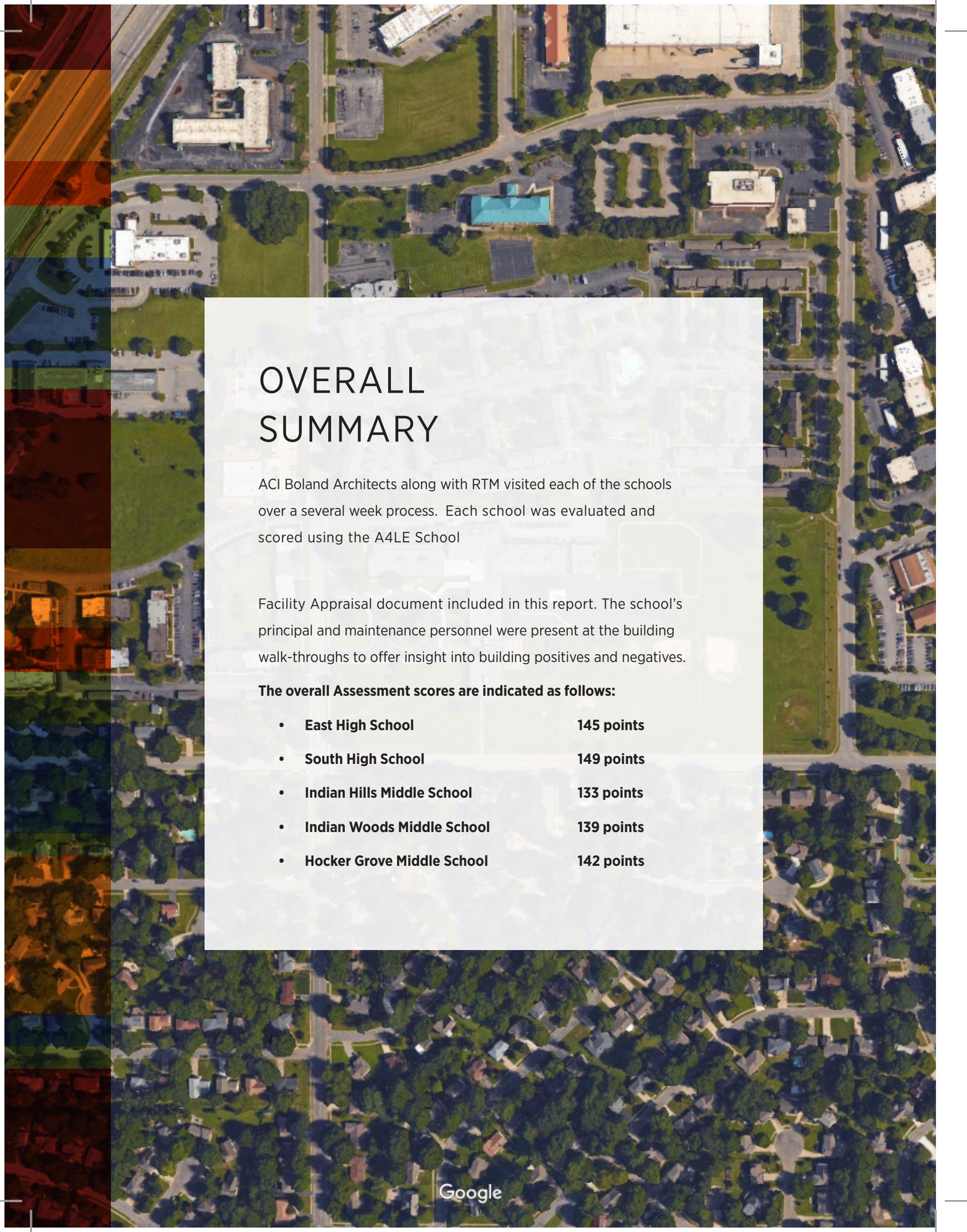




SMSD HOCKER GROVE MIDDLE SCHOOL
FACILITY EVALUATION



OVERALL SUMMARY

ACI Boland Architects along with RTM visited each of the schools over a several week process. Each school was evaluated and scored using the A4LE School

Facility Appraisal document included in this report. The school's principal and maintenance personnel were present at the building walk-throughs to offer insight into building positives and negatives.

The overall Assessment scores are indicated as follows:

- **East High School** **145 points**
- **South High School** **149 points**
- **Indian Hills Middle School** **133 points**
- **Indian Woods Middle School** **139 points**
- **Hocker Grove Middle School** **142 points**

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SUMMARY

Hocker Grove Middle School is in northern Overland Park, Kansas and is a feeder for Shawnee Mission North High School. 826 students are currently enrolled in grades 7 and 8.

Located at 10400 Johnson Drive, with street access only on the southern edge of the property that is a major thorough fare, surrounded by a residential neighborhood on the other three boundaries. Site access for drivers, buses and walkers can be dangerous.

The building is a two stories with a partial basement for mechanical equipment.

Originally built in 1955 and added onto several times with the latest addition in 2014 consisting of a new classroom wing, gymnasium and remodeled kitchen.

Constructed mostly of load bearing masonry with a brick veneer, the roof and exterior skin are in good shape and the building overall is in good condition and has been well maintained considering its age.

The front of the building has a long canopy that the rest of the entrances don't have. Removal of the canopy would open up the front of the building and give better site lines for safety and security.

Bus drop off and pickup is accommodate in the front circle drive. Capacity of the front drive is minimal. Parent drop off and pickup is handled in the west parking lot and can be congested with as it weaves through the parking lot. The school has student walkers that have to navigate the buses and cars to get to the sidewalks along the busy street.

Classrooms are arranged in a traditional manner in a L shaped double loaded corridor. Vertical circulation is handled by three stair towers two at the ends of the corridors and one central stair that is not adequately sized for students trying to move between floors or go to specials or other parts of the building.

The site is restricted in size and doesn't meet modern size standards. A new turf field was installed in the last two years and gives the school a year round surface.

The school doesn't have bathroom or locker room facilities for gender fluid students.

Not all bathrooms are ADA accessible.

APPRAISAL

GUIDE FOR

SCHOOL FACILITY APPRAISAL

INSTRUMENT FOR

Hocker Grove Middle School

APPRAISAL

Directions for Appraising Facilities

Middle School Appraisal

Prior to evaluating a building, the appraiser should become familiar with the educational program provided within the existing school facility. It is essential to determine other pertinent factors about the facility, which will provide background information sufficient to insure a thorough and accurate appraisal. Particularly helpful are the building's architectural plans, specifications and layout, if these are available. If possible, the school plant should be appraised at a time when school is in session, so that the actual use of the building is more apparent.

Although the Appraisal Guide is designed for individual appraiser use, ideally the school facility should be evaluated at the same time by three to five appraisers. The ratings of each of the appraisers should then be used to arrive at a consensus for each item. The final rating is the result of careful review of the individual scores.

The instrument uses an additive scoring method, with each item having a maximum number of allowable points. A total of 1,000 points is distributed among these six major categories:

<u>Section</u>		<u>Maximum Points</u>
1.0	The School Site	100
2.0	Structural and Mechanical Features	200
3.0	Plant Maintainability	100
4.0	School Building Safety and Security	200
5.0	Educational Adequacy	200
6.0	Environment for Education	200

Prior to Appraisal

Step I

Review the educational program; identify the number of faculty members and students; and examine the floor and plot plans carefully.

Overview of the Building and Grounds

Step II

Upon approach to the site, look for traffic patterns, school safety signs, neighborhood environment, etc. Begin the appraisal by taking a preliminary tour of the entire building noting both exterior and interior features. Information obtained prior to arrival at the campus recorded in the Building Data Record should be verified. The appraisal weights should not be determined during this initial walk through. The appraisal is better accomplished as separate individual steps in the process.

Assignment of Scores

Step III

After the completion of the preliminary inspection, go through the entire instrument section by section. The appraisal will be more accurate if each item is carefully considered, while it is appropriately observed. **Do not try to evaluate from memory** - use actual observation when making the appraisal decision.

Items that are needed/required, but are non-existent, should be given a 0 score. If an item is not needed and is non-existent, full credit should be allowed.

Note the Table of Weights for assistance in determining the score to be given each item. Each item should first be considered in the following terms: Non-Existent, Very Inadequate, Poor, Borderline, Satisfactory and Excellent. The weight (score) should then be assigned for that item. Place score in space provided in the Points Allotted column, total the score for each Section and insert in the space provided. The Section totals should then be tabulated and indicated in the Points Assigned column of the Appraisal Summary. Use the space provided in the Justification for Allocation of Points to provide notes justifying the scores at the extreme ends of the scale (e.g., very inadequate or excellent).

Building Data Record

Name of Appraiser: ACI Boland, Inc. **Date of Appraisal:** January 18, 2019

Building Name: Hocker Grove Middle School

Street Address: 10400 Johnson Dr

City, State, Zip Code: Shawnee, KS 66203

Telephone Number(s): 913-993-0200

School District: Shawnee Mission School District

Setting: Urban Suburban Small City Rural

Site Acreage: 11.7 Building Square Footage 117,236

Grades Housed: 7th-8th Student Capacity _____

of Teaching Stations: x # of Floors 2 +

Student Enrollment: 826 As of: 1/18/2019

Dates of Construction: Original building 1955 addition & Renovation 2008, 2012

Energy Source: Fuel Oil Gas Electric Solar

Air Conditioning: Roof Top Window Units Central Room Units

Heating: Central Roof Top Individual Unit

Forced Air Steam Hot Water

Types of Construction	Exterior Surfacing	Floor Construction
<input checked="" type="checkbox"/> Load Bearing Masonry	<input checked="" type="checkbox"/> Brick	<input type="checkbox"/> Wood Joists
<input checked="" type="checkbox"/> Steel Frame	<input checked="" type="checkbox"/> Stucco	<input type="checkbox"/> Steel Frame
<input type="checkbox"/> Concrete Frame	<input type="checkbox"/> Metal	<input type="checkbox"/> Slab on Grade
<input type="checkbox"/> Wood	<input type="checkbox"/> Wood	<input type="checkbox"/> Structural Slab
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

APPRAISAL GUIDE FOR SCHOOL FACILITIES

Table of Weights and Categories	Maximum Points Allotted	Non-Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
	5	0	1	2	3	4	5
10	0	2	4	6	8	10	
15	0	3	6	9	12	15	
20	0	4	8	12	16	20	
25	0	5	10	15	20	25	

Appraisal Summary	Section	Possible Points	Total Earned	Percent	Rating By Category
	1.0 The School Site	100	52	52%	
	2.0 Structural and Mechanical	200	133	67%	
	3.0 Plant Maintainability	100	76	76%	
	4.0 School Building Safety & Security	200	134	67%	
	5.0 Educational Adequacy	200	141	71%	
	6.0 Environment for Education	200	142	71%	
	TOTAL	1,000	678	68%	

1.0 The School Site		100 Points	
1.1	Site is large enough to meet present and future educational needs as defined by state and local requirements.	25	10
1.2	Site is easily accessible and conveniently located for the present and future population.	20	8
1.3	Location is removed from undesirable business, industry, traffic and natural hazards.	10	6
1.4	Site is well landscaped and developed to meet educational needs.	10	8
1.5	Well equipped athletic areas are adequate with sufficient solid-surface parking.	10	8
1.6	Topography is varied enough to provide desirable appearance and without steep inclines.	5	3
1.7	Site has stable, well drained soil free of erosion .	5	4
1.8	Site is suitable for special instructional needs , e.g. outdoor learning.	5	3
1.9	Pedestrian services including adequate sidewalks with designated crosswalks, curb cuts and correct slopes.	5	1
1.10	Sufficient on-site, solid surface parking is provided for faculty, students, staff and community.	5	1
Total - The School Site		100	52

Table of
Weights
and
Categories

Maximum Points Allotted	Non- Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
20	0	4	8	12	16	20
25	0	5	10	15	20	25

2.0 Structural and Mechanical Features

200 Points

Structural

2.1	Structure meets all barrier-free requirements both externally and internally.	15	9
2.2	Roofs appear sound, have positive drainage, and are weather-tight.	15	12
2.3	Foundations are strong and stable with no observable cracks.	10	6
2.4	Exterior and interior walls have sufficient expansion joints and are free of deterioration.	10	8
2.5	Entrances and exits are located so as to permit efficient student traffic flow.	10	6
2.6	Building "envelope" generally provides for energy conservation (See criteria).	10	6
2.7	Structure is free of friable asbestos and toxic materials .	10	8
2.8	Interior walls permit sufficient flexibility for a variety of class sizes.	10	6

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
10	0	2	4	6	8	10
15	0	3	6	9	12	15

Mechanical/Electrical

2.9	Adequate light sources are well maintained, properly placed and are not subject to overheating.	15	12
2.10	Internal water supply is adequate with sufficient pressure to meet health and safety requirements.	15	12
2.11	Each teaching/learning area has adequate convenient wall outlets , phone and computer cabling for technology applications .	15	6
2.12	Electrical controls are safely protected with disconnect switches easily accessible.	10	4
2.13	Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled.	10	8
2.14	Number and size of restrooms meet requirements .	10	6
2.15	Drainage systems are properly maintained and meet requirements.	10	6
2.16	Fire alarms, smoke detectors and sprinkler systems are properly maintained and meet requirements.	10	6
2.17	Intercommunication system consists of a central unit that allows dependable two-way communication between the office and instructional areas.	10	8
2.18	Exterior water supply is sufficient and available for normal usage.	5	4
Total - Structural and Mechanical Features		200	133

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15

3.0 Plant Maintainability

100 Points

3.1	Exterior windows, doors and walls are of material and finish requiring minimum maintenance.	15	12
3.2	Floor surfaces throughout the building require minimum care.	15	12
3.3	Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain.	10	8
3.4	Built-in equipment is designed and constructed for ease of maintenance.	10	8
3.5	Finishes and hardware , with a compatible keying system, are of durable quality.	10	8
3.6	Restroom fixtures are wall mounted and of quality finish.	10	8
3.7	Adequate custodial storage space with water and drain is accessible throughout the building.	10	8
3.8	Adequate electrical outlets and power , to permit routine cleaning, are available in every area.	10	6
3.9	Outdoor light fixtures, electric outlets , equipment, and other fixtures are accessible for repair and replacement.	10	6
Total - Plant Maintainability		100	76

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
10	0	2	4	6	8	10
15	0	3	6	9	12	15

4.0 Building Safety and Security

200 Points

Site Safety

4.1	Student loading areas are segregated from other vehicular traffic and pedestrian walkways.	15	3
4.2	Walkways , both on and offsite, are available for safety of pedestrians.	10	2
4.3	Access streets have sufficient signals and signs to permit safe entrance to and exit from school area.	5	2
4.4	Vehicular entrances and exits permit safe traffic flow.	5	2
4.5	Athletic field equipment is properly located and is free from hazard.	5	4

Building Safety

4.6	The heating unit(s) is located away from student occupied areas.	20	16
4.7	Multi-story buildings have at least two stairways for student egress.	15	12
4.8	Exterior doors open outward and are equipped with panic hardware.	10	8
4.9	Emergency lighting is provided throughout the building with exit signs on separate electrical circuits.	10	8
4.10	Classroom doors are recessed and open outward.	10	8
4.11	Building security systems are provided to assure uninterrupted operation of the educational program.	10	8

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15
20	0	4	8	12	16	20

Building Safety (cont.)

4.12	Flooring (including ramps and stairways) is maintained in a nonslip condition.	5	4
4.13	Stairs (interior and exterior) meet standards (maximum 7" rise to 11" tread) and steps range in number from 3 - 16.	5	4
4.14	Glass is properly located and protected with wire or safety material to prevent accidental student injury.	5	4
4.15	Fixed projections in the traffic areas do not extend more than 8" from the corridor wall.	5	4
4.16	Traffic areas terminate at an exit or a stairway leading to an egress.	5	3

Emergency Safety

4.17	Adequate fire safety equipment is properly located.	15	12
4.18	There are at least two independent exits from any point in the building.	15	9
4.19	Fire-resistant materials are used throughout the structure.	15	12
4.20	Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided.	15	9

Total - Building Safety and Security	200	134
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Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
5	0	1	2	3	4	5
15	0	3	6	9	12	15

5.0 Educational Adequacy

200 Points

Academic Learning Space

5.1	Size of academic learning areas meets desirable standards.	10	8.0
5.2	Classroom space permits arrangements for small group activity.	10	4.0
5.3	Location of academic learning areas is near related educational activities and away from disruptive noises.	10	8.0
5.4	Personal space in the classroom away from group instruction allows privacy time for individual students.	5	2.0
5.5	Storage for student materials is adequate.	5	3.0
5.6	Storage for teacher materials is adequate.	5	3.0

Specialized Learning Space

5.7	Size of specialized learning area(s) meets standards.	15	12.0
5.8	Design of specialized learning area(s) is compatible with instructional need.	10	8.0
5.9	Library/Resource/Media Center provides appropriate and attractive space.	15	12.0
5.10	Gymnasium and outdoor facilities adequately serve physical education instruction.	15	12.0
5.11	Science program is provided sufficient space and equipment.	10	8.0
5.12	Music Program is provided adequate sound-treated space.	10	6.0

Table of
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Categories

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5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15
25	0	5	10	15	20	25

Specialized Learning Space (cont.)

5.13	Space for art is appropriate for instruction, supplies and equipment.	10	8.0
5.14	Space for technology education permits use of state-of-the-art equipment.	10	8.0
5.15	Space for small groups and remedial instruction is provided adjacent to classrooms.	5	2.0
5.16	Storage for student and teacher material is adequate.	5	3.0

Support Space

5.17	Teacher's lounge and work areas support teachers as professionals.	10	4.0
5.18	Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage and food preparation.	10	6.0
5.19	Administrative offices are consistent in appearance and function with the maturity of the students served.	10	8.0
5.20	Counselor's office insures privacy and sufficient storage.	5	4.0
5.21	Clinic is near administrative offices and is equipped to meet requirements.	5	4.0
5.22	Suitable reception space is available for students, teachers and visitors.	5	4.0
5.23	Administrative personnel are provided sufficient work space and privacy.	5	4.0
Total - Educational Adequacy		200	141.0

Table of
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and
Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10

6.0 Environment for Education

200 Points

Exterior Environment

6.1	Overall design is aesthetically pleasing and appropriate for the age of students.	15	12
6.2	Site and buildings are well landscaped.	10	6
6.3	Exterior noise and surrounding environment do not disrupt learning.	10	6
6.4	Entrances and walkways are sheltered from sun and inclement weather.	10	8
6.5	Building materials provide attractive color and texture.	5	4

Interior Environment

6.6	Color schemes, building materials and decor provide an impetus to learning.	20	16
6.7	Year around comfortable temperature and humidity are provided throughout the building.	15	12
6.8	Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement.	15	12
6.9	Lighting system provides proper intensity, diffusion and distribution of illumination.	15	12
6.10	Sufficient drinking fountains and restroom facilities are conveniently located.	15	12
6.11	Communication among students is enhanced by commons area.	10	4

Table of Weights and Categories

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5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15
20	0	4	8	12	16	20

Interior Environment (cont.)

6.12	Traffic flow is aided by appropriate foyers and corridors.	10	4
6.13	Areas for students to interact are suitable to the age group.	10	6
6.14	Large group areas are designed for effective management of students.	10	6
6.15	Acoustical treatment of ceilings, walls and floors provides effective sound control.	10	6
6.16	Window design contributes to a pleasant environment.	10	8
6.17	Furniture and equipment provide a pleasing atmosphere.	10	8
Total - Environment for Education		200	142

Table of
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and
Categories

Maximum Points Allotted	Non- Existent	Very Inadequate 1 - 29%	Poor 30 - 49%	Borderline 50 - 69%	Satisfactory 70 - 89%	Excellent 90 - 100%
10	0	2	4	6	8	10

Justification for Allocation of Points

BUILDING NAME AND LEVEL:

Hocker Grove Middle School

Indicate the justification for the appraisal decision in the space provided.

BUILDING FEATURES THAT CLEARLY EXCEED CRITERIA:

1. Overall facility appears to be clean.

2. Remodeled Kitchen and Gymnasium addition

3. Recent turf soccer /FB practice field

4. _____

5. _____

BUILDING FEATURES THAT ARE NON-EXISTENT OR VERY INADEQUATE:

1. Traffic, drop-off (need to look at sidewalk and drive loop) off Johnson Dr.

2. ADA access from MPR and Band Room to exterior.

3. Next door to RV Park.

4. Separate Band Room but shared Vocal and Orchestra rooms.

5. Lack of storage -using areas for storage that should not be.

6. _____

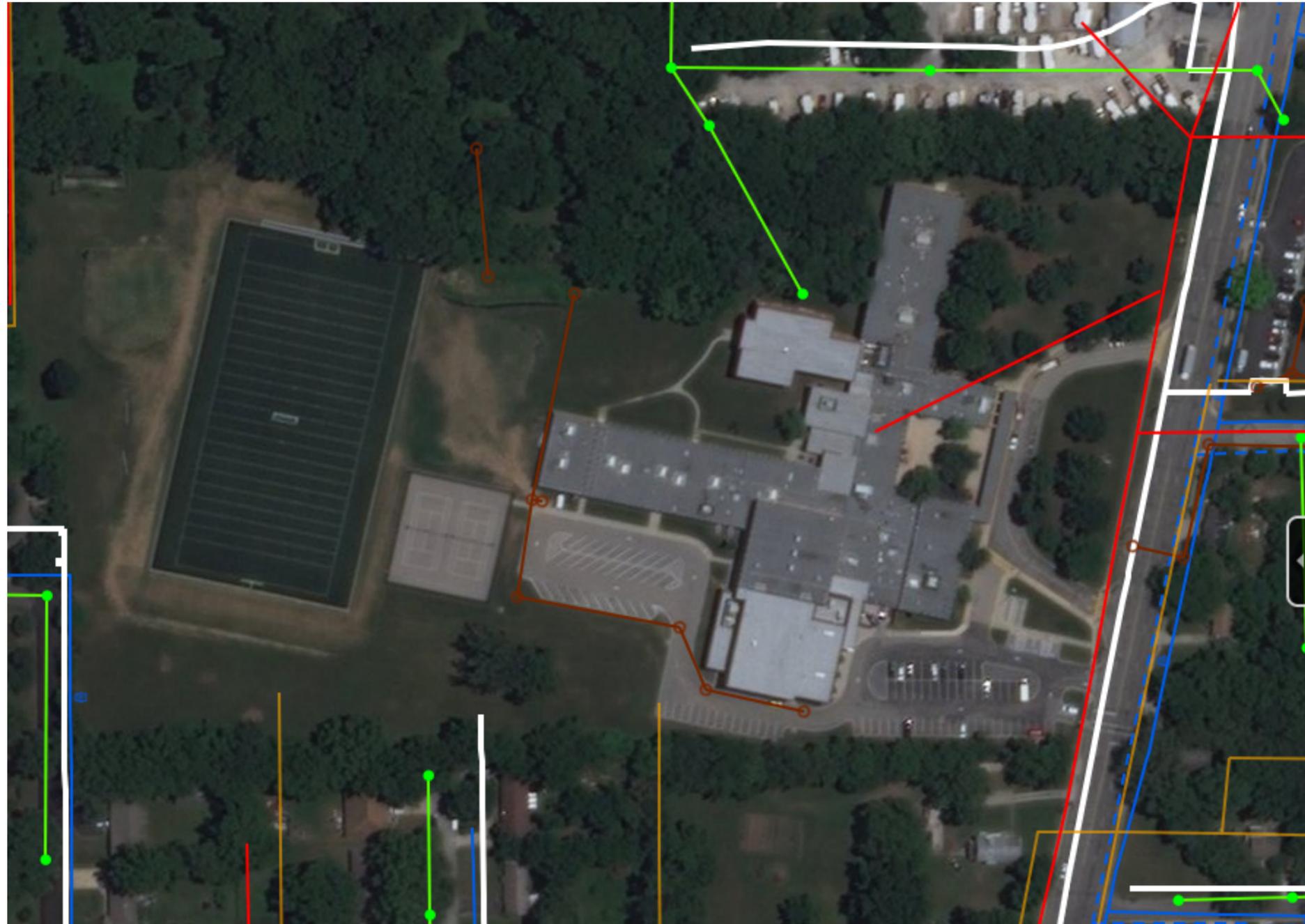
7. _____

SITE PLAN





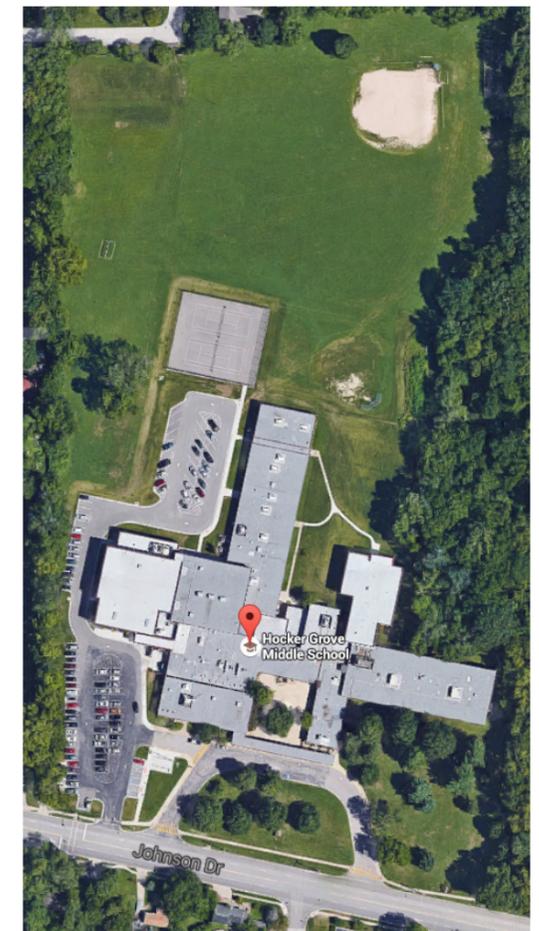
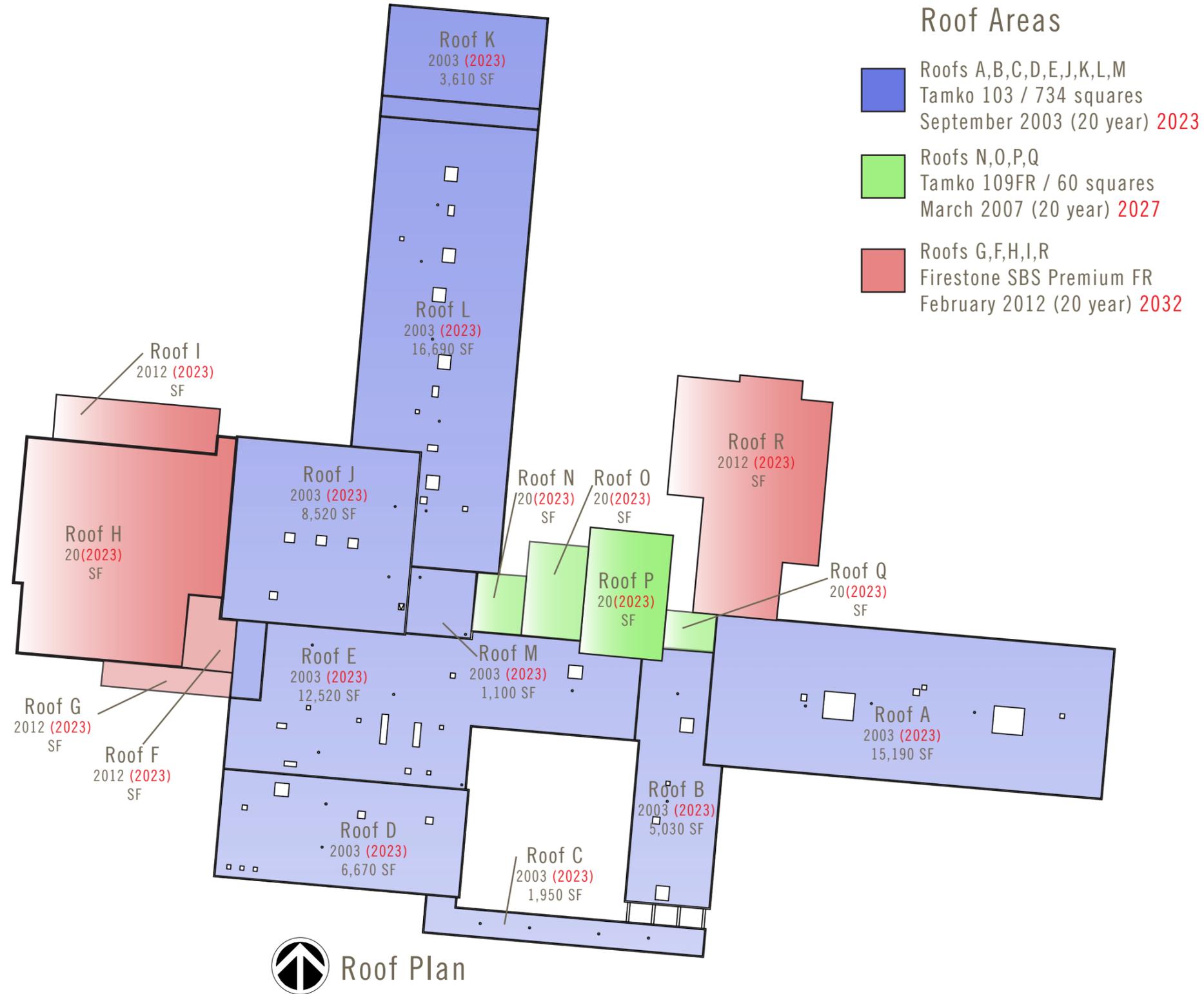
SITE UTILITIES



-  Water Main
 -  Abandoned Water Main
 -  Sanitary Sewer Main
 -  Sanitary Sewer Manhole
 -  Storm Structure
 -  Storm Sewer
 -  Electric Line
 -  Gas Main
 -  Cable
-  ←N



ROOF ASSESSMENT





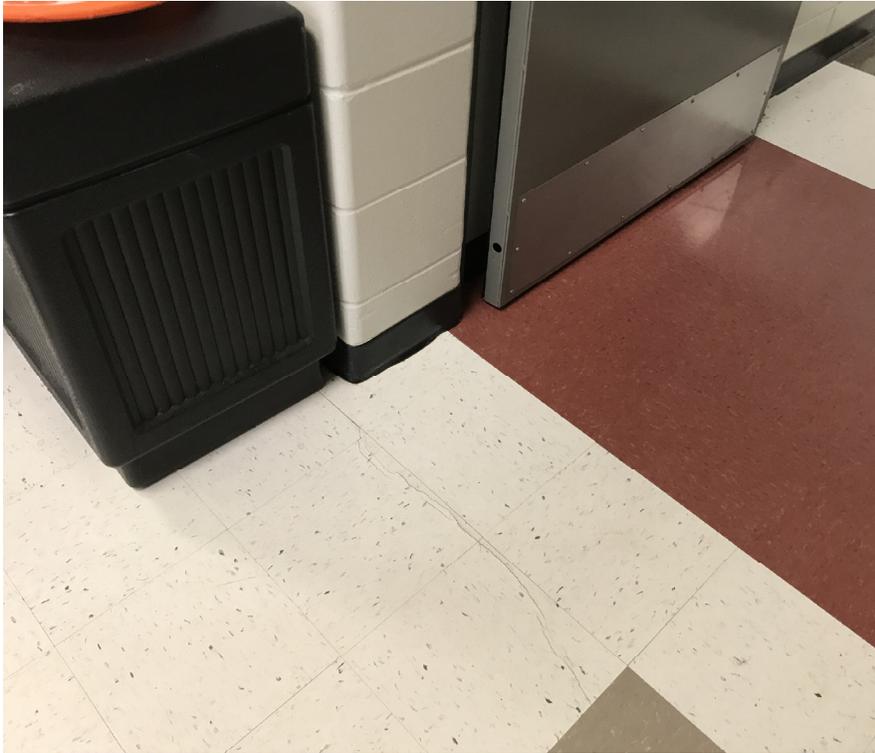
FLOOR PLAN





FACILITY OBSERVATIONS

Architectural Observations



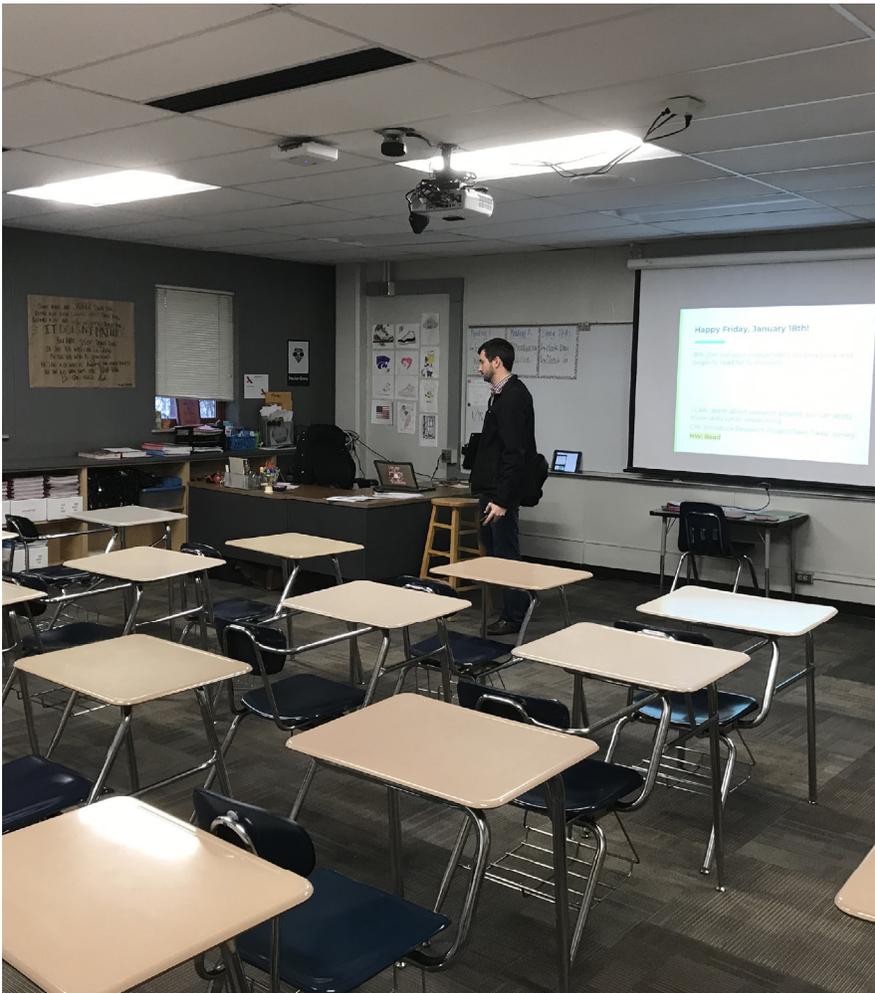
Cracking in the vinyl tile floor.



Crack in floor slab created telegraphing through the floor tile are this location in the main hallway.



Stair nosings and tread are worn and need replacement.



Typical conventional classroom layout.



Congestion at the major stair leads to backup of student flow into the adjacent corridor.



Stairwells are major congestion point.



Staff lounge is too small.



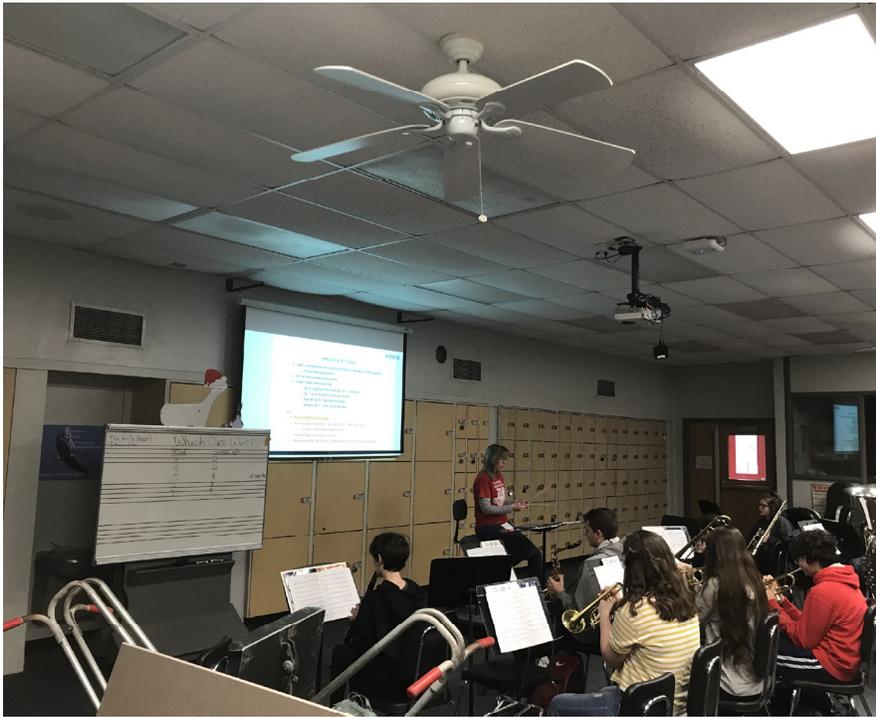
Art spaces need updating including lighting and access to the kiln from more than just one of the art rooms.



Serving and kitchen appears to be organized but tight on circulation space.



Cafeteria is too small for the number of tables it must accommodate.



Music room is crowded and needs additional storage.



This exit (off music room) from the building is not accessible.



Music room lacks adequate acoustical properties.

MEP Observations



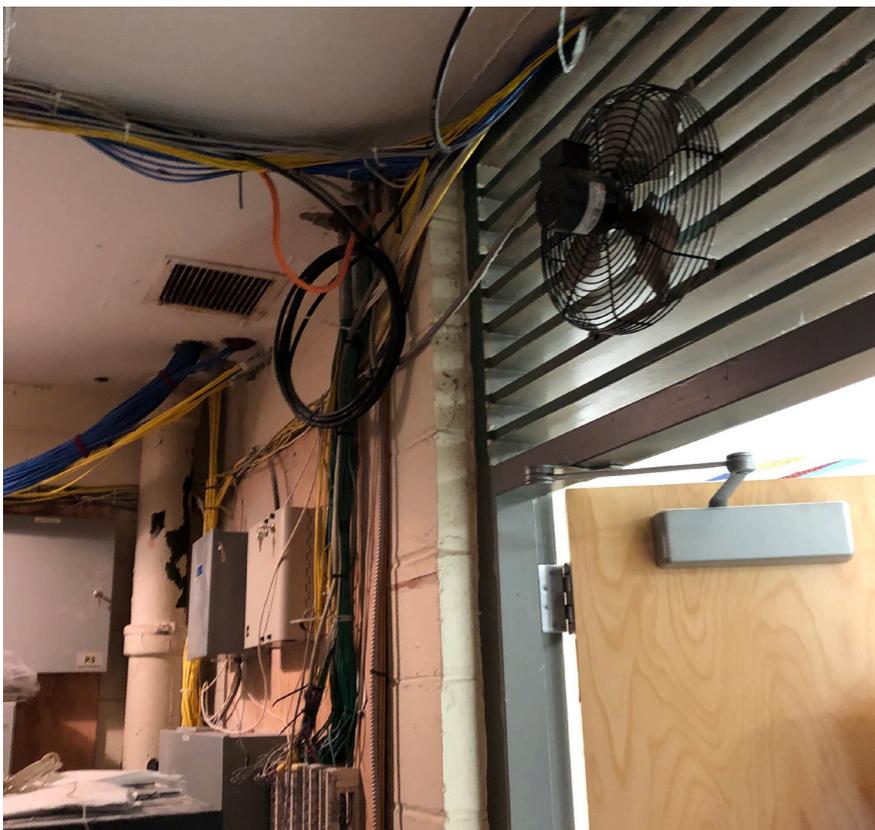
Corrosion on domestic water piping



Dehumidification unit



No bottle filling stations at water coolers



No dedicated cooling for data room, only louver above door



Teacher lounge trips breakers often

ARCHITECTURAL NARRATIVE

**Principal: Dr. Chris Kase | Mascot: Eagles | S. F. 117,236 s.f. | 11.7 acres | 2 levels | 1955 original building
Additions and Renovations in 2008, 2012**

General

- Building was constructed in 1955
- Current enrollment is 826 students

Building

- In 2014 there was an auxiliary gymnasium and fitness room.
- There are Wifi connection issues in exploration classroom.
- The east side of the academic wing stays wet because of minimal sun
- Gym, kitchen and academics have all been remodeled

Classrooms

- Class size during home room is between 2 and 29, it is typically around 19 students.
- There is no theater classroom

Fine and performing arts

- Choir and Orchestra share a room half-time
- The Band room is used full-time
- The Kiln room is only accessible from one art room
- Sound shells are stored on the stage

Gymnasium/Athletics

- The gym dividing wall has not been functional for over 10 years
- The gym floor was refinished last summer (2018)
- The Gym seating is not adequate for full assembly

- The Gym and stage noise present issues for academics
- The new gym is sprinklered

Cafeteria/Kitchen

- Cafeteria is adequately sized.
- Kitchen is in good shape.

Counselor/Nurse/Admin

- The social worker and Instructional coach could be closer to the main office
- There is no secure entry
- The Faculty Lounge is too small for get togethers
- Instructional coach uses a classroom space, they do have some flexibility to be housed someplace else opening up the classroom for instruction.

Special Classrooms/Media/Library

- The Medically Fragile ALC classroom has a changing room but does not have a bathroom
- The Health classroom is only used a few times a week
- The Media Center is currently under renovation

Circulation/Lockers/Commons

- The main staircase presents a major pinch point
- There is a desire for link between the academic wings and specials wing at the north stair creating an interior courtyard.

Site

- The end-of-the-day pick up will back up onto Johnson Drive
- The school uses 20 buses
- Johnson Drive presents safety issues for parent drop-off and student walkers
- A path for student walkers that avoids car pickup is greatly desired.

Wishes & Wants

- Performing Arts Center
- More classroom space
- Track

MEP NARRATIVE

General Project Information

Owner:	Shawnee Mission School District
School Name:	Hocker Grove Middle School
Project Address 1:	10400 Johnson Drive
City: Lenexa	State: KS
	Floor Area: 117,236 sf
Building Stories:	2
Building Use Type:	Middle School
Code Occupancy Group:	E Occupancy

Team Contact Information

Contact Name:	Keith Hammerschmidt
Contact Company:	RTM Associates
Contact Phone:	913-322-1400
Contact Fax:	913-825-6697
Contact Email:	khammerschmidt@rtmassociates.com

General

- A portion of the mechanical system serving the building is served from 4-pipe hydronic system with air handlers and fan powered boxes. Other portion of building served by rooftop units. Age of mechanical equipment ranges from 5 years to 25 years.
- Lighting throughout building appears to be sufficient. Majority of building has fluorescent light fixtures. Newer additions LED lighting has been added.
- Existing electrical service size appears to be sufficient, though almost at max capacity. Not a lot of room to expand the service size. Most areas of the building have available space for additional circuits.
- Only portions of building have fire sprinkler protection. Majority of building had area smoke detection in corridors.

Mechanical

- System Descriptions
 - 4-Pipe Hydronic system with air handlers and rooftop units.
 - Air Handling units around 10 - 20 years old. Typical life of an air handler is 20 – 25 years.
 - Chiller is around 7 years old. Typical life span is 20-25 years.
 - Rooftop units range from 5 years old to 20 years old. Typical life of a fan rooftop is 15 – 20 years.
 - Boilers are around 10 years old. Typical life span is 20 – 25 years old.
 - Kitchen equipment has been upgraded within last 5 years.
 - Some classrooms, the library, and the music room all have portable dehumidification units. Humidity issues appear to be an issue.
 - Rooftop units have damage on coils. Damaged coils affect the performance of the unit.
 - Portions of building have multiple complaints of comfort level in spaces.
 - Building has operable windows. Operable windows make it difficult to maintain humidity levels within the building.
- Controls Systems
 - A full BMS control system is currently installed to serve all HVAC equipment.
- Additional Updates required to bring systems up to current codes:
 - Demand control ventilation shall be provided for spaces larger than 500 square feet and with average occupant over 25 people per 1000 square feet.
 - Energy recovery at locations where exhaust cfm or outside supply cfm exceeds 5500 cfm or is a 100% make-up air / exhaust system. Lockers rooms would require energy recovery.
- Additional Updates required to bring systems up to current SMSD Standards:
 - HVAC equipment efficiencies shall be increased.

Plumbing Systems

- Hot Water
 - Portions of the building take a long time to get hot water. A small hot water heater was added to end of technology wing to help address issue.
 - Majority of hot water heaters are around 15 years old. Typical life of a hot water heater is 10 – 15 years.
 - Water heaters are electric.
 - Domestic hot water piping in boiler room at water heaters appear to have a lot of corrosion on pipe fittings.
- Water Supply
 - Water pressure appeared to be sufficient.
 - Water service was provided with backflow preventer.
- Roof Drains
 - Roof drains are internal.
 - Majority of building appears to not have overflow drains.
- Some of the restroom group's plumbing fixtures appeared to have been updated to Shawnee Mission School District standard faucets, flush valves, china, etc. but not all restrooms.
- Majority of water coolers were ADA compliant but didn't have any bottle filling stations.
- Janitor mop closets were also electrical rooms with multiple electrical panels.
- Additional Updates required to bring systems up to current codes:
 - All handwashing sinks will need to have thermostat mixing valves installed to limit maximum water hot water temperature to 110°F.
- Additional Updates required to bring systems up to current SMSD Standards:
 - Hot water recirculation line shall tie into hot water line with-in 3 feet of every hand washing sink.
 - Replace majority of urinals with new wall-mounted fixtures.

Electrical Systems

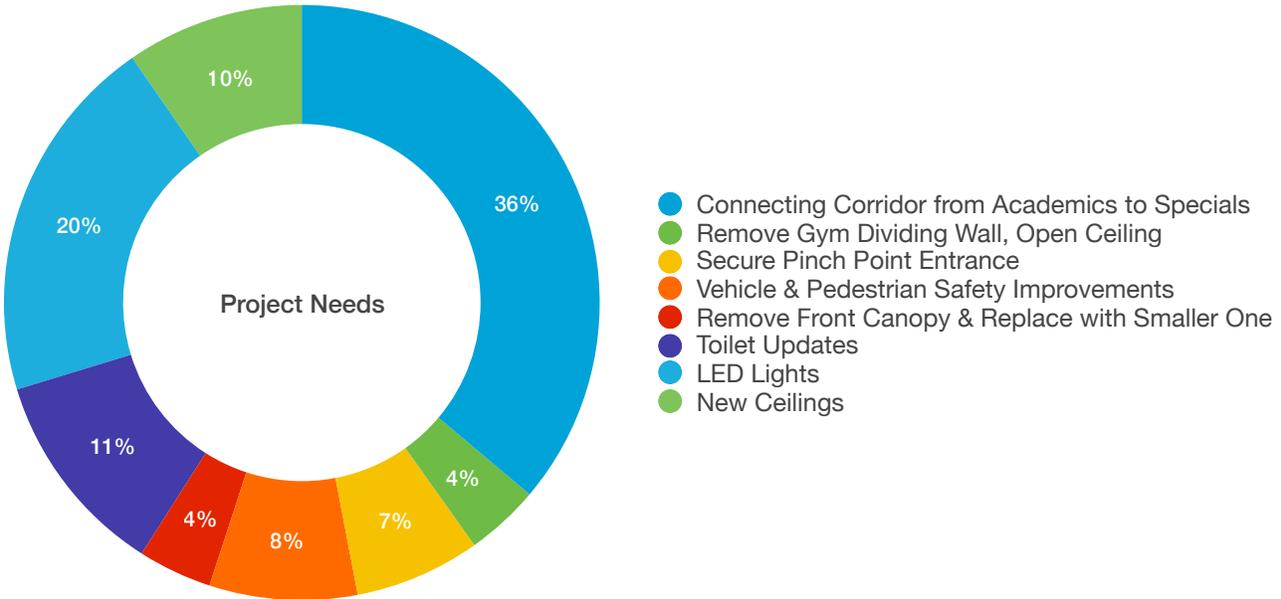
- Lighting
 - Majority of building has fluorescent light fixtures. New additions have LED light fixtures,(gym and classroom wing).
 - Occupancy sensors and vacancy sensors have not been installed in majority of building. New classroom wing addition does have sensors.
 - Majority of exterior light fixtures were not LED.
 - Majority of emergency lighting is by bug eyes. Not ideal for code required testing.
- Power
 - Electrical service is underground.

- Electrical service size is almost maxed out for size of building. Various electrical panels throughout the building have some additional space.
 - Electrical service didn't appear to have energy metering.
 - Extension cords and power supplies were common in classrooms due to insufficient quantities and locations of electrical receptacles.
 - Electrical / mechanical room is also used as storage. Some areas impeded on code required clearance for electrical equipment.
 - Teacher lounges trips a lot of breakers often. Need more dedicated outlets.
 - Building has lighting protection.
- Special Systems (Fire Alarm, Intercom, Data Systems)
 - Fire Alarm system doesn't appear to have been update, may require extensive modifications to support a new mass notification system.
 - Intercom system appeared functional and sufficient.
 - One classroom wing has had issues with WIFI connection.
 - Classrooms were provided with projector systems.
 - Only one IT closet was provided with dedicated cooling. All other spaces had a louver in door or wall to the corridor.
 - Data closet near kitchen was also being used as kitchen storage.
- Additional Updates required to bring systems up to current codes:
 - Electrical
 - Additional Exterior lighting to ensure sufficient illumination.
 - Provide code required surge protection.
 - Lighting
 - New lighting controls with occupancy sensors installed in entire building.
 - New lighting to meet watts per square foot based on energy code.
 - Fire Alarm – Addition of mass notification speakers.
 - Intercom system – None
 - Data systems – None
- Additional Updates required to bring systems up to current SMSD Standards:
 - Electrical
 - Energy Metering added to all electrical equipment.
 - Additional receptacles added throughout classrooms.
 - Lighting
 - New LED light fixtures installed in all areas, interior and exterior
 - Dimming Controls added in classrooms.
 - Fire Alarm – Addition of mass notification speakers.
 - Intercom system – New Valcom Intercom System
 - Data systems – Dedicated IT closets for Data Racks and data associated equipment.

CONCEPT ESTIMATE

TOTAL CONSTRUCTION COSTS	
Total Costs	\$7,781,250
Inflation 2019 to 2020 6%	\$466,875
TOTAL COSTS YEAR 2020	\$8,248,125

PROJECT NEEDS	SQUARE FOOT	COST/SF	HARD CONSTRUCTION COSTS	SOFT COSTS 25%	TOTAL PROJECT COSTS
Connecting Corridor from Academics to Specials	6,000	\$375	\$2,250,000	\$562,500	\$2,812,500
Remove Gym Dividing Wall, Open Ceiling			\$250,000	\$62,500	\$312,500
Secure Pinch Point Entrance	1,000	\$425	\$425,000	\$106,250	\$531,250
Vehicle & Pedestrian Safety Improvements			\$500,000	\$125,000	\$625,000
Remove Front Canopy & Replace with Smaller One			\$250,000	\$62,500	\$312,500
Toilet Updates	2,000	\$350	\$700,000	\$175,000	\$875,000
LED Lights	125,000	\$10	\$1,250,000	\$312,500	\$1,562,500
New Ceilings	100,000	\$6	\$600,000	\$150,000	\$750,000
TOTAL EXPENSES					\$7,781,250



* Connecting corridor from north classroom wing to specials wing would include collaboration spaces, gender neutral toilets and additional vertical circulation to relieve crowding at current central stair. This would create an internal courtyard space for potential outdoor classroom.

* Vehicle safety improvements would need to be studied further to determine the best plan of action. Possible property purchase along Johnson Drive.

