



City of Ypsilanti Fire Department

---

**Request for Proposal  
For Solar Installation Material**

---

July 18, 2016

## **Overview**

---

The City of Ypsilanti (City) is seeking a qualified supplier to purchase the necessary material to install a solar energy system on the roof of the Ypsilanti Fire Station at 525 West Michigan Avenue in Ypsilanti, Michigan.

The material includes:

- 50kW of mono crystalline solar panels with wattage of 280 watts or better.
- An inverter system to match these solar panels with power optimizers on a per panel, or two, and per optimizer online monitoring. The inverters need to interface with the Fire Station's 480 3-phase electrical system.
- A ballasted racking system to mount the panels and optimizers on the roof.

We would prefer the solar panels, inverters, and racking to be made in USA.

## **Detailed Project Description Proposal**

---

A sample solution could have 176 solar panels mounted on a ballasted rack using concrete blocks. The solar installation would provide approximately 50kW of maximum power or about 72% of the fire stations power needs. This amount appears to be the maximum number of solar panels that will fit on this roof without any shading. More panels could be add but at a lower efficiency due to intermittent shade.

DC optimizers and inverters will be used to connect and convert the power from the solar panels to the building's electrical system. The project would like to use DC optimizers with monitoring to allow the public to monitor the power generated on the roof of the Fire Station panel by panel. This makes it easy to spot any malfunctioning hardware or shading of the panels. The power from the optimizers will go to the back of the fire station and down an outside wall to inverters to convert the power from direct current to 480 volt 3-phase alternating current. From the inverters the power will be connected to the building's electrical system.

An internet connection will be needed for the inverters to send the optimizer's data to their web portal. This will feed the data for an Ypsilanti Fire Station page on a website that can be viewed by the public.

## **Bid Submittal**

---

- A. Sealed bids shall be submitted to the Ypsilanti City Clerk's Office at Ypsilanti City Hall, One South Huron Street, Ypsilanti, MI 48197 by no later than August 1st, 2016 at 2:00PM. at which time a public bid opening will be conducted by the City Clerk. Proposals shall be clearly marked "Fire Station Solar Installation Material" on the outside envelope.
- B. In submitting their bid, each bidder represents that they have read and understand the bidding documents.
- C. Proposals shall be submitted only on the proposal bidding spreadsheet below and shall be priced as indicated on the Proposal Bidding Form Spreadsheet.
- D. Proposals shall be made in full conformity with all the conditions set forth in these specifications. Bids are firm, must remain in effect and cannot be withdrawn for a period of sixty (60) days after the public opening.

- E. Each bidder shall be responsible for being aware of and in compliance with applicable federal, state, and local laws, ordinances, regulations, and licensing requirements affecting performance of the work.

### ***Time of Completion***

---

- A. The selected supplier shall be required to deliver the material within three weeks of the purchase order.
- B. The CITY reserves the right to terminate the contract at any time for supplier's negligence, poor performance, or failure to deliver all equipment within the time stipulated.

### ***Increase or Decrease in Equipment Quantities***

---

- A. The CITY reserves the right to increase, decrease or delete items in the proposal in order to match an increase or decrease in the size of the project.

### ***Award of Contract***

---

- A. The CITY reserves the right to reject any or all bids and to waive irregularities in bidding.
- B. The City reserves the right to purchase material or equipment from more than one bidder.
- C. The City reserves the right to partially award a proposal.

### ***Questions***

---

- A. Explanations desired by bidders shall be requested in writing, and if explanations are necessary, a reply will be made in the form of an Addendum.
- B. No request for explanation received within 4 working days of the bid deadline date will be given consideration.

For further information regarding the bidding process, please contact:

Fire Chief Max Anthouard at:

Email: [manthouard@cityofypsilanti.com](mailto:manthouard@cityofypsilanti.com)

For technical questions contact Dave Strenski at:

Email: [Dave@Strenski.com](mailto:Dave@Strenski.com)

Phone: 734-383-9077

---

**Proposal Bidding Form**

<b>Necessary Equipment List</b>				
	Make/Model	Quantity	Price per unit	Total
Solar panels				\$ -
Optimizers				\$ -
Inverters with monitoring				\$ -
Ballasted racking				\$ -
			Total	\$ -

---

**Fire Station at 525 West Michigan Ave**



**Sample Array Layout**

