

# DMPS FACILITY ASSESSMENT | MITCHELL EARLY LEARNING CENTER

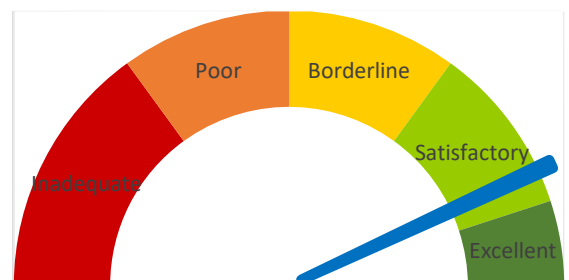
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# REPORT ORGANIZATION

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COVER SHEET

REPORT ORGANIZATION

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# EXECUTIVE BUILDING SUMMARY

Mitchell Early Learning Center’s on-site facility conditions assessment was conducted on January 23, 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 short term maintenance identified for Mitchell Early Learning Center are: ceiling tile replacement, door adjustments, exterior cleaning and repairs, exterior stair landing repair, DOAS unit repairs, and emergency boiler shutoff installation.

The recommended projects for Mitchell Early Learning Center to be completed in the next 1-2 years are as follows:

- Countertop joint sealant repair
- Roof access installation
- Exterior sealant replacement and repainting
- Sidewalk and curb repair
- CMU wall crack repairs
- Roof hydrant installation
- Mechanical equipment replacement
- Plumbing fixture upgrades
- Exterior lighting installation

These projects 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	130	125	2.00	260	250	96%	Excellent
2.0	Environment for Education	325	312	0.60	195	187	96%	Excellent
3.0	Exterior Envelope	95	85	3.00	285	255	89%	Satisfactory
4.0	School Site	95	76	1.50	143	114	80%	Satisfactory
5.0	Structural Conditions	85	80	1.30	111	104	94%	Excellent
6.0	Mechanical Systems	670	511	0.80	536	409	76%	Satisfactory
7.0	Electrical Systems	450	384	0.75	338	288	85%	Satisfactory
<b>Total</b>					<b>1,867</b>	<b>1,607</b>	<b>86%</b>	<b>Satisfactory</b>

Mitchell Early Learning Center Discipline Comparison	Rating Table				
	1-29%	30-49%	50-69%	70-89%	90-100%
	Inadequate	Poor	Borderline	Satisfactory	Excellent
<p>After totaling the scores from the various discipline assessment reports Mitchell Early Learning Center scored a building health rating of 86% 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. Mitchell Early Learning Center is within this positive range. Improvements to the mechanical systems and school site would make the largest impact in increasing the score to Excellent.</p>					

# Building Data Record

Building Name: Mitchell Early Learning Center

Date: January 23, 2024

Address: 111 Porter Avenue  
Des Moines, IA 50315

High School Feeder System: N/A

Building SF: 31,682 square feet

Site Acreage: 8.17 acres

Date(s) of Construction: 1958, 2005, 2010

Date(s) of Roof Replacement: 2018

Current/Scheduled Projects: Restroom Upgrades - 2024  
Classroom Casework - 2024

## Existing Building Data:

Egress Plans     Original Docs     Major Renovations and Additions     Minor Projects     Maint. Reports

## Site Items:

Student Garden     Loading Dock     Stormwater Detention

## Energy Source:

Electric     Gas     Geothermal     Solar

## Cooling:

DX RTU or DOAS     Chiller     VRF     Water Source Heat Pump     Fluid Cooler

## Heating:

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

## Structure Fireproofing:

No     Yes

## Construction:

Load Bearing Masonry     Steel Frame     Concrete     Wood     Other

## Exterior Facade:

Brick     Stucco     Metal     Wood     Other

## Floor/Roof Structure:

Wood Joists     Steel Joists/Beams     Slab on Grade     Struct. Slab     Other

## 1.0 Educational Adequacy

### General

**1.1** **Floor materials** are appropriate for space type.

Weight Factor	Rating	Points
2	5	10

Comments

### Elective/Secondary Classroom

**1.2** **Gymnasium** is adequate for providing physical education programming.

2	4	8
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Indoor recess equipment is set up in gymnasium reducing overall usable space in gym for other programming.

**1.3** **Cafeteria** has adequate space, furniture, and acoustics for efficient lunch use.

2	N/A	0
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**1.4** **Music room** is adequate for providing introductory music instruction.

2	N/A	0
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**1.5** **Art room** has sufficient accommodations for program.

2	N/A	0
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**1.6** **Library/Resource/Media Center** provides appropriate and attractive space.

1	N/A	0
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### Core Classroom

**1.7** Classroom space permits arrangements for **small group activity**.

3	5	15
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**1.8** **Student storage space** is adequate.

2	5	10
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**1.9** **Teacher storage space** is adequate.

3	5	15
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**1.10** Classroom **acoustical treatment** of ceiling, walls, and floors provide effective sound control.

3	4	12
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Adhered ceiling tile in all classrooms does not provide ideal levels of sound absorption.

	Weight Factor	Rating	Points	Comments
<b>1.11 Classroom power and data receptacles</b> are located to support current classroom instruction.	4	5	20	
<b>1.12 Educational technology</b> supports instruction.	4	5	20	
<b>Administration</b>				
<b>1.13 Conference/Private meeting rooms</b> are adequate for large and small meetings.	1	5	5	
<b>1.14 Main office</b> has a check-in and waiting area.	2	5	10	
<b>TOTAL</b>			125	

## 2.0 Environment for Education

### Design

		Weight Factor	Rating	Points	Comments
2.1	<b>Traffic flow</b> is aided by appropriate foyers and corridors.	1	5	5	
2.2	Communication among students is enhanced by <b>common areas</b> .	1	5	5	
2.3	Areas for students to <b>interact are suitable to the age group</b> .	1	5	5	
2.4	Large group areas are designed for effective <b>management of students</b> .	2	5	10	
2.5	<b>Furniture Systems</b> are in good or like new condition.	1	5	5	
2.6	<b>Color schemes</b> , building materials, and decor are <b>engaging and unify</b> the school character.	2	5	10	
2.7	Windows and skylights provide access to <b>adequately controlled daylight</b> for regularly occupied spaces.	3	5	15	
2.8	Windows provide access to <b>quality views</b> (to exterior, courtyards, artwork etc.) for regularly occupied spaces.	3	5	15	
2.9	<b>Lighting has proper controls</b> to provide the required light levels for various teaching and learning needs.	2	5	10	
2.10	<b>Staff dedicated spaces</b> include conference space, work space, and dedicated restrooms.	1	5	5	

	Weight Factor	Rating	Points	Comments
<b>2.11 Main office</b> is visually connected to the entry and is welcoming to students, staff, and guests.	2	3	6	Office is welcoming and visually connected to the entrance, but is not physically connected and does not provide adequate security control.
<b>2.12 Break room</b> is adequately sized and furnished for proper use.	1	5	5	
<b>2.13 Mother's room</b> is a separate designated space properly furnished.	1	3	3	Storage room off of gymnasium is used as a mother's room, but is not adequately furnished.
<b>Maintainability</b>				
<b>2.14 Floor surfaces</b> are durable and in good condition.	1	5	5	
<b>2.15 Ceilings</b> throughout the building – including services areas – are easily cleaned and resistant to stain.	1	3	3	Adhered ceiling tiles in classrooms do not provide optimal acoustic control, but are otherwise in fair to good condition.
<b>2.16 Walls</b> throughout the building – including services areas – are easily cleaned and resistant to stain.	1	5	5	
<b>2.17 Built-in casework</b> is designed and constructed for ease of maintenance.	1	3	3	Some plastic laminate counters do not have adequate sealant at back and side splashes. Wood casework in some rooms has minor veneer damage. See projects list for more details.
<b>2.18 Doors</b> are either solid core wood or hollow metal with a hollow metal frame and well maintained.	3	4	12	Most doors are in great condition, but a few have minor veneer damage at the bottom edge of the door. See projects list for more details.
<b>2.19 Facility doors</b> are keyed to standardized master keying system.	3	5	15	
<b>2.20 Restroom partitions</b> are securely mounted and of durable finish.	2	5	10	



	Weight Factor	Rating	Points	Comments
<b>2.21 Adequate electrical outlets</b> are located to permit routine cleaning in corridors and large spaces.	1	5	5	
<b>Occupant Safety</b>				
<b>2.22 Classroom doors are recessed and open outward.</b>	4	5	20	
<b>2.23 Door hardware</b> (into classrooms or any occupied rooms off of corridors) include <b>intruder classroom locksets.</b>	3	5	15	
<b>2.24 Door panels</b> into classrooms and other occupied spaces contain <b>vision lite.</b>	3	5	15	
<b>2.25 Vision lite</b> in doors is clear and uncovered.	2	5	10	
<b>2.26 Glass</b> is properly located and protected to prevent accidental injury.	2	5	10	
<b>2.27 Flooring</b> is maintained in a <b>non-slip</b> condition	2	5	10	
<b>2.28 Traffic areas terminate at exit or</b> stairway leading to egress	5	5	25	
<b>2.29 Multi-story buildings</b> have at least <b>two stairways</b> from all upper levels for student egress.	5	N/A	0	
<b>2.30 Stairs (interior and exterior)</b> are well maintained and in good condition meeting current safety requirements.	5	N/A	0	

# A | Architectural, Interior

ASSESSOR: Tim Bungert

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

## 3.0 Exterior Envelope

		Weight Factor	Rating	Points	Comments
<b>Design</b>					
<b>3.1</b>	Overall <b>design is aesthetically pleasing</b> and appropriate for the age of students.	2	5	10	
<b>Maintainability</b>					
<b>3.2</b>	<b>Roofs</b> appear sound, have positive drainage, and are water tight.	3	5	15	
<b>3.3</b>	<b>Roof access</b> is safe for all roofs.	3	3	9	Roof is only accessible by extension ladder from grade. There are no pieces of equipment on the roof that require regular maintenance (e.g. changing air filters).
<b>3.4</b>	Exterior <b>window sealant</b> is fully intact without cracks or gaps.	3	5	15	
<b>3.5</b>	<b>Glazing</b> is low-e coated, insulated, and overall in good condition.	1	4	4	Low-e glazing cannot be determined. Windows are tinted.
<b>3.6</b>	<b>Operable windows</b> are functional and safe. Operable portion of window fully seals when closed without gapping or leaking.	2	5	10	
<b>3.7</b>	<b>Exterior doors</b> are of durable material requiring minimum maintenance.	2	5	10	
<b>3.8</b>	<b>Exterior walls</b> are of material and finish requiring little maintenance,	1	4	4	Some sealant replacement required - see projects list.
<b>3.9</b>	<b>Exterior Doors</b> open outward and are equipped with <b>panic hardware</b> .	1	5	5	
<b>3.10</b>	<b>Exterior Doors are monitored</b> or controlled by an access control system.	1	3	3	01 - Doors do not latch 05 - Doors with card readers 03 - Doors with locks 00 - Doors with no exterior lock 08 - Doors with no signage.
<b>TOTAL</b>				85	

4.0 The School Site

	Weight Factor	Rating	Points	Comments
4.1 <b>Site topography</b> and grading drains water away from the building and retaining walls.	1	5	5	Site was steeper on the east and west sides and fairly flat on top, no erosion/drainage issues observed.
4.2 <b>Parking areas</b> are in good condition.	5	5	25	A couple of panels are in need of replacement but nothing immediate.
4.3 <b>Drive areas</b> are in good condition.	3	4	12	The north and south drive accesses need replacement, as well as a few sections of the main drive aisle.
4.4 <b>Sufficient on-site, solid surface parking</b> is provided for faculty, staff, and community.	1	3	3	DMPS states there is enough parking for staff but that there is not enough for large events.
4.5 <b>Sidewalks</b> around the facility are in good <b>condition</b> .	1	4	4	The perimeter walks had a couple of tripping hazards and the walk through the south egress needs replacement but conditions were mostly good overall. -The landing on stairs on the west side of the site is not in good condition and could be repaired as a maintenance project.
4.6 <b>Sidewalks are located</b> in appropriate areas with adequate building access.	1	3	3	The north side of the site was without any sidewalks.
4.7 <b>Hard surface</b> playground surfaces are in good condition.	3	2	6	The South asphalt area needs replacement in 5+ years, the SW area is right on the fringe of needing replacement in 5+ years, and the asphalt to the NW has an area sagging and cracking and will need replacement in 3 years.
4.8 <b>Fencing</b> around the site is in good condition.	1	4	4	The fence along the east side of the site had holes in mesh, broken connection bars, and mesh not extending all the way to the ground. All other fence sections looked to be in good condition.
4.9 <b>Trash enclosure</b> is in good condition.	1	N/A	0	Dumpsters were on the NE side of the building out in the east drive area.
4.10 <b>Utilities</b> are in newly constructed conditions and placed in suitable locations.	1	4	4	The FES on the NE side of the site that outlets the detention area was cracked but appeared to still be functioning without issue. The intakes and flumes all looked to be in good condition.

	Weight Factor	Rating	Points	Comments
4.11 Site has <b>sufficient room</b> for both building and parking expansion.	1	5	5	There is a lot of room on the north side of the site for expansion.
4.12 Site has <b>onsite bus and parent pickup</b> up with adequate length, good separation and general good site circulation.	1	5	5	Buses use the drop off on the south and parents use the one-way drive to the east of the school. DMPS states the parent drop off space gets busy for a little while but the long queueing length makes it manageable.
<b>TOTAL</b>			76	

## 5.0 Structural Conditions

	Weight Factor	Rating	Points	Comments
<b>Foundations</b>				
<b>5.1</b> Foundations appear to be in good condition with no visible cracks.	1	5	5	
<b>5.2</b> There does not appear to be any <b>foundation settlement.</b>	2	5	10	
<b>5.3</b> <b>Basement walls</b> do not appear to have any cracks.	1	N/A	0	
<b>5.4</b> <b>Stoops</b> appear to be in good condition.	1	5	5	
<b>Slab on Grade</b>				
<b>5.5</b> <b>Slabs on grade</b> do not appear to have any cracks	1	5	5	
<b>5.6</b> Slabs on grade do not appear to have any <b>settlement.</b>	1	5	5	
<b>Exterior Walls</b>				
<b>5.7</b> <b>Brick masonry</b> appears to be in good condition.	2	5	10	
<b>5.8</b> <b>Lintels</b> appear in good condition (no visible deflection or rust).	1	5	5	
<b>5.9</b> <b>CMU</b> is in good condition.	1	5	5	
<b>5.10</b> <b>Precast</b> is in good condition.	1	N/A	0	

	Weight Factor	Rating	Points	Comments
<b>Interior Walls</b>				
<b>5.11 Interior walls</b> appear to be in good condition.	1	5	5	Minor cracking in (2) locations in room 103. One location appears to have been patched previously
<b>Floor Framing (Elevated)</b>				
<b>5.12 Floor framing</b> appears to be in good condition.	3	N/A	0	
<b>5.13</b> Floor framing appears to meet the <b>code requirements.</b>	3	N/A	0	
<b>Roof Framing</b>				
<b>5.14 Roof framing</b> appears to be in good condition.	3	5	15	
<b>Miscellaneous</b>				
<b>5.15 Retaining walls</b> appear to be in good condition.	1	N/A	0	
<b>5.16 Canopies</b> appear to be in good condition.	1	N/A	0	
<b>5.17 Loading dock concrete</b> appears to be in good condition.	2	N/A	0	
<b>5.18 Mechanical screening</b> appears to be in good condition.	2	N/A	0	
<b>5.19 Stairs</b> appear to be in good condition.	1	5	5	
<b>5.20 Stair railings</b> appear to be in good condition.	1	5	5	

	Weight Factor	Rating	Points	Comments
<b>5.21</b> Tunnels appear to be in good condition without cracks.	1	N/A	0	
<b>5.22</b> There is a <b>designated hardened area</b> in the building.	1	0	0	No designated hardened area observed.
<b>5.23</b> The hardened area appears consistent with the <b>ICC 2018 code.</b>	1	N/A	0	
<b>TOTAL</b>			80	



## 6.0 Mechanical Systems

### HVAC Design

	Weight Factor	Rating	Points	Comments
<b>6.1 Zone Control.</b> Thermostats are provided in each space for individual zone control of space temperatures.	3	3	9	Some smaller rooms without any heatpumps or ventilation.
<b>6.2 Thermostat location.</b> Thermostats are properly located in the space.	3	5	15	
<b>6.3</b> Appropriate <b>amount of ventilation</b> are provided to each space.	5	5	25	Design drawings indicate appropriate levels of ventilation are provided for each space. However, see note below regarding operation of the ventilation system.
<b>6.4 Ventilation</b> is provided during occupied hours.	5	2	10	DOAS unit not operational day of site visit and noted to have operational issues during extreme cold conditions.
<b>6.5 Outdoor air intake locations</b> are appropriate.	4	4	16	ERV intake is at grade which can more easily carry dirt/dust into the intake.
<b>6.6</b> Appropriate <b>levels of exhaust</b> are provided for areas requiring this such as restrooms, janitor's closets and locker rooms.	5	3	15	Exhaust is provided through the ERV. ERV not operational during day of visit.
<b>6.7 Building pressurization.</b> The design takes into account the balance between ventilation and exhaust air	2	3	6	No outdoor air with ERV not operational
<b>6.8 Major HVAC Equipment</b> appears to be within it's acceptable <b>service life.</b>	5	1	5	All equipment is 13 years old and appears to be reaching the end of its useful life including heat pumps, ERV, and boiler. Recommend replacement of all equipment. See Note under 6.10 regarding boiler.
<b>6.9 Cooling loads</b> are within equipment operational capacity.	5	5	25	
<b>6.10 Heating loads</b> are within equipment operations capacity.	5	4	20	Geothermal wellfield has a back-up boiler. Boiler is a standard efficiency unit operating with 65 degF inlet water. This condition will cause it to have limited life due to corrosive condensate in heat exchanger.

	Weight Factor	Rating	Points	Comments
<b>6.11 Dehumidification</b> is provided and addressed humidity loads in incoming outside air.	3	3	9	DOAS units are provided with dehumidification, however, it appears they may not be able to operate reliably to provide dehumidification.
<b>Plumbing Design</b>				
<b>6.12 Water Supply Pressure</b> is adequate to allow for operation of plumbing fixtures.	5	5	25	
<b>6.13</b> Appropriate <b>backflow preventer</b> is provided at connection to city water supply.	5	5	25	
<b>6.14 Domestic hot-water systems</b> are within equipment operational capacity.	5	5	25	
<b>6.15</b> Domestic <b>hot-water recirculating systems</b> allow for hot-water at fixtures within a reasonable amount of time.	3	5	15	
<b>6.16 Sanitary sewer systems</b> are sized and sloped to allow for proper drainage.	5	5	25	
<b>6.17</b> Appropriately sized <b>grease interceptors</b> are provided for facilities with food service.	3	0	0	No grease interceptor at this building.
<b>6.18 Roof drainage</b> systems are sized appropriately and overflow drainage systems are installed.	5	5	25	
<b>6.19 Restroom fixtures</b> are in good condition and comply with current DMPS standards.	3	3	9	Several restroom fixtures without auto flush or hands free fixtures.
<b>Maintainability</b> <b>6.20</b> Equipment is provided with <b>adequate service clearance</b> to allow for regular maintenance	3	3	9	DOAS and Console Heat pumps have limited access for service and repair.

		Weight Factor	Rating	Points	Comments
6.21	AHUs and chiller are provided with <b>coil pull space</b> .	2	3	6	DOAS unit has limited access in lower mechanical room.
6.22	<b>Filter</b> sizes are standard and filter types are standard.	2	4	8	Varies by equipment type.
6.23	<b>Equipment mounting heights</b> are reasonable.	3	5	15	
6.24	<b>Floor surfaces</b> throughout the mechanical room are non-slip and are dry.	2	3	6	Some moisture issues in mechanical room (lowest level).
6.25	<b>Isolation valves</b> are located in the plumbing and hydronic systems to allow for isolation of only portions of the system for servicing.	2	5	10	
6.26	Appropriate means are provided for <b>airflow and water balancing</b> .	3	5	15	
6.27	<b>Hose Bibbs</b> located in proximity to <b>outdoor condensers and condensing units</b> . Is cottonwood an issue at this location?	2	5	10	No equipment on roof requiring cleaning.
6.28	<b>Fall protection</b> is provided for equipment within 15 ft of roof edge as per OSHA standard 1910.28(b).	2	4	8	Minor equipment located near edge of roof to need fall protection.
6.29	<b>Building devices are on DDC controls</b> and fully visible through Building Automation System. No pneumatic controls remain.	4	5	20	
<b>Occupant Safety</b> 6.30	<b>Backflow prevention</b> is provided at all <b>cross-connections</b> to non-potable water.	5	5	25	

	Weight Factor	Rating	Points	Comments
6.31 Building is fully <b>sprinklered</b> .	5	5	25	
6.32 <b>Domestic hot-water temperature</b> at lavatories used by students or staff is provided with a thermostatic mixing valve and adjusted properly.	5	5	25	
6.33 <b>Emergency eye-washes and tempering valves</b> are located where required.	5	0	0	None observed. Recommend evaluation with an occupational safety and health professional to determine necessity of eye wash(es) for facility mechanical spaces.
6.34 <b>Emergency boiler stop switches</b> are located at exits from boiler rooms.	5	0	0	No shutoff present at mechanical room door.
6.35 <b>Refrigeration evacuation systems</b> are provided in rooms with chillers.	5	N/A	0	
6.36 <b>Carbon Monoxide monitoring</b> and alarming is provided for areas with gas-fired equipment.	5	5	25	
<b>TOTAL</b>			511	

## 7.0 Electrical Systems

### Electrical Design

		Weight Factor	Rating	Points	Comments
7.1	<b>Transformer location</b> is easily accessible by utility line truck to allow for rapid transformer replacement in the event of an issue.	5	5	25	
7.2	<b>Transformer</b> 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	<b>The MDP environment</b> is safe, has adequate clearances and exiting.	3	5	15	208Y/120V 1200A - Siemens
7.4	The <b>MDP</b> appears serviceable.	4	5	20	
7.5	The MDP is <b>maintainable</b> .	3	4	12	2010
7.6	The MDP will support <b>future expansion</b> .	4	5	20	
7.7	The Distribution Panel <b>environment is safe</b> , has adequate clearances and exiting.	4	5	20	
7.8	The Distribution Panel appears <b>serviceable</b> .	4	1	4	350A feed to Frank Adams fuse panel. Panel is likely original to the building (1957).
7.9	The Distribution Panel is <b>maintainable</b> .	4	1	4	Panel is likely original to the building (1957).
7.10	The Distribution Panel will support <b>future expansion</b> .	4	1	4	Panel is likely original to the building (1957). This panel should not be used for expansion.

		Weight Factor	Rating	Points	Comments
7.11	<b>Electrical panels and disconnect switches</b> observed during assessment are safe, serviceable, and maintainable.	2	5	10	
7.12	Building has adequate and appropriately located, <b>safe exterior power</b> to allow for regular maintenance activities.	1	5	5	
7.13	Building has adequate <b>exterior lighting</b> to promote safety and security of the property.	5	4	20	SE and SW corners are darker than the rest of the facility perimeter.
<b>Electronic System Design</b>					
7.14	MDF is <b>neatly organized</b> and has appropriate clearances and working spaces. Cables are neatly laced or trained. Entry to the room is restricted.	4	5	20	
7.15	MDF Equipment Racks have adequate space for <b>future growth</b> .	4	5	20	
7.16	MDF is equipped with UPS to back up main switch(es), providing <b>backup power</b> to necessary equipment in the event of a power outage.	5	5	25	Two minuteman UPS
7.17	MDF Power is supplied by <b>20A circuits and receptacles</b> .	1	5	5	
7.18	MDF Power is supplied from a branch panel located in the room with <b>adequate spare circuit capacity</b> .	1	5	5	
7.19	MDF employs up-to-date <b>network cabling</b> .	2	5	10	Cat 6A/5e
7.20	MDF is connected to Intermediate Distribution Frame (IDF) closets with <b>fiber optic cabling</b> .	1	N/A	0	

		Weight Factor	Rating	Points	Comments
7.21	MDF has adequate <b>grounding busbar capacity.</b>	2	5	10	
7.22	Building is equipped with an <b>addressable fire alarm system.</b>	5	5	25	Simples 4100U
7.23	Building is equipped with an <b>access control system.</b>	5	3	15	4/8=50%
7.24	Building is equipped with a <b>CCTV system.</b>	5	5	25	
7.25	Building is equipped with an <b>intercom system.</b>	4	5	20	
7.26	Building is equipped with a <b>master clock system.</b>	4	5	20	Primex
<b>TOTAL</b>				384	

# 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 oversized 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

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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.

- o For projects assigned the 1-2 Year Priority add 10% of the estimated construction cost.
- o For projects assigned the 3-4 Year Priority add 20% of the estimated construction cost.
- o 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 \$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 quantities are all estimated based on observations. These are not measured or verified quantities. 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

Ceiling Tile Replacement	Replace damaged or missing acoustic ceiling tiles in rooms 110, 120, 126, and 128. (Total 6 tiles).
Door Adjustment	Adjust or repair door hardware to ensure that doors properly close and latch securely: 1 door at room 124, 1 door at main entrance (exterior).
Exterior Cleaning and Repairs	Remove birds nests from doors near room 104 and room 128. Clean masonry at room 103, approx. 16 SF. Fill pipe penetration at room 137.
Stair Landing Repair	Repair the deteriorated exterior stair landing to good condition. For location, refer to the civil site plan exhibit found in the appendix of this report.
DOAS Unit Repairs	Review existing DOAS unit to determine if repairs are needed to get DOAS operational.
Emergency Boiler Shutoff Installation	Install an emergency boiler shutoff at mechanical room egress door as required per Boiler code of Iowa.

## 1 - 2 Year Priority

Project Costs

Countertop Joint Sealant Repair	In all 14 classrooms, seal all joints of plastic laminate countertops, backsplashes, and sidesplashes with silicone sealant to protect counters from water damage (approximately 280 LF total).	\$9,000
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Roof Access Installation	Provide hatch with guardrail and 14 VLF interior ladder.	\$20,000
Exterior Sealant Replacement	<p>Replace sealant at masonry soft joints at the following locations: N, W, and S sides of roof B; (2) masonry joints room 129; room 138; Also metal sealant joint at room 1130. Approx. total: 34 LF</p> <p>Replace sealant at perimeter of windows and louvers: jamb of louver at east side room 129; perimeter of window room 138 Approx. total: 32 LF</p> <p>Replace sealant where vertical metal framing meets sill along south and west facades. Approx. total: 56 LF</p> <p>Replace sealant where vertical metal framing meets window frame and where window frame meets glass along south and west facades. This occurs at approx. 43 vertical frames, with four joints total each. Approx. total: 860 LF</p> <p>Replace sealant around wall above soffit and where soffit meets wall near room 112; 26 LF</p> <p>Replace sealant around inside perimeter of door frame near room 114 and 118, 50 LF</p> <p>Replace sealant at wall to wall joint at corner of room 118, 10 LF</p> <p>Add sealant to crack in masonry at corner of room 118, 10 LF.</p>	\$14,000
Exterior Repainting	<p>Repaint exterior steel elements including: 48 SF louver at room 129 2 SF exterior pipe at room 137 24 LF of steel guardrail near room 112</p>	\$7,000
Sidewalk Repair	Repair damaged sidewalks across the site. Approximately 26 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	\$10,000
Curb Repair	Return damaged curbs to new condition. Approximately 5 LF of 6" curbs. For locations, refer to civil site plan exhibit found in the appendix of this report.	\$6,000
Mechanical Room CMU Crack Repairs	Fill in cracks at control joints in room 129, (3) locations with sealant. Occurs in both CMU and exterior brick façade. Approximately 30 LF of cracks total	\$6,000

Gym CMU Crack Repairs	Fill cracks in CMU in room 103 (2) locations with grout (pointing masonry). One of the locations located on the South exterior portion of the wall appears to have repaired in the past. Approximately 16 LF of cracks total.	\$6,000
WSHP Installation	Add water source heat humps to smaller rooms converted to offices and include ventilation.	\$150,000
ERV Unit Repair or Replacement	Existing ERV has had issues operating during winter season. It is also nearing the end of useful life. Replace existing DOAS unit with new unit. Consider installing new unit on roof, gas-fired, DX with hot-gas reheat.	\$450,000
Replace flush valves	Add autoflush valves on water closets and urinals.	\$35,000
Replace boiler	Replace existing standard eff. boiler with new high-efficiency gas-fired condensing boiler.	\$65,000
Exterior Lighting Installation	Add building-mounted exterior lighting at SE and SW corners.	\$9,000

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Total 1-2 Year Project Costs: \$787,000.00

### 3 - 4 Year Priority

Project Costs

Casework Finish Repair	Repair casework wood veneer at rooms 108, 110, 114, 118, 122, 124, and 126 (approximately 75 SF total).	\$9,000
Wood Door Finish Repair	Repair interior doors wood veneer at rooms 106, 112, 114, 124, and 126. (approximately 20 SF total).	\$7,000
Flooring Replacement	Remove and replace 750 SF of VCT flooring in room 130. This room is currently used as storage, but will need new flooring if the use changes in the future.	\$11,000

Pavement Replacement	Remove and replace 107 SY of PCC. For location, refer to civil site plan exhibit found in the appendix of this report.	\$20,000
Sidewalk Repair	Repair damaged sidewalks across the site. Approximately 38 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	\$11,000
Playground Pavement Replacement	Remove and replace deteriorated playground asphalt. Approximately 225 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	\$35,000
RTU Replacement	Replace existing RTU serving Offices with new gas-fired DX unit. Existing RTU is a water-source heat pumps with water piping extended into the unit curb outside of the building envelope, which is not desirable.	\$310,000
New Grease Interceptor	Install new grease interceptor that complies with Des Moines WRA Requirements	\$530,000

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Total 3-4 Year Project Costs: \$933,000.00

## 5 - 10 Year Priority

Project Costs

Fence Replacement	Remove and replace approximately 455 LF of 6' chain link fence. For locations, refer to civil site plan exhibit found in the appendix of this report.	\$65,000
Pavement Replacement	Remove and replace 257 SY of PCC. For location, refer to civil site plan exhibit found in the appendix of this report.	\$50,000
Sidewalk Repair	Repair damaged sidewalks across the site. Approximately 103 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	\$25,000
Playground Pavement Replacement	Take out and restore deteriorated playground asphalt. Approximately 2936 SY. For locations, refer to civil site plan exhibit found in the appendix of this report.	\$520,000

plan exhibit found in the appendix of this report.

Heat Pump Replacement	Replace heat pumps throughout building. Consider two speed type to more closely match load and provide dehumidification.	\$1,900,000
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Total 5-10 Year Project Costs: \$2,560,000.00

## Projects Requiring Study

Design Services Fee

Designated Hardened Area Study	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
Exterior Equipment Storage Study	Custodian noted that tractor used to clear snow is difficult to start in cold weather due to being stored in unconditioned, detached shed. Explore possibilities to bring that storage into building envelope through doors accessed from exterior only.	\$5,000
Drop-off Study	Staff noted that line of cars to drop off students extends well onto road and that the drive on school grounds is too narrow for staff to access parking during this time.	\$5,000

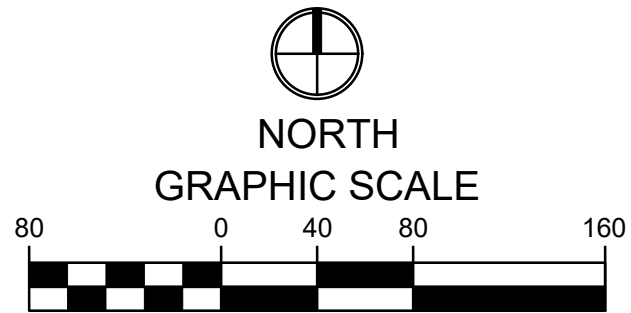
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Total Study Design Service Fees \$12,500

# APPENDIX

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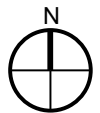
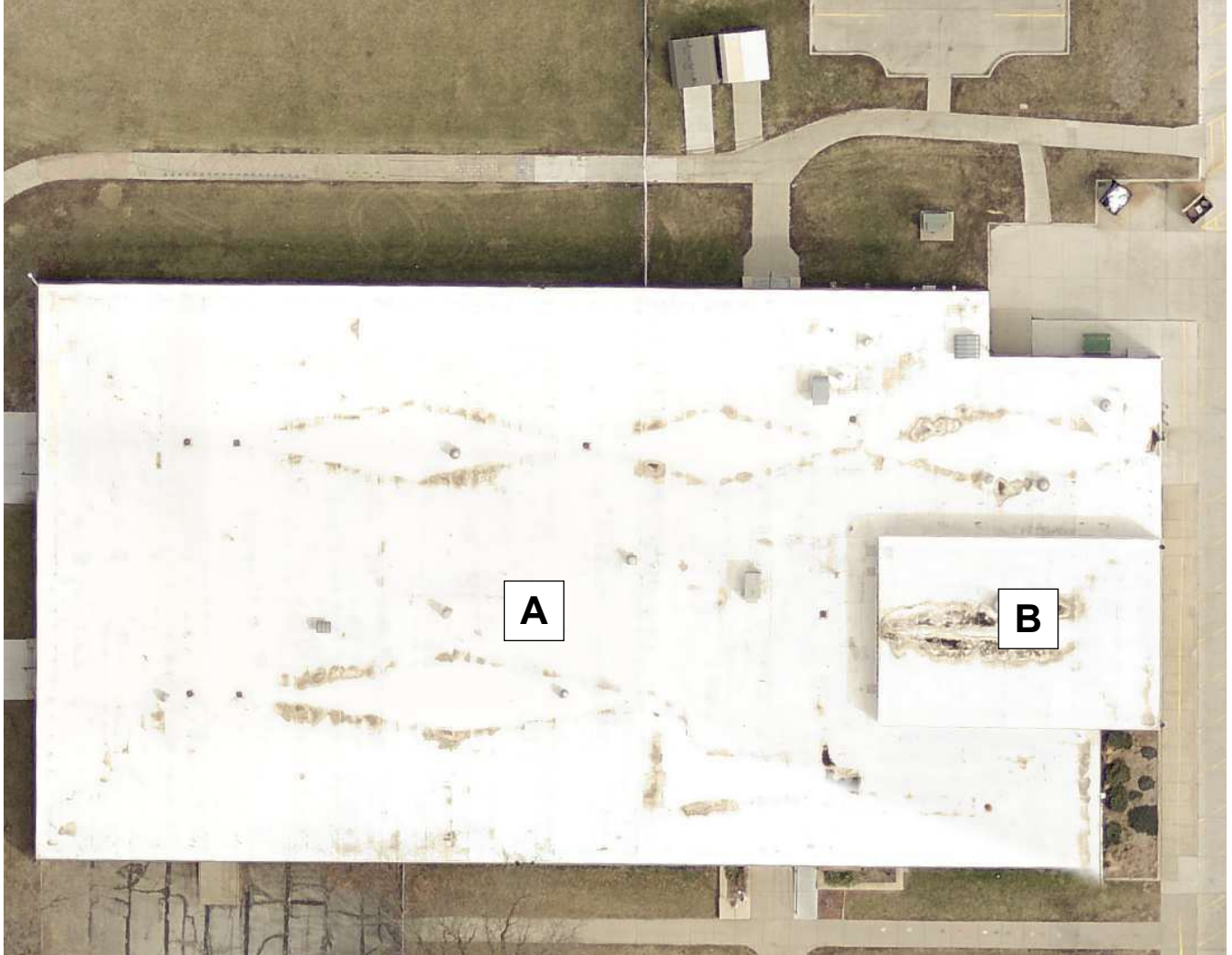
- 5+ YEAR REPLACEMENT
- 3-4 YEAR REPLACEMENT
- 1-2 YEAR REPLACEMENT



# MITCHELL EDUCATION CENTER

EXHIBIT  
PROJECT # 230286-63  
DATE 11/21/2023





NOTE: Room numbering shown on this plan does not fully align with room numbering from the latest available renovation documents. Confirm room numbering with DMPS

