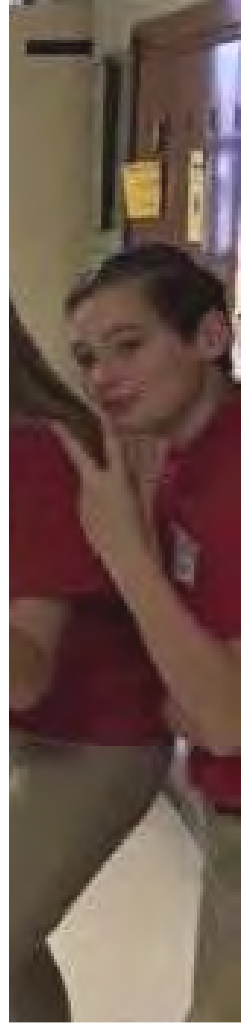


# Cuyahoga Falls City Schools

Facilities Committee Meeting #4

October 25, 2018



# Welcome



**Cheryl Fisher**

**TDA**

Educational/  
Master Planner



**Emily Danis**

**TDA**

Communications



**Jeff Tuckerman**

**Hammond**

Regional Program  
Consultant

# Agenda

## **Overview of Handouts**

Focus on Bolich Facility  
Condition

Focus on Newberry Facility  
Condition

Tour Bolich School

Tour Newberry Elementary

Questions

# Agenda

Overview of Handouts

**Focus on Bolich Facility  
Condition**

Focus on Newberry Facility  
Condition

Tour Bolich School

Tour Newberry Elementary

Questions

# Bolich Middle School – General Information



SF = 96,768 SF

Original Construction: 1953

Additions: 1967 – Media Center

Acres: 45.76 – shared with Newberry ES

Enrollment: 547

Grades 6-8

Building Capacity: 682 students



# Bolich Middle School – Sequence of Construction



# Bolich Middle School – Assessment Validation

	Item	Rating	SBDP 2009 FHA October 2014 Update Gandee 2015 EEA 2018 Cost Set	TDA June 2018 Assessment Validation Update	Delta:
A.	Heating System	3	\$3,301,724.16	\$3,301,724.16	\$0.00
B.	Roofing	3	\$1,281,337.60	<b>\$1,784,531.20</b>	<b>\$503,193.60</b>
C.	Ventilation / Air Conditioning	2	\$48,384.00	<b>\$0.00</b>	<b>(\$48,384.00)</b>
D.	Electrical Systems	3	\$1,570,544.64	\$1,570,544.64	\$0.00
E.	Plumbing and Fixtures	3	\$872,176.00	<b>\$882,176.00</b>	<b>\$10,000.00</b>
F.	Windows	3	\$31,417.00	<b>\$176,417.00</b>	<b>\$145,000.00</b>
G.	Structure: Foundation	2	\$25,200.00	\$25,200.00	\$0.00
H.	Structure: Walls and Chimneys	2	\$378,543.75	\$378,543.75	\$0.00
I.	Structure: Floors and Roofs	1	\$0.00	\$0.00	\$0.00
J.	General Finishes	3	\$2,457,122.60	<b>\$2,940,059.60</b>	<b>\$482,937.00</b>
K.	Interior Lighting	3	\$483,840.00	\$483,840.00	\$0.00
L.	Security Systems	3	\$275,788.80	<b>\$340,788.80</b>	<b>\$65,000.00</b>
M.	Emergency/Egress Lighting	3	\$96,768.00	\$96,768.00	\$0.00
N.	Fire Alarm	3	\$169,344.00	\$169,344.00	\$0.00
O.	Handicapped Access	2	\$437,430.00	<b>\$456,430.00</b>	<b>\$19,000.00</b>
P.	Site Condition	2	\$559,667.60	<b>\$578,867.60</b>	<b>\$19,200.00</b>
Q.	Sewage System	1	\$0.00	<b>\$16,200.00</b>	<b>\$16,200.00</b>
R.	Water Supply	1	\$0.00	\$0.00	\$0.00
S.	Exterior Doors	3	\$12,000.00	\$12,000.00	\$0.00
T.	Hazardous Material	3	\$337,240.80	\$337,240.80	\$0.00
U.	Life Safety	3	\$339,657.60	<b>\$344,657.60</b>	<b>\$5,000.00</b>
V.	Loose Furnishings	3	\$483,840.00	\$483,840.00	\$0.00
W.	Technology	3	\$838,010.88	\$838,010.88	\$0.00
	<b>Subtotal:</b>		<b>\$14,000,037.43</b>	<b>\$15,217,184.03</b>	<b>\$1,217,146.60</b>
X.	Construction Contingency / Non Construction Costs		\$3,420,251.14	<b>\$3,717,603.71</b>	<b>\$297,352.57</b>
	<b>Subtotal:</b>		<b>\$17,420,288.57</b>	<b>\$18,934,787.74</b>	<b>\$1,514,499.17</b>
	Total Cost (regional cost factor applied (103.60%)):		<b>\$18,047,418.96</b>	<b>\$19,616,440.10</b>	<b>\$1,569,021.14</b>

Cost to Replace  
Reno/Replace Ratio

\$24,229,739.52  
74%

\$24,229,739.52  
81%

6%





# Bolich Middle School – Condition



Exterior doors in Poor condition



ADA barriers present



Window gaskets failing



Asbestos flooring



# Bolich Middle School- Condition



Louvered interior doors worn



Roofs in poor condition



Guard/handrails not Code compliant

# Bolich Middle School – Condition



Dated & worn furniture



Fixtures in disrepair



General finishes worn

# Bolich Middle School Site:

45.76 acres including Newberry

- No dedicated bus/car drop off loop
- Site is open, generally flat and has ample greenspace *(has gentle slopes)*
- Greenspace available - about 27 acres
- Storm yard drains causing flooding *(tree roots in lines)*





# Educational Adequacy



SIZE

DAYLIGHTING



SAFETY/SECURITY





SIZE

and Flexibility

Student retention is **5%** with a lecture format,

**50%** with a discussion format and

**70%** with a practice by doing format.





SIZE

# and Flexibility



	EXISTING SF	OFCC RECOMMENDED SF	DELTA
CLASSROOMS	avg 748	900	-152
KINDERGARTEN	N/A	1,200	N/A
MEDIA CENTER	3,699	1,915	+1,784
STUDENT DINING	4,248	3,000	+1,248
KITCHEN	1,769	1,915	-146
GYMNASIUM	6,513	7,500	-987
MUSIC	3,427	2,700	+727
SCIENCE	avg 784	900-1,100	-116/-316

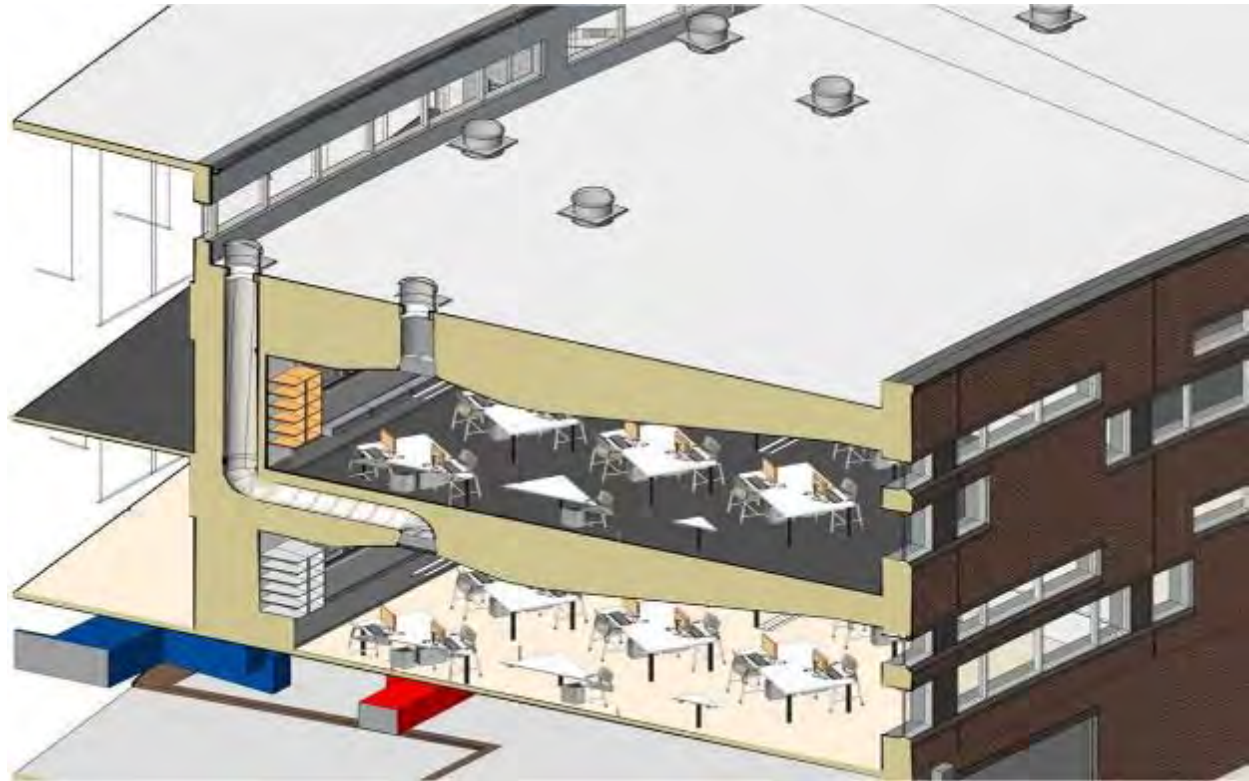


# DAYLIGHTING



“In one school district, students with the most daylighting in their classrooms progressed 20% faster on math tests and 26% faster on reading tests when compared to students in the least daylit classrooms.”

*Daylighting in Schools: Improving Student Performance and Health at a Price Schools Can Afford, 2000*



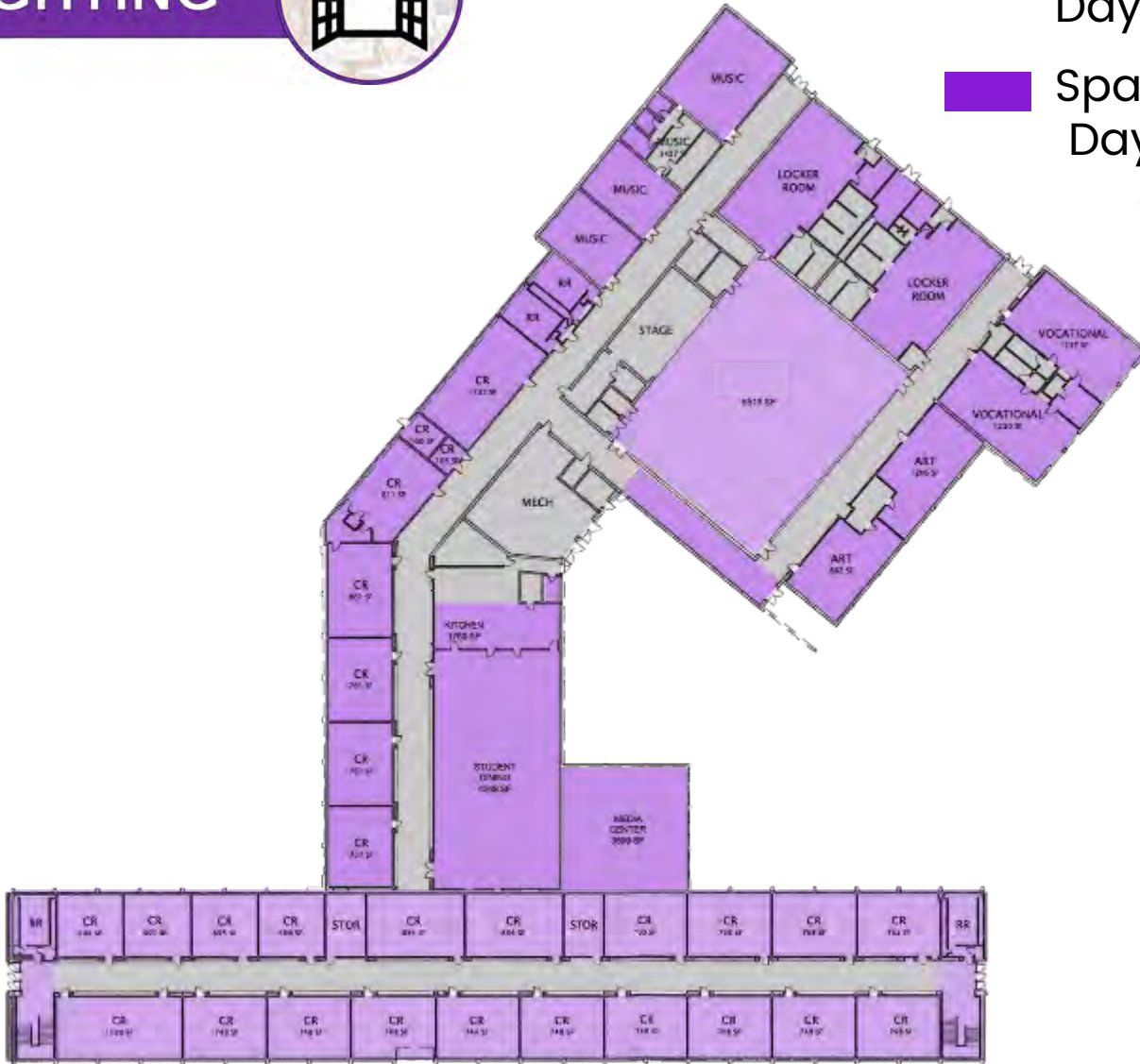


# DAYLIGHTING



■ Spaces without Daylight

■ Spaces with Daylight



# SAFETY/SECURITY



“Employing CPTED [Crime Prevention Through Environmental Design] concepts in new school construction and renovations can make substantial improvements, ranging from reconfiguring main entranceways to funnel visitors into the office to enhancing hallway supervision with improved line-of-sight, and reducing bullying by putting restroom sinks in a common area on the outer portion of the bathrooms so adults can better supervise kids washing their hands after using the facilities,”



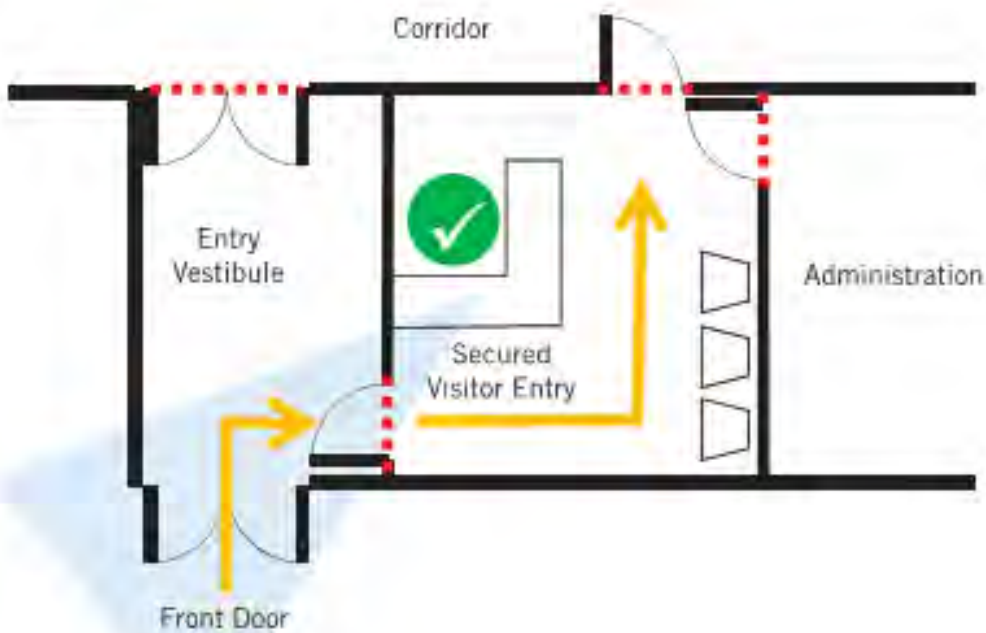
*School Safety A Shared Responsibility,  
Justine Brown, October 2015*





# SAFETY/SECURITY



## BUILDING SECURITY

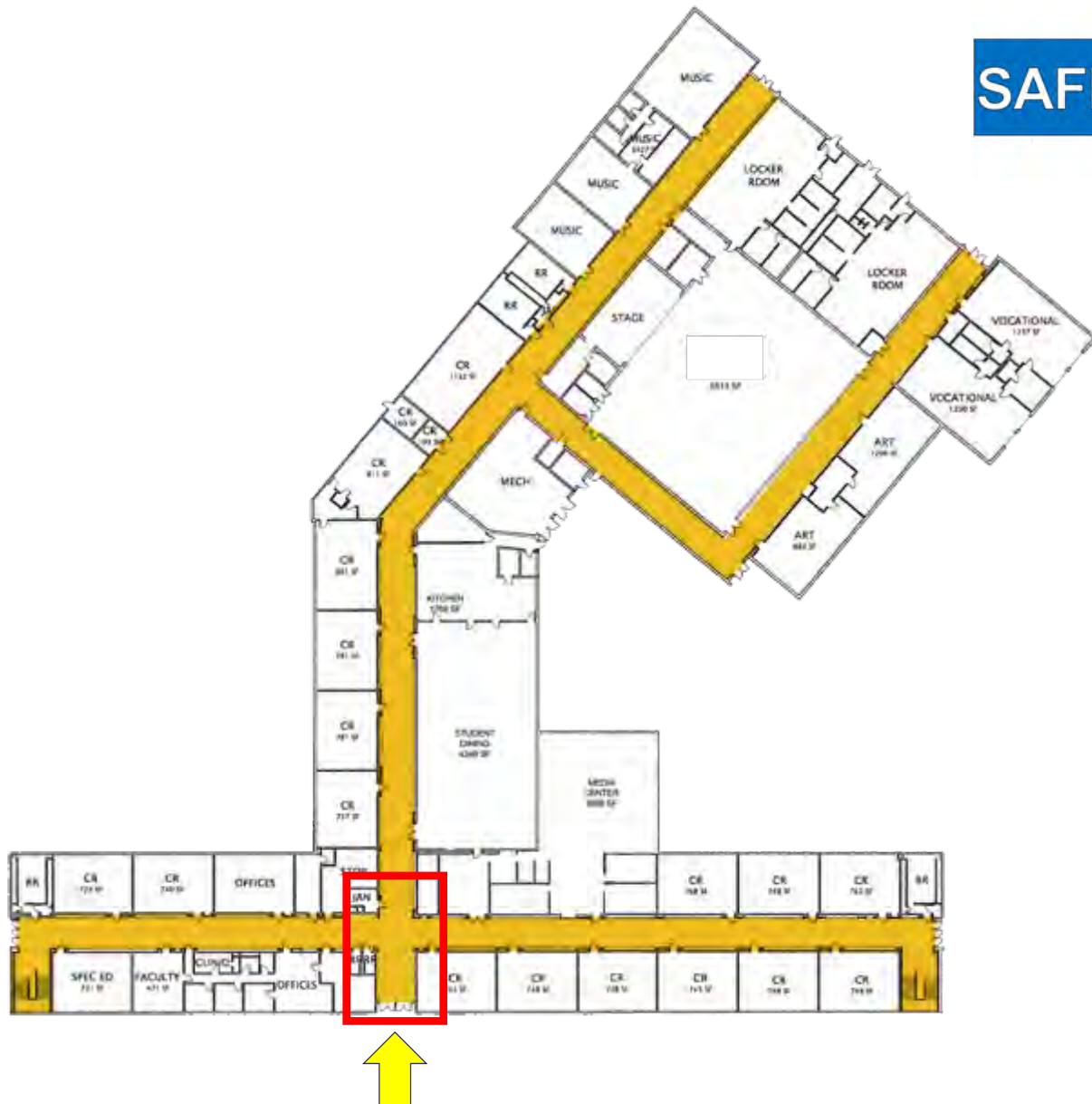
FACILITY ENTRY - BEST PRACTICES



-  Visitor Path
-  Secured Entry
-  Security Checkpoint
-  Visibility

*Perkins + Will*

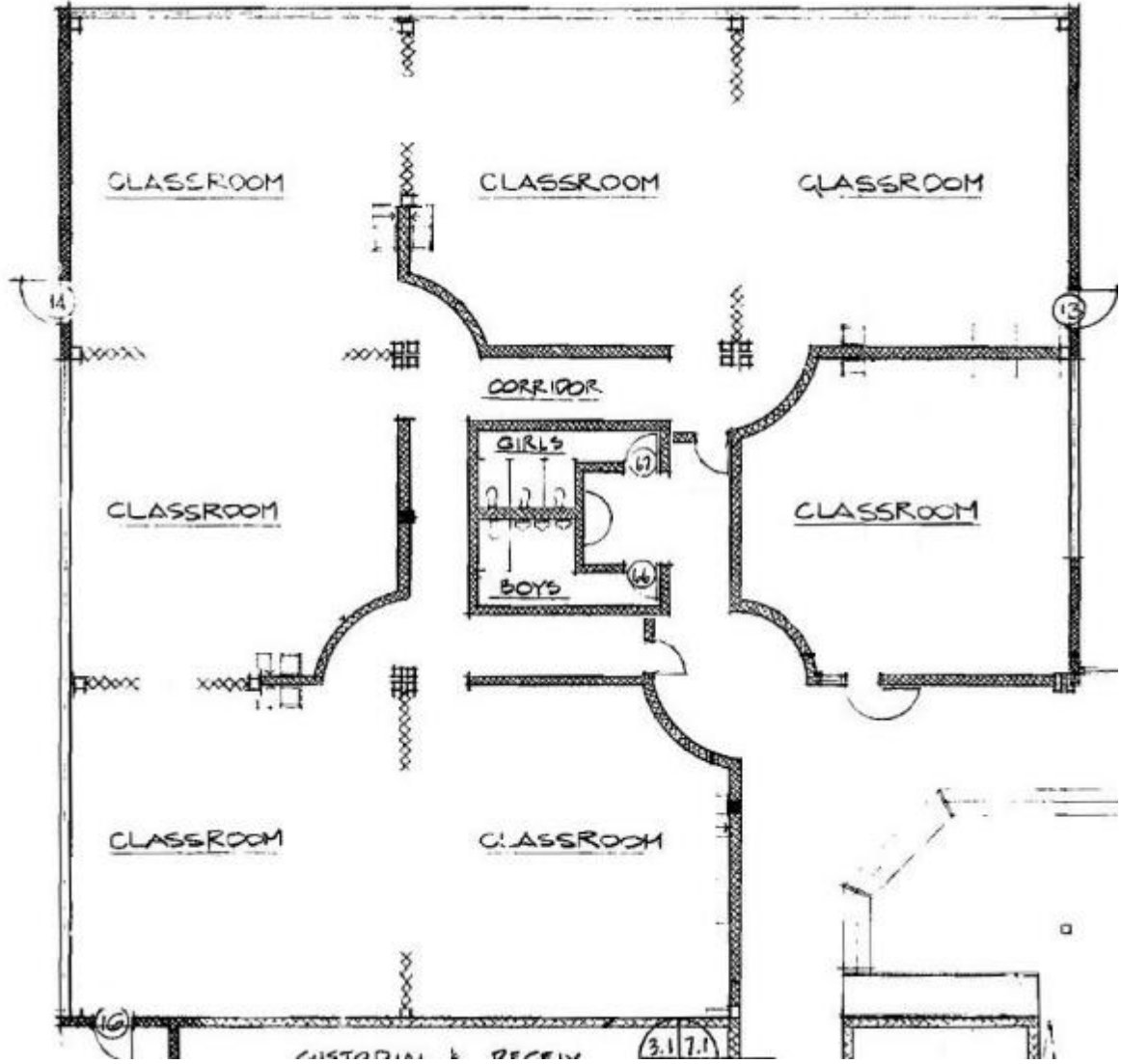
# SAFETY/SECURITY



- Main office is located near to main entrance
- A secure vestibule is not present at main entrance
- Corridor provides good line of sight for supervision on southern exposure but not on northern
- Restroom design does not provide sinks in a common area on the outer portion of the bathrooms so adults can better supervise kids



# SAFETY/SECURITY



# Bolich Middle School – Summary

- The overall renovation cost continues to increase and condition continues to deteriorate
- Site is large and has ample greenspace and room for expansion.
- Typical classrooms and science rooms are undersized compared to State standards and are static.
- The school has a generous amount of daylight – nearly all teaching/learning spaces are provided with natural light
- Some corridors provide good line of site, but others have multiple bends and turns, prohibiting supervision. The facility lacks security/safety features in the restroom design to inhibit opportunities for bullying and there is no secure vestibule entrance for enhanced security control.

# Agenda

Overview of Handouts

Focus on Bolich Facility  
Condition

**Focus on Newberry  
Facility Condition**

Tour Bolich School

Tour Newberry Elementary

Questions



# Newberry ES – General Information



SF = 42,774 SF

Original Construction: 1956

Additions: 1957 – 6 CR addition (north)

Acres: 45.76 – shared with Bolich MS

Enrollment: N/A

Building Capacity: 382 students



# Newberry ES – Sequence of Construction



# Newberry ES – Assessment Validation

Item	Rating	SBDF 2009 FHA October 2014 Update Gandee 2015 EEA 2018 Cost Set	TDA June 2018 Assessment Validation Update	Delta:
A. Heating System	3	\$1,459,448.88	\$1,459,448.88	\$0.00
<b>B. Roofing</b>	3	\$699,007.20	<b>\$862,521.60</b>	<b>\$163,514.40</b>
<b>C. Ventilation / Air Conditioning</b>	2	\$21,387.00	<b>\$0.00</b>	<b>(\$21,387.00)</b>
D. Electrical Systems	3	\$694,222.02	\$694,222.02	\$0.00
E. Plumbing and Fixtures	3	\$414,918.00	\$414,918.00	\$0.00
<b>F. Windows</b>	2	\$444,844.00	<b>\$435,444.00</b>	<b>(\$9,400.00)</b>
<b>G. Structure: Foundation</b>	2	\$39,175.00	<b>\$56,140.00</b>	<b>\$16,965.00</b>
H. Structure: Walls and Chimneys	2	\$259,590.75	\$259,590.75	\$0.00
I. Structure: Floors and Roofs	1	\$0.00	\$0.00	\$0.00
<b>J. General Finishes</b>	3	\$1,182,749.20	<b>\$1,310,729.70</b>	<b>\$127,980.50</b>
K. Interior Lighting	3	\$213,870.00	\$213,870.00	\$0.00
<b>L. Security Systems</b>	3	\$121,905.90	<b>\$181,905.90</b>	<b>\$60,000.00</b>
M. Emergency/Egress Lighting	3	\$42,774.00	\$42,774.00	\$0.00
N. Fire Alarm	3	\$74,854.50	\$74,854.50	\$0.00
<b>O. Handicapped Access</b>	2	\$332,355.00	<b>\$340,909.80</b>	<b>\$8,554.80</b>
<b>P. Site Condition</b>	3	\$291,030.36	<b>\$295,800.36</b>	<b>\$4,770.00</b>
Q. Sewage System	1	\$0.00	\$0.00	\$0.00
R. Water Supply	1	\$0.00	\$0.00	\$0.00
S. Exterior Doors	2	\$11,100.00	\$11,100.00	\$0.00
T. Hazardous Material	3	\$157,927.40	\$157,927.40	\$0.00
<b>U. Life Safety</b>	3	\$153,011.80	<b>\$155,911.80</b>	<b>\$2,900.00</b>
V. Loose Furnishings	3	\$213,870.00	\$213,870.00	\$0.00
W. Technology	3	\$525,989.02	\$525,989.02	\$0.00
<b>Subtotal:</b>		<b>\$7,354,030.03</b>	<b>\$7,707,927.73</b>	<b>\$353,897.70</b>
<b>X. Construction Contingency / Non Construction Costs</b>		<b>\$1,796,611.60</b>	<b>\$1,883,069.87</b>	<b>\$86,458.27</b>
<b>Total</b>		<b>\$9,150,641.63</b>	<b>\$9,590,997.60</b>	<b>\$440,355.97</b>
<b>Total Cost (regional cost factor applied (103.60%)):</b>		<b>\$9,480,064.73</b>	<b>\$9,936,273.51</b>	<b>\$456,208.78</b>

Cost to Replace  
Reno/Replace Ratio

**\$11,350,508.64**  
84%

**\$11,350,508.64**  
88%

4%

# Newberry ES – Condition



No A/C and outdated Heating / Ventilation System



Unit Ventilators do not provide code required amounts of fresh air



Outdated furnishings

# Newberry ES – Condition



Roofs have multiple layers and some in worn condition



Electrical system is original and in poor condition



Minimal security system



# Newberry ES – Condition



- 1) Fire alarm system does not meet OB Code, NFPA, or OSDM
- 2) Perforated wall board contains asbestos



Kitchen & general finishes dated/worn



VAT flooring in CR's

# Newberry ES School Site:

45.76 acres including Bolich

- No dedicated bus/car drop off loop - Circulation patterns poor
- Site is open, generally flat and has ample greenspace  
*(has gentle slopes)*
- Greenspace available - about 27 acres
- Ponding occurring to north - additional drainage needed





# Educational Adequacy



SIZE

DAYLIGHTING



SAFETY/SECURITY





SIZE

and Flexibility

Student retention is **5%** with a lecture format,

**50%** with a discussion format and

**70%** with a practice by doing format.



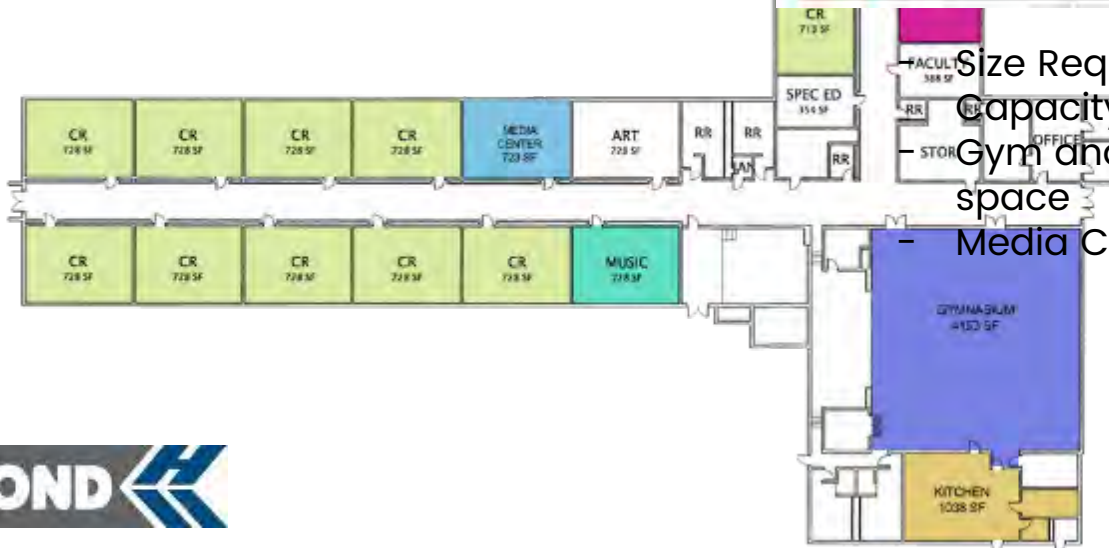


SIZE

# and Flexibility



	EXISTING SF	OFCC RECOMMENDED SF	DELTA SF
CLASSROOMS	avg 728	900	-172
KINDERGARTEN	990	1,200	-210
MEDIA CENTER	728	1,146	-418
STUDENT DINING	none	3,000	-3,000
KITCHEN	1,038	1,337	-299
GYMNASIUM	4,153	3,500	+653
MUSIC	728	1,200	-472
SCIENCE	N/A	N/A	N/A



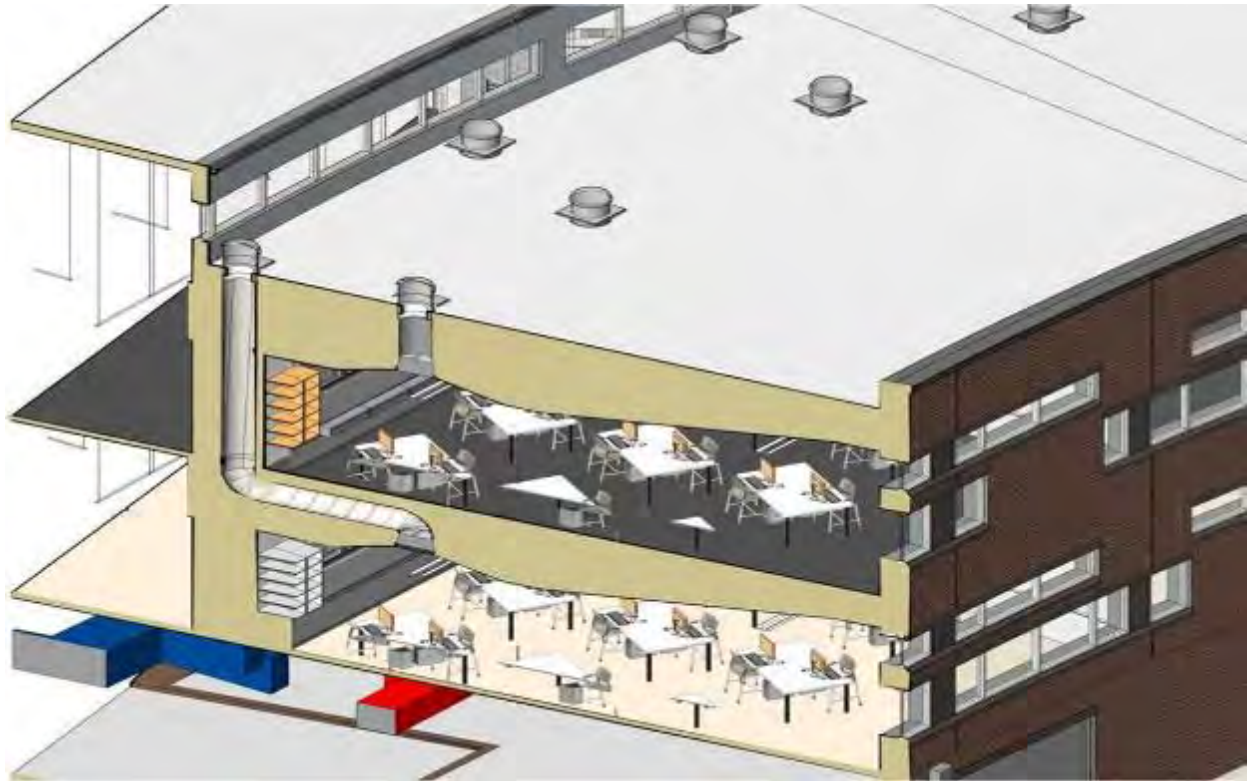
Size Requirements based on  
 Capacity enrollment of 382 students  
 Gym and student dining shared space  
 Media Center & Music in typical CR

# DAYLIGHTING



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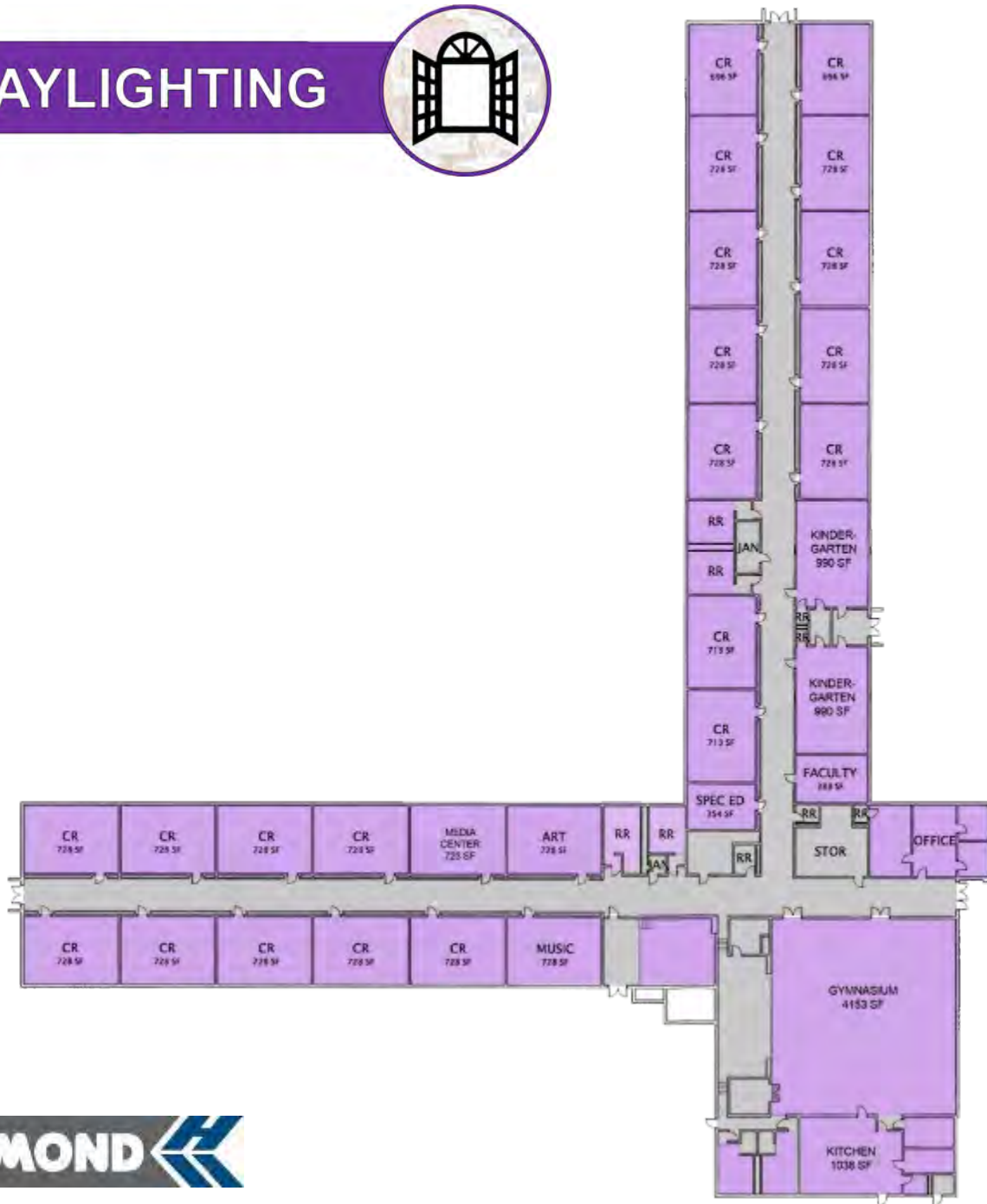




# DAYLIGHTING



- Spaces without Daylight
- Spaces with Daylight



# SAFETY/SECURITY



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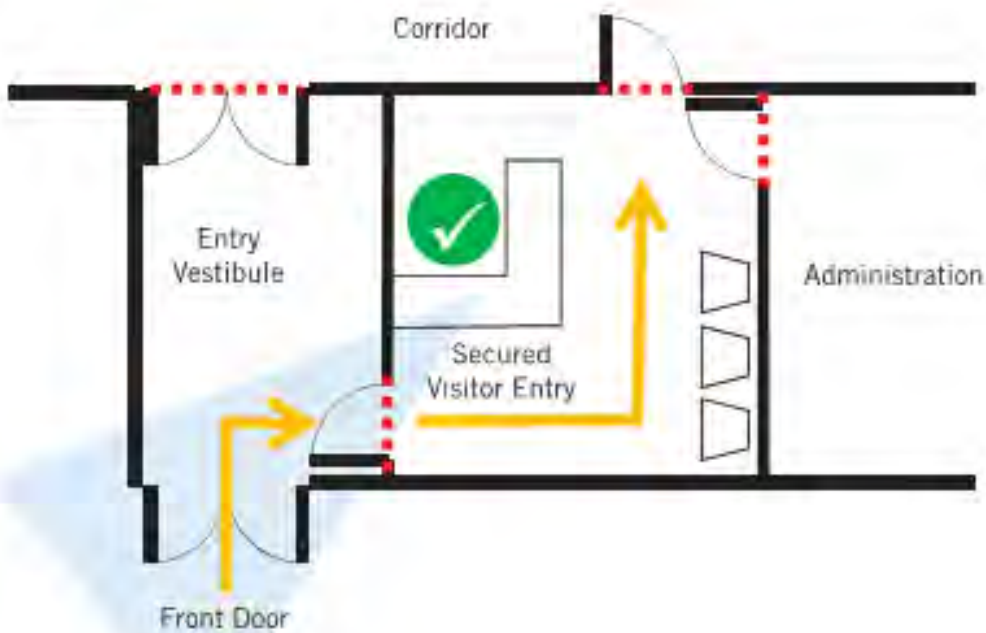
*School Safety A Shared Responsibility,  
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# SAFETY/SECURITY



## BUILDING SECURITY

FACILITY ENTRY - BEST PRACTICES



-  Visitor Path
-  Secured Entry
-  Security Checkpoint
-  Visibility

*Perkins + Will*



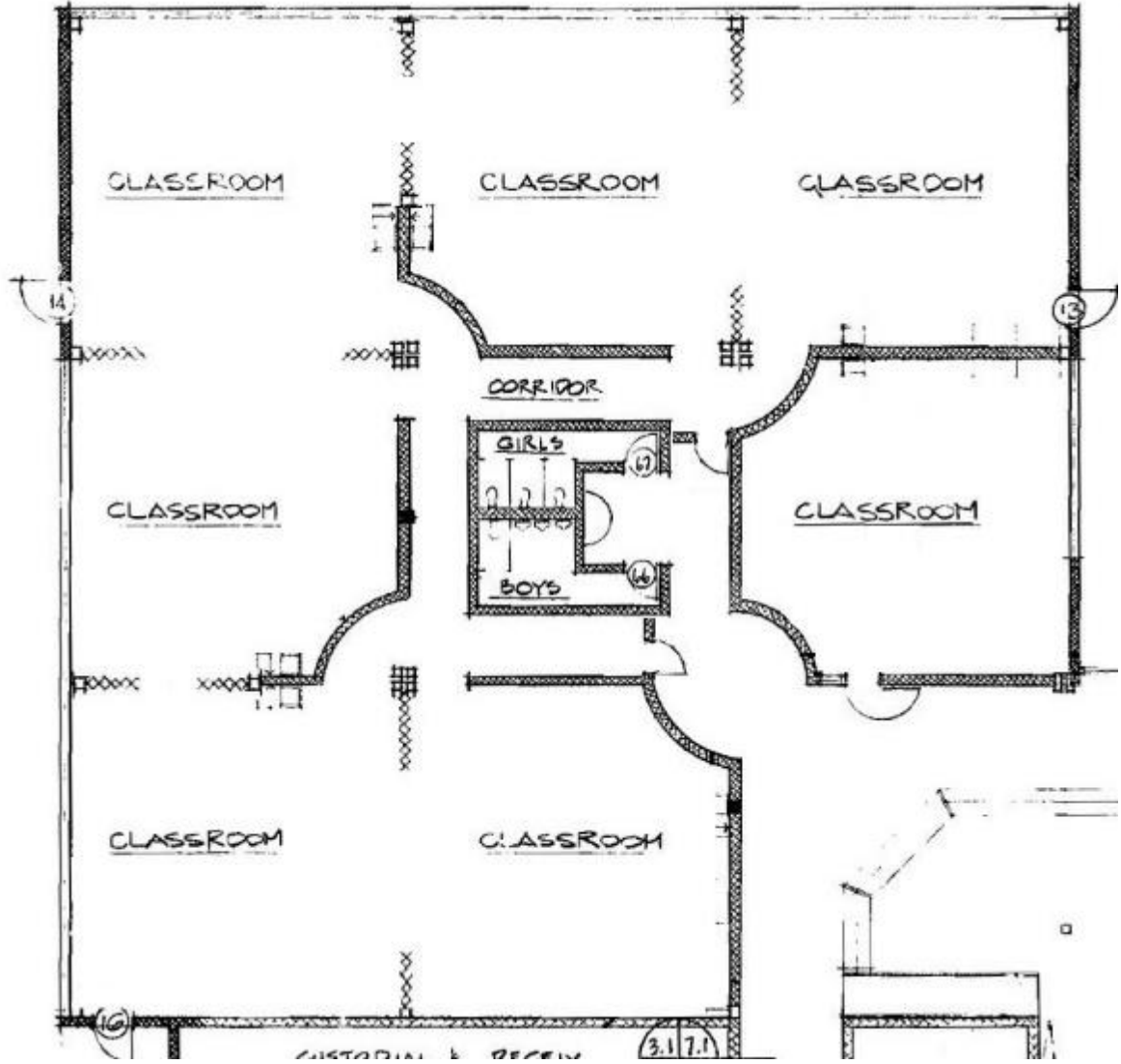
# SAFETY/SECURITY



- Main office is located near to main entrance
- A secure vestibule is not present at main entrance
- Corridor provides great line of sight for supervision
- Restroom design does not provide sinks in a common area on the outer portion of the bathrooms so adults can better supervise kids



# SAFETY/SECURITY



# Newberry ES – Summary

- The overall renovation cost continues to increase and condition continues to deteriorate
- Site is large and has ample greenspace and room for expansion.
- Typical classrooms and Kindergarten rooms are undersized compared to State standards and are static.
- There is not a separate gym and cafeteria – it's a shared space
- The school has a generous amount of daylight – nearly all teaching/learning spaces are provided with natural light
- Corridors have a great line of sight – supporting visual supervision. The facility lacks security/safety features in the restroom design to inhibit opportunities for bullying and there is no secure vestibule entrance for enhanced security control.

# Agenda

Overview of Handouts

Focus on Bolich Facility  
Condition

Focus on Newberry Facility  
Condition

Tour Bolich School

Tour Newberry Elementary

Questions

Media Center  
→

# Q & A Thank You!



Black Tiger  
Take a  
Tour

**tda**  
thendesign architecture