

25th percentile or better for size 50-249, NAICS 236200, Nonresidential building construction. Bidder's DART must be less than or equal to benchmark.

Total Recordable Incident Rate (TRIR) **Benchmark 3.6**
(U.S. Bureau of Labor Statistics, Table 1. Incidence rates of nonfatal occupational injuries and illnesses by industry and case types, 2019, 25th percentile or better for size 50-249, NAICS 236200, Nonresidential building construction). **Bidder's TRIR must be less than or equal to benchmark.**

Fatalities: **0** Work related fatalities resulting in OSHA citations within the last three years, OR if 1 or more work related fatalities resulting in an OSHA citation exist within the last three years, the contractor must have mitigated risk of recurrence by implementing adequate industry standard safety procedures and training as determined by OSHA by providing such OSHA determination to the District.

Bidder shall submit a health, safety and environmental plan for Construction and General Industry. The health, safety and environmental plan must address the following minimum requirements:

- Lockout/Tagout
- ~~Excavation Trenching and Shoring~~
- ~~Permit Required Confined Space~~
- Injury Reporting/Investigation
- Operator Qualifications
- Hot Work
- Personal Protective Equipment Electrical Safety
- Near Miss, Behavioral Based Safety
- Qualified, Certified and Competent Employees

OSHA Inspection Detail review must show no Serious or Willful violations in the previous 36 months and no unresolved Failure to Abate Prior Violation in the previous 36 months and no active Failure to Abate Prior Violation.

Bidder shall submit with their Bid OSHA Form 300A completed for the previous year, an Experience Modification Rating letter from its insurance carrier for the current period and a copy of its written health, safety and environmental program with training records for the previous 36 months.

25. **Previous Performance on District Projects:** The District has implemented a Contractor Evaluation Report in an effort to document contractor performance on District projects. Bidders who have received Unsatisfactory ratings on previous District projects must submit with their Bid a mitigation plan detailing previous unsatisfactory ratings and measures implemented to address the

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 Science Center at Jupiter Inlet Lighthouse Outstanding Natural Area
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1	Power transfer	C-EPT	630	SE	
2	Door Closer	2701	AL	YA	
2	OH Stop	10-XXX	630	RX	
1	Perimeter gasket	S88		PE	
1	Threshold	2005AV	AL	PE	
1	Power supply	AQD-8		SE	
1	Card reader	By Div 28			

NOTE: Delete threshold for Door L100-1

HW SET 2.0

Door: L101-2, L103-2

3	Hinge	BB1168	630	HA	
1	Electrified mortise lock	ML20906 x SEC x ARM x T	630	CR	
1	Power transfer	C-EPT	630	SE	
1	Door Closer	2701	AL	YA	
1	OH Stop	10-XXX	630	RX	
1	Perimeter gasket	S88		PE	
1	Threshold	2005AV	AL	PE	
1	Power supply	AQD-6		SE	
1	Card reader	By Div 28			

HW SET 3.0

Door: W101-2, W103-1

3	Hinge	BB1168	630	HA	
1	Exit Device	FLHC2303 x2003 x ELR	630	PR	
1	Power transfer	C-EPT	630	SE	
1	Door Closer	2701	689	YA	
1	OH Stop	10-XXX	630	RX	
1	Perimeter gasket	S88		PE	
1	Threshold	2005AV	AL	PE	
1	Power Supply	ELR150		PR	
1	Card reader	By Div 28			

HW SET 4.0

Door: W101-1

6	Hinge	BB1168	630	HA	
1	Exit Device	FLHC2203 x 2003 x ELR	630	PR	
1	Exit Device	FLHC2203 x 2002C	630	PR	
1	Power transfer	C-EPT	630	SE	
2	Door Closer	2701	689	YA	
2	OH Stop	10-XXX	630	RX	
1	Perimeter gasket	S88		PE	
1	Threshold	2005AV	AL	PE	
1	Power Supply	ELR150		PR	
1	Card reader	By Div 28			

HW SET 5.0

Door: W102-1

3	Hinge	MBP79	630	MK	
1	Electrified lock	CL33903 x M92 x AZD	626	CR	

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1	Door closer	2701	689	YA
1	Power transfer	C-EPT	630	SE
1	Wall Stop	409	630	RO
1	Power supply	AQD-6		SE
1	Card reader	By Div 28		

HW SET 6.0

Door: L102-1

3	Hinge	MPB79	630	MK
1	Office lock	CL3551 x AZD	626	CR
1	Wall Stop	409	630	RO

HW SET 7.0

Door: W103-2, W108-1

3	Hinge	MPB79	630	MK
1	Storeroom lock	CL3357 x AZD	626	CR
1	Door closer	2701CLP	689	YA
1	Wall Stop	409	630	RO

HW SET 8.0

Door: L104-1, L105-1, L106-1, W104-1, W105-1, W106-1

3	Hinge	MPB79	630	MK
1	Privacy lock	CL3520 x AZD	626	CR
1	Occupancy Indicator	D292	626	YA
1	Door closer	2701	689	YA
1	Wall Stop	409	630	RO
1	Door hook	RM828	630	RO

HW SET 9.0

Door: L101-3, L103-1

1	Barn door track	H180A-SWxSoft Close		AL	PE
1	Locking pull	LP3305 DBD ADA	626	RO	
1	Cylinder	01	626	CR	

HW SET 10.0

Door: 109-1

1	Overhead door	by others		
1	Cylinder	as required		

Manufacturers Abbreviations

CR	Corbin Russwin
HA	Hager
MK	McKinney
PE	Pemko
PR	Precision

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Project No.: 494.001
RO Rockwood
RX Rixson
SE Securitron
YA Yale

END OF SECTION 08 71 00

SECTION 26 00 00
WORK INCLUDED

PART 1: GENERAL

1.1 DESCRIPTION OF SYSTEMS

- A. The work required under this Division shall include all materials, labor and auxiliaries required to install, start up and test a complete and properly operating electrical system. The electrical systems required under this Division consist basically of, but are not limited to, the following:
1. Complete distribution system for power including service entrance, main switchboards and distribution panels, feeders, branch circuits, convenience outlets and connections to motors and other power loads.
 - a. The Contractor shall submit at the shop drawing submittal stage, 1/2-inch scale, dimensioned drawings of actual electrical equipment layouts in all electrical and mechanical rooms, based on the equipment being provided. Any conflicts shall be resolved between the General Contractor and the respective subcontractors to provide for the equipment location and required working clearances.
 - b. Conduit routing is not shown on the documents. It shall be the Contractors responsibility to field route all raceways and coordinate such routing with all disciplines to resolve any conflicts, as necessary to provide the intended connections. It shall be assumed that the design was based on the shortest possible route. Where conduit or duct routing follows other than direct paths, the conductors and raceways shall be adjusted accordingly to account for voltage drop.
 - c. The Contractor shall provide a complete Arch Flash, Fault and Coordination study for the entire 600-volt power distribution system. The study shall be based on the actual equipment installed and indicate the required fault duty in RMS symmetrical amps for each Overcurrent protective device. Provide time-current curves for each device, along with settings for all adjustable trip devices. The contractor shall ensure that all adjustable devices are set in accordance with the settings presented in the study. The study shall be signed and sealed by a Florida Licensed Engineer and shall be approved prior to the purchase of any equipment or overcurrent protective devices.
 2. Complete distribution system for service, panels, power, & lighting including the necessary equipment, feeders, branch circuits, lighting fixtures, control devices, control wiring and devices.
 3. Connecting motors and manual control (unless otherwise specified).
 4. Complete system of lightning protection as required by this specification.
 - ~~5. Complete fire alarm system.~~
 6. Complete power distribution system for HVAC equipment including wiring, conduits, and disconnect switches.
 7. Complete system of empty raceways (with pull lines) and terminal cabinets and power requirements for EMCS (Energy Management and Control System), and all communication and technology systems (i.e., telephone, data, public address, CCTV, audio-visual, security, and access control).

8. Furnishing and installing all necessary access panels.
9. Concrete work for equipment pads or encased raceways.
10. Painting (of special equipment).
11. Temporary power.
12. Contractor shall check site and existing conditions thoroughly before bidding. Advise Architect of discrepancies or questions note.
13. Whether indicated on the drawings or not, if a requirement is listed, mentioned, or described in this specification, the cost for its provision and complete installation and connection, shall be included in the Contractor's bid.
14. The Contractor is cautioned to consult drawings of all disciplines to ascertain electrical requirements for systems that may not be on the electrical plans. Specific attention is directed to special systems such as ~~fire alarm~~, security, EMCS, etc. The Contractor shall include in his bid, the cost for providing and installing all electrical provisions for a complete, operating system.
15. Perform all required commissioning. The contractor shall designate an individual to serve on the commissioning team and shall cooperate as required concerning all commissioning related activities, meetings, documentation, field tests, etc. The contractor shall provide all technically qualified personnel, equipment, instrumentation, and materials on a continuous basis in order to perform their required tasks at the required time period and provide all required or requested assistance by the commissioning provider to complete the commissioning process.
16. The contractor is required per referenced specifications to complete all applicable Pre-Functional Test Report forms on the systems being commissioned. This may include as well; start-up check list forms.

END OF SECTION

SECTION 26 01 27
CODES, FEES, AND STANDARDS

PART 1: GENERAL

1.1 CODES AND STANDARDS

- A. Unless specifically noted to the contrary, the Contractor shall furnish all equipment, materials, labor, and install and test in accordance with these specifications.
- B. The Contractor shall comply with the latest applicable editions of the following:
 - 1. City of West Palm Beach Ord.
 - 2. 2020 Florida Fire Prevention Code
 - 3. NFPA 101 (2018 Edition)
 - 4. 2020 Florida Building Code (Seventh Edition)
 - 5. NFPA-70 - National Electrical Code(2017)
 - 6. ~~NFPA-72 - National Fire Alarm Code(2016)~~
 - 7. U.L. - Underwriter's Laboratories
 - 8. NEMA - National Electrical Manufacturer's Association
 - 9. ASTM - American Society for Testing and Materials
 - 10. IEEE - Institute of Electrical and Electrical Engineers
 - 11. ANSI - American National Standards Institute
 - 12. ADA - Americans with Disabilities Act
- C. Reference to standards shall mean and intend the latest edition of such standards adopted and published at the date of bidding documents.
- D. Materials and installation, as a minimum, shall conform with local and state codes and ordinances.

1.2 FEES, CHARGES, COSTS

- A. It is the contractor's responsibility to contact the appropriate Utility Company and/or Building Department to determine if any fees, charges, or costs will be due to them. This fee, charge or cost shall be included in this contractor's bid price.

END OF SECTION

SECTION 26 05 00
BASIC MATERIALS AND METHODS

PART 1: GENERAL

1.1 WORK INCLUDES

- A. Contractor shall provide:
1. Work shown on the drawing and specified herein.

1.2 RELATED WORK

- A. Specified Elsewhere
1. Division 1 - Drawings and general provisions of Contract, including, but not limited to, General, Special, and Supplementary Conditions and other Division-1 Specification Sections, apply to the work of this Section.
 2. Division 23 - applicable sections.
 3. Division 26 - applicable sections.

1.3 QUALITY ASSURANCE

- A. All work and materials shall be in accordance with the requirements and codes of the State of Florida, and all other applicable bodies having jurisdiction.
- B. If, in the opinion of the Contractor, any part of the specification or plans do not comply with the laws, codes and regulations, that matter shall be referred in writing to the attention of the Engineer for a decision before proceeding with that part of the work. There shall be no changes in the drawings or specifications made without approval of the Engineer. Where a discrepancy exists between the drawings and this specification, the more stringent shall apply.
- C. This Contractor shall secure and pay for all permits required by local authorities and shall provide the Owner with satisfactory interim and final inspection certificates.
- D. Bidders shall visit the site and familiarize themselves with existing conditions and satisfy themselves as to the nature and scope of the work and the difficulties that attend its execution. The submission of a bid will be construed as evidence that such an examination has been made and that the existing conditions have been allowed for in hid bid.
- E. Before opening any material or doing any work, examine Architectural, Structural, Electrical, Mechanical, Plumbing, ~~Fire Protection~~, Civil, Landscape and Equipment drawings, verify all conditions of project. Any differences which occur between drawings or between them and specifications, or between both of these and actual field measurements shall be reported in writing to Consultant and written instructions for changes obtained before proceeding with work.

1.4 SUBMITTALS

- A. In accord with Division One.
1. Product Data
 - a. Fire Stopping Material
 - b. Conduit seals.

- yellow, neutral - gray, and ground - green.
- B. Maintain A, B, C, phase relation left to right or top to bottom when viewed from front. Maintain color coding throughout entire project.
 - C. Phase conductors, size #10 and smaller, and neutral and ground conductors, shall have continuous outer finish color as indicated above. Size #8 and larger conductors shall have black insulation and be color coded with a six-inch band of colored tape at all junctions and terminators.
 - D. Identify each feeder and branch circuit conductor fed from panel and circuit number at each accessible location.

3.3 NAMEPLATE ENGRAVING SCHEDULE

- A. Provide nameplates of minimum letter height as scheduled below.
 - 1. Panelboards: 1/2 inch-identify panelboard name. 1/4 inch-identify voltage rating.
 - 2. Individual Circuit Breakers and Switches: 3/8 inch-identify circuit and load served, including location.
 - 3. Safety Switches and Enclosed Switches: 1/2 inch - identify switch name; 1/4-inch - identify load served.
 - 4. Transformers: 3/8 inch-identify transformer name. 1/4 inch-identify primary and secondary voltages.
 - 5. Electrical Cabinets and Enclosures: 3/8 inch- identify equipment name.
 - 6. System Terminal Cabinets: 3/8 inch-identify equipment or system name.
- B. Headwall: 1/8 inch-identify panel and circuit number serving outlet (ex. 'LINA - 2') located above each outlet on headwall.
- C. Provide panelboard and circuit number on engraved trim plate, on each receptacle and switch. Engraving shall be deep enough to be visible and legible from a distance of 5'-0". Fasten nameplate to switch coverplate.

3.4 BOX COLOR CODING SCHEDULE

- A. Paint junction box and cover, and 6" of all conduits entering/leaving, in the following manner:
 - 1. ~~Fire alarm - Red~~
 - 2. Communications (Data/Telephone/Intercom) - Blue
 - 3. Audio Visual- Purple
 - 4. Access Control - Brown
 - 5. CATV - White.

3.5 LIGHTING AND POWER JUNCTION BOX IDENTIFICATION

- A. Identify lighting and power junction box covers with circuit and panelboard number on the outside, using permanent marker.

3.6 PANEL DIRECTORY

- A. Shall be typewritten, indicating specific and clear area of control, regardless of the listing in the panel schedules on the drawings. Indicate by room name, equipment, system, etc.