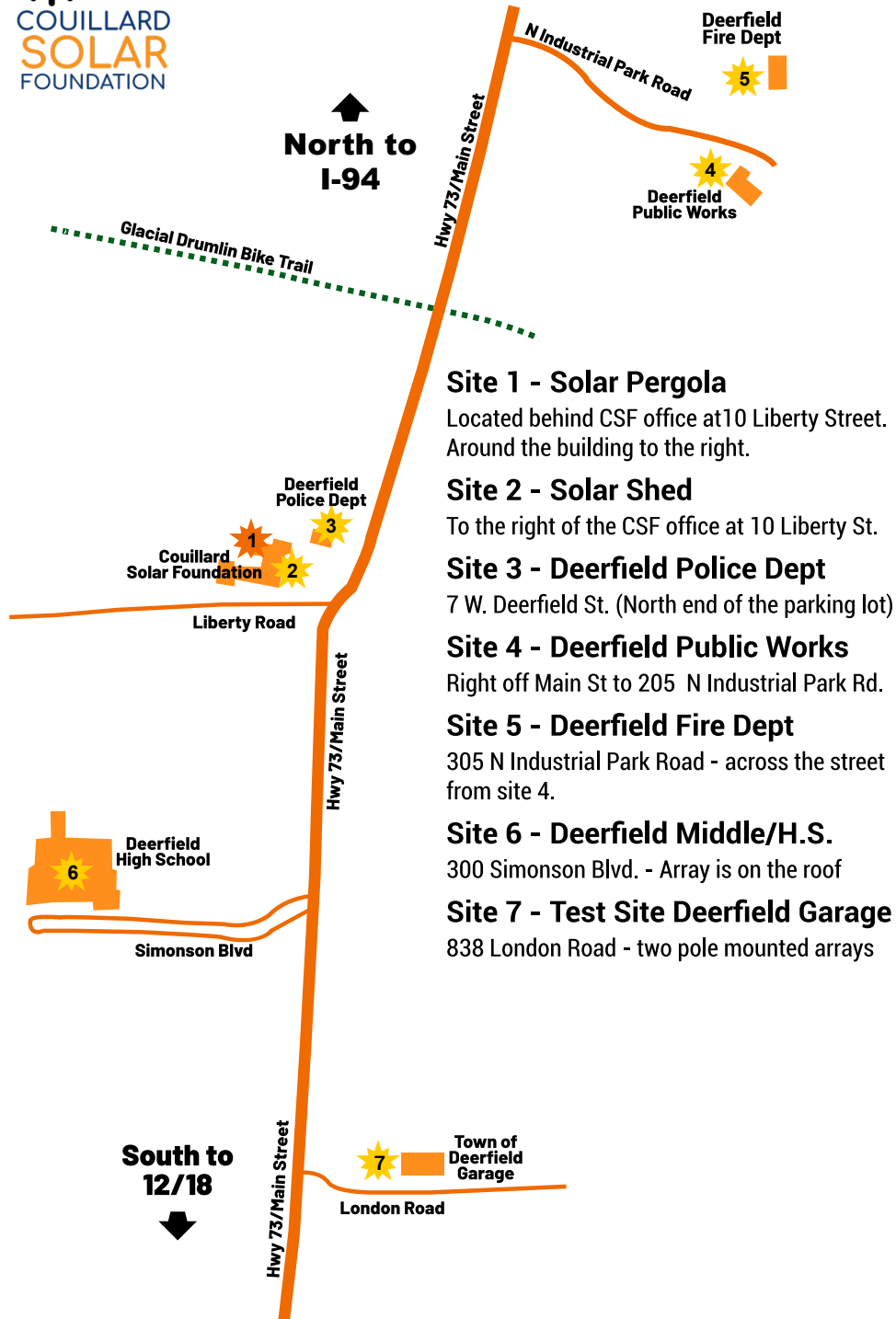


# Deerfield Solar Tour Map

COUILLARD  
SOLAR  
FOUNDATION



## Site 1 - Solar Pergola

Located behind CSF office at 10 Liberty Street. Around the building to the right.

## Site 2 - Solar Shed

To the right of the CSF office at 10 Liberty St.

## Site 3 - Deerfield Police Dept

7 W. Deerfield St. (North end of the parking lot)

## Site 4 - Deerfield Public Works

Right off Main St to 205 N Industrial Park Rd.

## Site 5 - Deerfield Fire Dept

305 N Industrial Park Road - across the street from site 4.

## Site 6 - Deerfield Middle/H.S.

300 Simonson Blvd. - Array is on the roof

## Site 7 - Test Site Deerfield Garage

838 London Road - two pole mounted arrays

# Deerfield Solar Tour Site Information

Deerfield is a community of almost 3000 people in Dane County, just south of Wisconsin's capitol, Madison. Cal Couillard, founder of the Couillard Solar Foundation and a long time resident of Deerfield, had a vision for his community. Since the first solar array, installed at the Deerfield Middle-High School, Cal has donated over 600kW of solar to the village, and has installed an additional 14.7 kW in arrays around Deerfield, with more planned.

## Site 1 - Solar Pergola

Installed Summer 2020 - 15 kW - Powers the Barbershop in Liberty Commons

Installer: Cris Folk

This is the prototype for a new kind of solar structure. It's designed for beauty as well as function, and can be used in residential, business or community projects. It uses 36 bifacial solar panels, which use albedo, or reflected light to begin charging from early morning until well into the afternoon.

## Site 2 - Solar Shed

Installed 2019 - 4 kW - Off grid - battery storage and EV charging station

The corrugated aluminum at the side of the shed reflects additional light onto the panels, increasing the overall solar production.

## Site 3 - Deerfield Police Dept

Installed Fall 2021 - 15 kW now (will be 20 kW) - Powers the police department

Notice the different types of panels on the roof. The top row contains 7 mono-facial panels (solar cells on 1 side), 27 bifacial (solar cells on the front and back) 370W panels w/ silver frames (top, middle row right and on the lower roof on the left) and 12 bifacial 445W panels with black frames. The array will help us test the effectiveness of bifacial panels flush-mounted to a light color roof.

## Site 4 - Deerfield Public Works

Installed March 2019 - 180 kW - Powers the village's waste treatment plant

Installer: Arch Electric

This ground-mount array contains 600 mono-facial panels. Underneath the array native plants are allowed to grow, preventing soil erosion and loosening the soil to improve rain absorption.

## Site 5 - Deerfield Fire Department

Installed March/April 2022 - 33.8 kW - Will power the Fire Department

This is the 2nd iteration of the CSF Solar Canopy design. The concrete base reflects albedo to the 76 445W bifacial panels. The canopy is modular, meaning it can vary in depth and width to suit any site.

## Site 6 - Middle/H.S.

Installed February 2019 - 360 kW - Supplies about 25% of the school's energy needs

Installer: Arch Electric

This system produces approximately 25% of the school's energy needs. The solar monitoring system associated with the array can be used to develop energy curriculum for Deerfield students.

## Site 7 - Test Site - Deerfield Garage

Installed June 2020 - two 3.7 kW arrays - Powers the village garage

These two arrays are a side-by-side test site designed to compare the output of bifacial vs. mono-facial arrays. Be sure to look at the inverters on the garage wall to compare the output of the two arrays to each other.



Use this QR code to see more information about the Deerfield mini solar tour and the Couillard Solar Foundation. Or go to [CouillardSolarFoundation.org](http://CouillardSolarFoundation.org).

