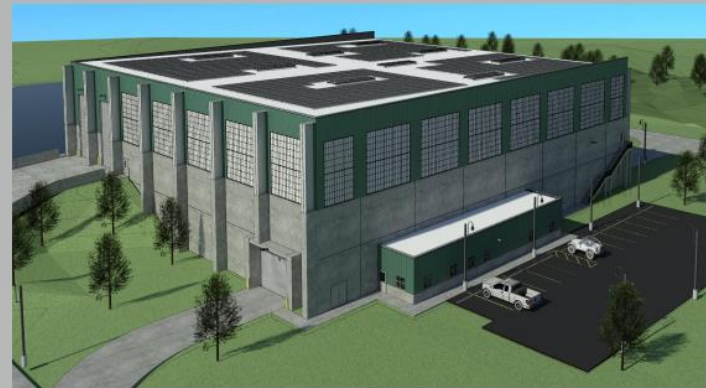




# Proposed Meadowview Material Transfer Facility

Waste Management of  
Illinois, Inc.

May 29, 2024



# WM At A Glance

Proposed Meadowview  
Material Transfer Facility

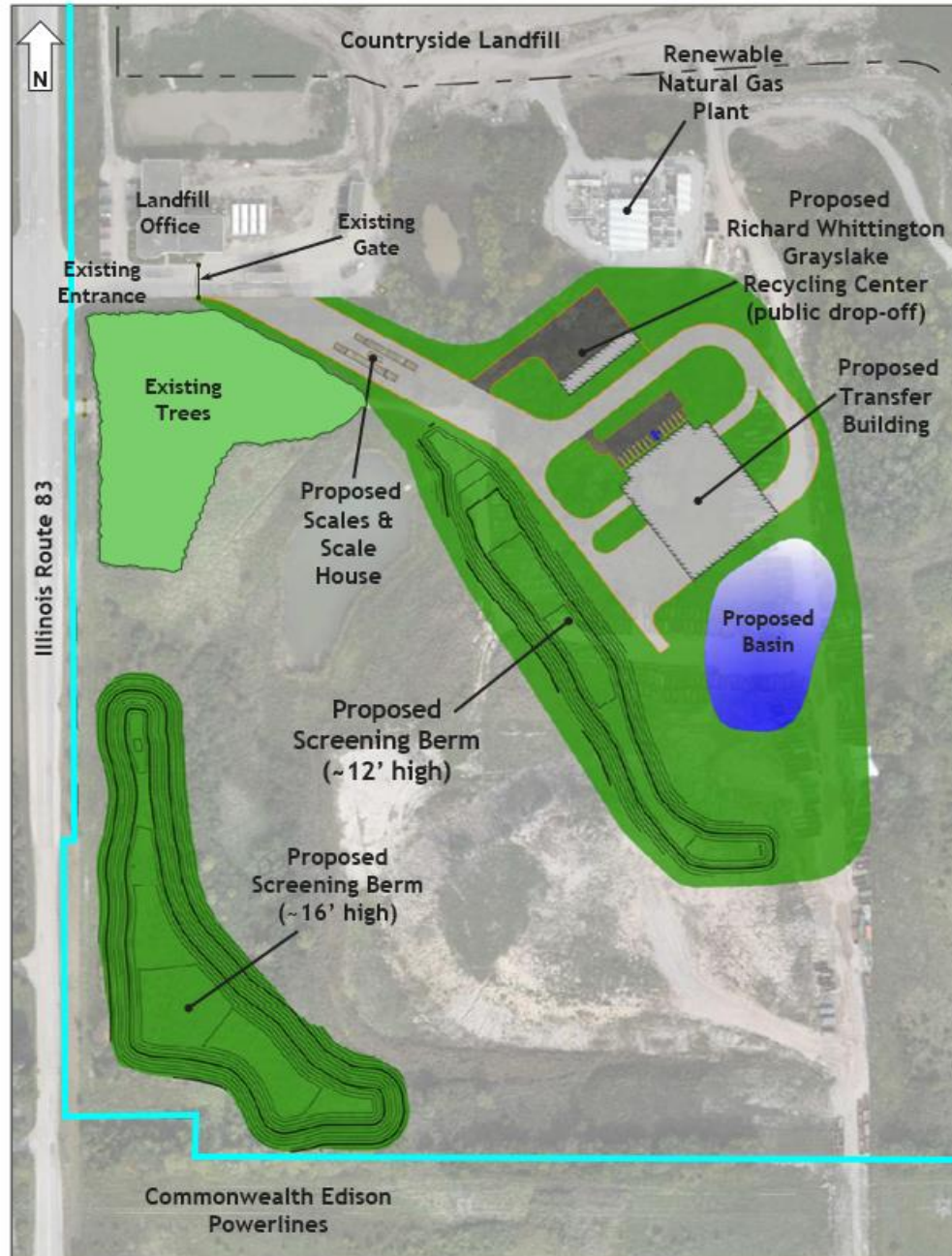
- Largest environmental services provider in North America
- ~49,300 employees
- 497 collection operations
- 337 transfer facilities (16 in Illinois)
- 254 solid waste landfills
- 97 recycling facilities
- 135 landfill gas beneficial use projects
- 41 organic composting facilities
- ~11,300 compressed natural gas trucks  
(largest heavy CNG truck fleet in North America)
- 181 natural gas fueling stations



# Location Map



# Conceptual Site Plan



## Meadowview Material Transfer Facility (“Facility”)

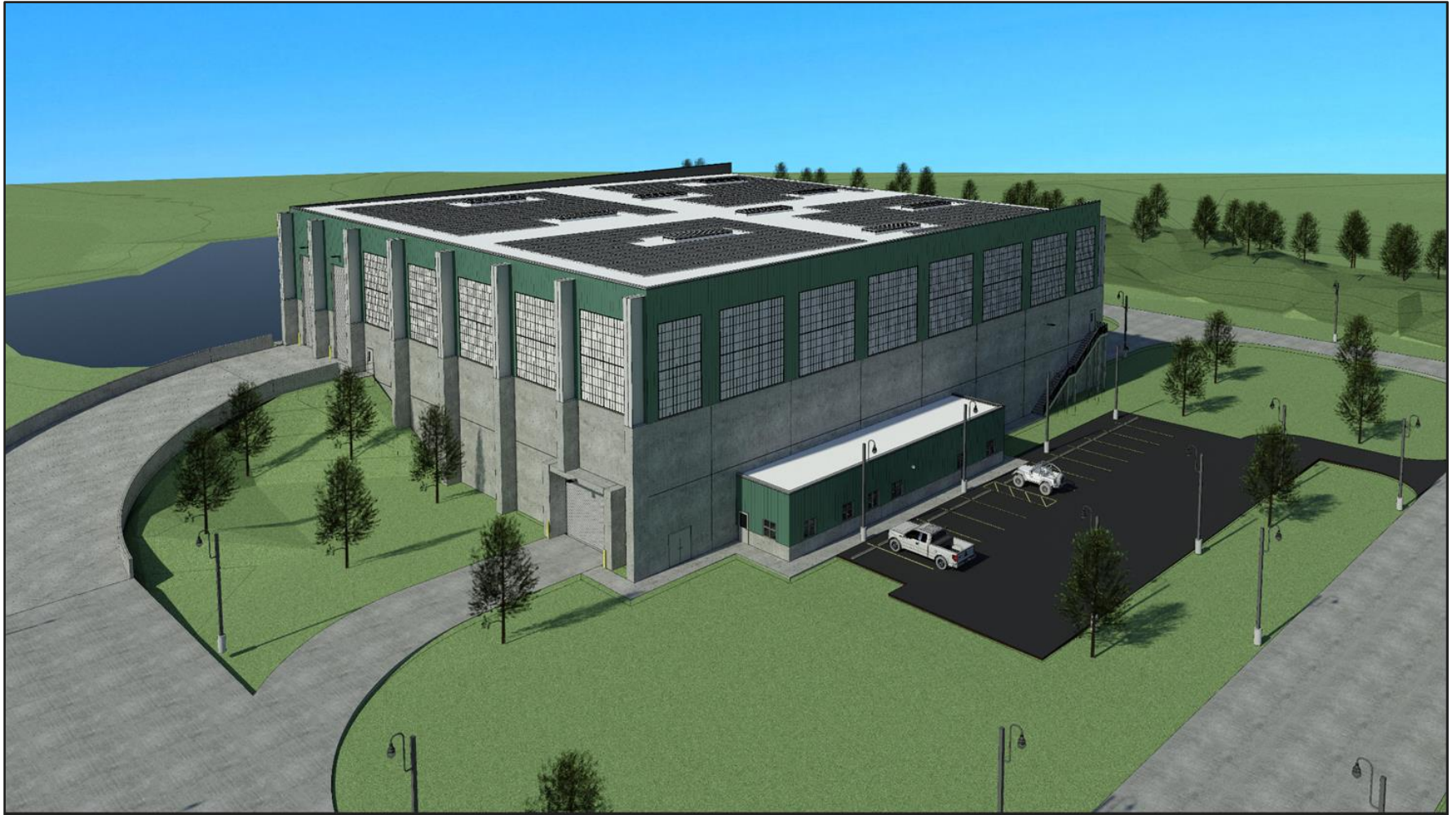
- 31,450 square foot transfer building
- 1,000 ton per day capacity
- Wastes accepted for transfer: municipal solid waste, construction & demolition waste, landscape waste
- Operating hours: 6:00 am - 6:00 pm M-F
- Gate hours: 6:30 am - 3:30 pm M-F
- Closed Saturdays, except for holiday make up days, i.e., when there is a holiday during the previous week: New Year’s Day, Memorial Day, 4th of July, Labor Day, Thanksgiving and Christmas
- For Saturday holiday make up days, operating and gate hours will be 6:30 am - 2 pm

## Recycling Center

- 3,500 square foot recycling building
- Recyclables accepted: household materials such as electronics, textiles, shoes, food scraps, mixed paper, cardboard, plastics, metal & aluminum cans, glass. Other materials may be added as agreed to by Lake County and SWALCO
- Gate hours: 6:30 am - 3:30 pm M-F, 8 am - 12 pm Saturday

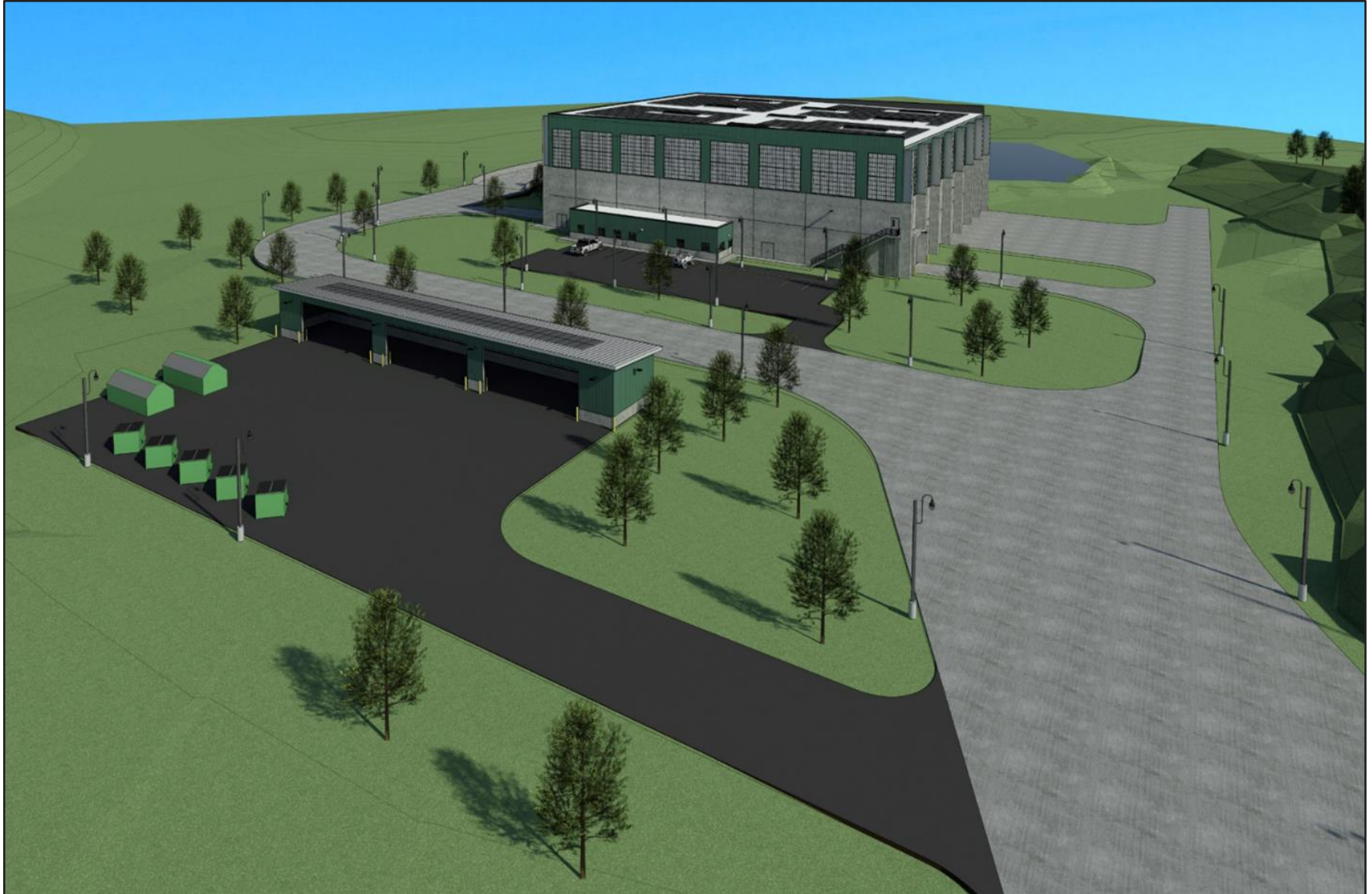
# Architectural Rendering - Southwest View

*Proposed Meadowview  
Material Transfer Facility*



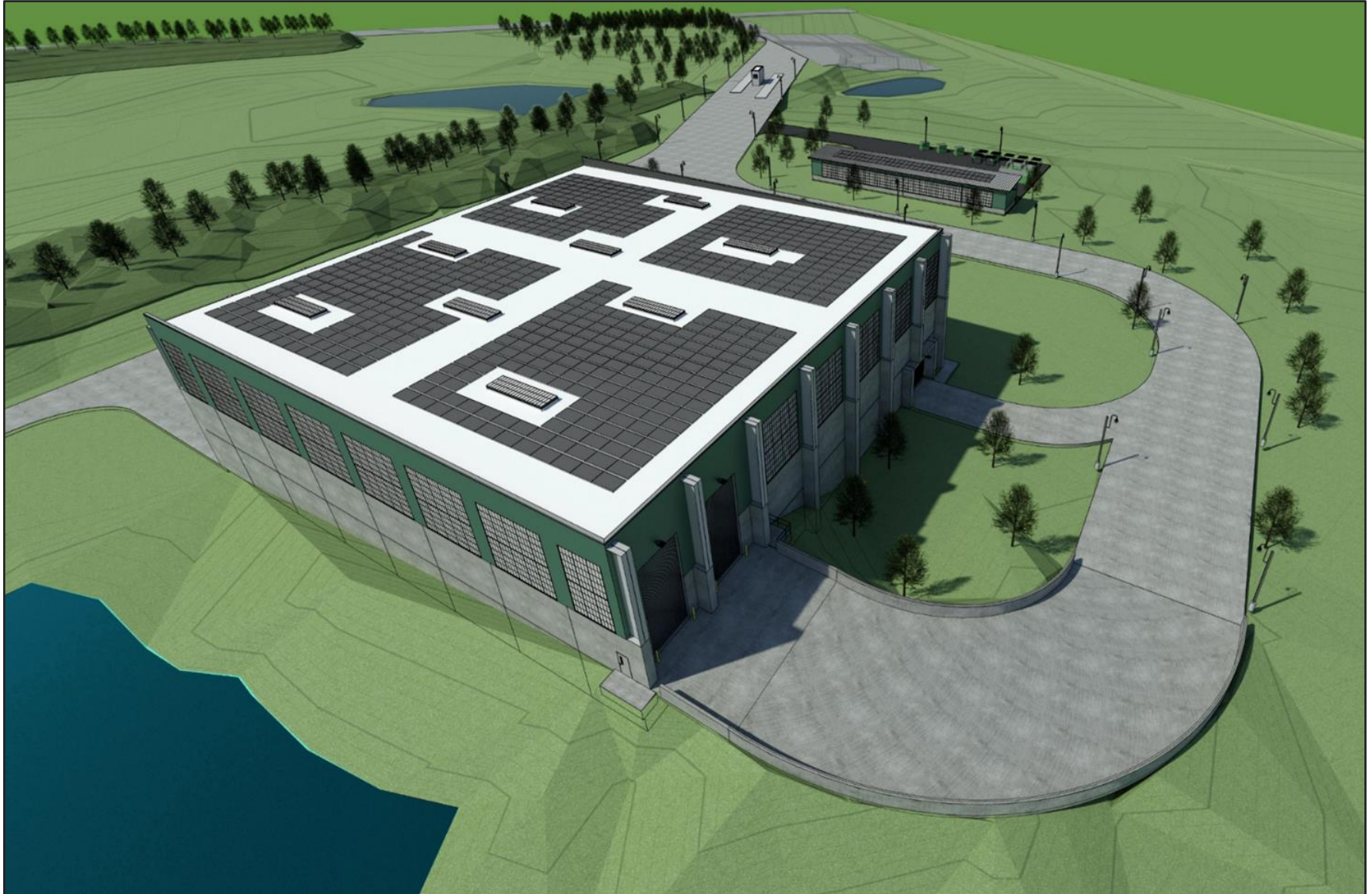
# Architectural Rendering - Southeast View

Proposed Meadowview  
Material Transfer Facility



# Architectural Rendering - West View

Proposed Meadowview  
Material Transfer Facility



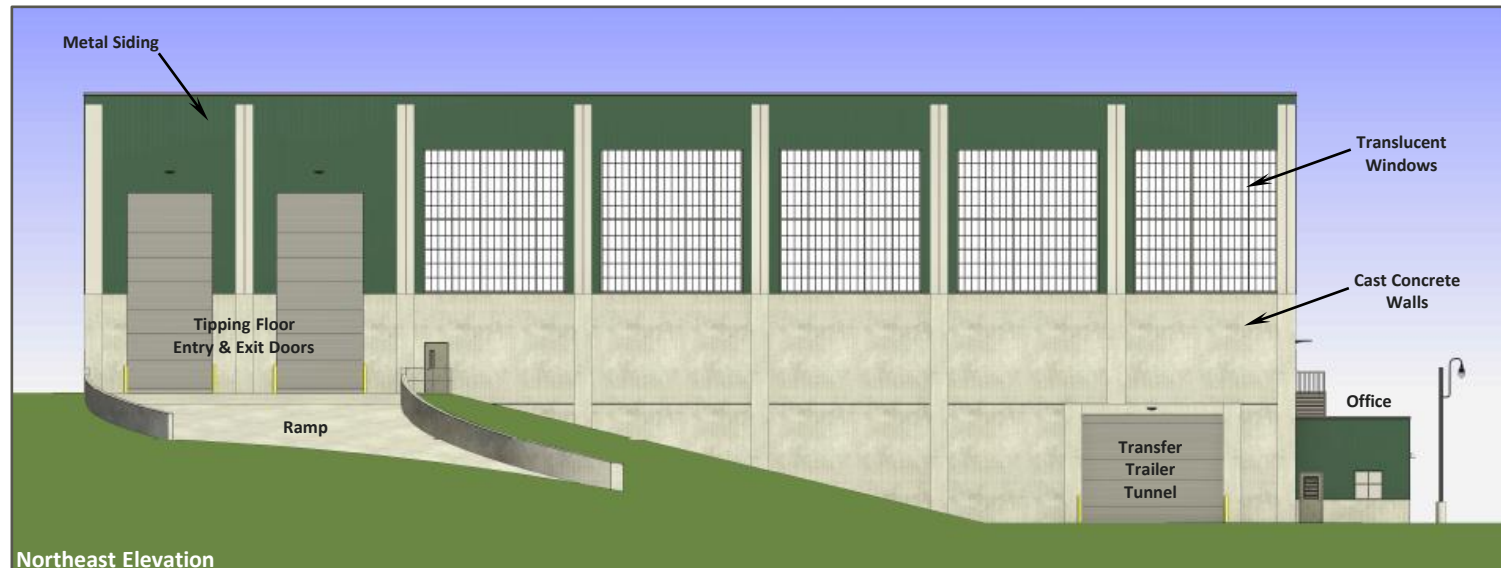


# Conceptual Site Plan - Traffic Flow



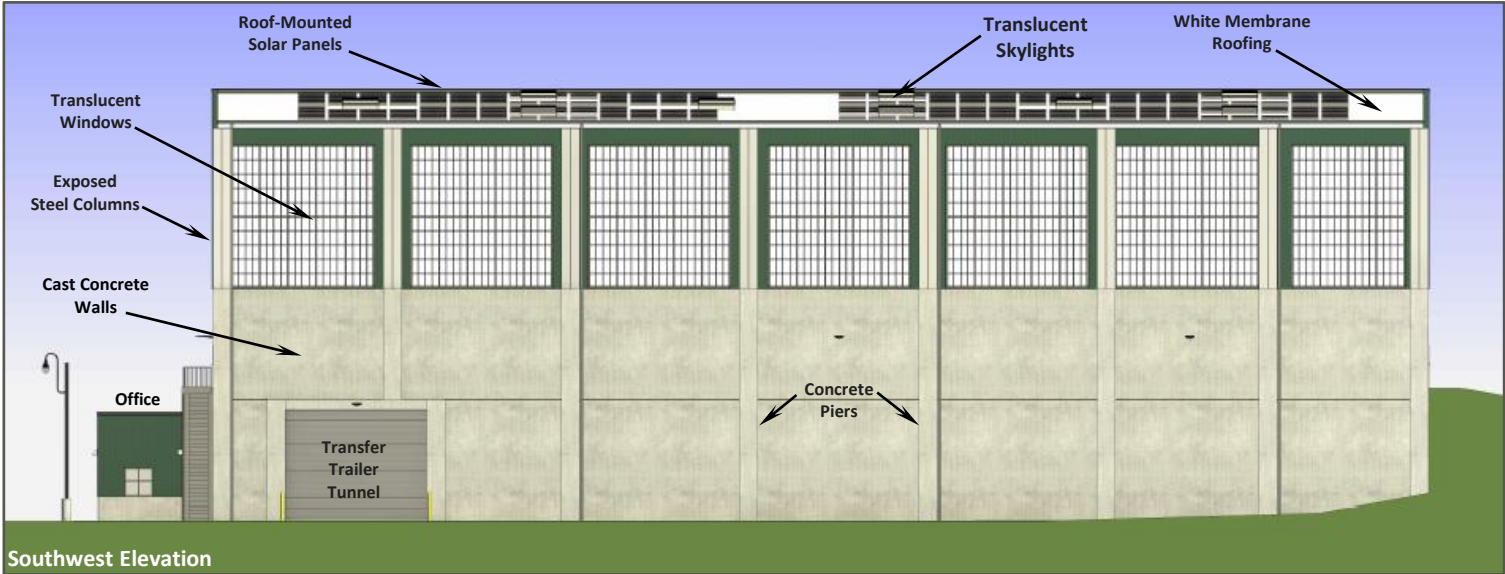
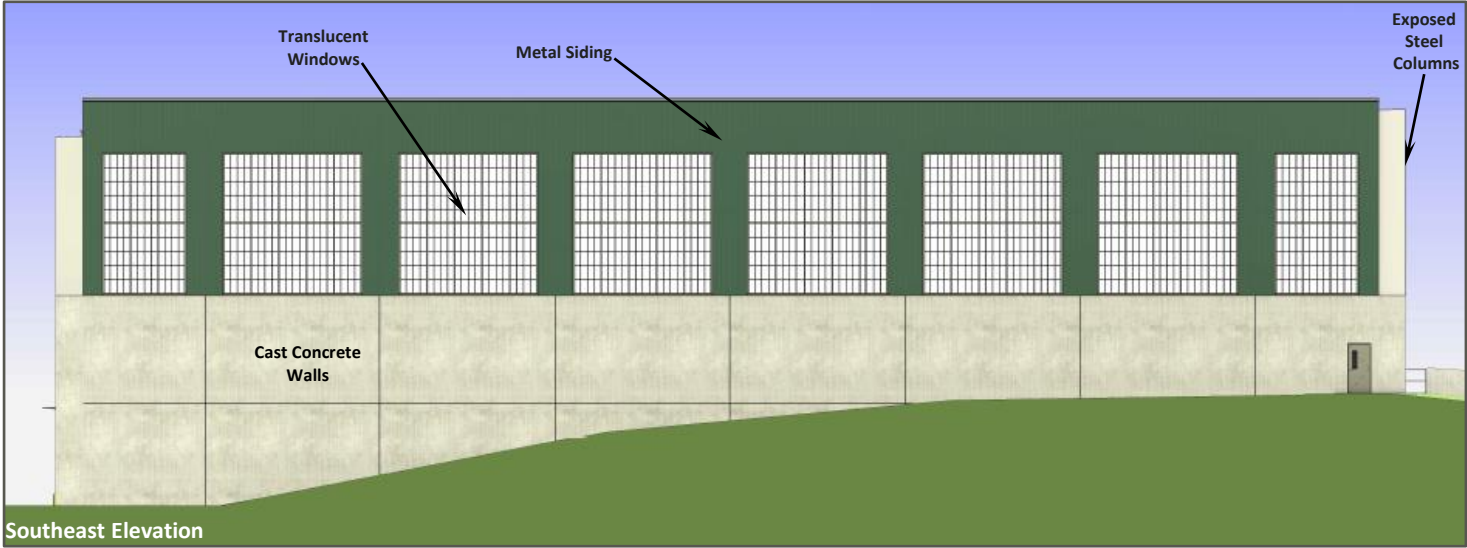
# Building Elevations - Transfer Building

Proposed Meadowview  
Material Transfer Facility



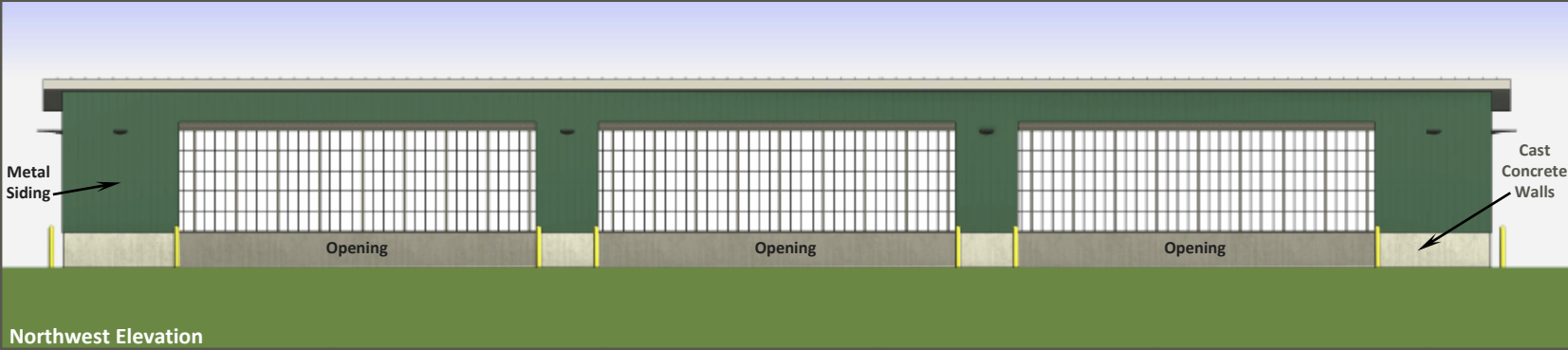
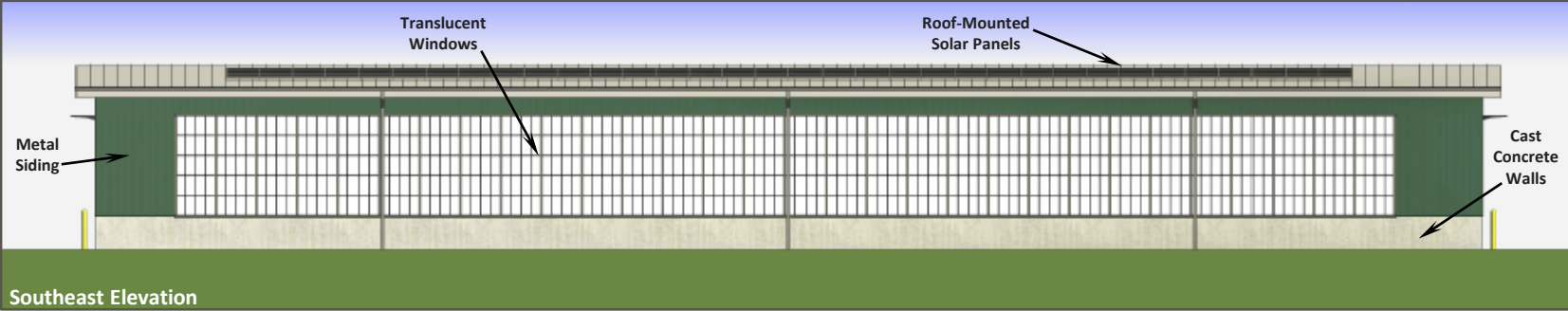
# Building Elevations - Transfer Building

Proposed Meadowview  
Material Transfer Facility



# Building Elevations - Recycling Building

Proposed Meadowview  
Material Transfer Facility

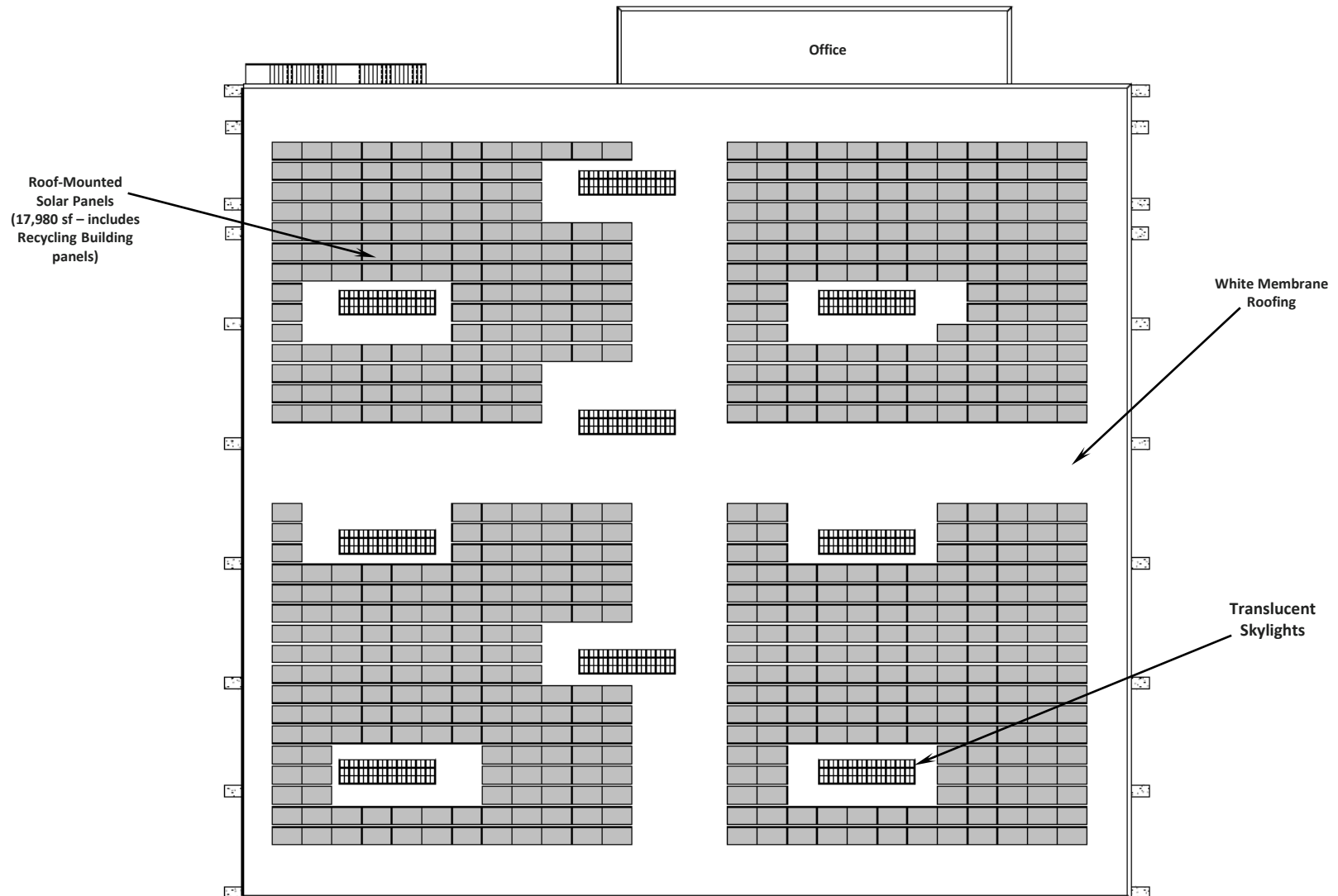


# Proposed Green Building Features

- Solar panels on transfer station building and recycling center
- White roof - heat island reduction
- Collection and reuse of rainwater
- Translucent panels and skylights to reduce lighting requirements
- LED indoor lighting
- Light pollution reduction through Dark Sky-compliant outdoor light fixtures
- Bird friendly building design
- Native landscaping

# Roof Solar Panel Layout - Transfer Building

Proposed Meadowview  
Material Transfer Facility



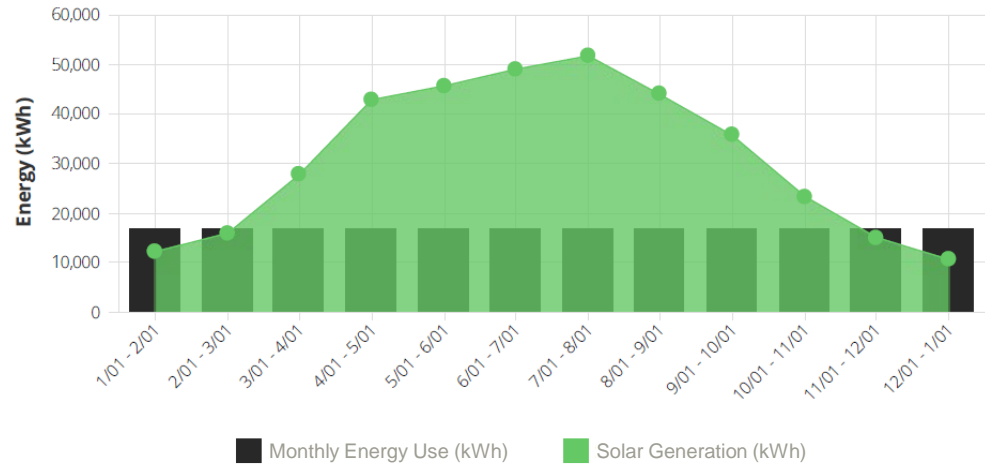
## Energy Production

Solar PV Year One Production = 374,270 kWh  
Current Annual Consumption = 203,004 kWh  
Solar PV Offset = 184.4%

## System Size

Equipment Power Rating: 345.9 kW-DC  
Nameplate Power Rating: 290.0 kW-AC

## Monthly Energy Use vs. Solar Generation



## CO<sub>2</sub> Offset From Solar

- Utilizing solar energy offsets CO<sub>2</sub> emissions from fossil fuel electrical generation
- In Illinois, on the average, 1 kWh of fossil fuel electrical production creates 0.639 lbs of CO<sub>2</sub> emissions<sup>1</sup>
- 374,270 kWh/year x 0.639 CO<sub>2</sub> lbs/kWh = 239,158 lbs CO<sub>2</sub> ÷ 2000 lbs/ton = 119.6 tons CO<sub>2</sub> per year
- Over a 30-year period, CO<sub>2</sub> emission offset = 3,587 tons

### Notes:

1. Based on the Illinois 2022 Electricity Profile, U.S. Energy Information Administration  
<https://www.eia.gov/electricity/state/illinois/>

## Proposed Building Code Amendments



### BIRD-FRIENDLY GLASS DEFINITION:

Glass or materials that have a **Material Threat Factor Rating of  $\leq 30$**  by including materials that meet any of the following conditions:

- a) any product tested and designated by the American Bird Conservancy (ABC) to have a Material Threat Factor Rating  $\leq 30$  (see ABC's Products & Solutions Database);
- b) any product that follows ABC's Prescriptive Rating Criteria;
- c) glass with exterior surface obstructed and effectively covered by building-integrated structures that do not have gaps larger than 12" in any dimension including non-glass double-skin facades, metal screens, fixed solar shading, and exterior insect or solar screens; or
- d) continuous-surface materials, including spandrel glass and polished or brushed metals, whose exterior surface gloss has a reflectivity of 15 percent or less as specified by the manufacturer.

May 8, 2024

The lower the Threat Factor the more effective the material will be at reducing bird collisions

## Non-residential Standards



For new build non-residential properties, **at least 80%** of all glass on each exterior facade from the **ground level to 100 feet**, including but not limited to glass surrounding a green roof or landscaped area, shall be bird-friendly glass.

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# Bird Friendly Glass

Proposed Meadowview  
Material Transfer Facility

## KALWALL®

high performance translucent building systems




photo: Brad Feinberg

### FACADES

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Wall Systems

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Unitized Curtain Walls

---

Window Replacements

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KALWALL.COM

## ABC Product Listing



**Kalwall®**

*Kalwall*

**Threat Factor: 2**

non-reflective white surface

Product Line: Kalwall

[Website](#)

Color: white/off-white

# Questions?