

Facility Review and Assessment
Town of North Andover, MA

Atkinson Elementary School

111 Phillips Brooks Road

North Andover, MA

Date: 12.31.12



DESCRIPTION

The Atkinson School is the 3rd largest elementary school and is located at the intersection of Phillips Brooks Road and Massachusetts Avenue. The facility was constructed in 1964 and consists of a main academic wing, gymnasium, cafetorium and two (2) temporary portable classroom structures. A canopy attaches to the northeast side of the building that serves as a covered walkway the adjacent Early Childhood Center (ECC). The school contains classrooms for K-5. The basement of the gym structure houses the school maintenance and storage areas. Administration areas are located at the East side of the 1st floor level. The facility is located on a relatively flat site with a slight East to West slope. Vehicular access is provided by paved driveways and parking areas located on the West, North and South sides of the facility. Access is provided to the school from Mass. Avenue and Chickering Road (rte. 125). There is a large grassed play area at the east side of the site which includes playground equipment. Athletic fields abut the North side of the site. The building is served by public utilities; water, sewer, electrical, natural gas & communications. The building consists of one & two story reinforced concrete/masonry/steel structures constructed in a general 'L' type configuration. The building systems consist of gas fired steam boilers, ventilation/exhaust, fluorescent lighting, fire alarm, domestic hot/cold water distribution, sanitary waste/vent. There is no fire protection system provided. ADA (American Disabilities Act) compliant access is provided from 'at grade' front entrance and an interior stair lift.

PROFILE

Lot size	-	5 +/- acres
Building size	-	43,500 s.f.
Stories	-	two (2)
% used	-	100 % +
Constructed	-	1964
Parking	-	80 +/-
Structure	-	reinforced concrete/structural steel
Envelope	-	brick masonry
Roof	-	rubber (epdm)
Vert. Transp.	-	stairs (2), ada chair lift – no elevator
Plumbing	-	hot/cold domestic water, sanitary waste/vent
HVAC	-	gas fired steam boilers
Fire protection-		none provided
Electrical	-	208 volt electrical service
Fire alarm	-	fire detection and annunciation system
Security	-	intrusion system
Occupants	-	520

DETAILED SUMMARY & IDENTIFIED NEEDS

SITE

Utilities:

The facility is served by public: water, sewer, natural gas, electrical

Storm Drainage;

provided by catch basins and subsurface piping

drainage swale at South end of site

storm water discharges into public infrastructure

roof drainage is direct eave discharge onto finish grade

Grading:

Site relatively flat with a slight East to West slope

Landscaping:

minor amounts of ornamental landscaping

grassed play area & playground eqt located at the East side

Paving:

paved surfaces in acceptable condition

no sidewalks/curbs

parking provided at the North & West sides of the site

south paved area is used for a play area

Identified Needs:

dredge South drainage swale

drainage system at building perimeter (manage roof discharge)

interceptor drainage at easterly edge of site (dry out play area)

landscaping requires maintenance & upgrading

drainage at portable classroom units

STRUCTURE

Foundation:

Main building:
Poured concrete foundation system

Portable classrooms:
Isolated loose-laid block masonry piers on concrete pads
Wind/seismic "tie-downs" not provided

Walls:

Main structure:
poured concrete columns

Portable classrooms:
Wood framed

Roof:

Main building:
poured concrete roof structure at main academic building
steel framed structures at cafetorium/kitchen/gym

Portable classrooms:
Wood framed

Floor:

Main building:
structural poured concrete 2nd floor level
slab on grade 1st floor level

Portable classrooms:
Wood framed

Stairs:

steel framed/concrete
stairs (2) serve 2nd floor level
ADA (American Disabilities Act) compliant access to 2nd level: motorized stair lift

Canopies:

steel framed/poured concrete structures serve exterior entrances
steel framed covered walkway to ECC

Identified Needs:

- portable classroom - frequent monitoring/inspection of;
 - wood framed structure
 - masonry support piers
 - horizontal movement
 - water/moisture damage
- repair exposed 'spalled' concrete structural components

ENVELOPE

Cladding:

Main building:

Brick/block masonry walls

Punched/curtain-wall style window systems

Portable classrooms:

Painted Wood panel/trim

Roof:

Rubber (epdm) roof system

Windows:

Main building:

New windows system 2012

Portable classroom:

glass/aluminum 'punched opening' sliding window units

Doors:

Aluminum framed/glass main entrance

Hollow metal door & frame units at secondary entrances

Identified Needs:

- Water intrusion mitigation measures;
 - portable classroom 'connector'
 - crawl space
 - Masonry repointing
- Portable classroom structures;
 - repair/replacement/sealing wood clad portable cladding
 - perimeter crawlspace & under-floor enclosure/insulation
 - window & doors
- building air sealing

SYSTEMS

Plumbing:

Main building:

- Hot & cold water distribution systems
- Commercial hot water heaters (2)
- Sanitary waste & vent piping
- Porcelain plumbing fixtures
- Natural gas piped distribution system
- Abandoned locker rooms

HVAC:

Main building:

- Gas fired steam boilers & piped distribution system
- Central exhaust/ventilation
 - Unit ventilators; classroom,cafetorium
 - Fan coil units – gym, hallways
- Window air conditioning units;
 - South/West classrooms, administration area
(removed during window replacement 2012)

Portable classrooms:

- AC, heat & ventilation; electrically powered wall units

Fire Protection:

- Sprinkler system not provided

Electrical:

Main building:

- 208 volt service
- Underground service connection
- diesel fueled emergency generator
- Lighting systems; predominantly fluorescent
- Exit signage & emergency lighting

Portable classrooms:

dedicated aerial electrical services to each portable classroom
fluorescent lighting systems
Exit signage & emergency lighting

Fire Alarm:

fire alarm detection & annunciation all areas
radio signalization system
Fire Alarm Control Panel (FACP) equipment provided

Communications:

new phone & data system 2012

Security:

intrusion system

Identified Needs

- fire protection system
- lighting system controls
- lighting fixture upgrade
- steam traps; evaluation/replacement/repair
- steam piping; insulation & repair
- unit ventilators; evaluation/replacement/repair
- HVAC controls; evaluation/replacement/repair
- Rx (re-commission) hvac system
- window ac units; evaluate needs/replacement
- hot water system; analyze needs – modify eqt/distribution
- floor drains; cap at abandoned shower areas
- Toilet rooms; evaluate capacity/proximity per current needs/code

INTERIOR

Flooring:

VCT (Vinyl Composition Tile)/carpet at classroom areas

VCT flooring hallways, cafetorium

NOTE: VAT (vinyl asbestos tile) below carpeted areas

Walls:

painted masonry/gypsum wallboard

Ceiling:

acoustical suspended ceilings; classrooms & hallways

exposed structure; cafetorium, gym

Doors:

wood doors in metal frames

Identified Needs:

- VAT (Vinyl Asbestos Tile) flooring system abatement
- Flooring repair/replacement- classrooms
 - re-paint/refinish gym ceiling
 - gym acoustical treatment
 - re-finish wood doors
 - interior re-painting

METHODS:

Facilities evaluation performed by visual observation

STANDARDS:

Level of quality standards noted herein are from that contained in the facility spread sheet evaluation format and include the following;

REFERENCES:

Sources of facilities information has been obtained from; janitorial staff, director of school operations, outside trade/maintenance vendors, school/municipal administrative staff and employees.

QUALIFICATIONS:

- Inspections performed without the use of any invasive or destructive measures.
- There has been no removal of items or subsurface excavation performed.
- There has been no review or inspection by other architect(s)/engineer (s) u.n.o.



Aerial view looking south



Portable temporary classrooms



West elevation



East elevation

**Facility and Review Assessment
Town of North Andover, MA**

Early Childhood Center

115 Phillips Brooks Road

North Andover, MA

Date: 12.31.2012



DESCRIPTION

The Early Childhood Center (ECC), is a one story modular constructed building located adjacent to Atkinson School. Built in 2009, it is the most recently constructed school facility in town. The school contains eleven classrooms for pre-school and kindergarten levels each with their own toilet & storage rooms, administration offices, faculty lounge, conference, individual instruction rooms and nurses office. Access to the school is provided via paved driveways that connect to the adjacent schools from the Mass. Ave. and Main Street entrances. A pickup/drop off area is provided the front entrance and parking is provided across the driveway. The school is ADA (American Disabilities Act) compliant. There are energy saving features included in the construction.

PROFILE

Lot size	-	1 +/- acres (adjacent to Atkinson School)
Building size	-	13,000 sf
Stories	-	one plus crawl space at basement level
% used	-	100 % (+)
Constructed	-	2009
Parking	-	50 + provided at adjacent lot
Structure	-	light gauge steel framing
Envelope	-	cement composite siding
Roof	-	TPO membrane & metal
Vert. Transp.	-	n/a
Plumbing	-	toilet rooms provided each classroom & general use
HVAC	-	roof mounted gas fired heating/electric cooled units
Fire Prot.	-	wet pipe sprinkler system
Electrical	-	208 volt service
Fire Alarm	-	fire detection & annunciation system hard wired/radio beacon signalization
Security	-	intrusion system provided
Occupants	-	118

DETAILED SUMMARY & IDENTIFIED NEEDS

SITE

Utilities:

Public water, sewer, gas & electrical utilities.

Communications systems newly installed phone & data

Storm drainage system includes;

sheet flow drainage to catch basins

perimeter building drainage swale at East & South sides

Trash service provided by private vendor

Grading:

Facility installed on relatively flat site

Wooded area located to the South of building

Access driveway provides 'at grade' building access

Enclosed fence play area located at West side of site

Landscaping:

ornamental landscaping provided at East side of site.

Paving, Sidewalks, Curbs:

Paved driveways at North side of facility

Concrete paved sidewalk at North side of building

Parking:

Adequate parking provided at lot located across main drive

Identified Needs:

Frequent maintenance at perimeter drainage swale to clear seasonal debris

STRUCTURE

Foundation:

- Poured concrete foundation system
- Perimeter wall with interior piers
- Crawl space height basement

Walls, Roof, Floor:

Light gauge metal framing

Stairs:

n/a

Canopies:

Steel framed structure and metal roof

Identified Needs:

- Closely monitor cladding systems to preclude water intrusion damage
- Frequent sealing and painting of cladding system

ENVELOPE

Cladding:

Cementitious horizontal siding & trim

Roof:

Adhered white TPO roofing membrane system

Windows:

Metal framed window frame structure with insulated glass

Doors:

Aluminum/steel framed door units with glass panel

Identified Needs:

- Closely monitor exterior wall cladding maintenance
- Maintain cladding in painted & sealed condition
- Roof drain & overflow scupper cleaning & maintenance

SYSTEMS

Plumbing:

Toilet facilities provided at each classroom & general use areas
Drain, waste, vent, water distribution piping
Interior roof drain system

HVAC:

Roof mounted gas fired heat/electrically cooled units
Programmable thermostats
Bathroom exhaust/ventilation systems

Fire Protection:

Wet pipe system

Electrical:

208 volt service
Power distribution system to HVAC, lighting, convenience power
emergency lighting system
fluorescent lighting

Fire Alarm:

Heat/smoke detectors, pull stations
FACP (Fire Alarm Control Panel)
Annunciation system (horn/strobe lights)
Flow and tamper devices at sprinkler system

Communications:

New telephone/data system throughout
Data closets provided

Security:

Intrusion system

Identified Needs:

- HVAC preventive maintenance program
- Leaking water pipes at ceiling

INTERIOR

Flooring:

VCT (Vinyl Composition Tile)

Carpet

Walls:

Painted gypsum wallboard

Ceiling:

Suspended acoustical tile system

Doors:

Metal framed wood veneer doors

Commercial grade hardware

Identified Needs:

Painting repairs

REFERENCES:

Sources of facilities information has been obtained from; custodial staff, Director of School Operations, outside trade/maintenance vendors, school/municipal administrative staff and employees.

QUALIFICATIONS:

Inspections performed without the use of any invasive or destructive measures. There has been no removal of items or subsurface excavation performed. There has been no review or inspection by other architect(s)/engineer (s) u.n.o.



ECC: west elevation

**Facility and Review Assessment
Town of North Andover, MA**

Franklin Elementary School

2 Cypress Terrace

North Andover, MA

Date: 12.31.2012



DESCRIPTION

Franklin School is the 2nd oldest elementary school in the district. It is a single story brick structure located off Andover Street at 2 Cypress Terrace. It contains elementary classrooms for K-5, cafeteria, kitchen, gym and administration offices. The main building consists of the original facility dated 1958 plus a subsequent addition in 1966. There are three temporary portable classroom modules located at the Southwest corner of the site. Its construction and interior program are similar to that of school facilities of same vintage. The existing electrical & plumbing systems are installations dated to the time of original construction. There was a major HVAC renovation performed in 2003. The building does not have a sprinkler fire protection system. The building provides ADA (American Disabilities Act) compliant exterior access via the main entrance and several side doors.

PROFILE

Lot size	-	9 +/- acres
Building size	-	50,000 sf
Stories	-	1 plus crawl space basement level
% used	-	100 % (+)
Constructed	-	1958, addition 1966
Parking	-	75 +/- spaces at the north/east side of site
Structure	-	reinforced concrete/masonry/structural steel wood framing (portable structures)
Envelope	-	brick masonry wood paneling (portable classrooms)
Roof	-	TPO Epdm - rubber (portable classrooms)
Vert. Transp.	-	stairwells; none stair lift: none elevator: none
Plumbing	-	installations dated to time of construction
HVAC	-	steam & hot water heating systems unit ventilators central exhaust Electric heat/AC (portable classrooms) Ductless split ac systems
Fire Prot.	-	not provided
Electrical	-	480 volt service Emergency generator
Fire Alarm	-	fire detection & annunciation system hard wired/radio beacon signalization
Security	-	intrusion system
Occupants	-	537

DETAILED SUMMARY & IDENTIFIED NEEDS

SITE

Grading:

Facility installed on a relatively flat site

Large grassed play areas located at South/West sides of site

Utilities:

Facility is served by public; water, sewer, gas & electrical utilities.

Communications systems newly installed phone & data

Storm drainage system includes sheet flow drainage to catch basins

Storm water discharge into local public infrastructure

Trash service provided by private vendor

Landscaping:

Some ornamental landscaping provided

Plantings show evidence of low maintenance.

Paving, Sidewalks, Curbs:

Paved driveways at entire perimeter of facility

Sidewalk & curb provided at North & East sides

Entrance driveways (2) provided to local public ways

Parking:

parking provided at north & east sides of site

parking is at/near capacity

Underground Storage Tanks:

Underground tanks (2) located at north side of site;

Abandoned heating fuel tank

Active diesel fuel – emergency generator

Identified Needs:

- removal of abandoned heating fuel oil tank
- replacement of buried diesel tank with above grade storage
- paving repairs at main entrance sidewalk & curb
- controlled access to driveway at side/rear portions of school
- dumpster enclosure
- future parking expansion

STRUCTURE

Foundation:

- Poured concrete foundation systems (main building)
- Crawl space at original building footprint
- Concrete piers/poured concrete footings (portable structures)

Walls:

- Masonry load bearing walls (main building)
- Wood framed walls (portable classrooms)

Roof:

- Steel frame structure & deck (main building)
- Poured concrete/terra cotta tile (main building)
- Wood framed (portable classrooms)

Floor:

- Poured concrete slab on grade/over crawl space (main building)
- Poured concrete slab on grade (addition)
- Wood framed (portable classrooms)

Stairs:

n/a – single story building

Canopies:

Poured concrete/steel at front entrance

Identified Needs:

- monitor temporary portable classroom structural elements closely
- minor masonry re-pointing

ENVELOPE

Cladding:

- Brick masonry (main building)
- Wood panel (portable classrooms)

Roof:

- TPO membrane roofing system
- EPDM (rubber) at portable structures

Windows:

- Replacement window system: Metal framed/insulating glass (main building)
- 'Punched' window openings-metal frame/glass (portable classrooms)

Doors:

- Metal frame/glass main entrances
- Hollow metal door/steel frame at secondary egress doors

Identified Needs:

- Repair/replacement/re-sealing of wood cladding
- Interior roof access hatch/ladder
- Building air sealing
- Repair/replace windows/doors portable classroom structures

SYSTEMS

Plumbing:

plumbing installations dated to time of original construction
'low-flow' plumbing fixtures not provided

HVAC:

Main Building

Gas fired steam boilers
Boiler installed 2003
Unit ventilators - classroom areas
Pneumatic HVAC controls
Bathroom exhaust/ventilation system
General building exhaust system

Portable classrooms

Electric heating
Wall mounted ac

Fire Protection:

Sprinkler system - not provided

Electrical:

480 volt service to mechanical room transformer vault
Electrical system dated to time of initial installation
Emergency generator power provided – diesel fueled
Fluorescent lighting
Emergency lighting system

Fire Alarm:

FACP (Fire Alarm Control Panel)
Detection devices; Heat/smoke detectors, pull stations
Annunciation system (horn/strobe lights)

Communications:

New telephone/data system throughout
Data closet provided

Security:

Intrusion system

Identified Needs:

- Heating system controls; repair/replace/re-commission
- HVAC preventative maintenance program
- Sprinkler system
- Repairs to steam heat piping system; valves, steam traps, leaks
- Controlled building exhaust
- Insulate steam pipes
- Replace HVAC equipment at end of service life
- Lighting system; controls/fixture upgrade

INTERIOR

Flooring:

- VCT (Vinyl Composition Tiles) and carpeted areas
- VAT (Vinyl Asbestos Tile) (asbestos managed in place)
- Carpet

Walls:

- Painted gypsum wallboard
- Painted masonry/glazed tile walls

Ceiling:

Acoustical tile – suspended & directly adhered systems

Doors:

- Metal framed wood veneer doors
- Commercial grade hardware

Equipment:

- White/smart boards
- Commercial kitchen

Identified Needs:

- Carpet/VCT flooring repairs/replacement
- repainting
- ceiling system repairs
- general door; hardware repairs/sanding/refinishing

REFERENCES

Sources of facilities information has been obtained from; custodial staff, Director of School Operations, outside trade/maintenance vendors, school/municipal administrative staff and employees.

QUALIFICATIONS

Inspections performed without the use of any invasive or destructive measures.

There has been no removal of items or subsurface excavation performed.

There has been no review or inspection by other architect(s)/engineer (s) u.n.o.



Main entrance



Cafetorium



Rear building entrance/canopy



Portable temporary classroom structures

**Facility Review and Assessment
Town of North Andover, MA**

Kittredge Elementary School

Main Street

North Andover, MA

Date: 12.31.2012



DESCRIPTION

The Kittredge School, located at the intersection of main street and route 125 (Chickering road), is the oldest school in the North Andover School District. The two story brick masonry building contains classrooms for grades K-5 at the 1st & 2nd level. There is a library, individual instruction rooms & Kindergarten located on the basement level. Its construction and interior program are similar to that of school facilities of same vintage. There is a modular addition to the facility located at the west side. The sloping site has allowed the creation of additional floor space at the basement level. The existing electrical & plumbing systems are dated to the original installations. A new sprinkler system has most recently been installed in 2011. A major HVAC renovation was performed in 2003.

The building provides ADA (American Disabilities Act) compliance exterior access via the South entrance ramp. Interior vertical access to the basement level is provided via a stair lift located at the east entrance. The window system was replaced within the recent 10 years.

A proposed gym addition to be located at the west side of the main building is currently in the design phase.

PROFILE:

Lot size	-	6.5 +/- acres
Building size	-	27,000 sf
Stories	-	two plus full basement level
% used	-	100 % (+)
Constructed	-	1952
Parking	-	40 +/- spaces at the North/East side of site
Structure	-	reinforced concrete/masonry
Envelope	-	brick masonry /wood siding
Roof	-	ballasted rubber TPO roofing system (new addition)
Vert. Transp.	-	stairwells serve all levels stair lift provided to basement level
Plumbing	-	original installation (original bldg) cast iron/copper (new addition)
HVAC	-	steam boiler heating system unit ventilators central exhaust RTU's (rooftop units-new addition)
Fire Prot.	-	wet pipe sprinkler system (2011)
Electrical	-	480 volt u.g.electrical service main bldg. 208 volt aerial service to modular addition
Fire Alarm	-	fire detection & annunciation system hard wired/radio beacon signalization
Security	-	intrusion system
Occupants	-	301

SITE:

Utilities:

Facility served by public; water, sewer, gas & electrical utilities.
Communications systems newly installed phone & data
Trash service provided by private vendor

Grading:

Facility installed on a northerly sloped site
Large grassed play areas located at West side

Landscaping:

Minimal ornamental plantings

Paving, Sidewalks, Curbs:

Paved driveways at entire perimeter of facility
Sidewalk & curb provided at South side of driveway
Entrance driveways (2) provided to local public ways

Parking:

Angled parking provided at East/South sides of site
parking is at capacity

Storm Water Drainage System

Sheet flow to catch basins/offsite
Discharge to local public infrastructure
Interior crawl space drains

Identified Needs:

Eliminate stormwater intrusion into crawl space
Curb/guard rail east parking area
parking capacity
Paving repairs South drive/parking
Site masterplan

ENVELOPE

Masonry:

Brick masonry with concrete block 'backer'
Cast stone sills & decorative piers

Windows:

Metal framed insulated glass system

Doors:

Aluminum/glass entrance units
Hollow metal frame/door secondary egress units

Cladding:

Cementitious horizontal siding (modular addition)

Roof:

Main Building:

Stone ballasted rubber membrane roofing system

Addition:

Adhered white TPO roofing membrane system

Identified Needs:

- Investigate rusting of steel relieving angles above windows
- repair/replace missing/damaged cast stone pilasters at cafetorium area
- miscellaneous masonry repointing brick walls & chimney
- permanent closure at louvered bathroom window vents
- 'connector' structure repairs
- Monitor exterior wood cladding closely for repairs, sealing, painting etc.
- Provide water tight crawl space opening at south side
- Building air sealing
- Crawl space water mitigation/management

STRUCTURE:

Foundation:

- Poured concrete foundation systems
- Crawl space (South End of original bldg. & addition)

Walls:

- Masonry load bearing walls (main building)
- Wood framed walls (modular addition)

Roof:

- Poured concrete/terra cotta tile (main building)
- Light gauge steel framing (modular addition)

Floor:

- Poured concrete slabs (main building)
- Wood framed (modular addition)

Stairs:

- Two (2) stairwells (main bldg.)

Identified Needs:

- monitor modular classroom structures closely
- masonry re-pointing
- monitor steel lintels at masonry openings
- ada access to 2nd floor level

INTERIOR

Flooring:

VCT (Vinyl Composition Tile)
carpet
ceramic tile

Walls:

Painted masonry & gypsum wallboard
glazed wall tile

Ceiling:

Acoustical tile – suspended & directly adhered systems

Doors:

Metal framed wood veneer doors
Commercial grade hardware

Equipment:

White/smart boards
Commercial kitchen

Identified Needs:

- flooring repairs/replacement
- repainting
- ceiling system replacement/repairs
- door; sanding/refinishing/hardware repairs
- ceramic tile repairs
- hard walled sprinkler riser enclosure (library)

SYSTEMS

Plumbing:

Plumbing installations dated to time of original construction
'dated' fixtures at original building
'low-flow' plumbing fixtures not provided
toilet facilities provided at all floor levels

HVAC:

Main Building;

Gas fired steam boilers
Unit ventilators - classroom areas
Pneumatic HVAC controls
Bathroom exhaust/ventilation system
General building exhaust system

Portable classrooms:

Roof mounted package gas heat/electric cooled units
Programmable thermostats

Fire Protection:

Wet pipe system

Electrical:

Main building:

System dated to time of original installation
480 volt electrical service at basement mechanical room
Transformer located at interior basement vault
Power distribution to each level

Modular addition:

208 volt aerial electrical service

All areas:

Fluorescent lighting
Emergency Lighting

Fire Alarm:

FACP (Fire Alarm Control Panel)

Detection devices; Heat/smoke detectors, pull stations

Annunciation system (horn/strobe lights)

Communications:

New telephone/data system

Data closet provided

Security:

Intrusion system

Identified Needs:

- Heating system controls; repair/re-commissioning/update
- Insulate steam pipes (crawl space)
- Evaluate/replace steam traps
- Replace HVAC equipment at end of service life
- Relocate transformer to exterior of building
- Upgrade/replace electrical system (main building)
- Lighting system controls
- Light fixture upgrade
- Update plumbing fixtures
- Modify toilet room fixture quantity per occupant/code needs
- Controlled crawl space ventilation
- Heat removal exhaust system – data closets

REFERENCES

Sources of facilities information has been obtained from; custodial staff, Director of School Operations, outside trade/maintenance vendors, school/municipal administrative staff and employees.

QUALIFICATIONS

- Inspections performed without the use of any invasive or destructive measures.
- There has been no removal of items or subsurface excavation performed.
- There has been no review or inspection by other architect(s)/engineer (s) u.n.o.



Aerial view



East elevation



West elevation (old portable classroom since demolished-new modular at same location)



West elevation (new modular classroom at location of red portable structure)

Facility and Review Assessment

Town of North Andover, MA

Facility: North Andover High School
Osgood Street
North Andover, MA

Date: 8.19.2012



Contents:

Summary:

Description:

The North Andover High School is a multi-story 300,000 s.f. brick masonry structure located on a sloped site between Osgood Street and Chickering Road (Rte. 125). The school is the largest public facility in town and contains classrooms for grades 8-12. The facility consists of a three story academic wing, fieldhouse, auditorium, kitchen, cafeteria, art, music, technology, administration, mechanical room and a north/south central connecting corridor ("main street"). The MEP systems are the largest and most sophisticated of the public buildings. The exterior grounds include a perimeter drive with large parking areas at each end of the facility. Building access provided at both Osgood Street and Rte. 125 (exit only). The south side of the site includes an artificial turf stadium (illuminated) & practice field. The baseball diamond is located to the east of the stadium. The north side of the site includes a synthetic surface track and artificial turf playing field.

Profile:

Lot size	-	29 +/- acres
Building size	-	300,000 sf
Stories	-	3 plus basement level
% used	-	100 %
Constructed	-	2003
Parking	-	provided at the north & south sides of site
Structure	-	reinforced concrete/masonry/steel
Envelope	-	brick masonry
Roof	-	epdm, sarnafil membrane
Vert. Transp	-	stairwells; all occupied levels served by multiple stairs Elevator: provided at each academic wing & basement
Plumbing	-	domestic h/c water distribution Sanitary waste/vent systems Multiple toilet groups Kitchen plumbing Special waste system Circulating hot water system Locker rooms
HVAC	-	hot water boiler heating system unit ventilators circulating chilled water system central exhaust Ductless splits
Fire Prot	-	wet pipe sprinkler system
Electrical	-	480 volt service
Fire Alarm	-	fire detection & annunciation system hard wired/radio beacon signalization
Security	-	intrusion, camera
Occupants	-	1367

Site:

Utilities;

public; water, sewer, gas & electrical utilities.

Communications systems newly installed phone & data

Storm drainage system;

sheet flow drainage to catch basins

underground stormwater detention/infiltration system

Trash service provided by private vendor

Grading;

Facility installed on a site sloped from south to north

Landscaping;

Minimal ornamental landscaping provided

Grassed areas surrounding building & athletic fields

Artificial turf playing fields at north & south sides of site

Synthetic surface outdoor track

Paving, sidewalks, curbs;

Paved driveways and parking lots

Sidewalk & curb provided

Concrete walkways

Parking;

Large lots at north & south ends of the facility

Athletic fields;

Illuminated stadium (artificial turf)

Practice field (artificial turf)

Baseball diamond

Tennis courts

Synthetic surface track

Artificial turf game field (north end)

Identified needs;

- Paving & precast curbing repairs
- Future “recharging” artificial turf systems
- Aesthetic improvement of Rte. 125 (west side) landscape
- Repairs; concrete walks, masonry walls, railings
- Water intrusion at ‘main street’ entrances

Structure:

Foundation;

Poured concrete foundation system
Basement mechanical room

Walls;

Block/brick masonry exterior walls
Structural steel columns

Roof;

Structural steel framing system

Floor;

Poured concrete floors on metal deck
Steel framed floor system
Concrete slab on grade

Stairs;

Poured concrete/steel structure

Identified needs;

- Monitor brick masonry

Envelope:

Cladding;

exterior face brick masonry
concrete block interior

Roof:

Stone ballasted epdm (rubber) membrane roofing system
Sarnafil membrane roof system (fieldhouse)

Windows;

Metal framed window structure with insulated glass

Doors;

Aluminum framed door units with glass panel

Identified needs;

- Roof pm; clean, repair
- Replace ballast at roof "bump out" at south end fieldhouse
- Improve/modify roof drainage at south fieldhouse 'bump-out'
- Defective flashing at windows; fieldhouse, cupola
- Repair defective hvac duct weather enclosure (fieldhouse)
- Repair window caulking sealant at south windows
- Building air sealing
- monitor building control joint sealants

Systems:

Plumbing;

- Multiple toilet groups throughout facility
- Drain, waste, vent, water distribution per original construction
- Fixture quantities and condition appear ok
- Circulating hot water system
- Special waste treatment system (chemistry lab)
- Kitchen plumbing
- Locker/shower rooms
- Chemistry lab plumbing specialized waste piping system

HVAC;

- Gas fired hot water boiler
- Roof mounted equipment;
 - Chillers, make up air, exhaust, condensing units
- Unit ventilators
- Chilled water piping system
- Hot water piping system
- HVAC controls system (Johnson) managed by on site personnel
- Bathroom exhaust/ventilation system
- Ductless split ac systems

Fire Protection;

- Wet pipe system throughout

Electrical;

- 480 volt main service at basement
- Emergency generator
- Power distribution to subpanels, hvac eqt., convenience
- Emergency lighting system
- Fluorescent lighting

Fire alarm;

Heat/smoke detectors, pull stations
FACP (fire alarm control panel)
Annunciation system (horn/strobe lights)
Flow and tamper devices at sprinkler system

Communications;

New telephone/data system throughout
Data closets provided at multiple locations

Security:

Intrusion
Cameras
Controlled access system

Identified needs;

- IT 'head end' room;
 - hvac alarm system
 - heat evacuation/ac system replacement
 - 'Backup' ac system
- Repair/evaluate need - waste treatment system
- Hvac preventive maintenance program
- Fieldhouse lighting system repair/replacement
- Lighting controls

Interior:

Flooring;

VCT (vinyl composition tile)

Carpet

Ceramic tile

Walls;

Painted gwb & masonry

Ceiling;

Suspended acoustical tile systems

Painted exposed roof deck

Doors;

Metal framed wood veneer doors

Commercial grade hardware

Rollup doors

Hollow metal frame/metal door

Equipment;

White/black boards

Commercial kitchen

Identified needs;

- Flooring repairs
- Wall painting



NAHS: south elevation



NAHS: south elevation



NAHS: academic wing



NAHS: east elevation



NAHS: north elevation



Interstate
 Major Road
 Road
 Easement
 MPC Boundary

1" = 384 ft




Horizontal Datum: NA Stateplane Coordinate System, Datum NAD83, Meters. Data Sources: The data for this map was produced by Merrimack Valley Planning Commission (MVPC) using data provided by the Town of North Andover. Additional data provided by the Executive Office of Environmental Affairs/MassGIS. The information depicted on this map is for planning purposes only. It may not be adequate for legal boundary definition or regulatory interpretation. THE TOWN OF NORTH ANDOVER MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY, COMPLETENESS, RELIABILITY, OR SUITABILITY OF THESE DATA. THE TOWN OF NORTH ANDOVER DOES NOT ASSUME ANY LIABILITY ASSOCIATED WITH THE USE OR MISUSE OF THIS INFORMATION.

NAHS site plan

References:

Sources of facilities information has been obtained from; custodial staff, Director of School Operations, outside trade/maintenance vendors, school/municipal administrative staff and employees.

Qualifications:

Inspections performed without the use of any invasive or destructive measures.

There has been no removal of items or subsurface excavation performed.

There has been no review or inspection by other architect(s)/engineer (s) u.n.o.

Facility and Review Assessment

Town of North Andover, MA

Facility: North Andover Middle School

495 Main Street
North Andover, MA

Date: 12.31.2012



Description:

The Middle School is the 2nd largest school in the North Andover, MA district and is located at 495 Main Street at the intersection of Rte. 125 (Chickering Road). The facility was initially constructed as a high school in 1954 and converted to a middle school in the mid 1970's. There have been two additions to the facility – 1962 & 1995. It consists of a 1 & 2 story brick masonry structure which includes a system of three (3) academic classroom 'wings' (Symmes, Freeman & Carrier) plus gymnasium, auditorium, performing arts center, cafeterias (2), art, music and administration areas. The school houses the 6th, 7th and 8th grade classes. The overall building configuration creates an enclosed perimeter with interior courtyards. Its structural construction varies according to each 'wing' while the brick exterior cladding and window system is typical throughout. The building and associated site improvements are installed on a relatively flat site created by re-grading of the pre-existing south to north sloping terrain. The facility is served by public utilities; water, sewer, electrical, communications, natural gas. Vehicular access is provided by four (4) driveway entrances connected to a perimeter access road. Parking is provided at the southeast side of the site. Athletic fields are located at an elevated site to the southeast of the facility. The MEP systems are consistent with the age of the existing structure and additions. There are substantial improvements & modifications to the boilers, lighting systems & hvac provided at the time of subsequent renovations/additions. The entire facility has a wet pipe fire protection sprinkler system throughout. The building provides ADA exterior access via 'at grade' entrances (4) and interior vertical access via elevators (3). Metal storage containers are located at the south end of the site.

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Profile:

Lot size	-	30 +/- acres
Building size	-	150,000 sf
Stories	-	2 plus basement/crawl space levels
% used	-	100 % (+)
Constructed	-	initial facility 1953, additions 1962 & 1995
Parking	-	200 spaces
Structure	-	reinforced concrete/masonry, steel framed/masonry
Envelope	-	brick masonry
Roof	-	epdm – ballasted TPO – fully adhered
Vert. Transp	-	stairwells; two (2) serving each academic wing Elevator: each academic wing (total = 3)
Plumbing	-	interior piped roof drainage system Sanitary waste, drain & vent Circulating hot water system Domestic cold water distribution system Natural gas distribution piping
HVAC	-	hot water heating system unit ventilators – typical each classroom central exhaust Rooftop Units; Ductless split systems;
Fire Prot.	-	wet pipe sprinkler system
Electrical	-	480 volt electrical service
Fire Alarm	-	fire detection & annunciation system hard wired/radio beacon signalization
Security	-	intrusion alarm system
Occupants	-	1180

Detailed Summary & identified Condition/Needs

Site:

Utilities;

Facility is served by public; water, sewer, gas & electrical utilities.

Communications systems newly installed phone & data

drainage;

storm water system;

sheet flow drainage to catch basins

discharge into public infrastructure

Interior roof drainage;

pipelined to storm water system

Crawl space/foundation drainage;

pumped sump systems

Trash service;

provided by private vendor

dumpsters & recycling enclosures located at south end of site

Grading;

Facility installed on a northerly sloped site

Athletic fields located at elevated southwest side of site

Landscaping;

ornamental landscaping provided at building perimeter

Plantings show evidence of low maintenance.

Grassed lawn areas at building perimeter & north/east sides

Athletic fields;

Hayes stadium:

Football & soccer events

Large bleacher seating & observation booth/storage facility

Snack bar/toilet facilities north end of site

Perimeter running track

Multi-use fields:

south end of site

baseball/softball/soccer/football

Paving, drives, sidewalks, curbs;

driveway entrances; (3)

north side (main st.)

Southwest (parker road)

South side (rte. 125)

Paved driveway at building perimeter

Paved sidewalk at building perimeter & main entrances

Concrete paved bus pickup area

Paved basketball court at east side of site

Parking:

Main lot located at south/west corner of site

Smaller parking areas at northeast corner of site

Daily parking requirements adequate

Event parking is under capacity

Identified needs;

- catch basin cleaning
- crawl space water management system
- Paving repairs n.e. driveway
- Concrete walk repairs bus pickup area
- Trimming /pruning landscaping & trees
- Alternate storage in lieu of metal storage containers.

Structure:

Foundation:

Poured concrete foundation systems (typical)

Poured concrete slab (typical);

Basement crawl space;

Typical all areas except 1995 addition

Superstructure:

1953 structure:

Pier supported slab with crawl space area below

Pier supported slab at crawl space areas

Poured concrete columns, floor/roof decks

1962 structure:

Pier supported slab with crawl space area below

cafeteria- Steel framed columns/roof

academic wing - poured concrete columns, floor/roof decks

1995 structure:

Earth supported concrete 'slab on grade'

Steel framed columns/floor/roof

Poured concrete deck 2nd floor level

Identified needs;

- Monitor older roof deck areas
- Monitor brick veneer closely at older building portions
- Recommend engineering study of veneer at older sections

Envelope:

Masonry:

Finish face brick with cmu back-up

Painting:

Minimal exterior painted areas/items

roof:

ballasted epdm (1995 addition)

TPO roof (2012)

Sealants/caulking:

Caulked joints;

Construction joints, expansion joints, dissimilar materials

Window/Door Systems:

Insulated glass window systems (typical);

Glazed insulated glass window systems

Gymnasium "Kalwall" translucent window system

Doors:

Exterior hollow metal doors at secondary exit/access locations

Primary entrance/egress aluminum framed/glass systems

Identified needs;

- failed insulating glass units replacement
- Investigate/monitor "Kalwall" gym window panel system
- Repair failed joint sealants (typical)
- masonry repairs 1953/1968 portions
- rusted perimeter spandrel beam at gym roof
- monitor older masonry areas closely
- close gaps at exterior metal flashing, masonry
- building air sealing
- investigate brick veneer at 1953 addition

Interior:

Flooring:

Carpet;

Classrooms, academic hallways, administration

Vct;

hallways & corridors, cafeterias

Ceramic tile;

toilet rooms, kitchen, locker rooms/showers

wood;

gymnasium floor

Ceiling:

Suspended acoustical ceiling systems

Hard gwb ceilings

Exposed structure

Finishes:

Painted interior;

Walls, doors, wood trim, ceilings

Identified needs:

- Flooring repairs/replacement
- Ceramic tile minor repairs
- Gym floor refinishing
- Replace damaged acoustical tile
- Refinish; wood finish at windows, wood door units
- Repaint; walls, door frames

Systems:

Plumbing:

Water distribution;

- Domestic hot/cold water supply
- Backflow preventer
- Piped hot/cold water distribution
- Circulating hot water system
- Commercial hot water heater (Jan. 2012)

Waste/vent/drain;

- Piped sanitary sewer system
- Discharge to public sewer infrastructure
- Dedicated waste/vent system for chemistry lab

Roof drainage;

- Interior piped drainage system
- Discharge into exterior storm water infrastructure

Gas piping;

- Natural gas piping distribution system
- Hot water system, comfort heating, kitchen (cooking)

Fire Protection system:

- Wet pipe sprinkler system throughout
- Public fire protection water service

HVAC:

Hot water heating system:

Boilers:

Natural gas fired boilers (2)

Unit ventilators:

Typical individual classroom, cafeteria

Ventilation/exhaust:

Rooftop/mechanical penthouse mounted equipment

Fresh air intake/supply/distribution systems

Dedicated exhaust; kitchen, toilets, locker rooms

fan coil units:

ducted ventilation system - gym, auditorium

Cooling:

Administration area, library - Rooftop mounted eqt.

Ductless split system - IT

Controls:

Pneumatic

Electrical:

Service:

480 volt located in basement
Mdp/Main switch in basement
Transformer: exterior pad mounted utility eqt.

Emergency generator:

Natural gas fired
Emergency power/lighting panels

Power distribution:

Electrical lighting and power subpanels
Distribution throughout

Emergency Lighting:

System provided throughout

Lighting system:

Interior:

Fluorescent light fixtures throughout
Energy savings lighting modifications within 5 yr. +/-

Exterior:

Building mounted fixtures at perimeter
Pole mounted fixtures parking lot areas

Fire alarm system:

Detection & annunciation provided throughout
FACP provided at front entry
Radio/hard wired signalization to emergency response
Flow and tamper devices at sprinkler system

Security system:

Intrusion system

Identified needs;

- Hvac controls;
 - head end system computer failed/outdated software
 - temperature control issues
 - replace/repair/re-commission
- Removal of abandoned hot water heater eqt.
- Modify/repair boiler breeching
- Hvac preventive maintenance program
- Additional high water alarms at basement mechanical area/sumps
- Fire alarm system chronic fault (beeping noise-trouble light)
- Occupancy sensor lighting controls
- Re-commission/repair exterior lighting timer controls

References:

Sources of facilities information has been obtained from; custodial staff, Director of School Operations, outside trade/maintenance vendors, school/municipal administrative staff and employees.

Qualifications:

Inspections performed without the use of any invasive or destructive measures.
There has been no removal of items or subsurface excavation performed.
There has been no review or inspection by other architect(s)/engineer (s) u.n.o



Aerial view looking north



front entrance



East entrance/bus canopy



Bus canopy/east elevation



Performance center entrance/south elevation



West elevation



West elevation



South elevation



South elevation



Roads



1" = 272 ft



Horizontal Datum: NA Stateplane Coordinate System, Datum NAD83, Meters. Data Sources: The data for this map was produced by Merrimack Valley Planning Commission (MVPC) using data provided by the Town of North Andover. Additional data provided by the Executive Office of Environmental Affairs/MassGIS. The information depicted on this map is for planning purposes only. It may not be adequate for legal boundary definition or regulatory interpretation. THE TOWN OF NORTH ANDOVER MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY, COMPLETENESS, RELIABILITY, OR SUITABILITY OF THESE DATA. THE TOWN OF NORTH ANDOVER DOES NOT ASSUME ANY LIABILITY ASSOCIATED WITH THE USE OR MISUSE OF THIS INFORMATION.

Facility Review and Assessment
Town of North Andover, MA

Annie L. Sargent Elementary School

Abbott Street
North Andover, MA

Date: 12.31.2012



DESCRIPTION

The Annie L. Sargent School, located in a rural setting located between Abbott and Johnson Streets, is one of the newer elementary schools in the district. The two story masonry facility consists of classrooms, gym, cafetorium, administration areas for grades K-5. There is an attached bus canopy at the West side of the site which abuts the driveway cul-de-sac. A kitchen area provides food distribution for offsite prepared meals. There are adjacent grassed playing fields and mulched playground areas at the West side. A wooded wetland area abuts the East side. The school is accessed via driveways at Abbott and Johnson streets. Parking is provided at the southeast corner of the site. A paved cul-de-sac provides pickup & drop off access to the upper level main entrance/bus canopy. The building provides ADA (American Disabilities Act) compliance exterior access via both main entrances; an interior ramp provides vertical interior access. The electrical, HVAC, plumbing and fire protection systems are dated to the original construction.

PROFILE

Lot size	-	14 + acres
Building size	-	71,000 sf
Stories	-	two (2)
% used	-	100 % +
Constructed	-	1995
Parking	-	100 +/- spaces
Structure	-	steel framed
Envelope	-	masonry
Roof	-	rubber membrane/asphalt shingle
Vertical Trans.-		stairs/ramp
Plumbing	-	toilet facilities, kitchen
HVAC	-	gas fired hot water boiler
Fire prot.	-	wet pipe sprinkler system
Electrical	-	480 volt service
Fire alarm	-	auto detection/annunciation system
Security	-	provided
Occupants	-	560

DETAILED SUMMARY & IDENTIFIED NEEDS

SITE

Utilities:

Facility is served by public; water, sewer, gas & electrical utilities.
Communications systems newly installed phone & data
Storm drainage system includes sheet flow drainage to catch basins
A storm detention pond is located to the south of the facility
Trash service provided by private vendor

Grading:

Facility located on a gently sloping site from north to south
Site grading allows for grade level access to both floors
Large grassed play area located at the north side of site

Landscaping:

Minimal ornamental landscaping provided

Paving, Sidewalks, Curbs:

Paved driveways and parking lots
Sidewalk & curb provided
Perimeter emergency access road encircles building

Parking:

provided at Southeast corner of site

Identified Needs:

- Frequent catch basin cleaning
- Paving repairs
- Drainage issue at s.w. corner of facility

STRUCTURE

Foundation:

Poured concrete foundation system

Walls:

Architectural concrete masonry block exterior walls

Steel column frame

Roof:

Steel framed

Cementitious wood fiber deck

Floor:

Steel joist/metal deck

Poured concrete floor system

Stairs:

Poured concrete/steel structure

Canopies:

Barrel vaulted steel structure bus canopy

Identified Needs:

- Masonry re-pointing at bus canopy support columns

ENVELOPE

Cladding:

Architectural masonry concrete block/brick

Roof:

Architectural asphalt strip shingles (gabled roofs)

Ballasted rubber membrane (flat roofs)

Gutter at eaves

Windows:

Metal framed window frame & insulated glass

Doors:

Aluminum framed door units with glass panel

Identified Needs:

- Rubber membrane roof maintenance at library & cafetorium
- Vandalism prevention measures to roof access
- building air sealing
- library roof paver system cleaning

SYSTEMS

Plumbing:

- Installation dated to time of initial construction
- Toilet facilities provided at each level
- Kitchen plumbing
- Sewer ejection pump system

HVAC:

- System dated to time of original construction
- Gas fired hot water boilers
- Unit ventilators serve classroom areas
- HVAC controls - pneumatic
- Bathroom exhaust/ventilation system
- Whole building exhaust system

Fire Protection:

- Wet pipe system

Electrical:

- System dated to time of original construction
- 480 volt electrical service
- Power distribution to all levels
- Emergency generator
- Emergency lighting system

Fire alarm:

- Heat/smoke detectors, pull stations
- FACP (Fire Alarm Control Panel)
- Annunciation system (horn/strobe lights)
- Flow and tamper devices at sprinkler system

Communications:

New telephone/data system

Data closets provided

Security:

Intrusion system

Identified Needs:

- HVAC controls upgrade/re-commissioning
- Pneumatic compressor repair/replacement
- Lighting system; controls/fixture upgrade

INTERIOR

Flooring:

- VCT (Vinyl Composition Tile)
- Carpeted class room, hallways
- Scatter rugs

Walls:

- Masonry block
- Painted gypsum wallboard

Ceiling:

- Suspended acoustical tile system
- Exposed cementitious wood fiber decking (“Tectum”)

Doors:

- Metal framed wood veneer doors
- Commercial grade classroom function locksets

Equipment:

- White/black boards
- Commercial kitchen

Identified Needs::

- Flooring repairs/replacement
- painting

REFERENCES

Sources of facilities information has been obtained from; custodial staff, Director of School Operations, outside trade/maintenance vendors, school/municipal administrative staff and employees.

QUALIFICATIONS

- Inspections performed without the use of any invasive or destructive measures.
- There has been no removal of items or subsurface excavation performed.
- There has been no review or inspection by other architect(s)/engineer (s) u.n.o



Aerial view



South elevation



South elevation



West elevation



North elevation



South elevation



Roads



Horizontal Datum: MA Stateplane Coordinate System, Datum NAD83, Meters. Data Sources: The data for this map was produced by Merrimack Valley Planning Commission (MVPC) using data provided by the Town of North Andover. Additional data provided by the Executive Office of Environmental Affairs/MassGIS. The information depicted on this map is for planning purposes only. It may not be adequate for legal boundary definition or regulatory interpretation. THE TOWN OF NORTH ANDOVER MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY, COMPLETENESS, RELIABILITY, OR SUITABILITY OF THESE DATA. THE TOWN OF NORTH ANDOVER DOES NOT ASSUME ANY LIABILITY ASSOCIATED WITH THE USE OR MISUSE OF THIS INFORMATION.

1" = 192 ft



**Facility Review and Assessment
Town of North Andover, MA**

Thompson Elementary School

Waverly Road
North Andover, MA

Date: 12.31.2012



DESCRIPTION

The Thompson School, located in an urban setting on the East side of Waverly Road, is one of the newer elementary schools in the district. The two story masonry wall & gabled roof facility consists of classrooms, gym, cafetorium administration areas for grades K-5. A kitchen area provides food distribution for offsite prepared meals. There is a grassed playing fields and mulched playground areas at the south side. The school is accessed via a driveway from Waverly Road and curb access from Staltonstall Street. Parking is provided at the north end of the site. A paved driveway provides pickup & drop off access via Waverly Road. The building provides ADA (American Disabilities Act) compliance exterior access via both main entrances; an elevator provides vertical interior access. The electrical, HVAC, plumbing and fire protection systems are dated to the original construction.

PROFILE

Lot size	-	3.5 +/- acres
Building size	-	42,000 sf
Stories	-	two
% used	-	100 %
Constructed	-	1997
Parking	-	40 +/- spaces
Structure	-	reinforced concrete/masonry/steel frame
Envelope	-	concrete block/brick masonry
Roof	-	rubber membrane/asphalt strip shingles
Vert. Transp.	-	stairwells; two (2) elevator: provided
Plumbing	-	toilet facilities each level
HVAC	-	hot water boiler heating system unit ventilators central exhaust rooftop package units Ductless splits
Fire Prot.	-	wet pipe sprinkler system
Electrical	-	480 volt service
Fire Alarm	-	fire detection & annunciation system hard wired/radio beacon signalization
Security	-	intrusion system
Occupants	-	302

DETAILED SUMMARY & IDENTIFIED NEEDS

SITE

Utilities:

Facility is served by public; water, sewer, gas & electrical utilities.
Communications systems newly installed phone & data
Storm drainage system includes sheet flow drainage to catch basins
Storm water discharge to on site underground detention system
Trash service provided by private vendor

Grading:

Facility installed on a flat site
Grade level entrances provided at two (2) adjacent streets
Front (main) entrance provided at grade level along Waverly Road
Rear school entrance located at 2nd floor level

Landscaping:

Minimal ornamental landscaping

Paving, Sidewalks, Curbs:

Paved driveways and parking areas
Parking provided at North end of site
Sidewalk & curb provided at Southeast corner of Easterly drive

Parking:

Parking lot provided at North end of site
Pickup/drop off drive located on West side of bldg.

Identified Needs:

- Additional parking capacity
- Frequent catch basin cleaning required at East side
- Paving repairs

STRUCTURE

Foundation:

Poured concrete foundation system

Walls:

Architectural Block/brick masonry exterior walls

Roof:

Steel framed/cementitious wood fiber deck

Floor:

concrete slab on grade

poured concrete on steel framed floor system

Stairs:

Poured concrete/steel structure

Identified Needs:

Monitor masonry for re-pointing needs

BUILDING ENVELOPE:

Cladding:

Exterior face consists of brick/block masonry

Roof:

Gabled roofs; strip asphalt shingles

Flat roofs; Stone ballasted rubber membrane

Gutters: metal gutter at perimeter

Windows:

Metal framed window frame & insulated glass

Doors:

Aluminum framed door units with glass panel

Identified Needs:

- Gutter cleaning maintenance
- Monitor masonry for re-pointing needs
- Monitor East entrance for roofing/gutter problems
- Vandalism prevention measures (roof access)
- Building air sealing

SYSTEMS

Plumbing:

plumbing system dated to original construction
exterior roof drainage system at gabled roofs

HVAC:

Gas fired modular hot water boiler assembly
Unit ventilators serve classroom areas
General building exhaust system
Package rooftop heating/cooling unit at library
ductless split system at administration
Bathroom exhaust/ventilation system

Fire Protection:

Wet pipe system

Electrical:

System dated to time of original construction
480 volt underground service
Pad mounted utility transformer
Power distribution to remote load centers
Emergency lighting system
Fluorescent lighting

Fire Alarm:

Heat/smoke detectors, pull stations
FACP (Fire Alarm Control Panel) located
Annunciation system (horn/strobe lights)
Flow and tamper devices at sprinkler system

Communications:

New telephone/data system throughout
Data closets provided

Security:

Intrusion system provided

Identified Needs:

- HVAC controls; repairs/upgrade/re-commissioning
- Hvac re-zoning
- Evaluate modular boiler system for possible upgrade
- Lighting system;
 - Fixture: standardization/simplification/upgrade
 - controls
- boilers;
 - efficiency check
 - hvac system controls

INTERIOR

Flooring

- VCT (Vinyl Composition Tile)
- Carpeted classroom areas (VCT inserts)
- Scatter rugs (classrooms)
- Ceramic tile bathroom

Walls:

- Painted gypsum wallboard
- masonry walls

Ceiling:

- Suspended acoustical tile systems
- Exposed cementitious wood fiber roof deck ('Tectum')

Doors:

- Metal framed wood veneer doors
- Commercial grade hardware

Equipment:

- White/black boards
- Commercial kitchen

Identified Needs:

- Flooring repairs
- Alternative finish flooring layout/materials

REFERENCES

Sources of facilities information has been obtained from; custodial staff, Director of School Operations, outside trade/maintenance vendors, school/municipal administrative staff and employees.

QUALIFICATIONS

- Inspections performed without the use of any invasive or destructive measures.
- There has been no removal of items or subsurface excavation performed.
- There has been no review or inspection by other architect(s)/engineer (s) u.n.o.



Aerial view



East entrance



South elevation



- Interstate
- Major Road
- Road
- Basement
- MPC Boundary

1" = 136 ft



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