# FACILITY CONDITION ASSESSMENT

*prepared for*

Ann Arbor Public Schools
2555 South State Street
Ann Arbor, Michigan 48104
Jim Vibbart


FACILITY CONDITION ASSESSMENT

OF

ALLEN ELEMENTARY SCHOOL
2560 TOWNER BOULEVARD
ANN ARBOR, MICHIGAN 48104

PREPARED BY:
*EMG*
*10461 Mill Run Circle, Suite 1100*
*Owings Mills, Maryland 21117*
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EMG PROJECT #:
*129010.18R000-005.354*

DATE OF REPORT:
*June 28, 2018*

ONSITE DATE:
*March 19-20, 2018*

**Immediate Repairs Report**
**Allen Elementary**
## 6/28/2018

| EMG Renamed Item Number | Location Description | ID | Cost Description | Quantity | Unit | Unit Cost * | Subtotal | Deficiency Repair Estimate * |
|---|---|---|---|---|---|---|---|---|
| 7 | Site | 882645 | Parking Lots, Asphalt Pavement, Cut & Patch | 2500 | SF | $5.70 | $14,261 | **$14,261** |
| 11 | Restrooms | 882586 | ADA, Restroom, Lavatory Pipe Wraps, Install | 1 | EA | $80.00 | $80 | **$80** |
| | Site | 958679 | Davis Bacon Prevailing Wages, Surcharge for Prevailing Wages, 10% surcharge for prevailing wages | 40396.52 | LS | $1.15 | $46,456 | **$46,456** |
| **Immediate Repairs Total** | | | | | | | | **$60,797** |

* Location Factor (1.0) included in totals.

**Replacement Reserves Report**

**Allen Elementary**

## 6/28/2018

| Location | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | Total Escalated Estimate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Allen Elementary | $60,797 | $493,936 | $828,452 | $133,399 | $146,155 | $391,608 | $105,606 | $331,889 | $150,029 | $146,535 | $825,638 | $551,022 | $1,243,575 | $367,028 | $1,713,228 | $1,126,522 | $166,904 | $134,528 | $114,256 | $647,858 | **$9,678,964** |
| **GrandTotal** | **$60,797** | **$493,936** | **$828,452** | **$133,399** | **$146,155** | **$391,608** | **$105,606** | **$331,889** | **$150,029** | **$146,535** | **$825,638** | **$551,022** | **$1,243,575** | **$367,028** | **$1,713,228** | **$1,126,522** | **$166,904** | **$134,528** | **$114,256** | **$647,858** | **$9,678,964** |

| EMG Renamed Item Number | Location Description | ID | Cost Description | Lifespan (EUL) | EAge | RUL | Quantity | Unit | Unit Cost | w/ Markup * | Subtotal | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | RRR_RowGrandTotalLabel |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | Building Exterior | 882646 | Exterior Wall, Glass Block, Replace | 40 | 26 | 14 | 20 | SF | $44.36 | $44.36 | $887 | | | | | | | | | | | | | | | $887 | | | | | | **$887** |
| 3 | Building Exterior | 882570 | Window, 24 SF, Replace | 30 | 22 | 8 | 34 | EA | $870.45 | $1,001.02 | $34,035 | | | | | | | | | $34,035 | | | | | | | | | | | | **$34,035** |
| 3 | Building Exterior | 882606 | Window, 12 SF, Replace | 30 | 13 | 17 | 52 | EA | $584.21 | $671.84 | $34,936 | | | | | | | | | | | | | | | | | | $34,936 | | | **$34,936** |
| 3 | Building Exterior | 882630 | Storefront, Metal-Framed Windows w/out Door(s), Replace | 30 | 20 | 10 | 350 | SF | $48.00 | $55.20 | $19,320 | | | | | | | | | | | $19,320 | | | | | | | | | | **$19,320** |
| 3 | Building Exterior | 882545 | Exterior Door, Fully-Glazed Aluminum-Framed Swinging Motor-Operated, Replace | 30 | 20 | 10 | 2 | EA | $10,194.36 | $11,723.51 | $23,447 | | | | | | | | | | | $23,447 | | | | | | | | | | **$23,447** |
| 3 | Building Exterior | 882567 | Exterior Door, Fully-Glazed Aluminum-Framed Swinging, Replace | 30 | 20 | 10 | 8 | EA | $2,106.57 | $2,422.55 | $19,380 | | | | | | | | | | | $19,380 | | | | | | | | | | **$19,380** |
| 3 | Building Exterior | 882595 | Exterior Door, Steel Insulated, Replace | 25 | 17 | 8 | 9 | EA | $1,577.53 | $1,814.16 | $16,327 | | | | | | | | | $16,327 | | | | | | | | | | | | **$16,327** |
| 3 | Building Exterior | 882589 | Exterior Door, Steel with Safety Glass, Replace | 25 | 15 | 10 | 16 | EA | $1,352.72 | $1,555.63 | $24,890 | | | | | | | | | | | $24,890 | | | | | | | | | | **$24,890** |
| 3 | Roof | 882609 | Roof, Asphalt Shingle, Replace | 20 | 14 | 6 | 4750 | SF | $3.42 | $3.93 | $18,684 | | | | | | | $18,684 | | | | | | | | | | | | | | **$18,684** |
| 3 | Roof | 882574 | Roof, Single-Ply EPDM Membrane, Replace | 20 | 8 | 12 | 60500 | SF | $10.52 | $12.10 | $731,929 | | | | | | | | | | | | | $731,929 | | | | | | | | **$731,929** |
| 3 | Roof | 882591 | Roof, Metal, Replace | 40 | 26 | 14 | 550 | SF | $12.45 | $14.32 | $7,874 | | | | | | | | | | | | | | | $7,874 | | | | | | **$7,874** |
| 4 | Throughout building | 882535 | Interior Door, Wood Solid-Core, Replace | 20 | 13 | 7 | 60 | EA | $1,423.11 | $1,636.58 | $98,195 | | | | | | | | $98,195 | | | | | | | | | | | | | **$98,195** |
| 4 | Throughout building | 882634 | Interior Door, Wood Solid-Core w/ Safety Glass, Replace | 20 | 8 | 12 | 40 | EA | $1,928.03 | $2,217.23 | $88,689 | | | | | | | | | | | | | $88,689 | | | | | | | | **$88,689** |
| 4 | Throughout building | 882651 | Interior Door, Fire 90-Minutes and Over, Replace | 20 | 5 | 15 | 30 | EA | $1,649.06 | $1,896.42 | $56,893 | | | | | | | | | | | | | | | | $56,893 | | | | | **$56,893** |
| 4 | Throughout building | 882536 | Door Hardware System, School (per Door), Replace | 10 | 6 | 4 | 130 | EA | $375.00 | $431.25 | $56,063 | | | | | $56,063 | | | | | | | | | | $56,063 | | | | | | **$112,125** |
| 4 | Throughout building | 882608 | Interior Wall Finish, Clay Brick, Repoint | 25 | 10 | 15 | 2000 | SF | $12.41 | $14.27 | $28,538 | | | | | | | | | | | | | | | | $28,538 | | | | | **$28,538** |
| 4 | Throughout building | 882575 | Interior Wall Finish, Concrete/Masonry, Prep & Paint | 8 | 3 | 5 | 120967 | SF | $1.45 | $1.67 | $201,852 | | | | | | $201,852 | | | | | | | | $201,852 | | | | | | | **$403,703** |
| 4 | Throughout building | 882566 | Interior Floor Finish, Vinyl Tile (VCT), Replace | 15 | 1 | 14 | 50000 | SF | $4.80 | $5.52 | $276,035 | | | | | | | | | | | | | | | $276,035 | | | | | | **$276,035** |
| 4 | Throughout building | 882600 | Interior Floor Finish, Carpet Standard-Commercial Medium-Traffic, Replace | 10 | 1 | 9 | 6500 | SF | $7.26 | $8.34 | $54,241 | | | | | | | | | | $54,241 | | | | | | | | | | $54,241 | **$108,482** |
| 4 | Restrooms | 882633 | Interior Ceiling Finish, Gypsum Board/Plaster, Prep & Paint | 10 | 1 | 9 | 750 | SF | $1.94 | $2.23 | $1,670 | | | | | | | | | | $1,670 | | | | | | | | | | $1,670 | **$3,341** |
| 4 | Throughout building | 882618 | Interior Ceiling Finish, Suspended Acoustical Tile (ACT), Replace | 20 | 1 | 19 | 59000 | SF | $3.11 | $3.58 | $211,081 | | | | | | | | | | | | | | | | | | | | $211,081 | **$211,081** |
| 5 | Restrooms | 882537 | Toilet Partitions, Metal Overhead-Braced, Replace | 20 | 13 | 7 | 10 | EA | $850.00 | $977.50 | $9,775 | | | | | | | | $9,775 | | | | | | | | | | | | | **$9,775** |
| 5 | Elevator shaft | 883218 | Elevator Cab Finishes, Standard w/ Stainless Steel Doors, Replace | 15 | 5 | 10 | 1 | EA | $8,000.00 | $9,200.00 | $9,200 | | | | | | | | | | | $9,200 | | | | | | | | | | **$9,200** |
| 5 | Elevator mechanical room | 882621 | Elevator Controls, Automatic, 1 or 2 Car Cluster, Modernize | 20 | 10 | 10 | 1 | EA | $11,547.25 | $13,279.34 | $13,279 | | | | | | | | | | | $13,279 | | | | | | | | | | **$13,279** |
| 5 | Restrooms | 882546 | Toilet, Flush Tank (Water Closet), Replace | 20 | 13 | 7 | 36 | EA | $1,055.15 | $1,213.43 | $43,683 | | | | | | | | $43,683 | | | | | | | | | | | | | **$43,683** |
| 5 | Restrooms | 882581 | Urinal, Vitreous China, Replace | 20 | 13 | 7 | 2 | EA | $1,193.44 | $1,372.46 | $2,745 | | | | | | | | $2,745 | | | | | | | | | | | | | **$2,745** |
| 5 | Restrooms | 882555 | Sink, Enameled Steel, Replace | 20 | 13 | 7 | 34 | EA | $616.03 | $708.43 | $24,087 | | | | | | | | $24,087 | | | | | | | | | | | | | **$24,087** |
| 5 | Throughout building | 882649 | Service Sink, Floor, Replace | 35 | 24 | 11 | 3 | EA | $1,599.51 | $1,839.44 | $5,518 | | | | | | | | | | | | $5,518 | | | | | | | | | **$5,518** |
| 5 | Throughout building | 882544 | Drinking Fountain, Refrigerated, Replace | 10 | 6 | 4 | 4 | EA | $1,257.51 | $1,446.13 | $5,785 | | | | | $5,785 | | | | | | | | | | $5,785 | | | | | | **$11,569** |
| 5 | Site | 882583 | Backflow Preventer, 2", Replace | 15 | 5 | 10 | 1 | EA | $2,603.17 | $2,993.64 | $2,994 | | | | | | | | | | | $2,994 | | | | | | | | | | **$2,994** |
| 5 | Custodial Closet | 882617 | Water Heater, 50 GAL, Replace | 10 | 2 | 8 | 1 | EA | $2,349.48 | $2,701.91 | $2,702 | | | | | | | | | $2,702 | | | | | | | | | | $2,702 | | **$5,404** |
| 5 | Boiler Room A | 882559 | Water Heater, 80 GAL, Replace | 15 | 7 | 8 | 1 | EA | $10,698.82 | $12,303.64 | $12,304 | | | | | | | | | $12,304 | | | | | | | | | | | | **$12,304** |
| 5 | Boiler Room B | 882538 | Compressed Air Dryer, , Replace | 15 | 12 | 3 | 1 | EA | $5,077.01 | $5,838.57 | $5,839 | | | | $5,839 | | | | | | | | | | | | | | | $5,839 | | **$11,677** |
| 5 | Boiler Room A | 882647 | Compressed Air Dryer, , Replace | 15 | 12 | 3 | 1 | EA | $5,077.01 | $5,838.57 | $5,839 | | | | $5,839 | | | | | | | | | | | | | | | $5,839 | | **$11,677** |
| 5 | Boiler Room A | 882556 | Air Compressor, 2 HP, Replace | 20 | 16 | 4 | 1 | EA | $6,611.73 | $7,603.48 | $7,603 | | | | | $7,603 | | | | | | | | | | | | | | | | **$7,603** |
| 5 | Boiler Room B | 882629 | Air Compressor, 2 HP, Replace | 20 | 16 | 4 | 1 | EA | $6,611.73 | $7,603.48 | $7,603 | | | | | $7,603 | | | | | | | | | | | | | | | | **$7,603** |
| 5 | Boiler Room A | 882543 | Boiler (1), 2095 MBH, Replace | 25 | 22 | 3 | 1 | EA | $54,195.22 | $62,324.51 | $62,325 | | | | $62,325 | | | | | | | | | | | | | | | | | **$62,325** |
| 5 | Boiler Room B | 882558 | Boiler, 2092 MBH, Replace | 25 | 20 | 5 | 1 | EA | $54,195.22 | $62,324.51 | $62,325 | | | | | | $62,325 | | | | | | | | | | | | | | | **$62,325** |
| 5 | Boiler Room B | 882590 | Expansion Tank, , Replace | 25 | 20 | 5 | 1 | EA | $3,998.56 | $4,598.34 | $4,598 | | | | | | $4,598 | | | | | | | | | | | | | | | **$4,598** |
| 5 | Boiler Room A | 882636 | Expansion Tank, 200 GAL, Replace | 25 | 20 | 5 | 1 | EA | $4,696.79 | $5,401.31 | $5,401 | | | | | | $5,401 | | | | | | | | | | | | | | | **$5,401** |
| 5 | Roof | 882611 | Ductless Split System, 1.5 Ton, Replace | 15 | 3 | 12 | 1 | EA | $4,473.11 | $5,144.08 | $5,144 | | | | | | | | | | | | | $5,144 | | | | | | | | **$5,144** |
| 5 | Roof | 882561 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882571 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882616 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882640 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882592 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882604 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882582 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882593 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882624 | Ductless Split System, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $4,473.11 | $5,144.08 | $5,144 | | | | | | | | | | | | | | | $5,144 | | | | | | **$5,144** |
| 5 | Roof | 882619 | Condensing Unit/Heat Pump, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882614 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |

| EMG Renamed Item Number | Location Description | ID | Cost Description | Lifespan (EUL) | EAge | RUL | Quantity | Unit | Unit Cost | w/ Markup * | Subtotal | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | RRR_RowGrandTotalLabel |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | Roof | 882648 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882643 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882597 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882540 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882613 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882639 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882641 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882654 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882637 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882562 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882642 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882632 | Condensing Unit, 40 Ton, Replace | 15 | 1 | 14 | 1 | EA | $54,169.90 | $62,295.38 | $62,295 | | | | | | | | | | | | | | | $62,295 | | | | | | **$62,295** |
| 5 | Roof | 882576 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882539 | Ductless Split System, 1.5 Ton, Replace | 15 | 1 | 14 | 1 | EA | $4,473.11 | $5,144.08 | $5,144 | | | | | | | | | | | | | | | $5,144 | | | | | | **$5,144** |
| 5 | Roof | 882579 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882626 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882548 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882569 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882573 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Roof | 882628 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882612 | Condensing Unit, 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,122.18 | $3,590.50 | $3,591 | | | | | | | | | | | | | | | $3,591 | | | | | | **$3,591** |
| 5 | Roof | 882638 | Condensing Unit, 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $3,578.67 | $4,115.46 | $4,115 | | | | | | | | | | | | | | | $4,115 | | | | | | **$4,115** |
| 5 | Penthouse level mechanical room | 882588 | Air Handler, 17500 CFM, Replace | 20 | 15 | 5 | 1 | EA | $9,413.96 | $10,826.06 | $10,826 | | | | | | $10,826 | | | | | | | | | | | | | | | **$10,826** |
| 5 | Classrooms | 882594 | Unit Ventilator, 1000 CFM, Replace | 15 | 1 | 14 | 25 | EA | $8,444.15 | $9,710.77 | $242,769 | | | | | | | | | | | | | | | $242,769 | | | | | | **$242,769** |
| 5 | Roof | 882551 | Exhaust Fan, 250 CFM, Replace | 15 | 8 | 7 | 25 | EA | $1,499.53 | $1,724.46 | $43,112 | | | | | | | | $43,112 | | | | | | | | | | | | | **$43,112** |
| 5 | Boiler Room B | 882560 | Distribution Pump, 5 HP, Replace | 20 | 16 | 4 | 1 | EA | $5,518.88 | $6,346.72 | $6,347 | | | | | $6,347 | | | | | | | | | | | | | | | | **$6,347** |
| 5 | Boiler Room B | 882610 | Distribution Pump, 5 HP, Replace | 20 | 15 | 5 | 1 | EA | $5,518.88 | $6,346.72 | $6,347 | | | | | | $6,347 | | | | | | | | | | | | | | | **$6,347** |
| 5 | Throughout building | 882557 | HVAC System Hydronic Piping, 2-Pipe, Replace | 30 | 15 | 15 | 65388 | SF | $6.50 | $7.48 | $488,775 | | | | | | | | | | | | | | | | $488,775 | | | | | **$488,775** |
| 5 | Roof | 882631 | Packaged Unit (RTU), 2 Ton, Replace | 15 | 1 | 14 | 1 | EA | $7,257.71 | $8,346.36 | $8,346 | | | | | | | | | | | | | | | $8,346 | | | | | | **$8,346** |
| 5 | Roof | 882547 | Packaged Unit (RTU), 3 Ton, Replace | 15 | 1 | 14 | 1 | EA | $9,871.90 | $11,352.69 | $11,353 | | | | | | | | | | | | | | | $11,353 | | | | | | **$11,353** |
| 5 | Roof | 882625 | Packaged Unit (RTU), 4 Ton, Replace | 15 | 1 | 14 | 1 | EA | $10,581.39 | $12,168.60 | $12,169 | | | | | | | | | | | | | | | $12,169 | | | | | | **$12,169** |
| 5 | Roof | 882601 | Packaged Unit (RTU-8), 10 Ton, Replace | 15 | 1 | 14 | 1 | EA | $18,554.44 | $21,337.61 | $21,338 | | | | | | | | | | | | | | | $21,338 | | | | | | **$21,338** |
| 5 | Roof | 882549 | Packaged Unit (RTU-6), 7.5 Ton, Replace | 15 | 1 | 14 | 1 | EA | $14,395.83 | $16,555.21 | $16,555 | | | | | | | | | | | | | | | $16,555 | | | | | | **$16,555** |
| 5 | Throughout building | 882568 | Building Automation System (HVAC Controls), Full Upgrade (per SF), Upgrade | 20 | 18 | 2 | 65388 | SF | $5.36 | $6.17 | $403,240 | | | $403,240 | | | | | | | | | | | | | | | | | | **$403,240** |
| 5 | Boiler Room B | 882552 | Sprinkler Heads (per SF), , Replace | 20 | 12 | 8 | 250 | SF | $1.33 | $1.33 | $332 | | | | | | | | | $332 | | | | | | | | | | | | **$332** |
| 5 | Throughout building | 882644 | Fire Extinguisher, , Replace | 15 | 9 | 6 | 10 | EA | $356.54 | $410.02 | $4,100 | | | | | | | $4,100 | | | | | | | | | | | | | | **$4,100** |
| 5 | Throughout building | 882607 | Annunciator Alarm Panel, , Replace | 15 | 5 | 10 | 1 | EA | $1,448.32 | $1,665.56 | $1,666 | | | | | | | | | | $1,666 | | | | | | | | | | | **$1,666** |
| 5 | Throughout building | 882599 | Fire Alarm System, School, Upgrade | 20 | 6 | 14 | 65388 | SF | $3.13 | $3.60 | $235,492 | | | | | | | | | | | | | | | $235,492 | | | | | | **$235,492** |
| 5 | Office | 882650 | Fire Alarm Control Panel, Multiplex, Replace | 15 | 1 | 14 | 1 | EA | $4,284.35 | $4,927.00 | $4,927 | | | | | | | | | | | | | | | $4,927 | | | | | | **$4,927** |
| 5 | Throughout building | 882602 | Exit Lighting Fixture, LED, Replace | 10 | 2 | 8 | 10 | EA | $405.01 | $465.76 | $4,658 | | | | | | | | | $4,658 | | | | | | | | | | $4,658 | | **$9,315** |
| 5 | Throughout building | 882603 | Defibrillator, Cabinet Mounted, Replace | 5 | 2 | 3 | 1 | EA | $1,409.50 | $1,620.93 | $1,621 | | | | $1,621 | | | | | $1,621 | | | | | $1,621 | | | | | $1,621 | | **$6,484** |
| 6 | Kitchen | 882578 | Commercial Kitchen, Freezer, Chest, Replace | 15 | 8 | 7 | 1 | EA | $1,568.19 | $1,803.42 | $1,803 | | | | | | | | $1,803 | | | | | | | | | | | | | **$1,803** |
| 6 | Kitchen | 882596 | Commercial Kitchen, Convection Oven, Double, Replace | 10 | 1 | 9 | 1 | EA | $8,643.00 | $9,939.45 | $9,939 | | | | | | | | | | $9,939 | | | | | | | | | | $9,939 | **$19,879** |
| 6 | Kitchen | 882615 | Commercial Kitchen, Refrigerator, 2-Door Reach-In, Replace | 15 | 5 | 10 | 1 | EA | $4,256.00 | $4,894.40 | $4,894 | | | | | | | | | | | $4,894 | | | | | | | | | | | **$4,894** |
| 7 | Site | 882577 | Light Fixture, Soffit, Exterior, Replace | 20 | 10 | 10 | 12 | EA | $995.47 | $1,144.79 | $13,738 | | | | | | | | | | | $13,738 | | | | | | | | | | | **$13,738** |
| 7 | Site | 882627 | Flood Light, Exterior, 100 W, Replace | 20 | 1 | 19 | 6 | EA | $995.47 | $1,144.79 | $6,869 | | | | | | | | | | | | | | | | | | | | $6,869 | **$6,869** |
| 7 | Site | 882645 | Parking Lots, Asphalt Pavement, Cut & Patch | 25 | 25 | 0 | 2500 | SF | $4.96 | $5.70 | $14,261 | $14,261 | | | | | | | | | | | | | | | | | | | | **$14,261** |
| 7 | Site | 882605 | Parking Lots, Asphalt Pavement, Seal & Stripe | 5 | 4 | 1 | 44000 | SF | $0.38 | $0.44 | $19,203 | | $19,203 | | | | | $19,203 | | | | | $19,203 | | | | | $19,203 | | | | **$76,811** |
| 7 | Site | 882635 | Parking Lots, Asphalt Pavement, Mill & Overlay | 25 | 15 | 10 | 44000 | SF | $3.28 | $3.77 | $165,988 | | | | | | | | | | $165,988 | | | | | | | | | | | **$165,988** |
| 7 | West elevation and main drive aisle | 883224 | Pedestrian Pavement, Sidewalk, Concrete Sections/Small Areas, Replace | 30 | 29 | 1 | 100 | SF | $19.00 | $21.85 | $2,185 | | $2,185 | | | | | | | | | | | | | | | | | | | **$2,185** |
| 7 | Site | 882541 | Pedestrian Pavement, Sidewalk, Concrete Large Areas, Replace | 30 | 20 | 10 | 26000 | SF | $9.00 | $10.35 | $269,100 | | | | | | | | | | $269,100 | | | | | | | | | | | **$269,100** |
| 7 | Main entrance | 883228 | Signage, Property, Monument, Replace | 20 | 5 | 15 | 1 | EA | $8,602.00 | $14,193.30 | $14,193 | | | | | | | | | | | | | | | | $14,193 | | | | | **$14,193** |
| 7 | South elevation behind basketball courts | 883233 | Landscaping, Flat Areas, Re-slope, Regrade/Establish | 25 | 24 | 1 | 500 | SF | $3.24 | $3.72 | $1,860 | | $1,860 | | | | | | | | | | | | | | | | | | | **$1,860** |
| 7 | Site | 882623 | Pole Light, Parking, , Replace | 20 | 5 | 15 | 9 | EA | $8,523.34 | $9,801.84 | $88,217 | | | | | | | | | | | | | | | | $88,217 | | | | | **$88,217** |
| 7 | Site | 882652 | Pole Light, Pedestrian, , Replace | 20 | 1 | 19 | 4 | EA | $8,523.34 | $9,801.84 | $39,207 | | | | | | | | | | | | | | | | | | | | $39,207 | **$39,207** |
| 11 | Restrooms | 882586 | ADA, Restroom, Lavatory Pipe Wraps, Install | 0 | 0 | 0 | 1 | EA | $80.00 | $80.00 | $80 | $80 | | | | | | | | | | | | | | | | | | | | **$80** |
| D70 | Throughout | 946123 | Exterior Door Hardware, Electronic Doors ANSI F39 Lockset, Replace | 30 | 29 | 1 | 26 | EA | $1,345.00 | $1,546.75 | $40,216 | | $40,216 | | | | | | | | | | | | | | | | | | | **$40,216** |
| | Roof | 960792 | Solar Instillation Project, Roof Mounted Solar Instillation, Install | 20 | 18 | 2 | 288000 | SF | $1.00 | $1.15 | $331,200 | | | $331,200 | | | | | | | | | | | | | | | | | | **$331,200** |
| D60 | Front entrance | 946121 | Intercom Master Station, Replace | 20 | 19 | 1 | 1 | EA | $3,814.50 | $4,386.67 | $4,387 | | $4,387 | | | | | | | | | | | | | | | | | | | **$4,387** |
| D50 | Throughout | 945781 | Clock and Bell System, Wireless or Ethernet Enabled, Up To 100 Total Clocks / Bells, Replace | 15 | 14 | 1 | 65388 | SF | $0.51 | $0.59 | $38,350 | | $38,350 | | | | | | | | | | | | | | | | $38,350 | | | **$76,700** |
| D70 | Throughout | 946122 | Security/Surveillance System, Cameras and CCTV, Install | 10 | 9 | 1 | 65388 | SF | $4.35 | $5.00 | $326,893 | | $326,893 | | | | | | | | | | $326,893 | | | | | | | | | **$653,786** |

| EMG Renamed Item Number | Location Description | ID | Cost Description | Lifespan (EUL) | EAge | RUL | Quantity | Unit | Unit Cost | w/ Markup * | Subtotal | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | RRR_RowGrandTotalLabel |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Site | 958679 | Davis Bacon Prevailing Wages, Surcharge for Prevailing Wages, 10% surcharge for prevailing wages | 1 | 1 | 0 | 40396.52 | LS | $1.00 | $1.15 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | $46,456 | **$929,120** |
| **Totals, Unescalated** | | | | | | | | | | | | **$60,797** | **$479,549** | **$780,896** | **$122,079** | **$129,857** | **$337,805** | **$88,443** | **$269,856** | **$118,434** | **$112,307** | **$614,352** | **$398,070** | **$872,218** | **$249,929** | **$1,132,646** | **$723,072** | **$104,009** | **$81,392** | **$67,114** | **$369,464** | **$7,112,287** |
| **Totals, Escalated (3.0% inflation, compounded annually)** | | | | | | | | | | | | **$60,797** | **$493,936** | **$828,452** | **$133,399** | **$146,155** | **$391,608** | **$105,606** | **$331,889** | **$150,029** | **$146,535** | **$825,638** | **$551,022** | **$1,243,575** | **$367,028** | **$1,713,228** | **$1,126,522** | **$166,904** | **$134,528** | **$114,256** | **$647,858** | **$9,678,964** |

* Markup/LocationFactor (1.0) has been included in unit costs. Markup includes a and 15% Ann Arbor Premium factors applied to the location adjusted unit cost.

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# 1. Executive Summary

## 1.1. Property Information and General Physical Condition

The property information is summarized in the table below. More detailed descriptions may be found in the various sections of the report and in the Appendices.

| Property Information | |
|---|---|
| Address: | 2560 Towner Boulevard, Ann Arbor, Washtenaw County, Michigan 48104 |
| Year Constructed/Renovated: | 1961, Phase I<br>Multiple reported additions to building; most recent Phase in 1991<br>Renovated 2016-2017 following significant flooding |
| Current Occupants: | Ann Arbor Public Schools |
| Percent Utilization: | 100% |
| Management Point of Contact: | Mr. Jim Vibbart, Ann Arbor Public Schools<br>vibbartj@aaps.k12.mi.us |
| Property Type: | Public School |
| Site Area: | 10.5 acres |
| Building Area: | 65,388 SF |
| Number of Buildings: | 1 |
| Number of Stories: | 1 - 2 |
| Parking Type and Number of Spaces: | 73 spaces in open lots |
| Building Construction: | Masonry bearing walls and wood-framed roofs. |
| Roof Construction: | Hip and mansard roofs with standing seam metal and asphalt shingles.<br>Flat roofs with single-ply EPDM membrane. |
| Exterior Finishes: | Brick Veneer |
| Heating, Ventilation and Air Conditioning: | Central system with boilers feeding hydronic fin tube radiators and cabinets, and classroom unit ventilators.<br>Individual rooftop package units and condensing units.<br>Supplemental components: ductless heat pump split-systems and ductless split system condensing units. |
| Fire and Life/Safety: | Limited fire sprinklers, hydrants, smoke detectors, alarms, strobes, extinguishers, pull stations, alarm panel, and exit signs. |
| ADA : | This building does not have any major ADA issues |
| All 65,388 square feet of the building are occupied by a single occupant, Ann Arbor Public Schools. The spaces are mostly classrooms and other academic rooms, and supporting restrooms, administrative offices, mechanical and other utility spaces. | |

| Assessment Information | |
|---|---|
| Dates of Visit: | 3/19/2018 and 3/20/2018 |
| On-Site Point of Contact (POC): | Kerry Beal, Principal, Allen Elementary School |
| Assessment and Report Prepared by: | Justin Dunn |

| Assessment Information | |
|---|---|
| Reviewed by: | Al Diefert<br>Technical Report Reviewer<br>For<br>Andrew Hupp<br>Program Manager<br>ahupp@emgcorp.com<br>800.733.0660 x6632 |

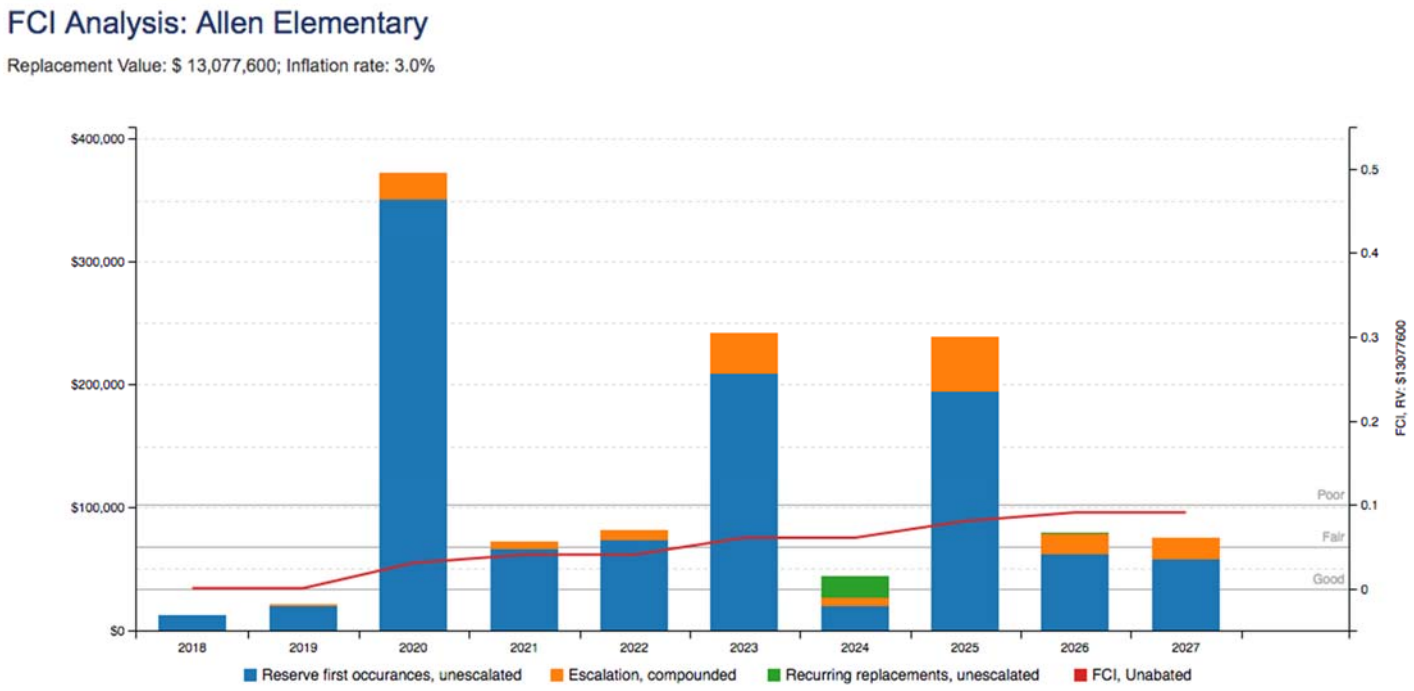
## 1.2. Key Findings

**Site :** The property's site is generally in good to fair condition, with isolated areas of damage and deterioration at the parking lots and sidewalks. The majority of other site components are in sound condition.

**Architectural :** The property's architectural components are generally in sound condition, with no significant deficiencies or deterioration reported or observed.

**MEPF :** The property's MEPF components are in generally good condition, having been largely replaced in 2017 after extensive flooding in 2016. One of the two boilers is an original 1961 unit, but is reportedly still functional.

## 1.3. Facility Condition Index (FCI)




One of the major goals of the FCA is to calculate the FCI, which gives an indication of a building's overall condition. Two FCI ratios are calculated and presented, the Current Year and Ten-Year. The Current Year FCI is the ratio of Immediate Repair Costs to the building's Current Replacement Value. Similarly, the Ten-Year FCI is the ratio of anticipated Capital Reserve Needs over the next ten years to the Current Replacement Value.

| FCI Rating | Definition | Percentage Value |
|---|---|---|
| Good | In new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies. | 0 to .05 |
| Fair | Subjected to wear and soiling but is still in a serviceable and functioning condition. | > than .05 to .10 |

| FCI Rating | Definition | Percentage Value |
|---|---|---|
| Poor | Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life. | > than .10 to .60 |
| Very Poor | Has reached the end of its useful or serviceable life. Renewal is now necessary. | > than .60 |

The graphs above and tables below represent summary-level findings for the FCA. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall strategy that can serve as the basis for a portfolio-wide capital improvement funding strategy. Key findings from the assessment include:

| KEY FINDING | METRIC |
|---|---|
| Current Year Facility Condition Index (FCI) FCI = (IR)/(CRV): | 0.10% |
| Current Year FCI Rating: | 2018 |
| 10-Year Facility Condition Index (FCI) FCI = (RR)/(CRV): | 9.46% |
| 10-Year FCI Rating | 0.09 |
| Current Replacement Value (CRV): | $13,077,600 |
| Year 0 (Current Year) - Immediate Repairs (IR): | $12,481 |
| Years 1-10 - Replacement Reserves (RR): | $1,224,476 |
| Total Capital Needs: | $1,236,957 |

Further detail on the specific costs that make up the Immediate Repair Costs can be found in the cost tables at the beginning of this report.

# 2. Building Structure

## A10 Foundations

| Building Foundation | | |
|---|---|---|
| Item | Description | Condition |
| Foundation | Slab on grade with integral footings | Good |
| Basement and Crawl Space | None | -- |

***Anticipated Lifecycle Replacements***

- No components of significance

***Actions/Comments:***

- The foundation systems are concealed. There are no significant signs of settlement, deflection, or movement. There is no evidence of movement or water infiltration.

## B10 Superstructure

| B1010 Floor Construction and B1020 Roof Construction | | |
|---|---|---|
| Item | Description | Condition |
| Framing / Load-Bearing Walls | Masonry walls | Good |
| Ground Floor | Concrete slab | Good |
| Upper Floor Framing | Concrete beams | Good |
| Upper Floor Decking | Concrete, cast-in-place | Good |
| Balcony Framing | -- | -- |
| Balcony Decking | None | -- |
| Balcony Deck Toppings | None | -- |
| Balcony Guardrails | None | -- |
| Roof Framing | Steel beams or girders | Good |
| Roof Decking | Plywood or OSB | Good |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Caulk minor cracking | | ☐ | Monitor cracking for growth | | ☐ |
| Other | | ☐ | Other | | ☐ |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- The superstructure is concealed. Walls and floors appear to be plumb, level, and stable. There are no significant signs of deflection or movement.

| B1080 Stairs | | | | | |
|---|---|---|---|---|---|
| Type | Description | Riser | Handrail | Balusters | Condition |
| Building Exterior Stairs | Wood-framed | Closed | Metal | Metal | Good |
| Building Interior Stairs | Steel Framed With Vinyl treads | Closed | Metal | Metal | Good |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended.

# 3. Building Envelope

## B20 Exterior Vertical Enclosures

| B2010 Exterior Walls | | |
|---|---|---|
| Type | Location | Condition |
| Primary Finish | Brick veneer | Fair |
| Secondary Finish | Concrete | Fair |
| Accented with | Metal siding | Fair |
| Soffits | Concealed | Fair |
| Building sealants | Between dissimilar materials, at joints, around windows and doors | -- |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Graffiti | | ☐ | Efflorescence | | ☐ |
| Other | | ☐ | Other | | ☐ |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance, including patching repairs, graffiti removal, and re-caulking, is highly recommended.

| B2020 Exterior Windows | | | | |
|---|---|---|---|---|
| Window Framing | Glazing | Location | Window Screen | Condition |
| Aluminum framed, operable | Double glaze | Throughout exterior walls | ☐ | Fair |
| Curtain wall | Double glaze | Throughout exterior walls | ☐ | Fair |
| Aluminum framed storefront | Double glaze | Entry doors | ☐ | Fair |

| B2050 Exterior Doors | | |
|---|---|---|
| Main Entrance Doors | Door Type | Condition |
| | Fully glazed, metal framed | Fair |
| Secondary Entrance Doors | Metal, insulated | Fair |
| Service Doors | Metal, insulated | Fair |
| Overhead Doors | None | -- |

***Anticipated Lifecycle Replacements:***

- Windows
- Curtain wall glazing
- Storefront glazing
- Exterior doors

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

| B3010 Primary Roof | | | |
|---|---|---|---|
| Location | Majority of roof | Finish | Single-ply membrane |
| Type / Geometry | Flat | Roof Age | Unknown; est. 5+ Yrs |
| Flashing | Membrane | Warranties | Unknown |
| Parapet Copings | None | Roof Drains | Internal drains |
| Fascia | Metal Panel | Insulation | Rigid Board |
| Soffits | Concealed Soffits | Skylights | No |
| Attics | None | Ventilation Source-1 | None |
| Roof Condition | Fair | Ventilation Source-2 | -- |

| B3010 Secondary Roof | | | |
|---|---|---|---|
| Location | Above library | Finish | Asphalt shingles |
| Type / Geometry | Hip Roof | Roof Age | Unknown; est. 15+ Yrs |
| Flashing | Sheet metal | Warranties | Unknown |
| Parapet Copings | None | Roof Drains | Edge drainage to ground |
| Fascia | None | Insulation | Unknown |
| Soffits | None | Skylights | No |
| Attics | None | Ventilation Source-1 | Power Vents |
| Roof Condition | Fair | Ventilation Source-2 | -- |

| B3010 Tertiary Roof | | | |
|---|---|---|---|
| Location | Above gymnasium | Finish | Asphalt shingles |
| Type / Geometry | Mansard Roof | Roof Age | Unknown; est. 15+ Yrs |
| Flashing | Sheet metal | Warranties | Unknown; any assumed to be expired |
| Parapet Copings | None | Roof Drains | Edge drainage to ground |
| Fascia | None | Insulation | Unknown |
| Soffits | None | Skylights | No |

| B3010 Tertiary Roof | | | |
|---|---|---|---|
| Attics | None | Ventilation Source-1 | None |
| Roof Condition | Fair | Ventilation Source-2 | -- |

| B3010 Quaternary Roof | | | |
|---|---|---|---|
| Location | Above elevator shaft | Finish | Standing seam metal |
| Type / Geometry | Hip Roof | Roof Age | Unknown; est. 26 Yrs |
| Flashing | Sheet metal | Warranties | Unknown |
| Parapet Copings | None | Roof Drains | Edge drainage to ground |
| Fascia | Metal Panel | Insulation | Rigid Board |
| Soffits | None | Skylights | No |
| Attics | None | Ventilation Source-1 | None |
| Roof Condition | Good | Ventilation Source-2 | -- |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Drainage components broken/missing | | ☐ | Vegetation/fungal growth | | ☐ |
| Blocked Drains | | ☐ | Debris | | ☐ |
| Missing shingles at mansard roof | Mansard roof, southeast elevation | ☒ | Other | | ☐ |

| Degradation Issues | | | |
|---|---|---|---|
| Observation | Exists at Site | Observation | Exists at Site |
| Evidence of roof leaks | ☐ | Significant ponding | ☐ |
| Excessive patching or repairs | ☐ | Blistering or ridging | ☐ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- Asphalt shingles
- EPDM roof membrane
- Metal roof

***Actions/Comments:***

- The roof finishes vary in age. Information regarding roof warranties or bonds was not available. The roofs are maintained by an outside contractor.
- According to the POC, there are no active roof leaks. There is no evidence of active roof leaks.

- There is no evidence of roof deck or insulation deterioration. The roof substrate and insulation should be inspected during any future roof repair or replacement work.
- Roof drainage appears to be adequate. Clearing and minor repair of drain system components should be performed regularly as part of the property management's routine maintenance and operations program.
- The attics are not accessible and it could not be determined if there is moisture, water intrusion, or excessive daylight in the attics.

# 4. Interiors

## C10 Interior Construction

| C1030 Interior Doors | | |
|---|---|---|
| Item | Type | Condition |
| Interior Doors | Solid core wood | Good |
| Door Framing | Metal | Good |
| Fire Doors | Yes | Good |
| Closet Doors | N/A | -- |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Improperly adjusted door closures | | ☐ | Damaged/loose door hardware | | ☐ |
| Other | | ☐ | Other | | ☐ |

The following table generally describes the locations and typical conditions of the interior finishes within the facility:

**Interior Finishes - ALLEN ELEMENTARY SCHOOL**

| Location | Finish | | Quantity (SF) | Condition | Action | RUL | Est. Cost |
|---|---|---|---|---|---|---|---|
| Restrooms | Ceiling | Gypsum Board/Plaster | 750 | Fair | Prep & Paint | 9 | 1,452 |
| Restrooms | Floor | Ceramic Tile | 750 | Good | Replace | 23 | 11,816 |
| Throughout building | Wall | Concrete/Masonry | 90000 | Fair | Prep & Paint | 5 | 130,590 |
| Throughout building | Wall | Clay Brick | 2000 | Fair | Repoint | 15 | 24,816 |
| Throughout building | Floor | Carpet Standard-Commercial Medium-Traffic | 6500 | Good | Replace | 9 | 47,166 |
| Throughout building | Floor | Vinyl Tile (VCT) | 50000 | Good | Replace | 14 | 240,030 |
| Throughout building | Ceiling | Suspended Acoustical Tile (ACT) | 59000 | Good | Replace | 19 | 183,549 |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Loose carpeting/flooring | | ☐ | Minor areas of stained ceiling tiles | | ☐ |
| Minor paint touch-up | | ☐ | Areas of damaged/missing baseboard | | ☐ |
| Other | | ☐ | Other | | ☐ |

***Anticipated Lifecycle Replacements:***

- Carpet
- Vinyl tile
- Interior paint
- Suspended acoustic ceiling tile
- Interior doors and hardware

***Actions/Comments:***

- The interior areas were last renovated in 2017.
- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended.

# 5. Services (MEPF)

See the Mechanical Equipment List in the Appendices for the quantity, manufacturer's name, model number, capacity and year of manufacturer of the major mechanical equipment, if available.

## D10 Conveying Systems

| D1030 Vertical Conveying (Building Elevators) – Building 1 | | | |
|---|---|---|---|
| Manufacturer | Otis | Machinery Location | Ground floor or basement adjacent to shaft |
| Safety Stops | Electronic | Emergency Communication Equipment | Yes |
| Cab Floor Finish | Vinyl-tiled | Cab Wall Finish | Plastic-laminated wood |
| Cab Finish Condition | Good | Elevator Cabin Lighting | F42T8 |
| Hydraulic Elevators | 1 car at 4000 LB | | |
| Overhead Traction Elevators | None | | |
| Freight Elevators | None | | |
| Machinery Condition | -- | Controls Condition | -- |
| Other Conveyances | None | Other Conveyance Condition | NA |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Inspection certificate not available | | ☐ | Inspection certificate expired | | ☐ |
| Service call needed | | ☐ | Minor cab finish repairs | | ☐ |
| Other | | ☐ | Other | | ☐ |

***Anticipated Lifecycle Replacements:***

- Elevator controls
- Elevator cab finishes

***Actions/Comments:***

- The POC was unable to provide a key to access the elevator mechanical room. Consequently, the elevator machinery was not observed during the on-site. The interior of the elevator cab was observed.
- The elevator is reported to provide adequate service. The elevator is reportedly serviced on a routine basis. The elevator machinery and controls appear to be more than 5 years old. The elevators will require continued periodic maintenance.
- The elevator is reportedly inspected on an annual basis by the municipality. A certificate of inspection was not on display in the elevator cab, and school personnel were unable to find a copy in the office. If the inspection certificate has expired, a new inspection should be scheduled as soon as possible.
- The emergency communication equipment in the elevator cabs appears to be functional. Equipment testing is not within the scope of the work.

# D20 Plumbing

| D2010 Domestic Water Distribution | | |
|---|---|---|
| Type | Description | Condition |
| Water Supply Piping | Copper | Fair |
| Water Meter Location | Vault at site | |

| Domestic Water Heaters or Boilers | |
|---|---|
| Components | Water Heaters |
| Fuel | Natural gas |
| Boiler or Water Heater Condition | Fair |
| Supplementary Storage Tanks? | No |
| Adequacy of Hot Water | Adequate |
| Adequacy of Water Pressure | Adequate |

| D2020 Sanitary Drainage | | |
|---|---|---|
| Type | Description | Condition |
| Waste/Sewer Piping | PVC | Fair |
| Vent Piping | PVC | Fair |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Hot water temperature too hot or cold | | ☐ | Minor or isolated leaks | | ☐ |
| Other | | ☐ | Other | | ☐ |

**Plumbing Systems - ALLEN ELEMENTARY SCHOOL**

| Location | Component | Component Description | Quantity | Unit | Condition | RUL | Est. Cost |
|---|---|---|---|---|---|---|---|
| Boiler Room A | Water Heater | 80 GAL | 1 | EA | Fair | 8 | 10,699 |
| Custodial Closet | Water Heater | 50 GAL | 1 | EA | Good | 8 | 2,349 |
| Restrooms | Urinal | Vitreous China | 2 | EA | Fair | 7 | 2,387 |
| Restrooms | Toilet | Flush Tank (Water Closet) | 36 | EA | Fair | 7 | 37,986 |
| Restrooms | Sink | Enameled Steel | 34 | EA | Fair | 7 | 20,945 |
| Site | Backflow Preventer | 2" | 1 | EA | Fair | 10 | 2,603 |
| Throughout building | Drinking Fountain | Refrigerated | 4 | EA | Fair | 4 | 5,030 |
| Throughout building | Service Sink | Floor | 3 | EA | Fair | 11 | 4,799 |

***Anticipated Lifecycle Replacements:***

- Water heaters

- Backflow preventer
- Toilets
- Urinals
- Sinks
- Service floor sinks
- Drinking fountains
- Toilet partitions

***Actions/Comments:***

- The plumbing systems appear to be well maintained and functioning adequately. The water pressure appears to be sufficient. No significant repair actions or short term replacement costs are required. Routine and periodic maintenance is recommended. Future lifecycle replacements of the components or systems listed above will be required.

## D30 Building Heating, Ventilating, and Air Conditioning (HVAC)

| Building Central Heating System | |
|---|---|
| Primary Heating System Type | Hot water boilers |
| Heating Fuel | Natural gas |
| Location of Major Equipment | Mechanical rooms |
| Space Served by System | Entire building |

| Distribution System | |
|---|---|
| HVAC Water Distribution System | Two-pipe |
| Air Distribution System | Constant |
| Location of Air Handlers | Rooftop, penthouse |
| Terminal Units | Unit ventilators |
| Quantity and Capacity of Terminal Units | Approximately 25 unit ventilators at an estimated average of 1000 CFM each |
| Location of Terminal Units | Adjacent to windows |

| Packaged, Split and Individual Units | |
|---|---|
| Primary Components | Package Units (RTUs) |
| Cooling (if separate from above) | performed via components above |
| Heating Fuel | Natural gas |
| Location of Equipment | Rooftop |
| Space Served by System | Various larger spaces (gymnasium, library, etc.) |

| Supplemental/Secondary Components | |
|---|---|
| Supplemental Component #1 | Ductless mini-split systems |

| Supplemental/Secondary Components | |
|---|---|
| Location / Space Served by Ductless mini-split systems | Electrical room; assumed elevator machine room |
| Ductless mini-split systems Condition | Good |
| Supplemental Component #2 | Ductless mini-split heat pump systems |
| Location / Space Served by Ductless mini-split heat pumps | IT/data room |
| Ductless mini-split heat pumps Condition | Good |
| Supplemental Component #3 | Split system condensing units |
| Location / Space Served by Split system condensing units | Classrooms (cooling for unit ventilators) |
| Split system condensing units Condition | Good |

| Controls and Ventilation | |
|---|---|
| HVAC Control System | BAS, hybrid pneumatic/electronic system |
| HVAC Control System Condition | Fair |
| Building Ventilation | Roof top exhaust fans |
| Ventilation System Condition | Fair |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Ductwork/grills need cleaned | | ☐ | Minor control adjustments needed | | ☐ |
| Leaking condensate lines | | ☐ | Poor mechanical area access | | ☐ |
| Other | | ☐ | Other | | ☐ |

| Degradation Issues | | | |
|---|---|---|---|
| Observation | Exists at Site | Observation | Exists at Site |
| Heating, Cooling or Ventilation is not adequate | ☐ | Major system inefficiencies | ☐ |
| HVAC controls pneumatic or antiquated | ☐ | Obsolete refrigerants : R11, R12, R22, R123, R502 | ☐ |
| Other | ☐ | Other | ☐ |

**Mechanical Systems - ALLEN ELEMENTARY SCHOOL**

| Location | Component | Component Description | Quantity | Unit | Condition | RUL | Est. Cost |
|---|---|---|---|---|---|---|---|
| Boiler Room A | Expansion Tank | 200 GAL | 1 | EA | Fair | 5 | 4,697 |
| Boiler Room A | Boiler (1) | 2095 MBH | 1 | EA | Fair | 3 | 54,195 |
| Boiler Room B | Distribution Pump | 5 HP | 1 | EA | Fair | 4 | 5,519 |
| Boiler Room B | Boiler | 2092 MBH | 1 | EA | Fair | 5 | 54,195 |
| Boiler Room B | Expansion Tank | 101 to 175 GAL | 1 | EA | Fair | 5 | 3,999 |
| Boiler Room B | Distribution Pump | 5 HP | 1 | EA | Fair | 5 | 5,519 |
| Penthouse level mechanical room | Air Handler | 17500 CFM | 1 | EA | Fair | 5 | 9,414 |
| Roof | Condensing Unit | 3 Ton | 1 | EA | Good | 14 | 3,579 |
| Roof | Condensing Unit | 3 Ton | 1 | EA | Good | 14 | 3,579 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 3 Ton | 1 | EA | Good | 14 | 3,579 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Ductless Split System | 1.5 Ton | 1 | EA | Good | 12 | 4,473 |
| Roof | Packaged Unit (RTU) | 2 Ton | 1 | EA | Good | 14 | 7,258 |
| Roof | Condensing Unit | 3 Ton | 1 | EA | Good | 14 | 3,579 |
| Roof | Ductless Split System | 2 Ton | 1 | EA | Good | 14 | 4,473 |
| Roof | Condensing Unit/Heat Pump | 3 Ton | 1 | EA | Good | 14 | 3,579 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 3 Ton | 1 | EA | Good | 14 | 3,579 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Packaged Unit (RTU) | 3 Ton | 1 | EA | Good | 14 | 9,872 |
| Roof | Packaged Unit (RTU) | 4 Ton | 1 | EA | Good | 14 | 10,581 |
| Roof | Packaged Unit (RTU-8) | 10 Ton | 1 | EA | Good | 14 | 18,554 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Packaged Unit (RTU-6) | 7.5 Ton | 1 | EA | Good | 14 | 14,396 |
| Roof | Condensing Unit | 3 Ton | 1 | EA | Good | 14 | 3,579 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 2 Ton | 1 | EA | Good | 14 | 3,122 |
| Roof | Condensing Unit | 3 Ton | 1 | EA | Good | 14 | 3,579 |
| Throughout building | Radiator | Hydronic, Fin Tube | 175 | LF | Fair | 23 | 23,235 |
| Throughout building | HVAC System Hydronic Piping | 2-Pipe | 65388 | SF | Fair | 15 | 425,022 |

***Anticipated Lifecycle Replacements:***

- Boilers
- Expansion tanks
- Air handling unit
- Distribution pumps
- Unit ventilators
- Package units
- Split system condensing units
- Ductless split system heat pumps
- Ductless split system condensing units
- Rooftop exhaust fans

***Actions/Comments:***

- The HVAC systems are maintained by an outside contractor. Details regarding the records of the installation, maintenance, upgrades, and replacement of the HVAC equipment at the property were not able to be verified.
- HVAC equipment varies in age.

- Boiler #1 is significantly past its EUL, as it is original the building's initial construction. However, the unit is reportedly still functional. The boiler will likely require replacement with a more modern unit within the term.
- Boiler #2 is past its EUL, but is reportedly still functional. The boiler appears to be leaking slightly, as water was observed on the floor of Mechanical Room B adjacent to the unit. The leak should be further investigated and repaired, and the boiler will likely require replacement within the term.
- The heating water distribution pumps appear to be past their EULs, but are reportedly still functional. Replacements will likely be required during the term.
- The facility HVAC appeared to be at least partially controlled using an outdated pneumatic system supplied by an air compressor. For modernization, reliability, and increased control, full conversion to a web-based direct digital control (DDC) platform is highly recommended.

## D40 Fire Protection

| Item | Description | | | | | |
|---|---|---|---|---|---|---|
| Type | Wet pipe, partial; Boiler Room B only | | | | | |
| Sprinkler System | None | ☐ | Standpipes | ☐ | Backflow Preventer | ☐ |
| | Hose Cabinets | ☐ | Fire Pumps | ☐ | Siamese Connections | ☐ |
| Sprinkler System Condition | Fair | | | | | |
| Fire Extinguishers | Last Service Date | | Servicing Current? | | | |
| | August 2017 | | Yes | | | |
| Hydrant Location | Drive aisles adjacent to building | | | | | |
| Siamese Location | N/A | | | | | |
| Special Systems | Kitchen Suppression System | ☐ | Computer Room Suppression System | ☐ | | |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Extinguisher tag expired | | ☐ | Riser tag expired (5 year) | | ☐ |
| Other | | ☐ | Other | | ☐ |

***Anticipated Lifecycle Replacements:***

- Sprinkler heads
- Fire extinguishers
- AED
- EXIT signs

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.
- Sprinkler coverage was only observed in the mechanical space of Boiler Room B.

## D50 Electrical

| Distribution and Lighting | | | |
|---|---|---|---|
| Electrical Lines | Underground | Transformer | Pad-mounted |
| Main Service Size | 800 Amps | Volts | 277/480 Volt, three-phase |
| Meter and Panel Location | Main electrical room | Branch Wiring | Copper |
| Conduit | Metallic | Step-Down Transformers? | No |
| Security / Surveillance System? | Yes | Building Intercom System? | Yes |
| Lighting Fixtures | Generally LEDs | | |
| Main Distribution Condition | Good | | |
| Secondary Panel and Transformer Condition | Fair | | |
| Lighting Condition | Good | | |

| Building Emergency Systems | | | |
|---|---|---|---|
| Size | None | Fuel | -- |
| Generator / UPS Serves | -- | Tank Location | -- |
| Testing Frequency | -- | Tank Type | -- |
| Generator / UPS Condition | -- | | |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Improperly stored material | | ☐ | Unsecured high voltage area | | ☐ |
| Other | | ☐ | Other | | ☐ |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- The onsite electrical systems up to the meters are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.
- Much of the electrical equipment was reportedly replaced in 2017 after the 2016 flooding. The electrical service appears to be adequate for the facility's needs.

## D60 Communications

| D6060 Public Address Systems | | | | | | |
|---|---|---|---|---|---|---|
| Item | Description | | | | | |
| Communication Equipment | Public Address System | ☒ | Nurse Call System | ☐ | Clock | ☒ |

## D70 Electronic Safety and Security

| D7010 Access Control and Intrusion Detection / D7050 Detection and Alarm | | | | | | |
|---|---|---|---|---|---|---|
| Item | Description | | | | | |
| Access Control and Intrusion Detection | Exterior Camera | ☒ | Interior Camera | ☒ | Front Door Camera Only | ☐ |
| | Cameras Monitored | ☒ | Security Personnel On-Site | ☐ | Intercom/Door Buzzer | ☒ |
| Fire Alarm System | Central Alarm Panel | ☒ | Battery-Operated Smoke Detectors | ☐ | Alarm Horns | ☒ |
| | Annunciator Panels | ☒ | Hard-Wired Smoke Detectors | ☒ | Strobe Light Alarms | ☒ |
| | Pull Stations | ☒ | Emergency Battery-Pack Lighting | ☒ | Illuminated EXIT Signs | ☒ |
| Fire Alarm System Condition | Fair | | | | | |
| Central Alarm Panel System | Location of Alarm Panel | | Installation Date of Alarm Panel | | | |
| | General Office Closet | | 2017 | | | |

***Anticipated Lifecycle Replacements:***

- Central alarm panel
- Annunciator alarm panel

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

# 6. Equipment & Furnishings

## E10 Equipment

The servery kitchen includes the following major appliances, fixtures, and equipment:

| E1030 Commercial Kitchen Equipment | | |
|---|---|---|
| Appliance | Comment | Condition |
| Refrigerators | Up-right | Fair |
| Freezers | Chest | Fair |
| Ranges | ☐ | -- |
| Ovens | Gas | Good |
| Griddles / Grills | ☐ | -- |
| Fryers | ☐ | -- |
| Hood | ☐ | -- |
| Dishwasher | ☐ | -- |
| Microwave | ☐ | -- |
| Ice Machines | ☐ | -- |
| Steam Tables | ☐ | -- |

| E1030 Commercial Laundry | | |
|---|---|---|
| Equipment | Comment | Condition |
| Commercial Washing Machines | ☐ | -- |
| Commercial Dryers | ☐ | -- |
| Residential Washers | ☐ | -- |
| Residential Dryers | ☐ | -- |

***Anticipated Lifecycle Replacements:***

- Convection oven
- Chest freezer
- Reach-in cooler

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

# 7. Sitework

## G20 Site Improvements

| G2020 Parking Lots and G2030 Pedestrian Walkways | | |
|---|---|---|
| Item | Material | Condition |
| Entrance Driveway Apron | Asphalt | Fair |
| Parking Lot | Asphalt | Fair |
| Drive Aisles | Asphalt | Fair |
| Service Aisles | None | -- |
| Sidewalks | Concrete | Fair |
| Curbs | Concrete | Fair |
| Pedestrian Ramps | Cast-in-place concrete | Good |
| Ground Floor Patio or Terrace | Brick pavers | Fair |

| Parking Count | | | | |
|---|---|---|---|---|
| Open Lot | Carport | Private Garage | Subterranean Garage | Freestanding Parking Structure |
| 73 | - | - | - | - |
| Total Number of ADA Compliant Spaces | | | 3 | |
| Number of ADA Compliant Spaces for Vans | | | 1 | |
| Total Parking Spaces | | | 73 | |

| Site Stairs | | | |
|---|---|---|---|
| Location | Material | Handrails | Condition |
| None | -- | -- | -- |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Pavement oil stains | | ☐ | Vegetation growth in joints | | ☐ |
| Stair/ramp rails loose | | ☐ | Stair/ramp rail needs scraped and painted | | ☐ |
| Other | | ☐ | Other | | ☐ |

| Degradation Issues | | | |
|---|---|---|---|
| Observation | Exists at Site | Observation | Exists at Site |
| Potholes/depressions | ☒ | Alligator cracking | ☒ |
| Concrete spalling | ☐ | Trip hazards (settlement/heaving) | ☒ |
| Other | ☐ | Other | ☐ |

***Anticipated Lifecycle Replacements:***

- Asphalt seal coating
- Asphalt pavement
- Sidewalks
- Curbs
- Patios

***Actions/Comments:***

- The asphalt pavement exhibits isolated areas of failure and deterioration, such as alligator cracking, and localized depressions, particularly along the main drive aisle. The most severely damaged areas of paving must be cut and patched in order to maintain the integrity of the overall pavement system. Complete milling and overlay of the entire lot is also recommended within the term.
- The concrete sidewalks and curbs have isolated areas of cracks, settlement and damage at the western elevation of the property and along the main drive aisle. The damaged areas of concrete pavement require replacement.

| G2060 Site Development | |
|---|---|
| Property Signage | |
| Property Signage | Monument |
| Street Address Displayed? | Yes |

| Site Fencing | | |
|---|---|---|
| Type | Location | Condition |
| Chain link with metal posts | Surrounding kindergarten playground, east elevation | Fair |

| Refuse Disposal | | | | |
|---|---|---|---|---|
| Refuse Disposal | Common area dumpsters | | | |
| Dumpster Locations | Mounting | Enclosure | Contracted? | Condition |
| Northeast corner of property | Concrete pad | None | Yes | Fair |

| Other Site Amenities | | | |
|---|---|---|---|
| | Description | Location | Condition |
| Playground Equipment | Plastic and metal | Playgrounds at east and southeast sides of property | Fair |
| Tennis Courts | None | -- | -- |
| Basketball Court | None | -- | -- |
| Swimming Pool | None | -- | -- |

The kindergarten playground is surrounded by a chain link fence.

***Anticipated Lifecycle Replacements:***

- Signage

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

| G2080 Landscaping | | |
|---|---|---|
| Drainage System and Erosion Control | | |
| System | Exists at Site | Condition |
| Surface Flow | ☒ | Fair |
| Inlets | ☒ | Fair |
| Swales | ☐ | -- |
| Detention pond | ☐ | -- |
| Lagoons | ☐ | -- |
| Ponds | ☐ | -- |
| Underground Piping | ☒ | Fair |
| Pits | ☐ | -- |
| Municipal System | ☒ | Fair |
| Dry Well | ☐ | -- |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- Ponding occurs in isolated areas. The affected areas must be graded to direct storm water toward the paved areas. This should be accomplished to maintain healthy vegetation.

| Item | Description | | | | | | |
|---|---|---|---|---|---|---|---|
| Site Topography | Slopes gently down from the west and south sides of the property toward the northeast and property line. | | | | | | |
| Landscaping | Trees | Grass | Flower Beds | Planters | Drought Tolerant Plants | Decorative Stone | None |
| | ☒ | ☒ | ☒ | ☒ | ☐ | ☐ | ☐ |

| Item | Description | | | |
|---|---|---|---|---|
| Landscaping Condition | Fair | | | |
| Irrigation | Automatic Underground | Drip | Hand Watering | None |
| | ☐ | ☐ | ☐ | ☒ |
| Irrigation Condition | -- | | | |

| Retaining Walls | | |
|---|---|---|
| Type | Location | Condition |
| CMU | Front elevation, adjacent to east parking lot | Good |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- The topography and adjacent uses do not appear to present conditions detrimental to the property. There are no significant areas of erosion.

## G30 Liquid & Gas Site Utilities

| G3060 Site Fuel Distribution | |
|---|---|
| Item | Description |
| Natural Gas | Gas service is supplied from the gas main on the adjacent public street. The gas meter and regulator are located adjacent to the grounds storage shed at the northwest corner of the building. The gas distribution piping within the building is malleable steel (black iron). |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- The pressure and quantity of gas appear to be adequate.
- The gas meter and regulator appear to be functioning adequately and will require routine maintenance.
- Only limited observation of the gas distribution piping can be made due to hidden conditions.

## G40 Electrical Site Improvements

| G4050 Site Lighting | | | | | |
|---|---|---|---|---|---|
| Site Lighting | None | Pole Mounted | Bollard Lights | Ground Mounted | Parking Lot Pole Type |
| | ☐ | ☒ | ☐ | ☐ | ☒ |
| | Fair | | | | |

| G4050 Site Lighting | | | |
|---|---|---|---|
| Building Lighting | None | Wall Mounted | Recessed Soffit |
| | ☐ | ☒ | ☒ |
| | Good | | |

| Maintenance Issues | | | | | |
|---|---|---|---|---|---|
| Observation | Location | Exists at Site | Observation | Location | Exists at Site |
| Isolated bulb/lamp replacement | | ☐ | Discolored/dirty lens cover | | ☐ |
| Other | | ☐ | Other | | ☐ |

***Anticipated Lifecycle Replacements:***

- Exterior light fixtures

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended. Future lifecycle replacements of the components listed above will be required.

# 8. Ancillary Structures

| Other Ancillary Structures | | | |
|---|---|---|---|
| Type | Grounds Storage Shed | Location | Northwest Corner of School |
| Item | Material | Item | Material |
| Exterior Siding | Pre-cast concrete | Roof Finishes | Concrete |
| Interior Finishes | Floor : Unfinished Concrete<br>Ceiling : Exposed<br>Walls : Pre-cast concrete | MEPF | N/A |
| Overall Building Condition | | | Fair |

***Anticipated Lifecycle Replacements:***

- No components of significance

***Actions/Comments:***

- No significant actions are identified at the present time. On-going periodic maintenance is highly recommended.

# 9. Opinions of Probable Costs

Cost estimates are attached at the front of this report (following the cover page).

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means* and *Marshall & Swift,* EMG's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited, etc. ASTM E2018-08 recognizes that certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

## 9.1. Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, EMG opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age. Projections of Remaining Useful Life (RUL) are based on continued use of the Property similar to the reported past use. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be derived from an actual take-off, lump sum costs or allowances are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

## 9.2. Immediate Repairs

Immediate repairs are opinions of probable costs that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) material building or fire code violations, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

## 9.3. Replacement Reserves

Replacement Reserves are for recurring probable expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, EMG's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

EMG's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Repair Cost Estimate

# 10. Purpose and Scope

## 10.1. Purpose

EMG was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record at municipal offices, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

**CONDITIONS:**

The physical condition of building systems and related components are typically defined as being in one of five conditions: Excellent, Good, Fair, Poor, Failed or a combination thereof. For the purposes of this report, the following definitions are used:

| | | |
|---|---|---|
| Excellent | = | New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service. |
| Good | = | Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service. |
| Fair | = | Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life. |
| Poor | = | Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life. |
| Failed | = | Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required. |
| Not Applicable | = | Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present. |

**FORMAT OF THE BODY OF THE REPORT:**

Throughout sections 5 through 9 of this report, each report section will typically contain three subsections organized in the following sequence:

- A descriptive table (and/or narrative), which identifies the components assessed, their condition, and other key data points.
- A simple bulleted list of Anticipated Lifecycle Replacements, which lists components and assets typically in Excellent, Good, or Fair condition at the time of the assessment but that will require replacement or some other attention once aged past their estimated useful life. These listed components are typically included in the associated inventory database with costs identified and budgeted beyond the first several years.
- A bulleted cluster of Actions/Comments, which include more detailed narratives describing deficiencies, recommended repairs, and short term replacements. The assets and components associated with these bullets are/were typically problematic and in Poor or Failed condition at the time of the assessment, with corresponding costs included within the first few years.

**PLAN TYPES:**

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the "why" part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance. The following Plan Types are listed in general weighted order of importance:

| | | |
|---|---|---|
| Safety | = | An observed or reported unsafe condition that if left unaddressed could result in an injury; a system or component that presents a potential liability risk. |
| Performance/Integrity | = | Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses a risk to overall system stability. |
| Accessibility | = | Does not meet ADA, UFAS, and/or other handicap accessibility requirements. |
| Environmental | = | Improvements to air or water quality, including removal of hazardous materials from the building or site. |
| Modernization/Adaptation | = | Conditions, systems, or spaces that need to be upgraded in appearance or function to meet current standards, facility usage, or client/occupant needs. |
| Lifecycle/Renewal | = | Any component or system in which future repair or replacement is anticipated beyond the next several years and/or is of minimal substantial early-term consequence. |

## 10.2. Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a general statement of the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey, but will help identify exposure to issues and the need for further review.
- Perform a limited assessment of accessible areas of the building(s) for the presence of fungal growth, conditions conducive to fungal growth, and/or evidence of moisture. EMG will also interview Project personnel regarding the presence of any known or suspected fungal growth, elevated relative humidity, water intrusion, or mildew-like odors. Potentially affected areas will be photographed. Sampling will not be considered in routine assessments.
- List the current utility service providers.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, in order to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report.
- Prepare a mechanical inventory list.

# 11. Accessibility and Property Research

## 11.1. ADA Accessibility

Generally, Title III of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of "areas of public accommodations" and "commercial facilities" on the basis of disability. Regardless of its age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Buildings completed and occupied after January 26, 1992 are required to comply fully with the ADAAG. Existing facilities constructed prior to this date are held to the lesser standard of compliance to the extent allowed by structural feasibility and the financial resources available. As an alternative, a reasonable accommodation pertaining to the deficiency must be made.

During the FCA, a limited visual observation for ADA accessibility compliance was conducted. The scope of the visual observation was limited to those areas set forth in *EMG's Abbreviated Accessibility Table* below. It is understood by the Client that the limited observations described herein does not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of EMG's undertaking. Only a representative sample of areas was observed and actual measurements were not taken to verify compliance.

The facility generally appears to be accessible as stated within the defined priorities of Title III of the Americans with Disabilities Act.

Under-sink pipe wrap was observed to be missing at the staff restroom, which is designated as accessible.

| Accessibility Issues | | | |
|---|---|---|---|
| Component | Major Issue (ADA Study Recommended) | Moderate Issue (ADA Study Recommended) | Minor Issue |
| Parking | ☐ | ☐ | ☐ |
| Exterior Accessible Route | ☐ | ☐ | ☐ |
| Interior Accessible Route | ☐ | ☐ | ☐ |
| Restrooms | ☐ | ☐ | ☒ |
| Elevators | ☐ | ☐ | ☐ |

A full ADA Compliance Survey may reveal aspects of the property that are not in compliance.

Corrections of these conditions should be addressed from a liability standpoint, but are not necessarily code violations. The Americans with Disabilities Act Accessibility Guidelines concern civil rights issues as they pertain to the disabled and are not a construction code, although many local jurisdictions have adopted the Guidelines as such.

# 12. Certification

Ann Arbor Public Schools retained EMG to perform this Facility Condition Assessment in connection with its continued operation of Allen Elementary School, 2560 Towner Boulevard, Ann Arbor, MI, the "Property". It is our understanding that the primary interest of Ann Arbor Public Schools is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in depth studies were performed unless specifically required under Section 2 of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas were observed (See Section 4.2 for areas observed). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the client for the purpose stated within Section 10 of this report. The report, or any excerpt thereof, shall not be used by any party other than the client or for any other purpose than that specifically stated in our agreement or within Section 10 of this report without the express written consent of EMG.

Any reuse or distribution of this report without such consent shall be at Ann Arbor Public Schools and the recipient's sole risk, without liability to EMG.

**Prepared by:** Justin Dunn,
Project Manager

**Reviewed by:**

Al Diefert
Technical Report Reviewer
For
Andrew Hupp
Program Manager

# 13. Appendices

Appendix A: Photographic Record

Appendix B: Site and Floor Plans

Appendix C: Supporting Documentation

Appendix D: Pre-Survey Questionnaire

# Appendix A:
# Photographic Record

| #1: | FRONT ELEVATION |
|---|---|

| #2: | LEFT ELEVATION |
|---|---|

| #3: | RIGHT ELEVATION |
|---|---|

| #4: | REAR ELEVATION |
|---|---|

| #5: | OVERALL SITE |
|---|---|

| #6: | OVERALL ROOF |
|---|---|

| | |
|---|---|
| #7: | FLAT ROOF, EPDM SINGLE-PLY |

| | |
|---|---|
| #8: | FLAT ROOF, ISOLATED MINOR PONDING |

| | |
|---|---|
| #9: | HIP ROOF, ASPHALT SHINGLED |

| | |
|---|---|
| #10: | MANSARD ROOF, ASPHALT SHINGLED |

| | |
|---|---|
| #11: | MISSING ASPHALT ROOF SHINGLES AT MANSARD ROOF |

| | |
|---|---|
| #12: | ROOF, METAL |

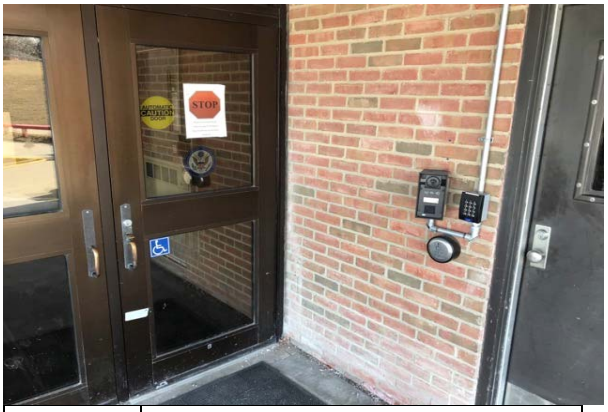
| #13: | EXTERIOR WALL TYPE |
|---|---|

| #14: | EXTERIOR WALL TYPE |
|---|---|

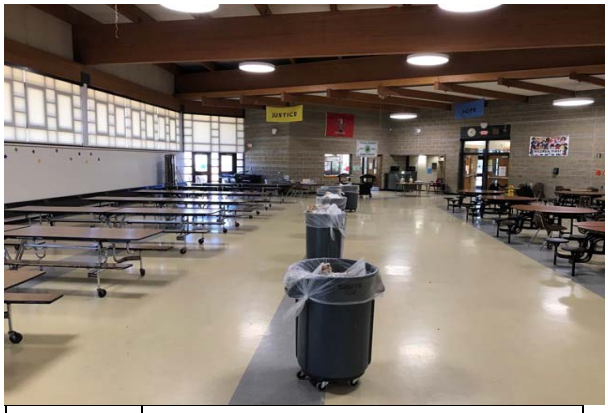
| #15: | EXTERIOR WALL TYPE |
|---|---|

| #16: | WINDOW SYSTEM |
|---|---|

| #17: | MAIN ENTRANCE |
|---|---|



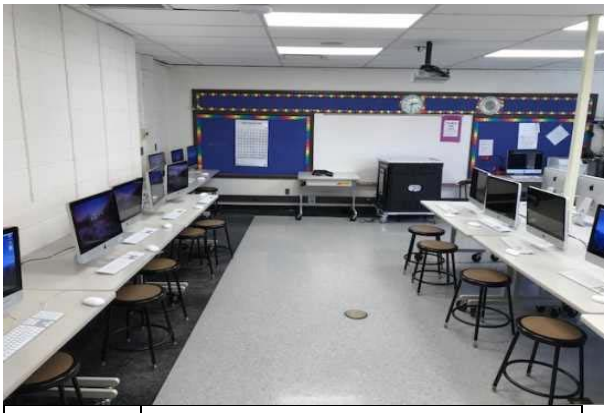

| #18: | ACCESSIBLE ENTRANCE DOOR |
|---|---|



| #19: | MULTI-PURPOSE GREAT ROOM |
|---|---|

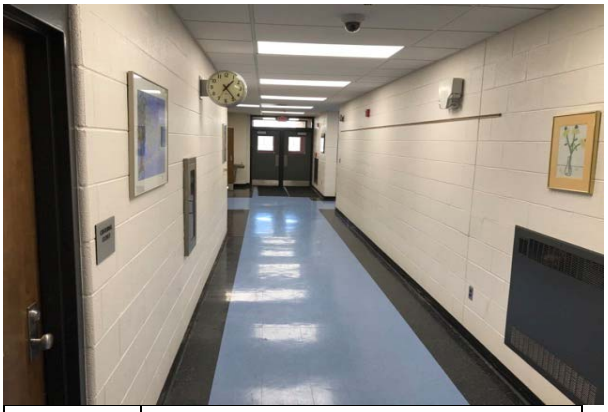
| #20: | GYMNASIUM |
|---|---|

| #21: | TYPICAL CLASSROOM |
|---|---|

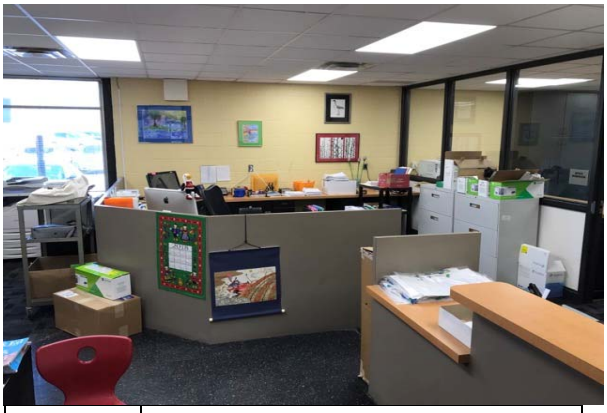


| #22: | COMPUTER LAB |
|---|---|

| #23: | CENTRAL HALLWAY |
|---|---|



| #24: | TYPICAL HALLWAY |
|---|---|



| #25: | GENERAL OFFICE |
|---|---|

| #26: | TYPICAL RESTROOM |
|---|---|

| #27: | BOILER ROOM A |
|---|---|

| #28: | BOILER ROOM B |
|---|---|

| #29: | ELECTRICAL ROOM |
|---|---|

| #30: | ELEVATOR |
|---|---|


| | |
|---|---|
| #31: | DOMESTIC WATER HEATER |


| | |
|---|---|
| #32: | PENTHOUSE AIR HANDLER |


| | |
|---|---|
| #33: | AIR-COOLED CONDENSING UNIT CONNECTED TO PENTHOUSE AHU |

| | |
|---|---|
| #34: | TYPICAL INDIVIDUAL CONDENSING UNITS |

| | |
|---|---|
| #35: | TYPICAL GAS-FIRED PACKAGE UNIT (RTU) |

| | |
|---|---|
| #36: | EXHAUST FANS |

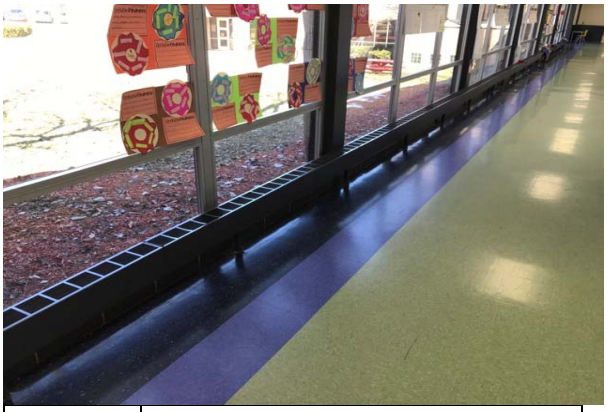
| | |
|---|---|
| #37: | BOILER #1 (ORIGINAL) |

| | |
|---|---|
| #38: | BOILER #2 (NEWER) |

| | |
|---|---|
| #39: | DISTRIBUTION PUMP, HEATING WATER |

| | |
|---|---|
| #40: | BUILDING AUTOMATION SYSTEM |

| | |
|---|---|
| #41: | TYPICAL CLASSROOM UNIT VENTILATOR |



| | |
|---|---|
| #42: | RADIATORS AT HALLWAYS |


| | |
|---|---|
| #43: | FIRE ALARM CONTROL PANEL |


| | |
|---|---|
| #44: | TYPICAL FIRE ALARM COMPONENTS |

| | |
|---|---|
| #45: | MAIN ELECTRICAL COMPONENTS |

| | |
|---|---|
| #46: | EXTERIOR LIGHTING |

| | |
|---|---|
| #47: | FRONT ASPHALT PAVED PARKING LOT |

| | |
|---|---|
| #48: | REAR PARKING LOT WITH DUMPSTERS |

| | |
|---|---|
| #49: | CRACKED AND DAMAGED PAVING AT DRIVE AISLE |

| | |
|---|---|
| #50: | CONCRETE CURB DAMAGE |

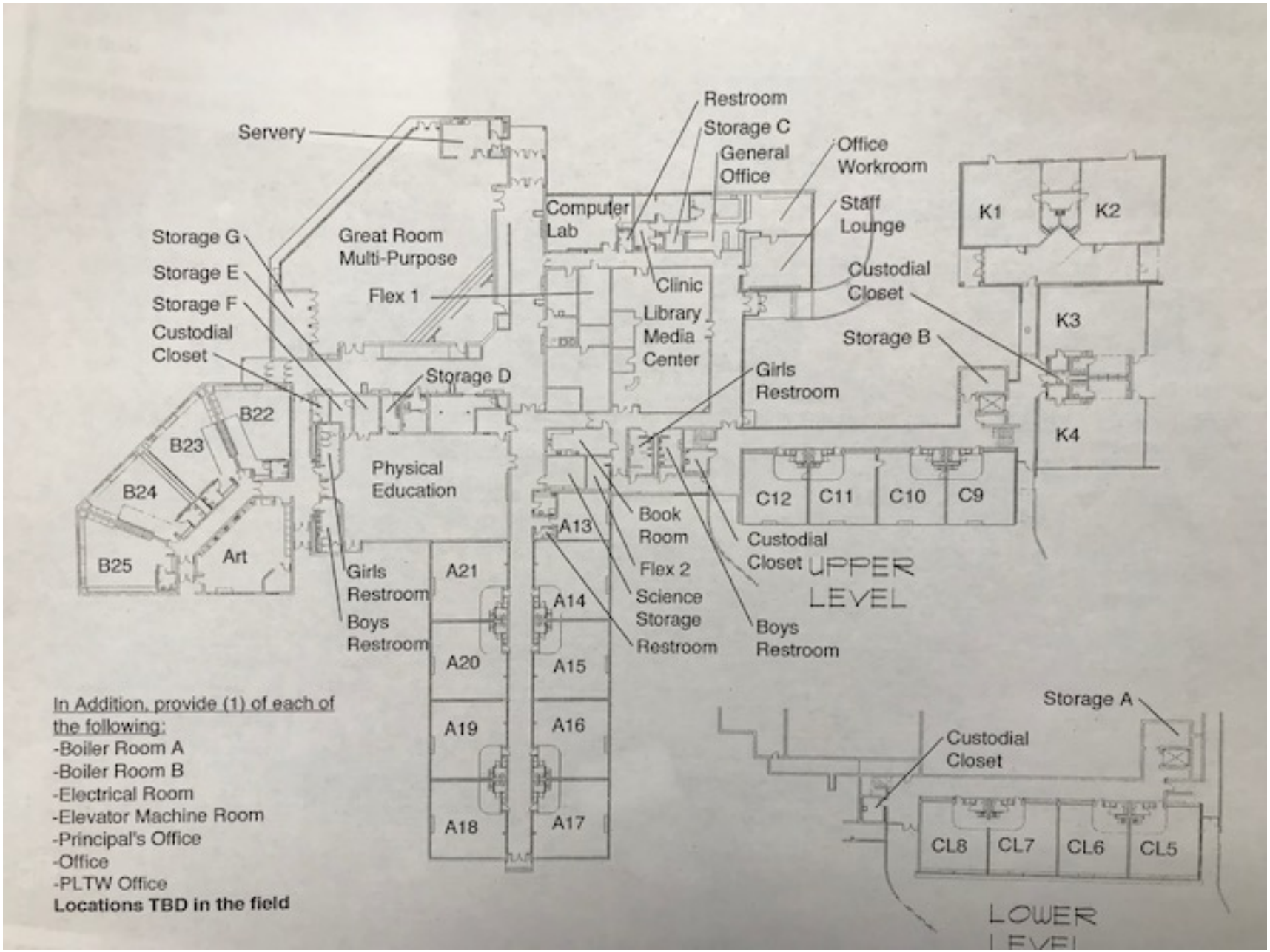
| | |
|---|---|
| #51: | TYPICAL CONCRETE SIDEWALK |

| | |
|---|---|
| #52: | CRACKED CONCRETE SIDEWALK |

# Appendix B:
# Site and Floor Plans

## Site Plan


| | | |
|---|---|---|
| emg | **Project Name:**<br>Allen Elementary School | **Project Number:**<br>129010.18R000-005.354 |
| | **Source:**<br>Google Earth | **On-Site Date:**<br>March 19, 2018 |




In Addition, provide (1) of each of the following:

- -Boiler Room A
- -Boiler Room B
- -Electrical Room
- -Elevator Machine Room
- -Principal's Office
- -Office
- -PLTW Office

**Locations TBD in the field**

# Appendix C:
# Supporting Documentation

# THIS APPENDIX IS INTENTIONALLY LEFT BLANK.

# Appendix D:
# EMG Accessibility Checklist

**Date Completed:** **March 19, 2018**

**Property Name:** **Allen Elementary School**

**EMG Project Number:** **129010.18R000-005.354**

| | Building History | Yes | No | Unk | Comments |
|---|---|---|---|---|---|
| 1 | Has an ADA survey previously been completed for this property? | | | ✓ | Informal review reportedly done as an activity with students on annual basis. |
| 2 | Have any ADA improvements been made to the property? | ✓ | | | |
| 3 | Does a Transition Plan / Barrier Removal Plan exist for the property? | | | ✓ | |
| 4 | Has building ownership or management received any ADA related complaints that have not been resolved? | | ✓ | | |
| 5 | Is any litigation pending related to ADA issues? | | ✓ | | |
| | **Parking** | **Yes** | **No** | **NA** | **Comments** |
| 1 | Are there sufficient accessible parking spaces with respect to the total number of reported spaces? | ✓ | | | |
| 2 | Are there sufficient van-accessible parking spaces available? | ✓ | | | |
| 3 | Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading “Van Accessible” at van spaces? | ✓ | | | |
| 4 | Is there at least one accessible route provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones, if provided, and public streets and sidewalks? | ✓ | | | |
| 5 | Do curbs on the accessible route have depressed, ramped curb cuts at drives, paths, and drop-offs? | ✓ | | | |
| 6 | If required does signage exist directing you to accessible parking and an accessible building entrance? | ✓ | | | |
| | **Ramps** | **Yes** | **No** | **NA** | **Comments** |
| 1* | Do all ramps along accessible path of travel appear to meet slope requirements? ( 1:12 or less) | ✓ | | | |
| 2 | Are ramps that appear longer than 6 ft complete with railings on both sides? | ✓ | | | |
| 3 | Does the width between railings appear at least 36 inches? | ✓ | | | |

| | Ramps (cont.) | Yes | No | NA | Comments |
|---|---|---|---|---|---|
| 4 | Is there a level landing for approximately every 30 ft horizontal length of ramp, at the top and at the bottom of ramps and switchbacks? | ✓ | | | |
| | **Entrances/Exits** | **Yes** | **No** | **NA** | **Comments** |
| 1 | Do all required accessible entrance doorways appear at least 32 inches wide and not a revolving door? | ✓ | | | |
| 2 | If the main entrance is inaccessible, are there alternate accessible entrances? | | | ✓ | Main entrance is accessible. |
| 3 | Is the door hardware easy to operate (lever/push type hardware, no twisting required and not higher than approximately 48 inches above the floor)? | ✓ | | | |
| | **Paths of Travel** | **Yes** | **No** | **NA** | **Comments** |
| 1 | Are all paths of travel free of obstruction and wide enough for a wheelchair (appear at least 36 inches wide)? | ✓ | | | |
| 2 | Are wheelchair-accessible facilities (toilet rooms, exits, etc.) identified with signage? | ✓ | | | |
| 3 | Is there a path of travel that does not require the use of stairs? | ✓ | | | |
| | **Elevators** | **Yes** | **No** | **NA** | **Comments** |
| 1 | Do the call buttons have visual and audible signals to indicate when a call is registered and answered when car arrives? | ✓ | | | |
| 2 | Are there visual and audible signals inside cars indicating floor change? | ✓ | | | |
| 3 | Are there standard raised and Braille marking on both jambs of each hoist way entrance as well as all cab/call buttons? | ✓ | | | |
| 4 | Do elevator doors have a reopening device that will stop and reopen a car door if an object or a person obstructs the door? | ✓ | | | |
| 5 | Are elevator controls low enough to be reached from a wheelchair (appears to be between 15 and 48 inches)? | ✓ | | | |
| 6 | If a two-way emergency communication system is provided within the elevator cab, is it usable without voice communication? | ✓ | | | |

| | Toilet Rooms | Yes | No | NA | Comments |
|---|---|---|---|---|---|
| 1 | Are common area public restrooms located on an accessible route? | ✓ | | | |
| 2 | Are pull handles push/pull or lever type? | ✓ | | | |
| 3 | Are there audible and visual fire alarm devices in the toilet rooms? | ✓ | | | |
| 4 | Are toilet room access doors wheelchair-accessible (appear to be at least 32 inches wide)? | ✓ | | | |
| 5 | Are public restrooms large enough to accommodate a wheelchair turnaround (appear to have 60” turning diameter)? | ✓ | | | |
| 6 | In unisex toilet rooms, are there safety alarms with pull cords? | | | ✓ | Pull cord alarm system not in use at property. |
| 7 | Are toilet stall doors wheelchair accessible (appear to be at least 32” wide)? | ✓ | | | |
| 8 | Are grab bars provided in toilet stalls? | ✓ | | | |
| 9 | Are sinks provided with clearance for a wheelchair to roll under (appear to have 29” clearance)? | ✓ | | | |
| 10 | Are sink handles operable with one hand without grasping, pinching or twisting? | ✓ | | | |
| 11 | Are exposed pipes under sink sufficiently insulated against contact? | | ✓ | | |
| | **Guest Rooms** | **Yes** | **No** | **NA** | **Comments** |
| 1 | How many total accessible sleeping rooms does the property management report to have? **Provide specific number in comment field.**<br>Are there sufficient reported accessible sleeping rooms with respect to the total number of reported guestrooms? See attached hot sheet. | | | ✓ | |

| | Guest Rooms (cont.) | Yes | No | NA | Comments |
|---|---|---|---|---|---|
| 2 | How many of the accessible sleeping rooms per property management have roll-in showers? **Provide specific number in comment field.**<br>Are there sufficient reported accessible rooms with roll-in showers with respect to the total number of reported accessible guestrooms? See attached hot sheet. | | | ✓ | |
| 3 | How many assistive listening kits and/or rooms with communication features are available per property management? **Provide specific number in comment field.**<br>Are there sufficient reported assistive listening devices with respect to the total number of rooms? See attached hot sheet. | | | ✓ | |
| | **Pools** | **Yes** | **No** | **NA** | **Comments** |
| 1 | Are public access pools provided? If the answer is no, please disregard this section. | | | ✓ | |
| 2 | How many accessible access points are provided to each pool/spa? **Provide number in comment field.**<br>Is at least one fixed lift or sloped entry to the pool provided? | | | ✓ | |
| | **Play Area** | **Yes** | **No** | **NA** | **Comments** |
| 1 | Has the play area been reviewed for accessibility? All public playgrounds are subject to ADAAG standards. | | ✓ | | Playgrounds reportedly scheduled to be reviewed for accessibility and improvements added within the year. |
| | **Exercise Equipment** | **Yes** | **No** | **NA** | **Comments** |
| 1 | Does there appear to be adequate clear floor space around the machines/equipment (30” by 48” minimum)? | | | ✓ | |

**Based on visual observation only. The slope was not confirmed through measurements.*

# Appendix E:
# Pre-Survey Questionnaire

## EMG FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

**Building / Facility Name:** Allen Elementary

**Name of person completing form:** Kerry Beal

**Title / Association with property:** Principal

**Length of time associated w/ property:** 4 years

**Date Completed:** 3/19/2018

**Phone Number:** 734-997-1210

**Directions:** Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any ***Yes*** responses.

| DATA OVERVIEW | | RESPONSE | | | |
|---|---|---|---|---|---|
| 1 | Year/s constructed | 1961 ; numerous additions to original structure (multiple wings) | | | |
| 2 | Building size in SF | 65,388 | | | |
| 3 | Major Renovation Dates | Façade | unk; varies, numerous additions | HVAC | mix, all A/C 2017; boilers older |
| | | Roof | unk | Electrical | 2017 (most major components) |
| | | Interiors | mostly 2017 due to flooding | Site Pavement | 4+ years; old and deteriorating |
| | | Accessibility | annual, involve the kids | other | |

| QUESTION | | RESPONSE |
|---|---|---|
| 4 | Provide additional detail about the scope of the MAJOR additions, renovations, or systemic rehabilitations since construction (referenced above in Question 3). | Flooded ~~2017~~ 2016; renovated 2016/2017 new furniture<br>pipe burst through floor<br>all new tile except gym; some drywall;<br>new windowshades in great room<br>got A/C → unit ventilators<br>RTUs for ~~classroom~~ spaces (gym, offices) |
| 5 | List other significant but somewhat lesser capital improvements, focusing on recent years (provide approximate year completed). | ceiling changed (finishes)<br>LED lighting throughout<br>new water access installed |
| 6 | List any major capital expenditures planned/requested for the next few years. Have they been budgeted? | playground additions<br>parking lot resurfacing → surfacing at least ~~4 years old~~ (but likely older) |
| 7 | Describe any on-going extremely problematic, historically chronic, or immediate facility needs. | tweaking HVAC; getting balance throughout building<br>some areas too warm/cool, but no major issues |

3-4 additions since built — 1991 most recent

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses. (**NA** indicates "*Not Applicable*", **Unk** indicates "*Unknown*")

| | QUESTION | RESPONSE | | | | COMMENTS |
|---|---|---|---|---|---|---|
| | | Yes | No | Unk | NA | |
| 8 | Are there any problems with foundations or structures, like excessive settlement? | | ✓ | | | |
| 9 | Has any part of the facility ever contained visible suspect mold growth, or have there been any indoor air quality or mold related complaints from occupants? | | ✓ | | | |
| 10 | Are there any wall, window, basement or roof leaks? | | ✓ | | | ~~leaks~~ |
| 11 | Are there any plumbing leaks, water pressure, or clogging/back-up problems? | | ✓ | | | |
| 12 | Have there been any leaks or pressure problems with natural gas, HVAC supply/return lines, or steam service? | | ✓ | | | |
| 13 | Are any areas of the facility inadequately heated, cooled or ventilated? Any poorly insulated areas? | ✓ | | | | HVAC balance issues; being worked on |
| 14 | Is the electrical service outdated, undersized, or otherwise problematic? | | ✓ | | | |
| 15 | Are there any problems or inadequacies with exterior building-mounted lighting? | | ✓ | | | |
| 16 | Is site/parking drainage inadequate, with excessive ponding or other problems? | ✓ | ✓ | | | blacktop @ playground gets wet ponding behind basketball courts |
| 17 | Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified above? | | ✓ | | | |
| 18 | ADA: Has an accessibility study been performed at the site? If so, indicate when. | ✓ | ✓ | | | annual assessment involving students formal/official assessment unknown |
| 19 | ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part? | ✓ | | | | mech door openers @ front doors |
| 20 | ADA: Have there been regular complaints about accessibility issues, or associated previous or pending litigation? | | ✓ | | | |

On the day of the site visit, provide EMG's Field Observer access to all of the available documents listed below. Provide copies if possible.

| INFORMATION REQUIRED | |
|---|---|
| 1. All available construction documents (blueprints) for the original construction of the building or for any tenant improvement work or other recent construction work.<br><br>2. A site plan, preferably 8 1/2" X 11", which depicts the arrangement of buildings, roads, parking stalls, and other site features.<br><br>3. For commercial properties, provide a tenant list which identifies the names of each tenant, vacant tenant units, the floor area of each tenant space, and the gross and net leasable area of the building(s).<br><br>4. For apartment properties, provide a summary of the apartment unit types and apartment unit type quantities, including the floor area of each apartment unit as measured in square feet.<br><br>5. For hotel or nursing home properties, provide a summary of the room types and room type quantities.<br><br>6. Copies of Certificates of Occupancy, building permits, fire or health department inspection reports, elevator inspection certificates, roof or HVAC warranties, or any other similar, relevant documents.<br><br>7. The names of the local utility companies which serve the property, including the water, sewer, electric, gas, and phone companies. | 8. The company name, phone number, and contact person of all outside vendors who serve the property, such as mechanical contractors, roof contractors, fire sprinkler or fire extinguisher testing contractors, and elevator contractors.<br><br>9. A summary of recent (over the last 5 years) capital improvement work which describes the scope of the work and the estimated cost of the improvements. Executed contracts or proposals for improvements. Historical costs for repairs, improvements, and replacements.<br><br>10. Records of system and material ages (roof, MEP, paving, finishes, furnishings).<br><br>11. Any brochures or marketing information.<br><br>12. Appraisal, either current or previously prepared.<br><br>13. Current occupancy percentage and typical turnover rate records (for commercial and apartment properties).<br><br>14. Previous reports pertaining to the physical condition of property.<br><br>15. ADA survey and status of improvements implemented.<br><br>16. Current / pending litigation related to property condition. |

Your timely compliance with this request is greatly appreciated.