

Minnesota Solar Hot Water Rebate

Instructions for Business Rebate Applications



INTRODUCTION

The Minnesota Solar Hot Water Business Rebate Program provides financial support for the installation of solar domestic hot water systems. To be eligible, a system must:

- be installed at a facility owned by a business with 20 or fewer full-time employees in Minnesota. Note that a facility owned by a non-profit organized under section 501(c)(3) of the Internal Revenue Code is eligible for the solar rebate program provided that the facility is used for a commercial activity, and the applicant satisfies all other eligibility criteria ;
- be installed by a contractor licensed in Minnesota that meets program participation criteria;
- be completed within nine months of approval of the rebate application; and
- comply with all applicable federal, state, and local requirements.

This program is funded by the American Recovery and Reinvestment Act of 2009 (ARRA), Pub. L. 111-5 and authorized by Laws of Minnesota 2009 Chapter 138. Federal and state guidelines require that projects adhere to a number of reporting and project implementation standards as outlined below.

The basic steps to receiving a solar hot water rebate follow.

1. **Implement domestic hot water energy efficiency measures.** At minimum, a business must be equipped with insulation on the existing hot water heater tank and accessible hot water pipes to minimize losses. Please note that the Office of Energy Security (OES) recommends a comprehensive professional energy audit. However, for the purpose of this program, an applicant may fulfill these minimum requirements.
2. **Complete a Solar Hot Water Site Assessment.** A site assessment using a solar shading analysis tool is required as part of this program. The site assessment must demonstrate at least an 80% shade factor compared to an ideally sited and oriented system. A structural evaluation should be done if the system will be building-mounted.
3. **Select a solar installer.** See the publication *Hiring a Renewable Energy Contractor* at www.energy.mn.gov > *Renewables* > *Solar* > *Purchase & Installation*. It includes a list of solar installers serving Minnesota. Note that not all installers listed are eligible to participate in the program.
4. **Submit application.** Submit an application AFTER assembling all supporting documentation with help from your installer. (See the checklist.) Additional funding may be available through federal tax incentives or from your local utility. For a current list of federal, state and utility energy incentives, visit the Database of State Incentives for Renewable Energy website at www.dsireusa.org.

Make a copy of the rebate application materials for your files and mail or hand deliver the originals to:

Solar Hot Water Rebate Program
Minnesota Office of Energy Security
85 7th Place East, Suite 500
Saint Paul, MN 55101-2198

IMPORTANT: Do not order, purchase or install any equipment before receiving a Rebate Confirmation Form indicating that the application has been approved. Failure to comply with any requirement at any point in the rebate process may disqualify the applicant from receiving a state rebate.

5. **Watch for the Rebate Confirmation Form in the mail.** OES will make every effort to notify the applicant if the application is approved within 30 days after receiving a complete application. Your solar installer may be notified as well. If approved, you will receive a **Rebate Confirmation Form and a Rebate Claim Form** that you will need to complete and return after your system is installed.
6. **Submit the original Rebate Claim Form.** Upon notice of project approval, the applicant has until September 15, 2011 to complete the installation and turn in the **Rebate Claim Form**. After the installation is complete, send the **Rebate Claim Form** and supporting materials to the Solar Hot Water Rebate Program. If the rebate claim package is complete, a rebate check will be issued within 30 days. **IMPORTANT: System installation must be completed by the expiration date indicated on the Rebate Confirmation Form. Extensions may be made on a case-by-case basis and must be requested at least five business days prior to the expiration date.**

The Office of Energy Security website hosts a solar section with information and web links that may be useful: www.energy.mn.gov, then click on *Renewables > Solar*. Questions regarding this application should be directed to the Energy Information Center at (651) 296-5175 or energy.info@state.mn.us.

REBATE APPLICATION CHECKLIST

- 1. Rebate Application Form, completed with original signatures
- 2. Evidence of Intent (evidence of \$500 minimum down payment)
- 3. Site Photos (All photos must be labeled)
 - A panoramic photo or series of five photos from 90° to 270° through south
 - A photo of the proposed installation site
- 4. Solar shading analysis (Pathfinder, SunEye, or similar)
- 5. Solar Site Diagram-Top View
- 6. System Schematic
- 7. Historic preservation documentation (See Exhibit B.)

TERMS AND CONDITIONS

PROGRAM DETAILS

1. **Eligibility.** Small businesses with 20 or fewer full-time employees are eligible. Residential applicants should use the residential version of this application. Others may contact energy.info@state.mn.us regarding possible funding opportunities for K-12 schools and local governments.
 - a. The primary function of the system must be to provide domestic hot water. Space heating is permitted if connected to domestic hot water, but the space heating portion of the system is NOT eligible for an incentive.
 - b. The system may not be integrated into a pool or hot tub.
 - c. An applicant who participated in a past Minnesota Solar Hot Water Rebate Program is not eligible for the current Minnesota Solar Hot Water Rebate Program for the same property.
 - d. The installer must be a Minnesota-licensed plumbing contractor, mechanical contractor, residential building contractor, or residential remodeler.
2. **Location of System.** The solar energy system must be installed on the property of an eligible consumer, and the property must be located in Minnesota.
3. **Shading.** The collectors must be at least 80% shade-free as calculated from the middle of the lowest edge of the collector(s) as shown by a solar shading profile as part of the solar site assessment. If the system pump(s) are powered by a photovoltaic (PV) module, the site assessment should show that there is no shading of the PV module year round. To ensure that power delivery to the DC pump corresponds with solar incidence on the

thermal collectors, the PV module must be attached to the frame of the solar hot water collectors or mounted adjacent to the collectors.

4. **Approval.** An application for a rebate must be approved by OES before any equipment is ordered, purchased or installed. OES will make every effort to notify the applicant if the application is approved within 30 days after receiving an application.
5. **Incentive Amount.** The rebate will not exceed 25 percent of project costs or \$25,000. OES uses the following table to determine the rebate amount.

Project Type	System size (square foot of NET aperture as determined by SRCC)	Multiply by rebate rate (\$25 per square foot)	Equals	Maximum Rebate (percent of project cost)	Maximum Rebate
Small business				25%	\$25,000
Multi-family 4+ units				25%	\$25,000

6. **System Requirements.** The solar energy system must be designed and installed to meet the *System Requirements* outlined in this application. The installer must notify OES for prior approval if they propose deviations from the *System Requirements*.
7. **Consumer Education.** Installer must provide system owner with instructions, maintenance schedule, and information about how to identify whether the system is working properly. An owner’s manual specific to the system must be delivered to the applicant in order to receive a rebate. All major system components must be labeled and a system schematic specific to the system must be included in the owner’s manual.
8. **Project Deadline.** The solar hot water system must be installed and the rebate claim form submitted by the expiration date listed on the **Rebate Confirmation Form**. If the installation is not completed and the rebate claim is not submitted by the expiration date, OES may terminate the rebate and notify the applicant that the rebate reservation has been canceled. Requests for extensions must be submitted in writing to OES at the program address on the first page or by e-mail to stacy.miller@state.mn.us.
9. **State Rebate Amount.** The rebate amount will not exceed the total cost of an installation minus federal, utility, and other incentives. See www.DSIREUSA.ORG for a comprehensive list of incentives from federal, state and utility sources.
10. **Changes.** The applicant or installer must notify OES in writing if there are changes to the original application with regard to the system installer, the system size, or equipment specifications.
11. **Privacy.** Please note that rebates and rebate applications may be considered public documents and may be subject to disclosure to the public upon request.
12. **Disclaimer.** Acceptance of this rebate does not constitute the approval, acceptance, warranty, guarantee or endorsement of OES or Department of Commerce.
13. **Program funding.** The total of all state solar rebate programs is up to \$3 million. See www.energy.mn.gov for state solar rebate program information including the Solar Electric Rebate Program and the Solar Air Heat Program.
14. **Additional Terms.** OES reserves the right to:
 - a. Inspect or monitor the system to ensure that it is consistent with program guidelines.
 - b. Withhold payment until any identified problems with the solar hot water system are resolved.
 - c. Terminate this rebate in whole or in part due to the applicant’s failure to fulfill the terms and conditions listed in this document, or due to non-appropriation of necessary funds.
 - d. Adjust the terms and conditions as necessary.

INSTALLATION SPECIFICATIONS

SYSTEM REQUIREMENTS

- **Professional Installation:** System must be installed to meet these *System Requirements* by an installer working with a licensed plumber. The installer who contracts for the installation must have a minimum \$50,000 of liability insurance. Product literature, system description, and schematic and maintenance instructions must be provided to the applicant in the form of an owner's manual. Self installations are not eligible to participate in the rebate program. The solar energy system must comply with all applicable federal, state and local codes and obtain the appropriate permits. Installation requirements vary from jurisdiction to jurisdiction. Plumbing connections between potable and non-potable water must be performed by a licensed plumber. The installer must notify OES if there are deviations to the system requirements.
- **Collectors:** Collectors must be rated by the Solar Rating and Certification Corporation (SRCC) to the OG-100 standard. Collectors must have a minimum five-year warranty. Flat plate collectors must have tempered glass glazing. Home built systems are not eligible.
- **SRCC OG-300 Pre-Assembled Systems:** Entire systems rated by the SRCC and assembled by the manufacturer may be installed as received from the manufacturer in lieu of the *System Requirements* for those components.
- **Collector Mounting:** Collectors must be mounted at an angle of at least 35 degrees but no more than 60 degrees from horizontal. Collectors must be securely fastened to their mounting structure. In some cases it may be necessary to reinforce roofing structure.
- **Labeling:** At minimum, the following system components must be labeled: potable water and non-potable pipe. Include a detailed schematic with the owner's manual and with application.
- **Pressurized Systems:** All piping in the solar collector loop, including supply and return piping between the collectors and the heat exchanger, must be copper or stainless steel and insulated with pipe insulation rated to withstand 250 degrees F or installed as recommended by the manufacturer's installation guide. All piping exposed to the elements must also have jacketing capable of withstanding moisture, ultraviolet radiation and environmental exposure. The balance of system piping, on the potable water loop, may be either copper, stainless steel or cross-linked polyethylene (PEX) (rated to at least 180 degrees F at 100 pounds per square inch) and insulated with pipe insulation rated to withstand 180 degrees F and capable of withstanding any environmental exposure. All piping to and from collectors must have at least a ¾ -inch inside diameter and all piping must be supported every six feet for copper pipe, and every thirty two inches for PEX pipe and flexible stainless steel piping or per manufacturer's recommendations. A check valve must be installed in the solar loop to prevent thermosyphoning. The closed loop must be fitted with the following components: fill and drain valve, pressure relief valve, expansion tank and pressure gauge. A pressure relief valve must be installed in the solar collector loop in the mechanical room on the collector side of ANY shut-off array valves. System pressures must not exceed 75 pounds per square inch.
- **Drainback Systems:** All piping between the collectors and the heat exchanger must be copper or stainless steel and insulated with insulation rated to withstand over 250 degrees F or installed as recommended by the manufacturer's installation guide. All piping exposed to the elements must also have jacketing capable of withstanding moisture, ultraviolet radiation and environmental exposure. The balance of system piping on the potable water loop may be either copper, stainless steel or cross-linked polyethylene (PEX) (rated to at least 180 degrees F at 100 pounds per square inch) and insulated with pipe insulation rated to withstand 180 degrees F and jacketing capable of withstanding any environmental exposure. All drainback piping to and from collectors must have at least a ¾ -inch inside diameter and be mounted with at least a ¼ -inch drop per foot towards the drainback tank. The collectors must also have a ¼ -inch drop per foot. All piping must be supported every six feet for copper pipe and every thirty two inches for PEX pipe and flexible stainless steel piping or per manufacturer's recommendations. No check valve needed in the solar collector loop.
- **High temperature propylene glycol antifreeze solution must be used.** To reduce risk of health hazard and to protect system components from corrosion and freezing, high temperature rated propylene glycol, mixed with distilled or de-ionized water, must be used. The heat transfer fluid must provide burst protection to at least -80 degrees F for pressurized systems and burst protection to at least -20 degrees F for drainback systems. The fluid must have a minimum temperature rating of 320 degrees F.
- **Balance of System:** There must be a back-up water heating system. The domestic hot water piping must be fitted with an adjustable **thermostatic tempering valve** to limit the maximum temperature of the hot water delivered. A **temperature monitoring gauge** must be installed at the outlet of the storage tank on the feed to the back-up water heater and downstream of the tempering valve. Piping between storage and domestic tanks must be done in a way to prevent thermosyphoning.
- **Two-Year Installation Warranty:** The system must include at least a two-year installation warranty that covers any defect in the workmanship of the installation at no charge to the owner.
- **One-Year Equipment Warranty:** All major system components must have at minimum a one-year warranty. Collectors must have a minimum five-year warranty.
- **Consumer Education.** Installer must provide system owner with instructions, a maintenance schedule, and information about how to identify whether the system is working properly. An owner's manual specific to the system must be delivered to the applicant in order to receive a rebate.

ARRA REQUIREMENTS

National Environmental Policy Act (NEPA)

OES is required to notify DOE if it determines that an activity categorically excluded from NEPA review appears to present an extraordinary circumstance as defined under 10 CFR § 1021.410(b). Applicants will need to certify to OES that their proposed solar installation activities will NOT:

1. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders;
2. Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators);
3. Disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; or
4. Adversely affect environmentally sensitive resources. Environmentally sensitive resources include, but are not limited to:
 - (i) Property (e.g., sites, buildings, structures, objects) of historic, archeological, or architectural significance designated by Federal, state, or local governments or property eligible for listing on the National Register of Historic Places;
 - (ii) Federally-listed threatened or endangered species or their habitat (including critical habitat), Federally- proposed or candidate species or their habitat, or state-listed endangered or threatened species or their habitat;
 - (iii) Wetlands regulated under the Clean Water Act (33 U.S.C. 1344) and floodplains;
 - (iv) Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, and marine sanctuaries;
 - (v) Prime agricultural lands;
 - (vi) Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and
 - (vii) Tundra, coral reefs, or rain forests.

National Historic Preservation Act

Any federally funded, licensed or permitted project requires consideration of historic resources under Section 106 of National Historic Preservation Act of 1966. Projects receiving funds through ARRA are subject to review for the identification and preservation of historic resources.

Davis-Bacon Act (DBA) Requirements

Contractors whose clients participate in the Minnesota Solar Hot Water Rebate for Businesses must pay employees federal prevailing wage rates. Section 1606 of the Recovery Act requires that all laborers and mechanics employed by contractors and subcontractors on construction, alteration, or repair projects funded directly by or assisted in whole or in part by ARRA Funds shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (USC). Pursuant to Reorganization Plan No. 14 and the Copeland Act, 40 USC 3145, the United States Department of Labor has issued regulations 29 CFR Parts 1, 3, and 5 to implement the Davis-Bacon and related Acts. Regulations in 29 CFR 5.5 instruct agencies concerning application of the standard DBA contract clauses set forth in that section (See Exhibit A). DBA wage determinations can be found at: www.wdol.gov and additional information on DBA Requirements can be found at: www.dol.gov/esa/whd.

Forms for weekly payroll reporting for contractors and subcontractors are available from www.energy.mn.gov > *Funding* > *Rebates and Credits* or by request from stacy.miller@state.mn.us. Payroll forms must be completed weekly for the project by both the installer and any subcontractors while work is being performed, and records must be maintained for a period of three years after project completion. Payroll reports must be submitted by certified mail or with delivery confirmation to:

**Davis-Bacon Reporting-Solar Rebate
Minnesota Office of Energy Security
85 7th Place East, Suite 500
Saint Paul, MN 55101-2198**

Minnesota Data Privacy Act/Tennessee Warning

The Minnesota Data Privacy Act requires that certain information you provide on this form remain as private data. The information about you that is collected on the Solar Hot Water Rebate Program application will be classified as either public or private data. Public data will be accessible to the public. Private data about you will be accessible only to you and state personnel and their

authorized subcontractors who administer the program and reporting requirements. The data you give us about yourself is needed to:

- Identify you;
- Contact you in case of program or energy use evaluation;
- Comply with certain federal and state reporting requirements;
- Evaluate program effectiveness; and
- Administer the Solar Hot Water Rebate Program.

If you choose to supply all of the requested data, your completed rebate application will be processed on a first-come, first-served basis. If you refuse to supply data requested on the rebate application form, your application will not be processed.

Solar Installer/Contractor Requirements

By signing the Minnesota Solar Hot Water Rebate Application, a Solar Installer/Contractor agrees to:

- Provide the state with accurate information regarding the full scope of the project, including but not limited to: itemized pricing of equipment, labor, work performed, wages paid, and total system cost.
- Abide by all state and federal guidelines and requirements, including reporting, associated with the Minnesota Solar Hot Water Rebate Program.

MINNESOTA SOLAR HOT WATER REBATE BUSINESS APPLICATION

APPLICANT INFORMATION – Complete all fields. Please print or complete on-line and print a hard copy.

Contact Name	Business Name			
Mailing Address	City	State	ZIP	
Phone () - - -	Email			
Installation address if different than mailing (no PO Boxes)	City	State	ZIP	County
System will be used in a: <input type="checkbox"/> Business with 20 or fewer full time employees <input type="checkbox"/> Apt/Condo building (4+ units) _____ occupants				
Subject property year built: _____ For rural properties, Township, Section, Range _____ (Township, section, and range may be available from your county's website or by calling the county property records division.)				
Will system be visible from the street or a public right of way? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Is property located within or adjacent to a historical preservation district? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Is the property individually listed or eligible to be listed in the National Register of Historic Places? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Are you aware of any events of historical significance associated with the property? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Will the solar installation involve structural alterations to an existing building? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Is the system sized no larger than required to meet the building load? <input type="checkbox"/> Yes <input type="checkbox"/> No				
Water heating fuel supplier _____		Acct # if natural gas or electric _____		
Current water heating fuel type: <input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane (LP) <input type="checkbox"/> Electric <input type="checkbox"/> Other: _____				
The following efficiency measures have been taken: <input type="checkbox"/> Insulated storage tanks <input type="checkbox"/> Insulation on interior hot water lines OR <input type="checkbox"/> These improvements will be made on or before _____ (date)				

INSTALLATION CONTRACTOR INFORMATION

Company installing and guaranteeing the system	Lead Installer's Name	Is lead installer NABCEP Solar Thermal certified? (Not required.) <input type="checkbox"/> Yes <input type="checkbox"/> No	
Mailing Address	City	State	ZIP
Company's Phone () - - -	Email		
Plumbing contractor license #	Solar installer liability insurance coverage \$ _____ Minimum of \$50,000 required.		
General Contractor # (where required)	Mechanical bond # _____ Plumbing bond # _____ (As required by DLI; May use plumbing contractor's bonds)		

SYSTEM DETAILS – All fields are required

<input type="checkbox"/> New Installation	Estimated Installation Date (required): _____	Estimated Installation Cost \$ _____
Collector Type: <input type="checkbox"/> Flat Plate <input type="checkbox"/> Evacuated Tube	# of Collectors/Tubes _____	<input type="checkbox"/> Roof Mount <input type="checkbox"/> Ground Mount
Collector Manufacturer/ Model Number _____	Net aperture _____	SRCC cert # _____
Collector Tilt Angle (35-60° from horizontal) _____	Azimuth Angle (must be between 135-225°) _____	
<input type="checkbox"/> Shading analysis (Attach the shading analysis completed during solar hot water site assessment)		
Solar Storage Tank Manufacturer	Solar Tank Model Number	Storage Tank Vol. _____ gallons
Back-up Water Heater: <input type="checkbox"/> Same as existing		
<input type="checkbox"/> Replacement Manufacturer: _____ Model Number: _____ Storage: _____ gallons		
Pump Manufacturer(s): _____ Model Number(s): _____ Horsepower: _____ <input type="checkbox"/> AC <input type="checkbox"/> DC		

TO BE COMPLETED BY PROGRAM ADMINISTRATOR

App #	DBA _____ NEPA _____ SHADE _____ SHPO _____	Date Received / /	HD / post
Approved? Yes ___ No ___ Contingency _____	Rebate: \$ _____	Date Reviewed / /	

SIGNATURE

I certify that I have performed or reviewed this analysis and any accompanying documentation, and the information is reasonable and accurate. I further certify the unit is to be installed at the indicated installation address. I have read and agree to the terms and conditions associated with this program. I understand that OES may elect to evaluate program energy savings by monitoring energy use prior to and after solar installation. The applicant's signature gives OES approval to obtain energy consumption data directly from the utility company.

Applicant Signature—original signature required

Date

By signing the Minnesota Solar Hot Water Rebate Application, the Solar Installer and all subcontractors agree to provide the state with accurate information regarding the full scope of the project, to include, but not limited to: itemized pricing of equipment, labor, work performed, and wages paid. The Solar Installer and all subcontractors further agree that installations will meet all applicable building and zoning codes and all terms and conditions of the Minnesota Solar Hot Water Program including the payment of prevailing wages.

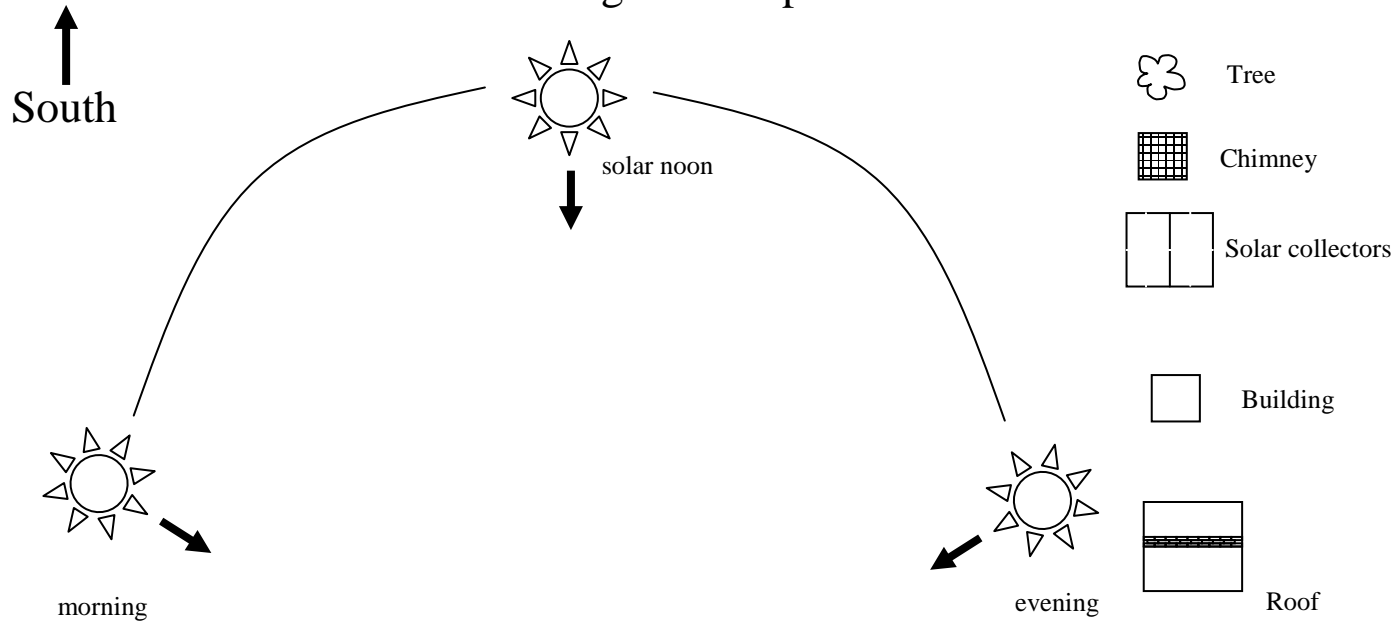
Installer Signature—original signature required

Date

The following supporting documentation must be included in this application:

- 1. Rebate Application Form, completed with original signatures
- 2. Evidence of Intent (evidence of \$500 minimum down payment)
- 3. Site Photos (All photos must be labeled)
 - A panoramic photo or series of five photos from 90° to 270° through south
 - A photo of the proposed installation site
- 4. Solar shading analysis (Pathfinder, SunEye, or similar)
- 5. Solar Site Diagram-Top View
- 6. System Schematic
- 7. Historic preservation documentation (See Exhibit B.)
 - photos of structures on the property unless pole mounted
 - aerial view as shown by <http://mapper.acme.com/> unless pole mounted

Solar Site Diagram - Top View



This form must be completed as part of Minnesota Solar Thermal Rebate Applications and include distances between the proposed system and surrounding objects. Include estimated heights for the system and surrounding objects as well.

What angle will the solar thermal system face? _____ degrees (180° is due south)

1. Draw the proposed location of the solar thermal system using the appropriate symbols. Include all existing structures on property and label streets relative to the proposed system for historic review purposes.
2. Indicate the orientation of the system.
3. Draw any objects that appear in the photos of the horizon. Pay particular attention to those objects which may appear to present a shading obstruction in the horizon photos.
 - a. Estimate the appropriate width at the widest point of each object.
 - b. Measure and make note of the distance from the solar system to each object on the diagram.
 - c. Include heights of objects and the height of the lowest point of the solar collectors.

29 CFR Part 5.5

Davis-Bacon Act: 29 CFR Part 5.5

The “recipient” referred to throughout the Davis-Bacon contract conditions is the “grantee”. This language must be included in all Davis-Bacon covered contracts and any and all subcontracts.

(a) The Agency head shall cause or require the contracting officer to insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in Sec. 5.1, the following clauses (or any modifications thereof to meet the particular needs of the agency, Provided, That such modifications are first approved by the Department of Labor):

(1) Minimum wages. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in Sec. 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The (write in name of Federal Agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records. (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site.

The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the (write the name of the agency) or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program.

If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration

shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility. (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1). (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1). (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

(b) Contract Work Hours and Safety Standards Act. The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Sec. 5.5(a) or 4.6 of part 4 of this title. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be

necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

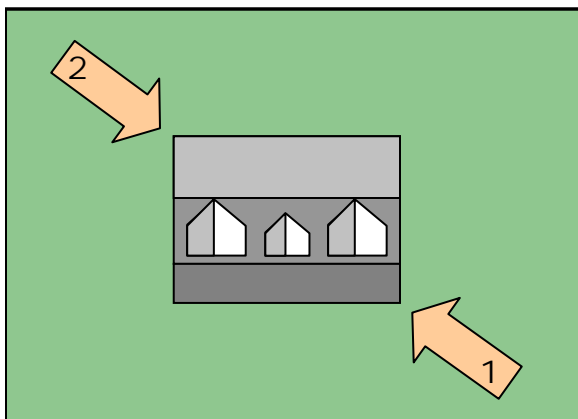
(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section. (c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in Sec. 5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

Historic Preservation 101

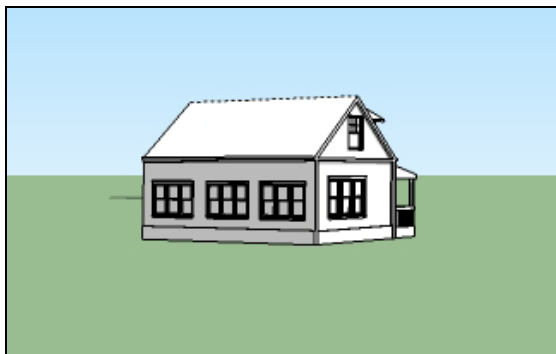
Photographs and Maps

Photography

Take at least two photographs of **each major structure** on the property. Shoot from opposite corners so that two sides of the building are visible in each photo.



View one



View two

Maps

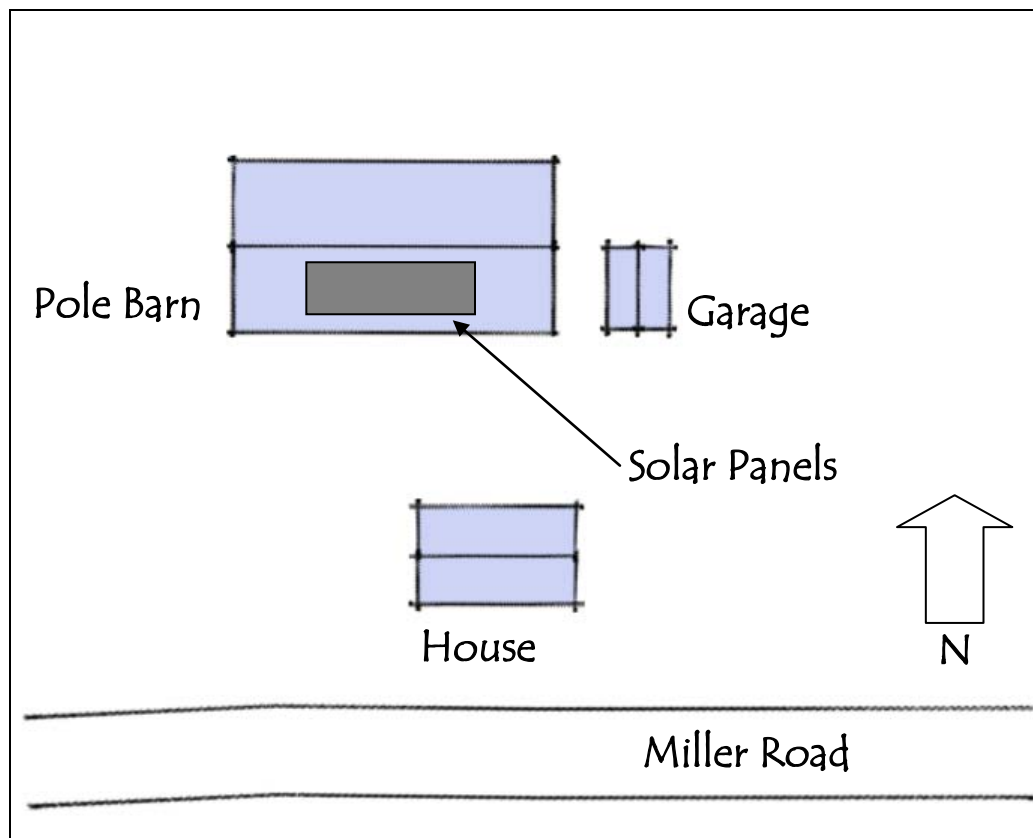
For properties within designated historic districts, in rural areas, or involving ground disturbance (i.e. geothermal systems; solar arrays requiring substantial footings, etc.) provide a topographical map and an aerial photo. This information is available online at <http://mapper.acme.com>. Applicants can print hard copies to submit with project proposals, and can also create electronic copies by clicking the "Link to this page" button to create a unique URL that can be pasted into electronic submittals.

Historic Preservation Documentation

Site Plan, Date of Construction, and Location

Site Plan

Please provide a sketch plan of the site, showing the locations of all buildings, and orientation of ridge lines. Show major roads or streets. Include a north arrow, and clearly mark the location of the proposed installation.



Construction Dates

Please provide dates of original construction for each major building on the site (house, barn, etc.) if known.

Township, Range, and Section

For properties in rural areas, please provide township, range and section information for the project area.

Historic Preservation Documentation

Line of Sight Projections

Line of Sight

For solar arrays or rooftop HVAC equipment on historic buildings it is often necessary to determine whether or not the equipment will be visible from the street. Photographs and diagrams should be prepared to indicate sight lines for such installations.



Figure 1. Aerial perspective showing location of rooftop solar array.

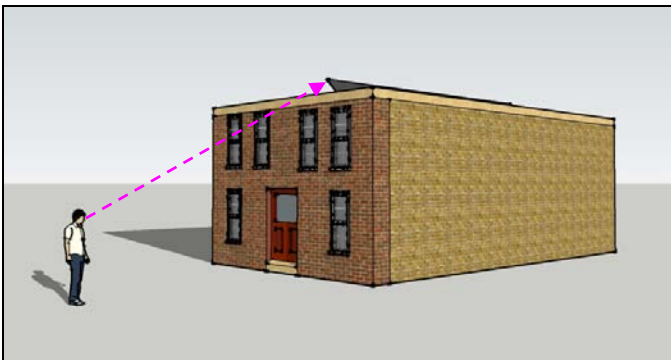


Figure 2. Photos should be taken from the street to indicate how much of the installation will be visible. A pole marked with the height of the installation and placed near the front corner can be used to plot sight lines.

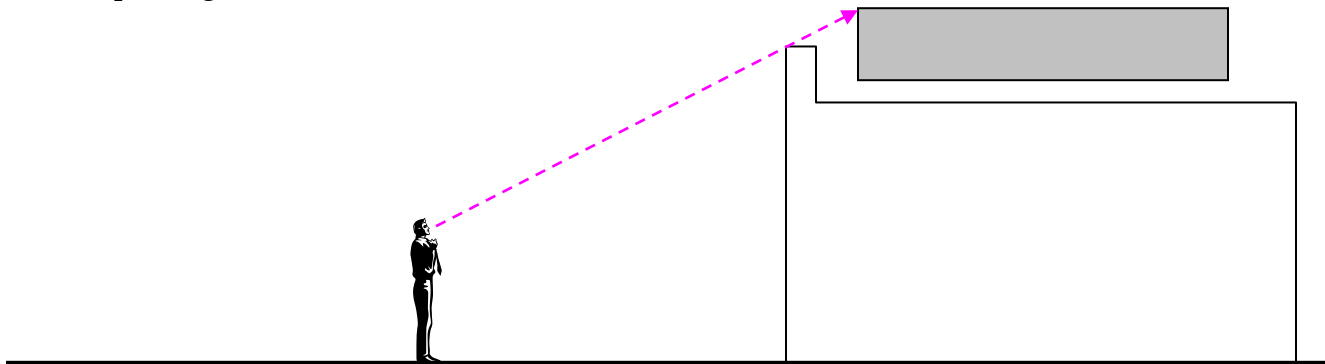


Figure 3. A diagram, drawn to scale and showing the height of the building, the height and placement of the installation, and the view from eye level (5 feet), can be used to plot sight lines.