

2007 District Wide Facilities Evaluation  
Building Assessment Report

# Roxboro Middle School

2400 Roxboro Road, Cleveland Heights, Ohio

prepared for:

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Heights City School District  
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## Introduction

### Building Assessment Report Objectives

The Building Assessment Report objectives are as follows:

- To provide a descriptive and photographic inventory of existing conditions.
- To provide a prioritized budget for repairs and renovations of existing conditions.

### Building Assessment Approach

The assessment approach proceeded as follows:

- The District's original drawings were reviewed. Computer drawings were created based on these original drawings and verified on site.
- Each building was visited by a team of architects and engineers. Existing conditions were observed and recorded.
- These observations and records became the basis for the final Building Assessment documents. A Building Assessment Report was produced for each of the District's eleven active school facilities: (1) High School, (3) Middle Schools, and (7) Elementary Schools.

### Building Assessment Organization

The Building Assessment is divided into three Components:

- Narrative
- Cost Assessment
- Photos

Each of these three Components is further subdivided into the following Categories:

- |    |   |    |  |
|----|---|----|--|
| A. | Hazardous Materials                       | M. | Branch Circuit Panels and Wiring         |
| B. | Site                                      | N. | Kitchen Lighting and Power               |
| C. | Building Structure                        | O. | Exterior Lighting                        |
| D. | Building Envelope                         | P. | Interior Lighting                        |
| E. | Building Interior                         | Q. | Gymnasium Lighting                       |
| F. | Equipment and Furnishings                 | R. | Exit Signs and Emergency Egress Lighting |
| G. | Fire Protection                           | S. | Fire Alarm System                        |
| H. | Plumbing and Fixtures                     | T. | Security System                          |
| I. | Heating, Ventilating and Air Conditioning | U. | Public Address System                    |
| J. | C.E.I. Service                            | V. | Cable TV System                          |
| K. | Main Power Distribution Equipment         | W. | Data and Telephone Systems               |
| L. | Emergency Power Distribution Equipment    | X. | Clocks and Programs Bell                 |

### Narrative

The primary purpose of the Narrative is to provide a description of the existing conditions observed during visits to each of the District's fourteen facilities. The Narrative also serves as a general guide to the history of additions and renovations to the building, and describes the general construction of each addition.

### Cost Assessment

The primary purpose of the Cost Assessment is to provide preliminary budget information for repairs and renovations of existing conditions.

Within each Category of the Cost Assessment, the following Priorities were identified:

- Priority 1: work recommended to occur within the next 1-2 years
- Priority 2: work recommended to occur within the next 3-4 years
- Priority 3: work recommended to occur within the next 5-6 years

### Photos

During the building assessment, photos were taken to visually record the existing condition of each building and site. These Photos have been organized into the Categories outlined above.

### Assessment Limitations and Assumptions

The following limitations and assumptions should be noted:

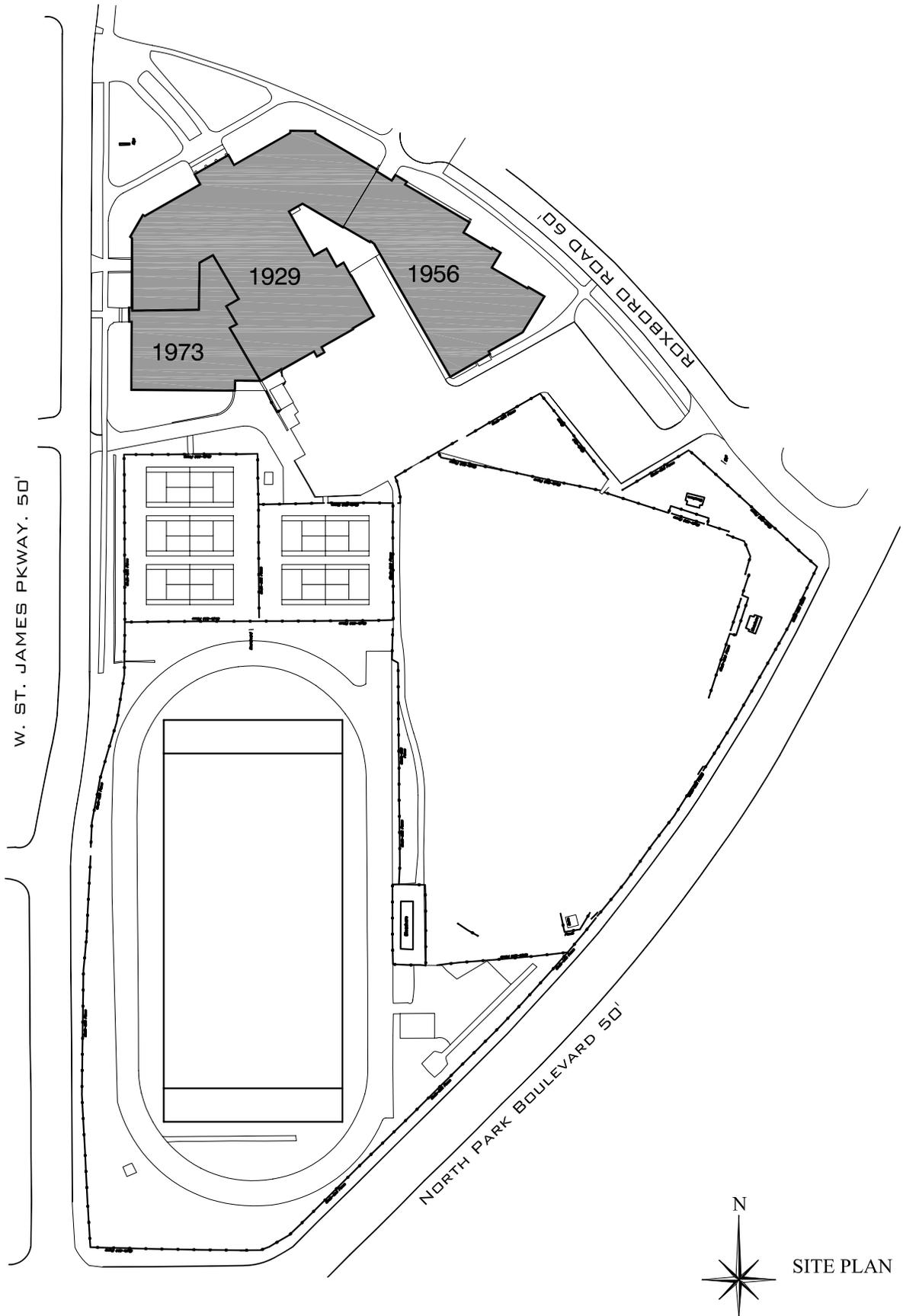
- This Facilities Assessment identifies building systems repair and renovation needs. Existing facilities do not always meet current program needs. Identifying and recommending needed space reconfigurations or building additions is beyond the scope of this report.
- The Cost Assessments provide estimated costs to replace or repair building finishes, components and systems that are damaged, missing, hazardous, inaccessible or approaching the end of useful life. The Cost Assessments do not generally provide costs to replace items which are merely aesthetically poor – but otherwise still functional and serviceable.
- The Cost Assessment is an assessment of Construction Cost. Add soft costs of 18-20% for Project Cost.
- Cost Assessment numbers are in current year dollars. An escalation / inflation factor needs to be applied at 3.5 to 4 percent for every year after 2007. Final cost estimating needs to be performed at the time the specific scope of a project is identified.
- Costs for items such as cleaning, painting, or other routine maintenance have not been included in the Cost Assessments.
- All assessments are visual and did not include physical tests, instrumentation or metering measurements, sampling or monitoring, unless otherwise noted.
- Buildings and components are inspected for condition and general safety and general accessibility requirements. The assessment does not include a complete OSHA, energy or ADA access study.

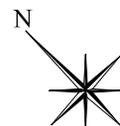
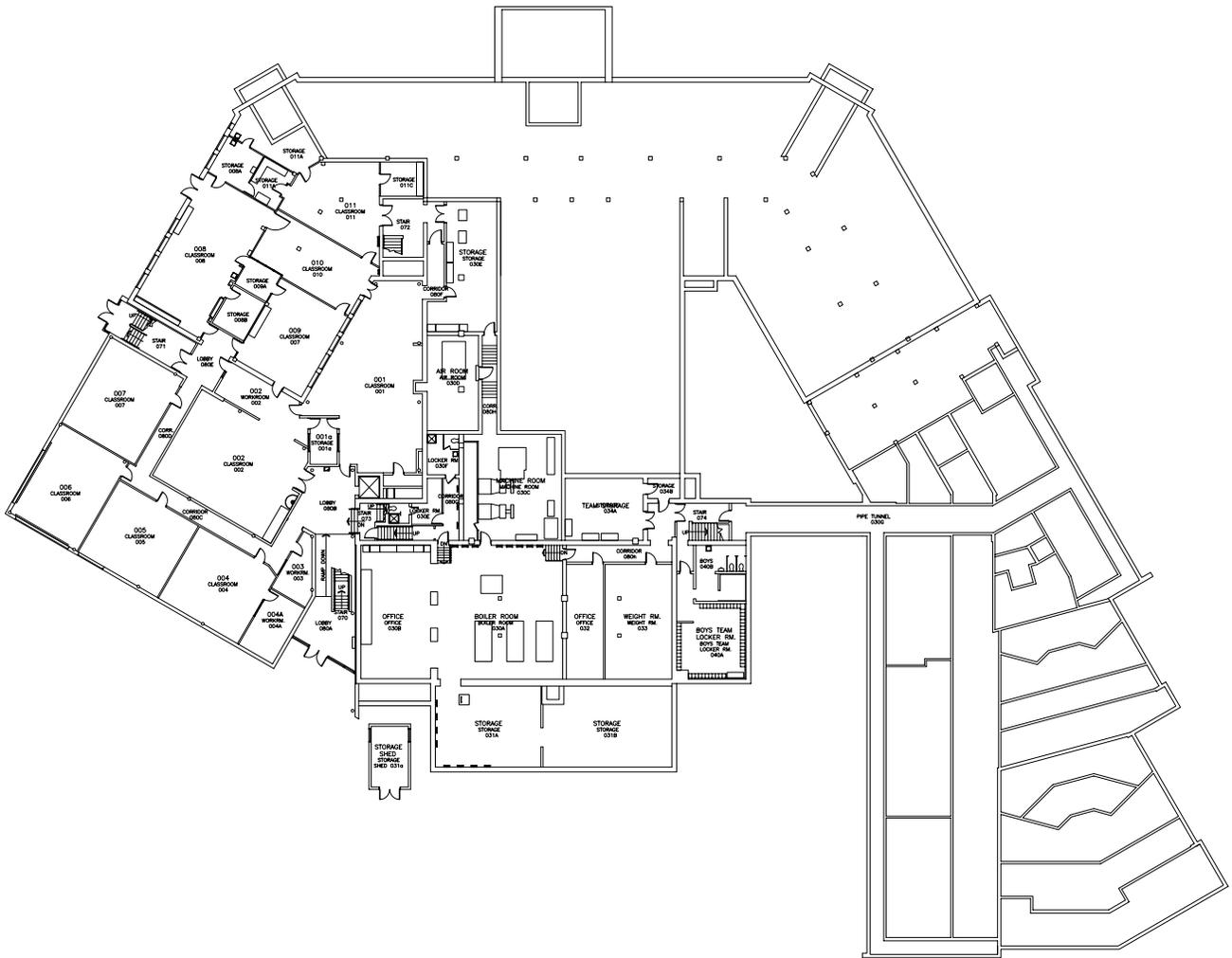
## History

- Roxboro Middle School is a 113,664 gross square foot grade 6-8 school located at 2400 Roxboro Road in Cleveland Heights, Ohio. The original building was designed by John H. Graham & Co. Architects. Drawings are dated 1925. Major additions, renovations and repairs to the school are listed below.

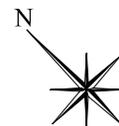
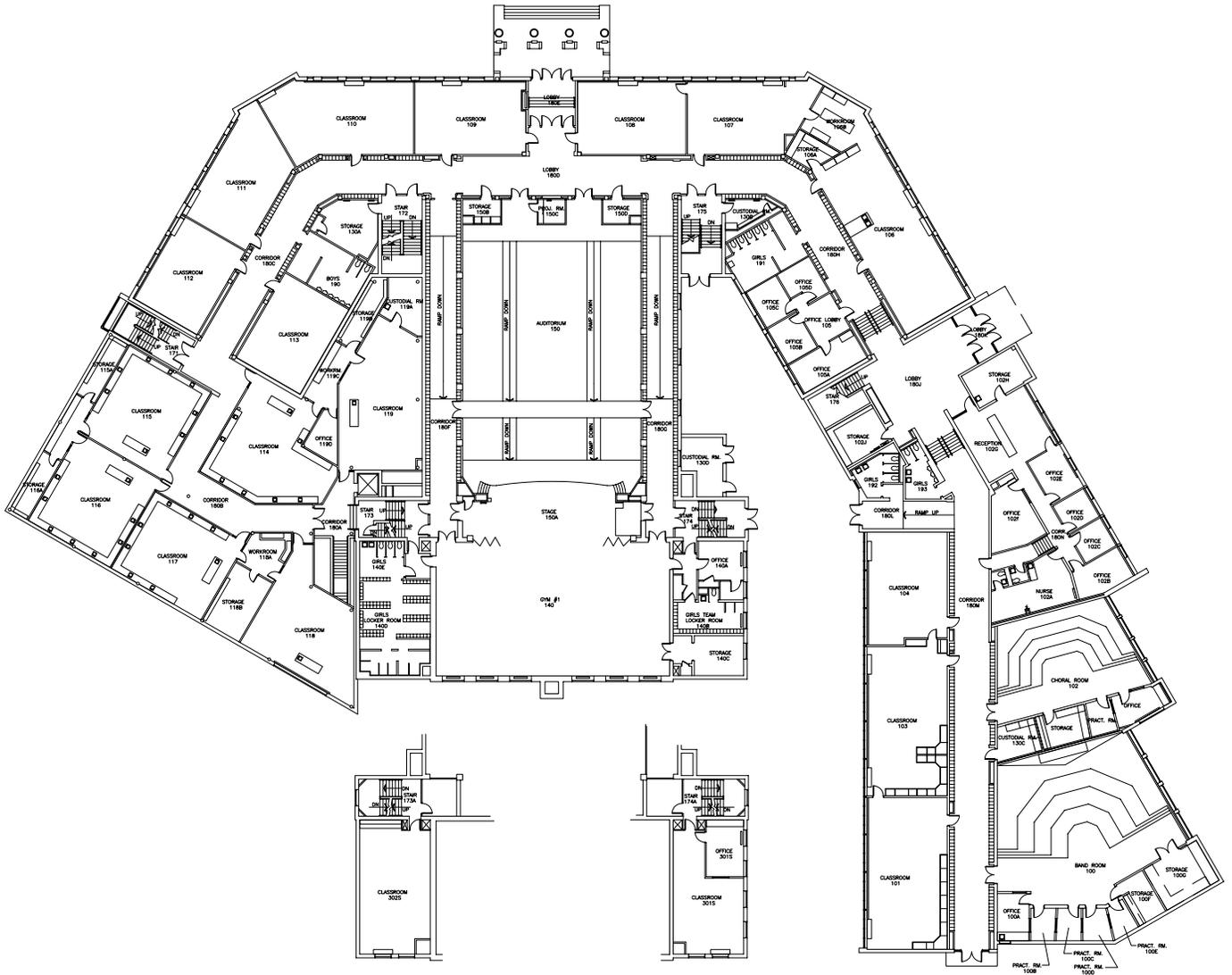
Date	Architect/Engineer	Description
1956	Spahn and Barnes Architects	Classroom and office addition
1958	Charles L. Knight Landscape Architect	Site development
1973	Richard Fleischman Architects	Classroom and media center addition
1980	John E. Litten Associates	New athletic facility
1980	Barber & Hoffman	Roof, gutter and wall repairs
1983	D.T. Levigne Associates	Roof repairs
1996	Collins Rimer Gordon	Fire alarm upgrade
2001	Technical Assurance	Roof renovation
2005	Capitol Aluminum & Glass	Window replacement
2005	Technical Assurance	Building envelope restoration
2006	Technical Assurance	Gymnasium roof replacement

Note: Additions, renovations and repairs listed above are from CHUH original drawings. Some minor renovations and repairs may not have been listed.





LOWER LEVEL PLAN



FIRST FLOOR PLAN



## **A: Hazardous Material**

CHUH has provided a copy of the Asbestos Containing Material (ACM) report dated July 3, 1998. The following types of ACM were identified at Roxboro Middle School:

- Thermal Systems
- Surfacing
- Miscellaneous

An updated ACM report will be conducted by a CHUH Hazmat Consultant in the Fall of 2007. The updated ACM report will locate, quantify and assign costs for removal/abatement of ACM throughout the school.

During interior building evaluations, some existing materials were identified as likely containing asbestos. These materials have been identified, and costs have been assigned for removal/replacement in Section E: Building Interior of both the Narrative and the Cost Assessment.

**B:Building Site**



Main Entry



Damaged Asphalt Drive



Chain Link Gate



Track Bleachers



Damaged Chain Link Mesh



Baseball Backstop



Damaged Concrete Walk



Deteriorated Chain Link Fence



Main Entry Paving



Tennis Court Damage



Tennis Court Damage



Running Track

## **B: Site**

### ADA

- There are 3 handicapped parking spaces at Roxboro Middle School, which is not adequate for the 72 spaces provided.
- No curb cut is needed. Pedestrians must cross traffic to reach the accessible entrance
- Building mounted signage adequately directs people to the accessible entrance.
- The accessible entrance door is 36" wide. There is no power operator.

### Site Furnishings

- The two small bleachers at the baseball field should be replaced.
- The main backstop should be painted, and the mesh replaced. The secondary backstop should be replaced.
- Site fencing is extensive, and mostly in good condition. Some areas show rusted and/or deformed mesh, and certain areas need total replacement.
- The small benches at the tennis courts should be replaced.

### Site Pavement

- The parking lot should be resurfaced and restriped.
- Most of the concrete drive areas require replacement. Some are extensively cracked and broken, others are heavily stained with rust and oil.
- Large areas of concrete pedestrian pavement require replacement due to cracking.
- The tennis courts need replacement or extensive repair. The markings are faded, and the asphalt has wide cracks through its thickness. Net supports and fencing are rusted and nonfunctional. Three have not been resurfaced since their installation in the 1960s. Two have been repaired and resurfaced poorly, the work doing little to remedy the problems.

### Landscaping

- The large planting bed facing St. James parkway is weedy and should be replanted. Miscellaneous small beds around the perimeter should be replanted as well.

## **C: Building Structure**

### Foundation

- The building foundation at the 1925 original building and the 1956 and 1973 additions consists of concrete spread footings at concrete and masonry foundation walls.

### Walls/Chimneys

- Exterior masonry walls are bearing walls at the 1925 original building. There is a masonry chimney at the boiler room of the 1925 original building.

### Floors/Roofs

- The lower level/basement of the 1925 original building and the 1973 addition is slab-on-grade.
- The first floor structure over lower level/basement areas consists of joist slabs supported by concrete encased steel beams and masonry bearing walls at the 1925 original building. The 1956 building first floor is typically slab-on-grade. The 1973 addition first floor structure over lower level/basement areas consists of steel joists supported by steel framing.
- The second floor structure consists of joist slabs supported by concrete encased steel beams and masonry bearing walls at the 1925 original building. The 1956 building second floor structure (fan room) consists of a concrete slab on metal deck, supported by steel joists and masonry bearing walls. The second floor of the 1973 addition consists of steel joists supported by steel framing.
- The attic of the 1925 original building consists of joist slabs supported by concrete encased steel beams and masonry bearing walls. The flat roof of the 1956 building consists of a perlite deck, supported by steel joists and masonry bearing walls. The flat roof of the 1973 addition consists of steel joists supported by steel framing.
- Sloped roof framing at the 1925 original building consists of wood rafters. The sloped roof of the original building auditorium is spanned by steel trusses.

**D:Building Envelope**





## **D: Building Envelope**

### ADA

- Power assisted doors need to be provided at a selected main building entry.

### Masonry

- Exterior masonry typically consists of brick veneer, limestone belt courses, stone door surrounds, stone columns and arches at main entry and decorative stone panels at the original 1925 building. A building envelope restoration was accomplished in 2005. Only minor tuckpointing of brick and stone is required. Part of a retaining wall adjacent to the northwest building elevation needs to be rebuilt.

### Exterior Doors/Frames

- Exterior doors are generally in fair condition but should be for replacement within the next 5-6 years with FRP doors and aluminum frames.
- A few exterior doors have been recently replaced with FRP (fiberglass reinforced polyester) doors, aluminum frames and new hardware.

### Windows

- Windows were replaced in 2004. Hardware should be added to the operable sash portions of the new windows to limit degree of opening.

### Roofing

- A roofing replacement and monitoring program replaced / renovated most of the roofing by 2001. Slate roofing was replaced with asphalt shingle roofs in 1995/1996. Gravel surfaced built-up roofing at the 1973 addition was replaced in 1995. Roofing at the 1956 Classroom /Office addition was replaced in 2001. The Gymnasium roof was replaced in 2006. All roofs are in good to very good condition. Three of the early & mid 90's roof installations are recommended for repair / recoating in the next six years (see cost assessment).

**E:Building Interior**



Main Office



Lay-In Ceiling Damage



Band Room



Cafeteria



Plaster Damage



Base & Wall Cabinet



Lay-In Ceiling



Entry to Auditorium from Corridor



Science Countertop



Locker Damage



Auditorium Seating



Water Damage at Auditorium Ceiling



Gaps at Locker Base



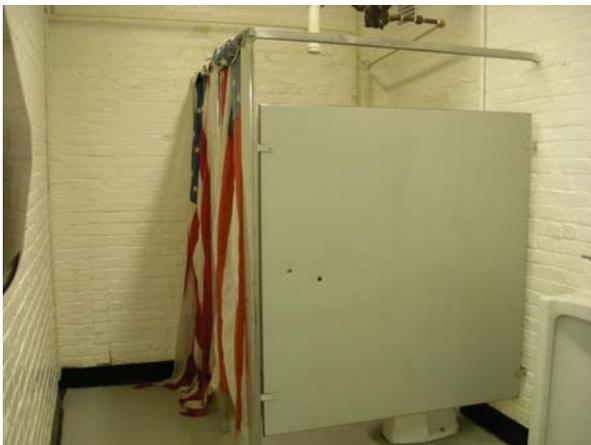
Chipped Paint at Metal Stair Risers



VCT Damage/Stain



VCT Damage



Missing Toilet Partition Doors



Worn and Missing Carpet

## **E: Building Interior**

### ADA

- Note: The Americans with Disabilities Act (ADA) Title II requires that public school systems comply with the ADA in all of their services, programs, or activities, including those that are open to parents or to the public. During the Building Assessment, a limited visual observation for ADA compliance was conducted. A copy of the ADA compliance checklist is attached to the assessment for reference. It is understood that this review does not constitute a comprehensive survey of all required ADA compliance items.
- Interior signage is not mounted at ADA height, and does not have braille or raised text.
- There is an elevator at Roxboro Middle School which connects the lower level, first and second floors within the building, but this elevator did not appear to meet ADA requirements. Ramps provide access to various levels of the first floor. Chair lifts also provide access between different first floor levels of the 1925 original building and the 1956 addition. However, some areas of Roxboro Middle School are still inaccessible, including the upper gymnasium and adjacent locker rooms, and some classrooms directly off of main stairwells.
- A retrofit handicapped accessible toilet stall was observed at the boys group toilet room in the 1956 addition.
- Group sinks are inaccessible semi-circular wash fountains. These sinks are typically in fair-to-poor condition.
- Some drinking fountains within the school appeared to meet ADA requirements.
- Many of the original wood doors within Roxboro Middle School have knob type hardware. This type of hardware is not ADA compliant.

### Egress/Life Safety

- Note: Interior egress/life safety items need only to be compliant with the building code in force when these items were originally constructed or renovated. As such, some items may not be in compliance with current egress/life safety components of the OBC. This assessment does not attempt to identify all work required to achieve said compliance.
- There are six enclosed stairwells at Roxboro Middle School. Four of these stairs serve the lower level through second floors, and two of the stairs connect the first floor and second floor only. An open stair in the 1973 addition connects the first and second floors. Most stair doors have panic hardware, though some of this hardware should be replaced due to age or condition.

### Floor

- Carpet is generally in poor condition. Typical carpet problems include staining, excessive/noticeable wear patterns, and open seams. Most areas of carpet should be replaced.
- VCT is typically in fair-to-poor condition. Cracked/damaged, worn and stained VCT is common and should be replaced. Note that VAT was observed at one first floor classroom as a substrate to VCT, where the VCT was missing. It is unknown how many other rooms within the school have VAT as a substrate to either VCT or carpet.
- Ceramic tile floors are typical at group toilet rooms. Tile floors are generally in fair condition, with grout discoloration common. Spot replacement of missing or damaged tile

should occur.

- Terrazzo flooring occurs in some stairwells, and is generally in good-to-fair condition. There is some minor cracking and discoloration, but the terrazzo appears solid. Chipped and/or cracked terrazzo treads should be repaired or replaced.
- Epoxy paint is common at concrete floors, including locker rooms, boiler room areas and miscellaneous storage rooms. Most of this epoxy paint is in fair condition, requiring repainting only.
- Unfinished concrete floors occur in some service rooms (janitor closets, fan rooms, etc.). These floors are usually in fair-to-good condition, with minor cracking common but floors generally sound.
- Wood flooring occurs at the gymnasiums and at the stage. The wood floor of the first floor gymnasium is in good condition. The stage is also in good condition, but has two small sections of wood floor which should be replaced. The second floor gymnasium wood floor is in fair condition, and requires refinishing and restriping. There did not appear to be any allowance for expansion at the perimeter of either gymnasium floor, but no expansion problems were observed.

#### Base

- Wood base is typical at the original 1925 building. This base is in fair condition, requiring repainting and possible minor repair.
- Vinyl base is generally in good-to-fair condition throughout the school. Vinyl base should be replaced if flooring (carpet or VCT) is scheduled for replacement, or should be replaced independent of flooring if base is missing, very worn or otherwise damaged.
- Ceramic tile base occurs at group toilet rooms. In most cases, tile base grout was discolored. Cracked ceramic tile base observed during the assessment should be replaced.

#### Walls

- Some existing partition walls in the school are in poor condition and should be replaced. These walls are typically not original construction, and were built using unsuitable materials, in an unacceptable manner, or both.
- Plaster walls vary in condition depending on location, but are generally in good-to-fair condition. Many plaster walls have some cracking, possible minor water damage, and possible minor peeling paint. Plaster walls in poor condition usually exhibit more severe water damage, with substantial peeling paint and cracking.
- Where exposed at the interior, most concrete block or brick walls are in good condition. Some hairline/settlement cracks were observed, most notably at the second floor of the original 1925 building. Masonry walls are in worse shape in the lower level boiler room and adjacent spaces, and will require more extensive scraping and prep work prior to painting.
- Gypsum board walls occur primarily in the 1973 addition and renovated areas. These walls are generally in good-to-fair condition, with some areas of minor cracking.
- Ceramic tile occurs at group toilet rooms. Though some grout was discolored or marked on, the tile itself was generally in fair-to-good condition. Spot replacement of tile should occur where cracked.
- Structural glazed tile occurs in the corridor and toilet rooms in the 1956 addition, and at locker rooms/showers in the 1925 original building. The glazed tile is generally in good

condition, with spot replacement of cracked/broken tile required.

- Marble interior cladding/partitions occurs at the girls team locker rooms. Much of this tile is cracked and should be removed and replaced, possibly with a more durable solid surfacing material.
- Some walls have been acoustically treated, either with a 12x12 tile (auditorium and band room) or acoustic paneling (band room only). This acoustical treatment is damaged and should be replaced in both areas.

#### Ceilings

- Acoustical tile ceilings occur throughout the building. Most areas are in fair condition, but some areas require complete ceiling replacement. Spot tile replacement should occur where damage exists, and grid should be repaired or replaced where noted.
- Plaster ceilings generally occur in spaces such as janitor closets, stairwells, and toilet rooms. Plaster ceilings in most spaces are in fair-to-good condition. The plaster ceiling in the auditorium has some areas of water damage which should be corrected.
- Gypsum board ceilings occur in some group toilet rooms, and are in good condition.
- Exposed structural ceilings occur at many service spaces, including the lower level boiler room and adjacent areas. There is also an exposed concrete ceiling at the first floor gymnasium which is in good condition.

#### Interior Doors

- Wood doors are generally in the original 1925 building, and in fair condition. Most of these doors have been painted many times, and may have some chips/dings, but appear to function well. However, many high use doors (at stairwells, some classrooms, etc.) were observed in poor condition and should be replaced.
- Hollow metal doors typical at the 1956 and 1973 additions at this school. Where observed, such doors are typically in fair-to-good condition.
- Wood door frames are original, and in fair condition. Most of these frames have been painted many times, and may have some chips/dings, but appear to function well. Repair or replacement is required at selected damaged wood frames.
- Hollow metal door frames are typically in good-to-fair condition – some denting, scratching of paint, but functional.
- Panic hardware at some stair doors is in poor condition, and should be replaced.

#### Visual Display Boards

- Visual display boards in the school consist primarily of tackboards and chalkboards. Selected rooms also have markerboards. Even though they are old, visual display boards in most cases are still functional and show little serious deterioration.

#### Toilet Partitions

- Plastic partitions occur at some group toilet rooms. Plastic partitions are generally in good condition.
- Original metal toilet partitions are in fair-to-poor condition and should be replaced.
- Marble partitions occur at the girls team locker room. These partitions are cracked/damaged, and should be replaced.

#### Toilet Fixtures

- Toilet fixtures are in fair condition typically.

#### Toilet Accessories

- Toilet accessories are in fair-to-good condition typically.

#### Casework

- The condition of fixed casework varies by location and use. Casework is generally in fair-to-poor condition. Many cabinets are extremely worn, broken and/or vandalized and should be replaced.

#### Window treatments

- Window treatments consist of horizontal mini blinds occurring at selected locations throughout the school. The blinds are in good condition.
- Protective window covers do not occur at the gymnasiums. Window covers should be installed at these locations.

#### Stairs

- Stairs at the original 1925 building and 1956 addition are typically steel construction, with painted stringers, risers, brackets, pickets and newel posts. Steel is typically in good condition, with painting required. Some minor corrosion was observed, which does not appear to affect the structure of the stair. This corrosion should be cleaned and primed prior to painting. These stairs have terrazzo stair treads, which are generally in good condition. Some terrazzo tread and nosing patching is required. Wood handrails and guardrails are in good condition.
- Stairs at the 1973 addition are steel pan construction with abrasive nosings and VCT finish at treads and landings. This VCT is in poor condition and should be replaced.

#### Other

- Corridor lockers are generally in good condition, with some repairs required. Lockers should be painted. Lockers in the following areas are in poor condition and should be replaced: lower level boys team locker room; first floor girls locker room and girls team locker room; second floor boys locker room and kitchen staff lockers.
- The operable partition between the first floor gymnasium and stage appears to be approaching the end of its useful life, and should be replaced.

## **F:Equipment and Furnishings**



Science Tables with New Tops



Science Base Cabinet



Base Cabinet "Island"



Teacher Desk



Typical Student Desks



Weight Room Floor



Kitchen Equipment



Kitchen Equipment



Kitchen Equipment



Vocal Music Room



First Floor Gymnasium



Basketball Backboard

## **F: Equipment and Furnishings**

### Student Furniture

- Most of the student desks are in fair condition. There is some chipping of tops and sides of the desks.

### Teacher Furniture

- Most teacher desks are in fair-to-poor condition. Though serviceable, they seem to be nearing the end of their useful life. Other teacher desks are in fair condition.

### Other Furniture

- Generally, most of the remaining furniture is in fair condition.

### Gymnasium/Auditorium/Stage Equipment and Furnishings

- The back stage curtain is stained, and should be cleaned. Other stage curtains are in fair-to-good condition.
- Auditorium seating is generally in fair condition. Many seats are damaged and require repair or replacement.
- Basketball backboards are in good condition at both gymnasiums.

### Kitchen Equipment

- Kitchen equipment at Roxboro Middle School is in fair-to-poor condition. Most kitchen equipment should be replaced within the next six years. Generally speaking, kitchen equipment replacement includes but is not limited to: walk in coolers/freezers; fryers; mixers; convection and conventional ovens; ranges; hot and cold serving units and cabinets; ice makers; refrigerators; disposers; dishwashers. Where observed, most stainless steel counters, storage units, work tables and multiple tub sinks were found to be in good condition.

## **G: Fire Protection**

A portion of the 1973 addition is sprinkled. As the water service is only 4", a dedicated fire line with a double detection check valve assembly in an outdoor pit may be required to fully sprinkle the building. Cost estimates include this work to sprinkle the building.

## **H: Plumbing**

The plumbing fixtures appear to be original and in fair-to-poor condition. Many hose bibb connections do not have vacuum breakers. Most potable water pipe is copper and sanitary sewer pipe is cast iron hub and spigot with lead joints.

The storm sewer pipe is cast iron hub and spigot pipe with lead joints. The condition of this pipe and roof drains is unknown. Repair/replacement of this pipe was not included in the estimate.

The domestic hot water heater and storage tank were replaced in 2004. The system includes two 750 MBH boilers, four 119 gallon storage tanks, and a recirculating pump. Water is stored and delivered at 140 deg. F. This is an appropriate storage temperature to prevent the growth of Legionella, but the Ohio Plumbing Code requires tempered water (110 deg. F.) be delivered to sinks, showers, and lavatories.

### **Recommendations**

- Add a mixing valve to the domestic hot water piping to mix "tempered" water and segregate the 1-1/2" hot water piping that extends to the kitchen to remain as 140 deg. F.
- Replace hose bibs with hose bibs with integral vacuum breakers.

# **I: Heating, Ventilation and Air Conditioning**



Rooftop Unit



Boilers



New Radiator



Obsolete Radiator in Gymnasium



Custodian's AC draws air from Boiler Room



Typical Unit Ventilator

## **I: Heating, Ventilating and Air Conditioning**

The building is heated by three steam boilers, which were installed in 1973. The boilers do not utilize a water softener, and, according to the maintenance staff, the chemical treatment is typically out of desired range. All boiler water blowdown is done manually. Boiler #1 has a damaged shell.

The 1925 original building is heated and ventilated by steam unit ventilators and steam finned tube radiators. Three exhaust fans serve the restrooms. Two exhaust fans provide relief for the unit ventilators. The outside air ventilation rates designed into the unit ventilators fall short of current code requirements. The exhaust ventilation for restrooms is also short of code requirements.

Each gymnasium was originally ventilated by a 100% outside air supply fan with steam coil located in the fan room and exhausted by an exhaust fan located in the attic. Steam radiators provide heat in each of the gymnasiums. In 1973, an air handling unit with steam coil was installed in each of the gymnasiums. The original supply and exhaust fans were not intended to be abandoned, though their intended use is unclear. The original supply and exhaust fans and the 1973 air handling unit are not utilized, so the only means of conditioning is the steam radiators and there is no ventilation.

The auditorium is heated and cooled by an air handling unit with steam coil and DX cooling coil located in the fan room with an associated condensing unit on the roof. The unit was installed in 1973 and appears to be in good condition.

The 1956 addition classrooms are heated and ventilated by steam unit ventilators and steam finned tube radiators. One exhaust fan serves the restrooms and one exhaust fans provide relief for the unit ventilators. The outside air ventilation rates designed into the unit ventilators fall short of current code requirements. The exhaust ventilation for restrooms is also short of code requirements. The music rooms are ventilated by an air handling unit with steam coil. A VVT rooftop cooling unit was installed in 2004 for the main office. Each zone has an electric reheat coil.

The 1973 addition is served by three multizone air handling units, two located on the roof serving the Media Center and the First Floor, and one in the Air Room serving the Basement with a condensing unit on the roof. The unit in the Basement has four zones and was originally designed for "Shop" and "Flex" space. At some point, the space was renovated into eight classrooms/offices, but the multizone unit was unchanged.

### **Building Automation System**

The building has a "Traditional Building" Building Automation System (BAS). Because the extent of the automated components of the building are not known, the cost estimates do not include any proposed modifications to these controls. It was noted that the air compressor cycled about every 3-4 minutes, which could be the result of leaky compressed air lines.

### **Recommendations**

- Replace the Basement multizone unit with a unit designed for classrooms and utilizing more zones for better temperature control.

- Replace all unit ventilators. The unit ventilators are over 30 years old and should be replaced.
- Add dual water softeners to the boiler's make-up water system. This will help prolong the life of the boilers.
- Replace exhaust fans and increase ventilation to comply with current code requirements.
- Add fire dampers in ductwork that penetrates corridor walls and other fire rated assemblies. Note, this requirement would diminish if the building were fully sprinkled.
- Add a vacuum breaker to the main steam header.
- Repair damaged boiler shell.
- Relocate the steam boilers make-up water backflow preventer to a more accessible elevation (it is currently about 18 feet above the floor).
- Investigate controls for gymnasium ventilation fans as they were not running during regular school hours. Recommission the air handling units and/or the supply/exhaust fans to provide required ventilation.

	Building Access	Yes	No	N/A	
1.	Is there an adequate number of wheelchair accessible parking spaces?		✓		
2.	Is there one wheelchair accessible van parking space for every 8 standard accessible spaces?	✓			Not Marked
3.	Are accessible parking spaces located on the shortest accessible route of travel from an accessible building entrance?	✓			
4.	Does signage exist directing users to a wheelchair accessible parking and an accessible building entrance?		✓		
5.	Is there a ramp from the parking to an accessible building entrance?		✓		
6.	If the main entrance is inaccessible, are there alternate accessible entrances?	✓			
7.	Is the accessible entrance doorway at least 32" wide?	✓			
8.	Is the door handle easy to open? (Lever/push type knob, no twisting required, no higher than 48" above floor)	✓			
	Building Corridors and Elevators	Yes	No	N/A	
1.	Is the path of travel free of obstructions and wide enough for a wheelchair (at least 60" wide)?	✓			
2.	Are floor surfaces firm, stable and slip resistant?	✓			
3.	Do obstacles (phones, fountains, etc.) protrude no more than 4" into walkways or corridor?		✓		
4.	Are elevator controls low enough to be reached from a wheelchair (48" front approach/54" side approach)?			✓	
5.	Are there raised elevator markings in Braille and Standard alphabet for the blind?			✓	
6.	Are there audible signals inside cars indicating floor changes?			✓	

7.	Do elevator lobbies have visual and audible indicators of the cars arrival?			✓	
8.	Does the elevator interior provide sufficient wheelchair turning area?			✓	
9.	Is at least one wheelchair accessible public phone available?	✓			
10.	Are wheelchair accessible facilities (restrooms, exits, etc.) identified with signage?		✓		
	<b>Restrooms</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	
1.	Are common area public restrooms located on an accessible route?	✓			
2.	Are pull handles push/pull or lever type?			✓	
3.	Are access doors wheelchair accessible (at least 32" wide)?	✓			
4.	Are public restrooms large enough for wheelchair turnaround (60" diameter)?	✓			
5.	Are stall doors wheelchair accessible (at least 32" wide)?	✓			
6.	Are grab bars provided in toilet stalls (33"-36" above floor)?	✓			
7.	Do sinks provide clearance for a wheelchair to roll under (29" clearance)?	✓			
8.	Are sink handles operable with one hand without grasping, pinching or twisting?	✓			
9.	Are exposed pipes under sink sufficiently insulated against contact?	✓			
10.	Are soap dispensers, towel, etc. reachable (48" from floor for frontal approach, 54" for side approach)?	✓			
11.	Is the base of the mirror no more than 40" off floor?	✓			

## Cost Summary of Roxboro Middle School

1. The Cost summary is an estimate of Construction Cost
2. Add soft costs of 18-20% for Project Cost.
3. Add an escalation/inflation factor of 3.5-4% for every year after 2007.

Priority 1: next 0-2 years	\$1,012,278
Priority 2: next 3-4 years	\$2,043,535
Priority 3: next 5-6 years	\$553,156
<b><u>Total Priority 1-3 next 6 years</u></b>	<b>\$3,608,969</b>

<p>Note: Some electrical Categories within the Cost Assessment contain <u>Priority 4</u> items, with action required in the next 7-10 years. These items are not identified in the total cost for <u>Priority 1-3</u> noted above. Please review the attached Cost Assessment for Categories which contain <u>Priority 4</u> items.</p>	
Priority 4: next 7-10 years	No items

**A: Hazardous Materials**

Total Priority 1-3: next 6 years

**To be determined**

An updated ACM report will be conducted by a CHUH Hazmat Consultant in the Fall of 2007. The updated ACM report is to locate, quantify and assign costs for removal/abatement of ACM throughout the school.

**B: Site**

Total Priority 1-3: next 6 years  
**\$283,348**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
ADA - Parking lot signage	lump	3	\$ 200.00	\$ 600.00	
<b>Subtotal Priority 1:</b>				<b>\$600</b>	

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Asphalt resurfacing	sf	29906	\$ 1.25	\$ 37,382.50	
Asphalt restriping	lump	1	\$ 4,500.00	\$ 4,500.00	
Concrete walk replacement	sf	10225	\$ 5.00	\$ 51,125.00	
Concrete drive replacement	sf	2635	\$ 8.00	\$ 21,080.00	
Replace tennis court - very poor condition	each	3	\$ 24,000.00	\$ 72,000.00	Not maintained. Faded, cracked through, posts rusted.
Replace bleachers	per seat	60	\$ 90.00	\$ 5,400.00	
Chain link fence replacement	lf	2070	\$ 5.00	\$ 10,350.00	
Chain link fence mesh replacement	sf	3520	\$ 3.00	\$ 10,560.00	
Chain link fence gate replacement	ea	1	\$ 250.00	\$ 250.00	
Replace chain link baseball backstop	ea	1	\$ 5,000.00	\$ 5,000.00	
<b>Subtotal Priority 2:</b>				<b>\$217,648</b>	

**Priority 3: next 5-6 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Replace bench	ea	2	\$ 800.00	\$ 1,600.00	
Replace tennis court - poor condition	each	2	\$ 24,000.00	\$ 48,000.00	Similar condition to other courts, with temporary, inadequate repairs.
Replace bike rack	ea	16	\$ 500.00	\$ 8,000.00	
Replant bed	lump	3	\$ 2,500.00	\$ 7,500.00	
Subtotal Priority 3:				\$65,100	

**C: Building Structure**

Total Priority 1-3: next 6 years  
**\$0**

There are no costs projected within the next 6 years for this category at Roxboro Middle School

**D: Building Envelope**

Total Priority 1-3: next 6 years  
**\$180,940**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
<b>ADA</b>					
Install power doors	each	2	\$7,500.00	\$15,000.00	Provide exterior door & vestibule door with assisted operation
<b>Wall Openings</b>					
New windows - add hardware to limit opening	lump	1	\$ 15,000.00	\$ 15,000.00	Add to all operable sections
<b>Roofing</b>					
Gutters / Downspouts	l.f.	20	\$20.00	\$ 400.00	Replace missing copper downspout (east elevation)
Install Scuppers, related masonry & flashing	lump	1	\$7,000.00	\$ 7,000.00	Install scuppers or overflow drains at Roof area "E", 2006 E.P.D.M. roof replacement
<b>Subtotal Priority 1:</b>				<b>\$37,400</b>	

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
<b>Masonry</b>					
Repair /rebuild retaining wall & foundation	lump	1	\$ 6,000.00	\$ 6,000.00	36 inch high retaining wall - at northwest elevation - first 15 l.f +/- from building out - rotating out of plumb.
Minor masonry repair & tuckpointing	lump	1	\$2,500.00	\$ 2,500.00	At northwest elevation of 1956 addition
<b>Wall Openings</b>					

Replace exterior wall louvers	lump	1	\$ 1,500.00	\$ 1,500.00	Misc. small louvers
Replace hollow metal window walls	s.f.	400	\$45.00	\$ 18,000.00	Replace with thermally broken, insulated glass storefront system
Replace doors and hardware	each	17	\$ 1,500.00	\$ 25,500.00	
<b>Subtotal Priority 2:</b>				<b>\$ 53,500</b>	

**Priority 3: next 5-6 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
<b>Masonry</b>					
<b>Wall Openings</b>					
Replace doors and hardware	each	3	\$ 1,500.00	\$ 4,500.00	
<b>Roofing</b>					
Recondition, recoat, repair BU roofing	s.f	9,500	\$5.00	\$ 47,500.00	Graveled BUR roof areas (Tremco roof area designations "F & G") - Roof areas appear in good condition. Warranty expired in 2005.
Recoat, repair BU roofing	s.f	7,608	\$5.00	\$ 38,040.00	Asphalt smooth surfaced roof ( Tremco roof area designation "H") - Recently recoated (aluminized coating)-Roof appears in good condition. A 10 year Warranty expired in 1995.
<b>Subtotal Priority 3:</b>				<b>\$90,040</b>	

**E: Building Interior**

Total Priority 1-3: next 6 years  
**\$1,205,231**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
ADA- Provide accessible toilet stall	ea	9	\$ 1,200.00	\$ 10,800.00	Reconfigure existing group toilet room to provide accessible stall
ADA - Provide accessible toilet room	ea	10	\$ 17,000.00	\$ 170,000.00	Reconfigure/expand existing small toilet room to provide accessibility; includes sink and toilet
ADA - Provide accessible restroom sink	ea	9	\$ 750.00	\$ 6,750.00	Where accessible stalls are provided in existing group toilet rooms
ADA - Provide accessible drinking fountains	ea	3	\$ 2,500.00	\$ 7,500.00	Quantity as required per ADA
ADA - Replace interior signage	bldg sf	113664	\$ 0.11	\$ 12,503.04	Typical throughout building
ADA - Replace inaccessible door hardware	bldg sf	102	\$ 450.00	\$ 45,900.00	Typical where knobs exist at required accessible spaces
ADA - Update elevator	ea	1	\$ 8,000.00	\$ 8,000.00	Update existing elevator to ADA standards
ADA - Provide chair lift	ea	2	\$ 18,000.00	\$ 36,000.00	Access to upper gymnasium and classrooms off stairs
Correct/level concrete floor - poor condition (4)	sf	60	\$ 10.00	\$ 600.00	Miscellaneous areas where walls or other items removed
Replace VCT	sf	19377	\$ 2.50	\$ 48,442.50	Includes replacement of adjacent base
Remove/abate VAT	sf	6060	\$ 3.50	\$ 21,210.00	
Replace wood floor	sf	50	\$ 15.00	\$ 750.00	Small area at stage

Repair/patch plaster wall - poor condition (4)	room sf	2520	\$ 7.50	\$ 18,900.00	
Spot replace/patch masonry wall	sf	28	\$ 10.00	\$ 280.00	
Replace partition wall	sf	1490	\$ 5.50	\$ 8,195.00	New metal stud partition with gypsum board each side
Repair and repaint plaster ceiling - poor condition (4)	sf	385	\$ 12.50	\$ 4,812.50	
Replace 12x12 acoustical ceiling	sf	9950	\$ 3.25	\$ 32,337.50	
Replace ACT lay in ceiling	sf	13895	\$ 2.75	\$ 38,211.25	
Spot replace ACT tile only	sf	1484	\$ 1.50	\$ 2,226.00	
Spot repair ACT grid only	sf	100	\$ 1.50	\$ 150.00	
Replace door hardware - poor condition (4)	ea	10	\$ 450.00	\$ 4,500.00	
Replace base cabinet w/ countertop	lf	244	\$ 350.00	\$ 85,400.00	
Replace wall cabinet	lf	47	\$ 200.00	\$ 9,400.00	
Replace tall cabinet	lf	208	\$ 450.00	\$ 93,600.00	
Replace low bookshelf	lf	21	\$ 300.00	\$ 6,300.00	
Science: Replace base cabinet with countertop	lf	122	\$ 400.00	\$ 48,800.00	
Replace toilet partition	stall	16	\$ 1,000.00	\$ 16,000.00	Typically deteriorated metal partitions
Replace/provide protective window covers	ea	12	\$ 1,000.00	\$ 12,000.00	At first floor gymnasium and second floor gymnasium
Replace rubber stair treads	lf	30	\$ 15.00	\$ 450.00	
Install/replace handrails	lf	16	\$ 35.00	\$ 560.00	

Replace metal locker	ea	274	\$ 150.00	\$ 41,100.00	
Replace locker trim	lump	1	\$ 300.00	\$ 300.00	
Replace auditorium seat	ea	70	\$ 295.00	\$ 20,650.00	
<b>Subtotal Priority 1:</b>				<b>\$812,628</b>	

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Repair and repaint or reseal concrete floor	sf	9390	\$ 1.50	\$ 14,085.00	Includes minor patching of floor cracks, etc.
Replace carpet	sy	3780	\$ 27.00	\$ 102,060.00	Includes replacement of adjacent base
Spot repair terrazzo floor/ tread	sf	35	\$ 16.00	\$ 560.00	
Refinish wood floor	sf	2750	\$ 3.00	\$ 8,250.00	Includes striping at gymnasium areas
Spot replace ceramic tile floor	sf	14	\$ 10.00	\$ 140.00	
Replace vinyl base	lf	130	\$ 2.50	\$ 325.00	
Repair/patch plaster wall - fair condition (3)	room sf	32640	\$ 2.50	\$ 81,600.00	
Repair and repaint masonry wall - fair condition (3)	room sf	5085	\$ 4.50	\$ 22,882.50	
Spot replace SGFT wall	sf	40	\$ 40.00	\$ 1,600.00	
Spot replace ceramic wall tile	sf	85	\$ 10.00	\$ 850.00	
Replace marble wall tile with solid surfacing	sf	100	\$ 45.00	\$ 4,500.00	
Replace 12x12 acoustic wall tile/ panel	sf	1970	\$ 4.00	\$ 7,880.00	

Repair and repaint plaster ceiling - fair condition (3)	sf	4135	\$ 3.00	\$ 12,405.00	
Replace wood door and hardware	ea	33	\$ 750.00	\$ 24,750.00	
Replace wood door, frame and hardware	ea	17	\$ 865.00	\$ 14,705.00	
Rekey doors to master key system	ea	298	\$ 95.00	\$ 28,310.00	
Replace operable partition	sf	675	\$ 85.00	\$ 57,375.00	Between stage and gymnasium
Repaint metal stair	per floor	7	\$ 750.00	\$ 5,250.00	Includes minor corrosion repair, scrape & paint
Subtotal Priority 2:				\$387,528	

**Priority 3: next 5-6 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Spot replace ceramic tile base	lf	36	\$ 11.00	\$ 396.00	
Replace vinyl wall covering	room sf	90	\$ 2.00	\$ 180.00	
Replace shower stall	ea	3	\$ 1,500.00	\$ 4,500.00	30x30 polypropylene with molded stone floor
Subtotal Priority 3:				\$5,076	

## F: Equipment & Furnishings

Total Priority 1-3: next 6 years

**\$460,160**

### Priority 1: next 0-2 years

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Clean stage curtains	sf	1000	\$ 1.00	\$ 1,000.00	
Kitchen equipment replacement *	lump	1	\$ 75,000.00	\$ 75,000.00	
<b>Subtotal Priority 1:</b>				<b>\$76,000</b>	

### Priority 2: next 3-4 years

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Selective replacement of loose furnishings	bldg sf	113,664	\$ 2.50	\$ 284,160	Includes student, teacher and administrator desks and chairs, classroom storage not listed in Category E, and tables
Kitchen equipment replacement *	lump	1	\$ 50,000.00	\$ 50,000.00	
<b>Subtotal Priority 2:</b>				<b>\$334,160</b>	

### Priority 3: next 5-6 years

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Kitchen equipment replacement *	lump	1	\$ 50,000.00	\$ 50,000.00	
<b>Subtotal Priority 3:</b>				<b>\$50,000</b>	

\* Kitchen equipment replacement includes but is not limited to: walk in coolers/freezers; fryers; mixers; convection and conventional ovens; ranges; hot and cold serving units and cabinets; ice makers; refrigerators; disposers; dishwashers. Most stainless steel counters, storage units, work tables and multiple tub sinks were found to be in good condition.

**G: Fire Protection**

Total Priority 1-3: next 6 years  
**\$418,130**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
No items					

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
No items					

**Priority 3: next 5-6 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Sprinkler System	S.F.	113,380	\$ 3.50	\$ 396,830.00	
Fire Service Line	L.F.	180	\$ 35.00	\$ 6,300.00	
Fire Valve Vault	Lump	1	\$ 15,000.00	\$ 15,000.00	
Subtotal Priority 3:				\$418,130	

**H: Plumbing**

Total Priority 1-3: next 6 years  
**\$20,150**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Add Domestic Hot Water Mixing Valve	Lump	1	\$ 12,000.00	\$ 12,000.00	
Replace hose Bibbs	Each	7	\$ 450.00	\$ 3,150.00	
Add Softener to Boiler Make-up	Lump	1	\$ 5,000.00	\$ 5,000.00	
<b>Subtotal Priority 1:</b>				<b>\$20,150</b>	

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
No items					

**Priority 3: next 5-6 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
No items					

**I: Heating, Ventilating & A/C**

Total Priority 1-3: next 6 years  
**\$373,500**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Install Fire Dampers in Ductwork	Each	75	\$ 500.00	\$ 37,500.00	
<b>Subtotal Priority 1:</b>				<b>\$37,500</b>	

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
Replace basement multizone	Lump	1	\$ 90,000.00	\$ 90,000.00	
Replace unit ventilators	Each	32	\$ 7,000.00	\$ 224,000.00	
Replace Toilet Exhaust	Lump	1	\$ 22,000.00	\$ 22,000.00	
<b>Subtotal Priority 2:</b>				<b>\$336,000</b>	

**Priority 3: next 5-6 years**

<i>Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Unit Cost</i>	<i>Assessed Cost</i>	<i>Comments</i>
<b>No items</b>					

**J: C.E.I. Service**

Total Priority 1-3: next 6 years  
**\$50,500**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Must Inventory CEI Equipment and Assess Existing Conditions and Existing Loads	\$ 500.00	Mission Critical Info.
<b>Subtotal Priority 1:</b>	<b>\$500</b>	

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Consolidate and Upgrade	\$ 50,000.00	Must Package with Item "K"
<b>Subtotal Priority 2:</b>	<b>\$50,000</b>	

**K: Main Power Distribution Equipment**

Total Priority 1-3: next 6 years  
**\$650,000**

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Consolidate and Upgrade	\$ 650,000.00	Obsolete, Potbound, and without SCA Protection. Package with Item "J"
<b>Subtotal Priority 2:</b>	<b>\$650,000</b>	

**L: Emergency Power Distribution Equipment**

Total Priority 1-3: next 6 years  
**\$0**

**Satisfactory**

Standby Emergency Generator and Emergency Power Distribution Panels installed during Summer of 2007, CHUHS Project # 07C-000-004.

**M: Branch Circuit Panels and Wiring**

Total Priority 1-3: next 6 years

**\$34,500**

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Replace 3 Obsolete Boiler Room Panels	\$ 9,000.00	
Replace 6 Obsolete Branch Panels	\$ 25,500.00	
Subtotal Priority 2:	\$34,500	

**N: Kitchen Lighting**

Total Priority 1-3: next 6 years  
**\$27,000**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Replace Existing Light Switches	\$ 1,000.00	Tired and Worn
Subtotal Priority 1:	\$1,000	

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Preplace 2 Obsolete Branch Panels	\$ 6,000.00	Tired and Worn
Subtotal Priority 2:	\$6,000	

**Priority 4: next 7-10 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Replace Existing Fluorescents	\$ 20,000.00	Tired and Worn
Subtotal Priority 2:	\$20,000	

**O: Exterior Lighting**

Total Priority 1-3: next 6 years  
**\$14,850**

**Priority 3: next 5-6 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
3 Additonal Wallpacks	\$ 3,600.00	
2 Wallpack Replacements/Relocations	\$ 3,000.00	
11 Canopy Lighting Retrofits	\$ 8,250.00	
Subtotal Priority 3:	\$14,850	

**P: Interior Lighting**

Total Priority 1-3: next 6 years  
**\$28,300**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Replace all Classroom Light Switches	\$ 8,500.00	Badly Worn
Replace all Twin-Tube Fixtures	\$ 9,000.00	
Replace Broken Fixture Lenses	\$ 9,600.00	CHUHS to Install
Replace 4 Stage Worklights w/Fluorescents	\$ 1,200.00	
<b>Subtotal Priority 1:</b>	<b>\$28,300</b>	

**Q: Gymnasium Lighting**

Total Priority 1-3: next 6 years  
**\$0**

**Satisfactory**

Eight (8) Surface Ceiling Mounted Modular 400W Metal Halide Fixtures in Each (upper and lower) Gym.

**R: Exit Signs and Emergency Egress Lighting**

Total Priority 1-3: next 6 years  
**\$0**

**Satisfactory**

Upgraded in Summer of 2007, CHUHS Project # 07C-000-004.

**S: Fire Alarm System**

Total Priority 1-3: next 6 years  
**\$0**

**Satisfactory**

**T: Security System**

Total Priority 1-3: next 6 years  
**\$9,700**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Three (3) Additional Key Fobs	\$ 4,500.00	
<b>Subtotal Priority 1:</b>	<b>\$4,500</b>	

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
CCTV/Intercom & Electric Door Latch at West Addn. Entry and at East	\$ 5,200.00	

(Auditorium) Entry

Subtotal Priority 2: \$5,200

**U: Public Address System**

Total Priority 1-3: next 6 years  
**\$9,100**

**Priority 1: next 0-2 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Retrofit with Best-Grade UPS Module	\$ 2,000.00	
Upgrade Obsolete Console Components	\$ 2,500.00	
New SW-25 Bank #4	\$ 1,600.00	
Twenty (20) Replacement Speakers	\$ 3,000.00	
Subtotal Priority 1:	\$9,100	

**V: Cable TV System**

Total Priority 1-3: next 6 years  
**\$0**

**Satisfactory**

**W: Data and Telephone Systems**

Total Priority 1-3: next 6 years  
**\$2,500**

**Priority 2: next 3-4 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Replace UPS System Batteries	\$ 2,500.00	Required every 4-5 years
Subtotal Priority 2:	\$2,500	

**X: Clocks and Program Bells**

Total Priority 1-3: next 6 years  
**\$22,000**

**Priority 3: next 5-6 years**

<i>Item</i>	<i>Assessed Cost</i>	<i>Comments</i>
Wireless Clock System	\$ 22,000.00	With P.A. System Interface
Subtotal Priority 1:	\$22,000	