



# **LAUREL RIDGE ELEMENTARY SCHOOL**

## **RENOVATION**

### **DEKALB COUNTY SCHOOL DISTRICT PRELIMINARY REPORT**

**OCTOBER 29, 2021**



COOPER CARRY

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# SECTION 1

## EXECUTIVE SUMMARY



We have by all reasonable means reviewed the Laurel Ridge Elementary School Building Assessment Report, As-Built drawings and conducted a site walk through to put together the report here in provided. We believe that the information provided will assist DeKalb County School District (DCSD) in making order of magnitude decisions for the Laurel Ridge Elementary School (LRES).

### Existing Building

The existing building is a concrete structure with CMU partitions throughout. The flooring consists of terrazo, vct, and quarry tile. Ceilings are damaged from mechanical condensation and roof drains. There are multiple ADA and egress concerns on both the interior and exterior. Items include insufficient handrails, lack of guardrails, and improper restroom clearances.

There are a few instances of newer storefront with the rest being older single pane windows. Additionally, the windows replaced are of varying types and layout that differ from the original windows. Previous mortar patches are evident on the exterior walls.

### Scope Recommended by Architect

The required scope of work includes the HVAC replacement. Since the construction will impact the ceiling level, we recommend a one to one lighting replacement of the existing fluorescent fixtures for LED fixtures. Complete replacement of ceiling, installation of new fire sprinkler system, and new roof. It has been our experience that, because the above scope overlaps, it is best to conduct this scope as one package. The architect also recommends a security vestibule since it is keeping with renovation scope upgrade of DCSD and for improved school security. The order of magnitude cost of the proposed scope is approximately \$6.4M. To facilitate the decision making process, we have included an additional scope cost estimate menu, similar to an a la carte menu in a restaurant, that could be added to the project scope/cost according to DeKalb County School District priorities.

We are very sensitive to the need for DCSD to be good stewards of the money invested in each school. We understand the budget constraints and the need to stay within budget. We as professionals believe that we bring all the facts to you, which will allow you as the Owner to make informed decisions. We see our next step as walking through each item that has been noted in this report and together working through what should be included in the scope of work for Laurel Ridge Elementary School.

### Schedule

Cooper Carry will be able to determine the project schedule upon the receipt of an approved scope.



# DESIGN TEAM & COST

## DESIGN TEAM

School Address:	Laurel Ridge Elementary School 1215 Balsam Dr Decatur, GA 30033
Managing Principal	Robert A. Just/Cooper Carry
Project Manager	Sophia Tarkhan/Cooper Carry
Project Architect	Evan Saadat/Cooper Carry
Mechanical Electrical	Scott Buchberger/Johnson, Spellman & Associates Jeff Williams/Bolden-Williams Associates, Inc.
Plumbing	Scott Buchberger/Johnson, Spellman & Associates
Cost Estimating:	Dan Ergle/ADE Construction Consultants

COST	Stated Cost Limitation (SCL)	\$5,584,500
	RFP Scope	\$2,397,756
	Scope Recommended by Architect	\$6,469,885

Through a third party cost estimator, we have established estimated costs for the base scope of work and for additional items that may be required. The estimate will enable DeKalb County Schools to compare differences and prioritize areas of work.

# SCHEDULE

## SCHEDULE TBD UPON THE RECEIPT OF APPROVED SCOPE

### Construction / Phasing

The school is currently occupied and it is the intent of DCSD that the work will be performed over the summer. Phasing will be determined after the full scope of work is resolved. If this project is to be conducted as a Summer renovation, it may need to be performed over 2 Summers. Summer 2023 & Summer 2024. In times past, DCSD has been open to providing portable classrooms as swing space, while the contractor performs their work. A phase continuous construction process would attract more general contractors therefore increasing the quality of contractors that bid the work. This method would allow work to start as soon as documents are completed. The market is currently unpredictable and quality contractors may very well steer away from a project that would require them to hold their cost for one year, considering the limited overall project work.



# INFORMATION TO BE PROVIDED BY THE OWNER

## INFORMATION TO BE PROVIDED BY OWNER

- Confirmed Project Scope
- Preliminary Report Approval
- Land Survey
- 2009 Geotechnical Report
- Environmental Report
- GDOE Local Facilities Plan/ Funding Application
- DCSD Guide Specifications
- Flow Test
- Roof Warranty Information



COOPER CARRY



# SECTION 2

## REVIEW OF OWNER DOCUMENTATION

### A. Description of the scope:

We were asked by DCSD to provide a new HVAC system for the entire building.

Proposed approach:

- Document existing mechanical equipment throughout the school
- We anticipate penetrations above the ceilings in the corridors walls. A unit cost and allowance will be requested of the contractors for this scope.
- We anticipate complete removal and replacement of acoustical ceiling tile.

### B. Review of the Facility Assessment Report

The School Assessment report from September 24, 2021, describes the existing building and recommends repair work.

The following repair / replacement recommendations are listed in the Assessment:

- Fire alarm horn/strobe replacement
- Wall pack lighting replacement
- Built-up roofing replacement
- Gutter joint repair
- Aluminum window replacement
- Metal exterior door replacement
- Wood exterior door replacement
- Electric unit heater replacement
- Distribution panel replacement
- Exterior dry tape transformer replacement
- Exterior liquid filled transformer replacement
- Panelboard replacement

The current budget for the project does not include all of the work described in the facilities assessment report. It is our understanding that some of these repairs are being completed through different projects. Items can be added to the scope of work if requested by DCSD or where integral to the conversion project.

Reference Section 4 for costs.



# REVIEW OF OWNER DOCUMENTATION

## C. Review of As-built Documentation / Building Space Survey

Laurel Ridge Elementary was constructed in 1966 as a single story school building constructed primarily of brick, structural concrete and CMU. The current building size is approximately 63,183 square feet. The roofs are flat with internal roof drains and overflow drains leading to downspouts on the exterior. Accessory spaces include a large cafetorium and media center for the students.

The gymnasium building has a pitched standing seam metal roof and is accessible via a covered walkway from the main building. It includes a practice sized gymnasium with gang restrooms and storage space.

The site is 4.57 acres with multiple playground areas for the students and what looks like, a small petting zoo.

### Building Timeline:

- 1959 - Construction of original classroom building and cafeteria
- 1981 - This renovation gave the school a new roof

DCSD has provided as-builts of the original drawings and additions for the structure. These drawings will be used to prepare the renovation drawings for the High School.

## D. Code Review:

The existing building was constructed in 1966 and met current building code at the time of it's construction. A code review relative to the scope of work will be performed in preparation for the renovation. The following items are noted as potential code issues, items may be added to this list as the design evolves and scope of work is established.

- ADA Compliance: The existing building is one level, though has a stage in the cafeteria which is outfitted with a wheelchair lift. According to school staff, the wheelchair lift is in working condition
- Egress: Door hardware does not meet egress requirements. Handrails to not extend proper distances and are not continuous throughout
- Site: Concrete ramps around the property may need handrails and guardrails.

## Permitting

Laurel Ridge Elementary School is located in DeKalb County. Due to the nature of the Pandemic, all permitting procedures and submissions are filed with the DeKalb County's Department of Planning and Sustainability electronically. The three (3) step permitting process will begin with uploading the completed Building Permit Application Form with all applicable drawings and documents included. Any payments or relevant fees are due upon application submission. DeKalb County will review the application with included documents and issue additional comments and or approval within 90-120 business days. Upon receipt of approval from DeKalb County, applicant's permit will be issued, and applicant may proceed with scheduling inspections. Any Projects dealing with health will need to be submitted as a separate document for permitting through DeKalb County.

## Applicable Codes

Building:	International Building Code (IBC), 2018 Edition with Georgia Amendments
Fire:	International Fire Code (IFC), 2018 Edition with Georgia Fire Marshal Amendments
Life Safety:	National Fire Protection Association (NFPA) 101 Life Safety Code, 2018 Edition
Mechanical:	International Mechanical Code, 2018 Edition with Georgia Amendments
Plumbing:	International Plumbing Code, 2018 Edition with Georgia Amendments
Electrical:	National Electrical Code, 2017 Edition
Gas:	International Fuel Gas Code, 2018 Edition with Georgia Amendments
Accessibility:	U.S. Department of Justice A.D.A. Standards for Accessible Design (ADA) - 2010 edition Chapter 120-3-3 Rules and Regulations for the State Minimum Fire Standards in Georgia
Energy:	International Energy Conservation Code (IECC), 2015 Edition with Supplements and Georgia Amendments





# SECTION 3

## REVIEW OF EXISTING BUILDING

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### A. ARCHITECTURAL

#### a1. Building Exterior

The existing building exterior is in fair condition.

- Windows were replaced in 2009 and are in good condition. No work is recommended at the existing windows
- Drawings show that roof was replaced in 2009. There is currently no roof access to the roof. A roof Hatch or ladder should be added to provide safe access to the roof. Building Engineer reported that the roof drains have to be cleaned often due to adjacent tree debris blocking the drains. In addition the roof drains in the courtyard across from the Media Center get blocked to the point that water ponds on the roof and eventually overflows into the exhaust fans on the roof. It is possible that the trees roots in the courtyard have compromised the storm lines.



# REVIEW OF EXISTING BUILDING

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## i. Exterior Walls

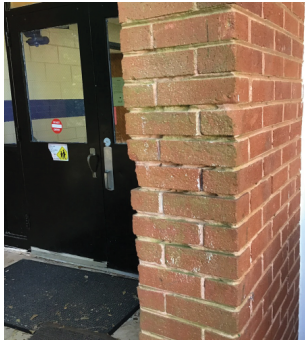
- Exterior brick has some defects typical of a building of its age. There are multiple locations where brick has been patched with excess mortar.
  - Multiple exterior columns have experienced damage over time, exposing rebar
  - Exposed wood in multiple locations where fascia is unfinished.
- 
- Proposed Repairs:
    - Consult with a structural engineer to repair columns.
    - Replace damaged portion of wall, patch cracks in brick masonry with matching brick.

# ARCHITECTURAL ASSESSMENT



## i. Exterior Walls (continued)

- Paint is peeling off columns and fascia.
- Proposed Repairs:
  - Prepare surfaces and repaint where paint is peeling



# REVIEW OF EXISTING BUILDING

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# ARCHITECTURAL ASSESSMENT



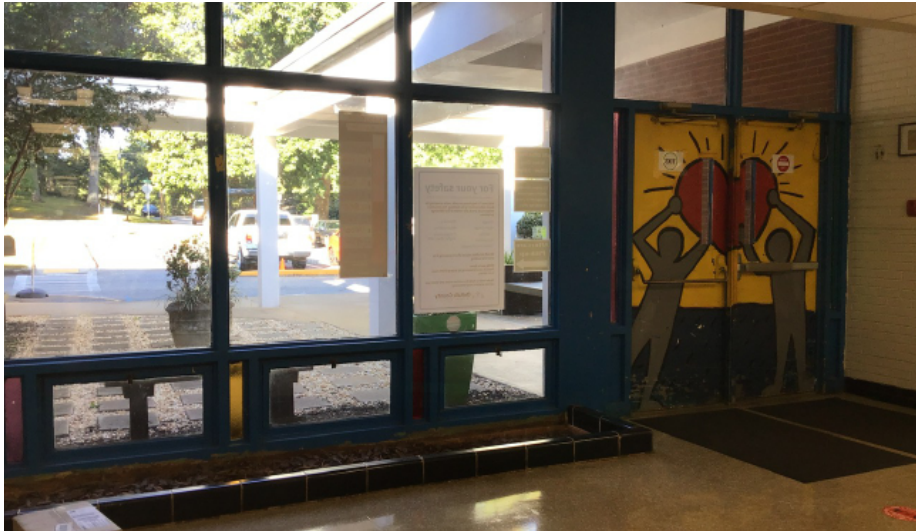
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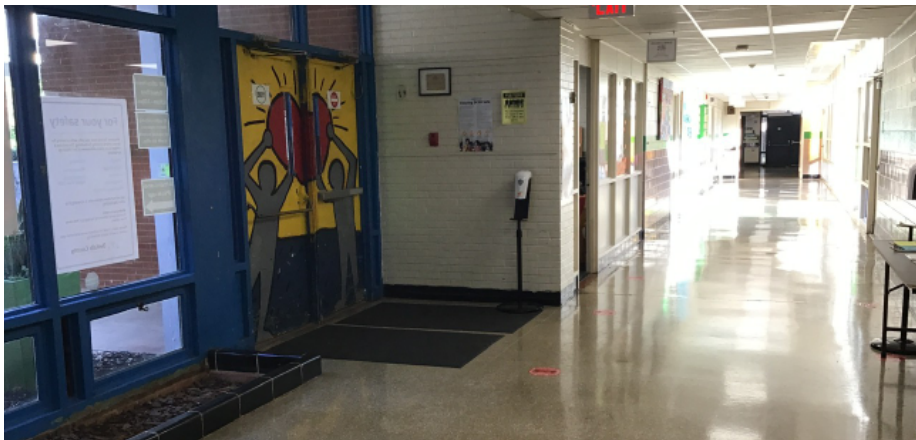
# REVIEW OF EXISTING BUILDING

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## ii. Interior

- Existing door hardware should be replaced to meet ADA requirements
- Water damage on ceiling tiles throughout building
- Flooring is terrazo, VCT, and quarry tile throughout. Floor finishes appear to be in fair condition.
- Light fixtures vary between fluorescent pendants and lay in fluorescent fixtures.



# ARCHITECTURAL ASSESSMENT



### iii. Kitchen Equipment

- The existing kitchen is in fair condition. According to the kitchen manager, all equipment is in working order. The kitchen contains equipment that is no longer used. This could result in a resizing of the vent hood.
- Proposed Repairs:
  - Reference mechanical assessment



# REVIEW OF EXISTING BUILDING

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## iv. Restroom and Drinking Fountains

- Drinking Fountains

- Existing water coolers appear to be in proper condition.

- Recommend bringing water coolers up to ADA Standard heights and clearances

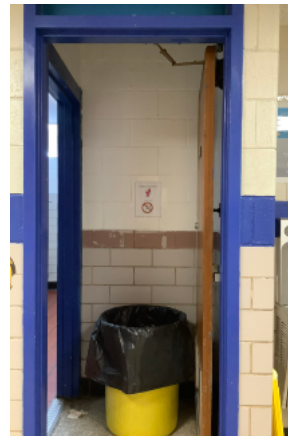
- Restrooms

- Toilet fixtures appear to be in proper operating condition.

- Restroom partitions and doors appear to be in fair condition

- Individual and gang restrooms have ADA concerns related to door swings and stall clearances.

- Floor finish for the restrooms is quarry tile throughout. Flooring is damaged in some locations.



# ARCHITECTURAL ASSESSMENT



# REVIEW OF EXISTING BUILDING

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## v. ADA Compliance & Building Accessibility

- There is currently no access to the roof. Recommend adding either an interior or exterior access point.
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- Door hardware does not meet ADA requirements in multiple locations. Round door knobs should be switched out for levers.
- Door clearances do not meet ADA requirements in multiple locations.
- Exterior concrete ramps may need handrails depending on slope of ramp.
- Light switches are currently mounted too high to meet accessibility requirements.
- Kitchen loading dock contains multiple life safety concerns; Handrails, guardrails, etc.



# ARCHITECTURAL ASSESSMENT



# REVIEW OF EXISTING BUILDING

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## vi. Mechanical Engineering Assessment

A. The proposed project will include the replacement of HVAC components for the existing Laurel Ridge Elementary School. The project site is located at 1215 Balsam Drive, Decatur, GA.

- HVAC:
  - The school is conditioned using cooling tower and boiler combination, which circulates chilled water/hot water to hallway plenum mounted water source heat pumps in most classrooms and corridors, and a few leftover unit ventilators for common spaces, as well as a number of roof top packaged units and packaged terminal air conditioners/heat pumps. Kitchen ventilation and makeup is achieved using the cooking equipment exhaust hood along with a conditioned air makeup system.
  
- Fire Suppression:
  - Currently, the school is not served by a fire protection system. A hydrant is located on the site property at the intersection of Balsam Drive and Shetland Drive.
- Security Entry:
  - Currently, the school lacks a security vestibule to meter persons entering the school.

B. The scope of work includes, but is not limited to the following:

- a. Replacement of HVAC components throughout the building. This includes classroom water source heat pumps, corridor recessed unit heaters, kitchen ventilation and makeup air equipment, boiler(s) and pumps, air distribution. Exhaust systems for toilet rooms will need to be redesigned.
- b. Kitchen Ventilation system may be redesigned with cooking equipment optimization. A full review of the cooking equipment use, including dishwashing machine, may be considered for redesigning the exhaust systems in the space. Currently, the kitchen is not conditioned. A sidewall, window mounted supply fan brings outdoor air into the kitchen space.

## MECHANICAL ENGINEER ASSESSMENT

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- c. Design and install a fire suppression system for the entire school. A fire hydrant directly in front of the building may provide an entry point for the sprinkler riser and installation of the riser in the mechanical room near this location. The fire line location would need to be confirmed and possible branch point installed near the southern portion of the site.
- d. Support the addition of a security vestibule. HVAC air distribution may need to be reworked if new walls create obstructions to current airflow patterns and spaces.
- e. If ADA requirements need to be addressed, supportive plumbing redesign may be necessary. Specifically, if toilet rooms need to meet ADA standards, adjustments to plumbing fixture locations will require plumbing design. Additionally, drinking fountains may be addressed.



# REVIEW OF EXISTING BUILDING

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## vii. Electrical Engineering Assessment

### A. General Electrical

- Power Distribution Systems
  - Existing electrical service is original to building and is in poor condition. Existing main panel labeling is unreadable, but estimated service is rated for 800-1000 Amps at 277/480 Volts, 3-Phase, 4-Wire.
  - Panelboards and transformers throughout building are original to building and in need of replacement.
  - Emergency generator does not exist for this school.
  - Emergency lighting is currently tapped ahead of main and is a code violation.
- Lighting
  - Existing lighting in corridors, media center, cafeteria and administration are older LED retrofit.
  - Existing lighting in all other areas is existing fluorescent.
- Fire Alarm
  - Fire alarm system does not meet current life safety codes and is in need of replacement.

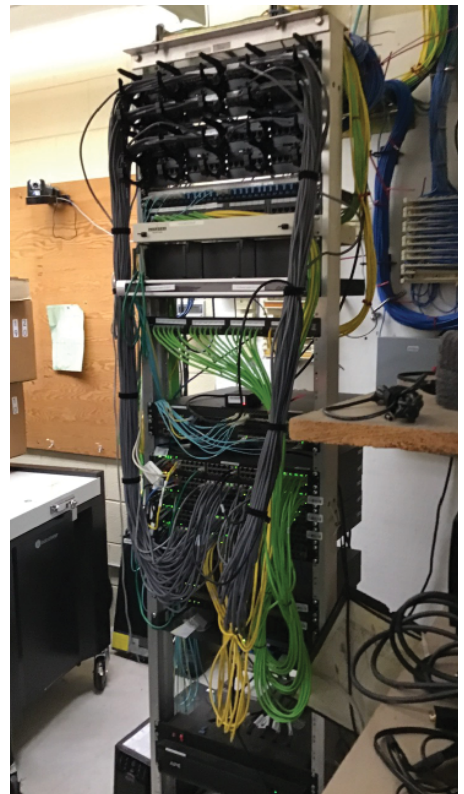
### B. Electrical Scope

- Power Distribution
  - Upgrade electrical service and provide new panels and circuiting for HVAC system replacement.
  - Provide new emergency generator and separate life safety and non-life safety systems.
- Lighting
  - Provide new LED lighting and controls throughout building to meet IECC. This includes new LED lighting in Gymnasium.



# ELECTRICAL ENGINEER ASSESSMENT

- Fire Alarm System
  - Provide new fire alarm system throughout building per DeKalb County design guidelines.





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# SECTION 4

## PRELIMINARY COST ESTIMATE

### A. Proposed Scope of work:

We have provided cost for the base scope of work for this project. A brief description of that scope is noted below:

#### Proposed Scope

- Replacement of HVAC components throughout the building
- Replacement of ceiling and ceiling grid

### B. Additional Scope Itemized.

Pricing has been provided for additional scope which arose from the review of the building assessment report as well as the site visit. Most of the items indicated as additional scope are to be provided at the Owners discretion, in consideration of the long term goals for the facility. The estimate has been provided “a la carte”, allowing the Owner to select scope separately. Each line item also shows the associated mark up providing clarity of how it would impact the total project cost.



**ORDER OF MAGNITUDE COST ESTIMATE**

REPORT SECTION	DESCRIPTION	QTY	UNIT	COST	TOTAL	TOTAL + GC, FEES, CONTINGENCY
						141.68%
<b>I PROPOSED SCOPE OF WORK PER DCSD</b>						
	Demo Existing HVAC & Install New HVAC throughout	57370	SF	23.50	\$ 1,348,195	\$ 1,910,077
	Demolish and Replace Ceiling and Ceiling Grid	57370	SF	6.00	\$ 344,220	\$ 487,679
	<b>SubTOTAL</b>				<b>\$ 1,692,415</b>	<b>\$ 2,397,756</b>
<b>TOTAL W/OUT MARKUPS</b>						<b>\$ 1,692,415</b>
	GENERAL CONDITIONS		7.0%		118,469	
	FEE		6.0%		108,653	
	BONDS, INSURANCES, AND FEES		3.0%		57,586	
	DESIGN CONTINGENCY (NOT CONSTRUCTION CONTINGENCY)		10.0%		197,712	
				<b>* TOTAL PROJECT COST</b>	<b>\$ 2,174,836</b>	
				<b>ESCALATION @ 5 % for 2 YRS</b>	<b>\$ 2,397,756</b>	
				<b>STATED COST LIMITATION</b>	<b>\$ 5,584,500</b>	
				<b>PROJECT COST (OVER)/UNDER</b>	<b>\$ 3,186,744</b>	
<p>* NOTE: PRICING IS AN 'ORDER OF MAGNITUDE' ANALYSIS BASED ON SITE AND BUILDING OBSERVATIONS, DISCUSSIONS, AND AVAILABLE PLANS.                      * DOES NOT INCLUDE HVAC REPLACEMENT IN GYMNASIUM                      * DOES NOT INCLUDE FF&amp;E.</p>						

**ORDER OF MAGNITUDE COST ESTIMATE**

REPORT SECTION	DESCRIPTION	QTY	UNIT	COST	TOTAL	TOTAL + GC, FEES, CONTINGENCY
						141.68%
<b>II ARCHITECTURAL RECOMMENDED SCOPE</b>						
<b>Security Vestibule</b>						
	GWB Ceiling (Specialty Ceiling)	1000	SF	8.50	\$ 8,500	\$ 12,043
	Porcelain Tile	500	SF	\$ 15.00	\$ 7,500	\$ 10,626
	Storefront Doors (Double Doors)	3	EA	2,750.00	\$ 8,250	\$ 11,688
	Bulletproof Glass	600	SF	75.00	\$ 45,000	\$ 63,754
	Aluminum Storefront	600	SF	50.00	\$ 30,000	\$ 42,503
	Low Voltage / Security at Vestibule	1	LS	25,000.00	\$ 25,000	\$ 35,419
	<b>Security Vestibule Sub-Total</b>					<b>\$ 176,0</b>
<b>Add Fire Sprinkler to Building</b>						
	Fire Sprinkler Room	50	SF	200.00	\$ 10,000	\$ 14,168
	Provide Sprinkler System to entire Bldg.	63183	SF	3.00	\$ 189,549	\$ 268,547
	Fire Line into Building	100	LF	80.00	\$ 8,000	\$ 11,334
	Demo/ Patch site improvements for Fire Line	1	LS	10,000.00	\$ 10,000	\$ 14,168
	Fire Sprinkler Pump	1	LS	75,000.00	\$ 75,000	\$ 106,257
	Upgrades to Fire Alarm to comply with new sprinkler system. Replace the existing fire alarm control panel in order to upgrade the existing system such that the additional SLC circuits can be added to the fire alarm system. Reconnect and interface existing devices, NACs, and fire alarm power supplies to new fire alarm control panel for a fully integrated system.	1	LS	7,500.00	\$ 7,500	\$ 10,626
	<b>Add Fire Sprinkler to Building Sub-Total</b>					<b>\$ 425,0</b>
	Bollards (Add at Loading Dock)	3	EA	850.00	\$ 2,550	\$ 3,613
	Downspout Replacement	225	LF	25.00	\$ 5,625	\$ 7,969
	New Fire Alarm System throughout building	63183	SF	4.50	\$ 284,324	\$ 402,820
	Replace Light Fixtures (Includes Demolition)	63183	SF	9.25	\$ 584,443	\$ 828,019
	Roof Replacement (Mod. Bit.)	57370	SF	\$ 17.50	\$ 1,003,975	\$ 1,422,398
	Roof replacement (Standing Seam)	5813	SF	\$ 17.50	\$ 101,728	\$ 144,124
	Roof Ladder	1	EA	\$ 2,500.00	\$ 2,500	\$ 3,542
	Patch holes above ceiling	57370	LS	\$ 2.25	\$ 129,083	\$ 182,880
	<b>SubTOTAL</b>				<b>\$ 2,874,245</b>	<b>\$ 4,072,133</b>



# PROPOSED SCOPE OF WORK

<b>III OPTIONAL ADDITIONAL SCOPE</b>						
Exterior Masonry Patching (Allowance)	1	LS	25,000.00	\$	25,000	\$ 35,419
Exterior Painting Allowance	1	LS	50,000.00	\$	50,000	\$ 70,838
Stainless Steel Handrail	100	LF	150.00	\$	15,000	\$ 21,251
Solid Core Interior Doors (Narrow Lite w/ Hardware)	100	EA	975.00	\$	97,500	\$ 138,135
Storefront Glazing (Includes removal and installation)	15000	SF	60.00	\$	900,000	\$ 1,275,089
Water Cooler w/ Bottle Filler (Single Fountain)	6	EA	\$ 3,000	\$	18,000	\$ 25,502
LVT	500	SF	6.50	\$	3,250	\$ 4,604
VCT	500	SF	4.50	\$	2,250	\$ 3,188
Guardrail (Galvanized Steel)	50	LF	\$ 125	\$	6,250	\$ 8,855
Gang Restroom Code Upgrades (1 restroom)	6	LS	\$ 85,000	\$	510,000	\$ 722,551
Roof Replacement (TPO)	57370	SF	\$ 12.00	\$	688,440	\$ 975,358
Handrail (Galvanized Steel)	150	LF	\$ 75	\$	11,250	\$ 15,939
<b>SubTOTAL</b>				\$	<b>2,326,940</b>	<b>\$ 3,296,730</b>
<b>TOTAL W/OUT MARKUPS</b>					<b>\$ 5,201,185</b>	
GENERAL CONDITIONS		7.0%			364,083	
FEE		6.0%			333,916	
BONDS, INSURANCES, AND FEES		3.0%			176,976	
DESIGN CONTINGENCY (NOT CONSTRUCTION CONTINGENCY)		10.0%			607,616	
					<b>* TOTAL PROJECT COST</b>	<b>\$ 6,683,776</b>
					<b>ESCALATION @ 5% for 2 Yr</b>	<b>\$ 7,368,863</b>
* NOTE: PRICING IS AN 'ORDER OF MAGNITUDE' ANALYSIS BASED ON SITE AND BUILDING OBSERVATIONS, DISCUSSIONS, AND AVAILABLE PLANS.						
* DOES NOT INCLUDE FF&E.						





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