM L: SECURITY SYSTEM

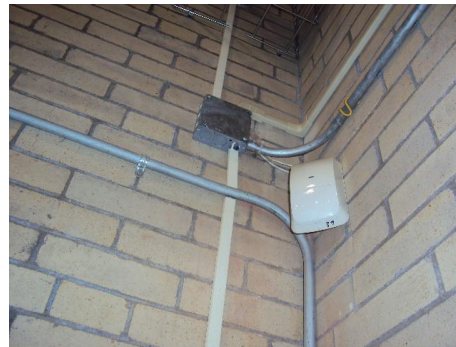
Description

The overall facility contains a CCTV intrusion type security system in fair condition. An automatic visitor control system is provided. Non-compliant CCTV cameras are provided at main entry areas, and main Corridors. CCTV is monitored at an off-site Administrative Area. A compliant computer controlled access control system integrating alarms and video signals, with appropriate UPS backup, is not provided. The system is not equipped with card/biometric readers. The security system is inadequate throughout the building and is not fully compliant with Ohio School Design Manual guidelines.

There is no exterior site lighting that belongs to the district. Pedestrian walkways are illuminated using municipally- owned street lights. Parking areas are not illuminated other than spillover from the municipal street lights. The exterior site lighting system provides inadequate illumination since none exists.



Corridor security camera



Typical motion sensor inside door

Recommendations

Provide new security system to meet Ohio School Design Manual guidelines. Provide new exterior site lighting system to meet Ohio School Design Manual guidelines.

Costs

Security System Replacement: 119,744 SF x \$1.85/SF =	\$221,526.40
Site Lighting Replacement: 119,744 SF x \$1.00/SF =	<u>\$119,744.00</u>
Total:	\$341,270.40

ITEM M: EMERGENCY / EGRESS LIGHTING

The overall facility is equipped with an emergency egress lighting system consisting of non-compliant red-lettered plastic construction illuminated exits signs, and the system is in fair condition. The facility is equipped with emergency egress floodlighting, but is not adequately provided throughout the building.



Non-compliant exit sign



Combination exit/emergency light

Recommendations

Provide complete replacement of emergency/egress lighting system to meet Ohio School Design Manual and Ohio Building Code guidelines. Although funding for emergency/egress lighting is not shown for the unusable basement and other areas, work is considered mandatory and funding will be provided via a Life Safety Allowance in master planning.

Costs

Emergency/Egress Replacement: 119,744 SF x \$1.00/SF =	\$119,744.00
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ITEM N: FIRE ALARM

Description

The overall facility is equipped with a Simplex fire alarm system. Its installation date is unknown and it is in poor condition. The system consists of manual pull stations and bells as

indicating devices. The system is not automatic and is not monitored by a third party. The system is not equipped with sufficient audible horns, strobe indicating devices, flow switches, tamper switches, smoke detectors or heat sensors. The system will not support future fire suppression systems. The system is not adequately provided throughout, but does have additional zone capabilities. The system is not fully compliant with Ohio Building Code, NFPA, and Ohio School Design Manual requirements.

Recommendations

Provide complete replacement of fire alarm system to meet OBC, NFPA, and Ohio School Design Manual guidelines.

Costs

Fire Alarm System replacement: 119,744 SF x \$1.50/SF = \$179,616.00



Typical pull station and indicating bell

ITEM O: HANDICAP ACCESS

Description

At the site, there is one accessible entrance from the parking lot to the west side entrance which is provided with an ADA ramp. This entrance does not, however, have a power-assist door. There is an accessible route connecting the entire site to city sidewalks around the site perimeter. The accessible entrance mentioned above is not direct from the parking lot, and all other adjacent entrances are compromised by steps. Adequate handicapped parking is provided. Exterior doors are provided with compliant ADA hardware. Playground layout and equipping appear compliant.



Non-ADA toilets & partitions



Typical interior door & hardware

On the interior of the building, space allowances and reach ranges are mostly compliant. However, there is not an accessible route through the building's lower level due to steps at the gymnasiums which take those spaces a half level lower. Although there is an elevator in the building, it is an old freight elevator which remains locked to students and staff. Elevation changes within the building are facilitated by five (5) main stairwells, with two (2) smaller stairs in the storage rooms beside the gym that lead to upper storage rooms. Access to the stage is not facilitated by a lift or a ramp. Interior doors are a combination of non-recessed and semi-recessed old, wood units that do not feature ADA compliant hardware. The large group restrooms are not equipped with ADA compliant toilets, toilet partitions, sinks or urinals. The building lacks ADA compliant electric water coolers as well. ADA signage is not provided.

Recommendations

Provide ADA-compliant signage, new elevator, ADA sinks, toilets, urinals, electric water coolers (see Item E for electric water coolers), new restroom mirrors, toilet partitions and other accessories as required. Replace old wood doors with new leafs equipped with ADA hardware. Provide a power door assist at entrance with ramp. Provide a lift for the stage, as well as at each set of steps leading to the two (2) gymnasiums.



Freight elevator

Costs

ADA signage: 119,744 SF x \$0.20/ SF =	\$23,948.80
Elevators: 4 stop x \$42,000/stop =	\$168,000.00
ADA Toilet Partition & accessory replacement: 11 units x \$1,000/ unit =	\$11,000.00
ADA sinks/toilets/urinals: 27 units x \$3,800.00/unit =	\$102,600.00
Replace interior doors & hardware: 158 leafs x \$1,300 / leaf =	\$205,400.00
Power-assist door: 1 unit x \$7,500/unit =	\$7,500.00
New mirrors at proper ADA height: 11 units x \$600/unit =	\$6,600.00
Lifts: 3 units x \$15,000/unit =	\$45,000.00
Total =	\$570,048.80

ITEM P: SITE CONDITION

Description

The 2.7 acre flat site is located in an urban setting in a residential neighborhood with moderate tree and shrub type landscaping. There are no outbuildings. There are no apparent problems with erosion or ponding. The site is bordered by moderately traveled city streets. Two entrances are provided onto the site and lead to the same parking lot. Traffic was observed to be very congested and was not orderly. Parents and children were observed walking in-between moving and parked cars in the parking lot. There is no bus loop or designated car drop-off/pick-up zone. Bus loading and unloading is conducted on the curbside. There is no room on site to create a bus or car loop. Staff, and visitor parking is facilitated by one parking lot providing 74 regular parking spaces and 6 ADA spaces, which is inadequate based on the current enrollment of 577 students. It was observed during the physical assessment that cars were parking in non-designated parking spaces and even in front of one the entrances to get into the site. OSDM recommends at least 96 parking spaces based on existing enrollments. However, the school meets OSFC parking requirements for a



Newer playground

school based on 500 students, which is the target enrollment for this school. The asphalt parking lot is riddled with cracks and requires resurfacing.

The site and parking lot drainage design consists of sheet drainage and storm drains which appear to provide adequate evacuation of storm water. No problems with parking lot ponding were observed. Concrete curbs are in fair condition with only a few locations showing signs of deterioration. Concrete sidewalks are appropriately placed to provide a logical flow of the pedestrian traffic and range in condition from good to poor. The trash dumpsters were observed to be placed directly on the asphalt surface, rather than properly placed on a concrete pad. There are several area/light wells around the building to provide natural light to the lower level, but some retaining walls are bowing, have deteriorated railings and require replacement. The entrance steps are marble and some separation of the joints was observed, thus requiring repairs.

The playground equipment appears relatively new and is provided with a rubber pad surface in fair condition. The playground is not for Pre-K students, however, and OSFC requires a dedicated outside playground for Pre-K students. A few areas of the sidewalks near the playground require replacement. The site contains gardens and compost bins for outdoor learning experiences and is aesthetically pleasing in terms of design and layout. Benches are also provided on the site. The site is provided with wrought iron fencing on most elevations – approximately half of it is newer and in good condition, while the other half is in poor condition and should be replaced.

Recommendations

Additional parking spaces are not required based on planning for the future and a target of 500 students for enrollment, but additional parking for visitors should be provided. Redesign of the existing parking lot is required to relieve congestion and ensure proper entrance/exit points, as well as safe circulation patterns (this could include adding entrance/exit points). The asphalt should be resurfaced. Where necessary because of condition, concrete sidewalks and curbs should be replaced. Old and missing site fencing should be replaced. Provide for replacement of bowing light wells and new railings. Provide repairs to concrete and marble steps at main entrances. Provide concrete dumpster pads. Provide sitework allowances per OSFC guidelines. Provide a dedicated Pre-K playground

Costs

Redesign of parking lot circulation patterns: Lump Sum =	\$50,000.00
Pre-K playground:	\$55,000.00
Resurface asphalt: 3,861 s.y. x \$19.00/s.y. =	\$73,359.00
Concrete sidewalk replacement: 2,544 SF x \$4.69 SF =	\$11,931.36



Cracked asphalt



Parking spaces are limited

Reconstruct light well & new railing: lump sum =	\$30,000.00
Concrete dumpster pad:	\$2,400.00
Curb replacement: Lump sum =	\$1,000.00
New wrought iron fencing: 909 LF x \$60/LF=	\$54,540.00
Marble & concrete step repairs: =	\$15,000.00
Base sitework allowance for unforeseen site circumstances per OSFC guidelines:	\$50,000.00
Additional sitework allowance based on SF of bldg. x \$1.50/SF per OSFC =	<u>\$179,616.00</u>
Total =	\$522,846.36

ITEM Q: SEWER SYSTEM

Description

The sanitary sewer system is tied in to the city system and is in fair condition. No significant system deficiencies were reported by the owner or noted during the physical assessment.

Recommendations

No work is required at this time.

ITEM R: WATER SUPPLY

Description

The domestic water supply system is tied to the municipal system. The District was not able to provide a water supply flow test. The existing domestic water service appears to meet the facilities current needs while utilizing a booster pump. However, while the pump appears to be operating properly it should be replaced due to its age.

Recommendations

The age of the domestic water booster pump requires an upgrade to keep the system operating in an uninterrupted way.

Costs

Domestic Water Booster Pump: lump sum =	\$35,000.00
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ITEM S: EXTERIOR DOORS

Description

Typical exterior doors in the overall building are FRP units with a faux wood appearance and appear to have been recently replaced and are in good condition. Some of the exterior doors are equipped with vision panels with insulated glass. The doors are equipped with proper door hardware. The facility is equipped with two (2) roof access doors which are in poor condition (see Item B). There are no overhead doors in the facility.

Recommendations

No work is required at this time.



Newer exterior doors

ITEM T: HAZARDOUS MATERIALS

Description

There is no fire suppression system provided in the building. In 2008, the OSFC conducted an Enhanced Environmental Assessment to determine what hazardous materials were present in the building. It was concluded that there are asbestos floor tiles, duct insulation, pipe fittings, as wells as acoustical ceiling tiles present in the building that require abatement. Costs are allocated for lead based paint testing and mockups, as well as for incineration of fluorescent lamps and ballasts.



Vinyl Asbestos Floor Tiles

Recommendations

Remove all hazardous materials, inclusive of asbestos-containing materials in the overall facility.

Cost

Hazardous material removal: =	\$140,340.58
Potential Lead paint remediation (exact cost to be determined by licensed specialist) =	<u>\$190,000.00</u>
Total =	\$330,340.58

Note: Enhanced Environmental Assessment is attached as an exhibit for itemized costs.

ITEM U: LIFE SAFETY

Description

The overall facility is not equipped with an automated fire suppression system. The facility is not currently equipped with an emergency generator. The facility features three (3) dead end corridors where the corridor previously connected to another building that was subsequently demolished. The two (2) gyms do not have the proper means of egress as required for spaces with more than 50 occupants. The interior stairwells are enclosed, but not with proper magnetic hold-open devices, two-hour fire-rated enclosures. The handrails and guardrails in the stairwells are not compliant with current Ohio Building Code requirements. There are no handrails at the stage steps. The facility has two fire escape exterior stairs – both attached to the auditorium/cafeteria which are not permitted as means of egress any longer by building code. Fire extinguishers were observed in the facility. There is no kitchen hood to evaluate in this building, as it contains a warming kitchen only.



Fire escape stair

Recommendations

Provide complete automated fire protection system to meet Ohio school design manual guidelines and the Ohio Mechanical Code. Provide new emergency generator, with funding provided via complete replacement of electrical system in Item D. Provide new handrails and stairway enclosures to meet current code and OSDM requirements. Provide handrails at stage. Extend restroom walls at dead end corridor and add doors to create a restroom vestibule and eliminate dead end on the three upper floors. Provide two new entrances from corridors (will require steps and new walls) leading into the gyms to meet code. Provide two new fire escape enclosures with stair at auditorium.

Costs

Sprinkler/fire suppression system: 119,744 SF x \$3.20/SF =	\$383,180.80
Fire rated stair enclosures: 25 levels x \$5,000/level =	\$125,000.00
Handrail replacement: 25 levels x \$5,000/level =	\$125,000.00
New handrails for stage steps: 2 units x \$500/unit =	\$1,000.00
New exterior stairs: 2 units x \$42,000/unit =	\$84,000.00
Restrooms extensions to eliminate dead ends (occurs in 3 floors) lump sum:	\$15,000.00
Additional entrance/exits at gym to meet code: lump sum=	\$10,000.00
Total =	\$743,180.08

ITEM V: LOOSE FURNISHINGS

Description

The typical furniture is generally mismatched, dated and in worn condition. It consists of student desks and chairs, teacher desks and chairs, desk height file cabinets, reading tables, computer workstations and bookcases.



Dated furniture

Recommendations

Provide for complete replacement of furnishings.



Mismatched furnishings

Costs

Loose furnishings: $119,744 \times \$5.00/\text{SF} =$

\$598,720.00

ITEM W: TECHNOLOGY

Description

Most classrooms are equipped with 1 or 2 data outlets. A two-way PA system is provided that each room can call the main office in case of an emergency. There are no phones provided in each classroom. A typical classroom has a single data cable that is branched off with either a router or net switch located in each room.



Typical technology rack on IT closet

Recommendations

Provide complete replacement of technology systems to meet Ohio School Design Manual requirements.

Costs

Technology system: $119,744 \times \$9.84/\text{SF} =$

\$1,178,280.96

ITEM X: SUMMARY OF COSTS

SUBTOTAL OF CONSTRUCTION COSTS:	=	\$14,786,889.78
Construction Contingency – 7%:	=	\$1,035,082.28
TOTAL OF CONSTRUCTION COSTS:	=	\$15,821,972.06
Non-construction costs – 16.29%:	=	\$2,577,399.31
Subtotal	=	\$18,399,371.31
Regional cost factor 104.79%	=	\$881,329.89
TOTAL RENOVATION PROJECT COST	=	\$19,280,701.20

Environmental Hazards Assessment Cost Estimates

Owner:	Cleveland Municipal
Facility:	Tremont Elem
Date of Initial Assessment:	Mar 26, 2002
Date of Assessment Update:	Jan 30, 2015
Cost Set:	2014

District IRN:	43786
Building IRN:	37457
Firm:	Ohio School Facilities Commission

Scope remains unchanged after cost updates.

Building Addition	Addition Area (sf)	Total of Environmental Hazards Assessment Cost Estimates	
		Renovation	Demolition
1917 1917 Original	59,040	\$97,272.60	\$87,273.00
1924 1924 Addition	60,468	\$11,426.80	\$11,426.80
Total	119,508	\$108,699.40	\$98,699.80
Total with Regional Cost Factor (103.76%)	—	\$112,786.50	\$102,410.91
Regional Total with Soft Costs & Contingency	—	\$140,340.58	\$127,430.21

Environmental Hazards(Enhanced) - Cleveland Municipal (43786) - Tremont Elem (37457) - 1917 Original

Owner: Cleveland Municipal Bldg. IRN: 37457
 Facility: Tremont Elem BuildingAdd: 1917 Original
 Date On-Site: 2002-04-11 Consultant Name:

A. Asbestos Containing Material (ACM)		AFM=Asbestos Free Material		
ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1. Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
2. Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
3. Tank Insulation Removal	Not Present	0	\$8.00	\$0.00
4. Duct Insulation Removal	Reported Asbestos-Containing Material	3147	\$8.00	\$25,176.00
5. Pipe Insulation Removal	Reported Asbestos-Containing Material	998	\$10.00	\$9,980.00
6. Pipe Fitting Insulation Removal	Assumed Asbestos-Containing Material	327	\$20.00	\$6,540.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Reported Asbestos-Containing Material	60	\$12.00	\$720.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Reported Asbestos-Containing Material	24	\$30.00	\$720.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)		0	\$15.00	\$0.00
10. Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
11. Flexible Duct Connection Removal	Assumed Asbestos-Containing Material	9	\$100.00	\$900.00
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	\$0.00
14. Hard Plaster Removal	Reported / Assumed Asbestos-Free Material	0	\$7.00	\$0.00
15. Gypsum Board Removal	Not Present	0	\$6.00	\$0.00
16. Acoustical Panel/Tile Ceiling Removal	Assumed Asbestos-Containing Material	4780	\$3.00	\$14,340.00
17. Laboratory Table/Counter Top Removal	Not Present	0	\$100.00	\$0.00
18. Cement Board Removal	Assumed Asbestos-Containing Material	20	\$5.00	\$100.00
19. Electric Cord Insulation Removal	Not Present	0	\$1.00	\$0.00
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00	\$0.00
21. Sheet Flooring with Friable Backer Removal		0	\$4.00	\$0.00
22. Fire Door Removal		0	\$100.00	\$0.00
23. Door and Window Panel Removal		0	\$100.00	\$0.00
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	\$0.00
25. Soil Removal		0	\$150.00	\$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Not Present	0	\$2.00	\$0.00
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo		0	\$300.00	\$0.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only		0	\$300.00	\$0.00
29. Resilient Flooring Removal, Including Mastic	Assumed Asbestos-Containing Material	7631	\$3.00	\$22,893.00
30. Carpet Mastic Removal	Not Present	0	\$2.00	\$0.00
31. Carpet Removal (over RFC)	Reported / Assumed Asbestos-Free Material	0	\$1.00	\$0.00
32. Acoustical Tile Mastic Removal	Reported / Assumed Asbestos-Free Material	0	\$3.00	\$0.00
33. Sink Undercoating Removal		0	\$100.00	\$0.00
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00
35. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Renovation Work			\$81,369.00
36. (Sum of Lines 1-34)	Total Asb. Hazard Abatement Cost for Demolition Work			\$81,369.00

B. Removal Of Underground Storage Tanks					<input checked="" type="checkbox"/> None Reported
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost
1. (Sum of Lines 1-0)	Total Cost For Removal Of Underground Storage Tanks				\$0.00

C. Lead-Based Paint (LBP) - Renovation Only		<input type="checkbox"/> Addition Constructed after 1980
1. Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups		\$5,000.00
2. Special Engineering Fees for LBP Mock-Ups		\$5,000.00
3. (Sum of Lines 1-2)	Total Cost for Lead-Based Paint Mock-Ups	\$10,000.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration				<input type="checkbox"/> Not Applicable
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost	
1. 59040		\$0.10	\$5,904.00	

E. Other Environmental Hazards/Remarks			<input type="checkbox"/> None Reported
	Description	Cost Estimate	
1. (Sum of Lines 1-0)	Total Cost for Other Environmental Hazards - Renovation		\$0.00
2. (Sum of Lines 1-0)	Total Cost for Other Environmental Hazards - Demolition		\$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A35, B1, C3, D1, and E1	Total Cost for Env. Hazards Work - Renovation	\$97,273.00
2. A36, B1, D1, and E2	Total Cost for Env. Hazards Work - Demolition	\$87,273.00

* INSPECTION ASSUMPTIONS for Reported/Assumed Asbestos-Free Materials (Rep/Asm AFM):

- Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
- Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
- Unless reported otherwise by the District, all roofing materials are assumed to be asbestos-free.

THESE MATERIALS SHOULD BE PROPERLY SAMPLED AND ANALYZED FOR ASBESTOS PRIOR TO DISTURBING THEM.

Environmental Hazards(Enhanced) - Cleveland Municipal (43786) - Tremont Elem (37457) - 1924 Addition

Owner: Cleveland Municipal Bldg. IRN: 37457
 Facility: Tremont Elem BuildingAdd: 1924 Addition
 Date On-Site: 2002-04-11 Consultant Name:

A. Asbestos Containing Material (ACM)		AFM=Asbestos Free Material		
ACM Found	Status	Quantity	Unit Cost	Estimated Cost
1. Boiler/Furnace Insulation Removal	Not Present	0	\$10.00	\$0.00
2. Breeching Insulation Removal	Not Present	0	\$10.00	\$0.00
3. Tank Insulation Removal	Not Present	0	\$8.00	\$0.00
4. Duct Insulation Removal	Reported Asbestos-Containing Material	400	\$8.00	\$3,200.00
5. Pipe Insulation Removal	Reported Asbestos-Containing Material	160	\$10.00	\$1,600.00
6. Pipe Fitting Insulation Removal	Reported Asbestos-Containing Material	29	\$20.00	\$580.00
7. Pipe Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$12.00	\$0.00
8. Pipe Fitting Insulation Removal (Crawlspace/Tunnel)	Not Present	0	\$30.00	\$0.00
9. Pipe Insulation Removal (Hidden in Walls/Ceilings)		0	\$15.00	\$0.00
10. Dismantling of Boiler/Furnace/Incinerator	Not Present	0	\$2,000.00	\$0.00
11. Flexible Duct Connection Removal	Not Present	0	\$100.00	\$0.00
12. Acoustical Plaster Removal	Not Present	0	\$7.00	\$0.00
13. Fireproofing Removal	Not Present	0	\$25.00	\$0.00
14. Hard Plaster Removal	Reported / Assumed Asbestos-Free Material	0	\$7.00	\$0.00
15. Gypsum Board Removal	Not Present	0	\$6.00	\$0.00
16. Acoustical Panel/Tile Ceiling Removal	Not Present	0	\$3.00	\$0.00
17. Laboratory Table/Counter Top Removal	Not Present	0	\$100.00	\$0.00
18. Cement Board Removal	Not Present	0	\$5.00	\$0.00
19. Electric Cord Insulation Removal	Not Present	0	\$1.00	\$0.00
20. Light (Reflector) Fixture Removal	Not Present	0	\$50.00	\$0.00
21. Sheet Flooring with Friable Backer Removal		0	\$4.00	\$0.00
22. Fire Door Removal		0	\$100.00	\$0.00
23. Door and Window Panel Removal		0	\$100.00	\$0.00
24. Decontamination of Crawlspace/Chase/Tunnel	Not Present	0	\$3.00	\$0.00
25. Soil Removal		0	\$150.00	\$0.00
26. Non-ACM Ceiling/Wall Removal (for access)	Not Present	0	\$2.00	\$0.00
27. Window Component (Compound, Tape, or Caulk) - Reno & Demo		0	\$300.00	\$0.00
28. Window Component (Compound, Tape, or Caulk) - Reno Only		0	\$300.00	\$0.00
29. Resilient Flooring Removal, Including Mastic	Not Present	0	\$3.00	\$0.00
30. Carpet Mastic Removal	Not Present	0	\$2.00	\$0.00
31. Carpet Removal (over RFC)	Not Present	0	\$1.00	\$0.00
32. Acoustical Tile Mastic Removal	Not Present	0	\$3.00	\$0.00
33. Sink Undercoating Removal		0	\$100.00	\$0.00
34. Roofing Removal	Reported / Assumed Asbestos-Free Material	0	\$2.00	\$0.00
35. None			lump sum	\$0.00
36. (Sum of Lines 1-35)	Total Asb. Hazard Abatement Cost for Renovation Work			\$5,380.00
37. (Sum of Lines 1-35)	Total Asb. Hazard Abatement Cost for Demolition Work			\$5,380.00

B. Removal Of Underground Storage Tanks						<input checked="" type="checkbox"/> None Reported
Tank No.	Location	Age	Product Stored	Size	Est.Rem.Cost	
1. (Sum of Lines 1-0)	Total Cost For Removal Of Underground Storage Tanks				\$0.00	

C. Lead-Based Paint (LBP) - Renovation Only		<input type="checkbox"/> Addition Constructed after 1980
1. Estimated Cost For Abatement Contractor to Perform Lead Mock-Ups		\$0.00
2. Special Engineering Fees for LBP Mock-Ups		\$0.00
3. (Sum of Lines 1-2)	Total Cost for Lead-Based Paint Mock-Ups	\$0.00

D. Fluorescent Lamps & Ballasts Recycling/Incineration				<input type="checkbox"/> Not Applicable
Area Of Building Addition	Square Feet w/Fluorescent Lamps & Ballasts	Unit Cost	Total Cost	
1. 60468	60468	\$0.10	\$6,046.80	

E. Other Environmental Hazards/Remarks		<input type="checkbox"/> None Reported
Description	Cost Estimate	
1. Lead Mockup Costs Included in Original 1917 Addition		\$0.00
2. (Sum of Lines 1-1)	Total Cost for Other Environmental Hazards - Renovation	\$0.00
3. (Sum of Lines 1-1)	Total Cost for Other Environmental Hazards - Demolition	\$0.00

F. Environmental Hazards Assessment Cost Estimate Summaries		
1. A36, B1, C3, D1, and E2	Total Cost for Env. Hazards Work - Renovation	\$11,426.80
2. A37, B1, D1, and E3	Total Cost for Env. Hazards Work - Demolition	\$11,426.80

* INSPECTION ASSUMPTIONS for Reported/Assumed Asbestos-Free Materials (Rep/Asm AFM):

- Unless reported otherwise by the District, materials installed after 1980 are assumed to be asbestos-free.
- Unless reported otherwise by the District, small quantities (less than 1,000 square feet) of the following materials are assumed to be asbestos free: hard plaster, acoustical plaster and gypsum board systems; acoustical panels and tiles; fireproofing; 12"x12" floor tile and mastic.
- Unless reported otherwise by the District, all roofing materials are assumed to be asbestos-free.

THESE MATERIALS SHOULD BE PROPERLY SAMPLED AND ANALYZED FOR ASBESTOS PRIOR TO DISTURBING THEM.

TREMONT
MONTESSORI
PK-8 SCHOOL

CLEVELAND METROPOLITAN
SCHOOL DISTRICT

CONSTRUCTION DATES:
1917, 1924

ACREAGE:
2.7

TOTAL SF:
119,744

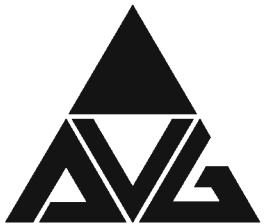
GRADES:
PK-8

CURRENT ENROLLMENT:
577

SQUARE FEET PER STUDENT:
207.52

DATE ISSUED:
MAY 15, 2015

LEGENDS:



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SHEET NO
1 OF 5

W 10 TH ST

GRASS

ASPHALT
PARKING

ACADEMIC BUILDING

GRASS

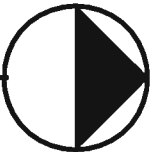
PLAYGROUND

JEFFERSON AVE

TREMONT AVE

SITE PLAN

SCALE: NOT TO SCALE



TREMONT
MONTESSORI
PK-8 SCHOOL

CLEVELAND METROPOLITAN
SCHOOL DISTRICT

CONSTRUCTION DATES:
1917, 1924

ACREAGE:
2.7

TOTAL SF:
119,744












GRADES:
PK-8

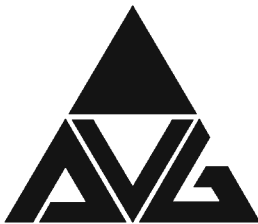
CURRENT ENROLLMENT:
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SQUARE FEET PER STUDENT:
207.52

DATE ISSUED:
MAY 15, 2015

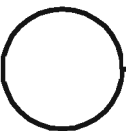
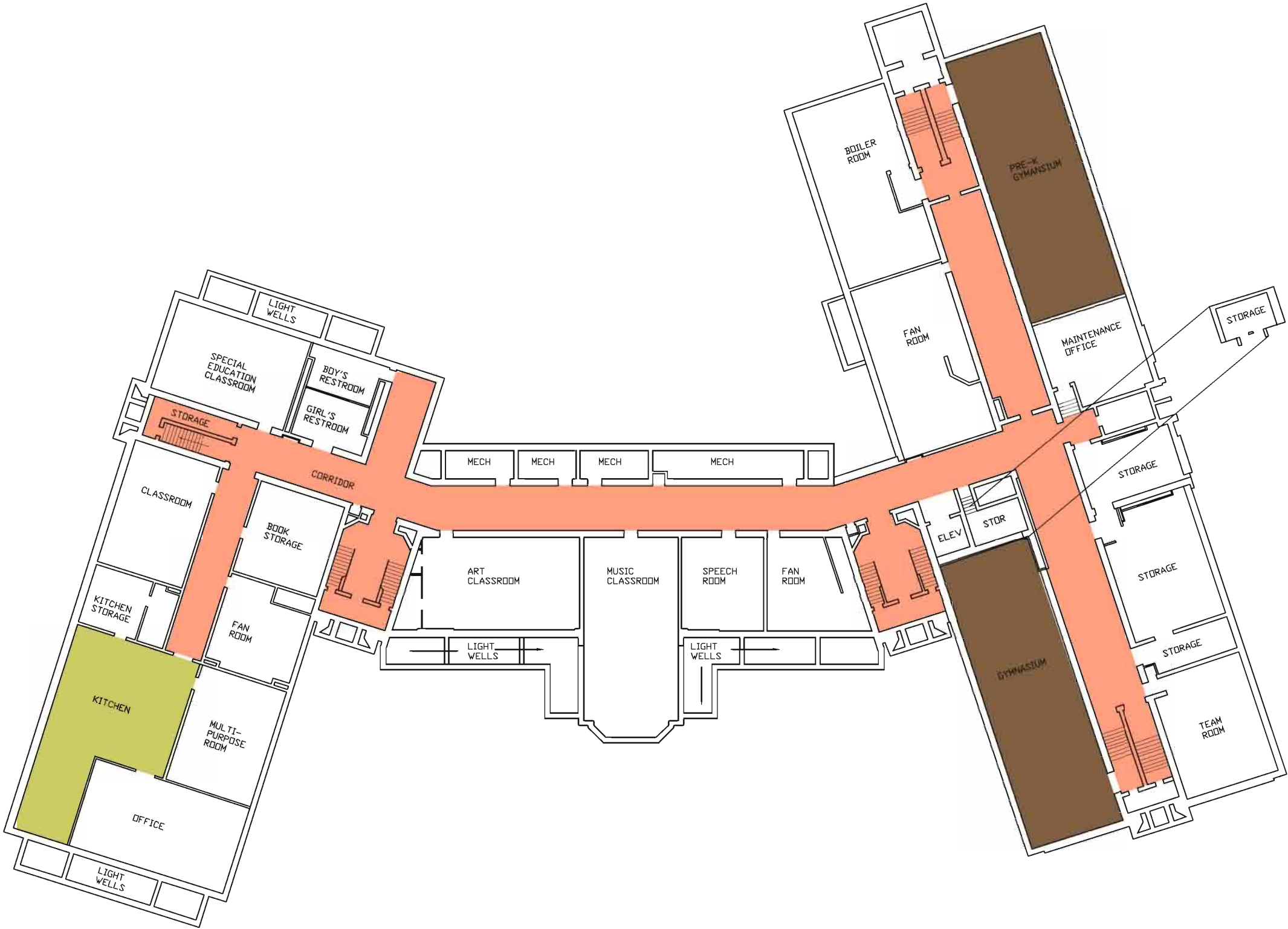
LEGENDS:

BUILDING COMPONENT	
	CORRIDORS
	GYMNASIUM
	MEDIA CENTER
	STUDENT DINING
	KITCHEN
	VOCATIONAL SPACE
	AGRICULTURAL EDUCATION LAB
	NON-DESIGN MANUAL
	UNUSABLE
	OVERSIZED
	BASEMENT



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SHEET NO
2 OF 5



LOWER LEVEL FLOOR PLAN

SCALE: 1" = 30'-0"



TREMONT
MONTESSORI
PK-8 SCHOOL

CLEVELAND METROPOLITAN
SCHOOL DISTRICT

CONSTRUCTION DATES:
1917, 1924

ACREAGE:
2.7

TOTAL SF:
119,744












GRADES:
PK-8

CURRENT ENROLLMENT:
577

SQUARE FEET PER STUDENT:
207.52

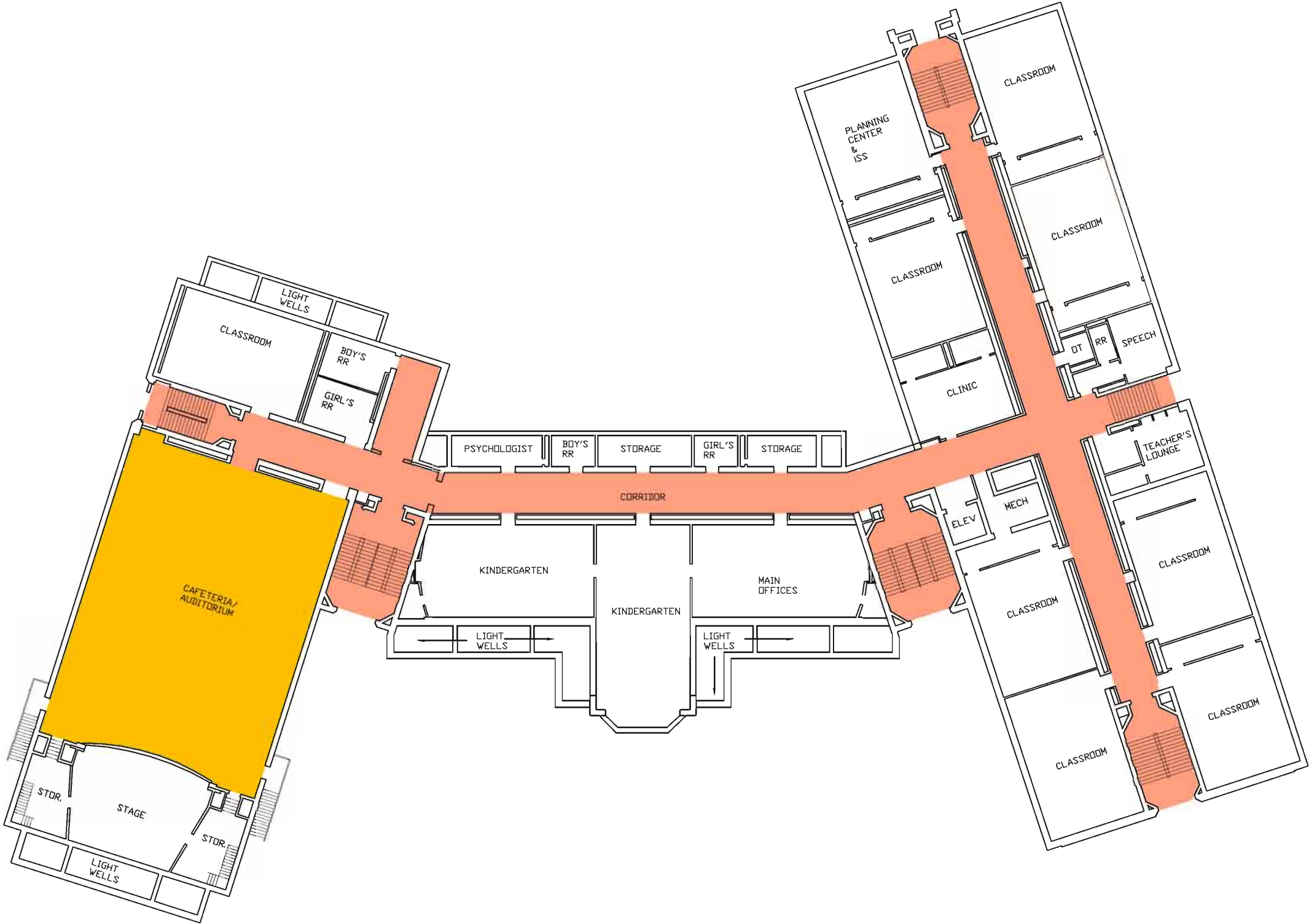
DATE ISSUED:
MAY 15, 2015

LEGENDS:

BUILDING COMPONENT	
	CORRIDORS
	GYMNASIUM
	MEDIA CENTER
	STUDENT DINING
	KITCHEN
	VOCATIONAL SPACE
	AGRICULTURAL EDUCATION LAB
	NON-DESIGN MANUAL
	UNUSABLE
	OVERSIZED
	BASEMENT



SHEET NO
3 OF 5



TREMONT
MONTESSORI
PK-8 SCHOOL

CLEVELAND METROPOLITAN
SCHOOL DISTRICT

CONSTRUCTION DATES:
1917, 1924

ACREAGE:
2.7

TOTAL SF:
119,744












GRADES:
PK-8

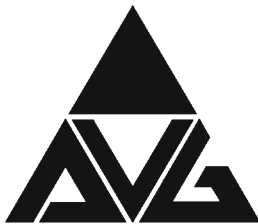
CURRENT ENROLLMENT:
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SQUARE FEET PER STUDENT:
207.52

DATE ISSUED:
MAY 15, 2015

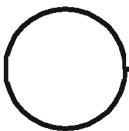
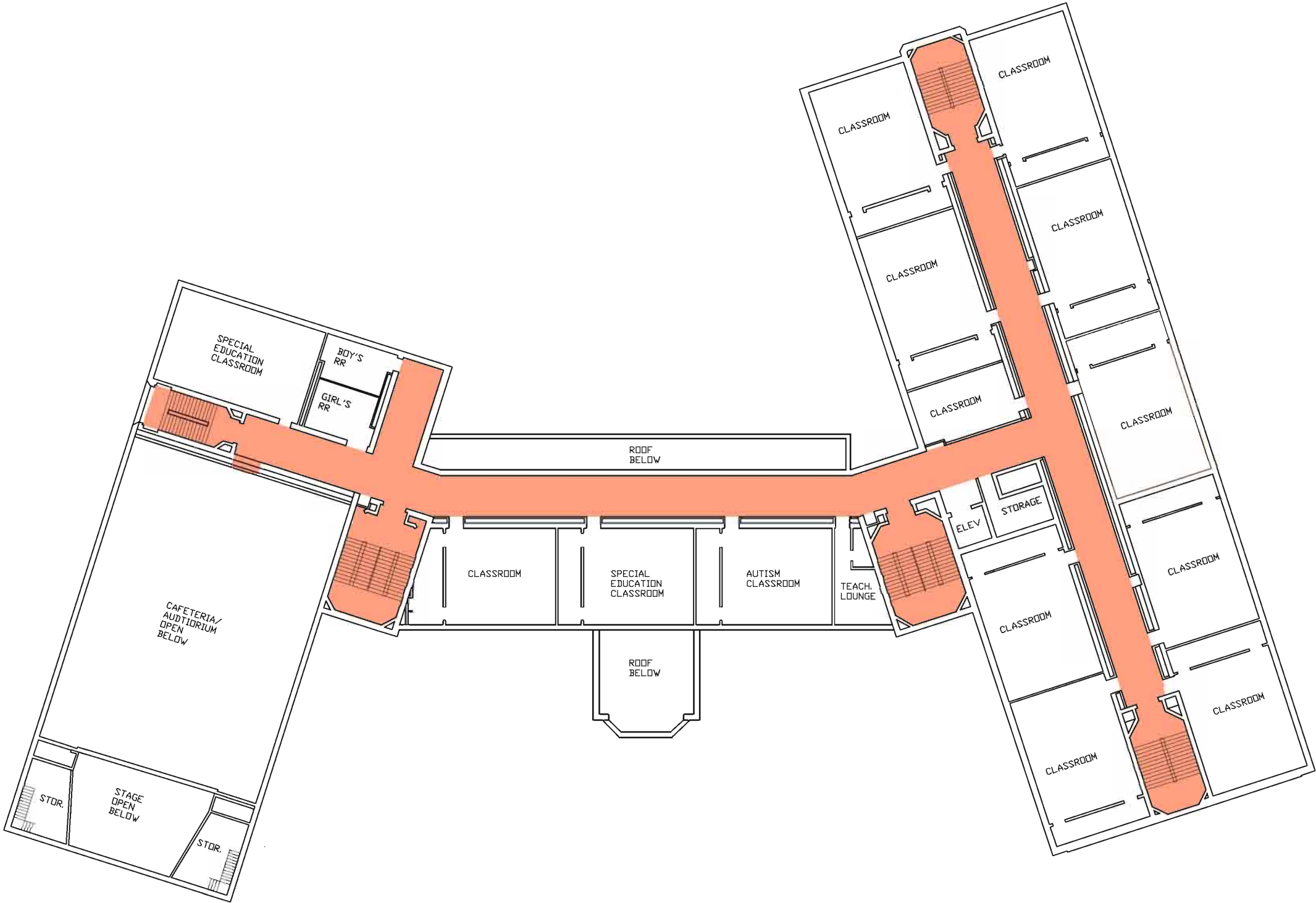
LEGENDS:

BUILDING COMPONENT	
	CORRIDORS
	GYMNASIUM
	MEDIA CENTER
	STUDENT DINING
	KITCHEN
	VOCATIONAL SPACE
	AGRICULTURAL EDUCATION LAB
	NON-DESIGN MANUAL
	UNUSABLE
	OVERSIZED
	BASEMENT



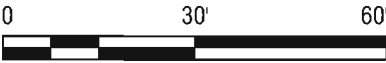
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SHEET NO
4 OF 5



SECOND FLOOR PLAN

SCALE: 1" = 30'-0"



TREMONT
MONTESSORI
PK-8 SCHOOL

CLEVELAND METROPOLITAN
SCHOOL DISTRICT

CONSTRUCTION DATES:
1917, 1924

ACREAGE:
2.7

TOTAL SF:
119,744












GRADES:
PK-8

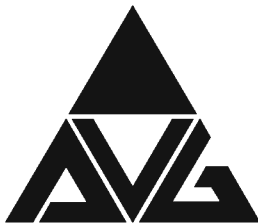
CURRENT ENROLLMENT:
577

SQUARE FEET PER STUDENT:
207.52

DATE ISSUED:
MAY 15, 2015

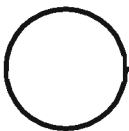
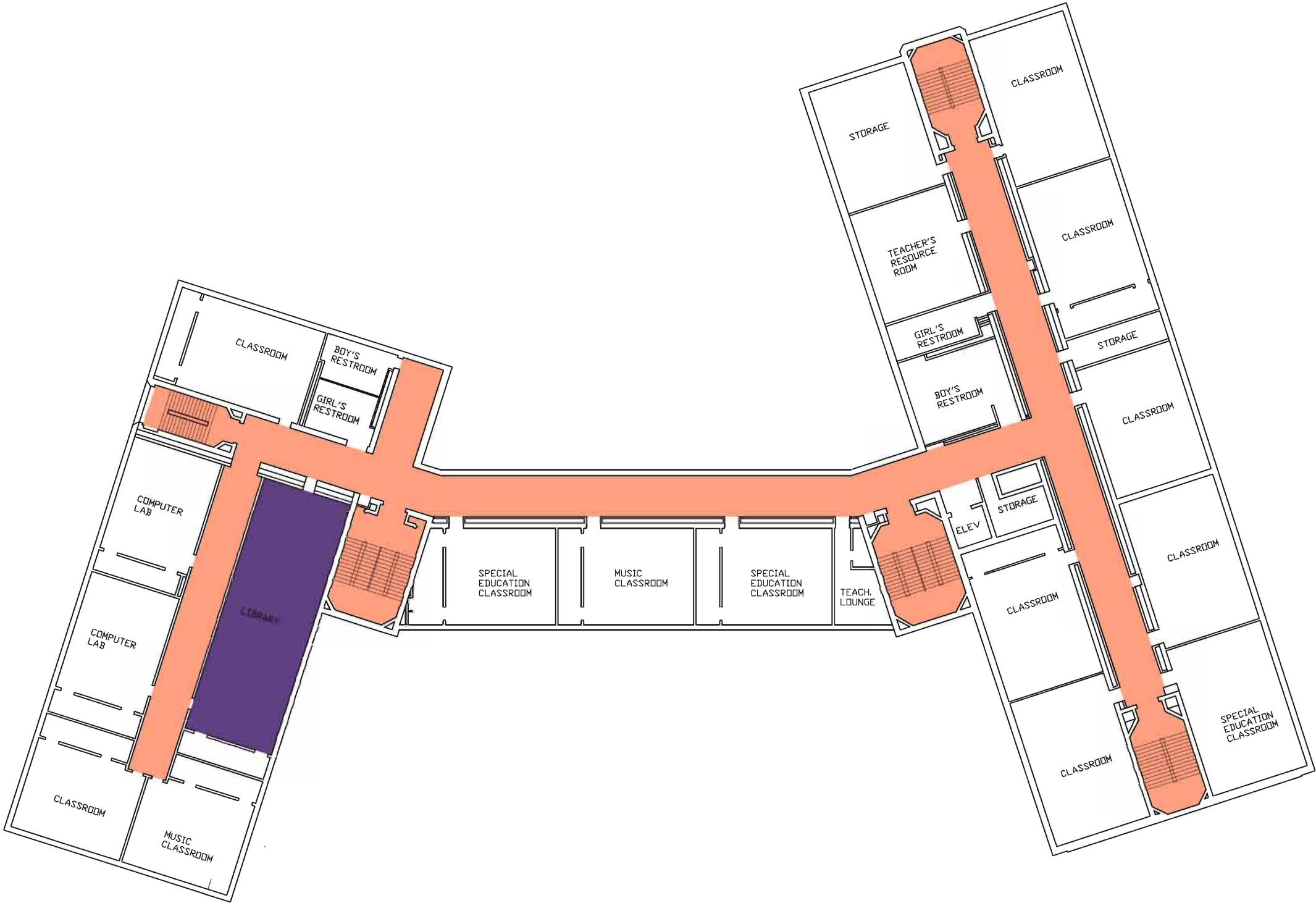
LEGENDS:

BUILDING COMPONENT	
	CORRIDORS
	GYMNASIUM
	MEDIA CENTER
	STUDENT DINING
	KITCHEN
	VOCATIONAL SPACE
	AGRICULTURAL EDUCATION LAB
	NON-DESIGN MANUAL
	UNUSABLE
	OVERSIZED
	BASEMENT



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SHEET NO
5 OF 5



THIRD FLOOR PLAN

SCALE: 1" = 30'-0"



Building	New Elementary/Middle		
Program			
Cost Set			
Assessing Consultant			
Type	Elementary/Middle		
Acres			
Grades Housed			
Current Enrollment			
Additions to Demolish			
Grades Housed - Proposed	PK-8		
Projected Enrollment	500		
CT Projected Enrollment			
Scope of Work	Build New		
CEFPI Rating			
Existing ft²			
Cost/ft² (DM)			
Cost to Replace	\$0.00		
Cost to Renovate			
Reprogramming	\$0.00		
Renovate÷Replace			
Right Replacement			
Right Ratio			
Addition Required	No		
	New ft²		
Proposed Enrollment	Students	sf/Student	sf required
Elementary (PK-K)	x	=	0
Elementary (PK-5)	350 x	128.95 =	45,132
Middle (6-8)	150 x	155.77 =	23,366
High (9-12)	x	=	0
Career Technical Core Space	x	=	0
Total ft² Required	68,498		
ft² Existing			
Large Group Restroom Fixture Replacement	No		
Comprehensive Vocational	No		
Oversized ft²			
Less Oversized ft²			
CT ft² Existing			
CT ft² Not Programmed			
Less CT ft²			
Addition ft²	68,498		
Cost per ft²	see below		
Total Addition Cost			
	Cost to Rebuild		
Cost Of New SF	SF Required	\$/SF	Cost
Elementary (PK-5)	45,132.5x	\$243.41=	\$10,985,701.82
Middle (6-8)	23,365.5x	\$239.19=	\$5,588,793.95
High (9-12)	0 x	=	\$0.00
Career Technical Program Space			
CT Existing ft²			
CT New ft²			
CT Total ft²			
CT Program Total	\$0.00		
Total Proposed ft²	68,498		
Total to Rebuild	\$16,574,495.77		
Total to Rebuild All Buildings			
Cost to Reno & Reprogram	\$0.00		
Total Addition Cost			
Total Career Technical	\$0.00		
Project Cost	\$16,574,495.77		
Asbestos Abatement	\$0.00		
Demolition	\$0.00		
Specific Allowance	\$0.00		
Total Building Cost	\$16,574,495.77		
Page Subtotal	\$16,574,495.77		
General Allowance	\$0.00		
Project Agreement LFI	\$0.00		
Co-Funded Project	\$16,574,495.77		
Total Project Cost	\$16,574,495.77		

ASSESSMENT COST GUIDELINES – 2014

A. HEATING SYSTEM

The Assessment Consultant shall evaluate the HVAC system and determine the requirements for each building or building addition using the funding chart below.

HVAC System Replacement:	\$ 26.12 sf	(includes demo of existing system and reconfiguration of piping layout and new controls, air conditioning)
Convert To Ducted System	\$ 8.00 sf	(includes costs for vert. & horz. chases, cut openings, soffits, etc. Must be used in addition to HVAC System Replacement if the existing HVAC system is non-ducted)
Heating System (Only):	\$ 8.50 sf	(for boilers, pump & piping replacement, not AHU)
Controls (Only):	\$ 2.50 sf	

<u>Heating System Component replacement:</u>		
(describe “Components” along with opinion of probable costs within recommendation section)		

Additional Comments:

- Systems which are not compliant with the OSDM are acceptable, providing they can meet OBBC fresh air requirements and are in safe/good working order. They should have a long-term additional life expectancy.
- Radiators must be removed.
- Rooftop units that are over 10 years old are to be replaced.
- If the controls are older than 1975, or not DDC, replace them.
- Heating system cost includes demolition of the existing system and reconfiguration of piping layout.
- Use “convert to ducted system” when changing from a non-ducted system. Do not repeat in Item “C”. Use only in conjunction with “HVAC System Replacement”.

Coordination Comments:

- If total HVAC system replacement is required, Item “C” shall be zero.
- If HVAC system is being replaced, replace acoustic ceilings under item J. GENERAL FINISHES and lighting under Item K. INTERIOR LIGHTING.
- If upgrading/adapting the heating system to accommodate cooling, use Item “C” Ventilation/AC.
- If replacing mechanical system add electrical service and connections under “D”.
- If replacing unit ventilator system verify whether adjacent casework needs to be replaced under “J. GENERAL FINISHES”.
- In situations where existing conditions prevent installation of ductwork due to deck height, etc., assessor should still budget for adding ductwork. This allowance in conjunction with full HVAC replacement will provide an adequate budget in cases where alternate viable systems may be required during actual design.
- Preliminary estimates to convert existing buildings to Geo-Thermal Systems indicate that the Complete HVAC System Replacement and Convert to Ducted System budgets (totaling **\$34.12**) should be sufficient for most facilities. However, Geo-Thermal System conversions will need to be analyzed on a case by case basis and additional costs beyond the **\$34.12** per sq. ft., if required, should be included as an “Other” with explanation for the additional costs.

HIGH BAY/INDUSTRIAL SPACE – LAB TYPES 5, 6, 7:

Heating and Ventilation System:	\$ 16.00 sf	(includes demo of existing system and reconfiguration of piping layout and new controls)
Roof Top Unit	\$ 11.00 sf	(without air conditioning)
	\$ 13.00 sf	(with air conditioning)

B. ROOFING

The Assessment Consultant shall document the age of existing roof(s) and note any known problems. Look for stained ceilings on the inside of each building as an indication of potential roof problems.

Asphalt Shingle:	\$	3.00 sf	
Asphalt Shingle with Ventilated Nail Base:	\$	8.20 sf	
Deck Replacement:	\$	5.25 sf	(wood or metal, including insulation)
Built-up Asphalt:	\$	13.20 sf	
Membrane (all types/fully adhered):	\$	8.70 sf	(unless under 10,000 sf)
Standing Metal Seam:	\$	16.50 sf	
Repair/replace cap flashing & coping:	\$	18.40 lf	
Gutters/Downspouts:	\$	13.10 lf	
Remove/replace existing roof			
Drains and Sump:	\$	1200.00 ea	
Overflow Roof Drains and Piping:	\$	2500.00 ea	
Roof Insulation:	\$	3.20 sf	(non-tapered insulation for use in areas without drainage problems)
Roof Insulation:	\$	4.70 sf	(tapered insulation)
Roof Access Hatch:	\$	2,000.00 ea	(remove and replace)
Roof Access Ladder with Fall			
Protection Cage:	\$	100.00 lf	(remove and replace)
Roof Access, Ladder & Fall			
Protection Cage:	\$	3,850.00 ea	(provide when no roof access currently exists)
Correct Ponding Water on Roof by			
Remove/Replace Existing Ponding			
Area:	\$	12.50 sf	(provide tapered insulation for limited area use to correct ponding)
<u>Hazardous Material Replacement Costs:</u>			
Roofing Replacement	\$	8.00 sf	

Other:

(describe "Other" items along with opinion of probable costs within recommendation section)

Additional Comments:

- Costs listed above include tear off of existing roof (non-asbestos containing shingles and/or underlayment). The systems include flashings.
- Replace membrane roofs that are (7) years old or older.
- Replace built-up roofs that are (15) years old or older.
- Replace asphalt shingle roofs that are (10) years old or older.
- Foam Roofing systems are to be budgeted for replacement. Use Membrane roof replacement at **\$8.70/sf**.
- Replace tile roofs with asphalt shingles; add deck if necessary.

Coordination Comments:

- Use only one roof system type to replace multiple systems used on a single facility, except for pitched roofs. The replacement roof should be in-kind to the most dominant roofing type being replaced.

C. VENTILATION/AIR CONDITIONING

The Assessment Consultant shall verify that all buildings or additions to buildings have air conditioning.

Air Conditioning System:	\$ 16.60 sf	
Dust Collection System:	\$ 25,000.00 ea	(complete w/installation)
Restroom Exhaust System:	\$10,500.00 ea	(including new ductwork and fans; do not include if complete HVAC system in Item A selected)
Kiln Exhaust System:	\$ 5,000.00 ea	
Art Program Paint Hood:	\$ 12,000.00 ea	
Chemical Exhaust Hood System for Science Laboratories:	\$ 15,000.00 ea	
<u>Other:</u> (describe "Other" items along with opinion of probable costs within recommendation section)		

Additional Comments:

- Add air to a school that has an acceptable heating system; this may require adapting the heating system to accommodate cooling.
- All wood shop areas are required to have dust collection systems in addition to HVAC upgrades.
- To completely replace heating and air conditioning systems, see Item A above.
- Window units are not acceptable.
- Do not include budget for Restroom Exhaust System if complete HVAC system in Item A selected.

Coordination Comments:

- If the building contains Air Conditioning and partial Air Conditioning component replacement exceeds \$11.12 per sf then replace entire Air Conditioning System at \$16.60 per sf
- If replacing Air Conditioning, replace acoustic ceilings under Item J. GENERAL FINISHES and lighting under Item K. INTERIOR LIGHTING.

HIGH BAY/INDUSTRIAL SPACE – LAB TYPES 5, 6, 7:

Welding Exhaust System:	\$ 50,000.00 per system
Paint Booth Exhaust System:	\$ 12,000.00 per system
Vehicle Emission System:	\$ 15,000.00 per system
Paint Hood System:	\$ 7,500.00 per system
Exhaust for Gas-fired Equipment:	\$ 3,500.00 per system
Other (describe "Other" items along with opinion of probable costs within recommendation section)	

Additional Comments:

- To completely replace heating and ventilation systems, see Item "A" above.
- Dust Collection System to be installed in Carpentry and Wood Product Technologies labs.
- Welding Exhaust System to be installed in Agriculture Production, Building & Property Maintenance, Industrial Maintenance, Natural Resources, Power Equipment Technology, Welding & Cutting, Engineering Technologies, Manufacturing Engineering Technology and Agriculture Industrial Equipment labs.
- Paint Booth Exhaust System to be installed in Aircraft Maintenance, Agriculture Production and Auto Collision Repair labs.
- Vehicle Emission System to be installed in Auto Specialization, Auto Technology and Medium/Heavy Truck Technician labs.
- Exhaust for Gas-fired Equipment to be installed in Plumbing and Pipefitting lab.

D. ELECTRICAL SYSTEMS

The Assessment Consultant shall verify that the electrical is adequate for estimated electrical loads (refer to Minimum Amperage Chart below).

System Replacement:	\$ 16.23 sf	(Includes demo of existing system. Includes generator for life safety systems. Does not include telephone or data or equipment)
<u>Components</u>		(Use items below ONLY when the entire system is NOT being replaced)
Panel Replacement:	\$ 3,500.00 unit	(power or lighting sub-panel only)
Transformer Removal:	\$ 1,500.00 lump sum	(per phase/can)
New Pad Mounted Transformer:	\$ 15,000.00 lump sum	(1000 KVA – includes demo of existing system)
Step-down Transformer:	\$ 3,000.00 lump sum	
Additional Circuits:	\$ 800.00 per circuit	
Additional Receptacles:	\$ 250.00 each	
Lightning Protection:	\$ 0.30 sf	
Grounding:	\$ 0.25 sf	

Other:

(describe “Other” items along with opinion of probable costs within recommendation section)

Minimum Amperage Chart		
Building Square Footage	Minimum Amperage 480v 3 phase	Minimum Amperage 208v
0-10,000	400	1,000
10,000 – 20,000	400	1,000
20,000 – 30,000	600	1,200
30,000 – 40,000	800	1,600
40,000 – 50,000	1,000	2,000
50,000 – 60,000	1,200	2,400
60,000 – 70,000	1,400	3,000
70,000 – 80,000	1,600	3,500
80,000 – 90,000	1,800	
90,000 – 100,000	2,000	

For each 10,000 sf increment over 100,000 sf increase 480-volt service size by 200.

Additional Comments:

- If electrical system is over 35 years old, replace entire system.
- If black oil-filled transformers are PCB contaminated, they must be replaced.
- New pad mounted transformer cost includes demolition of existing transformer.
- Replace single-phase service with three-phase service, if available.
- Electrical system replacement budget includes technology associated components, including back boxes, cable tray and grounding.

Coordination Comments:

- If Electrical Component replacement exceeds \$10.87 per sf, then replace entire Electrical System at \$16.23 per sf.
- Individual component costs should not be applied when a full system replacement has been indicated.

HIGH BAY/INDUSTRIAL SPACE – LAB TYPES 5, 6, 7:

Bus Duct:	\$ 150.00 per lf	
“Emergency Shut Off Switch” Push Button	\$ 8000.00 each	(Allows instructor to de-energize panelboards, bus duct or other electrical equipment in Type 5-7 lab spaces)
208v 3 Phase Service	\$ 15,000 lump sum	(Includes 300 lin. ft. conduit. Does not include new transformer, upgraded panels or switch gear.)
480v 3 Phase Service	\$ 20,000 lump sum	(Includes 300 lin. ft. conduit. Does not include new transformer, upgraded panels or switch gear.)

Additional Comments:

- Bus Duct to be installed in Electrical Trades Lab.
- 208v 3 phase and 480v 3 phase electrical service to be installed in Electrical Trades, Industrial Maintenance, Manufacturing Operations, Welding & Cutting, Manufacturing Engineering Technology, and Precision Machinery.
- The “Emergency Shut Off” Switch should be added to ~~the following~~ programs in Types 5-7 to allow the instructor to de-energize panelboards, bus ducts or other electrical equipment. *Where necessary, include “Emergency Shut Off” switch for equipment. ~~Type 4: Firefighting and Emergency Medical Services Type 5: Agribusiness & Production Systems, Appliance Repair, Auto Specialization, Building & Property Maintenance, Building Technology, Electrical Trades, Environmental Control Technologies, Heavy Equipment Operations (Construction), Integrated Systems Technology, Manufacturing Design & Development, Manufacturing Occupations, Natural Resource Management, Plumbing & Pipefitting, Power Equipment Technology, Power Transmission, Welding & Cutting; Type 6: Industrial Power Technology, Auto Collision Repair, Auto Technology, Ground Transportation, Carpentry, Construction – Design/Build and Management, Engineering Technology, Structural Systems, Mechanical, Electrical and Plumbing, Medium/Heavy Truck Technician, Wood Product Technologies, Precision Machining, Manufacturing Operations; Type 7: Aircraft Maintenance, Air Transportation, and Animal Science.~~*

E. PLUMBING AND FIXTURES

The Assessment Consultant shall determine if there are pressure problems and number of systems if additions are present, and address all other concerns using the cost indicated below. Do not put any cost of handicapped compliance in this area. – The Assessment Consultant shall determine if there are sufficient numbers of plumbing fixtures based upon plumbing code in effect at time of assessment. Determine fixture count by dividing the square footage of the building by the allowable square footage per student in the Design Manual.

Back Flow Preventer:	\$ 5,000.00 unit	
Water Treatment System:	\$ 15,000.00 unit	(Domestic Water System, softening only, per system)
Water Treatment System:	5,500.00 unit	(Chlorination type, per unit)
Domestic Supply Piping:	\$ 3.50 sf	(remove/replace)
Sanitary Waste Piping:	\$ 3.50 sf	(remove/replace)
Domestic Water Heater	\$ 5,100.00 unit	(remove/replace)
Toilet:	\$ 3,800.00 unit	(new)
Toilet:	\$ 1,500.00 unit	(remove/replace) See Item O
Urinal:	\$ 3,800.00 unit	(new)
Urinal:	\$ 1,500.00 unit	(remove/replace)
Sink:	\$ 2,500.00 unit	(new)
Sink:	\$ 1,500.00 unit	(remove/replace)
Electric Water Cooler:	\$ 3,000.00 unit	(double ADA)
Replace Faucets and Flush Valves	\$ 500.00 unit	(average cost to remove replace)
Two Station Modular Lavatory	\$ 3000.00 unit	(remove/replace)
Three Station Modular Lavatory	\$ 4000.00 unit	(remove/replace)

Other:

(describe "Other" items along with opinion of probable costs within recommendation section)

Additional Comments:

- Some schools with additions have more than one service.
- If domestic supply piping is galvanized pipe, replace the distribution system.
- Current codes require back-flow preventors, if there are none, add to system.
- Floor mounted toilet fixtures are acceptable if in safe/good working order and have a long-term additional life expectancy.
- Meet with school representatives and inquire about condition and history of under-slab sanitary. If problems are suspected, ask district about having a pipe inspection via camera photography to better determine condition. Also, enter item in the "Summary of Significant Findings."
- Replace ALL non low flow type fixtures in order to improve water efficiency and to meet the LEED pre-requisite #1 Water Use Reduction requirement.

HIGH BAY/INDUSTRIAL SPACE – LAB TYPES 5, 6, 7:**Safety Shower/Eyewash:**

Remove & Replace Existing:	\$ 450.00 each
New Installation:	\$ 2,500.00 each
Utility Sink:	\$ 2,400.00 unit
Hose Bibbs:	\$ 800.00 unit
Wash Fountain:	\$ 3,600.00 unit
Natural Gas Connections:	\$ 800.00 each
Compressed Air Connections:	\$ 15,000.00 system
Grease Trap or Oil Interceptor	\$ 6,000.00 each

Additional Comments:

- All high bay labs will have safety shower/eyewash, utility sink, hose bibbs and wash fountains.
- Natural Gas Connections to be included in Building and Property Maintenance, Heating and Ventilation Technician and Plumbing & Pipefitting labs.
- Compressed Air Connections to be included *as necessary and per the program space plates. in Appliance Repair, Agriculture Production, Agribusiness and Production, Auto Specialization, Business Machine Maintenance, Heavy Equipment Operations, Manufacturing Design and Development, Industrial Maintenance, Brick, Block and Cement Masonry, Natural Resource Management, Plumbing & Pipefitting, Power Transmission, Welding & Cutting, Agricultural and Industrial Equipment Technology, Industrial Power Technology, Auto Collision Repair, Auto Technology, Ground Transportation, Carpentry, Engineering Technology, Medium/Heavy Truck Technician, Wood Product Technologies, Precision Machining, Manufacturing Operations, Aircraft Maintenance and Air Transportation labs.*

F. WINDOWS

The Assessment Consultant should visually determine the area of windows to be replaced, by establishing an estimate based on approximate area of windows times number of units. The *Ohio School Facilities, Ohio School Design Manual* supports integral blinds.

Insulated Glass/Panels:	\$ 60.00 sf	(includes blinds)
Skylights:	\$ 125.00 sf	(remove and replace)
Translucent Panels:	\$ 125.00 sf	(remove and replace)
Curtain Wall/Storefront System:	\$ 65.00 sf	(remove and replace)
Greenhouse Replacement	\$ 85.00 sf	(demo and replace; based on area of greenhouse floor)
<u>Hazardous Material Replacement Costs:</u>		
Door and Window Panel		
Replacement:	\$ 200.00 ea	

Other:

(describe "Other" items along with opinion of probable costs within recommendation section)

Additional Comments:

- All single pane glass windows are to be replaced.
- All non-thermally broken window units are to be replaced.
- The above cost includes demolition of existing windows and installation of new panel screens and replacement windows.
- Replace glass block, which is part of an integral window system, only if the windows are being replaced, or if the glass block is in disrepair; replace glass block with windows. All other glass block, which is in good condition, may remain.
- Exterior transom windows and sidelights to be included in window area.

G. STRUCTURE

*The Assessment Consultant shall look for cracking and differential movement of the building and any additions. In addition, check any existing crawl space(s) for deterioration of structure. Determine if the district has experienced any structural problems. **Do not go down in pipe tunnels.***

Waterproofing:

Spray Applied: \$ 6.00 sf (includes excavation and backfill)

Membrane: \$ 7.00 sf (includes excavation and backfill)

Drainage Tile Systems/Foundation Drainage: \$ 18.00 lf (includes excavation and backfill)

Other:

(describe "Other" items along with opinion of probable costs within recommendation section)

Additional Comments:

- Calculation for this item will be made on a case-by-case basis.
- Indicate the reasons for any found deficiencies and their associated cost.
- Immediately report any conditions that appear "unsafe".

H. STRUCTURE WALLS AND CHIMNEYS

The Assessment Consultant shall look for any cracking, shifting, spalling or movement. Determine if the district has experienced any structural problems.

Tuckpointing:	\$ 5.25 sf	(wall surface)
Exterior Masonry Cleaning:	\$ 1.50 sf	(wall surface)
Exterior Masonry Sealing:	\$ 1.00 sf	(wall surface)
Exterior Caulking:	\$ 5.50 lf	(removing and replacing)
Replace Brick Veneer System:	\$ 35.00 sf	(total removal and replacement including pinning and shoring)
Lintel Replacement:	\$ 250.00 lf	(total removal and replacement including pinning and shoring)
Sill Replacement:	\$ 45.00 lf	(remove and replace)
Pre-finished Aluminum Coping		
Replacement:	\$ 22.50 lf	(removing existing coping and replacing)
Stone and Masonry	\$ 100.00 lf	(remove and replace)
Install Control Joints:	\$ 60.00 lf	

Other:

(describe "Other" items along with opinion of probable costs within recommendation section)

Additional Comments:

- Calculation for this item will be made on a case-by-case basis.
- Indicate the reason(s) for any found deficiencies and their associated cost.
- Tuckpoint up to natural breaks in walls, such as corners or control joints.

- If other less common exterior skin materials are observed to be problematic, such as metal panels or pre-cast concrete, enter items in the “Summary of Significant Findings.”

I. **STRUCTURE: FLOORS AND ROOFS**

Replace Wood Floor System:	\$ 45.00 sf	
Fire Rated Drywall over Existing		
Wood Ceiling Joists:	\$ 3.50 sf	(per square face feet of required drywall)
Repair Soffits:	\$ 24.00 sf	
Remove/Replace Damaged Concrete		
Slab on Grade:	\$ 8.00 sf	
<u>Hazardous Material Replacement Costs:</u>		
Soil Replacement	\$ 141.00 cy	(only to be used when back filling existing crawl spaces Where hazardous materials were abated)

Other:

(describe “Other” items along with opinion of probable costs within recommendation section)

Additional Comments:

- Structural wood floor supporting joists must be replaced and will result in replacing the addition with a new building.
- Roof wood structures are permitted to remain if separated with OBBC compliant fire separation assemblies.
- Calculation for this item will be made on a case-by-case basis.
- **CAUTION:** Replacing the structural floor requires gutting the entire addition and will require other systems to be affected as follows:

Coordination Comments:

- A. Heating System: HVAC System Replacement (\$26.12/sf)
- D. Electrical System: System Replacement (\$16.23/sf)
- J. General Finishes: Complete Replacement of Finishes and Casework (varies based on type of school)
- K. Interior Lighting: Complete Building Replacement (\$5.00/sf)
- L. Security Systems (\$1.50/sf)
- M. Emergency/Egress Lighting (\$1.00/sf)
- N. Fire Alarm (\$1.50/sf)
- T. Hazardous Materials: When replacing a wood floor system, include additional testing for possible hazardous material abatement.
- W. Technology: Non-OSDM Compliant (\$ variable/sf)

J. **GENERAL FINISHES**

The cost to replace all the finishes in a school building are listed below. Define requirement for casework within description.

<u>Partial Finish Replacement:</u>		
Paint:	\$ 2.00 sf	(floor area/prep and installation)
Acoustic Ceiling:	\$ 2.90 sf	(drop in/standard 2x4 ceiling tile per area)
	\$ 3.50 sf	(tear-out and replace per area)
Vinyl Enhanced Tile (VET):	\$ 4.10 sf	(tear out and replace per area; to be used in lieu of VCT)
Carpet:	\$ 3.50 sf	(tear-out and replace per area)
Tackboard:	\$ 0.30 sf	(per building area)
Chalkboard/Markerboard:	\$ 0.30 sf	(per building area)
Lockers:	\$ 1.73 sf	(high & middle school per building area)
	\$ 1.00 sf	(elementary/cubbies per building area)
Lockers:	\$ 250.00 ea	(individual unit replacement)

Complete Replacement of Finishes (excludes casework):

Elementary	\$	11.80 sf	(elementary, per building area, with removal of existing)
Middle	\$	12.60 sf	(middle, per building area, with removal of existing)
High	\$	12.60 sf	(high school, per building area, with removal of existing)

Complete Replacement of Finishes and Casework:

Elementary	\$	15.90 sf	(elementary, per building area, with removal of existing)
Middle	\$	15.90 sf	(middle, per building area, with removal of existing)
High	\$	17.70 sf	(high school, per building area, with removal of existing)

Complete replacement of Casework only:

Elementary	\$	4.00 sf	
Middle	\$	3.25 sf	
High	\$	5.00 sf	
Partial Casework: (base and wall)	\$	450.00 lf	(refer to OSFC, OSDM for requirements)
Toilet Partitions:	\$	1000.00 per stall	(removing and replacing)
Toilet Accessory Replacement	\$	0.20 sf	(per building area)
Plaster refinishing:	\$	14.00 sf	
Repair Drywall:	\$	5.50 sf	
Demo & Reinstall Drywall Partitions:	\$	7.00 sf	
Partition Open Space Classrooms:	\$	\$8.00 sf	(per building sq.ft., CMU in corridors and drywall partitions between classrooms)

Lightweight Concrete Floor

Infill at Wood Floor Removal	\$	8.00 sf	(includes removal of wood flooring and sleeper system)
Door, Frame and Hardware:	\$	1,300.00 each	(non-ADA)
Resilient Wood/Synthetic Flooring:	\$	12.85 sf	(tear-out and replace per area)
Terrazzo Floor Repair:	\$	25.00 sf	(floor area affected; max. area to be 300 sf)
Basketball Backboard Replacement	\$	3,200.00 each	(non-electric)
	\$	6,500.00 each	(electric)
Bleacher Replacement	\$	110.00 per seat	(based on current enrollment)
Art Program Kiln:	\$	2,750.00 ea	
Remove Demountable Partitions/			
Install New GWB Partitions	\$	9.00 sf	(includes the demolition of the demountable partition, new partition with 5/8" abuse board, 10' high walls braced to structure above and the use of existing electric and data runs; unit price is based on floor area)
Additional Wall Insulation	\$	6.00 sf	(includes the furring out of the existing walls, insulation and abuse resistant GWB)

Hazardous Material Replacement Costs

Acoustical Plaster Replacement	\$	12.00 sf
Fireproofing Replacement	\$	5.00 sf
Hard Plaster Replacement	\$	9.00 sf
Gypsum Board Replacement	\$	4.00 sf
Acoustical Panel/Tile Ceiling		
Replacement:	\$	1.50 sf
Laboratory Table/Counter Top		
Replacement:	\$	150.00 lf
Door and Window Panel Replacement	\$	200.00 ea

Non-ACM Acoust. Panel Ceiling

Replacement: \$ 1.50 sf

Resilient Flooring Replacement,

Including Mastic: \$ 2.25 sf

Carpet Replacement (over RFC) \$ 3.00 sf

Kitchen Equipment:

Walk-in Coolers/Freezers: \$ 29,818.00 per unit

Floor Mixer: \$ 9,476.00 per unit

CombiOven (double): \$31,000.00 per unit

CombiOven (single): \$15,500.00 per unit

Convection Oven (double): \$ 12,600.00 per unit

Conventional Oven: \$ 6,200.00 per unit

Range: \$ 2,925.00 per unit

Mixer: \$ 4,116.00 per unit

Hot Serving Unit: \$ 8,148.00 per unit

Hot Food Cabinet \$ 6,150.00 per unit

Cold Serving Unit: \$ 6,633.00 per unit

Cold Food Cabinet: \$ 9,900.00 per unit

Ice Maker (with bin) \$ 4,200.00 per unit

Stationary Serving Unit: \$ 3,300.00 per unit

Reach-in Refrigerator/Freezer: \$ 6,433.00 per unit

Slicer \$ 4,965.00 per unit

Kettle: \$ 20,016.00 per unit

Pot Filler: \$ 1,200.00 per unit

Disposer: \$ 2,814.00 per unit

Dishwasher: \$ 17,000.00 per unit

Soft Serve Machine: \$ 15,000.00 per unit

Shelving and Tables (stainless) \$ 3,325.00 per unit

Kitchen Exhaust Hood: \$ 56,000.00 per unit (includes fans, exhaust & ductwork)

Total Kitchen Equipment

Replacement: \$ 190.00 sf (square footage based upon only existing area of food preparation, serving, kitchen storage areas and walk-ins. Includes demolition and removal of existing kitchen equipment.)

Total Warming Kitchen

Replacement: \$ 112.50 sf (square footage based upon only existing area of food preparation, serving, kitchen storage areas and walk-ins. Includes demolition and removal of existing kitchen equipment.)

Other:

(describe "Other" items along with opinion of probable costs within recommendation section)

Additional Comments:

- Casework replacement should be on an as needed basis.
- Casework is to comply with Ohio School Facilities, Ohio School Design Manual where practical.
- Assessment Consultant must determine lineal footage of casework to be replaced.
- Do not add items to kitchen, if they do not exist.
- If Terrazzo floor repair area exceeds 300 sf, budget for VET or Carpet instead.
- Partitioning open space classrooms is intended for buildings with an open space design where individual, separated and enclosed classrooms are desired. This includes full height CMU walls in corridors, full height metal stud and drywall partitions between classrooms and doors in lieu of moveable partitions.

- Replace kitchen equipment over 20 years old.
- If two-thirds of the interior doors require replacement, replace all of them.
- When replacing demountable partitions, only count the floor area zones where the demountable partitions occur and indicate in the "Summary of Significant Findings."

Coordination Comments:

- If individual Kitchen Equipment item costs exceed \$127.30 per sf of food preparation, serving, kitchen storage areas and walk-ins, replace all Kitchen Equipment at funding level above for square footage of food preparation, serving, kitchen storage areas and walk-ins. (Use existing kitchen size for calculation).
- If Acoustic Ceilings are being replaced review condition of item K. INTERIOR LIGHTING.
- If Partial Finish Replacement costs exceed two-thirds cost per sf of Complete Finish Replacement, replace all finishes at funding level for Complete Replacement of Finishes.
- When replacing kitchen equipment, evaluate kitchen equipment electrical panel for sufficient capacity.
- When replacing demountable partitions with metal studs & gypsum board, replace all interior doors within these walls.

HIGH BAY/INDUSTRIAL SPACE – LAB TYPES 5, 6, 7:

Seal Concrete Floor:	\$ 0.50 sf	
Ceiling Replacement:	\$ 3.85 sf	(high bay area only, combination exposed and acoustical ceiling)
Paint exposed ceiling	\$ 1.00 sf	(high bay only)
Paint	\$ 1.50 sf	(high bay area only)
Total Flooring Replacement	\$ 0.75 sf	(high bay area only)
Total Finish Replacement	\$ 8.50 sf	(high bay area only)

K. INTERIOR LIGHTING

The Assessment Consultant shall refer to the design manual to verify that the minimum FC levels are present. Refer to the design manual (page 8600-13 (revised 7/1/99)) for candle levels. The Assessment Consultant shall measure lighting levels in a sampling of educational spaces to determine if upgrades are necessary. Indicate within description a summary of recorded lighting levels.

Building Lighting Replacement	\$5.00 sf	(Includes demo of existing fixtures)
<u>Hazardous Material Replacement Costs:</u>		
Light (Reflector) Fixture Removal	\$3.00 sf	

Additional Comments:

- Replace all incandescent pendant fixtures, U-shaped florescent lamps and T-12 florescent lamps.
- Replace fixtures in poor condition even though foot-candle level is good.

Coordination Comments:

- If Interior Lighting is being replaced, replace Acoustic Ceilings under item J. GENERAL FINISHES.
- If sprinklers are added, remove and replace ceilings and lighting.

HIGH BAY/INDUSTRIAL SPACE – LAB TYPES 5, 6, 7:

High Intensity (High Bay) Lighting	\$6.00 Sq. Ft.
Interior Lighting	\$4.00 Sq. Ft.

L. SECURITY SYSTEMS

The Assessment Consultant shall verify that all buildings in the school district have security systems.

If none exist, use \$1.85 sf.

Security System	\$ 1.85 sf	(complete, area of building)
Partial Security System Upgrade	\$ 1.35 sf	(complete, area of building)
Exterior Site Lighting:	\$ 1.00 sf	(complete, area of building)

Additional Comments:

- A complete security system will include access control systems, panic alarms, lock down capabilities, etc., and may include fencing (see Ohio School Facilities, Ohio School Design Manual.)

M. EMERGENCY/EGRESS LIGHTING

The Assessment Consultant shall verify that school building has a standby generator supplying emergency power to emergency/egress lighting.

Emergency/Egress Lighting:	\$1.00 sf	(complete, area of building)
New Exit Sign	\$300.00 each	
New Emergency Light	\$350.00 each	

Additional Comments:

- All exit signs are to meet code for size and location.
- Emergency lighting must meet code for illumination levels and locations.
- New Emergency/Egress lighting must have generator back up. Unless total electric replacement is required, coordinate generator with Item U Life Safety.

N. FIRE ALARM

The Assessment Consultant shall verify that all assessment facilities have a minimum of an addressable type alarm system with strobe type devices in all occupiable spaces and pull stations at all exits.

Fire Alarm System:	\$ 1.50 sf	(complete new system, including removal of existing)
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Additional Comments:

- All corridor/room devices shall be the strobe/horn type.
- If there is not an existing system, or if present system is outdated and does not meet code, add a new system.
- If present system does not have additional expansion capability, consider replacement.
- Alarm system shall be connected to an automatic digital communicator monitored by a central station.

O. HANDICAPPED ACCESS

Wheelchair confined students and staff must have access to all instructional areas of every school. All toilet facilities, drinking fountains and door hardware must be ADA compliant.

Handicapped Hardware:	\$ 350.00 set	(includes installation/hardware only)
Signage:	\$ 0.20 sf	(per building area)
Ramps:	\$ 40.00 sf	(per ramp/interior-exterior complete)
Lifts:	\$ 15,000.00 unit	(complete)
Elevators:	\$ 42,000.00	(per stop, \$84,000 minimum)
Electric Water Coolers:	\$ 1,800.00 unit	(replacement double ADA)

	\$ 3,000.00 unit	(new double ADA)
Toilet/Urinals/Sinks:	\$ 3,800.00 unit	(new ADA)
	\$ 1,500.00 unit	(replacement ADA)
Toilet Partitions:	\$ 1,000.00 stall	(ADA - grab bars, accessories included)
ADA Assist Door & Frame:	\$ 7,500.00 unit	(openers, electrical, patching, etc)
Replace Doors:	\$ 1,300.00 leaf	(standard 3070 wood door, HM frame, door/light, includes hardware)
	\$ 5,000.00 leaf	(rework narrow opening to provide 3070 wood door, HM frame, door/light, includes hardware)
	\$ 5,000.00 leaf	(rework opening and corridor wall to accommodate ADA standards when door opening is set back from edge of corridor and cannot accommodate a wheelchair.)
Remount Restroom Mirrors to Handicapped Height:	\$ 285.00 per restroom	
Provide ADA Shower:	\$ 3,000.00 ea	(includes fixtures, walls, floor drain, and supply line of an existing locker room)
Provide Toilet Accessories:	\$ 1,000.00 per restroom	
<i>Other:</i>		
(describe "Other" items along with opinion of probable costs within recommendation section)		

Additional Comments:

- Upgrade costs include associated required electrical upgrades.
- Ramps can be used if there is run-out room.
- Existing floor-to-floor chair lifts cannot be used as a substitute for a new elevator.
- Coordinate plumbing fixtures with "E".
- Provide ADA Assisted doors per OBBC.
- Ensure room for expansion, if applicable.

P. SITE CONDITION

The Assessment Consultant shall confirm with district personnel if a deficient site condition exists. Ask the custodian and/or district personnel if the district's parking areas meet city or local codes in reference to paving.

Playground Equipment:	\$ 1.50 sf up to \$100,000	(per building square feet)
Removal of existing Playground Equipment	\$ 2,000.00 lump sum	
Replace Existing Asphalt Paving (heavy duty):	\$ 30.60 sy	(includes drainage/tear out for heavy duty asphalt)
Replace Existing Asphalt Paving (light duty):	\$ 28.60 sy	(includes drainage/tear out for light duty asphalt)
Asphalt Paving/New Wearing Course:	\$ 19.00 sy	(includes minor crack repair in less than 5% of paved area)
New Asphalt Paving (heavy duty):	\$ 27.80 sy	
New Asphalt Paving (light duty):	\$ 25.80 sy	
Parking Space:	\$ 1,100.00 space	(ES & MS: .11 space per student, HS .42 space per student. Parking space includes parking lot drive space.)
Bus Drop-Off:		(Allowance to assist in constructing bus drop-off at buildings where there currently is none)
ES/MS	HS/CT	
\$110/student	\$68.75/student	(based on current enrollment)
Concrete Curb:	\$ 18.00 lf	(new)

Concrete Sidewalk:	\$ 4.69 sf	(5" exterior slab)
Stabilize soil erosion	\$ 2.50 sf	(includes stripping and re-grading)
Exterior Hand / Guard Rails:	\$ 43.00 lf	
Sitework Allowance	up to \$200,000	(for unforeseen conditions)
Provide Soft Surface Playground Material:	\$ 30.00 sy	
Replace Concrete Steps:	\$ 32.00 sf	
Provide Exterior Parking Lot Catch Basin:	\$ 2,500.00 ea	
Provide Concrete Dumpster Pad:	\$ 2,400.00 ea	(for two dumpsters)

Other:

Storm Drainage:

Curb Cuts:

Stabilize Soil Erosion:

(describe "Other" items along with opinion of probable costs within recommendation section)

Additional Comments:

- Review existing Bus/pedestrian/vehicular traffic separation. Assessment consultant should provide funding for paving and curbing to provide separation.
- Pave a parking lot if not currently paved.
- This could include a bad drainage condition.
- This could include a circulation problem such as handicapped inaccessibility.
- Provide playground equipment to elementaries (only) as indicated in the *Ohio School Facilities, Ohio School Design Manual*.
- Assessment Consultant to review any existing equipment.
- Bus drop off is based on current student enrollment. Combination schools will be determined by enrollment per grade level.
- A sitework allowance to accommodate unforeseen circumstances is to be included on all renovation projects. The assessor is required to manually select this as directed on the webtool instructions.

Q. SEWAGE SYSTEM

The Assessment Consultant shall verify the condition and suitability of the existing sewage system. These items are on a per school basis.

ELEMENTARY SCHOOL COST

<u>Square Feet of Building</u>	<u>Cost per sf</u>
43,750 – 50,000 sf	\$ 4.51
50,001 sf – 69,360 sf	\$ 4.68
69,361 sf – 100,000 sf	\$ 3.07
100,001 sf and up	\$ 2.80

MIDDLE SCHOOL COST

<u>Square Feet of Building</u>	<u>Cost per sf</u>
52,850 - 67,950 sf	\$ 3.93
67,951 sf – 91,650 sf	\$ 3.44
91,651 sf – 100,000 sf	\$ 3.04
100,001 sf and up	\$ 2.86

HIGH SCHOOL COST

<u>Square Feet of Building</u>	<u>Cost per sf</u>
63,000 - 100,000 sf	\$ 3.66
100,001 sf – 133,600 sf	\$ 2.21
133,601 sf – 200,400 sf	\$ 1.79
200,401 sf and up	\$ 1.60

A more accurate probable cost will be achieved by obtaining actual flow rates of a similar type of school with a similar student population and modifying those numbers to the design of the new or renovated building.

Abandonment of Self-

Contained Unit:	\$ 10,000.00 lump sum
Sewage Main:	\$ 45.00 lf (includes excavation and backfilling)

Other:

(describe “Other” items along with opinion of probable costs within recommendation section)

Additional Comments:

- The size (gallons/day) and type of the treatment plant (re-circulating sand filter or extended aeration) the drainage characteristics of the soil, and the length of sewer piping between the building and treatment components all influence the design and cost.*
- Another important factor is water-reducing plumbing fixtures. Treatment plants sized for higher flows will not perform satisfactorily and experience negative effects on the equipment provided.*
- ~~• Student count is based upon current enrollment or capacity as determined in Item “E” Plumbing; whichever is greater.~~
- Meet with school representatives and inquire about condition and history of the underground sanitary lines. If problems are suspected, ask district about having a pipe inspection via camera photography to better determine condition. Also enter the item in the “Summary of Significant Findings.”

R. WATER SUPPLY

The Assessment Consultant shall verify that there are no problems in this area.

Domestic Water Booster Pump:	\$ 35,000.00 lump sum	
Pressure Tank:	\$ 1.50 per gallon	(new)
	\$ 2.00 per gallon	(removal/replacement)
Domestic Water Main	\$ 40.00 lin. ft	(new)
Well:	\$ 45,000.00 unit	
Well Pump:	\$ 2,500.00 unit	(5HP unit)
	\$ 10,000.00 unit	(25-30 HP unit)
Water Quality Test	\$ 500.00	(includes 2 tests)

Other:

(describe “Other” items along with opinion of probable costs within recommendation section)

Coordination Comments:

- Coordinate with Item “U” – Life Safety
- If District uses a well for potable water, determine if arsenic contamination is an issue. Contact OSFC if Arsenic Filtration System is required.

S. EXTERIOR DOORS

Assessment Consultant shall visually inspect and recommend for replacement, if needed.

Door Leaf/Frame and Hardware:	\$ 2,000.00 per leaf	(includes removal of existing)
Overhead door and hardware	\$ 2,500.00 per leaf	(8x10 sectional, manual operation)
<u>Hazardous Material Replacement Costs:</u>		
Fire Door Replacement	\$ 1,100.00 each	

<u>Other:</u>		
(describe "Other" items along with opinion of probable costs within recommendation section)		

Additional Comments:

- All exterior door and hardware must be ADA compliant.
- Replace all wood exterior doors.
- Coordinate transoms and sidelights with Item "F" Windows.

T. HAZARDOUS MATERIAL

Effective June 1, 2001 Assessors will use the Environmental Hazards Form to establish estimates for Item T.

Additional Comments:

- **IMPORTANT NOTE TO REGIONAL PROGRAM CONSULTANTS:** If the building is intended to become a part of a district's Master Plan, the Regional Program Consultant shall review the Enhanced Environmental Report and make any budget adjustments required due to replacement of abated materials. The adjustments should be made per the specific line items in sections A through W herein, under the *Hazardous Material Replacement Costs* heading in each section.
- OSFC policy is to remove all hazardous materials.

U. LIFE SAFETY

The Assessment Consultant shall review exit corridors and include funding for eliminating existing dead-end corridor conditions. Include descriptive analysis and opinion of probable costs in recommendation section. The Assessment Consultant shall confirm that all buildings contain sprinklers. Stairs must be in two-hour rated enclosures and travel distances may require an additional means of egress. Stair railings must pass the 4" ball test. The present code requires that the guards of stair railing(s) shall not allow a sphere of 4" to pass through the balusters. An exception is made only for the triangular opening where the tread /rise / railing bottom meet to allow a 6" size sphere to pass through. In addition, the design of a guardrail should not be such that would create a "ladder effect" allowing a student to climb the railing system and therefore possibly fall over it. If water supply is from a well, assure an additional well, well pump, storage tank and generator will be required to serve the fire suppression sprinkler system.

Sprinkler / Fire Suppression System:	\$ 3.20 sf	(includes increase of service piping, if required)
Interior Stairwell Closure:	\$ 5,000.00 per level	(includes associated doors, door frames and hardware)
New Exterior Stair Enclosure	\$ 42,500.00 per level	(all inclusive)
Demo of existing stairway:	\$12,000 per floor	(per stairway, two floor minimum \$12,000, includes demo and floor construction, see coordination comment)
As required to provide adequate fire suppression system:		
Water Main	\$ 40.00 ln. ft.	(new)
Well Pump (Electric):	\$ 30,000.00 unit	
Well Pump for Fire Pump	\$ 20,000.00 unit	
Generator:	\$ 50,000.00 unit	(75 KW w/fence and pad/day tank only, life safety only)
Storage Tank:	\$ 50,000.00 unit	(30,000-35,000 gallon tanks)

Well:	\$ 45,000.00 unit	
Handrails:	\$ 5,000.00 level	
Retrofit existing kitchen hood with		
Fire suppression system	\$ 6,500.00 per hood	
Provide Fire Extinguisher and Wall		
Cabinet:	\$ 585.00 ea	(includes preparation of wall to receive recessed cabinet)
Replace Fire Extinguisher:	\$ 400.00 ea	

Other:

(describe "Other" items along with opinion of probable costs within recommendation section)

Additional Comments:

- Demo of existing stairway includes the removal of an interior stairway requiring enclosure due to fire code that cannot be enclosed because of space or other issues. The stairway will then be removed and the space used for other purposes. The cost includes the removal of the stair and any guard or handrails, installing structural steel, decking and concrete infill.
- Stairway enclosures not required for two-story buildings.

Coordination Comments:

- If a Fire Suppression System is being provided, replace Interior Lighting under item K. INTERIOR LIGHTING.
- If a Fire Suppression System is being provided, replace Acoustic Ceilings under item J. INTERIOR FINISHES.
- When specifying a fire protection system for a building currently using a well for domestic water include well pump, generator and storage tank.
- Coordinate with Item "R" Water Supply.
- If complete electrical replacement is required, do not add generator.

V. LOOSE FURNISHINGS

Based on the CEFPI appraisal form, if loose furnishings are rated less than 8 under Environment for Education on Item 6.17 apply funding as listed below. If CEFPI Item 6.17 is above 8, no funding should be received.

Use the following graduated scale:

CEFPI Rating	\$/Sf Allowance
8	\$1.00
7	\$2.00
6	\$3.00
4 to 5	\$4.00
0 to 3	\$5.00

(Graduated scale based on evaluation of furnishing)

HIGH BAY/INDUSTRIAL SPACE – LAB TYPES 5, 6, 7:

High Bay Loose Furnishings allowance is \$1.00 per sqft

Add \$19,500 for Welding Tables in the Welding lab in addition to the \$1.00 per sqft for loose furnishings.

W. TECHNOLOGY

The Assessment Consultant shall determine whether the school is fully compliant with the Ohio School Design Manual (OSDM). Provide assessment funding based on the figures below.

Non-OSDM Compliant:**ELEMENTARY SCHOOL TECHNOLOGY COST**

<u>Square Feet</u>	<u>Cost per sf</u>
< 50,000 sf	\$13.18
50,001 sf – 69,360 sf	\$11.51
69,361 sf – 100,000 sf	\$10.18
100,001 sf and up	\$ 9.84

MIDDLE SCHOOL TECHNOLOGY COST

<u>Square Feet</u>	<u>Cost per sf</u>
< 67,950 sf	\$10.29
67,951 sf – 91,650 sf	\$ 9.47
91,651 sf – 100,000 sf	\$ 8.66
100,001 sf and up	\$ 8.47

HIGH SCHOOL TECHNOLOGY COST

<u>Square Feet</u>	<u>Cost per sf</u>
< 100,000 sf	\$8.82
100,001 sf – 133,600 sf	\$8.54
133,601 sf – 200,400 sf	\$6.79
200,401 sf and up	\$5.80

Additional Comments:

- Technology renovation calculation is based on current student enrollment. Combination schools will be determined by enrollment per grade level.
- Technology renovation budgets include technology cabling, network electronics (wireless), phone system, paging & central sound system, wireless clock system, all A/V system components (such as classroom projectors, video distribution & sound), specialized audio systems for large group areas, and interactive curriculum technology (such as smart board/stand, interactive tablet, student response system, document camera).

Coordination Comments:

- Technology renovation calculation is based on current building size and current building enrollment (i.e. elementary, middle or high school). Combination schools will be determined by enrollment per grade level.

X. NON-CONSTRUCTION COST – (Same as 2013)

Non-Construction costs are listed below. A construction contingency of 7% will be added to the A through W Costs.

<i>Land Survey</i>	<i>0.03%</i>
<i>Soil Borings/Phase I Envir. Report</i>	<i>0.10%</i>
<i>Agency Approval Fees (Bldg. Code)</i>	<i>0.25%</i>
<i>Construction Testing</i>	<i>0.40%</i>
<i>Printing – Bid Documents</i>	<i>0.15%</i>
<i>Advertising for Bids</i>	<i>0.02%</i>
<i>Builders Risk Insurance</i>	<i>0.12%</i>
<i>Bond Fees</i>	<i>0.00%</i>
<i>Design Professionals Compensation</i>	<i>7.50%</i>
<i>CM Compensation</i>	<i>6.00%</i>
<i>Commissioning and Maintenance Plan Advisor</i>	<i>0.60%</i>
<i>Non-Construction Contingency</i>	<i><u>1.12%</u></i>

Non-Construction Total 16.29%

Regional Cost Factors

As of March 21, 2014 Regional Cost Factors have been adjusted as follows:

<i>Region 0 – Central Ohio</i>	<i>1.0000</i>
<i>Region 1 – Southwestern Ohio</i>	<i>0.9812</i>
<i>Region 2 – West Central Ohio</i>	<i>1.0012</i>
<i>Region 3 – Northwestern Ohio</i>	<i>1.0349</i>
<i>Region 4 – North Central Ohio</i>	<i>1.0244</i>
<i>Region 5 – South Central Ohio</i>	<i>1.0031</i>
<i>Region 6 – Southeastern Ohio</i>	<i>1.0216</i>
<i>Region 7 – East Central Ohio</i>	<i>1.0085</i>
<i>Region 8 – Northeastern Ohio</i>	<i>1.0376</i>

Note: The changes for 2014 are color-coded as follows:

Green:	Cost or Narrative Change
Orange:	Cost or Narrative Added
Red:	Narrative Deleted

