

# POUDRE SCHOOL DISTRICT

# IRISH ELEMENTARY SCHOOL

## FACILITY CONDITION ASSESSMENT

FORT COLLINS, CO

OCTOBER 2023



Together, Building a Thriving Planet

# Table of Contents

---

<b>KEY CONTACT INFORMATION.....</b>	<b>2</b>
<b>EXECUTIVE SUMMARY.....</b>	<b>3</b>
<b>SCOPE AND APPROACH.....</b>	<b>7</b>
Scope of work.....	8
Ratings, Methods and Scoring.....	9
Cost Estimating.....	12
<b>CONDITION ASSESSMENT.....</b>	<b>14</b>
Systems Description - Irish ES.....	15
Priorities.....	16
3-, 5-, 10-Year Plans.....	19
<b>APPENDICES .....</b>	<b>24</b>
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](mailto:devinb@mckinstry.com)

Roger Noonan  
Senior Facility Assessment Consultant  
970.531.1527  
[rogern@mckinstry.com](mailto:rogern@mckinstry.com)

Josh Phillips  
Facility Assessment Consultant  
719.480.1372  
[joshph@mckinstry.com](mailto:joshph@mckinstry.com)

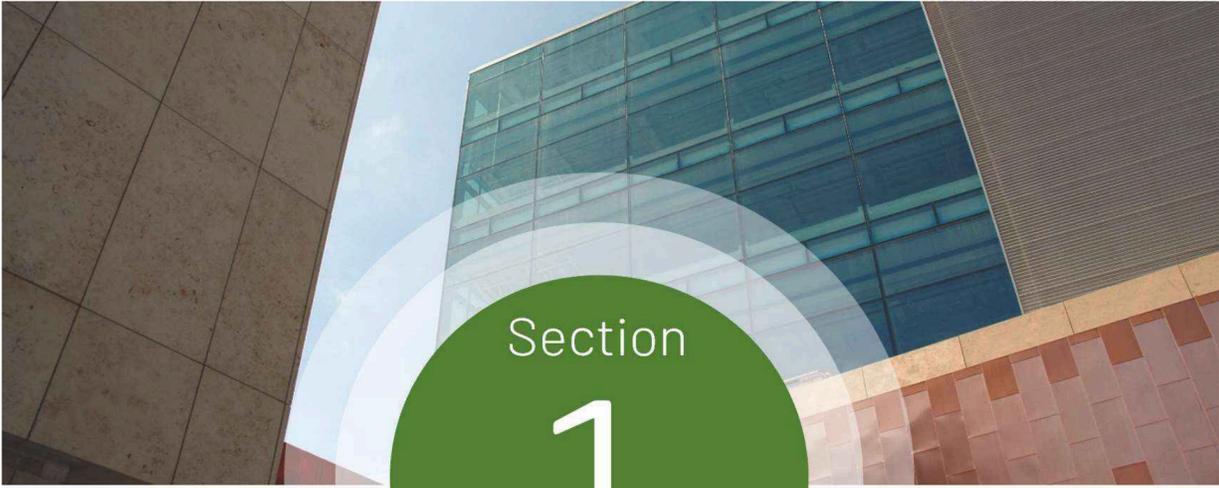
Tracey Cousins  
Strategic Account Manager  
720.445.7608  
[traceyc@mckinstry.com](mailto:traceyc@mckinstry.com)

Jaime Villarino-Eilenberger  
Project Manager - Technical Services  
949.933.7996  
[jaimev@mckinstry.com](mailto:jaimev@mckinstry.com)

### Poudre School District Contacts

Trudy Trimbath  
Energy and Sustainability Manager  
970.490.3502  
[ttrimbath@psdschools.org](mailto:ttrimbath@psdschools.org)

Jessie Ericson  
Administrative Assistant - Operations  
970.490.3080  
[jericson@psdschools.org](mailto:jericson@psdschools.org)



# Executive Summary

# Executive Summary

---

## Project Goals

The contents of this report present the results of the Facility Condition Assessment (FCA) performed at Irish ES within the Poudre School District (PSD) on May 12, 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
IRISH ES	52,291	1968
<b>TOTAL</b>	<b>52,291</b>	

## Facility Summary

### Irish ES

Irish ES is located at 515 Irish Dr., Fort Collins, CO 80521. This 52,291 SF facility consists of one level and was initially constructed in 1968. The equity index for this school is 2.89.



*Irish ES*

# Executive Summary

---

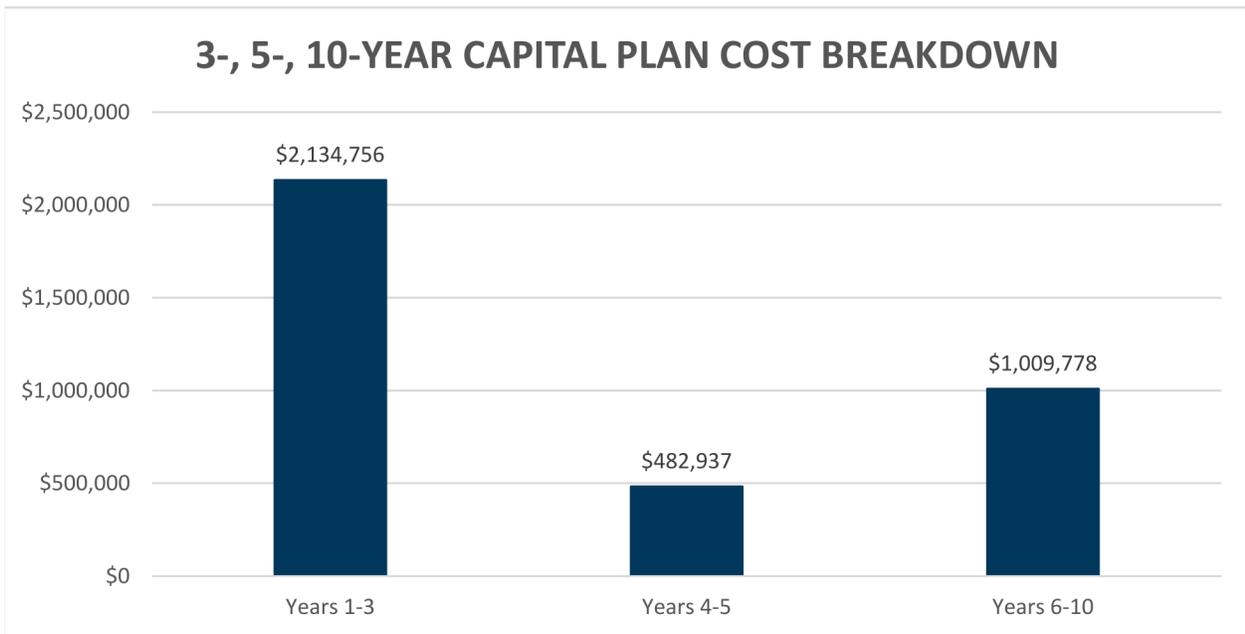
## Assessment Summary

This section summarizes the building systems at the facility and describes the general condition observed based on the assessment performed on May 12, 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.



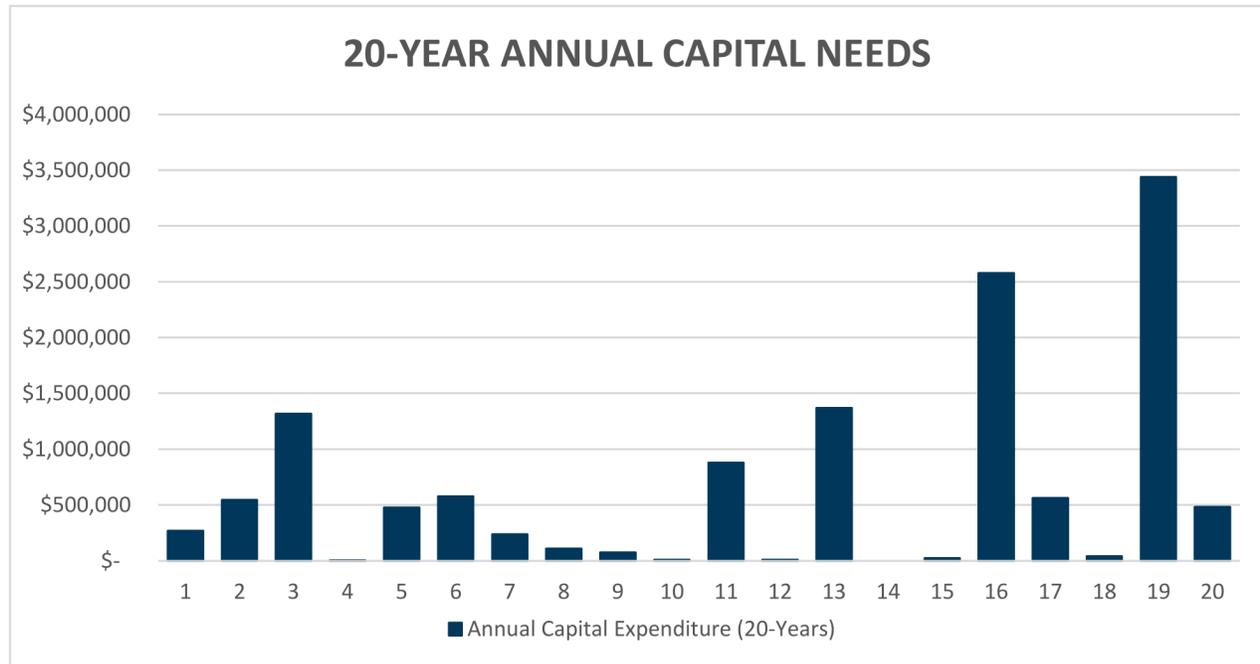
**3-, 5-, 10-Year Capital Plan Cost Breakdown**

# 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	\$193,799	\$0	\$350,694	\$257,493
B30 - Roofing	\$30,374	\$112,863	\$0	\$466,047
C10 - Int. Construction	\$524,085	\$0	\$14,144	\$3,390,832
C20 - Stairs	\$0	\$0	\$0	\$0
C30 - Interior Finishes	\$782,562	\$53,895	\$1,523,837	\$52,248
D10 - Conveying	\$0	\$0	\$0	\$0
D20 - Plumbing	\$28,854	\$0	\$61,357	\$8,818
D30 - HVAC	\$693,428	\$111,638	\$238,585	\$1,671,861
D40 - Fire Suppression	\$0	\$0	\$0	\$0
D50 - Electrical	\$352,532	\$731,383	\$80,044	\$1,260,744
E10 - Equipment	\$12,060	\$0	\$16,208	\$0
<b>Total:</b>	<b>\$1,086,874</b>	<b>\$843,021</b>	<b>\$396,194</b>	<b>\$2,941,423</b>

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 Unifomat 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		

\*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, RSMMeans, 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 Irish ES is 2.89.

Sample Calculation:

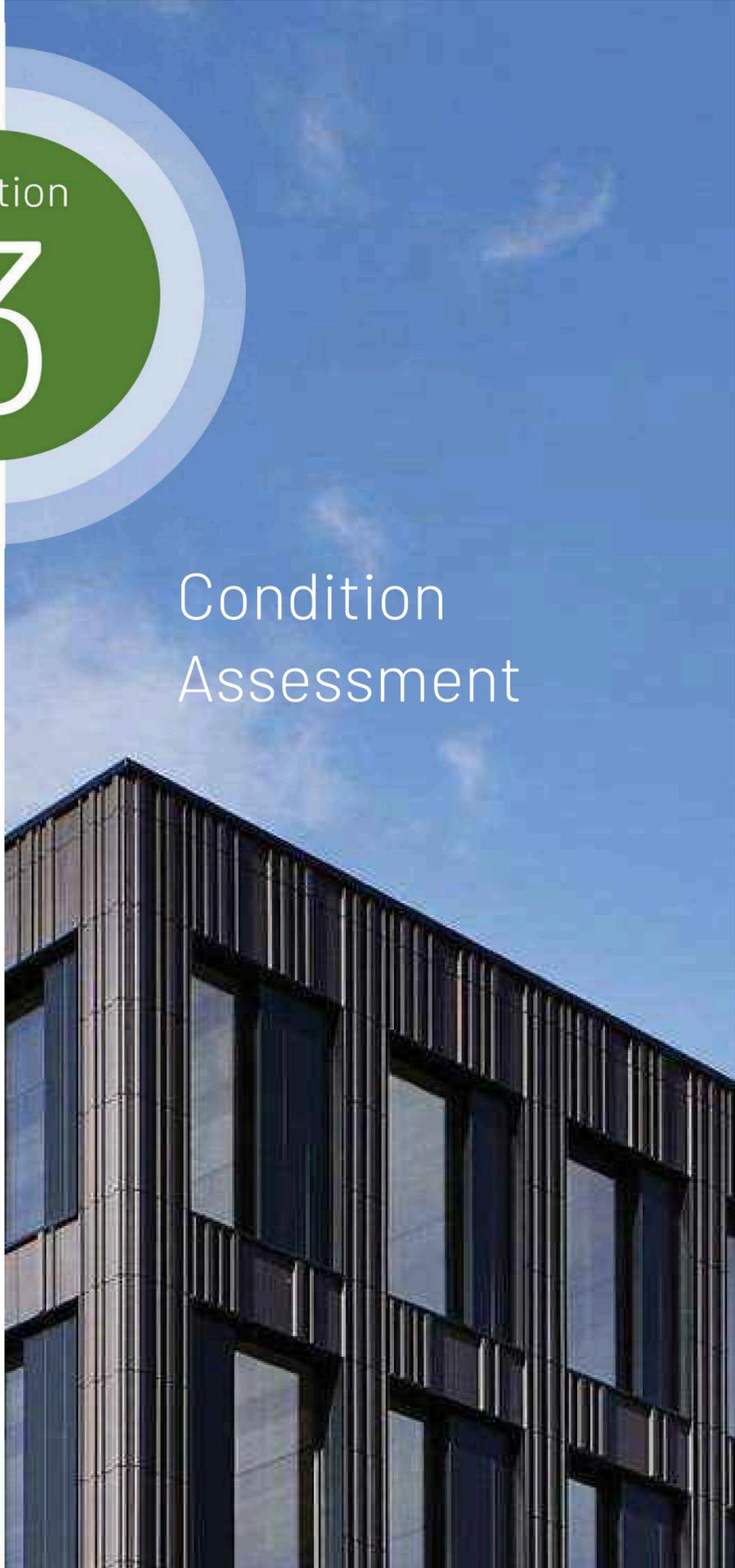
School Name	School Population K-12 Total	F/R	ELL	SPED	McKinney-Vento	Total of Previous Columns	Equity Index Number = school average / district average
Sample	381	15.20%	0.00%	8.40%	0.00%	0.24	0.24/0.48 = 0.49
<b>Grand PSD Total - Oct 2022 Count</b>	<b>26,163</b>	<b>29.5%</b>	<b>5.8%</b>	<b>9.5%</b>	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

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 Irish 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 1968. Subsequent additions to the school were completed in 1970, 1989, and 2006. All sections of the school are primarily of brick and CMU construction. Most doors and windows have been updated, [REDACTED] [REDACTED] Two modular buildings were constructed in 2014. The West Central exterior was observed to have significant foundational concrete slab spalling. Recommend repair to this 25' section to prevent further water/weather damage.

### Roofing

Rolled asphalt roofing dating to 2006 is present on all building sections, and a synthetic coating was added to approximately 80% of the existing roof in 2018. [REDACTED]

### Interior Construction and Finishes

Interior walls are primarily of brick and CMU and vary in age. Many of the interior finish components were updated in 2014 but some original finishes remain. There exists original 1968 acoustical tile ceiling in the gym (not thought to be asbestos), 2004 carpeting, and a small section of 1994 VCT tile flooring.

### Conveyance

The building is comprised of a single story and therefore does not require an elevator.

### Electrical and Lighting

The building includes both 120/208V and 277/480V service. Electrical assets, including panelboards, transformers, and switchboards vary in age. [REDACTED] Emergency back-up lighting and fluorescent interior lighting were updated 2003-2014. Most of the school was upgraded to LED fixtures in 2019. Exterior LED wall packs were replaced in 2014. The security and fire alarm system were replaced in 2014. The interior main switchboard and four panelboards date to 1968 [REDACTED]

### HVAC Systems

HVAC assets include a 2014-built cooling tower with an associated heat exchanger, (11) RTUs, (8) VAVs with HW Reheat, (9) 1992-built Exhaust Fans, and two Condensing Units. The VAVs were replaced in 2014. Of the total eleven RTUs, five were replaced in 2014 but two (RTU-8 and RTU-9) date to 1989 and four (RTUs 2,3,4,5,) date to 1992. Most EFs are expected to require replacement within 2 years. The Heating System is comprised of two 1993-built boilers with 5 years of remaining life and two HWP's built in 2019. The BAS was replaced in 2016 and is in good condition.

### Plumbing

Plumbing assets include two BFPs, two DHW circulation pumps, and two gas-fired water heaters. G [REDACTED] [REDACTED] GWH-2 and DHWCP-2 were replaced in 2018-2019 and are in good condition.

### Fire Suppression

The fire alarm system was replaced in 2014 and is consistent with current fire code requirements. Anticipate replacement of the fire alarm system within 6 years.

### Equipment

The Walk-In Freezer was updated in 2014, and the two condensing units date to 2002. However, the Walk-In Cooler is original 1968 construction and is 35 years past expected life. Expect to replace the Walk-In Cooler within the year.

# 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.

#### *Irish ES*

#### **Slab Foundation Repair**

Out of scope item (Foundation). The West Central 1989 exterior was observed to have [REDACTED] concrete slab spalling. Recommend immediate repair to this 25' section to prevent further water/weather damage.



The following assets are included within this measure:

FCAID-240001

<b>Priority Level:</b>	1
<b>Estimated Cost:</b>	TBD
<b>Remaining Life:</b>	1 Year

# Condition Assessment

## Replace 1968 Switchboard & Panelboards

The following assets are included within this measure:

FCAID-240143, FCAID-240144, FCAID-240141, FCAID-240134, FCAID-240135, FCAID-240139



**Priority Level:** 1  
**Estimated Cost:** \$131,820  
**Remaining Life:** 1 Year

## Replace Back-Up Generator

Run Hours are fairly low at 221.1, but the overall condition is poor. The associated ATS was replaced in 2014 and does not require replacement.

The following assets are included within this measure:

FCAID-240071



**Priority Level:** 1  
**Estimated Cost:** \$51,270  
**Remaining Life:** 2 Years

# Condition Assessment

## Replace (6) Rooftop Units

Of the total eleven RTUs, five were replaced in 2014 but two (RTU-8 and RTU-9) date to 1989 and four (RTUs 2,3,4,5,) date to 1992.



The following assets are included within this measure:

FCAID-240112, FCAID-240113, FCAID-240106 through FCAID-240109



**Priority Level:** 2  
**Estimated Cost:** \$253,480  
**Remaining Life:** 1-2 Years

## Replace Walk-In Cooler

The Walk-In Cooler is original 1968 construction and is 35 years past expected life. Expect to replace the Walk-In Cooler within the year.



The following assets are included within this measure:

FCAID-240155



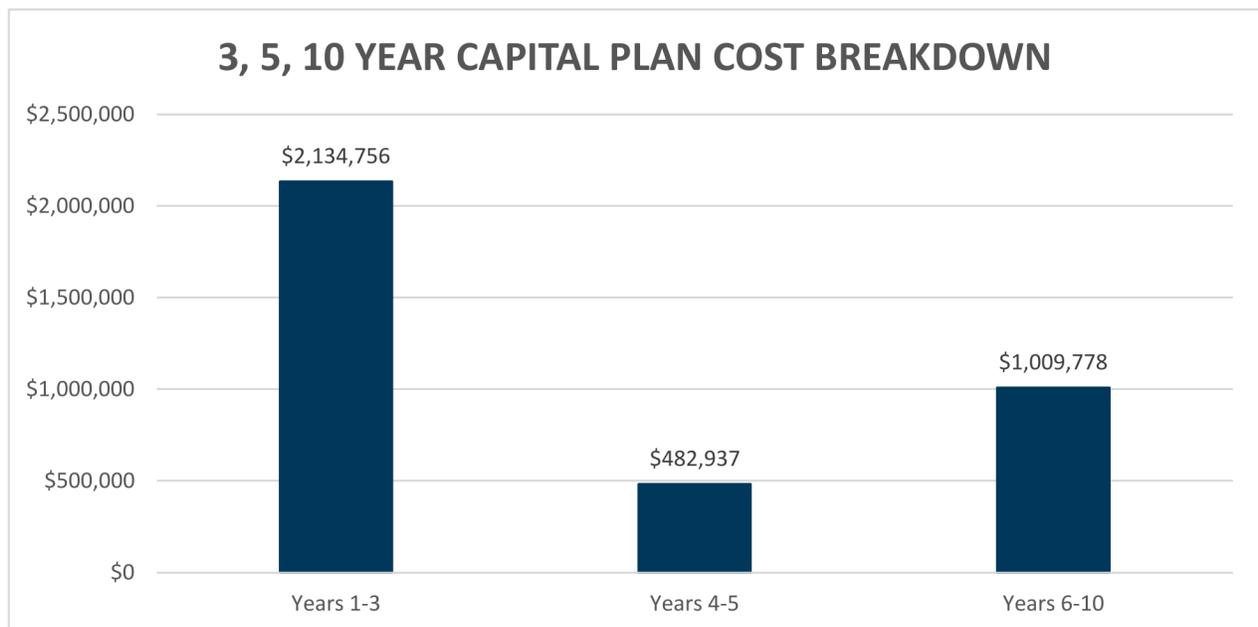
**Priority Level:** 2  
**Estimated Cost:** \$12,060  
**Remaining Life:** 1 Year

# 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.

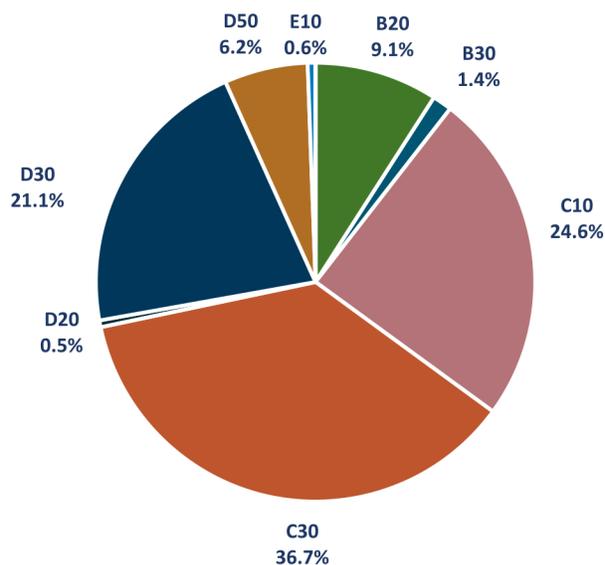
REPLACEMENT PERIOD	ASSET QUANTITY	CUMULATIVE REPLACEMENT COST
3-Year Plan	49	\$2,134,756
5-Year Plan	10	\$482,937
10-Year Plan	19	\$1,009,778
<b>Total</b>	<b>78</b>	<b>\$3,627,471</b>

# 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 \$2,134,756. The specific assets that will reach end of life in this period are listed in Appendix A.

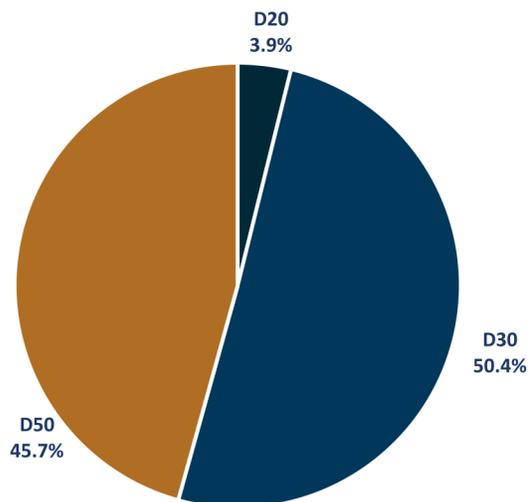
SUBSYSTEM	Years 1-3	Percent
A10 - Foundations	\$0	0%
B10 - Superstructure	\$0	0%
B20 - Exterior Enclosure	\$193,799	9%
B30 - Roofing	\$30,374	1%
C10 - Int. Construction	\$524,085	25%
C20 - Stairs	\$0	0%
C30 - Interior Finishes	\$782,562	37%
D10 - Conveying	\$0	0%
D20 - Plumbing	\$10,238	<1%
D30 - HVAC	\$449,819	21%
D40 - Fire Protection	\$0	0%
D50 - Electrical	\$131,820	6%
E10 - Equipment	\$12,060	1%
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 \$482,937. 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	\$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	\$18,616	4%
D30 - HVAC	\$243,608	50%
D40 - Fire Protection	\$0	0%
D50 - Electrical	\$220,712	46%
E10 - Equipment	\$0	0%
G20 - Site Improvements	\$0	0%
G40 - Site Electrical	\$0	0%

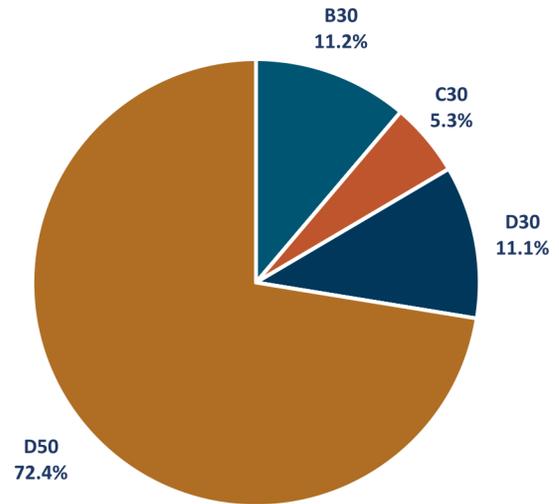


# Condition Assessment

## 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 \$1,009,778. 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	\$112,863	11%
C10 - Int. Construction	\$0	0%
C20 - Stairs	\$0	0%
C30 - Interior Finishes	\$53,895	5%
D10 - Conveying	\$0	0%
D20 - Plumbing	\$0	0%
D30 - HVAC	\$111,638	11%
D40 - Fire Protection	\$0	0%
D50 - Electrical	\$731,383	72%
E10 - Equipment	\$0	0%
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:  $\leq 12$  = Green, 12.1-23.9 = Yellow,  $\geq 24$  = 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.



# Condition Assessment

## PRIORITY SCORE SUMMARY - IRISH ES

	<b>IRISH ES</b>
	BUILDING TYPE: Elementary School
	YEAR BUILT: 1968
	GROSS AREA (SF): 52,291
	DATE ASSESSED: May 12, 2023
PRIORITY SCORE: 15.0	

SUBSYSTEM:	DESCRIPTION	PRIORITY SCORE
B20 - Ext. Enclosure	The original building was constructed in 1968. Subsequent additions to the school were completed in 1970, 1989, and 2006. All sections of the school are primarily of brick and CMU construction. Most doors and windows have been updated, [REDACTED]. Two modular buildings were constructed in 2014. The West Central exterior was observed to have [REDACTED] foundational concrete slab spalling. Recommend repair to this 25' section to prevent further water/weather damage.	12.4
B30 - Roofing	Rolled asphalt roofing dating to 2006 is present on all building sections, and a synthetic coating was added to approximately 80% of the existing roof in 2018. [REDACTED]	14.4
C10 - Int. Construction	Interior walls are primarily of brick and CMU and vary in age. Many of the interior finish components were updated in 2014 but some original finishes remain. There exists original 1968 acoustical tile ceiling in the gym (not thought to be asbestos), 2004 carpeting, and a small section of 1994 VCT tile flooring.	12.9
C30 - Interior Finishes		15.3
D20 - Plumbing	Plumbing assets include two BFPs, two DHW circulation pumps, and two gas-fired water heaters. [REDACTED] GWH-2 and DHWCP-2 were replaced in 2018-2019 and are in good condition.	11.3
D30 - HVAC	HVAC assets include a 2014-built cooling tower with an associated heat exchanger, (11) RTUs, (8) VAVs with HW Reheat, (9) 1992-built Exhaust Fans, and two Condensing Units. The VAVs were replaced in 2014. Of the total eleven RTUs, five were replaced in 2014 but two (RTU-8 and RTU-9) date to 1989 and four (RTUs 2,3,4,5,) date to 1992. Most EFs are expected to require replacement within 2 years. The Heating System is comprised of two 1993-built boilers with 5 years of remaining life and two HWP's built in 2019. The BAS was replaced in 2016 and is in good condition.	16.0
D40 - Fire Suppression	The fire alarm system was replaced in 2014 and is consistent with current fire code requirements. Anticipate replacement of the fire alarm system within 6 years.	N/A
D50 - Electrical	The building includes both 120/208V and 277/480V service. Electrical assets, including panelboards, transformers, and switchboards vary in age. [REDACTED]. Emergency back-up lighting and fluorescent interior lighting were updated 2003-2014. Most of the school was upgraded to LED fixtures in 2019. Exterior LED wall packs were replaced in 2015. The security and fire alarm system were replaced in 2014. [REDACTED]	19.9
E10 - Equipment	The Walk-In Freezer was updated in 2014, and the two condensing units date to 2002. However, the Walk-In Cooler is original 1968 construction and is 35 years past expected life. Expect to replace the Walk-In Cooler within the year.	16.0

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.

### IRISH ES

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING	REPLACEMENT COST	PRIORITY SCORE
FCAID-240109	RTU-5	D30 - HVAC	1	\$47,000	22
FCAID-240113	RTU-9	D30 - HVAC	1	\$32,740	21
FCAID-240108	RTU-4	D30 - HVAC	2	\$47,000	21
FCAID-240144	Main Switchboard Section 2 of 2	D50 - Electrical	1	\$40,180	21
FCAID-240112	RTU-8	D30 - HVAC	1	\$32,740	21
FCAID-240106	RTU-2	D30 - HVAC	2	\$47,000	21
FCAID-240143	Main Switchboard Section 1 of 2	D50 - Electrical	1	\$40,180	21
FCAID-240107	RTU-3	D30 - HVAC	2	\$47,000	21
FCAID-240071	Back-Up Generator	D30 - HVAC	2	\$51,270	19
FCAID-240155	Walk-In Cooler	E10 - Equipment	1	\$12,060	19
FCAID-240011	Exterior: 67 Metal Windows	B20 - Exterior Enclosu	2	\$140,400	18
FCAID-240141	Main Manual Disconnect	D50 - Electrical	1	\$40,180	18
FCAID-240023	Roofing: Skylights Type 2	B30 - Roofing	1	\$5,930	17
FCAID-240012	Exterior: 70 Metal Windows	B20 - Exterior Enclosu	2	\$23,400	17
FCAID-240051	Interior Flooring Finishes: 14 Carpet	C30 - Interior Finishes	3	\$691,690	17
FCAID-240134	Panel K	D50 - Electrical	1	\$3,270	17
FCAID-240135	Panel L	D50 - Electrical	1	\$3,270	17
FCAID-240001	Exterior: Concrete Slab Foundation Damag	B20 - Exterior Enclosu	1	\$5,000	17
FCAID-240139	Panel PD	D50 - Electrical	1	\$4,740	17
FCAID-240089	EF-7	D30 - HVAC	2	\$12,980	16
FCAID-240038	Interior Construction: 67 Metal Windows	C10 - Interior Construc	3	\$304,200	16
FCAID-240090	EF-8	D30 - HVAC	2	\$8,190	16
FCAID-240085	EF-3	D30 - HVAC	2	\$6,710	16
FCAID-240082	EF-11	D30 - HVAC	2	\$6,710	16
FCAID-240086	EF-4	D30 - HVAC	2	\$6,710	16
FCAID-240077	CU-1-Walk-in Cooler	D30 - HVAC	3	\$10,050	16

FCAID-240013	Exterior: 89 Metal Windows	B20 - Exterior Enclosu	2	\$19,500	16
FCAID-240084	EF-2	D30 - HVAC	2	\$6,710	16
FCAID-240087	EF-5	D30 - HVAC	2	\$6,710	16
FCAID-240092	RH-1	D30 - HVAC	2	\$11,230	16
FCAID-240078	CU-2-Walk-in Freezer	D30 - HVAC	3	\$15,080	16
FCAID-240093	RH-2	D30 - HVAC	2	\$11,230	16
FCAID-240094	RH-3	D30 - HVAC	2	\$11,230	16
FCAID-240088	EF-6	D30 - HVAC	2	\$6,710	16
FCAID-240081	EF-1	D30 - HVAC	2	\$6,710	16
FCAID-240050	Interior Flooring Finishes: 04 Carpet	C30 - Interior Finishes	2	\$7,460	15
FCAID-240049	Interior Ceiling Finishes: Ceiling Tile	C30 - Interior Finishes	2	\$27,300	15
FCAID-240056	Interior Flooring Finishes: 94 VCT	C30 - Interior Finishes	2	\$2,210	14
FCAID-240026	Interior Construction: 67 Drywall	C10 - Interior Constr	3	\$101,400	14
FCAID-240022	Roofing: Skylights Type 1	B30 - Roofing	3	\$2,960	14
FCAID-240021	Roof Hatch	B30 - Roofing	1	\$3,120	14
FCAID-240063	GWH-1	D20 - Plumbing	3	\$9,650	14
FCAID-240046	Interior Ceiling Finishes: 06 ACT	C30 - Interior Finishes	2	\$3,410	14
FCAID-240048	Interior Ceiling Finishes: 94 ACT	C30 - Interior Finishes	2	\$4,270	14
FCAID-240070	AS-2	D30 - HVAC	2	\$7,530	13
FCAID-240039	Interior Construction: 70 Metal Windows	C10 - Interior Constr	3	\$78,000	13
FCAID-240018	Roofing: Metal Flashing	B30 - Roofing	3	\$17,140	12
FCAID-240052	Interior Ceiling Finishes: Drywall Ceiling	C30 - Interior Finishes	3	\$2,600	12
FCAID-240027	Interior Construction: 70 Drywall	C10 - Interior Constr	3	\$10,400	12

# 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.

### IRISH ES

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE	REPLACEMENT COST	PRIORITY SCORE
FCAID-240130	Interior Lighting: Fluorescent	D50 - Electrical	5	\$196,100	23
FCAID-240098	Boiler-2	D30 - HVAC	5	\$93,980	19
FCAID-240097	Boiler-1	D30 - HVAC	5	\$93,980	19
FCAID-240064	GWH-2	D20 - Plumbing	5	\$10,610	13
FCAID-240114	GUH-1	D30 - HVAC	4	\$4,020	13
FCAID-240067	D-1 Chemical Treatment System	D20 - Plumbing	5	\$5,530	12
FCAID-240068	AC-1	D30 - HVAC	5	\$3,820	12
FCAID-240057	BFP-Boiler Makeup	D20 - Plumbing	5	\$400	11
FCAID-240075	AD-1	D30 - HVAC	5	\$2,510	11
FCAID-240096	ET-2	D30 - HVAC	5	\$18,250	10

# 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.

### IRISH ES

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE	REPLACEMENT COST	PRIORITY SCORE
FCAID-240129	Fire Alarm System	D50 - Electrical	6	\$418,330	22
FCAID-240105	RTU-11	D30 - HVAC	6	\$24,290	17
FCAID-240126	Emergency Back-Up Lighting	D50 - Electrical	7	\$199,230	16
FCAID-240020	Roofing: Rolled Asphalt	B30 - Roofing	8	\$88,760	13
FCAID-240115	UH-1	D30 - HVAC	6	\$3,520	12
FCAID-240024	Roof Ladder	B30 - Roofing	9	\$2,920	12
FCAID-240054	Interior Flooring Finishes: 14 VCT	C30 - Interior Finishes	6	\$33,210	12
FCAID-240116	VAV-01-01	D30 - HVAC	9	\$5,640	11
FCAID-240122	VAV-01-07	D30 - HVAC	9	\$7,270	11
FCAID-240121	VAV-01-06	D30 - HVAC	9	\$8,900	11
FCAID-240123	VAV-01-08	D30 - HVAC	9	\$2,680	11
FCAID-240117	VAV-01-02	D30 - HVAC	9	\$8,900	11
FCAID-240055	Interior Flooring Finishes: 14 Vinyl sheet fl	C30 - Interior Finishes	6	\$13,280	11
FCAID-240137	Panel MM	D50 - Electrical	10	\$3,270	11
FCAID-240132	Panel EE	D50 - Electrical	10	\$3,270	11
FCAID-240119	VAV-01-04	D30 - HVAC	9	\$8,900	11
FCAID-240120	VAV-01-05	D30 - HVAC	9	\$5,640	11
FCAID-240118	VAV-01-03	D30 - HVAC	9	\$8,900	11
FCAID-240069	AS-1	D30 - HVAC	6	\$6,390	10