




SMSD INDIAN WOODS 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

Indian Woods was opened in 1961 and presently houses approximately 740 7th & 8th grade students. During its peak, enrollment in the 1970's was over 1,000 students. After graduating the majority of the students will attend Shawnee Mission South High School.

Located at 9700 Woodson drive in a residential neighborhood. Nearest major thoroughfares are 95th street several blocks to the north and Nall Ave. a few blocks to the east.

The building is a three story building with a small partial unused basement in the southwest corner of the academic wing.

The last addition and remodeling work occurred in 2012 when an auxiliary gymnasium and fitness room was added. Science rooms were also updated with that project.

The building is composed of mostly brick veneer on masonry load bearing walls.

The building is well maintained and in general good shape. The roof and exterior skin is in good shape despite some settlement in the southeast corner of the building.

Bus drop off and pickup is in the front drive loop off of Woodson Drive. Parent drop off and pickup is routed through the north parking lot with cars backing up onto 97th st. at the end of the school day.

The front canopy blocks the front elevation of the building and creates an easy path for students to climb onto the roof of the school. Removing the canopy would open up the front of the building and create an inviting and safe front door.

Classrooms are laid out in a traditional manner along a single loaded corridor. Rooms have plenty of natural light and are well ventilated. Teachers wishing to work in teams and pods are limited by the present classroom layout. Students don't have breakout spaces to work on projects as a team outside of the classrooms.

Student flow and circulation is hampered by stair towers with fire doors and staircases that are too narrow. Single direction staircases are utilized to help with congestion. The corridor in the classroom wing is too narrow and causes behavior issues as well as an orderly flow.

The Building has two enclosed courtyards. The one off the cafeteria is better utilized but is not fully accessible. The courtyard between the media center and classroom wing is not well utilized and could be improved with intentional classroom space and better drainage. Insects are a problem in this space.

The school doesn't have bathroom or locker room facilities for gender fluid students, presently they use the nurses office to change for PE, which causes issues for time lost from class time.

APPRAISAL

GUIDE FOR

SCHOOL FACILITY APPRAISAL

INSTRUMENT FOR

Indian Woods 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 Appriaser: ACI Boland, Inc.
Date of Appraisal: January 17, 2019

Building Name: Indian Woods Middle School

Street Address: 9700 Woodson

City, State, Zip Code: Overland Park, KS 66207

Telephone Number(s): 913-993-0600

School District: Shawnee Mission School District

Setting:
☐ Urban
 ☒ Suburban
 ☐ Small City
 ☐ Rural

Site Acreage: 19.7
 Building Square Footage: 130,336

Grades Housed: 7th-8th
 Student Capacity: x

of Teaching Stations: x
 # of Floors: 3

Student Enrollment: 740
 As of: 1/17/2019

Dates of Construction: Original building 1961 additions and renovations 2007, 2013, 2014

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 checked="" type="checkbox"/> Slab on Grade
<input type="checkbox"/> Wood	<input type="checkbox"/> Wood	<input checked="" 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
PointsTotal
Earned

Percent

Rating By
Category

1.0 The School Site

100

82

82%

2.0 Structural and Mechanical

200

133

67%

3.0 Plant Maintainability

100

74

74%

4.0 School Building Safety &
Security

200

155

78%

5.0 Educational Adequacy

200

135

68%

6.0 Environment for Education

200

139

70%

TOTAL**1,000**

718

72%

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	20
1.2	Site is easily accessible and conveniently located for the present and future population.	20	20
1.3	Location is removed from undesirable business, industry, traffic and natural hazards.	10	10
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	4
1.7	Site has stable, well drained soil free of erosion .	5	3
1.8	Site is suitable for special instructional needs , e.g. outdoor learning.	5	2
1.9	Pedestrian services including adequate sidewalks with designated crosswalks, curb cuts and correct slopes.	5	4
1.10	Sufficient on-site, solid surface parking is provided for faculty, students, staff and community.	5	3
Total - The School Site		100	82

Table of
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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	6
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	8
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	8
2.7	Structure is free of friable asbestos and toxic materials .	10	6
2.8	Interior walls permit sufficient flexibility for a variety of class sizes.	10	4

Table of
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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	9
2.12	Electrical controls are safely protected with disconnect switches easily accessible.	10	6
2.13	Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled.	10	6
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	6
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	6
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	8
3.9	Outdoor light fixtures, electric outlets , equipment, and other fixtures are accessible for repair and replacement.	10	6
Total - Plant Maintainability		100	74

Table of
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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	12
4.2	Walkways , both on and offsite, are available for safety of pedestrians.	10	8
4.3	Access streets have sufficient signals and signs to permit safe entrance to and exit from school area.	5	3
4.4	Vehicular entrances and exits permit safe traffic flow.	5	4
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	9
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

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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	12
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	12

Total - Building Safety and Security

200	155
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Table of
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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	3.0
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	9.0
5.8	Design of specialized learning area(s) is compatible with instructional need.	10	6.0
5.9	Library/Resource/Media Center provides appropriate and attractive space.	15	9.0
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	4.0

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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	6.0
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	2.0

Support Space

5.17	Teacher's lounge and work areas support teachers as professionals.	10	8.0
5.18	Cafeteria/Kitchen is attractive with sufficient space for seating/dining, delivery, storage and food preparation.	10	8.0
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	135.0
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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	10
6.4	Entrances and walkways are sheltered from sun and inclement weather.	10	10
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	12
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	9
6.11	Communication among students is enhanced by commons area.	10	4

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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	4
6.15	Acoustical treatment of ceilings, walls and floors provides effective sound control.	10	8
6.16	Window design contributes to a pleasant environment.	10	6
6.17	Furniture and equipment provide a pleasing atmosphere.	10	8
Total - Environment for Education		200	139

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10	0	2	4	6	8	10

Justification for Allocation of Points

BUILDING NAME AND LEVEL:

Indian Woods Middle School

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

BUILDING FEATURES THAT CLEARLY EXCEED CRITERIA:

1. Building appears to be in good overall condition

2. Recent turf Soccer /Football practice field

3.

4.

5.

BUILDING FEATURES THAT ARE NON-EXISTENT OR VERY INADEQUATE:

1. Lack of collaborative spaces and narrow corridors, with floor ledge each side.

2. Stairs too narrow.

3. Corridor ceiling has low hanging structural elements

4. Music storage non-existent-forcing instruments into corridor.

5. Classrooms set up for convential teaching - not teams.

6. Basement flooding an issue.

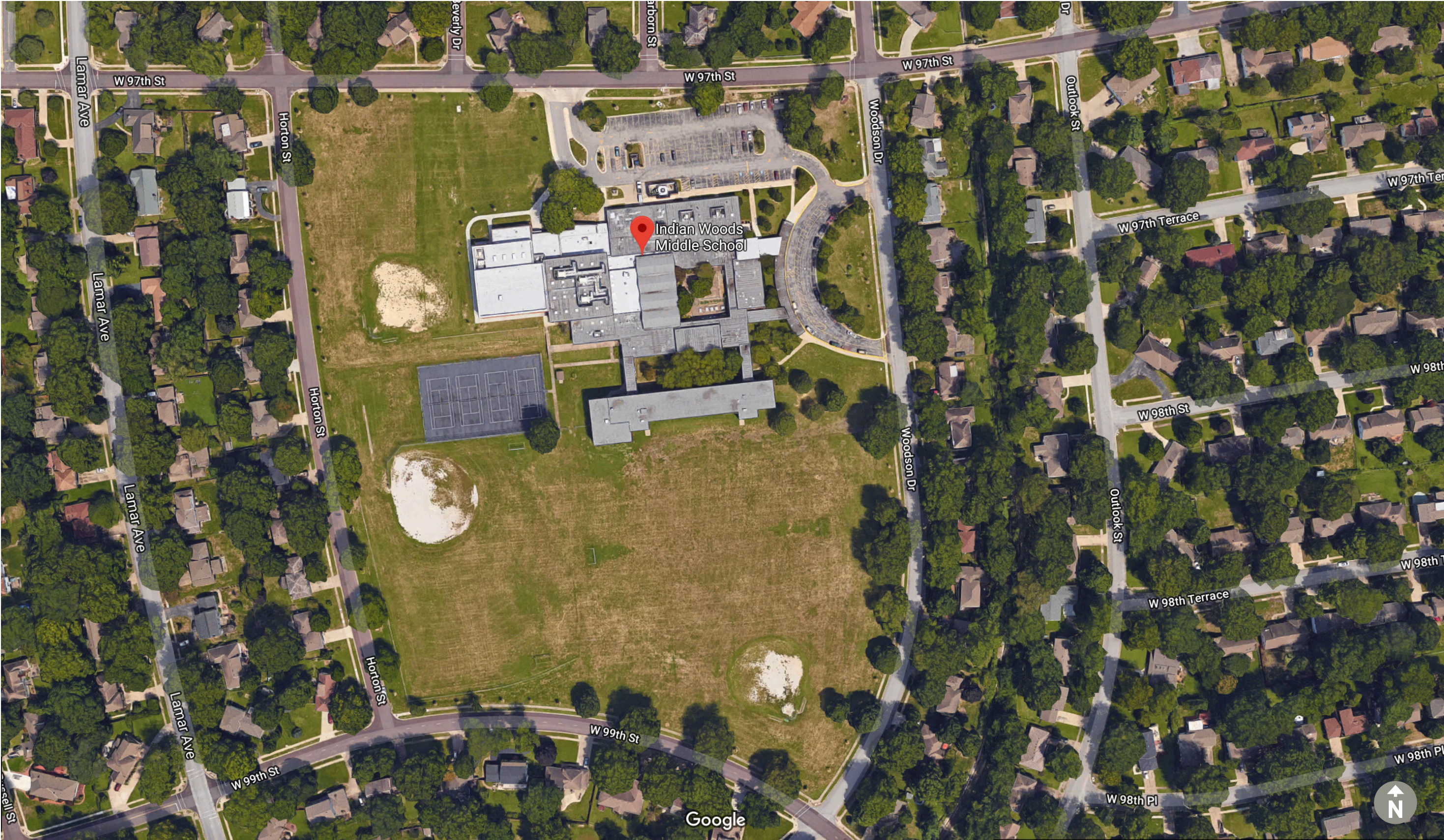
7. Need sidewalk from building to turf field and improved drainage between field and building.

Date of Appraisal: January 17, 2019

Name of School: Indian Woods Middle School

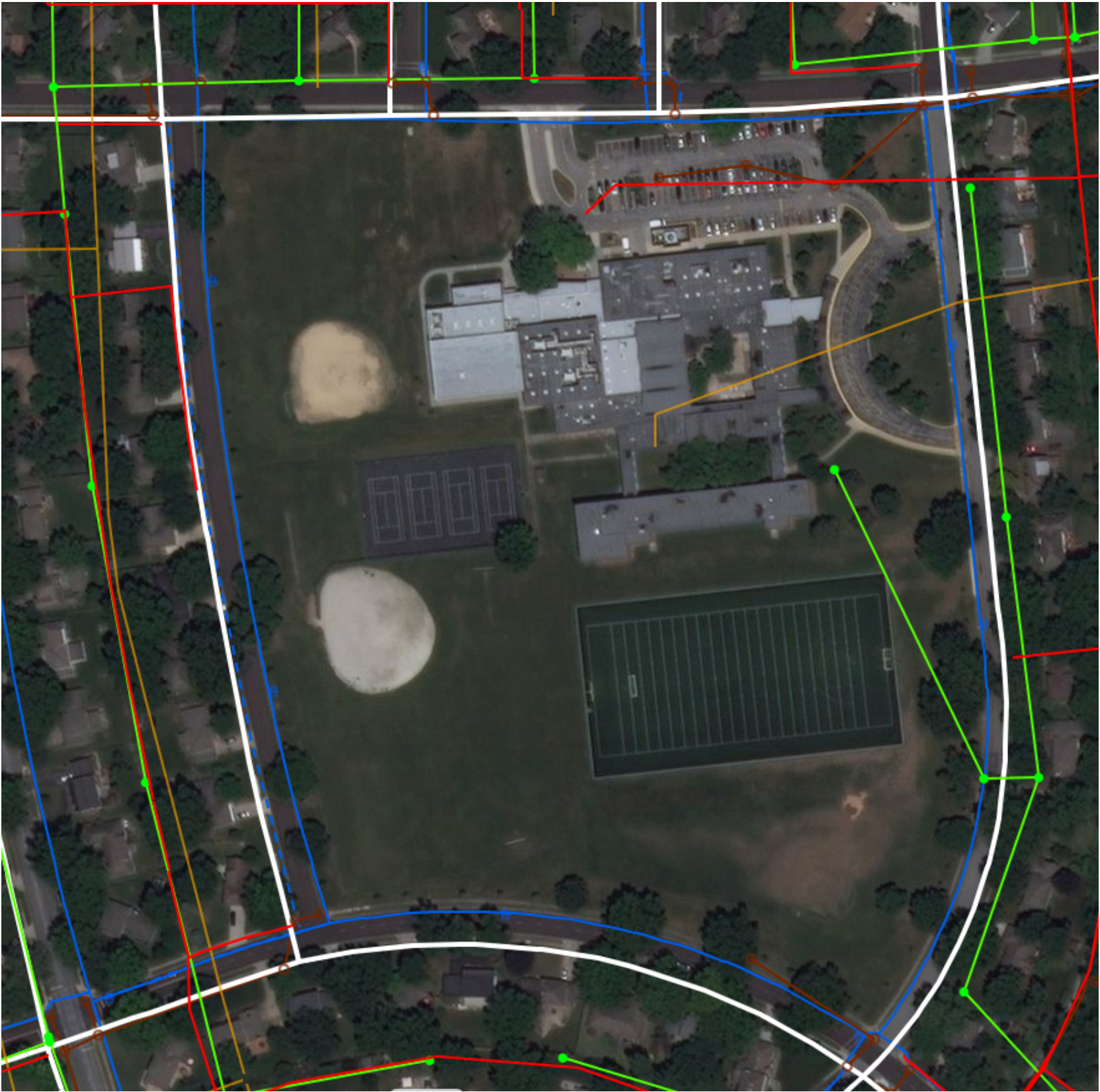
Name of Appraisers: ACI Boland, Inc.

SITE PLAN





SITE UTILITIES

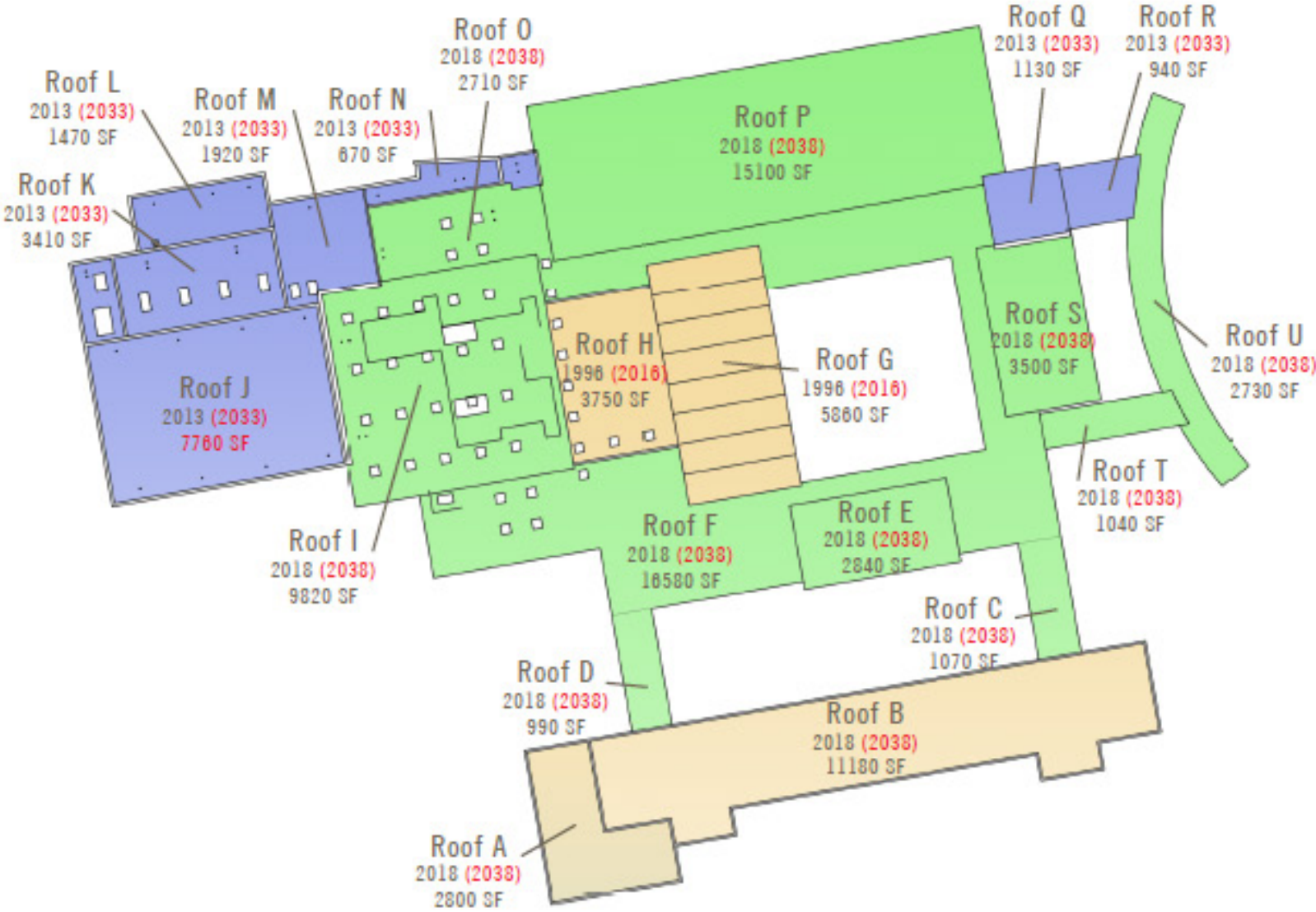


- Water Main
- Abandoned Water Main
- Sanitary Sewer Main
- Sanitary Sewer Manhole
- Storm Structure
- Storm Sewer
- Electric Line
- Gas Main
- Cable





ROOF ASSESSMENT



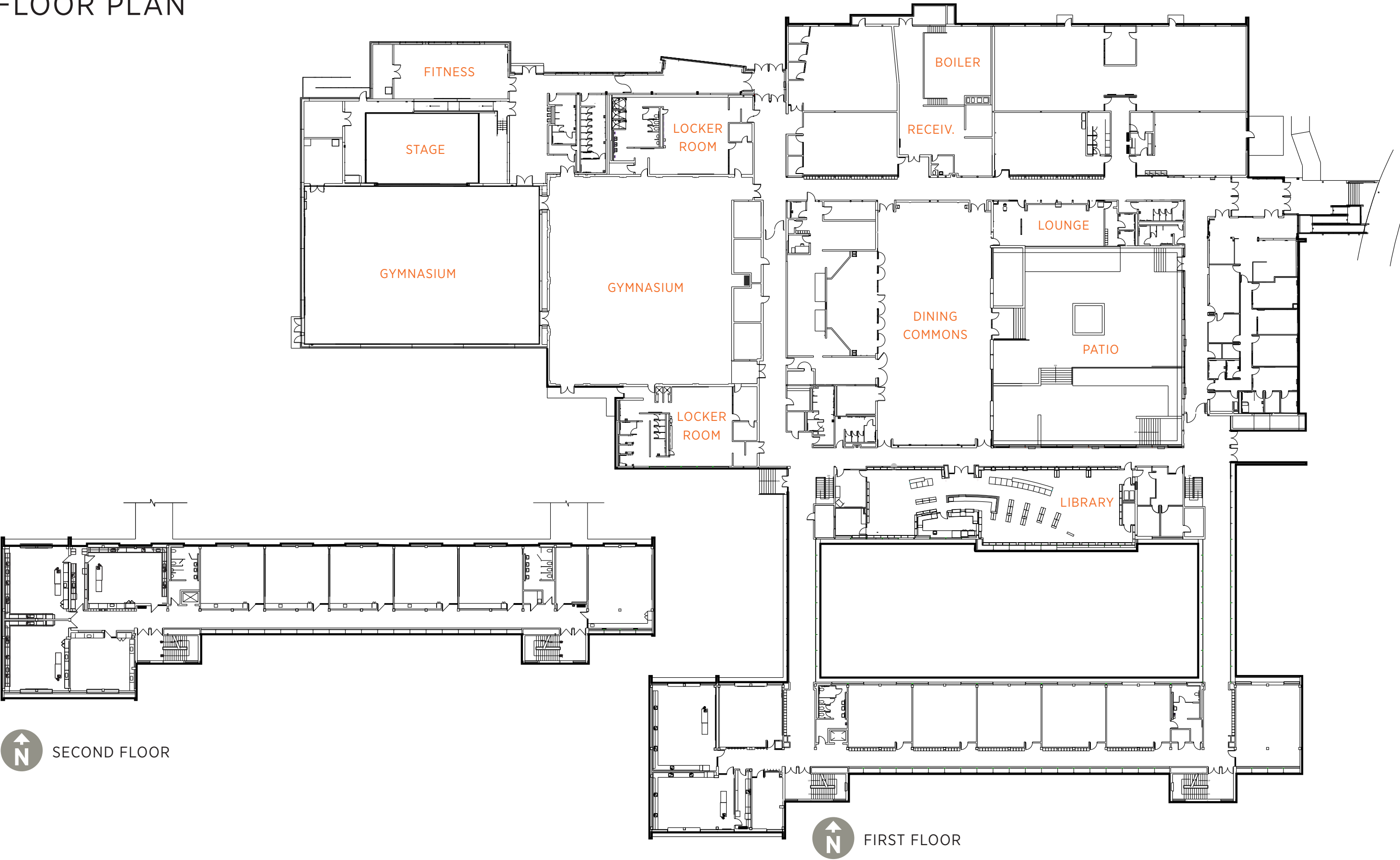
- ### Roof Areas
- Roofs C,D,E,F,I,O,P,S,T,U
Derbigum / 588 sq.
October 1991 (20 year) **2038**
 - Roofs A,B,G,H
Derbigum / 254 squares
August 1996 (20 year) **2038**
 - Roofs J,K,L,M,N,Q,R
Ruberoid/Gafglas Diamond Pledge NDL / 179 squares
May 2013 (20 year) **2033**

 Roof Plan





FLOOR PLAN

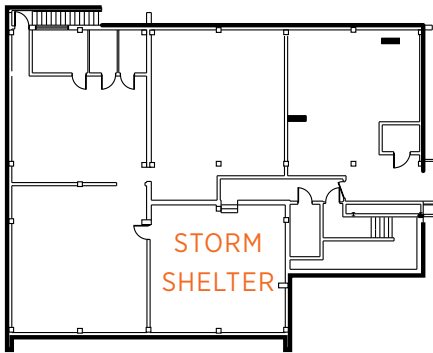




FLOOR PLAN



GROUND FLOOR



BASEMENT



FACILITY OBSERVATIONS

Architectural Observations



Stair is too narrow during high traffic periods



Stair is too narrow during high traffic periods



Narrow corridors without adjacent collaboration spaces



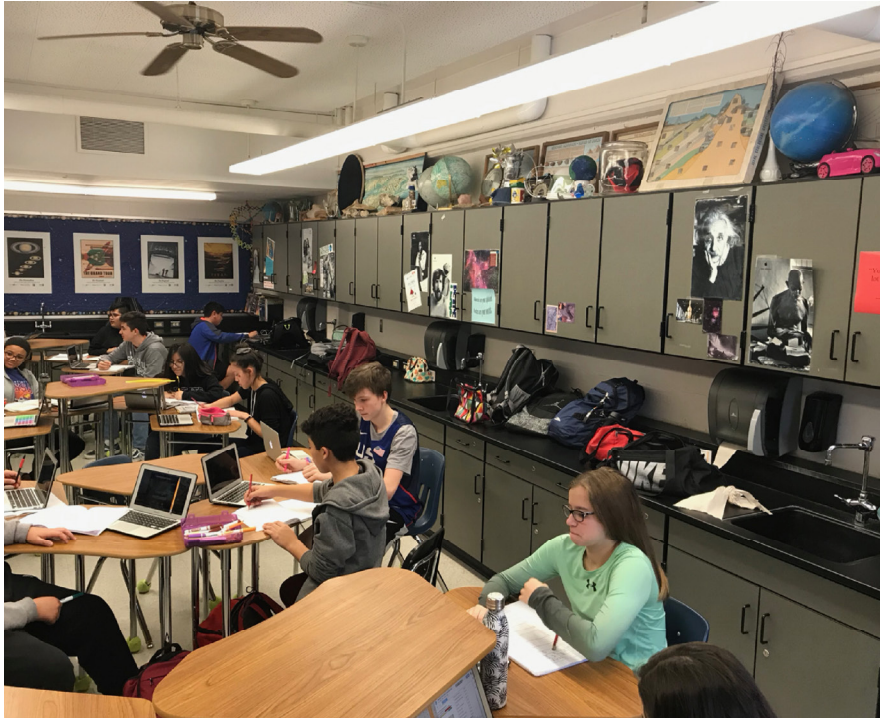
Narrow intersection cause congestion during class change periods



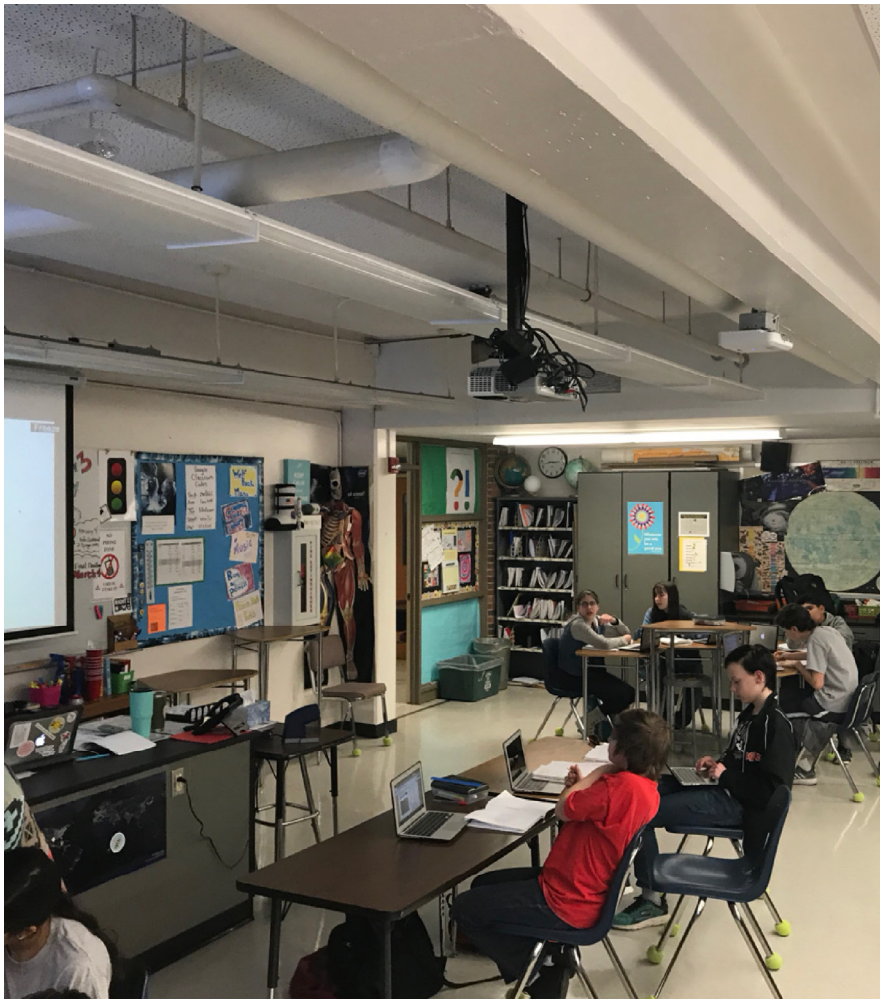
Damaged and cracked VCT evident



High student traffic period



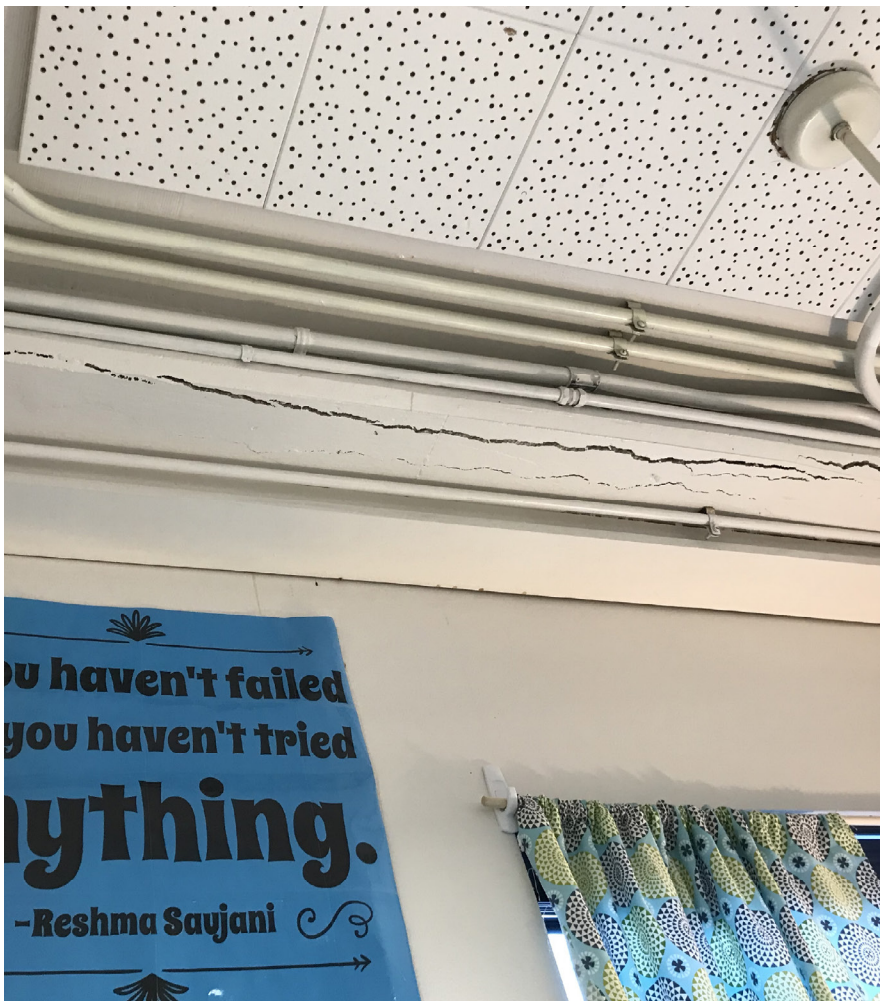
Desks are groups in an otherwise unconventional science classroom



Science rooms could use more storage space



Recently remodeled gym is attractive, however lacks space for bleachers



Crack evident in Room 109



Covered entrance includes a maze-like accessible ramp system



Covered entrance on east side-the north parking lot is combined with a drop-off that can back-up traffic on to the adjoining street



There is no sidewalk from the building to the turf field



Courtyard is a good feature however it lacks complete accessibility with one lift



Instrument storage in the corridor



Inadequate orchestra instrument storage encroches on already small area available for teaching



Converted art room to music room doesn't allow enough space or proper acoustics



Exterior stair to basement has apparent drainage and mold issues



Evidence of basement flooding and concrete slab cracking in mechanical space

MEP Observations



Low light levels in corridor



Operable windows open on a cold day



Upgraded plumbing fixtures



Water cooler does not meet ADA requirements and has no bottle filling station



Floor mounted urinal

ARCHITECTURAL NARRATIVE

**Principal: Dr. David Conrady | Mascot: Rockets | S. F. 130,336 s.f. | 19.7 acres | 3 levels | 1961 original building
Additions and Renovations in 2007, 2013, 2014**

General

- The building was constructed in 1961
- During the mid-70's enrollment was around 1,100 students; its current enrollment is 740.
- Building
- The southwest corner of the building is settling.
- One of the interior breezeways has a sloped edge that students run up on.
- Students have easy access to the roof from the front canopy.
- HVAC was added in 1998
- There are drainage issues around the building and the turf fields running towards the building cause more flooding in the basement.
- Fluorescent lighting is used throughout the building

Basement

- The basement level floods up to 4 inches when there is rain.
- The flooring here has been epoxied.
- 3 classrooms are not and will not be used, they are referred to as the 'dungeon'
- The basement is used as a storm shelter only

Classrooms

- Classrooms are still set up traditionally
- Two to three classroom aren't used all day
- Teachers have been making updates to their space ad hoc.

- Science, math, Social Studies, and English are all team taught

Fine and performing Arts

- The art room has been converted for Orchestra, and the storage space is not adequate.
- Art, Digital Media, and Project Lead The Way all share a classroom
- The art room is located on the front of the building, it has a lot of glass and high visibility, causing a potential security issue

Science Rooms

- There are currently five official science rooms, there is a desire for more.
- Lab spaces were updated around 2012.

Gymnasium/Athletics

- The fitness room and gymnasium were updated around 2012.
- In the main gym locker rooms there is poor visibility which makes supervision difficult. The shows in these rooms are not used.
- The gym floor is due to be striped in about two years
- The gym can hold everyone (650-680 students), but it leaves no space for activity.
- The Personal Fitness Class has around 90 kids per day, however space becomes very limited at 30 students. There is also a desire for upgraded, durable equipment.
- The stage in the gym is used for a performance class and musicals. This arrangement works well.

- There was previously a stage in the cafeteria, but it was removed during the last remodel.
- In the Auxiliary Gym there is no room for bleachers and it's too small for two courts of volleyball.
- There are four fenced tennis courts on site.

Cafeteria

- The cafeteria has electrical issues, it will pop breakers daily.
- This space is used by 7th graders in the morning, it is short about 6 tables (approximately 375 students per grade)
- There are three lunches per day with about 250 students each

Counselor/Nurse

- The counselor offices are too small.
- The Social Worker is in an old conference room.
- The interpreter is close to the front desk.
- The Nurse's office located by the Principals office is okay. There are some privacy issues because of conversations. It currently has space for two bed and one restroom.

Special Classrooms/Media/Library

- Shop class needs access to doors
- One computer lab- computer dimensions
- MacBook security room is in the library
- Media Design & Journalism do not have any data drops
- The special needs classrooms have been carved out of the larger classrooms and there is only one special education classroom that has its own restroom.
- Project Lead They Way has a robotics program
- The library will be updated this summer (2019)

Toilets

- Toilets throughout the building are in decent space, the new ones are better.
- The only gender-neutral toilets are in either the nurse's office or the old PE storage room.

Circulation/Lockers

- The elevator does not work reliably and has no access to basement level.
- The corridors double as common spaces for students
- Hallways throughout the building have beams which the students can jump up and grab.
- Staircases are one-way.
- Lockers are assigned but only have 20% usage.

Site

- Parking on the site meets current demands well.
- The bus drop-off is located at the front of the building, there are currently 14 buses.
- Parent drop-off is in the north lot and can back-up onto Diemer street.

Wishes & Wants

- Strong desire for outdoor classroom
- Wider halls and collaboration spaces
- Team based teaching pods (5 teams with 150-175 students per pod)
- More gym storage for athletics
- Track of any size of type

MEP NARRATIVE

General Project Information

Owner:	Shawnee Mission School District
School Name:	Indian Woods Middle School
Project Address 1:	9700 Woodson Drive
City: Lenexa	State: KS
	Floor Area: 130,336 sf
Building Stories:	3
Building Use Type:	Middle School
Code Occupancy Group:	E Occupancy

Team Contact Information

Contact Name:	Keith Hammerschmidt
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General

- A portion of the mechanical system serving the building is served from 4-pipe hydronic system with air handlers located in mechanical rooms and penthouses. Other portion of building served by rooftop units. Age of mechanical equipment ranges from 5 years to 25 years.
- Lighting in classrooms appears to be sufficient. Corridors and gym appear to have low light levels. 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.
- Majority of building didn't appear to have fire sprinkler coverage. Gym addition only area that appeared to have fire sprinkler coverage.

Mechanical

- System Descriptions
 - 4-Pipe Hydronic system with air handlers and rooftop units.
 - Air Handling units around 20 years old. Typical life of an air handler is 20 – 25 years.
 - Chiller is around 10 years old. Typical life span is 20-25 years.
 - Rooftop units range from 5 - 23 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.
 - Cooling tower is around 10 years old. Typical life of a cooling tower is 15 – 20 years.
 - Kitchen equipment has been upgraded within last 5 years.
 - Basemen floods through mechanical louver.
 - Rooftop units have damage on coils. Damaged coils affect the performance of the unit.
 - Dust collection system is older and appears to not be the most affective system.
 - 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.
 - Majority of hot water heaters are around 10 -20 years old. Typical life of a hot water heater is 10 – 15 years.
 - Water heaters gas but not high efficiency type.
- Water Supply
 - Water pressure appeared to be sufficient, water service size doesn't allow for much more expansion to domestic water system.
 - Water service was provided with backflow preventer.
- Roof Drains
 - Roof drains are internal.
 - Majority of building appears to not have overflow drains. Newer additions have internal overflow drains or overflow scuppers.
- 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 urinals were floor mounted.
- Some water coolers have been updated to ADA but didn't observe 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.
 - Water coolers with bottle filling stations.

Electrical Systems

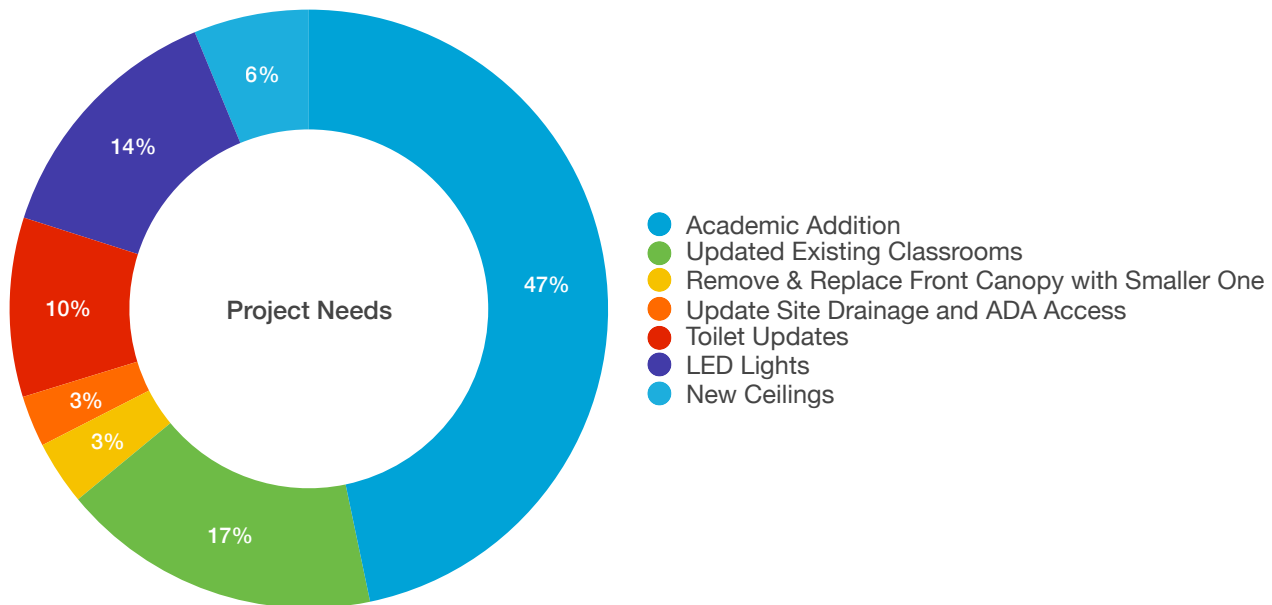
- Lighting
 - Majority of building has fluorescent light fixtures. Majority of light fixtures were surface mounted.
 - Occupancy sensors and vacancy sensors have not been installed in majority of building.
 - Majority of exterior light fixtures were not LED.

- 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.
- Special Systems (Fire Alarm, Intercom, Data Systems)
 - Fire Alarm system appears to have been update, modifications to support a new mass notification system should minimal.
 - Intercom system appeared functional and sufficient.
 - Classrooms were provided with projector systems.
 - Data racks were located in janitor closets.
- 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	\$9,031,250
Inflation 2019 to 2020 6%	\$541,875
TOTAL COSTS YEAR 2020	\$9,573,125

PROJECT NEEDS	SQUARE FOOT	COST/SF	HARD CONSTRUCTION COSTS	SOFT COSTS 25%	TOTAL PROJECT COSTS
Academic Addition	9,000	\$375	\$3,375,000	\$843,750	\$4,218,750
Updated Existing Classrooms	25,000	\$50	\$1,250,000	\$312,500	\$1,562,500
Remove & Replace Front Canopy with Smaller One			\$250,000	\$62,500	\$312,500
Update Site Drainage and ADA Access			\$200,000	\$50,000	\$250,000
Toilet Updates	2,000	\$350	\$700,000	\$175,000	\$875,000
LED Lights	100,000	\$10	\$1,000,000	\$250,000	\$1,250,000
New Ceilings	75,000	\$6	\$450,000	\$112,500	\$562,500
TOTAL EXPENSES					\$9,031,250



* Academic addition would include collaboration and team teaching spaces, new elevator that goes to basement, new large stairs & gender neutral toilets.

* Updated existing classrooms would include, ceilings, flooring, paint, casework and lighting.

