



**CROTON-HARMON UFSD**  
**2015 BUILDING CONDITION SURVEY**  
**PIERRE VAN CORTLANDT MIDDLE SCHOOL**  
**SED # 66-02-02-03-0-002**



**Important Information: Please read the following information to better understand the information contained in the Comprehensive Facilities Report.**

**General Notes:**

1. The report consists of (2) two main documents; (1) the "Summary" Report which gives a listing of each work item identified with a brief description and (2) the "Detail" Report that gives a more comprehensive description of each work item identified. These (2) two documents are complimentary and form the overall Comprehensive Facilities Report.

**Categories**

**Level 1-** These items have been identified to fit into one of the following categories:

1. Non-code compliant and recommended for upgrade.
2. Beyond serviceable/useful life.

**Level 2-** These items have been identified to fit into one of the following categories:

1. Non-code compliant but not requiring upgrades at this time.
2. Beyond serviceable/useful life, however, still functioning and likely to last at least 4 more years.

**Level 3-** These items have been identified to fit into one of the following categories:

1. Items identified that can be considered for upgrades/renovations but are not required by building codes or ADA compliance requirements.
2. Items that are nearing the end their useful life but not posing any current concerns.

**Level 4-** These items have been identified to fit into one of the following categories:

1. Items identified that would enhance the building or site but are not mandatory to accommodate academic instruction.
2. Items identified that are currently functioning but should be considered for future upgrades.

**Level 5-**These items have been identified as possible work to be completed as part of the yearly Operations and Maintenance budget.

**Pricing notes**

**\* Pricing for this report has been calculated as follows:**

1. A unit price based upon architect's available cost data multiplied by the appropriate quantity for the system such as each (EA), Square Feet (SF) or Linear Feet (LF).
2. A lump sum (LS) based upon the scope of work and architect's best judgment based on past similar projects.
3. Each identified project is estimated as if it was to be completed as a unique project. At this time, cost estimates do not reflect potential savings if multiple projects were completed within an overall project scope.
4. Cost estimates presented herein are for planning purposes at this time. If/ when a group of projects is identified for consideration, costing will be re-examined for potential savings.
5. Estimates do not take into consideration the source of funding.
6. The project totals include a design contingency of 20% to allows for the fact that projects often contain more elements when they are fully designed than could have been anticipated earlier in the design process.
7. Estimates do not include a project contingency at this time. A project contingency is for unknowns during construction. The project contingency allows for unknown factors that could increase construction and related costs beyond the estimate. If/ when a group of projects is identified for consideration, costing will be re-examined to determine if additional monies should be included to cover these unknown factors.

IDENTIFICATION NUMBER	DESCRIPTION SUMMARY (For further explanation of work see "Detail" report)	TOTAL QUANTITY	UNIT	\$/ UNIT	ITEM COST*	PRIORITY	Level 1	Level 2	Level 3	Level 4	Level 5
<b>SITE SYSTEMS</b>											
SS 2	Site parking:										
	Upper Asphalt Parking lot and Bus Loop: Repave	1	LS	\$300,000	\$300,000	1.4				\$300,000	
	Lower Asphalt Parking lot	1	LS	\$150,000	\$150,000	1.4				\$150,000	
SS 4	Site Drainage: Reset Grates & Piping (North of Cafeteria)	1	EA	\$75,000	\$75,000	1.1	\$75,000				
SS 6	Storage Container: Provide Ventilation and Panic hardware	1	EA	\$3,000	\$3,000	1.5					\$3,000
SS 7	Concrete Curbs: Repair & Replace	200	LF	\$50	\$10,000	1.4				\$10,000	
SS 8	Concrete Sidewalks: Repair & Replace	2500	SF	\$20	\$50,000	1.3			\$50,000		
SS 9	Brick Steps/ Wall: Rebuild & Repair	1	LS	\$75,000	\$75,000	1.2		\$75,000			
SS 10	Cafeteria Site Paths/ Stairs/and Retaining Wall: Reconstruct	1	LS	\$125,000	\$125,000	1.1	\$125,000				
SS 11	Add panic device to Picnic area and garden gate	2	LS	\$875	\$1,750	1.5					\$1,750
SS 12	Site Stairs Between HS and MS: Replace	1	LS	\$45,000	\$45,000	1.2		\$45,000			
SS 12	Wood Stair at Tennis Courts: Replace	1	LS	\$8,000	\$8,000	1.3			\$8,000		
SS 13	Timber Retaining Wall/stair : Replace	1	LS	\$25,000	\$25,000	1.1	\$25,000				
SS 16	Storage Building: replace storage container with building	1	LS	\$250,000	\$250,000	1.4				\$250,000	
<b>Sub-total Site Systems</b>					<b>\$1,117,750</b>		<b>\$225,000</b>	<b>\$120,000</b>	<b>\$58,000</b>	<b>\$710,000</b>	<b>\$4,750</b>
<b>SUBSTRUCTURES</b>											
No items noted											
<b>EXTERIOR BUILDING ENVELOPE</b>											
EB 2	Rusted Steel Lintels: Replace	1	EA	\$2,000	\$2,000	1.2		\$2,000			
EB 5	Concrete Stairs/ Ramps/ Sidewalks: Replace	1	LS	\$10,000	\$10,000	1.2		\$10,000			
EB 6	Replace Gutter 2004 addition	1	LS	\$50,000	\$50,000	1.1	\$50,000				
<b>Sub-total Exterior Building Envelope</b>					<b>\$62,000</b>		<b>\$50,000</b>	<b>\$12,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>BUILDING INTERIORS - CODE, HEALTH &amp; SAFETY, ACCESSIBILITY</b>											
BIC 1	Wire Glass (Code): Replace	300	SF	\$300	\$90,000	1.3			\$90,000		
BIC 2	Interior wood doors: Replace	40	EA	\$2,200	\$88,000	1.1	\$88,000				
BIC 3	Add fall protection to library windows	1	LS	\$25,000	\$25,000	1.1	\$25,000				
BIC 4	Wood Wall at Gymnasium: Replace	230	SF	\$130	\$29,900	1.1	\$29,900				
<b>Sub-total Building Interiors - Code, Health &amp; Safety, Accessibility</b>					<b>\$232,900</b>		<b>\$142,900</b>	<b>\$0</b>	<b>\$90,000</b>	<b>\$0</b>	<b>\$0</b>
<b>BUILDING INTERIORS - BUILDING IMPROVEMENTS / REPAIRS</b>											
BIR 1	1939 Gymnasium Ceiling: Remove and Replace	3500	SF	\$25	\$87,500	1.1	\$87,500				
BIR 2	Concealed Spline Ceiling: Remove and Replace	6000	SF	\$10	\$60,000	1.4				\$60,000	
BIR 3	Carpet: Replace	2000	SF	\$15	\$30,000	1.5					\$30,000
BIR 10	Vinyl Asbestos Tile (abatement): Replace	500	SF	\$25	\$12,500	1.3			\$12,500		
BIR 11	Vinyl Composite Tile: replace	10,000	SF	\$6	\$60,000	1.4				\$60,000	
BIR 12	Single Use Toilet Room: Reconnect plumbing	2	EA	\$25,000	\$50,000	1.3			\$50,000		
BIR 13	1939 Building Lobby: Restore Marble	1	LS	\$100,000	\$100,000	1.3			\$100,000		
BIR 14	Flat Screen Monitors: Upgrade from Smart boards	40	EA	\$6,000	\$240,000	1.3			\$240,000		
BIR 15	Flat Screen/ Smart Board mounting frame: Add to all classrooms in 1939 building.	20	EA	\$7,000	\$140,000	1.3			\$140,000		
BIR 16	Maker Space: Renovate/convert classroom 229	1	LS	\$500,000	\$500,000	1.2		\$500,000			
BIR 17	Guidance Renovations: Renovate to provide additional office space	1	LS	\$300,000	\$300,000	1.3			\$300,000		
BIR 18	Green houses: Renovate/complete	2	EA	\$50,000	\$100,000	1.3			\$100,000		
<b>Sub-total Building Interiors - Building Improvements / Repairs</b>					<b>\$1,680,000</b>		<b>\$87,500</b>	<b>\$500,000</b>	<b>\$942,500</b>	<b>\$120,000</b>	<b>\$30,000</b>

IDENTIFICATION NUMBER	DESCRIPTION SUMMARY (For further explanation of work see "Detail" report)	TOTAL QUANTITY	UNIT	\$/ UNIT	ITEM COST*	PRIORITY	Level 1	Level 2	Level 3	Level 4	Level 5
<b>PLUMBING</b>											
P1	1939 Building: Replace Existing Water Service	1	LS	\$130,000	\$130,000	1.3			\$130,000		
<b>Sub-total Plumbing</b>					<b>\$130,000</b>		<b>\$0</b>	<b>\$0</b>	<b>\$130,000</b>	<b>\$0</b>	<b>\$0</b>
<b>ELECTRIC</b>											
E1	Add computer receptacles in 1939 classrooms	25	EA	\$3,300	\$82,500	1.4				\$82,500	
E2	Add site lighting between high school and middle school	8	EA	\$15,600	\$124,800	1.4				\$124,800	
E3	Add walkway lighting along tennis courts	6	EA	\$9,000	\$54,000	1.3			\$54,000		
E4	Add wireless points in all classrooms/common areas	50	EA	\$2,000	\$100,000	1.3			\$100,000		
<b>Sub-total Electric</b>					<b>\$361,300</b>		<b>\$0</b>	<b>\$0</b>	<b>\$154,000</b>	<b>\$207,300</b>	<b>\$0</b>
<b>MECHANICAL / HVAC</b>											
M1	1939 Building: Replace Ducted Powered Exhaust Fans	4	EA	\$20,000	\$80,000	1.2		\$80,000			
M2	1939 Building: Provide Fire Dampers in Classroom Exhaust Shafts	45	EA	\$1,000	\$45,000	1.1	\$45,000				
M3	1939 Building: Provide Powered Ventilation for Rooms 221, 223, 224, 307, 308, 309, 319	7	EA	\$50,000	\$350,000	1.1	\$350,000				
M4	1939 Building: Replace Gymnasium Ventilation Fan	1	EA	\$60,000	\$60,000	1.2		\$60,000			
M5	1939 Building: Provide Corridor Ventilation on all Floors	1	LS	\$150,000	\$150,000	1.1	\$150,000				
M6	1939 Building: Steam and Condensate Piping: Replace in-kind or convert to hot water (see M11)	1	LS	\$1,800,000	\$1,800,000	1.2		\$1,800,000			
M7	1939 Building: Upgrade Remaining Pneumatic Control Systems to DDC and convert existing DDC system manufacturer to Honeywell as a single provider	1	LS	\$175,000	\$175,000	1.4				\$175,000	
M8	2004 Addition: Provide Air Conditioning to Minimum twelve (12) existing Classrooms (Possibly connect to existing Chiller)	1	LS	\$150,000	\$300,000	1.3			\$300,000		
M9	CO2 Monitoring: Provide CO2 sensors	80	EA	\$500	\$40,000	1.4				\$40,000	
M10	1939 Building: Crawlspace: Provide powered ventilation	1	LS	\$80,000	\$80,000	1.2		\$80,000			
M11	1939 Building: Converting heating system to hot water requires boiler conversion and terminal unit replacement throughout	1	LS	\$800,000	\$800,000	1.2		\$800,000			
<b>Sub-total Mechanical / HVAC</b>					<b>\$3,880,000</b>		<b>\$545,000</b>	<b>\$2,820,000</b>	<b>\$300,000</b>	<b>\$215,000</b>	<b>\$0</b>
Subtotal							\$1,050,400	\$3,452,000	\$1,674,500	\$1,252,300	\$34,750
Design Contingency (20%)							\$210,080	\$690,400	\$334,900	\$250,460	\$6,950
<b>TOTAL</b>							<b>\$1,260,480</b>	<b>\$4,142,400</b>	<b>\$2,009,400</b>	<b>\$1,502,760</b>	<b>\$41,700</b>
<b>GRAND TOTAL \$8,956,740</b>											
Escalation 0%							\$0				
Escalation 5%								\$207,124			
Escalation 10%									\$200,940		
Escalation 15%										\$225,414	
Escalation 20%											\$0
Subtotal							\$1,260,480	\$4,349,524	\$2,210,340	\$1,728,174	\$83,400
Soft Costs (30%)							\$378,144	\$1,304,857	\$663,102	\$518,452	\$25,020
<b>TOTAL</b>							<b>\$1,638,624</b>	<b>\$5,654,381</b>	<b>\$2,873,442</b>	<b>\$2,246,626</b>	<b>\$108,420</b>
<b>GRAND TOTAL \$12,521,494</b>											



### Architectural Survey



**SS 2 Asphalt Paving:**  
Repave upper parking lot with new asphalt paving.



**SS 2 Asphalt Paving:**  
Repave lower parking lot and bus loop with new asphalt paving.



**SS 4 Cafeteria Path Site Drainage:**  
Current storm grate elevations are set above grade and do not intercept storm water. Work includes adjusting grate elevations to complement new cafeteria path design



**SS 6 Site Storage**  
The State Education Department requires storage containers to be provided with ventilation and door hardware that can be opened from the inside without a key.



**SS 7 Concrete Curbs:**  
Replace broken concrete curbs.



**SS 8 Concrete Sidewalks**  
Replace cracked and broken concrete sidewalks.



 <p><b>SS 9 Brick Site Stairs</b> Brick joints at northwestern steps are beginning to show signs of deterioration and will allow water into the exterior wall causing further deterioration. Work would include the repointing and restoration of masonry and replacement of handrails</p>	 <p><b>SS 10 Cafeteria Site Stair</b> The pedestrian walkway behind the cafeteria is excessively steep for comfortable use. Work would include the reconfigure of the walkway and retaining wall, including site stairs to reduce the steep slope of the path.</p>	 <p><b>SS 11 Garden and Picnic Area Gate</b> Door hardware should be provided to allow opening the gate from the inside without a key</p>
 <p><b>SS 12 Site Stairs</b> Site stairs between the Middle School and High School present a tripping hazard due to uneven landings and stair treads. Stairs should be replaced with new concrete stairs</p>	 <p><b>SS 12 Site Stairs</b> Wood site stairs at the tennis courts are deteriorating. Recommend replacement with concrete stairs.</p>	 <p><b>SS 13 Timber Retaining wall and Stair</b> The existing timber retaining wall and stair is deteriorating. Work would include replacement of wall and stair with stacked block retaining wall and stairs. Work includes new handrails.</p>





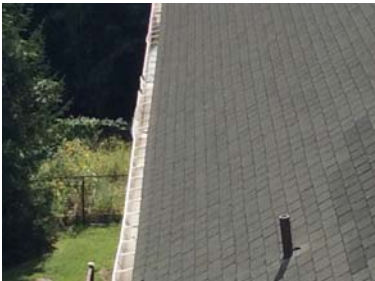
**SS 16 Storage Building:**  
Replace existing storage container with storage building.



**EB 2 Replace Rusted Lintels**  
Lintel at the 1939 Gymnasium is starting to expand due to rusting. Lintel should be replaced before it expands further and cracks the brick veneer.



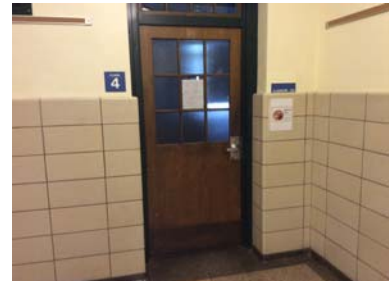
**EB 5 Concrete Ramp**  
Surface of concrete ramp is badly deteriorated. Recommend removing and replacing ramp and stairs with new concrete ramp and stairs.



**EB-6 Metal Gutter**  
Metal gutter at 2004 addition is damaged from debris collecting and clogging gutter. Recommend replacing damaged gutter with new gutter with protective covering.



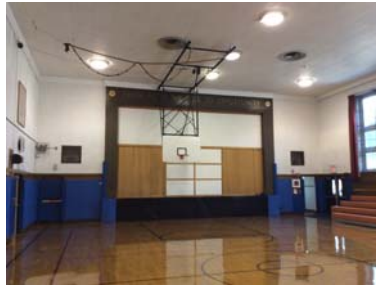
**BIC 1 Wire Glass**  
Wire glass is no longer allowed by the State Education Department. Although replacement is not mandatory, it is recommended that large areas of glass be replaced with approved safety glazing as time and budget permit.



**BIC 2 Interior Wood Doors**  
Interior wood doors are at the end of their useful life. Fatigue at the hinges and latch hardware is causing the doors to stick or not latch properly. Replacement is recommended.



**BIC 3 Library Windows**  
Operable windows at Library are at floor level and provide no fall protection when open. Recommend adding safety railings to the windows, and adding stops to limit window opening



**BIC 4 Wood Gymnasium partition**  
The wood partition between the gymnasium and adjacent classroom does not provide the fire separation as required by current New York State Building and Fire Code. Work would include the removal and replacement of the wall with fire-rated construction.



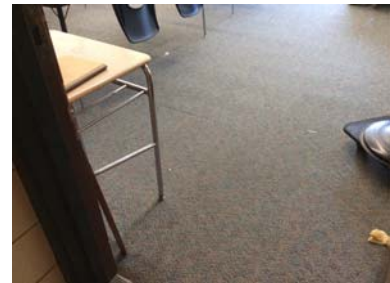
**BIC 5 Rescue Windows**  
Window treatments at rescue windows should be labeled with rescue window labels



**BIR 1 Gymnasium Ceiling**  
1939 Gymnasium ceiling has many tiles that are loose, damaged and falling down. Replacement of ceiling with impact resistant suspended ceiling system is recommended.



**BIR 2 Concealed Spline Ceilings:**  
Concealed spline ceilings were installed when the building was first built and restrict access above ceiling for maintenance. Work would include the replacement of these ceiling areas.



**BIR 3 Carpet:**  
Worn and stained carpet at the end of its useful life should be removed and replaced.





**BIR 10 Vinyl Asbestos Tile:**

Vinyl asbestos tile installed during the original construction of the building has served its useful life and requires replacement. Work would include removal of existing floor tile and rubber base and installation of new vinyl composite tile and rubber base.



**BIR 11 Vinyl Composite Tile:**

Seams at the common area s vinyl composite tile in the 2004 addition are expanding and widening. Vinyl composite tile should be removed and replaced with new vinyl composite tile and wall base.



**BIR 12 Single Use Toilet Rooms**

Two single use toilet rooms on the third floor were abandoned during the domestic water replacement project. Work would be to reconnect fixtures to new domestic water piping to restore use of these toilet rooms



**BIR 13 Restore 1939 Building Lobby**

The marble panels and metal trim in the original entry lobby are from the original construction. Age has loosened and cracked the materials and requires work in order to preserve the original materials. Work would include the restoration and repair of the materials.



**BIR 14 Flat Screen Monitors:**

Upgrade smart boards to flat screen monitors at all classrooms.



**BIR 15 Flat screen/Smart Board Mounting Frame-1939 Building:**

Mount frame for smartboard or flat screen monitor to plaster walls in 1939 addition. Work includes asbestos abatement due to asbestos containing plaster walls throughout 1939 building.



**BIR 16 Maker Space:**  
Convert existing classroom 229 (former Industrial Arts) to Maker Space to support District's evolving technology curriculum.



**BIR 17 Guidance Renovations:**  
The Guidance Department requires one more office to accommodate the current staff. Work includes renovating current location to provide one additional office



**BIR 18 Greenhouses:**  
Greenhouses in the 2004 addition were never finished. Work includes renovations to convert spaces into working greenhouses.



**Plumbing/ Electrical/ Mechanical Survey**



**P1 Water Service (1939 Building)**  
Replace existing domestic water service piping to building.



**E1 Add Computer Receptacles in 1939 classrooms:**  
Add additional 2 quad computer receptacles / classroom in 1939 building



**E2 Add Site Lighting**  
Add site lighting between High School and Middle School



**E3 Add Site Lighting:**  
Add walkway lighting along tennis courts.



**E4 Add wireless points in classrooms and common areas:**  
Provide new WAP (wireless access point) in classrooms and common areas.



**M1 General Exhaust (1939 Building)**  
Replace existing rooftop exhaust fans.



**M2 Exhaust Shaft Fire Stopping (1939 Building)**  
Provide fire dampers in existing exhaust shafts serving classrooms.



**M3 Rooms 223, 224, 307, 309, 319 (1939 Building)**  
Provide powered outdoor air and exhaust ventilation.



**M4 Gymnasium (1939 Building)**  
Replace existing Gymnasium ventilation fan.



**M5 Corridors (1939 Building)**  
Provide powered outdoor air ventilation for all Corridors.



**M6 Heating Piping (1939 Building)**  
Replace existing steam and condensate piping.



**M7 Controls (1939 Building)**  
Replace remaining pneumatic controls with DDC type and connect to existing BMS.



**M8 Air Conditioning (2004 Addition):**

Provide Cooling to minimum twelve (12) additional Classrooms which are currently not air conditioned by the chilled water system.



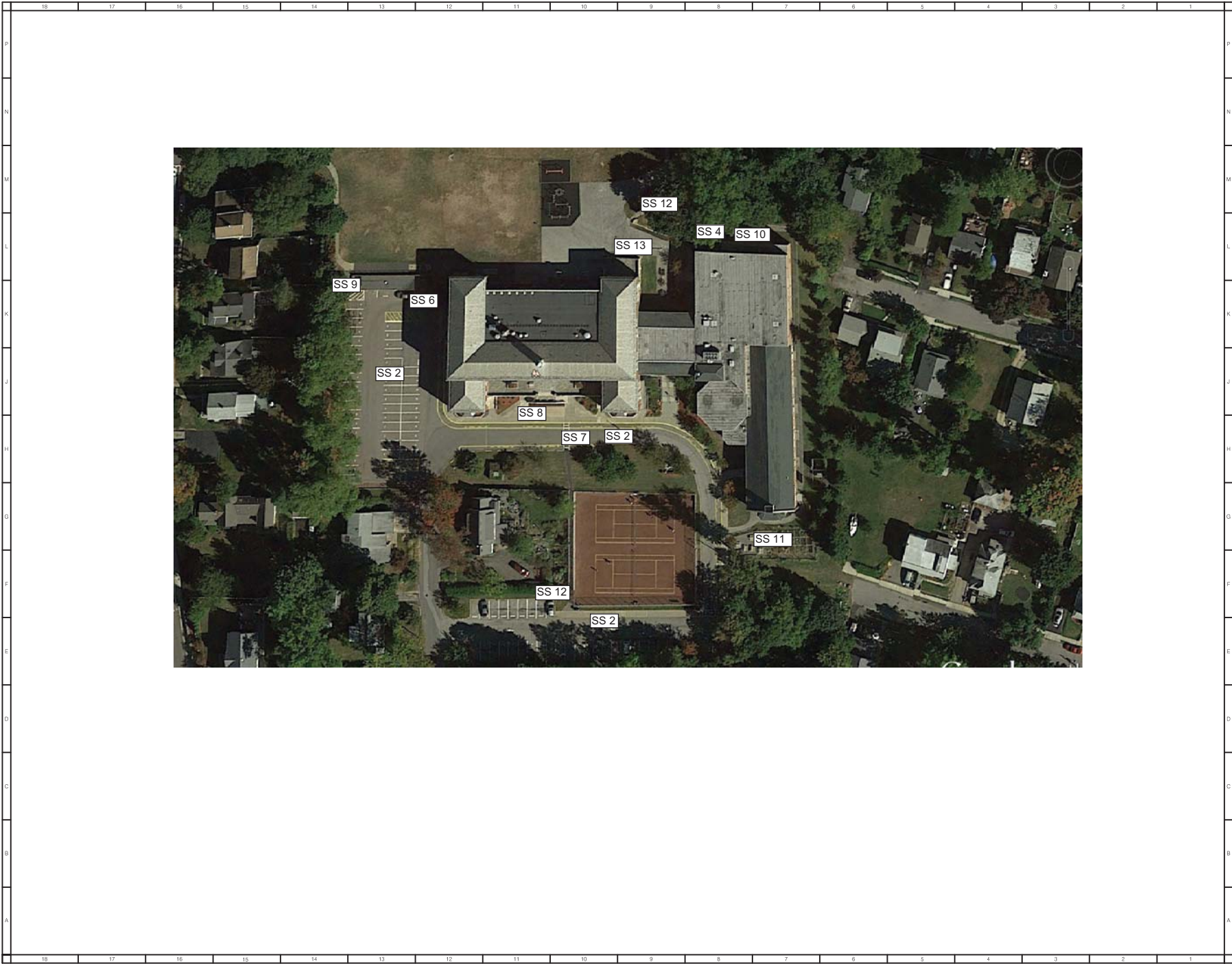
**M9 CO2 Monitoring:**

Provide CO2 wall sensors in Classroom spaces.



**M10 Crawlspace:**

Provide Powered Exhaust Ventilation.



**Croton-Harmon UFSD  
2015 Five Year Plan  
Pierre Van Cortlandt Middle School**

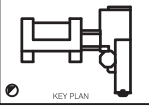


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<b>REVISIONS</b>

**SHEET NUMBER** PVC-A100