



Cuyahoga Falls City Schools

Facilities Committee Meeting #5

November 8, 2018

Welcome



Cheryl Fisher

TDA

Educational/
Master Planner



Emily Danis

TDA

Communications



Jeff Tuckerman

Hammond

Regional Program
Consultant

Agenda

Overview of Handouts

Focus on Roberts MS
Facility Condition

Focus on Silver Lake ES
Facility Condition

Tour Roberts MS School

Tour Silver Lake ES School

Questions

Agenda

Overview of Handouts

**Focus on Roberts MS
Facility Condition**

Focus on Silver Lake ES
Facility Condition

Tour Roberts MS School

Tour Silver Lake ES School

Questions

Roberts Middle School– General Information



SF = 75,249 SF

Original Construction: 1968

Additions: None

Acres: 14.8 (including Little Black Tiger Field)*

Enrollment: 405

Grades 6-8

Building Capacity: 648 students

Roberts 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 | \$2,567,495.88 | \$2,567,495.88 | \$0.00 |
| B. Roofing | 2 | \$578,273.20 | \$716,036.40 | \$137,763.20 |
| C. Ventilation / Air Conditioning | 2 | \$37,624.50 | \$0.00 | (\$37,624.50) |
| D. Electrical Systems | 3 | \$1,221,291.27 | \$1,221,291.27 | \$0.00 |
| E. Plumbing and Fixtures | 3 | \$675,943.00 | \$697,043.00 | \$21,100.00 |
| F. Windows | 3 | \$106,270.00 | \$124,270.00 | \$18,000.00 |
| G. Structure: Foundation | 1 | \$0.00 | \$0.00 | \$0.00 |
| H. Structure: Walls and Chimneys | 2 | \$167,125.00 | \$214,725.00 | \$47,600.00 |
| I. Structure: Floors and Roofs | 1 | \$0.00 | \$0.00 | \$0.00 |
| J. General Finishes | 3 | \$1,849,886.90 | \$2,218,014.40 | \$368,127.50 |
| K. Interior Lighting | 3 | \$376,245.00 | \$376,245.00 | \$0.00 |
| L. Security Systems | 3 | \$214,459.65 | \$274,459.65 | \$60,000.00 |
| M. Emergency/Egress Lighting | 3 | \$75,249.00 | \$75,249.00 | \$0.00 |
| N. Fire Alarm | 3 | \$131,685.75 | \$131,685.75 | \$0.00 |
| O. Handicapped Access | 2 | \$307,609.80 | \$310,607.80 | \$2,998.00 |
| P. Site Condition | 2 | \$371,530.30 | \$371,530.30 | \$0.00 |
| Q. Sewage System | 1 | \$0.00 | \$0.00 | \$0.00 |
| R. Water Supply | 1 | \$0.00 | \$0.00 | \$0.00 |
| S. Exterior Doors | 2 | \$28,800.00 | \$50,000.00 | \$21,200.00 |
| T. Hazardous Material | 2 | \$367,424.90 | \$367,424.90 | \$0.00 |
| U. Life Safety | 3 | \$321,859.30 | \$326,859.30 | \$5,000.00 |
| V. Loose Furnishings | 3 | \$376,245.00 | \$376,245.00 | \$0.00 |
| W. Technology | 3 | \$712,608.03 | \$712,608.03 | \$0.00 |
| Subtotal: | | \$10,487,626.48 | \$11,131,790.68 | \$644,164.20 |
| X. Construction Contingency / Non Construction Costs | | \$2,562,158.61 | \$2,719,529.86 | \$157,371.25 |
| Subtotal: | | \$13,049,785.09 | \$13,851,320.54 | \$801,535.45 |
| Total Cost (regional cost factor applied (103.60%)): | | \$13,519,577.36 | \$14,349,968.08 | \$830,390.72 |

Cost to Replacement
Reno/Replace Ratio

\$18,891,261.45
72%

\$18,891,261.45
76%

4%

Roberts Middle School – Condition



Spalling brick



Deteriorating wall



Spalling brick

Roberts Middle School- Condition



HVAC system does not provide 15 CFM fresh air per OBC



Guard/Handrail not code compliant



Rusted/delaminated lintel



Exterior doors in poor condition

Roberts Middle School Site:

14.8 combined acres (2 different sites - 3 combined parcels)

- Has dedicated one-way Bus Loop
- Site is open, relatively flat and park-like setting
- Greenspace available - about 3.7 acres
- Site very suitable for outdoor learning (picnic table areas & gardens provided)



Revised 11-9-18 to include west detached parcels

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





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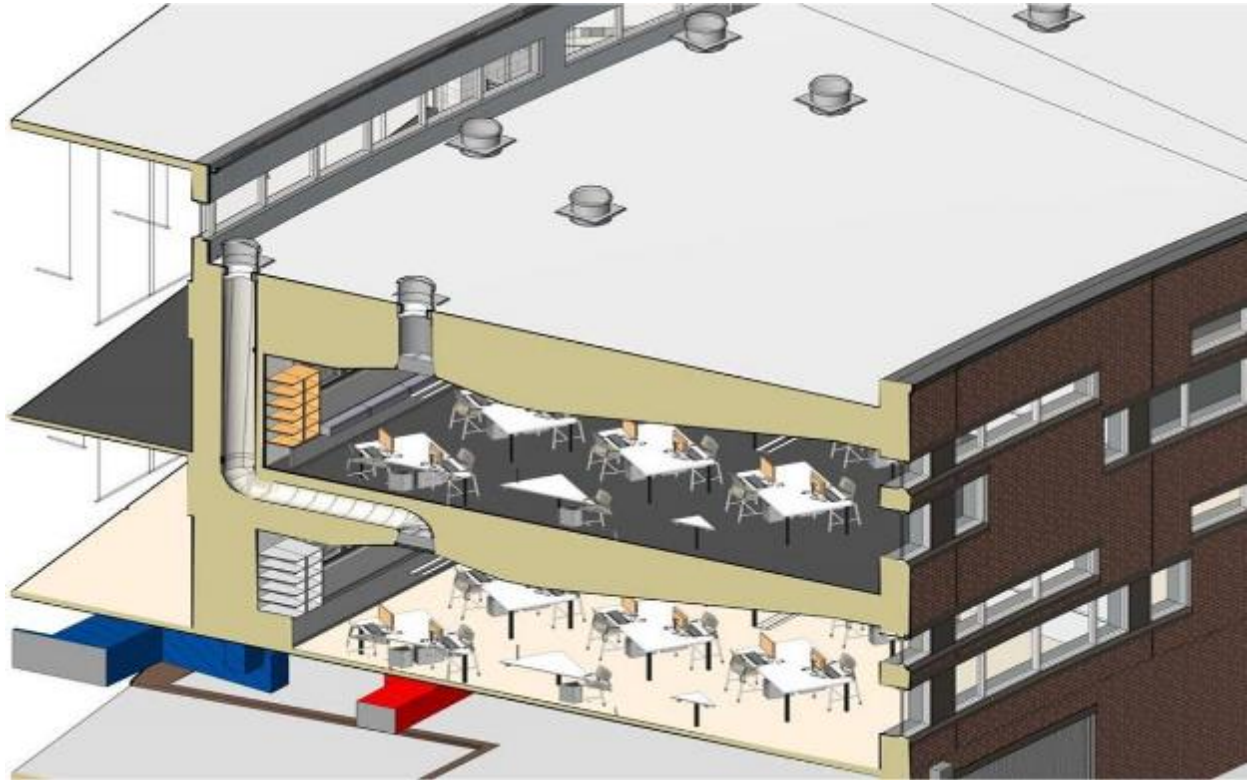
| | EXISTING SF | OFCC RECOMMENDED SF | DELTA |
|----------------|-------------|---------------------|----------|
| CLASSROOMS | avg 625 | 900 | -275 |
| KINDERGARTEN | N/A | 1,200 | N/A |
| MEDIA CENTER | 2,543 | 1,418 | +1,125 |
| STUDENT DINING | 3,406 | 3,000 | +406 |
| KITCHEN | 2,321 | 1,418 | +903 |
| GYMNASIUM | 6,891 | 7,000 | -109 |
| MUSIC | 2,290 | 2,600 | -310 |
| SCIENCE | avg 805 | 900-1,100 | -95/-295 |

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

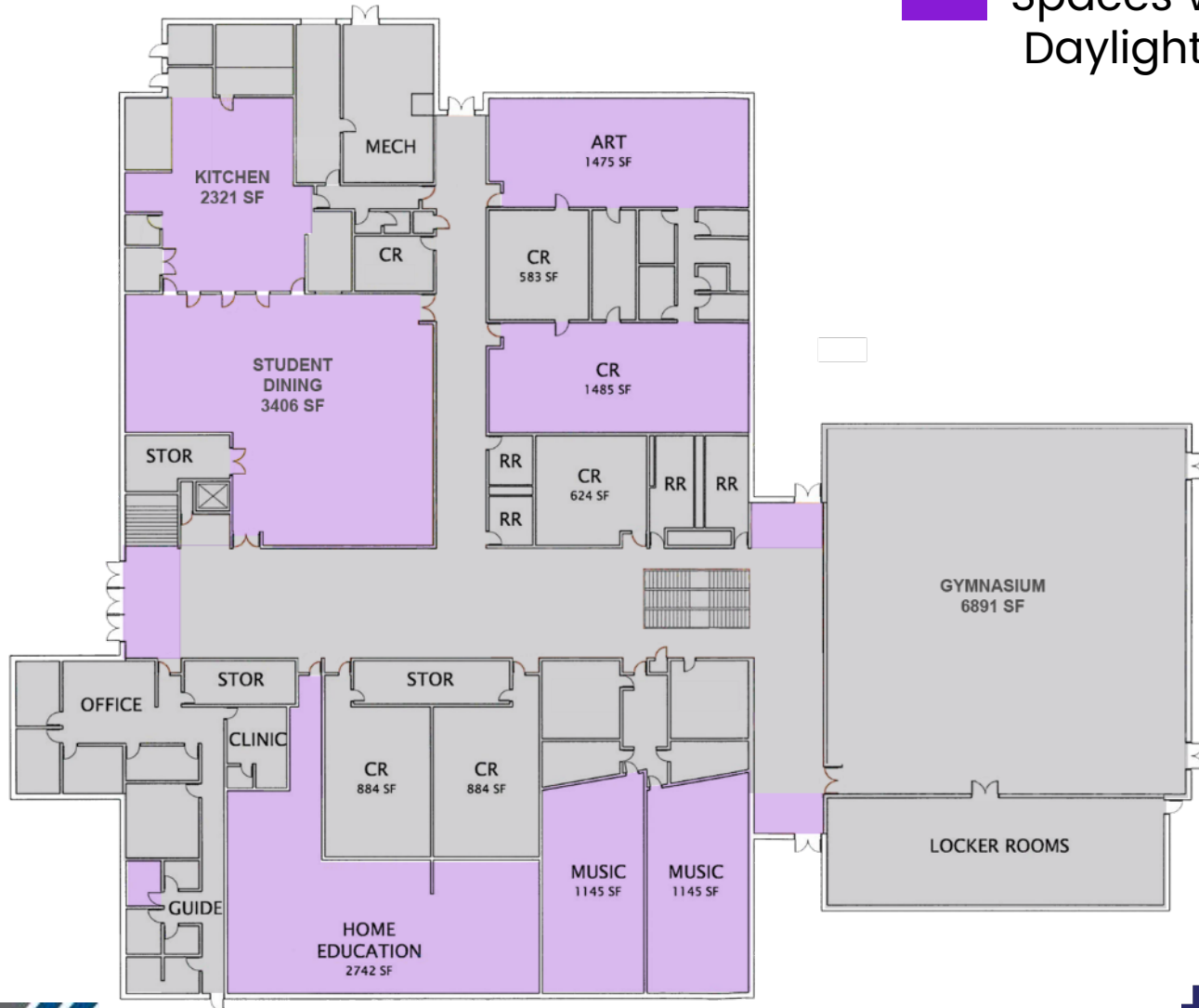


DAYLIGHTING



Spaces without Daylight

Spaces with Daylight



DAYLIGHTING



■ Spaces without Daylight

■ Spaces with Daylight



SAFETY/SECURITY



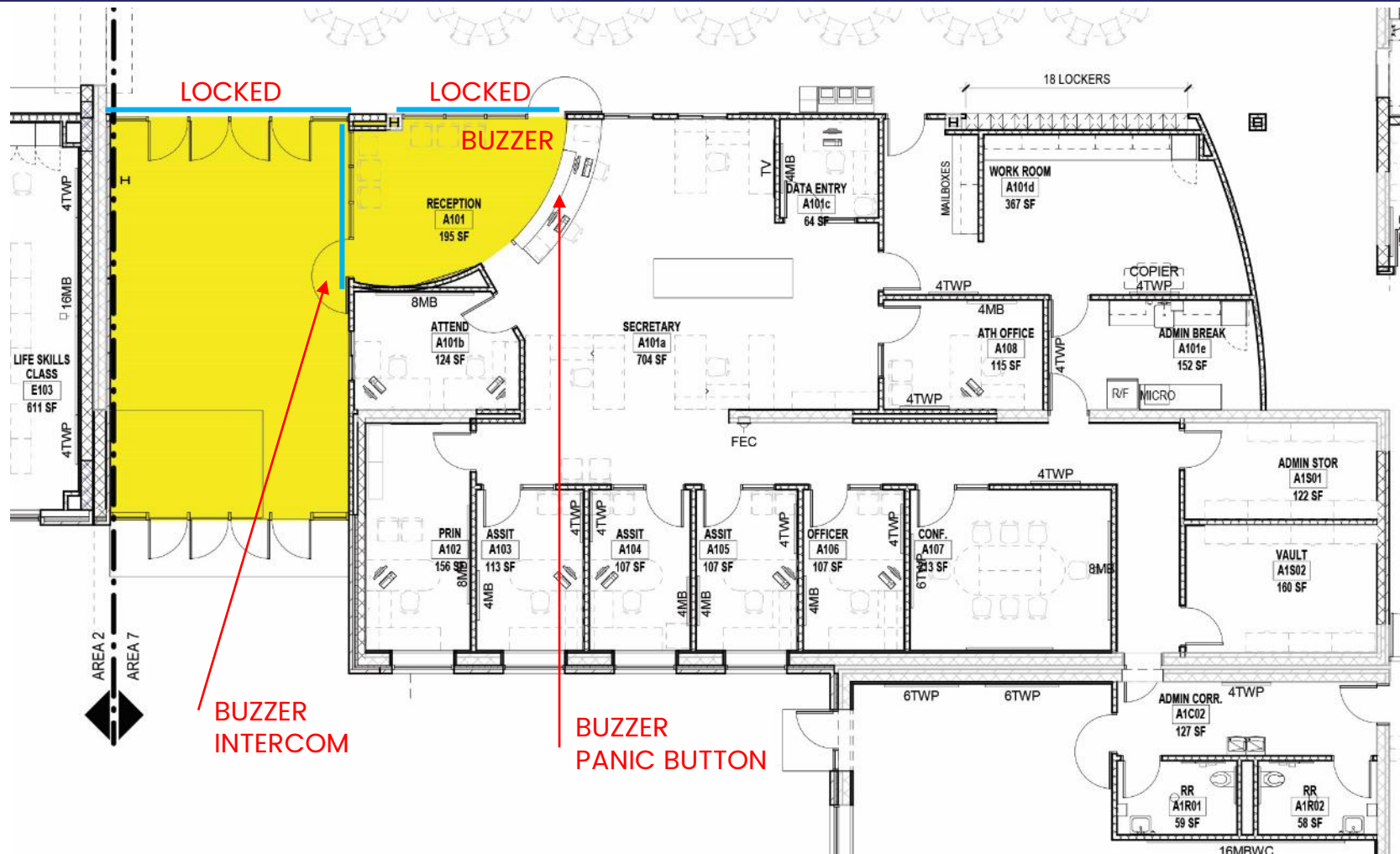
“Employing CPTED [Crime Prevention Through Environmental Design] concepts in new school construction and renovations can make substantial improvements, ranging from reconfiguring main entranceways to funnel visitors into the office to enhancing hallway supervision with improved line-of-sight, and reducing 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,”



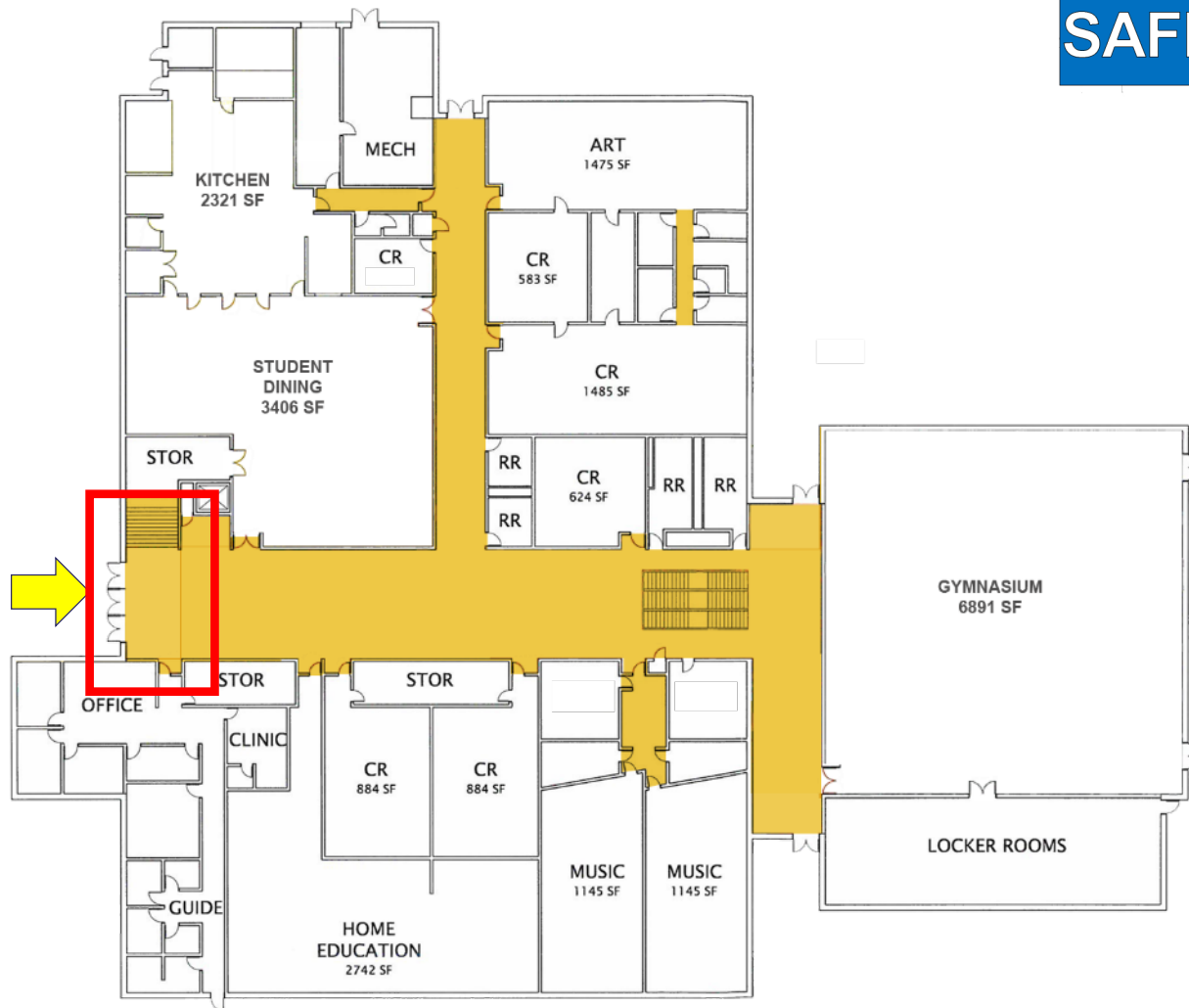
*School Safety A Shared Responsibility,
Justine Brown, October 2015*

PASSIVE DESIGN

Secure entry vestibule

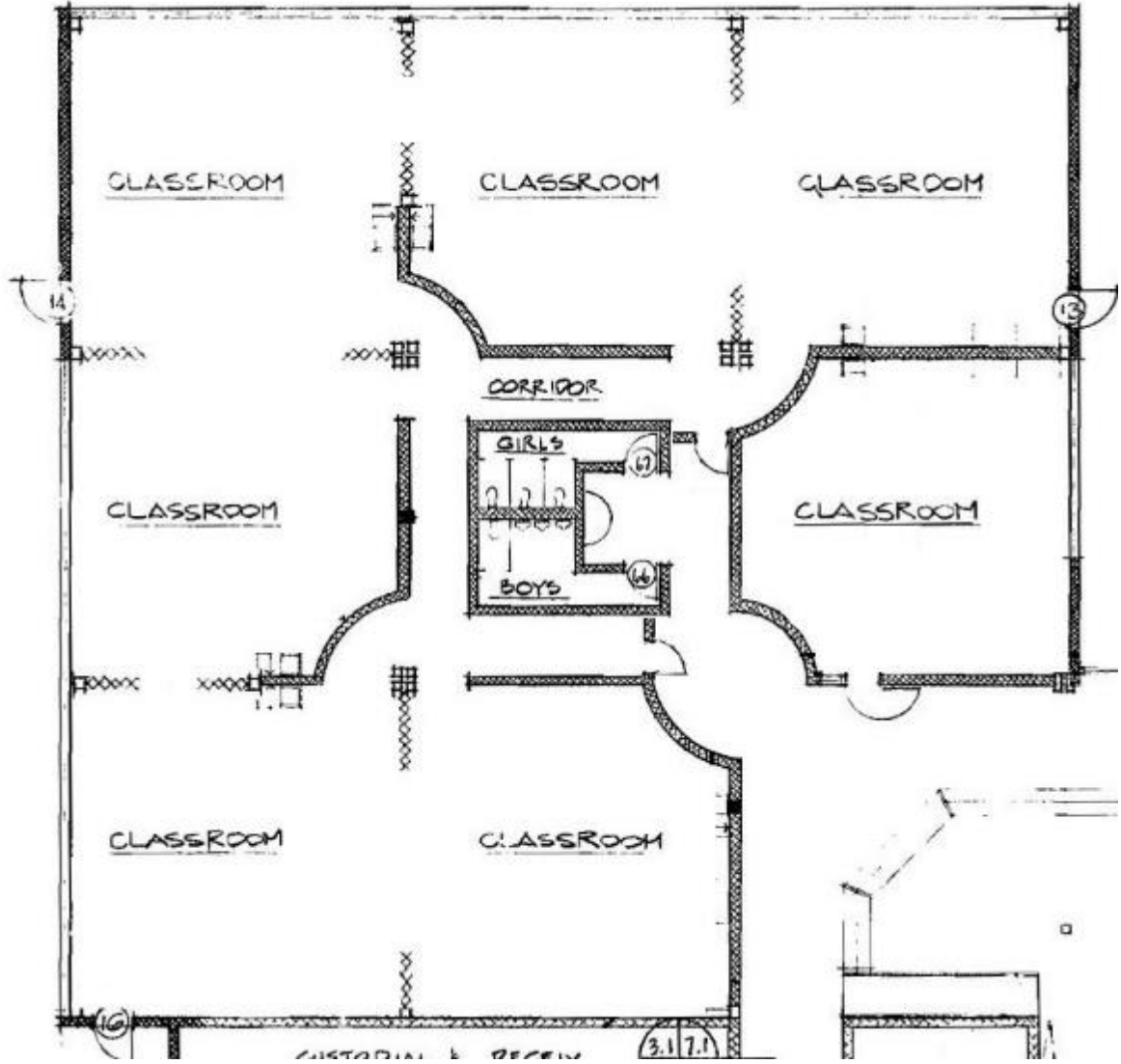


SAFETY/SECURITY



- Main office is located near to main entrance
- A secure vestibule is not present at main entrance
- Corridor generally provide good line of site, but there are a few bends limiting visual 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



Roberts Middle School – Summary

- The overall renovation cost rose slightly since last update and conditions continue to deteriorate
- Site is a pleasant, park-like setting, is provided with a dedicated bus loop for proper separation of car and buses, and has approx. 3.7 acres of greenspace suitable for outdoor learning opportunities.
- Typical classrooms and science rooms are undersized compared to State standards. The first floor spaces are typically static and non-flexible, but many upstairs rooms are equipped with movable walls allowing for a variety of class sizes.
- The compact design does not allow for natural light in many educational spaces.
- Most corridors provide good line of site, but some have 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 Roberts MS
Facility Condition

**Focus on Silver Lake ES
Facility Condition**

Tour Roberts MS School

Tour Silver Lake ES School

Questions

Silver Lake ES – General Information



SF = 37,606 SF

Original Construction: 1927

Additions: 1946 Classroom Addition
1950 Classroom Addition
1956 Classroom Addition

Acres: 4.3

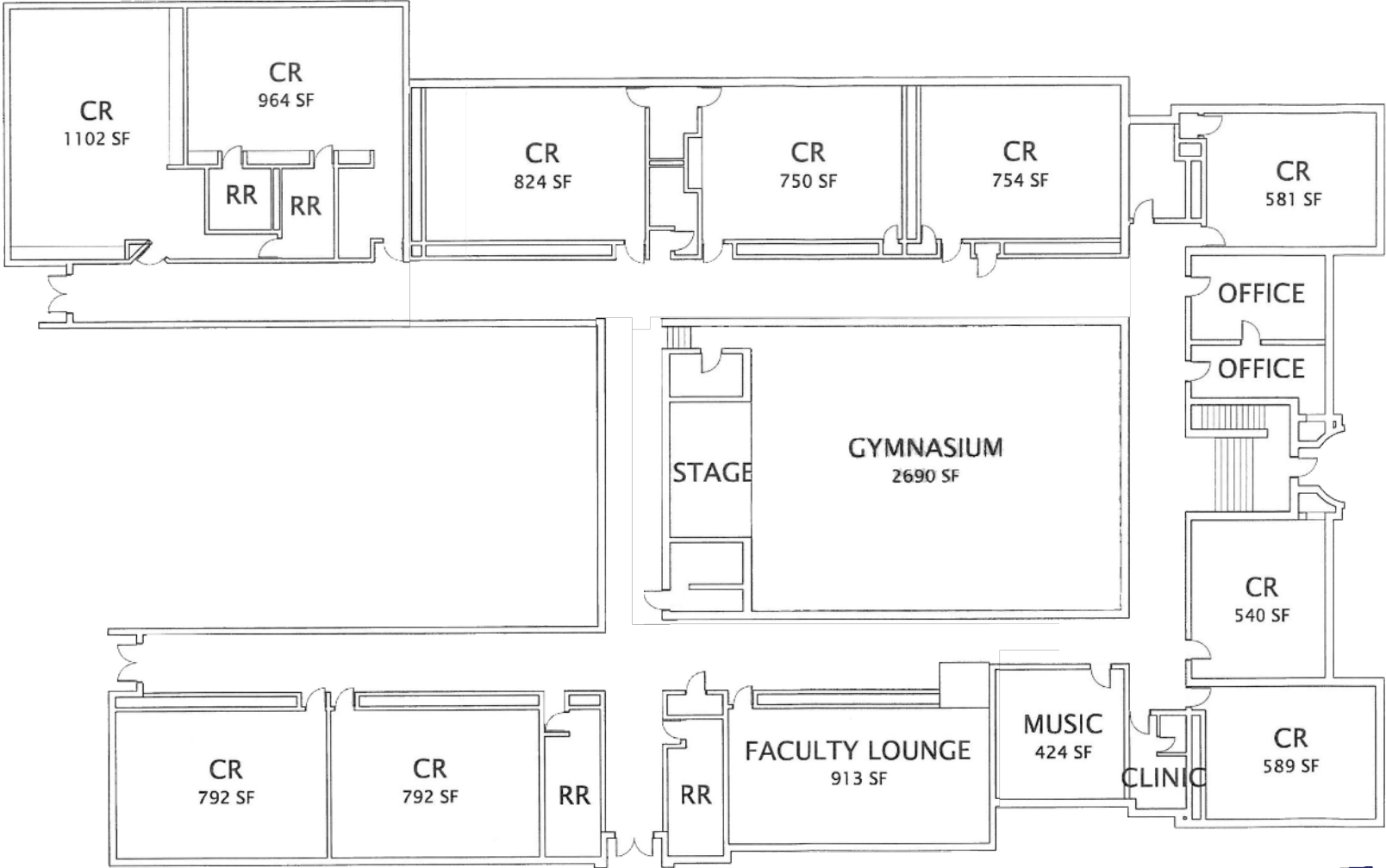
Grades: K-5

Enrollment: 233

Building Capacity: 300 students



Silver Lake ES – Sequence of Construction



Silver Lake ES – 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 | \$1,283,116.72 | \$1,283,116.72 | \$0.00 |
| B. Roofing | 3 | \$260,619.00 | \$365,201.40 | \$104,582.40 |
| C. Ventilation / Air Conditioning | 2 | \$23,803.00 | \$5,000.00 | (\$18,803.00) |
| D. Electrical Systems | 3 | \$610,345.38 | \$610,345.38 | \$0.00 |
| E. Plumbing and Fixtures | 3 | \$369,642.00 | \$369,642.00 | \$0.00 |
| F. Windows | 2 | \$22,848.00 | \$101,023.00 | \$78,175.00 |
| G. Structure: Foundation | 2 | \$59,160.00 | \$67,160.00 | \$8,000.00 |
| H. Structure: Walls and Chimneys | 2 | \$424,327.25 | \$472,327.25 | \$48,000.00 |
| I. Structure: Floors and Roofs | 2 | \$7,380.00 | \$7,380.00 | \$0.00 |
| J. General Finishes | 3 | \$1,074,473.20 | \$1,340,361.20 | \$265,888.00 |
| K. Interior Lighting | 3 | \$188,030.00 | \$188,030.00 | \$0.00 |
| L. Security Systems | 3 | \$107,177.10 | \$207,177.10 | \$100,000.00 |
| M. Emergency/Egress Lighting | 3 | \$37,606.00 | \$37,606.00 | \$0.00 |
| N. Fire Alarm | 3 | \$65,810.50 | \$65,810.50 | \$0.00 |
| O. Handicapped Access | 2 | \$411,753.00 | \$411,753.00 | \$0.00 |
| P. Site Condition | 2 | \$279,051.40 | \$335,460.00 | \$56,408.60 |
| Q. Sewage System | 1 | \$0.00 | \$0.00 | \$0.00 |
| R. Water Supply | 1 | \$0.00 | \$0.00 | \$0.00 |
| S. Exterior Doors | 3 | \$11,100.00 | \$17,100.00 | \$6,000.00 |
| T. Hazardous Material | 3 | \$468,642.60 | \$468,642.60 | \$0.00 |
| U. Life Safety | 3 | \$365,991.45 | \$368,891.45 | \$2,900.00 |
| V. Loose Furnishings | 3 | \$188,030.00 | \$188,030.00 | \$0.00 |
| W. Technology | 3 | \$495,647.08 | \$495,647.08 | \$0.00 |
| Subtotal: | | \$6,754,553.68 | \$7,405,704.68 | \$651,151.00 |
| X. Construction Contingency / Non Construction Costs | | \$1,650,158.18 | \$1,809,236.37 | \$159,078.19 |
| Subtotal: | | \$8,404,711.86 | \$9,214,941.05 | \$810,229.19 |
| Total Cost (regional cost factor applied (103.60%)): | | \$8,707,281.49 | \$9,546,678.93 | \$839,397.44 |

Cost to Replace
Reno/Replace Ratio

\$9,979,128.16
87%

\$9,979,128.16
96%

8%

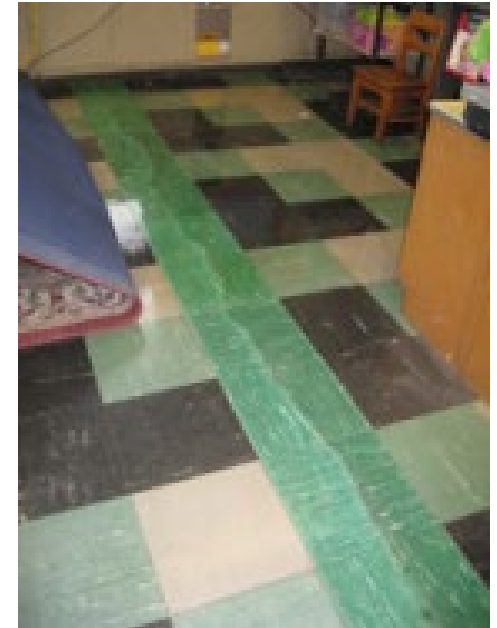
Silver Lake ES - Condition



General Finishes in
Worn condition



Retaining wall deteriorating



Floor crack due to
settlement

Silver Lake ES - Condition



ADA barriers with multiple stories and level changes



Exterior doors in worn out condition



Concrete steps deteriorating

Silver Lake Elementary School Site:

4.3 acres

- Does not have dedicated one-way Bus Loop
- One entry/exit point in parking lot impedes safe circulation
- Site is open and relatively flat with benches and tables provided to support outdoor learning
- Greenspace available - about 2.2 acres



Educational Adequacy



SIZE

DAYLIGHTING



SAFETY/SECURITY





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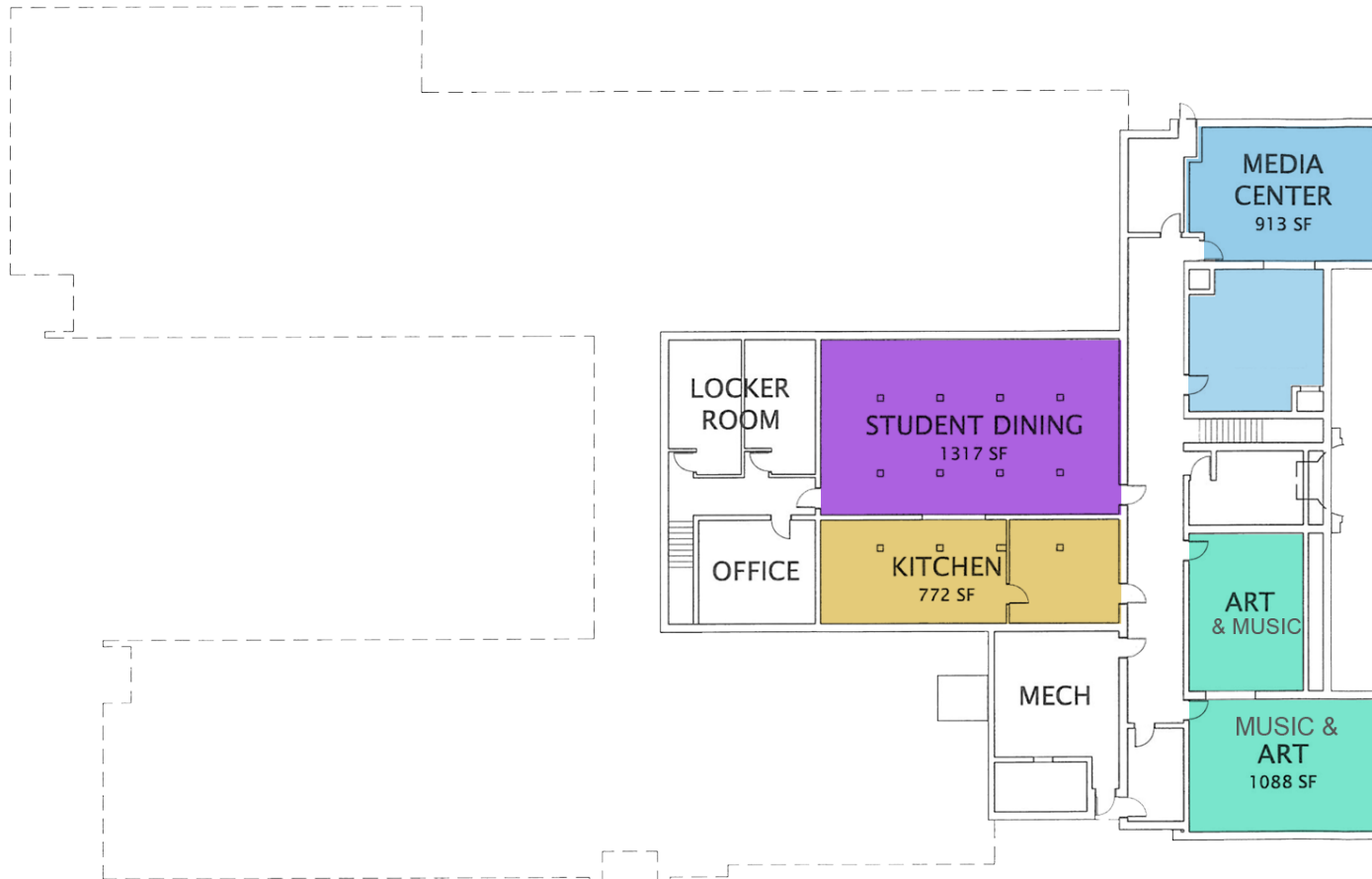
70% with a practice by doing format.





SIZE

and Flexibility



Revised 11-9-18 to include recent change in Music location (was on 1st floor previously as presented 11-8-18)



SIZE

and Flexibility

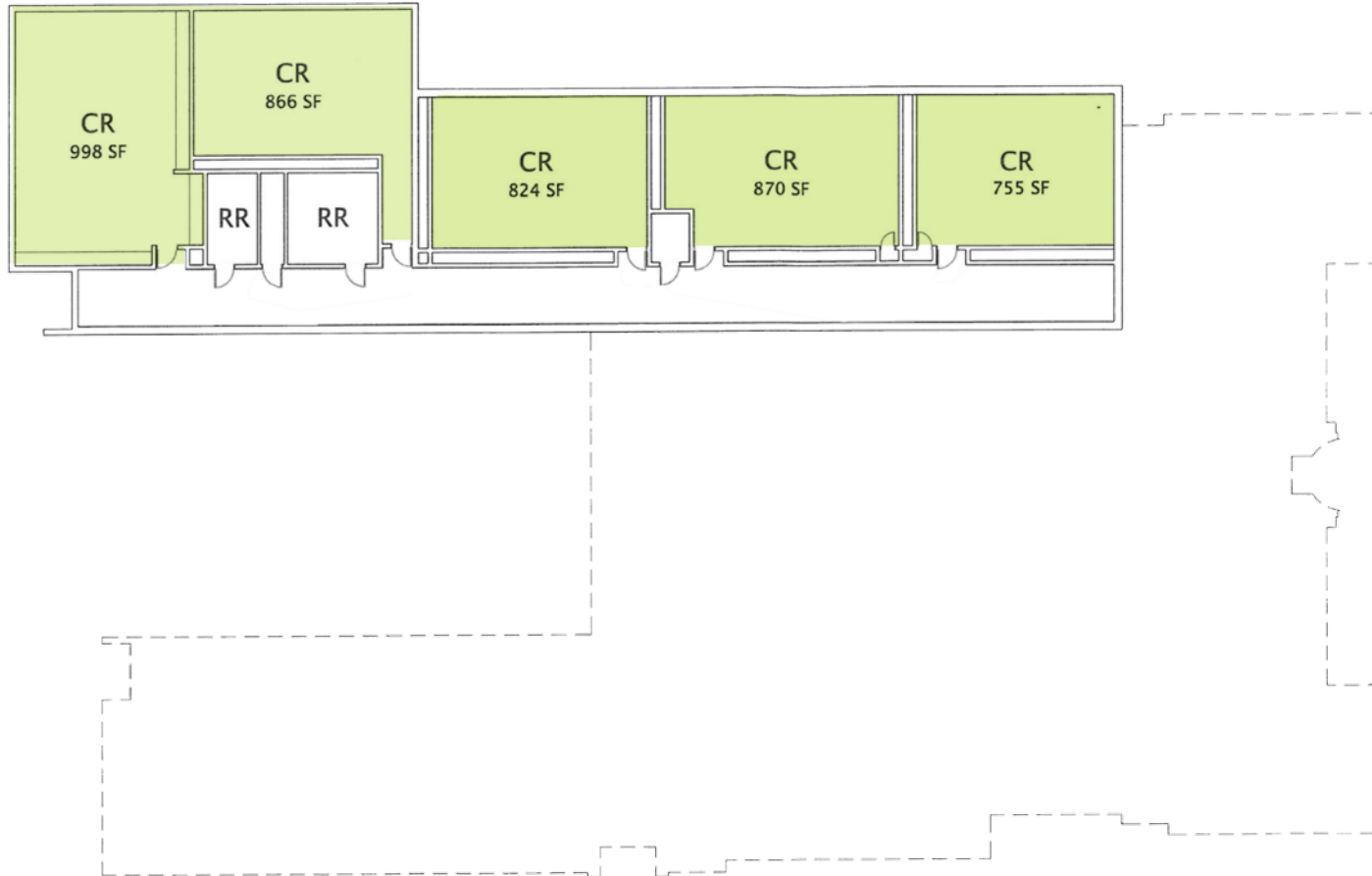


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SIZE









and Flexibility





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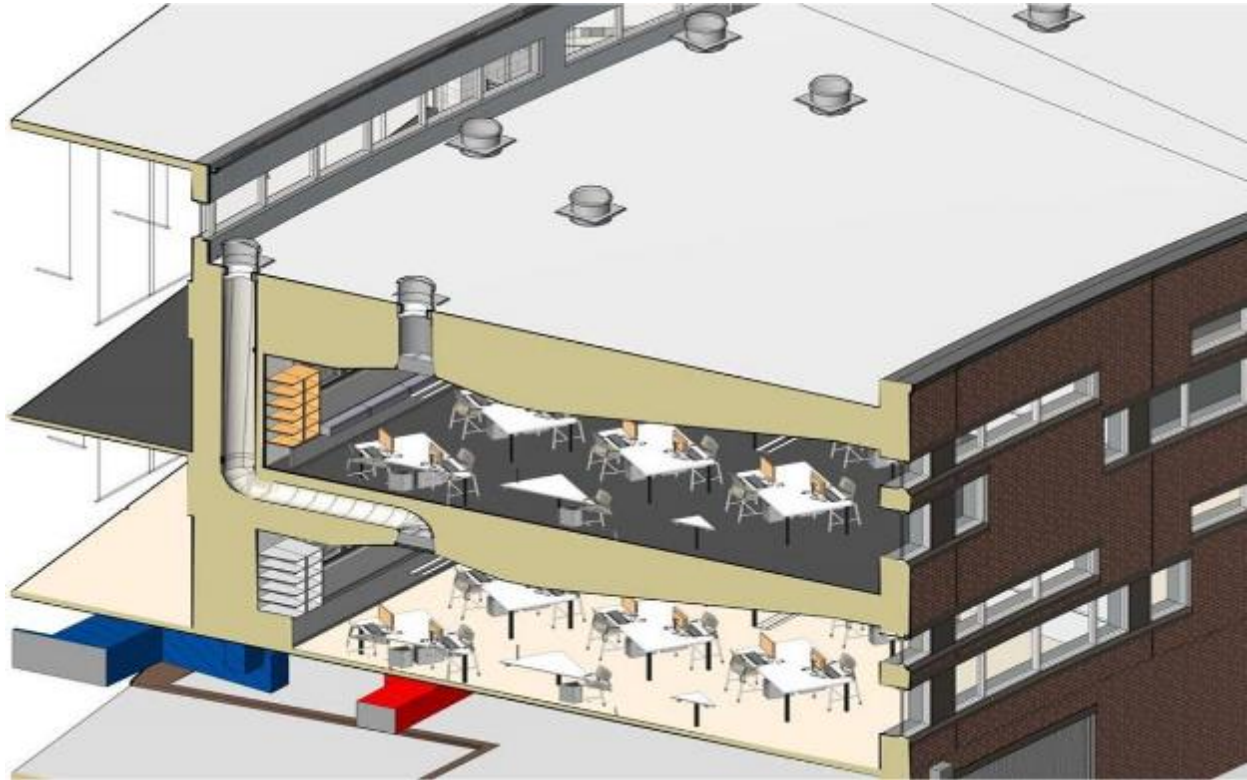
| | EXISTING SF | OFCC RECOMMENDED SF | DELTA |
|--|-------------|---------------------|--------|
|  CLASSROOMS | avg 764 | 900 | -136 |
|  KINDERGARTEN | avg 1,033 | 1,200 | -167 |
|  MEDIA CENTER | 913 | 699 | +214 |
|  STUDENT DINING | 1,317 | 3,000 | -1,683 |
|  KITCHEN | 772 | 816 | -44 |
|  GYMNASIUM | 2,690 | 3,500 | -810 |
|  MUSIC | 424 | 1,200 | -776 |
|  SCIENCE | N/A | N/A | N/A |

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.”

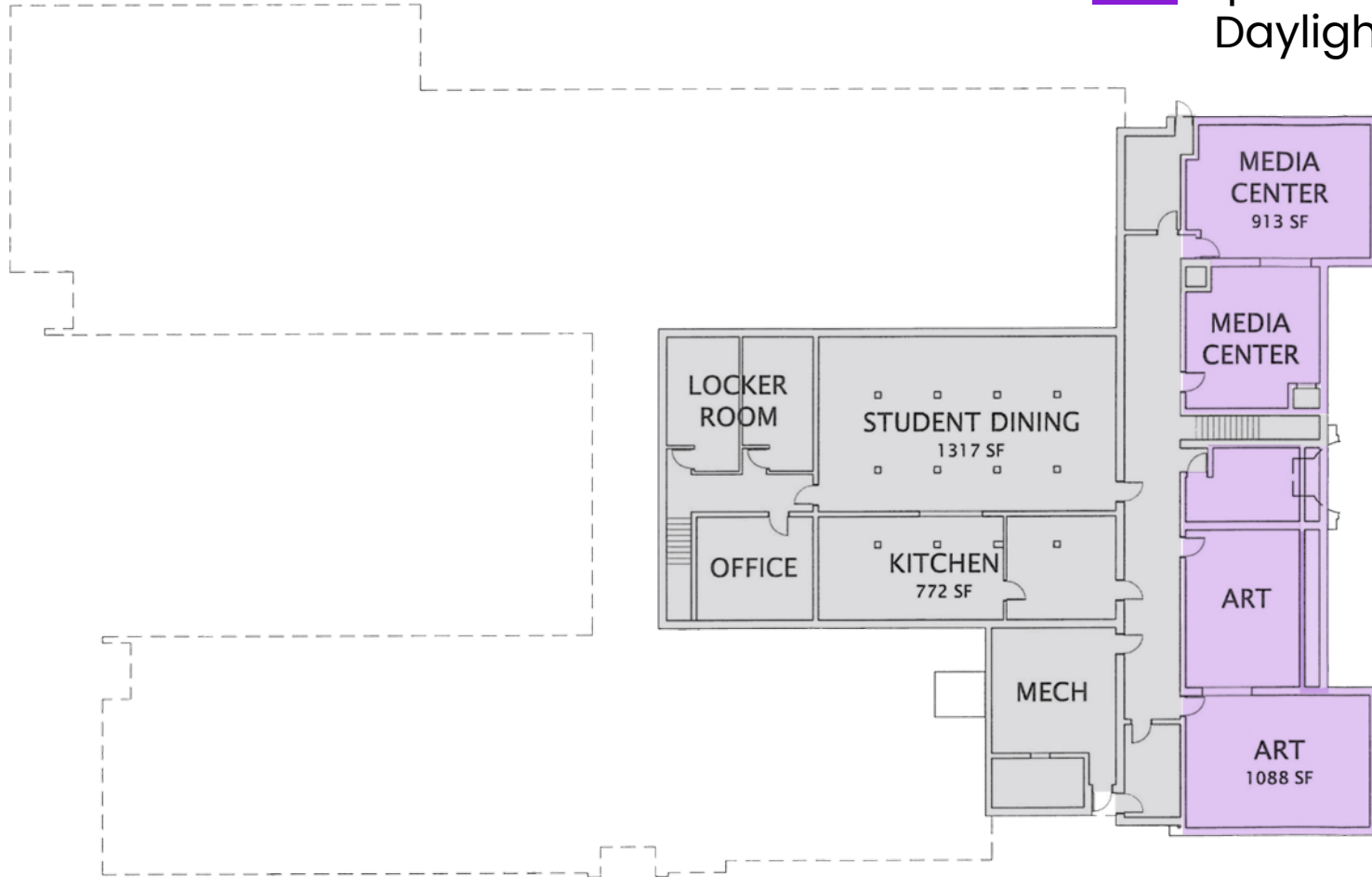
Daylighting in Schools: Improving Student Performance and Health at a Price Schools Can Afford, 2000



DAYLIGHTING



- Spaces without Daylight
- Spaces with Daylight

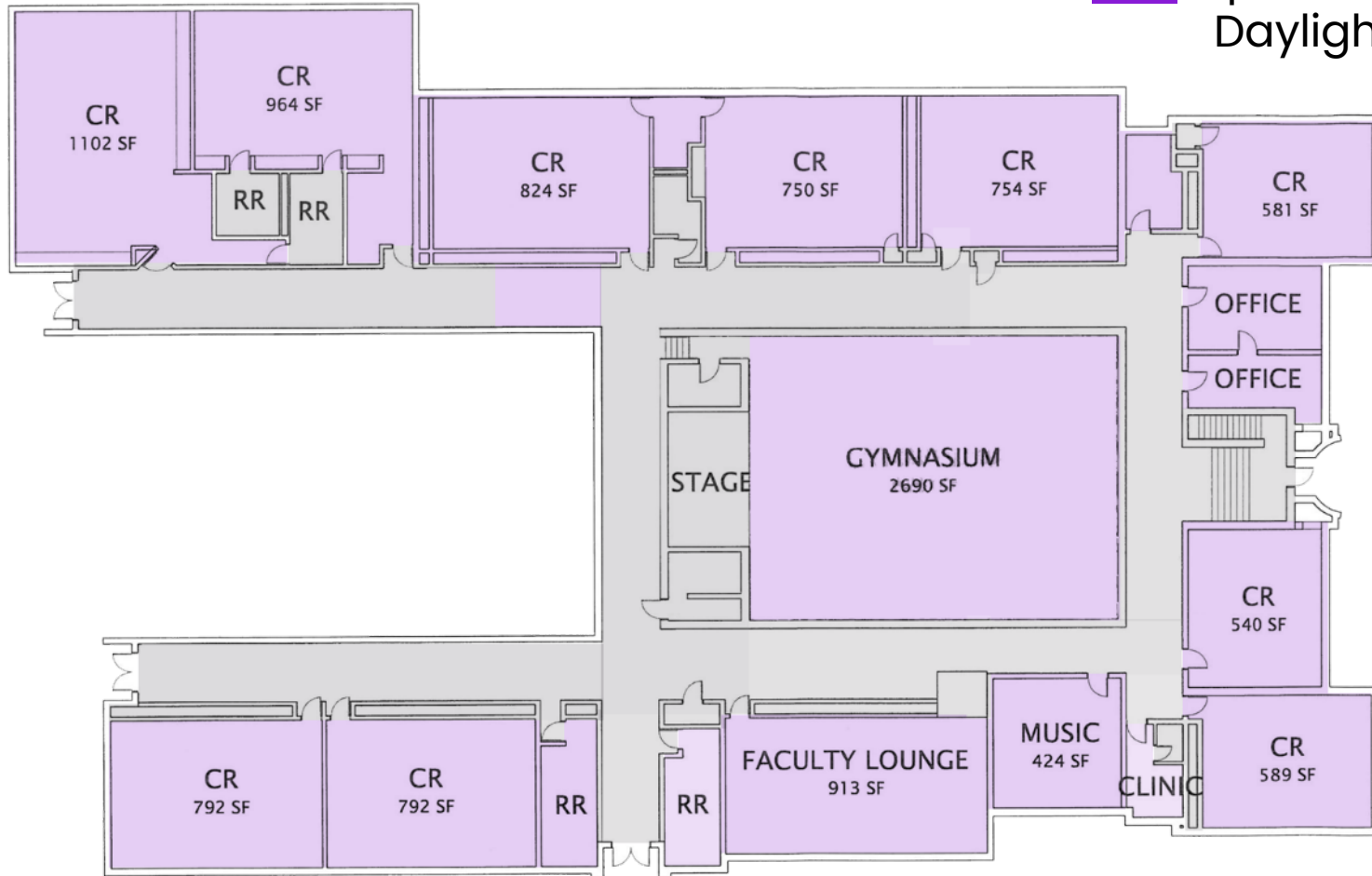


DAYLIGHTING



■ Spaces without Daylight

■ Spaces with Daylight

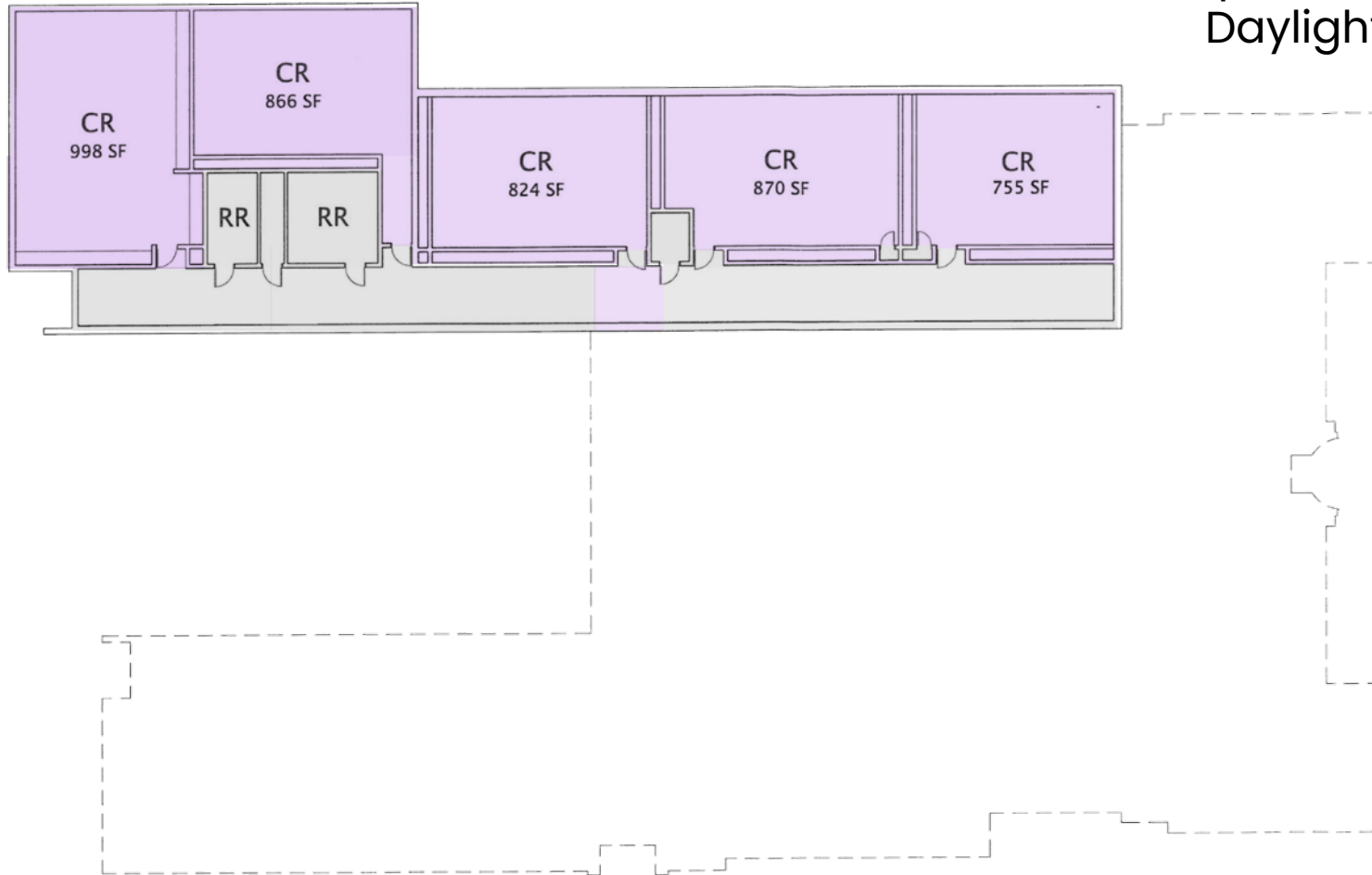


DAYLIGHTING



■ Spaces without Daylight

■ Spaces with Daylight



SAFETY/SECURITY



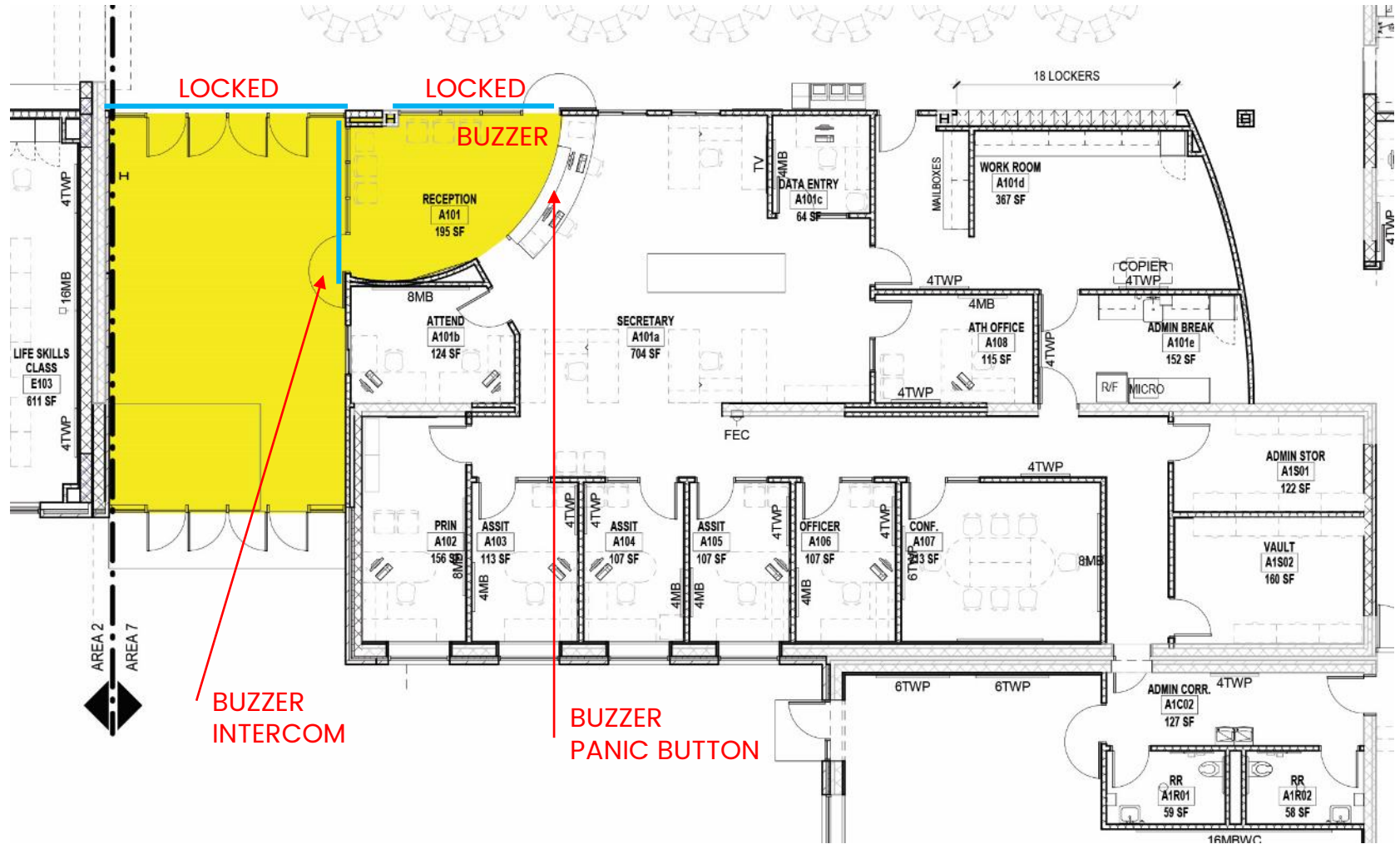
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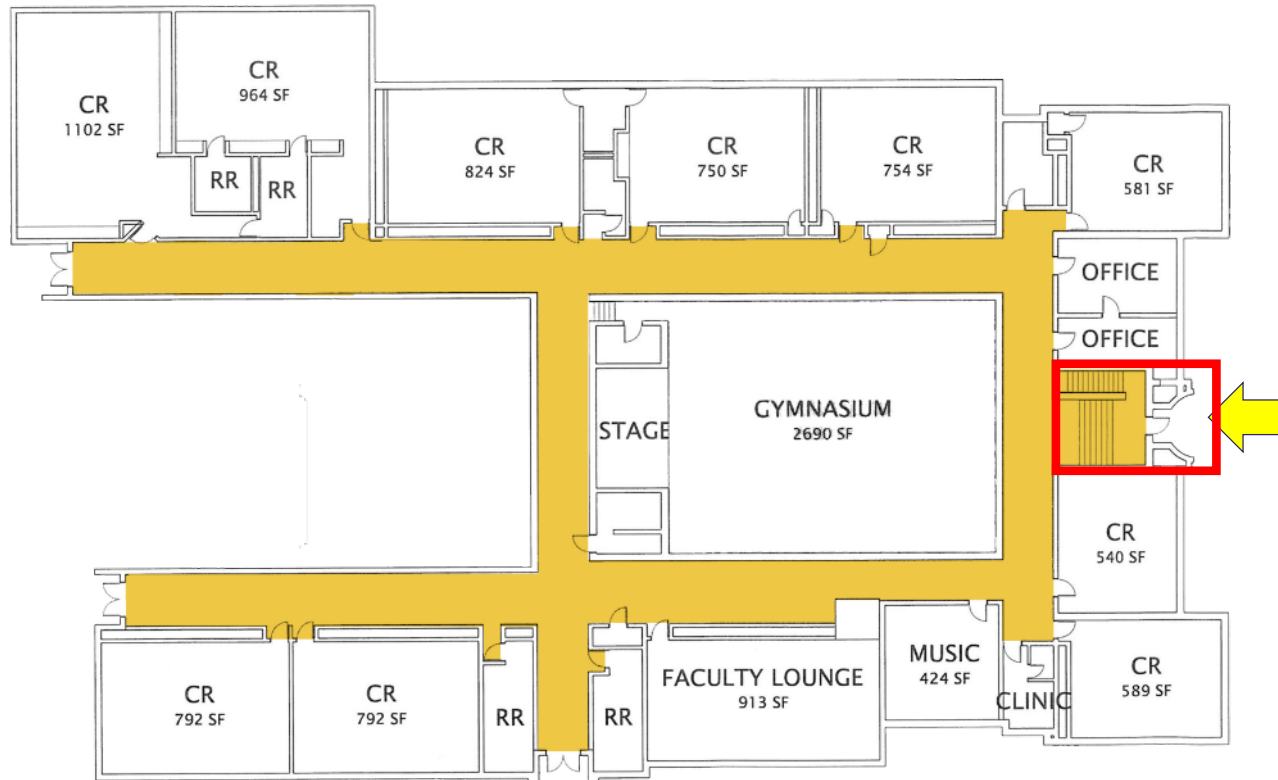
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PASSIVE DESIGN

Secure entry vestibule

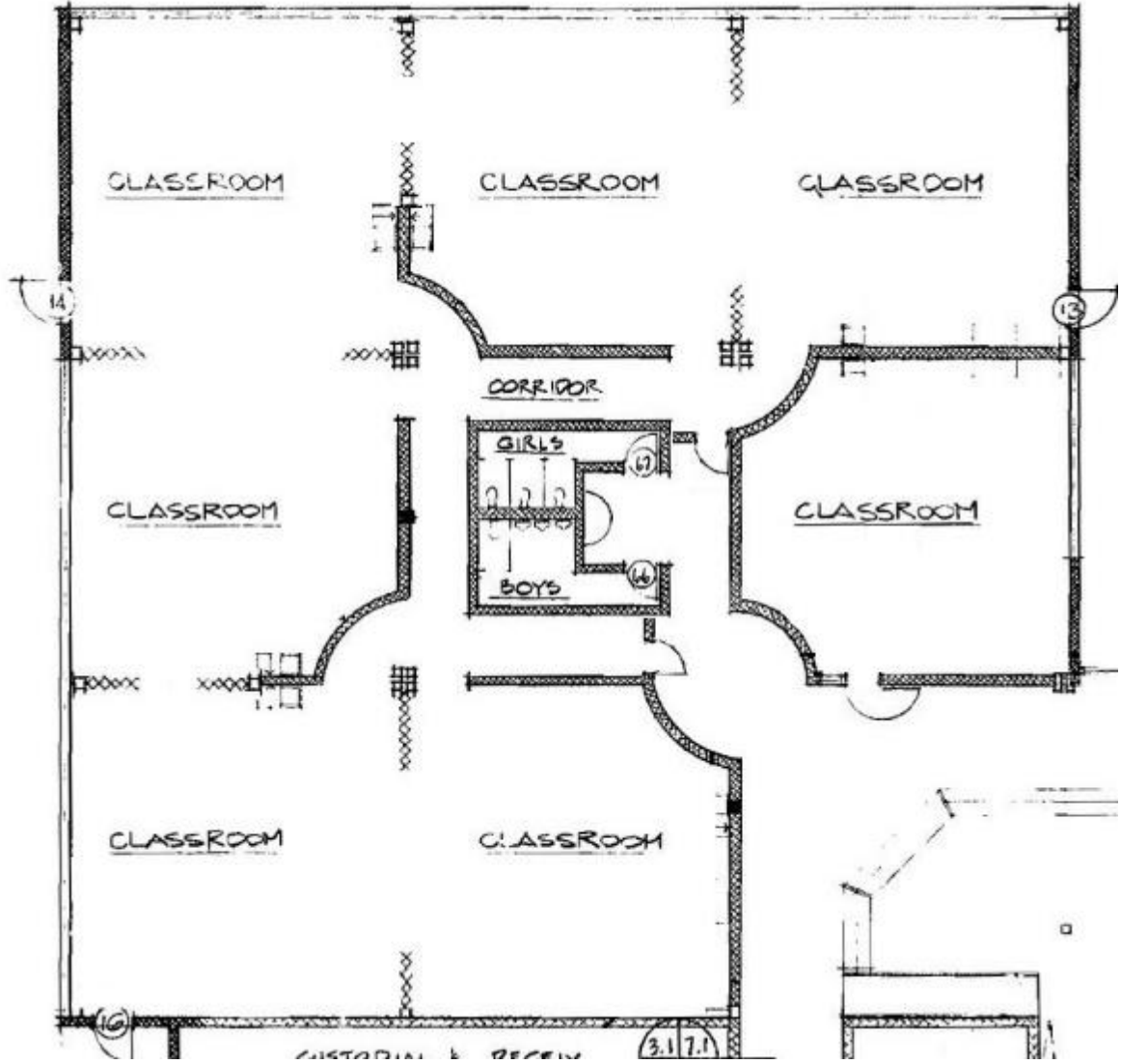


SAFETY/SECURITY



- Main office is located a half level above main entrance
- A secure vestibule is not present at main entrance
- Corridors provide generally a good 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



Silver Lake Elementary ES – Summary

- The overall renovation cost continues to increase and condition continues to deteriorate
- Site is small at 4.3 acres and has about 2.2 greenspace and room for expansion. Parking design does not promote good circulation patterns. There is no bus drop loop.
- Typical classrooms are undersized compared to State standards and are static.
- Multiple levels in this facility create ADA barriers throughout.
- The school has a generous amount of daylight – nearly all teaching/learning spaces are provided with natural light
- Corridors have a good line of sight with only a few bends which could hinder 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

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Focus on Roberts MS
Facility Condition

Focus on Silver Lake ES
Facility Condition

Tour Roberts MS School

**Tour Silver Lake ES
School**

Questions

Q & A Thank You!

LIFE IS YOUR JOURNEY
TRAVEL
DRUG FREE

ROBERTS M.S.

