15% Phase I Submittal SRCSD Test Kitchen/Office Renovation 21065



March 1, 2022

Mr. Joseph Harrell Assistant Superintendent for Administrative Services Santa Rosa County School District 6544 Firehouse Road Milton, FL 32570

Re: Support Services Building #7 – Test Kitchen and Office Renovation

Mr. Harrell,

We have attached here our 15% Phase I Schematic Drawing Set for the Boards Review and Approval. If you have any questions about these items, or you need any additional information, please contact me.

Sincerely, H. Miller Caldwell III, Bartner

Cc: Accounting F/C w/ attachment Attachments: 21066 15% Phase I Schematic Drawing Set 21066 SRCDS Test Kitchen Power Study 21066 Opinion of Probable Cost



## CALDWELL ASSOCIATES | ARCHITECTS, INC.

Opinion of Probable Cost						
Delivery Method:	Hard Bid Delivery Method			Mar. 1, 2022		
<b>Construction Cost Estimat</b>	e Based on Preliminary Concept Diss	cussions				
		Quantity	Unit	Unit Cost		TOTAL
Demolition and Site Cost		1	LS	\$222,500.00		\$222,500.00
Building #7 Renovation		4310	sqft	\$250.00		\$1,077,500.00
Sub-Total					\$	1,300,000
DMS Fee Curve - Comple	xity Group C - 8.82%					
Basic Service						\$114,121.00
Sub-Total					\$	114,121
Total Project Cost					S	1.414.121



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2022-02-25 SRCDS Test Kitchen Job No. 22009

# **Electrical Power Study**

#### Introduction

The purpose of this report is to detail the necessary electrical upgrades to building 7 at the Santa Rosa County District School campus to support the renovation and addition of a commercial test kitchen.

#### **Electrical System Description**

Building 7 is served from a utility pole mounted transformer bank located on the right of way of highway 87. The service to building 7 is 208Y/120 volt, 3 phase, 4 wires. The existing electrical system is not code compliant as the main panel does not have a main breaker and exceeds six service disconnects for the building. The same utility transformer bank also serves the portable north of building 7.

#### Study Results

The existing electrical system in building 7 is not sufficient to support the renovations. The system must be upgraded to a 480Y/277 volt, 3 phase, 4 wire service to support all new kitchen equipment. This will require the addition of a new utility transformer and possible utility distribution system modifications. Coordination is required between the owner, architect, engineer, and utility company to determine the best course of action for all medium voltage upgrades.

### New Electrical Systems Description

The estimated service size required for the facility will be a 600 amp, 480Y/277 volt, 3 phase, 4 wire main panel. The main panel will serve one or more dry type transformers to step the voltage down to 208Y/120 volts, 3 phase, 4 wires to serve all loads in the facility rated at that voltage.

The new system will be properly grounded with a complete grounding electrode system with all building steel, metal pipe, and supplemental electrodes bonded to a main ground bar.

Lighting will be all LED and served from the 480Y/277 volt system. Emergency egress lighting will be provided via battery backup. Battery backup may be integral to the fixtures or a centrally located lighting inverter, per the choice of the owner. Lighting controls will be per Florida Building Code requirements.

The electrical system will serve a complete system of receptacles as determined by the engineer and directed by the owner. The electrical system will also serve all kitchen and HVAC equipment.

The fire alarm system for building 7 is derived from a fire alarm control panel located in the portable north of the building. The fire alarm system will be upgraded to support the renovated facility. A complete system of visual and audible notifications, smoke detection, heat detection, and manual pull stations will be provided. Extending fire alarm circuits between buildings, as in this case, presents an increased risk of lightning damage to the system. We recommend that actions be taken to mitigate the



risk of lightning damage to the system. Providing a new fire alarm control panel in building 7, connected to the north portable via fiber optic cable, will reduce the risk of lightning damage to the system. Raceway rough in for new telecommunication systems will be provided as determined by the engineer and directed by the owner.