



City of West Allis
Request for Proposal
RFP # DV-25015
Solar Panel System - Liberty Heights Park

Submitted by: Arch Solar, Inc

Address: 7764 N 81st St. Milwaukee, WI 53223

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Angie Kochanski – *Director of Business Development*

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Submitted to:

City of West Allis-Finance Department
7525 W. Greenfield Ave. West Allis, WI 53214
purchasing@westalliswi.gov

Arch Solar, Inc., a certified Women Business Enterprise, is pleased to have the opportunity to work with the City of West Allis as the Solar Installation Contractor providing turnkey solar solutions for the new pavilion at Liberty Heights Park. This document responds to the Proposal Request, Project No. DV-25015, Project Weather information used in modelling is based on data collected at TMY, MILWAUKEE MITCHELL INTL AP, NSRDB (tmy3, I). All designs meet IFC 2018 and NEC 2017 requirements. Arch supports the City of West Allis in the addition of renewable energy curriculum and is willing to participate in community engagement activities to educate the community on renewable energy and its carbon reducing impact. Arch Solar has provided a base bid along with alternative bids. One alternative bid includes a storage option. This project would have a cost-effective solution for storage capacity. The addition of storage capacity to this project would enhance this site as a neighborhood resiliency hub providing back-up power. We appreciate your consideration and hope to work with you on whichever of the proposed bids best meets the city's goals.

1. System Description Summaries

i. Base Bid:

1. **Total System Size DC:** 15,800 W
2. **Total System Size AC:** 11,400 W
3. **Total Module Qty:** 27 (QCell 585 Watt)
4. **Total Inverter Qty:** 1 (SolarEdge 11.4kw)
5. **Total Optimizer Qty:** 14 SolarEdge U650B
6. **Racking:** S5!-PVKIT Rail Less Metal Roof Solar Mount
7. **Annual Yield to Grid:** 20,492.6 kWh
8. **Solar Efficiency:** 1,297 kWh/kWp
9. **Solar Array Cost:** \$47,385

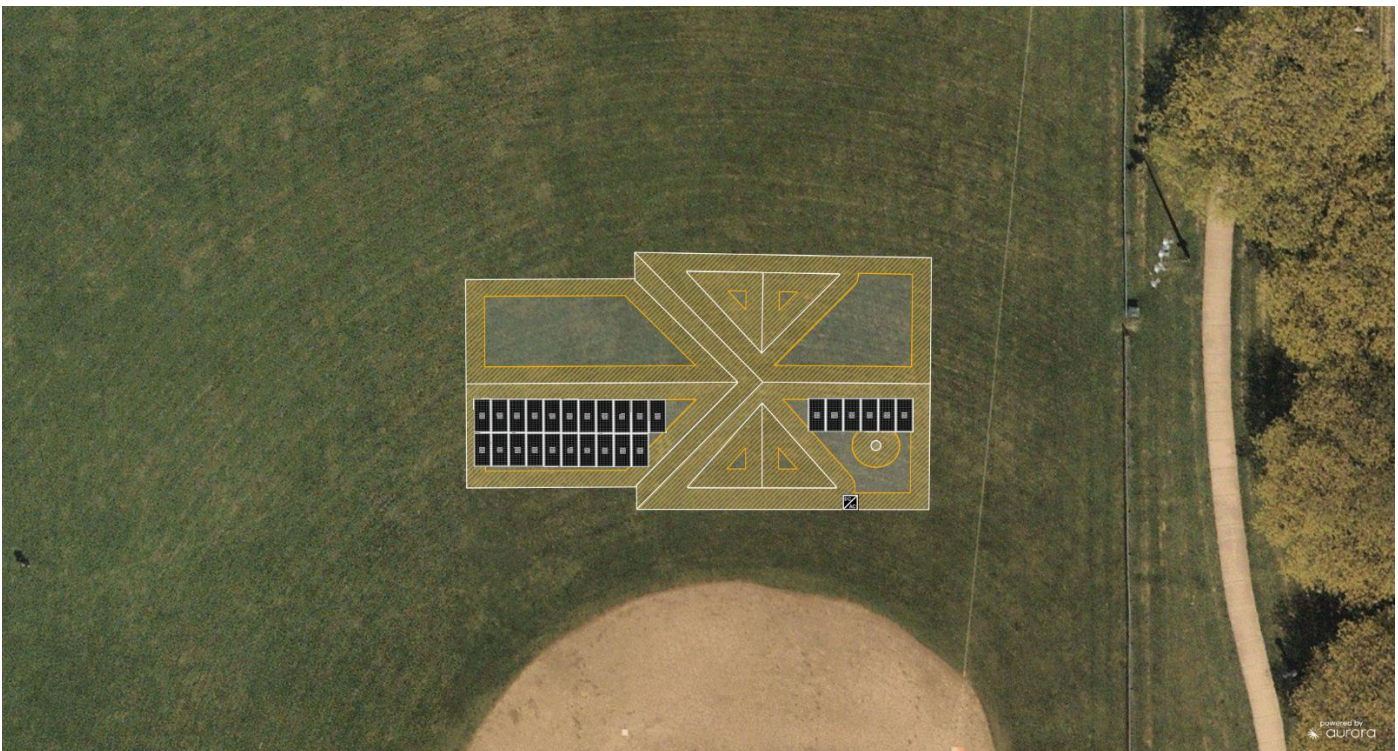
ii. Alternative 1:

1. **Total System Size DC:** 15,800 W
2. **Total System Size AC:** 15,200 W
3. **Total Module Qty:** 27 (Q Cell 585 Watt)
4. **Total Inverter Qty:** 2 (Tesla Inverter 7.6kw)
5. **Total RSD Qty:** 14 (Tesla Rapid Shut Down Module Performance)
6. **Racking:** S5!-PVKIT Rail Less Metal Roof Solar Mount
7. **Annual Yield to Grid:** 20,371/kwh
8. **Solar Efficiency:** 1,290 kWh/kWp
9. **Solar Array Cost:** \$45,030

iii. **Alternative 2:**

1. **Total System Size DC:** 15,800 W
2. **Total System Size AC:** 11,500 W
3. **Total Module Qty:** 27 (Q Cell 585 Watt)
4. **Total Inverter Qty:** included with the Tesla Powerwall 3
5. **Total Battery Qty:** 1 Tesla Powerwall 3
6. **Total RSD Qty:** 14 (Tesla Rapid Shut Down Module Performance)
7. **Racking:** S5!-PVKIT Rail Less Metal Roof Solar Mount
8. **Annual Yield to Grid:** 20,371/kwh
9. **Storage Capacity:** 13.5/kwh
10. **Solar Efficiency:** 1,290 kWh/kWp
11. **Solar Array Cost:** \$55,050

2. **Proposed Layout and Orientation of Array:**





3. **Installation Timeline:**

Projected dates are based on the Notice to Begin Work being given on or about July 18, 2025.

City of West Allis Liberty Park		
Item	Expected Duration	Completion
Focus on Energy Reservation/Schedule Job (apply in 2025)	1 Week	07/21/2025
Creation of Engineering Documents	2 Weeks	08/01/2025
Interconnection Submittal/Approval (WE Energies)	2-4 Weeks	09/01/2025
Order Materials	-	09/01/2025
Kit Inventory Materials / Schedule Equipment Rentals	1 Week	09/01/2025
Permit Approval	4-6 Weeks	09/01/2025
Pre-Construction Meeting (On Site)	-	09/05/2025
Mobilization / Racking Installation	2-3 Days	09/15/2025
Inverter / BOS Installation (AC)	2-3 Days	09/15/2025
Solar Module Installation / Wire Management (DC)	2-3 Days	09/19/2025
Outage/Inspection (WE Energies and City of West Allis)	1 Week	09/26/2025
Substantial Completion System Testing / Arch QC Inspection & Punch List	1 Week	09/26/2025
Commissioning (WE Energies)	2-3 Weeks	10/24/2025
Training Session	1 Week	10/24/2025

4. **Material Timeline:**

The proposed panels are inventoried material. The base bid quote includes the SolarEdge inverters and optimizers. Standard lead time for SolarEdge product is 12 weeks. Inventory is currently available through distribution of the spec'd product. In the event, Arch Solar is not able to procure SolarEdge within the necessary project timeline an alternative bid has been provided with Arch inventoried materials. The Tesla inverter and the Tesla Powerwall 3 are both inventoried material. The racking and balance of materials are readily available through distribution and will be procured prior to construction.

5. **Bid Certification**

Arch Solar acknowledges that the bid terms and prices will remain in effect until 45 days following 06/24/2025. Arch Solar acknowledges that the capabilities and system equipment is currently on the market and procurable. Arch Solar confirms that this project will be substantially completed by 10/01/2025 if written award of contract is no later than 07/18/2025.

6. **Warranty & Maintenance Information**

- a. Expected Life of System:
 - i. Modules: 30+ Years
 - ii. Optimizers: 25+ Years
 - iii. Inverters: 15+ Years
 - iv. Racking: 30+ Years



- b. Qcells Solar Modules: 12 Year Product, 30 Year Power Output (0.45% Annual Degradation ZNShine Solar
- c. SolarEdge Optimizers Inverters: 25 Year Product
- d. SolarEdge Inverters: 12 Year Product
- e. Tesla Inverters: 12.5 Year Product
- f. Tesla Powerwall 3: 10 Year Product
- g. Tesla RSD: 25 Year Product
- h. S5I-PVKIT Rail Less Metal Roof Solar Racking: Lifetime of Roof Warranty
- i. Arch Solar: 5 Year Workmanship
- j. Maintenance Information:
 - i. Arch Solar has a dedicated service department. While solar is mostly maintenance free, keeping up-to-date thermal imaging can detect failures before they occur. We provide one year free, following that we have three plan options: Monitor, Maintain, and Repair for optimized system operation.

7. Applicable Incentives

- i. Focus on Energy: a state level incentive of \$50/kW, up to \$25,000
 - 1. Can be used again if additional solar is added 12+ months later.
- ii. Direct Pay ITC: 30% Tax Credit
 - 1. Domestic Content Adder: 10% Adder to 30% ITC

8. Arch Solar Commitment to Educational Support

Through many projects installed in Wisconsin, Arch values our local roots and support of community stewardship. Because of this we are large participants in community education and helping our customers illustrate system impacts both environmentally and financially to the general public. We have worked with Village of River Hills, City of Milwaukee, Nicolet High School, Outreach Health, Hunger Task Force, Elkhart Lake High School, St. Roberts Academy, Homestead High School and many others to develop community educational materials.

Summary: Arch Solar is honored to have the potential to contract with the City of West Allis on this pivotal project for Liberty Heights to strengthen Wisconsin's renewable energy generation. We recommend the Alternative Bid 1 to achieve the shortest ROI and best financial overview. However, if the budget is available, it would be advantageous to consider Alternative Bid 2 which includes storage capacity for added community resiliency.

9. Summary:

Arch Solar is honored to have the potential to contract with the City of West Allis on this pivotal project for Liberty Heights to strengthen Wisconsin's renewable energy generation. We recommend the Alternative Bid 1 to achieve the shortest ROI and best financial overview. However, if the budget is available, it would be advantageous to consider Alternative Bid 2 which includes storage capacity for added community resiliency.



10. Qualification Statement:

I have read the entire contents of the RFP and certify to the best of my knowledge that Proposing Firm has necessary purchasing contacts, equipment, storage facilities, experience, ability and capital to furnish the proposed products in the manner described and to perform the required work satisfactorily along with their manufacturing partners.

Sincerely,

Angie Kochanski – *Director of Business Development*
Arch Solar, Inc | The Energy Experts | www.archsolar.com
Mobile: 920-838-4687 | Email: angie@archsolar.com



ANNEX 1 Scope of Work

Contractor's Scope of Work under the Agreement is more specifically detailed below. Certain exclusions, assumptions, and qualifications that limit the Scope of Work and on which the Contract Price and Construction Schedules are based are also identified below.

Contractor(Arch Solar) to provide and/or install the following services and equipment:

Site Facilities

- Job trailer and secured storage.

Permitting/Interconnection

- Included: Electrical & Building Permit Application Documentation, relating to solar installation.
- Approved interconnection with WE Energies

Drawings and Design

- Engineering Services for Interconnection Process.
- Electrical and Structural Construction Drawings for Solar Photovoltaic System.
- Provide as built Construction Drawings.

Installation of Contractor Provided Electrical Equipment

- QCell Solar PV Modules
 - QCell 585W
- SolarEdge Optimizers (Base Bid)
 - SolarEdge U650B Power Optimizers
- SolarEdge Inverters (Base Bid)
 - USE11400H-USMNB78
- Tesla Inverters (Alternate Bid 1)
- Tesla Powerwall 3 (Alternate Bid 2)

Testing and Commissioning

- Standard Quality Control Test Reports.
- Inverter and Monitoring commissioning.
- Ohm/Resistance Testing for Conductors.

A. General Construction

1. Includes provision of a project team with qualified project manager, superintendent, safety representative, and field crew with NABCEP certification.
2. Includes providing required on-site supervision.
3. Includes provision of Project Health and Safety Plan and other safety and protective measures, including Site Specific Safety Plan.
4. Includes providing on-site trash receptacles and sanitary facilities.
5. Includes small tools and safety equipment.
6. Includes coordination with the Local Electric Utility regarding interconnection of the Facility.



7. Includes arranging inspections with Governmental Authorities as required to complete Contractor's Work.
8. Includes prevailing wage or Davis Bacon Act wage requirements.
9. Includes all associated aspects of project to be under Arch Solar, Inc, a certified Women Business Enterprise with the State of Wisconsin.

B. Engineering

1. Includes provision of all design and engineering services necessary for the completion.
 - i. A.1-A.4 Arch Engineering Documents (Scope of Work, Site Plan, Array Details, One Line)

C. Permits

1. In Scope Permits related to the solar installation provided by Contractor.
 - i. City of West Allis
 - ii. State of Wisconsin
2. Interconnection Application with Local Utility (WE Energies)
 - i. Category 1

D. Civil Work

1. Excludes any civil work.

E. Mechanical Construction: Racking and Modules

1. Includes receipt, unloading and inspection of racking material and components.
2. Includes receipt, unloading and inspection of solar modules, optimizers, and inverters.
3. Includes installation of racking.
4. Includes installation of solar modules.
5. Includes installation of optimizers.
6. Includes installation inverters.

F. Electrical Construction: AC/DC Electrical Work

1. Installation per Specifications provided by Original Equipment Manufacturers.
2. Includes installation of DC string wiring from modules, optimizers, and inverters.
3. Includes installation of grounding system for modules, racks, and grounding.
4. Includes installation of conduits from Array combiners to inverters, and inverters to POI.
5. Includes installation of wire including grounding from inverters to POI.
6. Includes installation of MC-4 connectors.
7. Includes termination of all cables.
8. Includes receipt, inspection, and unloading of equipment.
9. Includes NEC 2017 compliant installation.
10. Includes IFC 2018 compliant installation.
11. Excludes off hours (not between 8:00 AM – 2:00 PM CST) Utility Outage cost with Public Utility (WE Energies).
12. Excludes Arch personnel overtime/off-hour labor for Utility Outage (not between 7:00 AM – 3:00 PM CST)
13. Includes one year of O&M services, free of charge.

G. References

Company	Category	System Size	Role	Location
Whitefish Bay DPW	Municipal	200 kW	EPC	Whitefish Bay, WI
Milwaukee Plate Glass	Manufacturing	210 kW	EPC	West Allis, WI
Milwaukee Plumbing and Piping	Retail	13.5 kW	EPC	West Allis, WI
Froedtert Hospital	Medical	82.8 kW	EPC	Wauwatosa, WI
Kathy's House	Medical	53.3 kW	EPC	Wauwatosa, WI
City of Wauwatosa	Municipal	389 kW	EPC	Wauwatosa, WI
CH Coakley	Warehousing	299.3 kW	EPC	Wauwatosa, WI
Woodway/Bayerlin	Manufacturing	389 kW	EPC	Waukesha, WI
Woodway/Bayerlin Phase 2	Manufacturing	389 kW	EPC	Waukesha, WI
Bliffert Lumber	Retail	75.6 kW	EPC	Waukesha, WI
Aria of Waukesha	Senior Living	82.8 kW	EPC	Waukesha, WI
CCC of Pewaukee	Senior Living	186.3 kW	EPC	Waukesha, WI
Madison College	Educational	133.2 kW	EPC	Watertown, WI
Walbec Company	Alternative	386.1 kW	EPC	Sussex, WI
Bliffert Lumber	Retail	58.1 kW	EPC	Sturtevant, WI
Dominion Wall	Office	54 kW	EPC	Shorewood, WI
Aurora Hospital	Healthcare	100.8 kW	EPC	Sheboygan, WI
St. Nicholas Apartments	Senior Living	30 kW	EPC	Sheboygan, WI
Lakeside Pepsi	Distribution	134 kW	EPC	Sheboygan Falls, WI
Sheboygan Senior Center	Senior Living	200.5 kW	EPC	Sheboygan Falls, WI
Village of River Hills	Municipal	58.5 kW	EPC	River Hills, WI
Illing Company	Manufacturing	389 kW	EPC	Richfield, WI
Madison College	Educational	97.7 kW	EPC	Reedsburg, WI
Hotel Verdant	Lodging	49.32 kW	EPC	Racine, WI
HALO Homeless Shelter	Public	60.4 kW	EPC	Racine, WI
Racine County Food Bank	Public	37.8 kW	EPC	Racine, WI
Aspirus Health	Medical	370 kW	EPC	Portage, WI
Aurora Urgent Care	Healthcare	128.7 kW	EPC	Plymouth, WI
Inkworks Printing	Manufacturing	74 kW	EPC	Plymouth, WI
Aurora Urgent Care	Medical	128.7 kW	EPC	Plymouth, WI
City of Plymouth	Municipal	20 kW	EPC	Plymouth, WI
Plymouth Furniture	Retail	50.7 kW	EPC	Plymouth, WI
Lakeland Supply	Distribution	175 kW	EPC	Pewaukee, WI
Thysse Printing	Manufacturing	339 kW	EPC	Oregon, WI
Viking Masek	Manufacturing	240 kW	EPC	Oostburg, WI
Ongna Wood	Pallet Mfg.	378 kW	EPC	Oostburg, WI
Blackhawk Shooting Sports	Retail	45.4 kW	EPC	Oostburg, WI
Oconomowoc Transport	Transportation	50 kW	EPC	Oconomowoc, WI
MATC - Oak Creek	Educational	388.5 kW	EPC	Oak Creek, WI
Riverwood Estates	Lodging	207 kW	EPC	Oak Creek, WI
IKEA	Retail	1,642 kW	Construction	Oak Creek, WI
Connoils	Manufacturing	147 kW	Construction	New Berlin, WI

Halder, Inc.	Retail	35.1 kW	EPC	New Berlin, WI
Venture Construction Group	Retail	29.5 kW	EPC	New Berlin, WI
Super Products	Manufacturing	389 kW	EPC	Mukwonago, WI
Sid Grinker	Contracting	102 kW	EPC	Milwaukee, WI
St. Roberts Parish	Educational	91.2 kW	EPC	Milwaukee, WI
Caleffi Hydronic Solutions	Manufacturing	83.4 kW	EPC	Milwaukee, WI
Dead Bird Brewing	Manufacturing	46 kW	EPC	Milwaukee, WI
Lange Brothers	Manufacturing	100 kW	EPC	Milwaukee, WI
Outreach Health	Medical	43.5 kW	EPC	Milwaukee, WI
Milwaukee Public Museum	Public	99 kW	EPC	Milwaukee, WI
Hunger Task Force	Public	88.9 kW	EPC	Milwaukee, WI
Wisconsin/Baird Center	Public	86.4 kW	EPC	Milwaukee, WI
Bayview Community Center	Public	16.2 kW	EPC	Milwaukee, WI
Havenwoods State Forest	Public	15.6 kW	EPC	Milwaukee, WI
Bliffert Lumber	Retail	50.7 kW	EPC	Milwaukee, WI
CH Coakley	Warehousing	388.9 kW	EPC	Milwaukee, WI
MATC - Mequon	Educational	299 kW	EPC	Mequon, WI
Gan Ami	Educational	28.7 kW	EPC	Mequon, WI
Wisconsin Shower Door	Manufacturing	174 kW	EPC	Menomonee Falls, WI
Emmanuel Community Church	Religious	63.7 kW	EPC	Menomonee Falls, WI
CH Coakley	Warehousing	388.9 kW	EPC	Menomonee Falls, WI
CCC of Mayville	Senior Living	86.4 kW	EPC	Mayville, WI
Dramm Corporation	Manufacturing	90 kW	EPC	Manitowoc, WI
Hoffman Manufacturing	Manufacturing	133 kW	EPC	Madison, WI
Keweenaw Bay Ojibwa Community College	Educational	98.1 kW	EPC	Lanse, MI
Green Valley Dairy	Agriculture	1800 kW	EPC	Krakow, WI
Aurora Hospital	Medical	100.8 kW	EPC	Kohler, WI
Pike Creek	Housing	81.4 kW	EPC	Kenosha, WI
Manor of Kenosha	Senior Living	186.3 kW	EPC	Kenosha, WI
General Beer	Distribution	300 kW	EPC	Kaukauna, WI
Greendale Community Church	Religious	34.8 kW	EPC	Greendale, WI
Neighborworks	Public	64.7 kW	EPC	Green Bay, WI
Gilman Precision	Manufacturing	365 kW	EPC	Grafton, WI
Ampco Pumps	Manufacturing	382 kW	EPC	Glendale, WI
Just One More Meal	Religious	28.9 kW	EPC	Glendale, WI
Krones Cranes	Manufacturing	388.8 kW	EPC	Franklin, WI
Madison College	Educational	149.5 kW	EPC	Fort Atkinson, WI
Alliance Manufacturing	Manufacturing	64 kW	EPC	Fond Du Lac, WI
Holiday Ford and Collision	Retail	466.5 kW	EPC	Fond du Lac, WI
General Beverage	Distribution	233 kW	EPC	Fitchburg, WI
Fitchburg City Hall	Municipal	43.5 kW	EPC	Fitchburg, WI
Fitchburg Public Works	Municipal	112.1 kW	EPC	Fitchburg, WI
City of Fitchburg - Public Library	Municipal	112 kW	EPC	Fitchburg, WI



Fitchburg Fire Station	Municipal	100 kW	EPC	Fitchburg, WI
Latitude Graphics	Manufacturing	133 kW	EPC	Cross Plains, WI
Lakeshore Technical College	Educational	20.7 kW	EPC	Cleveland, WI
Cascade Cheese	Manufacturing	110 kW	EPC	Cascade, WI
Green Up Solutions	Distribution	53.1 kW	EPC	Butler, WI
GEA Vegas	Manufacturing	810.4 kW	EPC	Burlington, WI
Engineering Specialist	Engineering Firm	133 kW	EPC	Brookfield, WI
Aria of Brookfield	Senior Living	246.2 kW	EPC	Brookfield, WI
Mighty Grand Dairy	Agriculture	201 kW	EPC	Brighton, WI
Village of Bayside	Municipal	112 kW	EPC	Bayside, WI

*Additional and contact info available upon request.