

Indian Trails Public Library – Solar Photovoltaic System

Project Highlights and Results

- Solar photovoltaic (PV) system design enables onsite use of all generated power; at all times
- Installed PV system was within budget of \$100,000 EBSCO grant previously awarded to library

Project Background

Owner:	Indian Trails Public Library
Location:	Wheeling, IL
Team/Team Lead:	Steve Maze, Bhupendra Tailor
Elara Role:	Electrical Engineer
Type:	Solar Photovoltaic System
Construction Cost:	\$92,295

Project Overview

Building Type:	Municipal Library
Building Attributes:	2 Stories, 56,285 SF
Initial Construction:	1980s, 1990s
MEPPFIT Systems:	Geothermal Heat Pump System, FCUs, VAVs, DOAS, DDC

Innovation

- Prepared permit/bid/construction documents for new PV system to facilitate permit, secure competitive bids, and to construct the project.
- Provided bidding assistance including posting the bid advertisement, creating a project manual, posting project drawings, conducting a pre-bid meeting, clarifying the project for bidders, responding to questions during the bidding period, evaluating bids (including interviews and identification of value-added items), and working with client legal counsel in contract preparation and execution.
- Provided construction engineering services to guard the Library against defects and deficiencies in the work of the project's contractors. Services included a review of all submittals, shop drawings and equipment data and periodic site visits to observe the work in progress.
- Assisted the Library in applying for the EBSCO grant utilized to fund the project.

