

PROJECT SIZE: 15 MWp

LOCATION: CHICAGO METRO AREA  
ILLINOIS, U.S.

LAND: 40 ACRES



# 2.5x More Value, Same Site: Reimagining a Partially Developed Site with Smarter Solar Design



## **Challenge:** A promising site—but conceived for the past, not the market ahead

In the Chicago suburbs, where incentives have sparked fierce competition for increasingly limited land, a developer saw an opportunity. A partially developed site surfaced for acquisition, with approved zoning and interconnection and a conventional tracker-based layout that left much of the valuable interconnect capacity nearby unused. The design reflected yesterday's thinking, not today's reality.

The developer knew there was an opportunity to drive more output in a high-demand area, reduce CapEx, and generate much stronger returns—without restarting the development clock or expanding the site footprint.

<b>Familiar risks:</b>	<b>Limited land availability</b>	<b>Legacy layouts</b>	<b>Terrain &amp; labor challenges</b>	<b>Incentive pressure</b>
	Prime parcels are disappearing fast, especially near demand centers.	Mid-stage projects are often designed with outdated assumptions and underbuilt density.	Undulating topography and high local labor rates make conventional builds costly.	Missed deadlines could mean missing out on critical upside.

## Solution: A smarter layout for where the market is going

The developer brought in Planted Solar early—while still evaluating the site—to assess what was possible. Using Planted’s integrated software and hardware platform, the team reimaged the site for maximum output and economic performance without touching the parcel boundaries.

- **Compact, high-density racking**  
enables 2x more energy on the same land
- **Terrain-following arrays**  
adapt to site contours to avoid major grading
- **Interconnection-aware design**  
expands generation close to key delivery points
- **Rapid installation**  
maximizes highly skilled labor and accelerates build speed



*This layout is a simulation, but it reflects the real constraints and decisions developers face when rethinking legacy sites with Planted at the table.*

## Result: A higher-performing project with a repeatable upside

With Planted’s approach built in from the start, developers can turn moderately scoped assets into high-yield, high-confidence investments.

- **2.5x increase in project NPV** driven by higher output and lower LCOE
- **More energy per acre** without expanding the footprint
- **Lower CapEx per MW** with less grading, cabling, steel, and labor required
- **Faster, more predictable build** supported by automation and simpler site prep
- **Repeatable M&A strategy** for upgrading mid-stage sites in high-stakes markets

These pressures, parameters, and performance gains are pulled straight from the field. With Planted Solar’s high-density, terrain-following deployment, developers can turn constrained sites into efficient, resilient, and profitable solar assets.

## Build Smarter from the Start with Planted Solar

The best land is taken. The smartest projects make more of what’s left.  
We help developers unlock better returns—without expanding the footprint.

**Let’s Talk**