

POUDRE SCHOOL DISTRICT LINTON ELEMENTARY SCHOOL

FACILITY CONDITION ASSESSMENT

FORT COLLINS, CO

OCTOBER 2023



Together, Building a Thriving Planet



Table of Contents

KEY CONTACT INFORMATION.....	2
EXECUTIVE SUMMARY.....	3
SCOPE AND APPROACH.....	7
Scope of work.....	8
Ratings, Methods and Scoring.....	9
Cost Estimating.....	12
CONDITION ASSESSMENT.....	14
Systems Description - Linton ES.....	15
Priorities.....	16
3-, 5-, 10-Year Plans.....	19
APPENDICES	24
Appendix A: 3-Year Plan Assets List.....	A
Appendix B: 5-Year Plan Assets List.....	B
Appendix C: 10-Year Plan Assets List.....	C

Contacts

Key Contact Information

McKinstry Contacts

Devin Boyce
Program Manager, Facility Condition Assessments
720.408.4573
devinb@mckinstry.com

Roger Noonan
Senior Facility Assessment Consultant
970.531.1527
rogern@mckinstry.com

Josh Phillips
Facility Assessment Consultant
719.480.1372
joshph@mckinstry.com

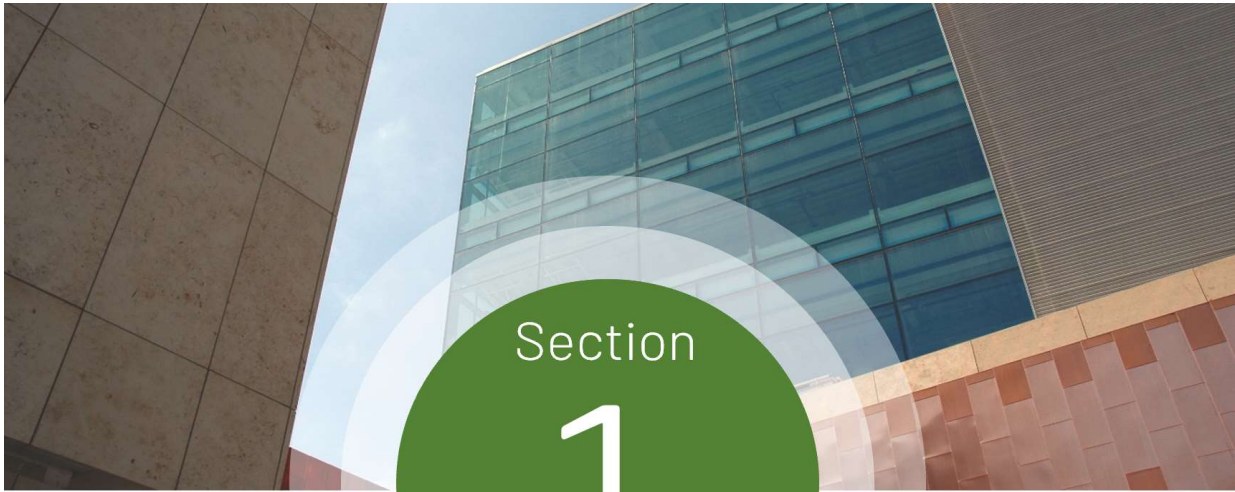
Tracey Cousins
Strategic Account Manager
720.445.7608
traceyc@mckinstry.com

Jaime Villarino-Eilenberger
Project Manager - Technical Services
949.933.7996
jaimev@mckinstry.com

Poudre School District Contacts

Trudy Trimbath
Energy and Sustainability Manager
970.490.3502
ttrimbath@psdschools.org

Jessie Ericson
Administrative Assistant - Operations
970.490.3080
jericson@psdschools.org



Section

1

Executive Summary

Executive Summary

Project Goals

The contents of this report present the results of the Facility Condition Assessment (FCA) performed at Linton ES within the Poudre School District (PSD) on June 13, 2023. PSD intends to utilize the findings of this report to inform both capital and operating budgets, prioritize maintenance efforts, and optimize planning processes as replacements and upgrades of assets and facility systems become necessary in the future.

Facility List

The scope of the FCA project included the assessment of the following campus.

FACILITY NAME	AREA (SF)	YEAR(S) BUILT
LINTON ES	51,384	1988
TOTAL	51,384	

Facility Summary

Linton ES

Linton ES is located at 4100 Caribou Dr., Fort Collins, CO 80525. This 51,384 SF facility consists of one level and was initially constructed in 1988. The equity index for this school is 2.24.



Linton ES

Executive Summary

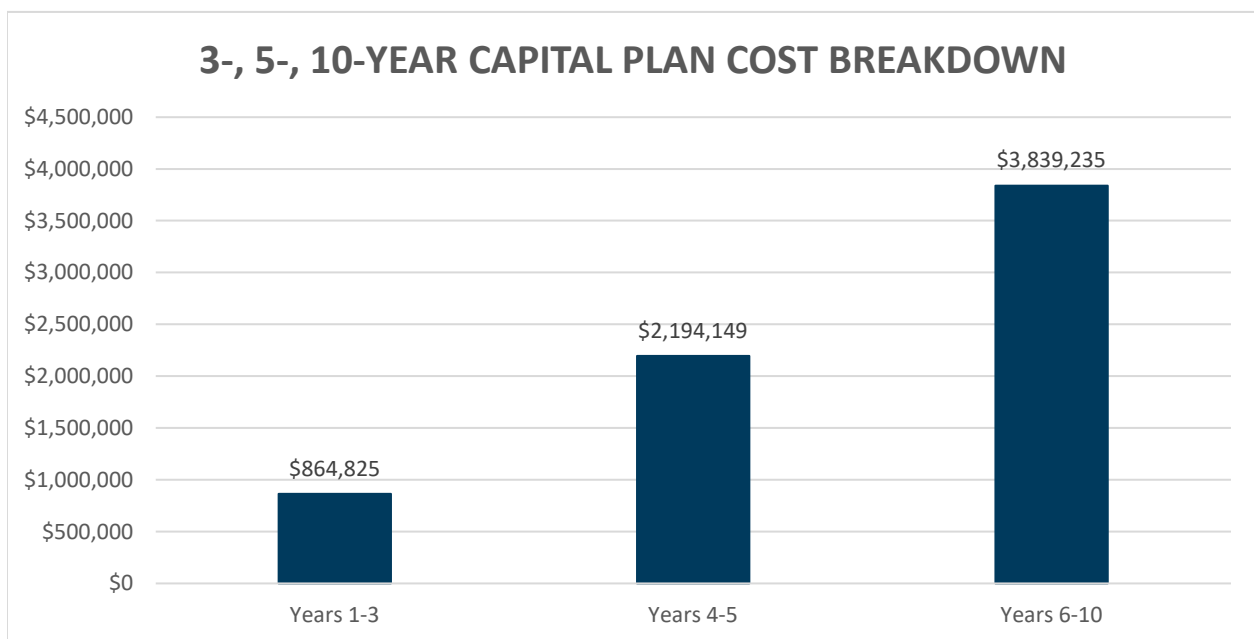
Assessment Summary

This section summarizes the building systems at the facility and describes the general condition observed based on the assessment performed on June 13, 2023. Additional details, findings and recommendations are presented in Section 3 of this report.

Capital Plan Summary

The estimated replacement costs for equipment expected to fail within the next ten years are shown below, divided into three separate plans. These plans are the 3-Year Plan, 5-Year Plan, and the 10-Year Plan. Each plan includes the cost for replacement of equipment expected to fail during these periods, based on the observed condition of the equipment at the time of the assessment.

Replacement costs include 3% inflation year over year.



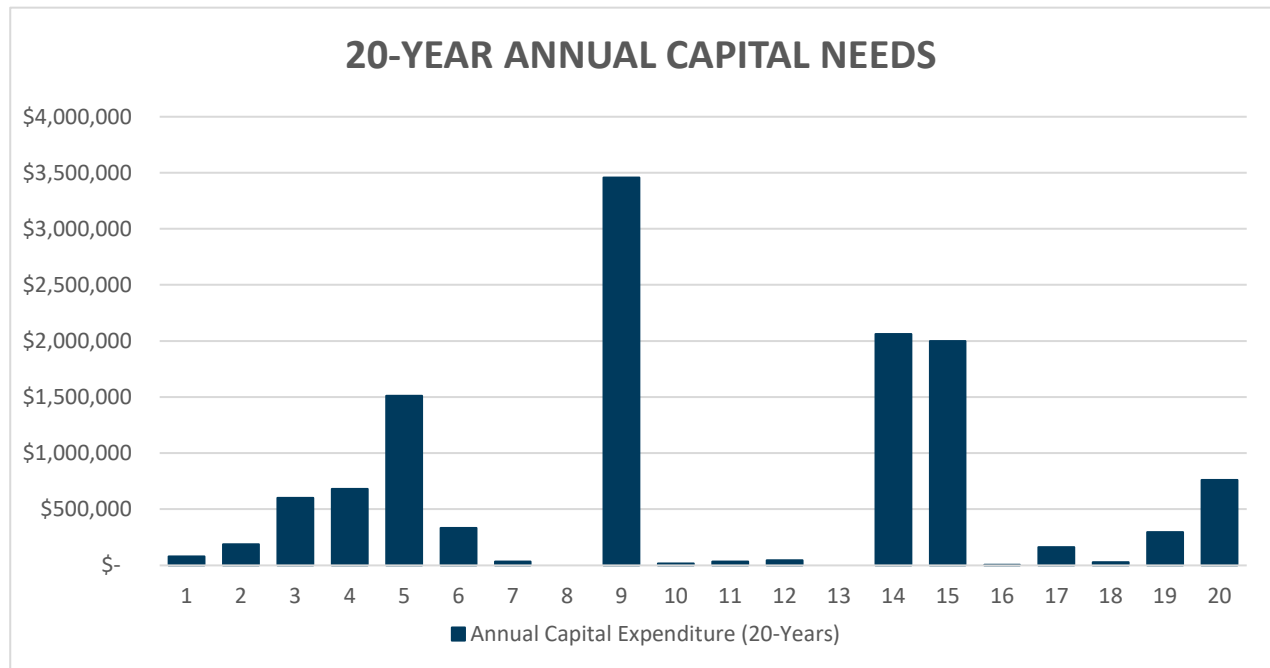
3-, 5-, 10-Year Capital Plan Cost Breakdown

Executive Summary

Annual Capital Expenditure (20 Years)

20-Year Annual Capital Needs and 20-Year Annual Capital Expenditure by Subsystem below indicate the estimated replacement costs for equipment expected to fail within the next twenty years, and are displayed both by year and by subsystem.

Replacement costs include 3% inflation year over year.



Annual Capital Expenditure by Year

Replacement costs associated with the Annual Capital Expenditure graph and table include values that are adjusted for inflation.

20-Year Annual Capital Expenditure by Subsystem

Subsystem	Years 1-5	Years 6-10	Years 11-15	Years 15-20
B20 - Enclosure	\$449,539	\$0	\$0	\$0
B30 - Roofing	\$0	\$1,866,383	\$491,988	\$0
C10 - Int. Construction	\$0	\$152,537	\$1,006,840	\$0
C20 - Stairs	\$0	\$0	\$0	\$0
C30 - Interior Finishes	\$674,977	\$416,590	\$834,377	\$294,657
D10 - Conveying	\$0	\$0	\$0	\$0
D20 - Plumbing	\$38,064	\$1,013	\$51,781	\$0
D30 - HVAC	\$239,535	\$456,494	\$1,162,101	\$105,086
D40 - Fire Suppression	\$599,642	\$0	\$0	\$0
D50 - Electrical	\$1,057,217	\$917,417	\$592,239	\$848,852
E10 - Equipment	\$0	\$28,801	\$0	\$0
Total:	\$3,058,974	\$3,839,235	\$4,139,326	\$1,248,595

Section

2

Approach and Methodology

Scope and Approach

Scope and Approach

SCOPE OF WORK

The scope of this facility condition assessment includes all major mechanical, electrical, and plumbing equipment, and commercial refrigeration equipment. In addition, the building enclosure, roofing, interior construction and finishes, and fire suppression systems are included within the assessment. Turf, site assets, kitchen assets besides walk-in freezers, exhaust fans and kitchen make up air units are not included in scope.

The following table lists the general asset types included within the scope of this assessment. Also shown is the corresponding Uniformal code, which has been used to catalog equipment based on type and intended use.

UniFormat Classification of Building Systems

UNIFORMAT CODE	CATEGORY DESCRIPTION
B20	Exterior Enclosure (i.e. windows, walls, doors)
B30	Roofing (i.e. roofing covering, skylights, etc.)
C10	Interior Construction (i.e. doors, walls)
C20	Interior Stairs (i.e. stair construction)
C30	Interior Finishes (i.e. flooring, ceiling finishes, etc.)
D10	Conveying (i.e., elevators)
D20	Plumbing (i.e., water heating, pumps, compressors)
D30	Heating, Ventilation, and Air Conditioning
D40	Fire Suppression Systems
D50	Electrical (panelboards, transformers, switchgear)
E10	Equipment, Kitchen Hoods, Walk-in Units, etc.

Scope and Approach

RATINGS, METHODS AND SCORING

To allow Poudre School District more flexibility in prioritizing capital planning efforts, McKinstry has developed the following metrics which assign various scores to each asset.

Asset Condition

Condition ratings are presented for each asset as a score of 1 – 5. Scores are based upon a visual inspection during the building evaluation period. A score of 1 signifies that the asset is in great, “like new” condition. A score of 2 indicates that the asset is in good condition. A score of 3 signifies that the asset is in expected “average” condition based on function and the age of the asset. A score of 4 signifies that the asset is in poor condition, in need of repair, and will require replacement in the near future. A score of 5 signifies that the asset is in very poor or failed condition and in need of imminent replacement.

SCORE	CONDITION ASSESSMENT
1	Asset is in great condition, no action required.
2	Asset is in good condition, regular maintenance expected.
3	Asset is in expected condition, regular replacement/maintenance expected.
4	Asset is in poor condition, maintenance/replacement recommended soon.
5	Asset is in very poor condition, urgent replacement needed.

Student/Teacher Impact

Student/Teacher Impact scores are presented for each asset on a scale of 1 – 5 (low to high impact). This metric considers educational (student and/or teacher) impact caused if the equipment were to fail. Assets serving classrooms and other educational spaces are assigned scores of 2-5 depending on the impact the failure of an asset would have and if backups are available. A student/teacher impact score of 1 indicates that there is little to no impact to educational activities.

SCORE	STUDENT/TEACHER IMPACT
1	Failure poses no significant educational impact.
2	Failure poses low educational impact.
3	Failure poses moderate impact. Asset serves teaching area, but has backup.
4	Failure poses high educational impact.
5	Failure poses severe impact. Asset serves teaching area and has no backup.

Energy Cost Impact

The Energy Impact score is presented for each asset on a scale of 1-5 (low to high impact). Each of the asset types within the scope of this assessment were evaluated based on their impact to energy cost and consumption (including electrical, natural gas, and liquid fuels). Assets with a higher Energy Cost Impact score indicate that the asset has a large contribution to the overall energy costs of the facility. A sample of Energy impact scores is shown below:

Scope and Approach

ASSET TYPE	ASSET SIZE	ENERGY COST IMPACT (1-5)
Air Handling Unit	less than 10,000 CFM	3
	between 10,000 CFM – 50,000 CFM	4
	greater than 50,000 CFM	5
Chiller	less than 200 tons	3
	between 200 – 500 tons	4
	greater than 500 tons	5
Computer Room AC Condensing Unit Heat Pump	less than 10 tons	2
	greater than 10 tons	3
Cooling Tower	less than 200 tons of rejection	2
	greater than 200 tons of rejection	3
Dust Collector	less than 5 HP	2
	between 5 HP and 25 HP	3
	greater than 25 HP	4
Exhaust Fan	less than 5000 CFM	2
	greater than 5000 CFM	3
Fan Coil Unit	greater than 3000 CFM	2
Fuel Fired Boiler	less than 200 MBH	2
	between 200 – 1000 MBH	3
	between 1000 – 2000 MBH	4
	greater than 2000 MBH	5
Furnace	less than 100 MBH	2
	between 100 and 500 MBH	3
	greater than 500 MBH	4
Generator	less than 500 KW	2
	greater than 500 KW	3
Lighting, Exterior	LED	2
	Fluorescent	3
	HID/Incandescent	4
Lighting, Interior	LED	2
	Fluorescent	4
	HID/Incandescent	5
Make-Up Air Unit	less than 5,000 CFM	3
	between 5,000 and 25,000 CFM	4
	greater than 25,000 CFM	5
Pumps	less than 25 HP	2
	between 25 -150 HP*	3
	greater than 150 HP*	4
Return Fan Supply Fan	less than 20 HP	2
	greater than 20 HP*	3

Scope and Approach

ASSET TYPE	ASSET SIZE	ENERGY COST IMPACT (1-5)
Rooftop Unit	less than 5 ton	2
	between 5 and 20 tons	3
	between 20 and 50 tons	4
	greater than 50 tons	5
Transformer	greater than 200 kVA	2
VFD	greater than 50 HP	2
Air Compressor	All sizes	2
Air Curtain		
Air Dryer		
Cabinet Unit Heater		
Dehumidifier		
Electric Duct Heater		
Humidifier		
Unit Heater		
Unit Ventilator		
Walk-In Condenser		
Walk-In Unit		
All Other	All sizes	1

*Add 1 for direct drive motors

Operational Impact

Operational Impact scores are presented for each asset on a scale of 1 – 5 (low to high impact). This metric considers the operational impact caused if the equipment were to fail. Assets serving critical administrative and district operational spaces are assigned scores of 2-5 depending on the impact the failure of an asset would have and if backups are available. An operational impact score of 1 indicates that there is little to no impact to administrative or operational activities.

SCORE	OPERATIONAL COST IMPACT SCORE
1	Asset has little to no operational impact.
2	Asset has a low level of operational impact.
3	Asset has a moderate operational impact.
4	Asset has a high level of operational impact.
5	Asset has severe operational impact.

Industry Life Expectancy

The designed life expectancy for a given asset is determined using a combination of widely accepted industry standards including ASHRAE and BOMA, as well as a manufacturers' database of equipment life expectancies. This value is expressed in number of years.

Scope and Approach

Observed Remaining Life

The Observed Remaining Life is also expressed in number of years and takes into consideration the function and operating environment of the asset, as well as a determination based upon a visual inspection of the asset. The Observed Remaining Life value may vary from the Design Life value. For example, a secondary heat exchanger that has been well maintained may have an Observed Remaining Life that is greater than the expected Design Life. Likewise, a primary chilled water pump that has not been well maintained, and shows visual signs of premature wear and tear, may have an Observed Remaining Life that is less than the expected Design Life.

Cost Estimating

Based on the constraints of the scope outlined in the contract we have based our asset pricing upon industry standards, RSMeans, and pricing data sourced through McKinstry's construction division. This information is intended to assist in the prioritization and resource allocation associated with maintenance and capital replacement projects. Cost estimates are determined using specific characteristics of each asset (tonnage, motor size, capacity, etc.) along with one of several cost information data sets. Standard equipment warranties are included.

To clarify, all Estimated Replacement Costs include averages of the material cost of the asset, the demolition and installation of that asset type and are expressed in 2023 dollars. Additionally, site specific construction and equipment invoices have been utilized as available.

Costs associated with project design, contractor competence, commissioning, test and balance services and are excluded from the estimate and are the responsibility of the Client. McKinstry assumed a 3% inflation, applied year over year. All work is during normal business hours. For mechanical equipment any duct work, piping, existing appurtenances are to be reused; costs to repair or replace any lines going to or coming from the units is excluded. Existing isolation valves to be used; repair or replacement of isolation valves is excluded.

Costs typically associated with project-specific parameters are excluded and should be added at the discretion of the Client. Such exclusions include risks or contingencies such as asbestos abatement, other hazardous waste abatement, scope changes, design changes, taxes, special wage requirements such as Prevailing Wage rates, warranty management and unknown site conditions. Overtime and after-hours work is excluded. Any necessary structural or electrical upgrades to replace equipment is excluded. Incidental code violations resulting from project scope or execution are excluded. Correction of any existing code violations are excluded. Temporary heating, cooling, ventilation, and power during construction and the warranty period are excluded. Moving of heavy equipment or furniture to complete the work is excluded. Running and terminating new IP drops for equipment is excluded. Any changes to fire and life safety systems for mechanical equipment upgrades is excluded.

Data-Driven Maintenance Approach

Included with the submission of this report is the FCA Data Collection Workbook, which includes all data collected for each asset. The Workbook can be used to quickly sort through equipment and prioritize maintenance and replacement efforts. Additional observations and equipment details are provided within the workbook for each asset.

Scope and Approach

Each asset is classified according to building system, size, capacity, and other standards, as well as ratings of current condition and impact of failure. Such organization and classification facilitate searching and sorting the data for maintenance and replacement priorities. As mentioned, the impact ratings help to compare one asset to another. Based on observed condition and impact scores, the future maintenance priorities for each building are described further in later sections.

As each of the components identified in the workbook is repaired or replaced, the information can be revised to reflect the new conditions. Remaining useful life values can also be manually iterated one year from the assessment date to reflect fewer remaining years of life. Assets no longer in service can be removed from the list. Similarly, assets that have been newly installed can be added to the list. Following the impact guidelines, relative priority can be calculated for these assets.

Equity Index

As an additional metric to the six existing areas of the Facilities Condition Assessment, Poudre School District has created an Equity Index to assist in prioritizing facilities improvement projects. This number takes into account student poverty, students qualifying for ELA services, students qualifying for Special Education services, and students who are homeless. The calculated score for each school is based on these factors and where it falls in relation to the district average. The formula would be:

$$\frac{\text{School Percentage in these areas added together as decimals}}{\text{District Percentages in these areas added together as decimals}}$$

In this formula, a school with student needs equal to the district average would have an equity index of 1.0. Schools with student needs higher than the district average would have an Equity Index greater than 1.0. Schools with student needs less than the district average would have an Equity Index less than 1.0.

Category	Equity Index
Low	0.29
High	3.20
Average	1.11
Median	0.95

The equity index for Linton ES is 2.24.

Sample Calculation:

School Name	School Population K-12 Total	F/R	ELL	SPED	McKinney-Vento	Total of Previous Columns	Equity Index Number = school average / district average
Sample	381	15.20%	0.00%	8.40%	0.00%	0.24	0.24/0.48 = 0.49
Grand PSD Total - Oct 2022 Count	26,163	29.5%	5.8%	9.5%	3.4%	0.48	

F/R - Free or Reduced-Price Lunch; ELL- English Language Learners; SPED - Special Ed.; McKinney-Vento - Homeless Assistance

Section

3

Condition Assessment

Condition Assessment

SYSTEMS DESCRIPTION

This section summarizes the building systems at Linton ES and describes the general condition observed based on the assessment. Specific findings and recommendations are detailed later in this report.

Exterior Enclosure

The original building was constructed in 1998. Subsequent renovations to the school were completed in 1989, 2001, 2013, and 2015. Exterior walls are of CMU construction. Windows are of the aluminum framed type. Exterior doors consist of hollow metal and storefront types. [REDACTED]

Roofing

The rolled asphalt roofing and skylights were replaced in 2012 [REDACTED] with 14 and 9 years of remaining life respectively.

Interior Construction and Finishes

The interior construction components of the building, including drywall and concrete masonry unit (CMU) walls are original. The interior doors are primarily of the wood and hollow metal type but also include automatic glass/metal. The interior construction and interior finish components are a mix of original 1988 install and 2012 upgrades. Though upgraded in 2012, the carpeting and VCT flooring will be the first finishes to require replacement within 4 years.

Conveyance

As the building is comprised of a single story an elevator is not provided.

Electrical and Lighting

The building includes both 120/208V and 277/480V service. Electrical assets, including panelboards, transformers, and VFDs have partly been upgraded from 2012-2020. Both VFDs were replaced in 2013. [REDACTED] The associated ATS-1 is also original and should be replaced when the generator is replaced. Emergency back-up lighting appears to have been updated in 2012 along with the interior fluorescent light, fire alarm system, and the security system. Exterior wall packs were updated to LED fixtures in 2021. Recommend replacement of the fluorescent lighting fixtures with LED lighting fixtures in approximately 9 years. There are (12) panelboards, a switchboard, and the pad transformer that are dated to 1988 and are expected to require replacement in approximately 5 years.

HVAC Systems

The HVAC assets include (2) original air handling units, exhaust fans, fan coil units, cabinet unit heaters, BBRs, and (3) 2013-built RTUs. The heating water system features two gas-fired boilers with associated circulation pumps. Though Boiler-2 was replaced in 2020, [REDACTED]. The BAS was upgraded in 2012.

Plumbing

Plumbing assets include three gas-fired water heaters and one circulation pump. Three backflow preventers and one thermostatic mixing valve are also provided. GWH-1, GWH-2, and GWH-3 date to between 2003 and 2005 and are expected to require replacement in approximately 2 years.

Fire Suppression

The fire alarm system was updated in 2012, though the wet fire sprinkler system dates to the 1988 original construction. [REDACTED] The Fire Protection System appears to be well maintained and updated per fire code requirements. No deficiencies were noted with this system.

Equipment

The Kitchen area is provided one original walk-in cooler and one original walk-in freezer that were replaced in 2010. The associated condensing units were replaced in 2019 and are in good condition. Observed remaining life of the walk-in cooler and the original walk-in freezer is 7 years.

Condition Assessment

PRIORITIES

SPECIFIC PRIORITIES

The top capital measures (up to five max) have been detailed in the following tables. Each measure receives a priority level of 1, 2, or 3. A priority level of 1 indicates that the measure is considered an immediate concern or a potential hazard and should be addressed as soon as possible. A priority level of 2 indicates that the measure is considered urgent, but not a potential hazard or there is a less severe impact to occupants. A priority level of 3 indicates that the assets associated with the measure are nearing end of life, but have not yet failed or have a mild to moderate impact on occupant safety and comfort.

Linton ES

Replace Back-Up Generator & ATS-1

The back-up generator and ATS-1 are original to the 1988 construction and are now 15 and 10 years past expected life respectively. [REDACTED]

[REDACTED] Recommend replacement of both assets at the same time.

The following assets are included within this measure:

FCAID-340111, FCAID-340110



Priority Level:	2
Estimated Cost:	\$57,660
Remaining Life:	1-4 years

Condition Assessment

Replace Boiler-2

Though Boiler-1 was replaced in 2020 and is in good condition, [REDACTED] Recommend replacement prior to 2024-2025 heating season.

The following assets are included within this measure:

FCAID-340074

Priority Level: 2
Estimated Cost: \$78,630
Remaining Life: 1 year



Replace (3) GWHs

GWH-1, GWH-2, and GWH-3 date to between 2003 and 2005 and are expected to require replacement in approximately 2 years.

The following assets are included within this measure:

FCAID-340028, FCAID-340029, FCAID-340030

Priority Level: 2
Estimated Cost: \$28,950
Remaining Life: 2 years



Condition Assessment

Replace 1988 Electrical Assets

Though not an immediate concern, there exist (12) panelboards, a switchboard, and the pad transformer that date to 1988. These assets are expected to require replacement in approximately 5 years and will represent a substantial Replacement Cost at that time. Item added for Capital Planning.

The following assets are included within this measure:

FCAID-340130, FCAID-340134, FCAID-340117 through FCAID-340128,



Priority Level:	3
Estimated Cost:	\$85,680
Remaining Life:	5 years

Replace EC-1

EC-1 (145EC002 Evap Cooler) is 10 years past expected useful life [REDACTED]. Recommend replacement in 1-2 years.

The following assets are included within this measure:

FCAID-340043



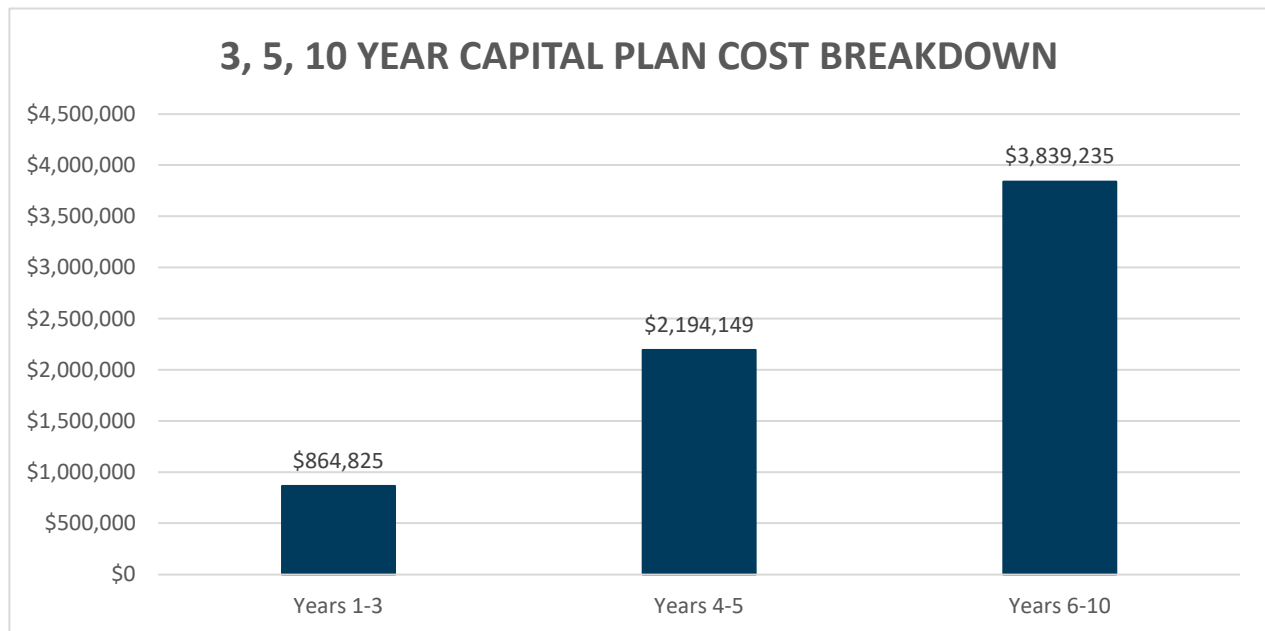
Priority Level:	3
Estimated Cost:	\$2,500
Remaining Life:	1-2 years

Condition Assessment

3-, 5-, 10-YEAR PLANS

The following sections present the expected equipment replacement costs over the next ten years, broken into three separate plans. These plans are the 3-Year Plan, 5-Year Plan, and the 10-Year Plan. Each plan includes the equipment expected to fail during these periods, based on the observed condition of the equipment at the time of the assessment. Note, the 3-Year Plan includes assets failing within the next three years, the 5-Year Plan includes assets failing between four and five years, and the 10-Year Plan includes assets failing between in the next six to ten years from the assessment date.

The chart below presents the total expected replacement costs for each plan. Note that these figures include 3% inflation YOY.



Future Capital Plan

The table below displays replacement costs for the campus, and the number of associated assets expected to fail within the next ten years. Assets requiring replacement or extensive maintenance in this plan are presented in Appendices A, B, and C.

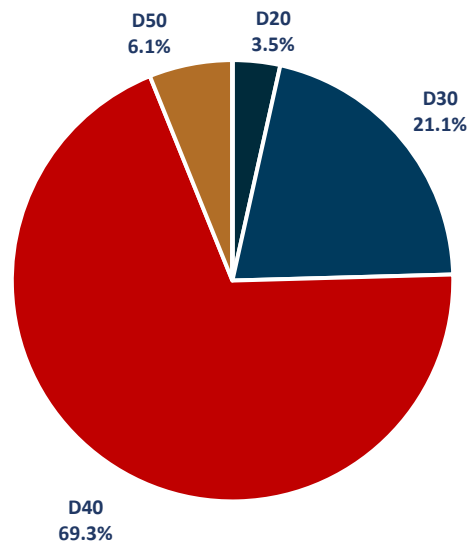
REPLACEMENT PERIOD	ASSET QUANTITY	CUMULATIVE REPLACEMENT COST
3-Year Plan	10	\$864,825
5-Year Plan	31	\$2,194,149
10-Year Plan	65	\$3,839,235
Total	106	\$6,898,209

Condition Assessment

3-YEAR PLAN BREAKDOWN

The three-year plan includes the estimated capital expenditure needed to replace assets reaching end of life in years 1-3, or between 2024 and 2026. The sum of the anticipated capital needs is \$864,825. The specific assets that will reach end of life in this period are listed in Appendix A.

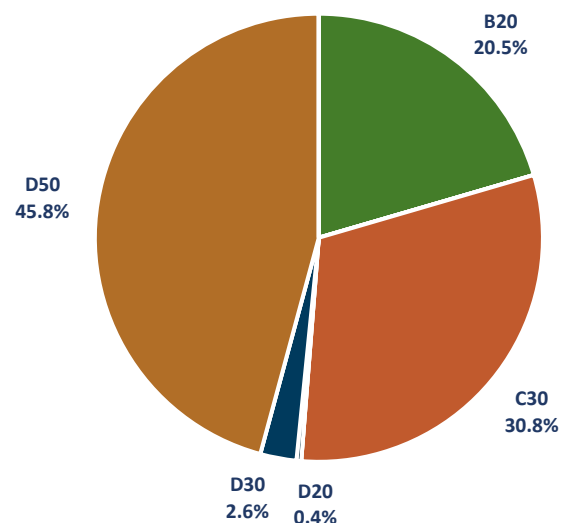
SUBSYSTEM	Years 1-3	Percent
A10 - Foundations	\$0	0%
B10 - Superstructure	\$0	0%
B20 - Exterior Enclosure	\$0	0%
B30 - Roofing	\$0	0%
C10 - Int. Construction	\$0	0%
C20 - Stairs	\$0	0%
C30 - Interior Finishes	\$0	0%
D10 - Conveying	\$0	0%
D20 - Plumbing	\$30,231	3%
D30 - HVAC	\$182,145	21%
D40 - Fire Protection	\$599,642	69%
D50 - Electrical	\$52,808	6%
E10 - Equipment	\$0	0%
G20 - Site Improvements	\$0	0%
G40 - Site Electrical	\$0	0%



5-YEAR PLAN BREAKDOWN

The five-year plan includes the estimated capital expenditure needed to replace assets reaching end of life in years 4-5, or between 2027 and 2028. The sum of the anticipated capital needs is \$2,194,149. The specific assets that will reach end of life in this period are listed in Appendix A.

SUBSYSTEM	Years 4-5	Percent
A10 - Foundations	\$0	0%
B10 - Superstructure	\$0	0%
B20 - Exterior Enclosure	\$449,539	20%
B30 - Roofing	\$0	0%
C10 - Int. Construction	\$0	0%
C20 - Stairs	\$0	0%
C30 - Interior Finishes	\$674,977	31%
D10 - Conveying	\$0	0%
D20 - Plumbing	\$7,834	<1%
D30 - HVAC	\$57,390	3%
D40 - Fire Protection	\$0	0%
D50 - Electrical	\$1,004,408	46%
E10 - Equipment	\$0	0%
G20 - Site Improvements	\$0	0%
G40 - Site Electrical	\$0	0%

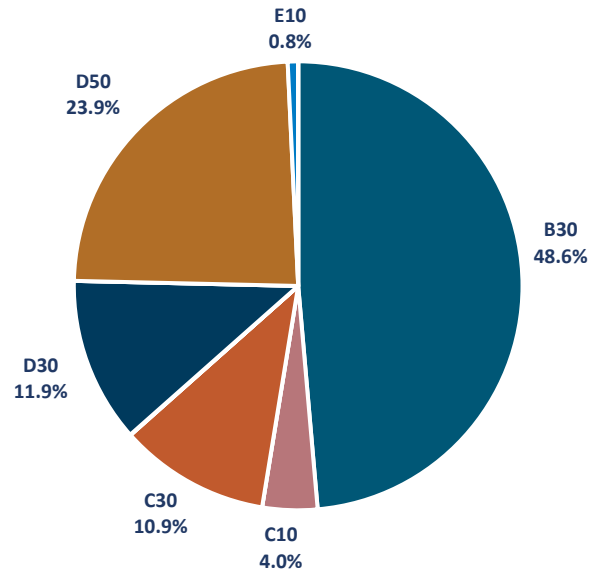


Condition Assessment

10-YEAR PLAN BREAKDOWN

The ten-year plan includes the estimated capital expenditure needed to replace assets reaching end of life in years 6-10, or between 2029 and 2033. The sum of the anticipated capital needs is \$3,839,235. The specific assets that will reach end of life in this period are listed in Appendix A.

SUBSYSTEM	Years 6-10	Percent
A10 - Foundations	\$0	0%
B10 - Superstructure	\$0	0%
B20 - Exterior Enclosure	\$0	0%
B30 - Roofing	\$1,866,383	49%
C10 - Int. Construction	\$152,537	4%
C20 - Stairs	\$0	0%
C30 - Interior Finishes	\$416,590	11%
D10 - Conveying	\$0	0%
D20 - Plumbing	\$1,013	<1%
D30 - HVAC	\$456,494	12%
D40 - Fire Protection	\$0	0%
D50 - Electrical	\$917,417	24%
E10 - Equipment	\$28,801	1%
G20 - Site Improvements	\$0	0%
G40 - Site Electrical	\$0	0%



Condition Assessment

PRIORITY SUMMARY

The summary below assigns a composite Overall Priority Score to the campus as of the assessment date. Priority Scores range from 6 (low priority) to 30 (high priority), and are based on asset condition, operating impact, student impact, energy impact, estimated replacement cost, and observed remaining life.

In addition to the Overall Priority Score, each Subsystem category within the site is assigned a Priority Score. This score can differentiate systems that may need more attention than others, due to condition or impact on occupants or operations. Each Subsystem category includes a general narrative section under the Description column.

Future Capital Plan

The Subsystem scores are color coded to reflect the level of priority: ≤ 12 = Green, 12.1-23.9 = Yellow, ≥ 24 = Red. Higher priority scores indicate that a system should be considered for maintenance or capital improvements before other systems with lower scores. The rating scale for Priority Score is visualized below.

LOW	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	HIGH
6	12	18	24	30

Condition Assessment

PRIORITY SCORE SUMMARY - LINTON ES

 LINTON ES BUILDING TYPE: Elementary School YEAR BUILT: 1988 GROSS AREA (SF): 51,384 DATE ASSESSED: June 9, 2023 PRIORITY SCORE: 16.2		
SUBSYSTEM:	DESCRIPTION	PRIORITY SCORE
B20 - Ext. Enclosure	The original building was constructed in 1998. Subsequent renovations to the school were completed in 1989, 2001, 2013, and 2015. Exterior walls are of CMU construction. Windows are of the aluminum framed type. Exterior doors consist of hollow metal and storefront types.	13.3
B30 - Roofing	The rolled asphalt roofing and skylights were replaced in 2012 with 14 and 9 years of remaining life respectively.	15.8
C10 - Int. Construction	The interior construction components of the building, including drywall and concrete masonry unit (CMU) walls are original. The interior doors are primarily of the wood and hollow metal type but also include automatic glass/metal. The interior construction and interior finish components are a mix of original 1988 install and 2012 upgrades. Though upgraded in 2012, the carpeting and VCT flooring will be the first finishes to require replacement within 4 years.	12.8
C30 - Interior Finishes		15.0
D20 - Plumbing	Plumbing assets include three gas-fired water heaters and one circulation pump. Three backflow preventers and one thermostatic mixing valve are also provided. GWH-1, GWH-2, and GWH-3 date to between 2003 and 2005 and are expected to require replacement in approximately 2 years.	13.6
D30 - HVAC	The HVAC assets include (2) original air handling units, exhaust fans, fan coil units, cabinet unit heaters, BBRs, and (3) 2013-built RTUs. The heating water system features two gas-fired boilers with associated circulation pumps. Though Boiler-1 was replaced in 2020, The BAS was upgraded in 2012.	16.2
D40 - Fire Suppression	The fire alarm system was updated in 2012, though the wet fire sprinkler system dates to the 1988 original construction. The Fire Protection System appears to be well maintained and updated per fire code requirements. No deficiencies were noted with this system.	23.0
D50 - Electrical	The building includes both 120/208V and 277/480V service. Electrical assets, including panelboards, transformers, and VFDs have partly been upgraded from 2012-2020. Both VFDs were replaced in 2013. The associated ATS-1 is also original and should be replaced when the generator is replaced. Emergency back-up lighting appears to have been updated in 2012 along with the interior fluorescent light, fire alarm system, and the security system. Exterior wall packs were updated to LED fixtures in 2021. Recommend replacement of the fluorescent lighting fixtures with LED lighting fixtures in approximately 9 years. There are (12) panelboards, a switchboard, and the pad transformer that are dated to 1988 and are expected to require replacement in approximately 5 years.	21.2
E10 - Equipment	The Kitchen area is provided one original walk-in cooler and one original walk-in freezer that were replaced in 2010. The associated condensing units were replaced in 2019 and are in good condition. Observed remaining life of the walk-in cooler and the original walk-in freezer is 7 years.	15.0

System priority scored from 6 (lowest priority) to 30 (highest priority) based on condition, operating impact, student/teacher impact, energy impact, estimated replacement cost, and observed remaining life. [≤12 = green, 12-24 = yellow, ≥24 = red]

Appendices

A. 3-YEAR PLAN ASSETS LIST

B. 5-YEAR PLAN ASSETS LIST

C.10-YEAR PLAN ASSETS LIST

Appendix A

APPENDIX A: 3-YEAR PLAN ASSETS LIST

The individual assets associated with the 3-Year Plan are shown below, sorted from highest to lowest priority score. The priority score key is shown below for convenience.

Note that these values represent current replacement costs expressed in 2023 dollar amounts and are not adjusted for inflation.

LOW	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	HIGH
6	12	18	24	30

The asset ID listed for each entry has been assigned during this assessment and reflects the corresponding asset in the FCA workbook.

LINTON ES

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING	REPLACEMENT COST	PRIORITY SCORE
FCAID-340109	Wet Fire Sprinkler System	D40 - Fire Prot.	3	\$565,220	23
FCAID-340031	AHU-001	D30 - HVAC	2	\$42,000	20
FCAID-340032	AHU-002	D30 - HVAC	2	\$56,000	20
FCAID-340074	Boiler-2	D30 - HVAC	1	\$78,630	19
FCAID-340111	Backup Generator	D50 - Electrical	2	\$51,270	19
FCAID-340043	145EC002 Evap Cooler	D30 - HVAC	2	\$2,500	17
FCAID-340028	GWH-1	D20 - Plumbing	2	\$9,650	16
FCAID-340030	GWH-3	D20 - Plumbing	2	\$9,650	16
FCAID-340029	GWH-2	D20 - Plumbing	2	\$9,650	16
FCAID-340023	BFP-GWH-2	D20 - Plumbing	2	\$400	14
FCAID-340112	Electric Meter	G40 - Site Electric	2	\$4,340	13

Appendix B

APPENDIX B: 5-YEAR PLAN ASSETS LIST

The individual assets associated with the 5-Year Plan are shown below, sorted from highest to lowest priority score. The priority score key is shown below for convenience.

Note that these values represent current replacement costs expressed in 2023 dollar amounts and are not adjusted for inflation.

LOW	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	HIGH
6	12	18	24	30

The asset ID listed for each entry has been assigned during this assessment and reflects the corresponding asset in the FCA workbook.

LINTON ES

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE	REPLACEMENT COST	PRIORITY SCORE
FCAID-340115	Emergency Back-Up Lighting	D50 - Electrical	5	\$195,770	23
FCAID-340114	Fire Alarm System	D50 - Electrical	5	\$400,280	22
FCAID-340129	Security System	D50 - Electrical	5	\$195,770	19
FCAID-340019	Interior Flooring: Carpet	C30 - Int. Finishes	4	\$536,300	17
FCAID-340130	SW-1	D50 - Electrical	5	\$31,030	17
FCAID-340107	RTU-3	D30 - HVAC	5	\$32,740	17
FCAID-340134	Pad Transformer	D50 - Electrical	5	\$8,740	16
FCAID-340005	Exterior Doors: Hollow Metal/Glass, Single	B20 - Ext. Enclosure	5	\$119,040	14
FCAID-340006	Exterior Windows: Steel Framed	B20 - Ext. Enclosure	5	\$62,130	14
FCAID-340002	Exterior Doors: Hollow Metal, Double	B20 - Ext. Enclosure	5	\$128,960	14
FCAID-340131	Fire Panel Power Supply-1	D50 - Electrical	5	\$2,900	13
FCAID-340127	Panel MDP	D50 - Electrical	5	\$12,370	13
FCAID-340125	Panel LC	D50 - Electrical	5	\$3,000	13
FCAID-340117	Panel CU	D50 - Electrical	5	\$3,000	13
FCAID-340110	ATS-1	D50 - Electrical	4	\$6,390	13
FCAID-340118	Panel DB	D50 - Electrical	5	\$3,000	13
FCAID-340133	Fire Panel Power Supply-RPS3	D50 - Electrical	5	\$2,900	13
FCAID-340004	Exterior Doors: Hollow Metal, Single	B20 - Ext. Enclosure	5	\$29,760	13
FCAID-340126	Panel M	D50 - Electrical	5	\$3,000	13
FCAID-340120	Panel EM	D50 - Electrical	5	\$3,000	13
FCAID-340128	Panel Modular	D50 - Electrical	5	\$3,000	13
FCAID-340121	Panel K-Left	D50 - Electrical	5	\$3,270	13
FCAID-340003	Exterior Doors: Metal/Glass, Automatic, D	B20 - Ext. Enclosure	5	\$59,520	13
FCAID-340122	Panel K-Right	D50 - Electrical	5	\$3,270	13
FCAID-340132	Fire Panel Power Supply-2	D50 - Electrical	5	\$2,900	13

FCAID-340123	Panel LA Right	D50 - Electrical	5	\$3,000	13
FCAID-340021	Interior Flooring: VCT	C30 - Int. Finishes	4	\$81,400	13
FCAID-340124	Panel LB	D50 - Electrical	5	\$3,000	13
FCAID-340119	Panel DC	D50 - Electrical	5	\$3,000	13
FCAID-340062	ET-2	D30 - HVAC	5	\$18,250	9
FCAID-340061	ET-1	D20 - Plumbing	5	\$6,960	9

Appendix C

APPENDIX C: 10-YEAR PLAN ASSETS LIST

The individual assets associated with the 10-Year Plan are shown below, sorted from highest to lowest priority score. The priority score key is shown below for convenience.

Note that these values represent current replacement costs expressed in 2023 dollar amounts and are not adjusted for inflation.

LOW	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	HIGH
6	12	18	24	30

The asset ID listed for each entry has been assigned during this assessment and reflects the corresponding asset in the FCA workbook.

LINTON ES

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE	REPLACEMENT COST	PRIORITY SCORE
FCAID-340116	Interior Lighting: Fluorescent	D50 - Electrical	9	\$712,620	23
FCAID-340007	Skylights	B30 - Roofing	9	\$1,473,340	16
FCAID-340137	Walk-in Freezer	E10 - Equipment	7	\$12,060	15
FCAID-340108	Walk-in Cooler	E10 - Equipment	7	\$12,060	15
FCAID-340017	Interior Ceiling: Acoustical Tile	C30 - Int. Finishes	9	\$328,860	14
FCAID-340078	P-3	D30 - HVAC	6	\$4,630	14
FCAID-340079	P-4	D30 - HVAC	6	\$4,630	14
FCAID-340088	BBR-107	D30 - HVAC	6	\$5,720	13
FCAID-340099	BBR-209B	D30 - HVAC	6	\$4,770	13
FCAID-340095	BBR-205	D30 - HVAC	6	\$9,540	13
FCAID-340069	FCU-6	D30 - HVAC	9	\$7,830	13
FCAID-340103	BBR-406	D30 - HVAC	6	\$9,540	13
FCAID-340070	FCU-7	D30 - HVAC	9	\$9,490	13
FCAID-340068	FCU-5	D30 - HVAC	9	\$7,830	13
FCAID-340071	FCU-8	D30 - HVAC	9	\$9,490	13
FCAID-340097	BBR-208	D30 - HVAC	6	\$4,770	13
FCAID-340066	FCU-3	D30 - HVAC	9	\$9,490	13
FCAID-340101	BBR-215	D30 - HVAC	6	\$9,540	13
FCAID-340067	FCU-4	D30 - HVAC	9	\$7,830	13
FCAID-340065	FCU-2	D30 - HVAC	9	\$7,830	13
FCAID-340090	BBR-108B	D30 - HVAC	6	\$2,390	13
FCAID-340089	BBR-108	D30 - HVAC	6	\$4,770	13
FCAID-340091	BBR-200	D30 - HVAC	6	\$4,770	13
FCAID-340093	BBR-203	D30 - HVAC	6	\$4,770	13
FCAID-340092	BBR-202	D30 - HVAC	6	\$5,720	13

FCAID-340080	BBR-032	D30 - HVAC	6	\$1,910	13
FCAID-340094	BBR-204	D30 - HVAC	6	\$5,720	13
FCAID-340081	BBR-033	D30 - HVAC	6	\$2,390	13
FCAID-340096	BBR-206	D30 - HVAC	6	\$4,770	13
FCAID-340082	BBR-100	D30 - HVAC	6	\$9,540	13
FCAID-340098	BBR-209	D30 - HVAC	6	\$4,770	13
FCAID-340083	BBR-101	D30 - HVAC	6	\$5,720	13
FCAID-340100	BBR-213	D30 - HVAC	6	\$4,770	13
FCAID-340084	BBR-101B	D30 - HVAC	6	\$5,720	13
FCAID-340102	BBR-405B	D30 - HVAC	6	\$2,390	13
FCAID-340014	Interior Windows: Glass Block	C10 - Int. Construct.	6	\$131,580	13
FCAID-340104	BBR-504	D30 - HVAC	6	\$9,540	13
FCAID-340064	FCU-1	D30 - HVAC	9	\$7,830	13
FCAID-340087	BBR-104	D30 - HVAC	6	\$9,540	13
FCAID-340085	BBR-102	D30 - HVAC	6	\$9,540	13
FCAID-340086	BBR-103	D30 - HVAC	6	\$4,770	13
FCAID-340072	FCU-9	D30 - HVAC	9	\$9,490	13
FCAID-340057	145EX025 Exhaust Hood	D30 - HVAC	9	\$6,710	12
FCAID-340053	145EX018 Exhaust Fan	D30 - HVAC	9	\$6,710	12
FCAID-340051	145EX015 Exhaust Fan	D30 - HVAC	9	\$8,660	12
FCAID-340060	RH-1	D30 - HVAC	9	\$8,190	12
FCAID-340055	145EX021 Exhaust Fan	D30 - HVAC	9	\$6,710	12
FCAID-340044	145EX007 Exhaust Fan	D30 - HVAC	9	\$6,710	12
FCAID-340050	145EX014 Exhaust Fan	D30 - HVAC	9	\$12,980	12
FCAID-340045	145EX008 Exhaust Fan	D30 - HVAC	9	\$6,710	12
FCAID-340052	145EX016 Exhaust Fan	D30 - HVAC	9	\$8,660	12
FCAID-340046	145EX009 Exhaust Fan	D30 - HVAC	9	\$6,710	12
FCAID-340054	145EX020 Exhaust Hood	D30 - HVAC	9	\$6,710	12
FCAID-340047	145EX010 Exhaust Fan	D30 - HVAC	9	\$6,710	12
FCAID-340056	145EX024 Exhaust Fan	D30 - HVAC	9	\$6,710	12
FCAID-340048	145EX012 Exhaust Fan	D30 - HVAC	9	\$8,660	12
FCAID-340058	EF-1	D30 - HVAC	9	\$8,190	12
FCAID-340059	EF-2	D30 - HVAC	9	\$6,710	12
FCAID-340049	145EX013 Exhaust Fan	D30 - HVAC	9	\$12,980	12
FCAID-340063	ET-3	D30 - HVAC	7	\$3,950	10
FCAID-340024	BFP-MAU-1	D20 - Plumbing	9	\$400	10
FCAID-340022	BFP-GWH-1	D20 - Plumbing	9	\$400	10
FCAID-340135	P-1 VFD	D50 - Electrical	10	\$5,630	9
FCAID-340025	Bypass Feeder-HWS	D30 - HVAC	9	\$750	9
FCAID-340136	P-2 VFD	D50 - Electrical	10	\$5,630	9