



MSD of New Durham Township Westville Schools

2017 Facility Assessment Report Overview

April 10, 2017



Westville Schools Facility Assessment



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Westville Schools Facility Assessment

INTRODUCTION

During the fall and winter of 2016/2017, **Viridian Architectural Design, Inc.** was tasked with examining the existing building envelope, parking lots, hardscapes, playgrounds, interior, mechanical, electrical and plumbing systems for all the MSD of New Durham Township Westville Schools facilities. The following documents are the observations and recommendations from multiple site visits and examinations of each section of the building. As noted, a few of the existing systems have exceeded their typical life expectancy. There are quite a few existing systems still in fair to good condition. The probable costs of the recommended systems replacement, as outlined at the end of this report, are based upon Winter 2016 pricing. (Please note that this pricing excludes any additional contingency funds for unforeseen issues during the construction and systems replacement process.)



Westville Schools Facility Assessment

SYMBOLS

Building Conditions:

Good

Good Building Condition - A building system that may last another fifteen (15) plus years with fair maintenance practices.

Fair

Fair Building Condition - A building system that may last another five to seven (5-7) years with good maintenance practices.

Poor

Poor Building Condition - A building system that needs immediate maintenance attention and may be harming the surrounding building systems. Poor building systems need to be replaced within the next two (2) years.

Failed

Failed Building Condition - A failed building system may be potentially harming the surrounding building systems. Failed building systems need immediate maintenance attention and need to be replaced as soon as possible.



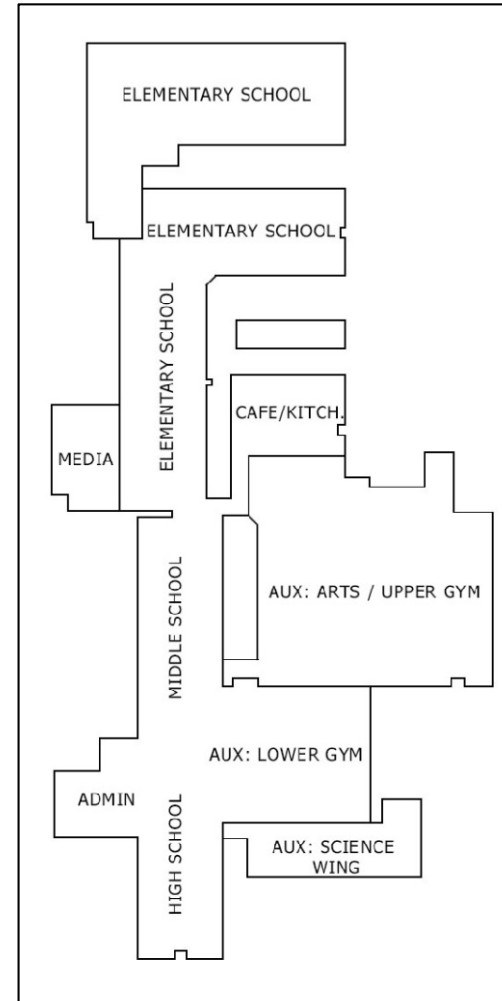
Westville Schools Facility Assessment

CAMPUS



Aerial View

BUILDING



Key Plan



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ASSESSMENT SHEET EXAMPLE

Westville - Preschool Building

MSD OF NEW DURHAM TOWNSHIP WESTVILLE SCHOOLS FACILITY ASSESSMENT REPORT

Restroom Data	
Location:	Restroom #1
Fixtures:	Good
Flooring:	Fair
Walls:	Fair
Ceiling:	Fair
Doors:	Good
Accessories:	Good
Overall Condition:	Fair
Replacement Cost:	\$15,000 - \$20,000
General Notes:	Restrooms do not meet current ADA requirements.

Image Legend:
1. Wear and tear on existing flooring system.
2. No vertical grab bar per ADA requirements.
3. No horizontal grab bar per ADA requirements.
4. No turn / maneuvering space per ADA requirement.
5. Pipe covers do not cover entire pipe.



PRESCHOOL



Westville Schools Facility Assessment

RESTROOM

Restroom Data	
Location:	Restroom #1
Fixtures:	Good
Flooring:	Fair
Walls:	Fair
Ceiling:	Fair
Doors:	Good
Accessories:	Good
Overall Condition:	Fair
Replacement Cost:	\$15,000 - \$20,000
General Notes:	
Restrooms do not meet current ADA requirements.	

Image Legend:
1. Wear and tear on existing flooring system.
2. No vertical grab bar per ADA requirements.
3. No horizontal grab bar per ADA requirements.
4. No turn / maneuvering space per ADA requirement.
5. Pipe covers do not cover entire pipe.



Westville Schools Facility Assessment

RESTROOM





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PARKING AND HARDSCAPES

Parking and Hardscapes	
Location:	Back of Main Building
Sidewalk Material:	Concrete
Sidewalk Condition:	Failed
Replacement Cost:	\$5,000
General Notes:	
Replace damaged stoop in its entirety.	

Image Legend:

1. Some concrete step / stoop damage due to freeze / thaw.



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PARKING AND HARDSCAPES





EXTERIOR CAMPUS BUILDING ENVELOPE



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EXTERIOR DOORS

Exterior Door System Data	
Door Designation:	#1 Exterior
Door Material:	Hollow Metal
Weather Stripping:	Poor
Door Closers:	Good
Door Glazing:	Insulated 1" & 1/2"
Sidelites/Transoms:	Poor
Vestibule:	Yes
Overall Condition:	Poor
Replacement Cost:	\$16,500
General Notes:	
Recommended to inspect, maintain, and clean door system regularly to prolong life expectancy. Door does not have electronic security.	

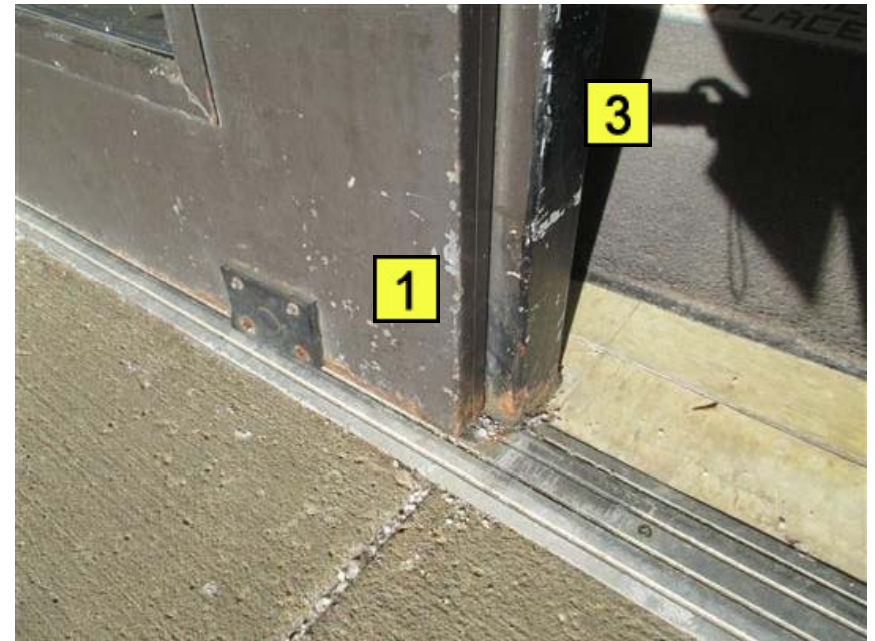
Image Legend:
1. Door rusting.
2. Newer hardware.
3. Some weather stripping missing.
4. Sweeps worn out.
5. Excessive wear / abuse.
6. No ADA push buttons.



Westville Schools Facility Assessment

EXTERIOR DOORS

Location: #1 Exterior

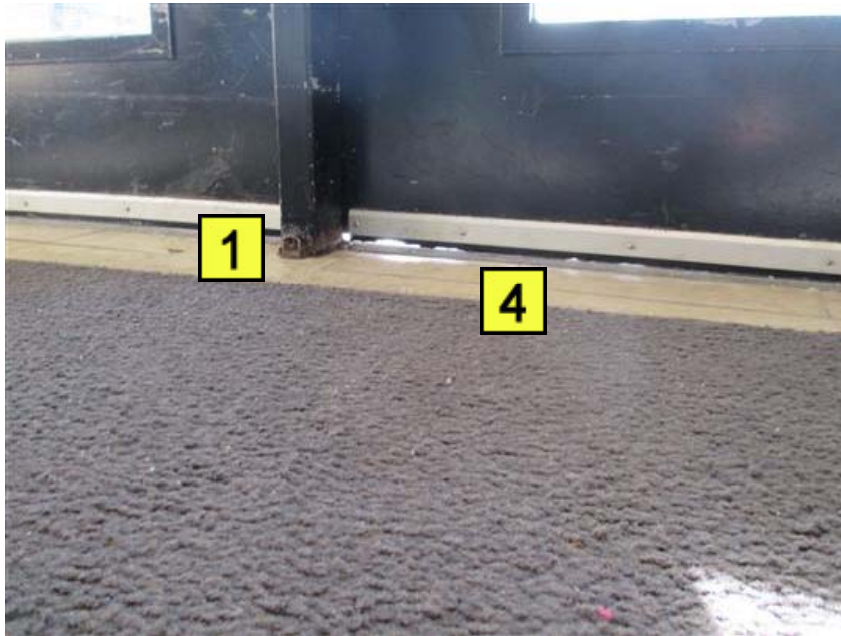




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EXTERIOR DOORS

Location: #1 Exterior





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MASONRY / SEALANT

Masonry / Sealant Data (Con.)	
Masonry:	Good
Cladding:	Poor
Flashing / Trim:	Poor
Caulking / Sealant:	Fair
Overall Condition:	Failed
Replacement Cost:	\$125,000 - \$150,000
General Notes:	
Recommend replacing trim to ensure water sheds away from building to prevent water issues in the future	

Image Legend:

1. Trim Slopes back towards building
2. Transition between window and facade trim not aligned causing water issues.



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MASONRY / SEALANT





INTERIOR CAMPUS CONDITIONS



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CORRIDORS

Corridor Data	
Category:	Floors
Flooring Type:	Terrazzo
Flooring Condition:	Poor
Wall Base Type:	Rubber
Wall Base Condition:	Fair
Accessories:	Good
Overall Condition:	Poor
Replacement Cost:	\$90,000 - \$140,000*
General Notes:	
General condition of corridor flooring is poor. The floor is cracking and needs repaired / replaced. *(Estimate of repair cost based on \$2-\$3/SF)	

Image Legend:
1. Floor surface is cracking in many places.
2. Flooring surface is damaged.
3. Threshold in corridor. Some floor mounted door stops in corridor are trip hazards.
4. Floor tile gap developing.



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CORRIDORS





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CORRIDORS

Corridor Data	
Category:	Ceiling (Con.)
Ceiling Type:	Drop - ACT
Panel Condition:	Poor
Grid / Accessories:	Good
Overall Condition:	Fair
Replacement Cost:	\$90,000 - \$145,000*
General Notes:	
<p>Various ceiling tiles need to be replaced. Sources of water damage need to be identified and repaired. Panels are overall rated as 'Poor' due to many instances of damage/stains. *(Cost basis: \$4.50/SF)</p>	

Image Legend:
1. Various ceiling tiles have water stains.
2. Various ceiling tiles are physically damaged.
3. Some ceiling tiles are loose due to damage or warping.



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CORRIDORS





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MAINTENANCE / STORAGE

Maintenance & Storage Data	
Location:	Maintenance & Storage
Floor Material:	Concrete
Wall:	CMU Block
Storage Conditions:	Poor
Lighting:	Poor
Overall Condition:	Poor
Replacement Cost:	
General Notes:	
Storage room has major drainage issues.	

Image Legend:
1. Drainage issues in space
2. Walls need painted.
3. Abestos on present on pipes in tunnels



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MAINTENANCE / STORAGE





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RESTROOMS

Restroom Data	
Location:	Men
Fixtures:	Fair
Flooring:	Fair
Walls:	Fair
Ceiling:	Good
Accessories:	Good
Overall Condition:	Fair
Replacement Cost:	\$60,000 - \$75,000
General Notes:	
Condition of finishes is fair to good. However, the restroom layout is not ADA compliant.	

Image Legend:
1. Flooring is damaged / deteriorated.
1. Mirror installed above height required for ADA.
2. Pipe cover does not meet current ADA access requirements.
4. No ADA stalls / urinals.



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RESTROOMS





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ELEMENTARY



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ELEMENTARY CLASSROOMS

Classroom Data	
Category:	Flooring
Type:	VCT & Carpet
Category:	Wall Base
Type:	Rubber
Overall Condition:	Fair
Replacement Cost:	\$115,000 - \$176,000*
General Notes:	
The elementary school classroom flooring is in fair condition. *(Cost basis for all classrooms)	

Image Legend:
1. Carpet is showing signs of aging and wear.
2. Carpet is wrinkling, which poses a tripping hazard.
3. VCT is showing signs of aging and wear.



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ELEMENTARY CLASSROOMS





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MIDDLE SCHOOL



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MIDDLE SCHOOL CLASSROOMS

Classroom Data	
Category:	Casework
Type:	Lower
Countertop:	Laminate
Casework Material:	Laminate and Wood
Overall Condition:	Poor
Type:	Full Height Cabinet
Casework Material:	Laminate and Wood
Overall Condition:	Fair
Replacement Cost:	\$125,000 - \$140,000
General Notes:	
Overall condition of casework is poor and needs replaced.	

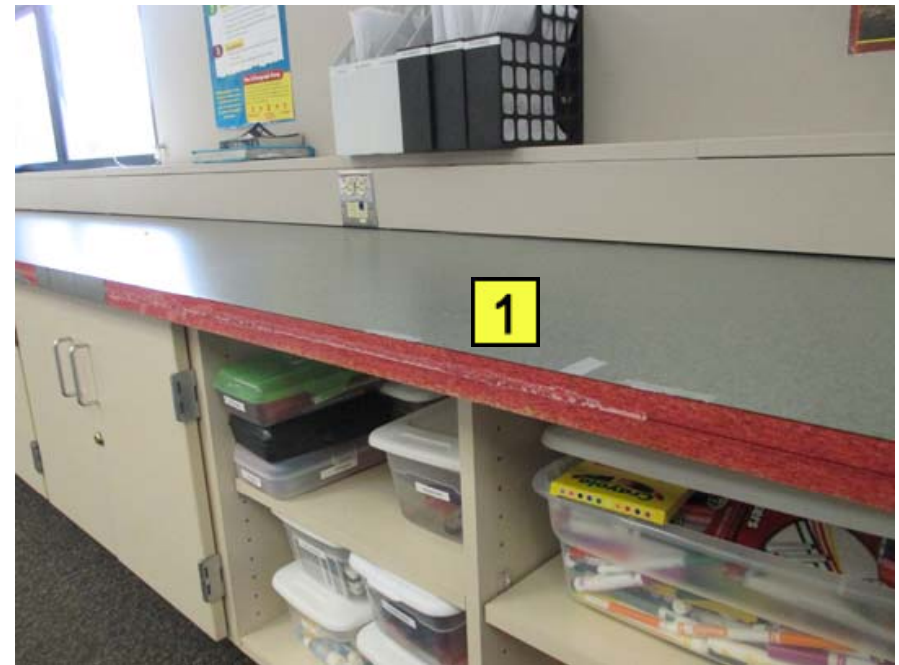
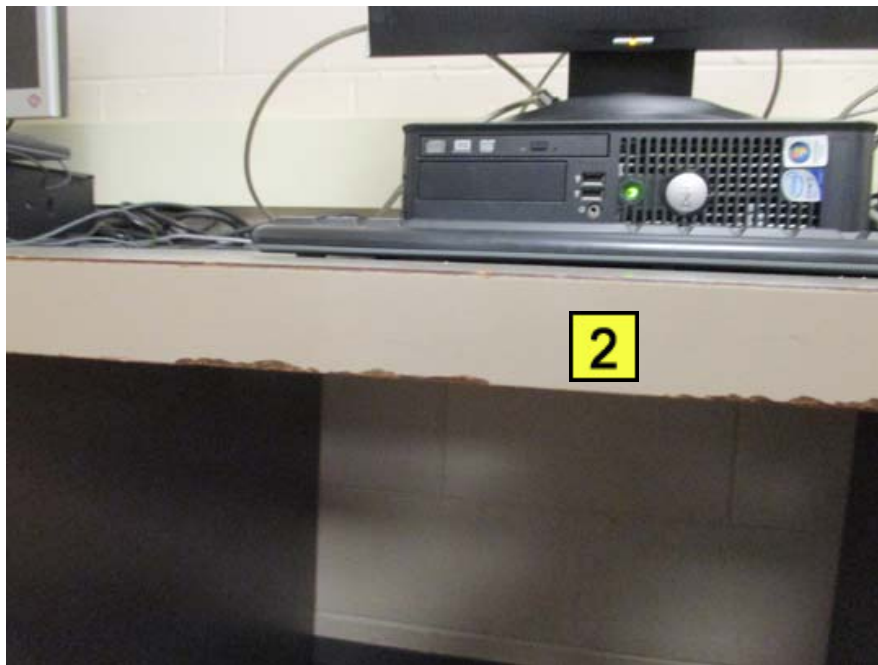
Image Legend:

1. Laminate is peeling off.
2. Countertop edges are worn.



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MIDDLE SCHOOL CLASSROOMS





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HIGH SCHOOL



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HIGH SCHOOL CLASSROOMS

Classroom Data	
Category:	Wall Surfaces
Type:	Painted Drywall
Overall Condition:	Fair
Type:	Painted CMU
Overall Condition:	Fair
Type:	Trim
Overall Condition:	Fair
Type:	White/Tack Boards Etc
Overall Condition:	Fair
Replacement Cost:	\$1,500 - \$2,500/per room
General Notes:	
Wall surfaces in HS classrooms (typ Rm 15 - 24) need spot repairs and in some cases more extensive refinishing. Wall damage from removal of adhesive (tape etc) is evident. Suggest more durable surfaces and paints and use of removable hanging products.	

Image Legend:
1. Typical spot repairs of wall surface and paint are needed.
2. Typical example of equipment removal where wall (and ceiling) were not repaired.
3. More extensive example of uncompleted wall repair after equipment reconfiguration.



MECHANICAL, ELECTRICAL, PLUMBING (MEP)



Westville Schools Facility Assessment

CAMPUS MECHANICAL

Media Center Air Handler	
Tag	AHU-4
Type:	Modular Air Handler
Zone Control:	Variable air volume boxes with hot water reheat
Installation Date:	2000
Controls:	DDC
Overall Condition:	Good
Pumps:	Inline cooling pump
Controls:	DDC
Overall Condition:	Poor
Replacement Cost:	\$140,000-\$165,000
General Notes:	
AHU-4 is a cooling only variable air volume air handler that serves the media center. Heating is provided at the VAV box hot water coils.	

Image Legend:

1. AHU-4
2. AHU-4 chilled water pump.



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CAMPUS MECHANICAL





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CAMPUS ELECTRICAL

Building Lighting Data	
Location:	Elementary School
Type of Lighting:	Fluorescent Fixtures
Control:	Wall Switches
Installation Date:	2000-2001
Expected Life Left:	4 years
Overall Condition:	Poor
Replacement Cost:	\$150,000 - \$160,000
General Notes:	
Current lighting system is inefficient and aged, several lamps are out, and lenses are dingy. Light levels in many areas are dim. Upgrade to newer LED light fixtures is needed. Occupancy sensor controls should also be installed in most areas for energy savings.	

Image Legend:

1. Elementary classroom showing dim lighting and aged light fixtures.



Westville Schools Facility Assessment

CAMPUS ELECTRICAL





ROOF SYSTEMS



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ROOF SYSTEMS

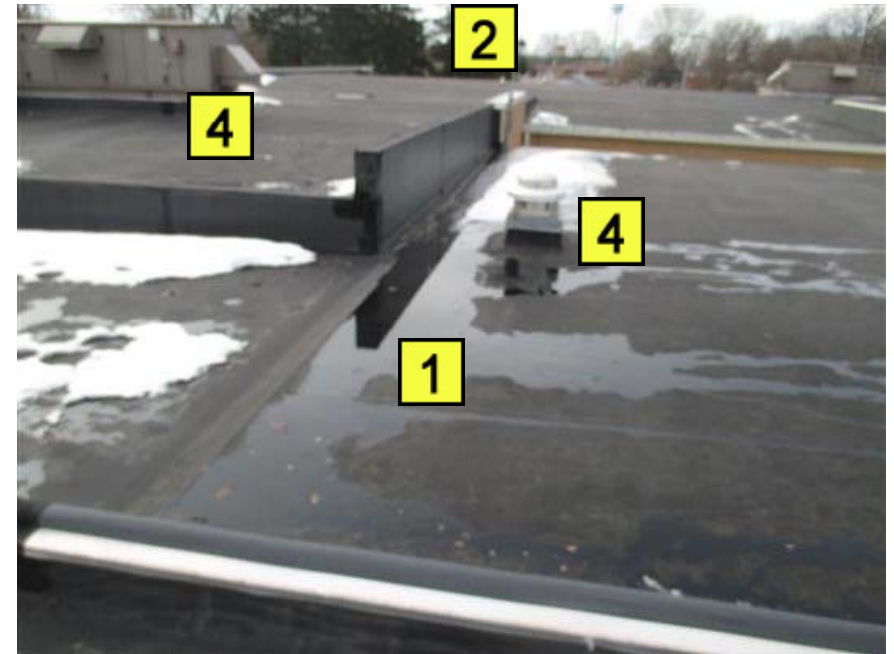
Existing Roof Data	
Roof Section Number:	2
Roof Area:	27,626 SF
Year Installed:	
Warranty Period:	
Roof Composition:	Single Ply-EPDM over Rigid Polyisocyanurate
Core Sample:	Not Available
Overall Roof Condition:	Poor
Visible Defects:	1 -Sealant issues. 2 -Ponding around drains. 3 -Ponding near gutters. 4. General maintenance.
Recommendations:	Roof replacement.
Cost of Repairs:	See probable cost section.

Image Legend:
1. Internal ponding, not sloping properly to drains or gutter. High points not allowing water to flow through.
2. No coping on top of wall.
3. Lip at gutter edge prevents flow of water to drain.
4. Mechanical penetrations to have crickets to drain water away from their curbs.
General Note: Roof membrane overall is in fair condition, but lack of drainage at gutters, equipment curbs lack of coping and general bad maintenance may create serious issues soon!



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ROOF SYSTEMS





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ROOF SYSTEMS

Existing Roof Data	
Roof Section Number:	20
Roof Area:	2,538 SF
Year Installed:	
Warranty Period:	
Roof Rating:	Failed
Roof Composition:	Asphalt Shingle
Core Sample:	Not Available
Overall Roof Condition:	Failed
Visible Defects:	1 - Shingle old, deteriorated. 2. General maintenance.
Recommendations:	Due to expansion of cafeteria, building indicated may be removed.
Cost of Repairs:	See probable cost section.

Image Legend:
1. Shingles are old and deteriorated.
2. General site condition has lack of drainage.



Westville Schools Facility Assessment

ROOF SYSTEMS





EXTERIOR CAMPUS CONDITIONS



Westville Schools Facility Assessment

PARKING AND HARDSCAPES

Parking and Hardscapes	
Location:	See Key Plan
Surfacing Material:	Asphalt
Parking Condition:	Poor
Drainage:	Poor
Sidewalk Material:	Concrete
Sidewalk Condition:	Fair
Pavement Cost:	\$500,000.00
Drainage Cost:	\$1M-\$2M
Sidewalk Cost:	\$250,000-\$750,000
General Notes:	
Recommend to replace and repair sidewalk / asphalt that is damaged / deteriorated. Parking has drainage issues that need to be addressed.	

Image Legend:
1. Shear cracks and missing concrete at sidewalks.
2. Parking lot showing signs of aging and cracking – needs to be resurfaced.
3. Some sidewalk collapse due to drainage issues.
4. No inlet in parking lot.
5. Some concrete step / stoop damage due to freeze / thaw.



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PARKING AND HARDSCAPES





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PARKING AND HARDSCAPES





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ATHLETIC FIELDS

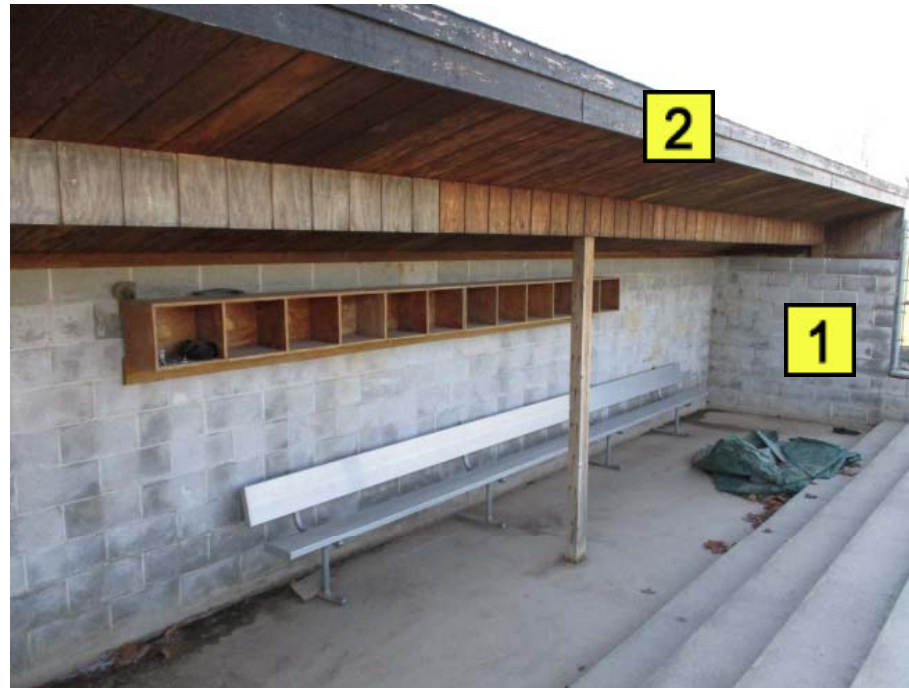
Athletic Fields Data - Itemized	
Location:	Baseball Field
Category:	Dugout
Condition:	Poor
Replacement Cost:	\$80,000 - \$100,000
General Notes:	
Recommend paint, maintain, and clean exposed wood and walls to prolong life expectancy.	

Image Legend:
1. Block walls not painted.
2. Exposed wood shows signs of aging, paint is peeling off.



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ATHLETIC FIELDS





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PLAYGROUND

Playground Data (Con.)	
Location:	See Key Plan
Ground Material:	Wood chips / Mulch
Playground Equip.:	Metal / Plastic
Overall Condition:	Fair
Site Cost:	\$75,000 - \$125,000
Equip. Cost:	\$150,000 - \$350,000
General Notes:	

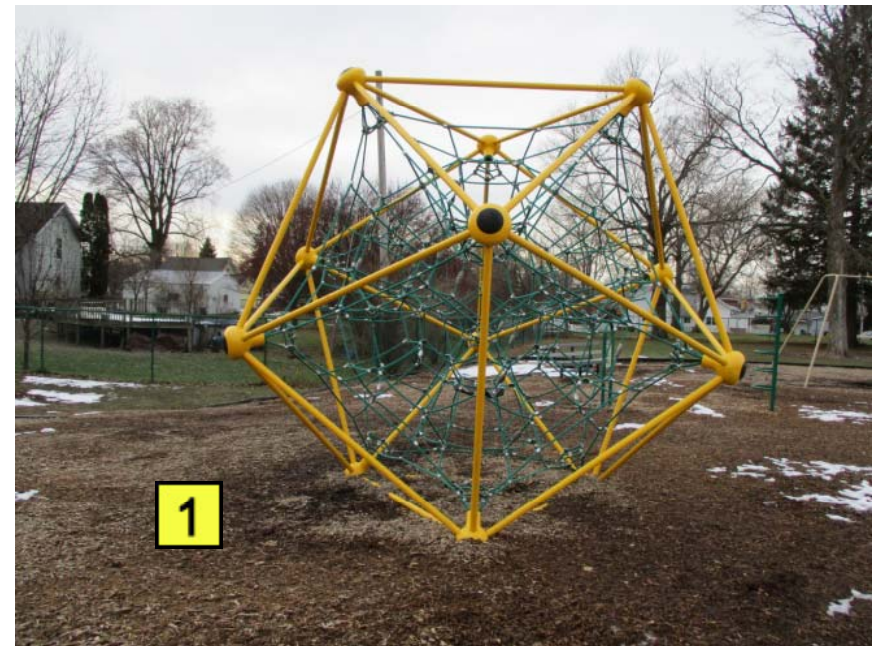
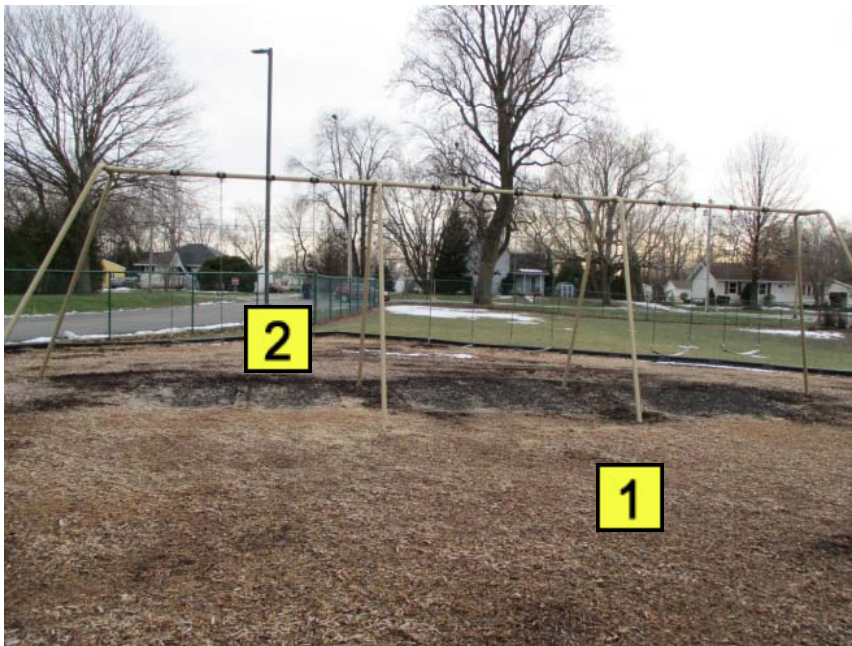
Image Legend:

1. Playground does not drain well.
2. Playground swing area needs rebuilt.



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PLAYGROUND





FACILITY ASBESTOS REPORT



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ASBESTOS

Westville Schools Asbestos Report				
Material	ACBM (Yes or Assumed)	Quantity	Cost of Abatement (\$)	Units
Sprayed On Soft Plaster	Yes	790	9,480.00	SF
Floor Tile & Black Mastic	Yes	56,250	112,500.00	SF
Thermal System Boiler Pipe Insul.	Yes	500 - 700	12,000.00	LF
Exterior Transite Panels	Yes	1,500	7,500.00	SF
12" x 12" Brown & Cream Floor Tile	Yes	200	400.00	SF
Total Quantified Abatement Cost			\$ 141,880.00	



PROBABLE COST ESTIMATE



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OVERALL PROBABLE COST

Westville Schools Overall Probable Cost		
Repair Cost	Low	High
Corporation Buildings Good	\$ 5,897,650	\$ 7,523,000
Corporation Buildings Fair	\$ 8,131,256	\$10,825,256
Corporation Buildings Poor	\$ 4,078,800	\$ 5,575,800
Corporation Buildings Failed	\$ 44,000	\$ 44,000
Corporation Roofs Good	\$ -	\$ -
Corporation Roofs Fair	\$ 1,735,040	\$ 1,735,040
Corporation Roofs Poor	\$ 1,212,320	\$ 1,212,320
Corporation Roofs Failed	\$ -	\$ -
Corporation Asbestos	\$ 141,880	\$ 141,880
Corporation Overall	\$ 21,240,946	\$ 27,057,296

Contingency Fees	10%	10%
A/E Design Fees	6.5%*	7.5%**

* 6.5% Is based on no public bidding being involved in the project.

**7.5% Is based on the inclusion of the public bidding process.



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CAMPUS





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SITE DRAINAGE





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CAFETERIA / KITCHEN





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EXTERIOR DOORS





THANK YOU!

QUESTIONS?