

TECHNICAL SPECIFICATIONS

5.3.6 Alarm Devices

The following alarms need two aux contacts each to run into the City's SCADA system.

Intrusion

Hydrogen Gas Detector

Required Automatic Fire Suppression System Alarms

Alarm Devices to be Wired to Termination Cabinet (sec 5.3.11), Coiled up, and labeled.

5.3.7 Heating/ Cooling

One (1) 36,000 BTU (3 Ton) Bard Wall Mount Heat Pump with 5 kW Heat Strip and 7-day Programmable Thermostat Controls

5.3.8 Battery and charger

The Building is to house a 130V DC battery. The battery rack: Hoppecke Power; LM425-09; OGi bloc 6V-200 and the charger: AT10-130-020E are to be installed and wired into the DC panel.

5.3.8 Battery Ventilation

650 CFM (12") Exhaust Fan with Gravity Flow Backdraft Louvers and Screened Fiberglass Rainhood, Gravity Flow Intake Damper with Screened and Filtered Fiberglass Rainhood, and Cyclable 24 Hour Timer and Hydrogen Gas Detector Controls

5.3.9 Cable Entrance

The building floor is to have an approximately 14" X 20" cable entrance slot with removable cover plate.

5.3.10 Cable Management

Approximately Fifty (50) Feet 24" Wide x 4" Deep Aluminum Cable Tray with Ceiling and Wall Mounting Hardware
Factory Fittings for Changes in Direction

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5.3.11 Relay Enclosures

The relay enclosures, if required later, will be supplied and installed by the city.

5.3.12 Termination Cabinet

One 30"X30"X9" Nema I termination cabinet mounted on the wall of the building. Inside the cabinet ten (10) 600V, 30A terminal boards are to be mounted to the back panel. One aux contact from each of the alarms that are integral part of the building are to be terminated in this cabinet.

5.3.13 Safety Equipment

3.3.13.1 One (1) Self Contained Eyewash Station – Fendall Porta Stream II Eyewash Station; 32-000200-0000

3.3.13.2 Fire management system with smoke detection, automatic fire suppression system and alarms

5.4 FOUNDATION

The contractor will work with the city engineer to advise on the design of the appropriate building foundation. The city does have soil reports for the site which will be provided to the winning bidder. The pouring of the foundation or piers is the responsibility of the City of Saint Charles, with advice from the building's vendor.

6.0 BUILDING LAYOUT

A preliminary layout of the building is given in Appendix A. The layout of the items in the building is flexible. The attached drawing is provided as a guideline and to make sure that the building has enough space for all the installed devices and furniture.

7.0 SPECIAL CONDITIONS

7.1 The City of St Charles requires contractors working on city grounds to meet all State of Illinois requirements, such as human rights, prevailing wage rates, insurance, etc. (See Information to Bidders at <http://www.stcharlesil.gov/>)

7.2 All work under this contract shall comply with the Prevailing Wage Rate Act of the State of Illinois, Illinois Compiled Statutes, 1987, Chapter 820, par. 130/31, et. seq, and as amended by Public Acts 86-799 and 86-693 and our

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current city ordinance, with rates to be paid in effect at time work is performed.

- 7.3 Contractors shall submit certified payroll records to the city for the portion of the work that is done on the City's property.
- 7.4 Contractor shall have approved General Contracting License to work within the City of St. Charles.
- 7.5 Contractor shall provide the list of Subcontractors to the Electric Division.
- 7.6 Workers are required to wear appropriate PPE as required by OSHA. The contractor shall provide all required safety equipment for work to include but now limited to hard hat, steel toed shoes and safety glasses.
- 7.7 Contractor shall provide Insurance to the City of St. Charles.
- 7.8 Contractor is not to start work without receiving information transfer from the City on known of potential hazards of the work (OSHA 1910.296(a) (3)).

8.0 SHIPPING REQUIREMENTS AND TIMING

The Seller shall be responsible for all costs associated with shipment, delivery and set up of the building F.O.B. to the foundation or the piers that are supplied by the CITY at the substation.

The conceptual plan of the substation showing the surrounding solar farm is given in Appendix B and a map of the same area showing the new building in red is shown in Appendix C.

The address of the Legacy Drive Substation is:

859 Equity Drive
Saint Charles, IL 60174

**CITY OF ST. CHARLES, IL
LEGACY PARK SUBSTATION
TECHNICAL SPECIFICATIONS**

**SUBSTATION
BUILDING**

PROPOSAL FORM

I propose to furnish the City of St. Charles Firm Prices for a modular substation building described in the preceding sections, and in accordance with all attached conditions and specifications for the

**TOTAL COST \$ _____
ALL PRICES ARE FIRM WITH NO ESCALATOR.**

By submission of this bid I certify that the bid has been arrived at independently and has been submitted without collusion with any vendor of materials, supplies, or equipment of the type described in the preceding section.

Shipment can be made F.O.B. City of St. Charles _____ weeks after receipt of Purchase Order.

MANUFACTURER/MODEL #: _____

COMPANY _____

ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE _____

SIGNATURE OF AUTHORIZED AGENT _____

PRINTED NAME OF AUTHORIZED AGENT _____

TABLE OF ATTACHMENTS

APPENDIX A – BUILDING LAYOUT

APPENDIX B – CONCEPTUAL PLAN

APPENDIX C- MAP OF SUBSTATION 9



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Precision GIS

RAYMOND ROGINA Mayor
MARK KOENEN City Administrator



Map Information
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 Precision GIS
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Map of Legacy Park Substation



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