DMPS FACILITY ASSESSMENT | MCCOMBS MIDDLE SCHOOL

1.30.2024

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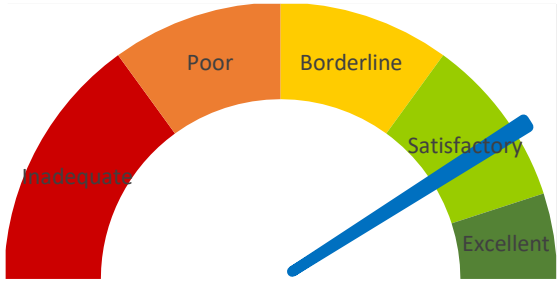

REPORT ORGANIZATION

COVER SHEET

REPORT ORGANIZATION

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BUILDING DATA RECORD

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APPENDIX
- Civil Site Plan
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EXECUTIVE BUILDING SUMMARY

McCombs Middle School's on-site facility conditions assessment was conducted on January 30, 2024 and included visual conditions assessment from professionals covering interior architecture, exterior building envelope, the property's grounds (site), structural condition, mechanical (HVAC/Plumbing) systems, electrical systems (power, exterior lighting, interior lighting, fire alarm, and general IT), and the elevator conditions.

A few of the notable short term maintenance identified for McCombs Middle School are: power repairs at the auditorium stage, door 1541 repair, 1620 lighting repairs, exterior door latching repairs, site grading repairs, and MDF cooling maintenance. Vision lights at classroom doors were almost all covered with paper or a closed fabric curtain. According to DMPS policy, and student and staff safety, it is recommended these vision panels be kept clear and unobstructed. Other maintenance recommendations are included in the Project Recommendations list later in this report. Many deferred maintenance items are now becoming larger projects needing addressed. Addressing these projects and tracking on-going maintenance will help to keep the facility in better condition in between large projects.

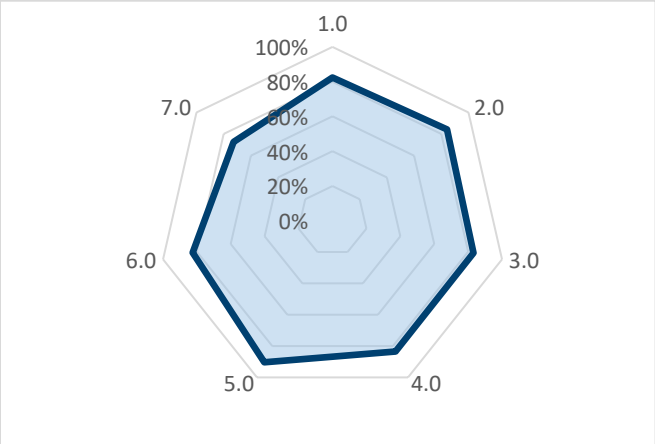
A summary of the recommended projects for Moore Elementary to be completed in the next 1-2 years are as follows:

- Interior Renovations and Improvements
- Exterior Repainting
- Site Repairs
- Structural Floor Patch/Repairs
- Lintel Repairs
- Domestic Water Improvements

Additional 1-2 year projects and details along with all of the recommended potential projects at the 3-4 year and 5-10 year priority levels are further described within this report.

Discipline Comparison				Building Health				
Assessment Category Summary		Max Pnts	Earned Pnts	Bldg Weight Factor	Max Pnts	Earned Pnts	%	Rating
1.0	Educational Adequacy	125	103	2.00	250	206	82%	Satisfactory
2.0	Environment for Education	370	312	0.60	222	187	84%	Satisfactory
3.0	Exterior Envelope	95	79	3.00	285	237	83%	Satisfactory
4.0	School Site	85	71	1.50	128	107	84%	Satisfactory
5.0	Structural Conditions	145	131	1.30	189	170	90%	Excellent
6.0	Mechanical Systems	670	553	0.80	536	442	83%	Satisfactory
7.0	Electrical Systems	455	331	0.75	341	248	73%	Satisfactory
Total					**1,950**	**1,598**	**82%**	

McCombs Middle
Discipline Comparison



Rating Table				
1-29%	30-49%	50-69%	70-89%	90-100%
Inadequate	Poor	Borderline	Satisfactory	Excellent

After totaling the scores from the various discipline assessment reports McCombs Middle School scored a building health rating of 82% or "Satisfactory" per the scale described above. Per the graph shown on the cover page of this report, scores within the "green" range are considered positive scores. McCombs Middle School is within this positive range. Improvements to the mechanical and electrical systems, as described within this report, would make the largest impact in increasing the score to "Excellent".

Building Data Record

Building Name: McCombs Middle

Date: 1.30.2024

Address: 201 County Line Rd
Des Moines, IA 50320

High School Feeder System: Lincoln High

Building SF: 99,673 square feet

Site Acreage: 35.62 acres

Date(s) of Construction: 1973, 2013, 2017 entry addition

Date(s) of Roof Replacement: 2012, 2018, 2022

Current/Scheduled Projects: Geothermal Upgrade
Remove fuel storage tank - 2025

Existing Building Data:

- [x] Egress Plans
- [x] Original Docs
- [x] Major Renovations and Additions
- [x] Minor Projects
- [ ] Maint. Reports

Site Items:

- [ ] Student Garden
- [x] Loading Dock
- [x] Stormwater Detention

Energy Source:

- [ ] Electric
- [x] Gas
- [x] Geothermal
- [ ] Solar

Cooling:

- [ ] DX RTU or DOAS
- [x] Chiller
- [ ] VRF
- [ ] Water Source Heat Pump
- [ ] Fluid Cooler

Heating:

- [ ] Gas/Electric RTU or DOAS
- [x] Boiler
- [x] Water-to-Water Heat Pump
- [ ] VRF
- [ ] Water Source Heat Pump

Structure Fireproofing:

- [x] No
- [ ] Yes

Construction:

- [x] Load Bearing Masonry
- [x] Steel Frame
- [x] Concrete
- [ ] Wood
- [ ] Other

Exterior Facade:

- [x] Brick
- [ ] Stucco
- [x] Metal
- [ ] Wood
- [ ] Other

Floor/Roof Structure:

- [ ] Wood Joists
- [x] Steel Joists/Beams
- [x] Slab on Grade
- [x] Struct. Slab
- [ ] Other

A | Architectural, Programming

ASSESSOR: Tim Bungert, Kaela Shoemaker

1.0 Educational Adequacy

		Weight Factor	Rating	Points	Comments
General					
1.1	**Floor materials** are appropriate for space type.	1	4	4	Select classrooms would benefit from carpet over concrete floors.
Elective/Secondary Classroom					
1.2	**Gymnasium** is adequate for providing physical education programming.	3	3	9	In need of acoustic absorption. Basketball hoops are non adjustable which limits other activities.
1.3	Gymnasium is supported by adequate **locker rooms.**	1	4	4	Locker rooms and locker room restrooms appear in adequate condition for limited uses. Lockers are slightly rusted in areas. If use is consistent or increased it would be recommended to replace the lockers. Shower areas are filled with storage and unused. The shower plumbing fixtures are rusted, if these are to be usable a renovation is recommended.
1.4	**Cafeteria** has adequate space, furniture, and acoustics for efficient lunch use.	2	4	8	1/3 of tables have noticeable chipped, or delaminated corners. Otherwise space is in good condition.
1.5	**Vocal music room** is adequate for providing music instruction.	2	5	10	
1.6	**Instrumental music room** is adequate for providing music instruction, practice, and lessons.	2	5	10	
1.7	**Auditorium** has sufficent arrangement, technology, and acoustics for program.	2	2	4	The character and size of space is excellent. Stage floor has damage, stage power is hazardous with reported issues. 30% of seating is significantly damaged and unusable. General flooring is significantly worn and missing in areas. Ceiling damage in select areas.
1.8	**Art room** has sufficient accommodations for program.	2	4	8	No access to daylight.
1.9	**Science classrooms** have sufficent access to water, gas and equipment for program.	2	4	8	Countertops and worktops are showing wear.
1.10	**Family Consumer Science** classrooms have sufficient accommodations for program.	2	5	10	

A | Architectural, Programming

ASSESSOR: Tim Bungert, Kaela Shoemaker

		Weight Factor	Rating	Points	Comments
1.11	**Industrial Arts** space has sufficent accomodations for program.	2	N/A	0	
1.12	**Library/Resource/Media Center** provides appropriate and attractive space.	1	3	3	Decals on windows reduce daylight access significantly. Would recommend improvements. Furniture was tables and chairs without varied postures or styles.
Core Classroom					
1.13	Classroom space permits arrangements for **small group activity.**	2	5	10	
1.14	**Student storage space** is adequate.	1	5	5	
1.15	**Teacher storage space** is adequate.	2	5	10	
1.16	Classroom **acoustical treatment** of ceiling, walls, and floors provide effective sound control.	3	3	9	Several classrooms need acoustic improvements, see projects for more information.
1.17	**Classroom power and data receptacles** are located to support current classroom instruction.	4	3	12	Typical classroom has at least 3 extension cords pulling over to the center of the classrooms.
1.18	Educational **technology** supports instruction.	4	5	20	
Administration					
1.19	**Conference/Private meeting rooms** are adequate for large and small meetings.	1	5	5	
1.20	**Main office** has a check-in and waiting area.	2	5	10	
	TOTAL			159	

A | Architectural, Interior

ASSESSOR: Tim Bungert, Kaela Shoemaker

2.0 Environment for Education

Design

		Weight Factor	Rating	Points	Comments
2.1	**Traffic flow** is aided by appropriate foyers and corridors.	2	5	10	
2.2	Communication among students is enhanced by **common areas.**	2	4	8	Not many common areas are in place, or activated with student focused furniture.
2.3	Areas for students to **interact are suitable to the age group.**	2	5	10	
2.4	Large group areas are designed for effective **management of students.**	2	4	8	The auditorium has some disorganization that makes for some challenges in student visibility and management when used for music classes.
2.5	**Furniture Systems** are in good or like new condition.	1	4	4	Cafeteria tables are showing wear in corners
2.6	**Color schemes**, building materials, and decor are **engaging and unify** the school character.	2	4	8	Corridors could be more engaging in areas. Near the main office there is more engaging wall covering and displays.
2.7	Windows and skylights provide access to **adequately controlled daylight** for regularly occupied spaces.	3	2	6	There are 16 classrooms, approximately 50%, without access to daylight. Overall spaces are lacking in daylight making the building as a whole feel dark.
2.8	Windows provide access to **quality views** (to exterior, courtyards, artwork etc.) for regularly occupied spaces.	3	3	9	16 classrooms lack access to views outward.
2.9	**Lighting has proper controls** to provide the required light levels for various teaching and learning needs.	2	5	10	
2.10	**Staff dedicated spaces** include conference space, work space, and dedicated restrooms.	1	5	5	

A | Architectural, Interior

ASSESSOR: Tim Bungert, Kaela Shoemaker

		Weight Factor	Rating	Points	Comments
2.11	**Main office** is visually connected to the entry and is welcoming to students, staff, and guests.	3	5	15	
2.12	**Break room** is adequately sized and furnished for proper use.	1	4	4	Lacking tables and chairs in lounge 1141. 1040 appears adequate.
2.13	**Mother's room** is a separate designated space properly furnished.	1	0	0	None observed
Maintainability					
2.14	**Floor surfaces** are durable and in good condition.	1	3	3	Most classroom carpet needs replacement in the near future. Other hard surface flooring in good conditions.
2.15	**Ceilings** throughout the building – including services areas – are easily cleaned and resistant to stain.	1	3	3	Dish room and kitchen ceiling is not appropriate for the space and is significantly damaged. Other ceiling throughout the space has water damage. South portions of the building show the most damage. Restrooms ceilings have minor tile damage but notable staining throughout.
2.16	**Walls** throughout the building – including services areas – are easily cleaned and resistant to stain.	1	3	3	Gypsum wall corners are damaged. They need corner guards. High traffic areas appear to need repainted or a more durable finish.
2.17	**Built-in casework** is designed and constructed for ease of maintenance.	1	3	3	Science and Art Room counters showing minor wear. Restroom counters at lavatories are showing significant delamination in the multi-user restrooms. Staff restrooms also have plastic laminate counters but appear in adequate condition.
2.18	**Doors** are either solid core wood or hollow metal with a hollow metal frame and well maintained.	3	4	12	Veneer damage at base in several doors. Door frames need painting touch ups, significant wear at the door frames adjacent to the door latch. Door 1604 needs replaced , damaged to core.
2.19	**Facility doors** are keyed to standardized master keying system.	3	5	15	
2.20	**Restroom partitions** are securely mounted and of durable finish.	2	3	6	Dark colored partitions show graffiti removal marring. Partitions in most restrooms are black core phenolic panels. Lavatories are mounted in plastic laminate counters showing significant wear and damage. Mirrors are either missing or silvered in most all restrooms.

A | Architectural, Interior

ASSESSOR: Tim Bungert, Kaela Shoemaker

		Weight Factor	Rating	Points	Comments
2.21	**Adequate electrical outlets** are located to permit routine cleaning in corridors and large spaces.	1	5	5	
Occupant Safety					
2.22	Classroom doors are **recessed and open outward.**	4	5	20	
2.23	Door hardware (into classrooms or any occupied rooms off of corridors) include **intruder classroom locksets.**	3	5	15	
2.24	**Door panels** into classrooms and other occupied spaces contain **vision lite.**	3	3	9	1406 , 1515, 1401 library no vision lites
2.25	**Vision lite** in doors is clear and uncovered.	2	3	6	Most were covered with either paper or cloth. It is recommended paper covering be removed and cloth is either removed or tied back to allow visual access between the corridor and classrooms. This is recommended as necessary staff and student safety.
2.26	**Glass** is properly located and protected to prevent accidental injury.	2	5	10	
2.27	**Flooring** is maintained in a **non-slip** condition	2	5	10	
2.28	**Traffic areas terminate at exit or** stairway leading to egress	5	5	25	
2.29	Multi-story buildings have at least **two stairways** from all upper levels for student egress.	5	N/A	0	
2.30	**Stairs (interior and exterior)** are well maintained and in good condition meeting current safety requirements.	5	4	20	Minor stair and railing issues in mechanical rooms. See structural scoring and comments.

A | Architectural, Interior

ASSESSOR: Tim Bungert, Kaela Shoemaker

		Weight Factor	Rating	Points	Comments
2.31	At least **two independent exits** from any point in the building	5	5	25	
2.32	**Emergency lighting** is provided throughout the building.	5	5	25	
	TOTAL			312	

A | Architectural , Exterior

ASSESSOR: Gaul/Unick

3.0 Exterior Envelope

		Weight Factor	Rating	Points	Comments
Design					
3.1	Overall **design is aesthetically pleasing** and appropriate for the age of students.	2	5	10	No comments.
Maintainability					
3.2	**Roofs** appear sound, have positive drainage, and are water tight.	3	4	12	Next roof replacement in 5-10 years.
3.3	**Roof access** is safe for all roofs.	3	5	15	No comments.
3.4	Exterior **window sealant** is fully intact without cracks or gaps.	3	4	12	Sealant is good condition. Anticipate maintenance replacement in 5-10 years.
3.5	**Glazing** is low-e coated, insulated, and overall in good condition.	1	5	5	All glazing appears to be insulated units with tinting.
3.6	**Operable windows** are functional and safe. Operable portion of window fully seals when closed without gapping or leaking.	2	4	8	No significant issues noted.
3.7	**Exterior doors** are of durable material requiring minimum maintenance.	2	3	6	Doors are all aluminum, steel, or fiberglass faced steel. All steel doors/frames should be repainted in 3-4 years.
3.8	**Exterior walls** are of material and finish requiring little maintenance,	1	4	4	Exterior walls are CMU or brick, with some metal panel soffits. Opening lintels and some soffits/louvers will require repainting. Soft joints in masonry will require replacement in 3-4 years.
3.9	**Exterior Doors** open outward and are equipped with **panic hardware.**	1	4	4	No comments. Some hardware maintenance required at Doors 6 and 17.
3.10	**Exterior Doors are monitored** or controlled by an access control system.	1	3	3	(2) Doors (Nos. 3 and 10) require maintenance (3 does not latch; 10 does not unlatch from exterior). (7) Doors have card readers and position switches. (13) Doors have keyed locksets. (6) of those have position switches. (1) Door has no exterior hardware. All doors (except exterior storage) have signage.
	TOTAL		79		

C | Civil

ASSESSOR: Jack Gorman Joel Jackson

4.0 The School Site

		Weight Factor	Rating	Points	Comments
4.1	**Site topography** and grading drains water away from the building and retaining walls.	1	4	4	Site drains predominately to the south, one erosion issues on the SW side where swale is washing out.
4.2	**Parking areas** are in good condition.	5	5	25	The parking lot on the east appeared new and in good condition.
4.3	**Drive areas** are in good condition.	3	4	12	The asphalt drive was cracked all the way through about every ~50 ft and there were sections of asphalt that were cracking profusely at the interface where the asphalt and concrete curb and gutter sections meet. The entrance to the site was too narrow for truck maneuvering and should be widened.
4.4	**Sufficient on-site, solid surface parking** is provided for faculty, staff, and community.	1	4	4	DMPS states staff parking is good for day to day and that decent sized events are manageable.
4.5	**Sidewalks** around the facility are in good **condition.**	1	4	4	Some sections along the south walk in need of replacement, small isolated sections in need of repair elsewhere.
4.6	**Sidewalks are located** in appropriate areas with adequate building access.	1	4	4	One door was without sidewalk access.
4.7	**Hard surface** playground surfaces are in good condition.	3	N/A	0	
4.8	**Fencing** around the site is in good condition.	1	4	4	The north side of the site has a section needing replacement, the western fence appeared old but still in good condition.
4.9	**Trash enclosure** is in good condition.	1	4	4	On the western side of the school, a small crack was observed by one of the gate post but no issues otherwise.
4.10	**Utilities** are in newly constructed conditions and placed in suitable locations.	1	3	3	One intake adjustment ring in need of repair, a FES needs replacement, a FES trash guard needs reattached, and the FES going under County Line Road is damaged but owned by the city. DMPS may contact the city to coordinate replacement or repair.

ASSESSOR: Jack Gorman Joel Jackson

		Weight Factor	Rating	Points	Comments
4.11	**Site has sufficient room** for both building and parking expansion.	1	5	5	Plenty of space on site for building or parking expansion.
4.12	Site has **onsite bus and parent pickup** up with adequate length, good separation and general good site circulation.	1	2	2	Buses use the north lane and parents use the entire property for drop off. DMPS states there are many conflicts and that pick up is worse than drop off. The signage directing bus and car traffic was confusing, and visitors were observed not following the signage.
	TOTAL			71	

S | Structural

ASSESSOR: Trevor Pullen

5.0 Structural Conditions

		Weight Factor	Rating	Points	Comments
Foundations					
5.1	**Foundations** appear to be in good condition with no visible cracks.	1	5	5	
5.2	There does not appear to be any **foundation settlement.**	2	5	10	
5.3	**Basement walls** do not appear to have any cracks.	1	5	5	
5.4	**Stoops** appear to be in good condition.	1	4	4	The stoop near room 1108 has some cracking. It is not severe enough to need repaired at this time. No stoops located outside of doors in rooms 1631 and 1601.
Slab on Grade					
5.5	**Slabs on grade** do not appear to have any cracks	1	4	4	There are shrinkage cracks throughout the polished concrete floors in the corridors, cafeteria and other various rooms.
5.6	Slabs on grade do not appear to have any **settlement.**	1	5	5	
Exterior Walls					
5.7	**Brick masonry** appears to be in good condition.	2	5	10	
5.8	**Lintels** appear in good condition (no visible deflection or rust).	1	3	3	There are several lintels with minor to moderate rust. There are also three lintels with visible deflection.
5.9	**CMU** is in good condition.	1	5	5	
5.10	**Precast** is in good condition.	1	N/A	0	

S | Structural

ASSESSOR: Trevor Pullen

		Weight Factor	Rating	Points	Comments
Interior Walls					
5.11	**Interior walls** appear to be in good condition.	1	4	4	There is minor mortar cracking in various locations throughout the building. There are two spots in need of repair next to the exit doors north of room 1401.
Floor Framing (Elevated)					
5.12	**Floor framing** appears to be in good condition.	3	5	15	
5.13	Floor framing appears to meet the **code requirements.**	3	5	15	
Roof Framing					
5.14	**Roof framing** appears to be in good condition.	3	5	15	
Miscellaneous					
5.15	**Retaining walls** appear to be in good condition.	1	N/A	0	
5.16	**Canopies** appear to be in good condition.	1	5	5	
5.17	**Loading dock concrete** appears to be in good condition.	2	5	10	
5.18	**Mechanical screening** appears to be in good condition.	2	4	8	There is minor rust on most of the mechanical screen posts.
5.19	**Stairs** appear to be in good condition.	1	4	4	Concrete stair in the boiler room (1107) exit has a chunk of concrete that has broken off.
5.20	**Stair railings** appear to be in good condition.	1	4	4	Railing at the concrete stair in the boiler room (1107) exit is loose. It is missing bolts in the base attachments and wall attachment.

S | Structural

ASSESSOR: Trevor Pullen

		Weight Factor	Rating	Points	Comments
5.21	**Tunnels** appear to be in good condition without cracks.	1	N/A	0	
5.22	There is a **designated hardened area** in the building.	1	0	0	There is no hardened area.
5.23	The hardened area appears consistent with the **ICC 2018 code.**	1	N/A	0	
	TOTAL			131	

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

6.0 Mechanical Systems

HVAC Design

		Weight Factor	Rating	Points	Comments
6.1	**Zone Control.** Thermostats are provided in each space for individual zone control of space temperatures.	3	4	12	Appears to be true for most zones - a few zones were highlighted as having potential issue with shared control.
6.2	**Thermostat location.** Thermostats are properly located in the space.	3	5	15	Generally appears to be true
6.3	Appropriate **amount of ventilation** are provided to each space.	5	5	25	Generally appears to be true, though. See note below, though about AHU-1 off during site visit.
6.4	**Ventilation** is provided during occupied hours.	5	3	15	AHU-1 was tripped off during visit, so no ventilation air was provided to these spaces.
6.5	**Outdoor air intake locations** are appropriate.	4	5	20	Intake locations generally appear to be acceptable
6.6	Appropriate **levels of exhaust** are provided for areas requiring this such as restrooms, janitor's closets and locker rooms.	5	5	25	Generally appears to be true
6.7	**Building pressurization.** The design takes into account the balance between ventilation and exhaust air	2	2	4	It was discovered that the 2 larger AHUs in the building, 1 and 2, have their supply ductwork tied together in the middle of the building. This causes AHU-1 to trip off on high static frequently. With AHU-1 off this reduces capability of systems to maintain control over building pressurization, particularly with exhaust systems continuing to operate.
6.8	**Major HVAC Equipment** appears to be within it's acceptable **service life.**	5	5	25	Generally appears to be true
6.9	**Cooling loads** are within equipment operational capacity.	5	5	25	Appears to be true for most spaces. But with AHU-1 frequently tripped off, areas served by AHU-1 may struggle to maintain cooling setpoint. As the building has fan-powered boxes, the spaces are likely able to maintain heating setpoint.
6.10	**Heating loads** are within equipment operations capacity.	5	5	25	Appears to be true for most spaces

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

		Weight Factor	Rating	Points	Comments
6.11	**Dehumidification** is provided and addressed humidity loads in incoming outside air.	3	5	15	Generally appears to be true when all AHUs are operational
Plumbing Design					
6.12	**Water Supply Pressure** is adequate to allow for operation of plumbing fixtures.	5	3	15	Water pressure was noted as seeming low at several outlets
6.13	Appropriate **backflow preventer** is provided at connection to city water supply.	5	5	25	Yes - single backflow preventer is provided
6.14	**Domestic hot-water systems** are within equipment operational capacity.	5	5	25	Appears to be true
6.15	Domestic **hot-water recirculating systems** allow for hot-water at fixtures within a reasonable amount of time.	3	1	3	Circulating pump was observed, but hot water was not observed at outlets - see Item 6.32 for additional notes
6.16	**Sanitary sewer systems** are sized and sloped to allow for proper drainage.	5	5	25	Appears to be true
6.17	Appropriately sized **grease interceptors** are provided for facilities with food service.	3	5	15	Two grease interceptors piped in series (5000 and 2000 gallons)
6.18	**Roof drainage** systems are sized appropriately and overflow drainage systems are installed.	5	4	20	Overflow drains generally not observed, however majority of roof does not have parapet and appears that overflow would shed over wall of building if drain is plugged.
6.19	**Restroom fixtures** are in good condition and comply with current DMPS standards.	3	3	9	Automatic flush valves but manual faucets without mixing valves (no hot water observed and clear pressure issues).
Maintainability					
6.20	Equipment is provided with **adequate service clearance** to allow for regular maintenance	3	5	15	Generally appears to be true.

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

		Weight Factor	Rating	Points	Comments
6.21	AHUs and chiller are provided with **coil pull space.**	2	5	10	Appears to be true.
6.22	**Filter** sizes are standard and filter types are standard.	2	5	10	Appears to be true.
6.23	**Equipment mounting heights** are reasonable.	3	5	15	Appears to be true.
6.24	**Floor surfaces** throughout the mechanical room are non-slip and are dry.	2	5	10	Appears to be true.
6.25	**Isolation valves** are located in the plumbing and hydronic systems to allow for isolation of only portions of the system for servicing.	2	5	10	Appears to be true.
6.26	Appropriate means are provided for **airflow and water balancing.**	3	5	15	Appears to be true.
6.27	**Hose Bibbs** located in proximity to **outdoor condensers and condensing units**. Is cottonwood an issue at this location?	2	4	8	Wall hydrants located at grade, but the building is 2-story. Limited equipment with condensers at roof (one DOAS and two VRF air-source heat pumps).
6.28	**Fall protection** is provided for equipment within 15 ft of roof edge as per OSHA standard 1910.28(b).	2	5	10	Equipment is typically set back from edge of roof.
6.29	**Building devices are on DDC controls** and fully visible through Building Automation System. No pneumatic controls remain.	4	5	20	Appears to be true.
Occupant Safety					
6.30	**Backflow prevention** is provided at all **cross-connections** to non-potable water.	5	5	25	Appears to be true.

MP | Mechanical & Plumbing

ASSESSOR: Corey Metzger

		Weight Factor	Rating	Points	Comments
6.31	Building is fully **sprinklered.**	5	5	25	Appears to be true.
6.32	**Domestic hot-water temperature** at lavatories used by students or staff is provided with a thermostatic mixing valve and adjusted properly.	5	2	10	Existing central thermostatic mixing valve does not appear functional based on observations of pressure gauges.
6.33	**Emergency eye-washes and tempering valves** are located where required.	5	0	0	Not observed. Recommend evaluation with an occupational safety and health professional to determine necessity of eye wash(es) for facility spaces.
6.34	**Emergency boiler stop switches** are located at exits from boiler rooms.	5	5	25	Yes. At both entrances.
6.35	**Refrigeration evacuation systems** are provided in rooms with chillers.	5	N/A	0	Does not appear to be necessary for water-to-water heat pumps given relatively small refrigerant charge in each unit.
6.36	**Carbon Monoxide monitoring** and alarming is provided for areas with gas-fired equipment.	5	5	25	Yes. Difficult to locate but does exist (near mixing valve enclosure).
	TOTAL			576	

E | Electrical

ASSESSOR: David Carlson/Rob Hedgepeth

7.0 Electrical Systems

Electrical Design

		Weight Factor	Rating	Points	Comments
7.1	**Transformer location** is easily accessible by utility line truck to allow for rapid transformer replacement in the event of an issue.	5	5	25	Service entrance consists of 500kVA, 208/120V transformer.
7.2	**Transformer** has adequate clearance from non-combustible building components, paths of egress, etc. 10' clear working area in front of doors.	5	5	25	
7.3	**The MDP environment** is safe, has adequate clearances and exiting.	3	3	9	Medium storage in front of main switchboard MS. (-2 points)
7.4	The **MDP** appears serviceable.	4	1	4	MS is in poor condition, with corrosion present (-2 points). Age greater than 25 years (-2 points).
7.5	The MDP is **maintainable.**	3	3	9	Square D QMB fusible switchboards are still in production, but the model present in MS is only supported with field modification if switches fail. (-2 points)
7.6	The MDP will support **future expansion.**	4	0	0	MS has exceeded capacity, with disconnects tapped off for more distribution.
7.7	The Distribution Panel **environment is safe**, has adequate clearances and exiting.	4	3	12	Scores are average of distribution panels observed, DPA, DPB, and DPF. DPA has ladders and 5-gal paint stored in front. (3) DPB does not meet NEC clearance requirements. (0) DFF is clear (5).
7.8	The Distribution Panel appears **serviceable.**	4	3	12	DPA is older than 10 years (4). DPB is older than 25 years and is in poor condition (1). DPF is older than 10 years (4).
7.9	The Distribution Panel is **maintainable.**	4	3	12	DPA and DPF are Square D I-Line panelboards and are fully supported. DPB is antiquated QMB switchboard and is not supported without field modification.
7.10	The Distribution Panel will support **future expansion.**	4	3	12	DPA is at capacity, 99" mounting total. (1) DPB has exceeded capacity with added disconnects. (0) DPF has 50% capacity remaining (5)

E | Electrical

ASSESSOR: David Carlson/Rob Hedgepeth

		Weight Factor	Rating	Points	Comments
7.11	**Electrical panels and disconnect switches** observed during assessment are safe, serviceable, and maintainable.	2	3	6	Electrical panels observed vary widely in age, but all are Square D NQ/NQOD make and are generally supported. Several panels need blank plates to fill open spaces.
7.12	Building has adequate and appropriately located, **safe exterior power** to allow for regular maintenance activities.	1	2	2	Receptacles observed do not have WP in-use covers, and some are not GFCI.
7.13	Building has adequate **exterior lighting** to promote safety and security of the property.	5	4	20	Front roadway and parking area (not road next to building, but roadway south) is very dark. NE corner of building is dark.
Electronic System Design					
7.14	MDF is **neatly organized** and has appropriate clearances and working spaces. Cables are neatly laced or trained. Entry to the room is restricted.	4	4	16	Generally well organized, but additions are haphazard.
7.15	MDF Equipment Racks have adequate space for **future growth.**	4	5	20	Three racks present, only one is majorly utilized for excess of 50% capacity.
7.16	MDF is equipped with UPS to back up main switch(es), providing **backup power** to necessary equipment in the event of a power outage.	5	5	25	
7.17	MDF Power is supplied by **20A circuits and receptacles.**	1	5	5	
7.18	MDF Power is supplied from a branch panel located in the room with **adequate spare circuit capacity.**	1	4	4	Panel LT feeds the MDF. 10 of 30 positions are space. Split system circuit is tripped.
7.19	MDF employs up-to-date **network cabling.**	2	4	8	Majority of cabling present is CAT5e. (-1 point for less than 6/6A)
7.20	MDF is connected to Intermediate Distribution Frame (IDF) closets with **fiber optic cabling.**	1	3	3	Connections to IDFs and small point of use racks utilize OM3 multi-mode cabling.

E | Electrical

ASSESSOR: David Carlson/Rob Hedgepeth

		Weight Factor	Rating	Points	Comments
7.21	MDF has adequate **grounding busbar capacity.**	2	3	6	Ample capacity remains on grounding busbar, but no connections to cable tray and cable TV are present.
7.22	Building is equipped with an **addressable fire alarm system.**	5	5	25	
7.23	Building is equipped with an **access control system.**	5	2	10	7 of 20 exterior doors equipped with card readers. 7/20=35%
7.24	Building is equipped with a **CCTV system.**	5	5	25	Camera lens by dock camera (SW corner) is dirty or scratched and causes glare at night.
7.25	Building is equipped with an **intercom system.**	4	5	20	
7.26	Building is equipped with a **master clock system.**	4	4	16	Error light flashing on Primex master clock.
	TOTAL			331	

RECOMMENDED PROJECTS AND COST ESTIMATING METHODOLOGIES

One of the major impetuses for our facility condition assessment work is the need to support strategic fiscal and maintenance planning for their facilities. As such, DMPS requires that recommended projects be assigned a total project cost in order to support the strategic planning needs of the District. A total project cost is a cost that includes the estimated construction cost as well as the various other 'hard' and 'soft' costs of a construction project such as professional design fees, contractor overhead, required contingencies, inflation, direct costs (e.g. permitting costs), etc. The full list of these hard and soft costs are defined later in this section.

Project Descriptions

Every building assessment report includes a section titled Recommended Projects and Priorities. This section is divided into the following subcategories: "Short Term Maintenance", "1-2 Year Project Priorities", "3-4 Year Project Priorities", "5 - 10 Year Project Priorities", and "Projects Requiring a Study". Each of these subcategories includes a list of project recommendations. The projects listed in each subcategory are grouped by discipline and listed in the following order: interior architecture, exterior architecture, civil (site), structural, mechanical, electrical, and elevator projects. The discipline order as described mirrors the order of the discipline Scoring Reports section found earlier in the building assessment report. The projects listed within Short Term Maintenance section do not include a cost. It is assumed that DMPS will perform this work. Additionally, projects which recommend furniture repair or replacement do not include a cost since furniture systems are selected and procured via a separate process. All other projects associated with the remaining subcategories, other than "Projects Requiring a Study" are provided an estimated total project cost.

Projects Requiring a Study

The projects listed within Projects Requiring a Study are provided estimated professional design fees to produce the recommended design study. In the future, once commissioned and completed, these recommended studies will not produce a completed design. Rather, the completed study will provide recommended project descriptions and estimated total project costs similar to the projects listed in this assessment report. For studies that most likely will result in a substantial project with a substantial cost associated, an "anticipated capital investment" cost number has been provided to help assist the District's strategic planning. This anticipated capital investment cost is based on a 5-10 Year Priority completion date and very high level general 'rules of thumb' estimations since it is unknown exactly what conclusions or recommendations will be determined by the study before the study is commissioned and completed.

Cost Estimating

To achieve the total project cost reflected in this building report, the recommended projects incorporate construction costs with added percentages to account for professional design services, design phase contingency, construction contingency, general contractor overhead and profit, other direct costs incurred by the project, and year-over-year inflation dependent on how many years out the recommended project is recommended to be completed. Not included in the total project cost are costs associated with hazardous materials abatement, testing, surveys, or site exploration (geotechnical testing, etc.). Additionally, for projects that are expected to produce a minimal amount of waste that is normally acceptable to City of Des Moines collection, costs for dumpsters have been excluded. To arrive at the final estimated total project cost as described above, the following methodology was used by the assessment team for each recommended project:

Step 1: Determine estimated direct cost of construction in 2024 dollars.

The recommended projects are conceptual in nature; therefore, all cost multipliers are overall systems level and/or unit costs. (These costs are not based on itemized breakdowns.) The cost information used is based on current available information which is in 2024 dollars and is a mixture of recent bids, firm experience, manufacturer provided information, and RS Means costing data.

Step 2: For recommended projects that are smaller in scale, scope, and estimated cost, a "small project fee" additive cost is applied to the estimated direct cost of construction determined in Step 1. This additive cost works to cover outsized mobilization, staffing, and equipment costs that are incurred on a small scale project the same as for a large project with a large economy of scale. These costs are as follows:

For projects with a Step 1 cost of $4,999.99 or less, an additive cost of $5,000.00 has been added.

For projects with a Step 1 cost of $5,000.00 to $14,999.99, a graduated additive cost from $5,000.00 to $0 has been added.

For all other projects (Step 1 cost of $15,000.00 and above) this step is skipped.

Step 3: Add 10% of the estimated direct construction cost for construction contingency.

RECOMMENDED PROJECTS AND COST ESTIMATING METHODOLOGIES

Step 4: Add a percentage of estimated direct construction cost plus construction contingency for inflation.
The projects are grouped based on how many years out it is recommended that the project is started. Projects closer to 2024 are more urgent projects. As project start times move further and further away from 2024, inflation must be added to best estimate how 2024 dollars will translate into the future. 5% year-over-year inflation was chosen as a reasonable assumption for this work.

- For projects assigned the 1-2 Year Priority add 10% of the estimated construction cost.
- For projects assigned the 3-4 Year Priority add 20% of the estimated construction cost.
- For projects assigned the 5-10 Year Priority add 50% of the estimated construction cost.

Step 5: Add 5% of the estimated direct construction cost, construction contingency, plus inflation for general conditions.
This cost covers the incidental costs incurred by the contractor to perform the work that are not directly tied to the specific materials and labor; examples include mobilizing to the site and final cleaning.

Step 6: Add 10% of the estimated direct construction cost, construction contingency, inflation, plus inflation for general contractor overhead and profit; combined, this is the total construction cost.

Step 7: Add 10% of the total construction cost for professional design services.
These services include, when appropriate: architectural design and project management, civil engineering, structural engineering, mechanical engineering, and electrical engineering. These services are for conceptual design through construction phase work.

Step 8: Add 5% of the total construction cost and professional design services for other direct costs.
These costs cover various other costs directly associated with the project such as printing, equipment, required permits, etc.

At the conclusion of Step 8, the total project cost for the recommended project is finalized.

PROJECT RECOMMENDATIONS

Below are recommended maintenance, projects, and studies based on the previous assessment scoring information. Short Term Maintenance items are items requiring DMPS attention in less than a year's time and is less than approximately $5,000. Costs for these items are not estimated. 1-2 year priority projects are projects that require attention within the next 2 years. 3-4 year priority projects are projects that require attention within the next 4 years. 5-10 year priority projects are projects that require attention within the next 10 years. Project costs are listed. Project requiring Study are items where project scope is not able to be defined at this time and further investigation is required. Costs for these items are design service fees, not project costs. See the Cost Methodology description for additional information.

Short Term Maintenance

Vision Light Clearing	It is recommended paper coverings be removed from the lite and cloth is either removed or tied back to allow visual access between the corridor and classrooms. This is recommended as necessary staff and student safety.
Stage Power Repairs	The in floor power in the Auditorium stage has been turned off due to electrocution and past fires occurring within this area. Without power other functions necessary for teaching are unavailable. Power to this area should be provided in a safe and reliable manner.
Interior Door Repair	Door 1541 doesn't currently latch. Door appears warped or hinges are not aligned.
Lighting Repairs	Lighting in corridor 1620 do not appear operational.
Roof Cleaning	Remove debris from roof low spots, drains, overflows, gutters, downspouts, and other areas where it collects so that the roof membrane remains in good condition and sheds water as intended.
Exterior Door Adjustment	Door 3 (Kitchen entry) does not latch, and upper manual flush bolt does not unlatch. Door 10 (east exit from west wing) card reader does not release from exterior. Appears to be issue with electric strike.
Exterior Masonry Repairs	Patch oversized hole at south face of west penthouse at pipe penetration. Provide insulated sleeve and non-shrink grout.

Exterior Door Hardware Modifications	Remove hold open from Door 6 (Classroom 1601). Replace weatherstripping at sill of Door 17 (Locker Room 1209).	
Reattach FES Trash Guard	Reattach the trash guard to the flared end section. For location, refer to the civil site plan exhibit found in the appendix of this report.	
Grading Repair	Add soil to fill in the hole created by erosion. For location, refer to the civil site plan exhibit found in the appendix of this report.	
Add Backfill Behind Curb	Add backfill behind curb to prevent undermining of the pavement. For location, refer to the civil site plan exhibit found in the appendix of this report.	
Master Clock Error Code	Error lights flashing on Primex master clock head-end during assessment. Investigate and troubleshoot codes.	
Exterior Receptacle Repair	Replace broken weatherproof covers on exterior receptacles, 3 noted. Replace non-GFCI exterior receptacles and install weatherproof covers, 2 noted. More of each condition may be present.	
MDF Cooling Maintenance	MDF split system unit was nonfunctional during assessment. Breaker feeding unit was tripped, investigate cause of overcurrent device operation.	
MDF Grounding	Install #6 grounding conductor from TMGB to cable tray. Install #6 grounding conductor from TMGB to cable TV entrance equipment.	
Exterior Cameras	Clean or replace dirty or scratched lens cover at SE corner camera (by dock).	

1 - 2 Year Priority

		Project Costs
Interior Door Replacement	Replace interior door 1604 due to damage to wood. Hardware and frame may remain or be re-used. Door leaf should have a vision panel that matches the rest of the building.	$8,000

Ceiling Replacement	Replace damaged ceiling tiles throughout the building. Ceiling tiles in the kitchen dish room should be removed and replaced with moisture resistant, vinyl wrapped ACT or similar. Approximately 1,800 SF Ceiling tiles throughout the corridors, classrooms, and offices may be standard ACT tile. Approximately 2,500SF.	$45,000
Auditorium Renovation	Renovate the existing auditorium space to include new seating (approximately 400) , new wall finishes such as paint and acoustic panels (approximately 4,000 SF of total wall area), new carpet tiles (approximately 3,000 SF), and gypsum ceiling repairs (approximately 200 SF). Repairs to the stage should include wood flooring repairs and refinishing and replacement of the in floor power in the stage. Approximately 1,500 SF of stage area. Short term correction in the stage power is also noted as a maintenance item due to the current danger to staff and students.	$530,000
Acoustic Improvements	Acoustic panels or baffles in the gym is recommended to reduce the reverberation time and echo. The space is approximately 6,700 SF with approximately2,100 SF of acoustic material needed. Classroom acoustic improvements are needed in rooms 1110, 1109A , and 1109B. Recommended to install ACT tile in 1109A and 1109B. Carpet tile is recommended to be installed over the concrete floors in all 3 classrooms. Approximately 1,000 SF per each classroom.	$130,000
Restroom Improvements	4 multi-user restrooms should be updated with new fixtures, partitions, ceilings, and wall finishes. Fixture count for restrooms: 6, 4, 5, and 5. 2 existing staff single occupant restrooms should be updated to provide more privacy as well as new fixtures and finishes. Minor plumbing modifications are likely to meet accessibility requirements. **This project should be completed alongside, in coordination with, the Domestic Water Improvements described further below.**	$490,000
Lintel Repainting	Clean rust off of lintels at (2) doors total, one at each penthouse (6 LF at 6" wide). Clean all door and window lintels and repaint in original building, approximately (12) locations, 75 LF at 6" wide.	$7,000
Exterior Repainting	Repaint louver at east wall of building (45 SF), repaint exterior soffits at Doors 16, 17, and 18 (80 SF)	$6,000

Pavement Replacement	Remove and replace 140 SY of PCC and 206 SY of asphalt. For location, refer to the civil site plan exhibit found in the appendix of this report.	$45,000
Curb and Gutter Repairs	Return damaged curbs and adjacent pavement to new condition. Approximately 40 LF of 6" curbs. For locations, refer to civil site plan exhibit found in the appendix of this report.	$8,000
Sidewalk Repairs	Repair damaged sidewalks across the site. Approximately 43 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$11,000
Mechanical Floor Patch	The mechanical room above room 1607 has a section of floor that has spalled concrete and exposed wire mesh. It appears to be the result of a concrete mechanical pad that was cut out and removed. The floor should be patch to ensure it's structural integrity. The area is 5ft x 10ft and requires a 3" thick patch. No additional reinforcement.	$11,000
Repair brick at lintel bearings	The brick at the lintel bearing locations at both exit doors in the corridor north of room 1401 is loose and cracked. It should be re-set and re-grouted. Total area = 4SF. It may require temporary shoring of the brick above.	$6,000
CMU header repair	There is a CMU header in the mechanical space above room 1209 that is severely corroded. It is also sagging 3/4" to the point where the CMU is no longer bearing on it. It should either be removed with the opening underneath it infilled with CMU. It is a mechanical opening that is no longer being used. Opening is 8ft wide x 2ft tall. Lintel is likely a W8x15 beam with a bottom plate.	$7,000
AHU Isolation Dampers	Add isolation dampers and controls to separate AHU-1 and 2 with common supply duct. Current configuration causes repeated failures of west AHU.	$14,000
Domestic Water Central Mixing Valve	Replace existing thermostatic mixing valve with new digital mixing valve.	$13,000

Total 1-2 Year Project Costs: $1,331,000.00

3 - 4 Year Priority

		Project Costs
Cafeteria Furniture Replacement	Replace damaged table/stool cafeteria furniture with new. Approximately 8 new tables. Recommendation based on current and predicted condition.	DMPS
Flooring Replacement	Classroom carpet should be replaced, in approximately 18 classrooms each at approximately 1,000 SF. Carpet is recommended to be stain resistant carpet tiles for ease of maintenance and spot replacement if damage occurs.	$13,000
Interior Wall Finish	Classroom walls, especially 3' and below, appear to have areas of several patches as well as on-going scuffing. Repainting classrooms and high traffic corridor gypsum board walls is recommended. Corner guards at gypsum board corners in corridors are recommended. Approximately 8,500 SF of corridor and classroom walls are to be repainted. Approximately 12 corner guards should be added as required.	$45,000
Casework Replacement	Art room and science storage rooms have casework that is chipping and worn. Replace with HDPE countertops. Approximately 50LF. Could be completed with the below project for efficiencies in cost.	$25,000
Science Classroom Renovation	3 science classrooms are recommended for renovation. Classrooms are approximately 1,300 SF. Flooring is finished concrete and generally in good condition. New casework should include wood casework with epoxy countertops, approximately 160 LF, 2 sinks each, with 25LF of 5' high cabinets with whiteboards. Walls should be refinished with epoxy paint, approximately 4,500 SF. Note, no science classrooms currently have access to exterior views or daylight. This is not addressed within this	$250,000
Pavement Replacement - Asphalt to PCC	Remove and replace 79 SY of cracking asphalt with PCC to prolong pavement life. For locations, refer to civil site plan exhibit found in the appendix of this report.	$14,000
Pavement Replacement	Remove and replace 151 SY of PCC and 112 SY of asphalt. For location, refer to the civil site plan exhibit found in the appendix of this report.	$40,000
Sidewalk Repairs	Repair damaged sidewalks across the site. Approximately 20 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$9,000

Fence Replacement	Remove and replace 371 LF of 6' chain link fence. For locations, refer to civil site plan exhibit found in the appendix of this report.	$40,000
Intake Repair	Repair the adjustment ring of intake, the project should be coordinated with pavement replacement of the area. For locations, refer to civil site plan exhibit found in the appendix of this report.	$7,000
Curb and Gutter Repairs	Return damaged curbs and adjacent pavement to new condition. Approximately 33 LF of 6" curbs. For locations, refer to civil site plan exhibit found in the appendix of this report.	$9,000
FES Replacement	Replace the damaged FES and add TRM at the outlet to prevent erosion wash out. For location, refer to civil site plan exhibit found in the appendix of this report.	$12,000
Replace Domestic Water Galvanized Piping	Replace galvanized piping on service side of backflow preventer.	$30,000
MDP Replacement	Replace existing 3000A fused switchboard MS with appropriately sized switchgear utilizing breakers to allow for appropriately sized equipment and ample breaker space for expansion.	$460,000
DP Replacement	Replace existing fused switchboard distribution panel DPB with lower-profile breaker distribution panel to achieve code clearances and increase available space for future expansion.	$130,000
	Total 3-4 Year Project Costs:	**$1,084,000.00**

5-10 Year Priority

		Project Costs
Roof Replacement	Remove approximately 22,400 SF of TPO and PVC roofing and insulation over roof areas A, B, P and Q. Install code compliant insulation and TPO roofing. Approximately year 2033.	$720,000
Replace Through-Wall Masonry Flashing	Asphaltic coating on through-wall flashing on 2011 addition (north bay of both east and west classroom wings plus Rooms 1411 and 1421) has some bleed to the face of the building. Remove and replace 385 LF through wall cavity flashing.	$240,000

Pavement Replacement - Asphalt to PCC	Remove and replace 149 SY of cracking asphalt with PCC to prolong pavement life. For locations, refer to civil site plan exhibit found in the appendix of this report.	$30,000
Pavement Replacement	Remove and replace 105 SY of PCC and 160 SY of asphalt. For location, refer to the civil site plan exhibit found in the appendix of this report.	$50,000
Sidewalk Repairs	Repair damaged sidewalks across the site. Approximately 94 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	$25,000
Lintel Repairs	Several brick lintels are showing minor to moderate corrosion. They should be sand blasted and repainted. Total LF = 50ft. Lintels are about 10" wide.	$6,000
Roof Screen Posts	Roof screen posts all have minor corrosion. These should be sand blasted and repainted. There are 48 posts. They are 4"x4" square steel tubes and 4ft tall.	$11,000
Exterior Angle Repairs	(2) Steel angle supports for the miniature windmill outside of room 1532 have minor corrosion. They should be sand blasted and repainted. Total LF = 4ft, Angles look to be 3" x 3" angles.	$6,000
Guardrail Replacement	The guardrail for stair at the SE corner of room 1107 is a bit loose and is missing some anchors into the concrete stair and CMU wall. Guardrail will need to be removed, and re-mounted. An additional (8) anchors should be installed at locations that currently do not have anchors or where anchors have sheared off. ~10 L.F. of guardrail.	$11,000
Concrete repair	Some concrete at the corner of the CIP stair in the SE corner of room 1107 has broken off. Repair the ~6" x 6" section.	$6,000

Total 5-10 Year Project Costs: $1,105,000.00

Projects Requiring Study

		Design Services Fee
Mother's Room Space Study	Study to define a private dedicated space for a Mother's Room that includes a sink, side table, chair, and privacy door hardware.	$5,000

Daylight Study	Study to determine ways to increase access to daylight for interior spaces. This could be accomplished through more visibility to exterior windows, solar tubes, skylights or other applications.	$5,000
Power installation study	Approximately 7 of 32 classrooms appear not to have adequate access to power for student work. This is based on uses of extension cords and power strips to supplement power to the center of the room. A study is recommended based on a class by class basis to determine the appropriate solution for additional power outlet access in each classroom.	$10,000
Expand Drive Width	The north drive entrance appears to be too narrow for truck movement as there was damaged curb and surrounding soil had tire tracks over it. A study is need to determine the proper driveway width and any coordination with the city that may be necessary.	$3,000
Lintel Study	The lintels at the exterior door near room 1210 and 1508 have moderate corrosion and is deformed near one end. Further investigation is needed to determine if this needs to be replaced, or can be repaired.	$1,000
Designated Hardened Area	No designated hardened area was observed. Study to determine the feasibility of adding a designated hardened area to the building including location within the existing building, schematic design concept if deemed feasible, and preliminary project costs.	$2,500
Domestic Water Pressure Improvements	Evaluate existing domestic water system to identify why there is low pressure. Replace section of piping, or install booster pump if required to improve pressure.	$7,500
	Anticipated Capital Investment: $1,100,000	
	Anticipated Capital Investment Costs	**$1,100,000**
	Total Study Design Service Fees	**$34,000**

APPENDIX

5+ YEAR REPLACEMENT

3-4 YEAR REPLACEMENT

1-2 YEAR REPLACEMENT

NORTH

GRAPHIC SCALE

120 0 60 120 240

bbs ARCHITECTS ENGINEERS

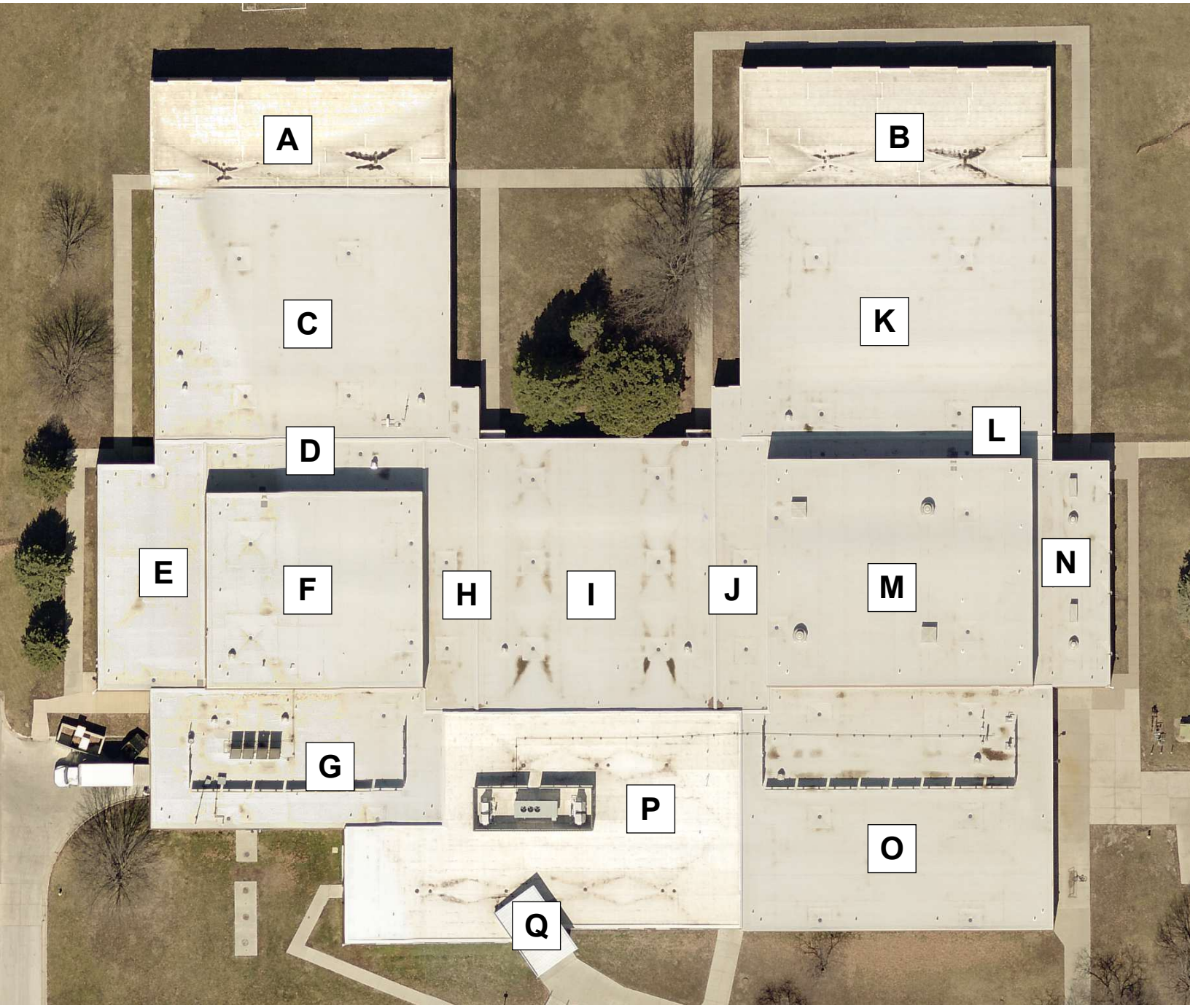
BISHOP ENGINEERING +

McCOMBS MIDDLE SCHOOL

EXHIBIT

PROJECT # 230286-45

DATE 2/2/2024



N

bbs ARCHITECTS ENGINEERS

23055 - DMPS Facility Conditions Assessment
Roof Identification Image
McCombs Middle School
1.30.2024

McCOMBS MIDDLE SCHOOL

201 COUNTY LINE ROAD
DES MOINES, IOWA 50320

FIRST FLOOR

NORTH

- Core Classroom
- Student Support
- Administration
- Large Shared Space
- Other

bbs ARCHITECTS ENGINEERS