VILLAGE OF MORTON GROVE

APPEARANCE COMMISSION

Flickinger Municipal Center
6101 Capulina Avenue, Morton Grove, IL 60053

Tuesday, December 2, 2025 - 7:00 P.M.
AGENDA

I. CALL TO ORDER

II. APPROVAL OF MINUTES
November 4, 2025, Meeting of the Appearance Commission

III. PUBLIC MEETING

CASE	**AC 25-19**
APPLICANT	Graham Enterprise, Inc.
LOCATION	8801 Waukegan Road Morton Grove, Illinois 60053
PETITION	Request for approval of an Appearance Certificate for new illuminated canopy signage at an existing automobile mini mart and service station in the C-1 General Commercial District.

CASE	**AC 25-20**
APPLICANT	Neon Art LLC
LOCATION	7130 Dempster Street Morton Grove, Illinois 60053
PETITION	Request for approval of an Appearance Certificate for wall signs, including a variation for a wall sign on a third frontage pursuant Section 10-10-7, at a business located in the C-1 General Commercial District.

CASE	**AC 25-21**
APPLICANT	SLDIL Portfolio LLC
LOCATION	8625 Waukegan Road Morton Grove, Illinois 60053
PETITION	Request for approval to amend a Special Use Permit (Ord. 04-21) to allow for the installation of a roof-mounted community solar project.

IV. OTHER BUSINESS

V. CLOSE MEETING

Note that all persons are welcome to attend the public meeting in-person as regularly scheduled. All persons in attendance will have the opportunity to be heard during periods of public comment.

MINUTES OF THE NOVEMBER 4, 2025
MEETING OF THE MORTON GROVE APPEARANCE COMMISSION
MORTON GROVE VILLAGE HALL, 6101 CAPULINA AVENUE, MORTON GROVE, IL 60053

Pursuant to proper notice in accordance with the Open Meetings Act, the regular meeting of the Appearance Commission was called to order at 7:00 p.m. by Chairperson Pietron. Anne Ryder Kirchner called the roll.

Commissioners Present:	Block, Dahlberg, Manno, Minx, and Zimmer
Commissioners Absent:	Hedrick and Pietron with notice
Village Staff Present:	Brandon Nolin, AICP, Community and Economic Development Administrator Anne Ryder Kirchner, Planner/Zoning Administrator
Trustees Present:	Minx and Thill

Acting Chairperson Minx proceeded to seek approval of the October 7, 2025 minutes.

Commissioner Block moved to approve the minutes. Commissioner Dahlberg seconded the motion. Acting Chairperson Minx called for the vote.

Commissioner Block voting	aye
Commissioner Dahlberg voting	aye
Commissioner Minx voting	aye
Commissioner Manno voting	aye
Commissioner Zimmer voting	aye

Minutes approved (5-0)

Acting Chairperson Minx called for the first case.

CASE: **AC 25-17**

APPLICANT: DLA Architects, Ltd. on behalf of Golf School District 67

LOCATION: 9000 Belleforte Avenue
Morton Grove, Illinois 60053

PETITION: Request for approval of an Appearance Certificate for site, landscape, and building plans associated with Case PC 25-12, a request for a Special Use Permit to allow the expansion and modification of an existing school.

In the case of AC 25-17**,** the applicant DLA Architects (on behalf of Golf School District 67) is requesting approval of site, landscape, and building plans associated with Case PC 25-12, a request for a Special Use Permit to allow the expansion and modification of an existing school (Hynes Elementary School) at 9000 Belleforte Avenue. The parcel is zoned R-2 Single Family Residence and is generally surrounded by other R-2 zoned properties as well as ComEd right-of-way.

The school expansion would include the addition of a new administration office to the west of the current multi-purpose room and would form a new primary entrance to the school. A second addition that would serve as a new media center is proposed for a portion of the school currently consisting of interior courtyard. Several existing classrooms and hallways would be renovated as part of the project. A pair of classrooms currently housed in a temporary structure and connected via a walkway with plastic vestibule on the west side of the school would be removed as part of the project.

The adjoining parking lot to the south would be reconfigured for one-way circulation to create a parent drop-off lane that passes the new front entrance and a new parking area. The southwest parking lot would be reconfigured to accommodate bus circulation and new parking lot would be established at the west entrance to the school. The project would provide for 10 additional parking spaces. The required tree preservation plan distributed in hard copy tonight indicates **3 protected trees** would require replacement rather than the 5 indicated in the Staff report. The applicant should speak to the practicality of planting additional trees within the parking lot and the waiver sought.

The applicant is proposing to locate a transformer, switchboard, and generator near the current entrance to the multipurpose room entrance. To ensure an attractive and consistent façade, Staff recommends requiring the use of a matching brick façade which is included as a condition of approval. The applicant should speak to the proposed utility screening and the proposed location.

Required stormwater management would be provided by a new detention basin to be located in the northeast corner of the subject property along the National Avenue frontage. No new building signage is proposed.

Tina Ewanio, Director of Business Services for District 67, introduced the proposal and noted the design team was present to answer any questions.

Commissioner Dahlberg asked that the equipment screening be masonry instead of a composite wood-like panel.

Jae Yoo, of DLA architects, provided samples of the composite wood fencing and Trex paneling. He noted the screening compliments the paneling.

Carrie Matlock, of DLA Architects said brick matching masonry is a financial hardship for the district. It is hard to match the brick and they have used stain in some areas where brick was replaced and did not match. The composite material is low maintenance, and a preference of District 67.

Commissioner Zimmer asked to plant the twelve trees on the property, there is plenty of room. He would like the enclosure to be masonry.

Commissioner Minx asked if the trees could be planted elsewhere the school property.

Commissioner Dahlberg asked if there could be a landscape bed in the existing staff parking area. It could help delineate it from the play area.

Tim Ball, landscape architect with Gary Weber and Associates, said they tried to find places for the trees. As a landscape architect, his motto is to plant the right tree in the right place with plenty of room to grow. They do not want to cover-up the new façade and entrance of the building. He noted the proposed trees will mature to 35 feet in height and will have a 25 feet area of shade coverage.

Commissioner Zimmer asked if the trees could be planted elsewhere on the school property.

Mr. Ball said they do not want to have more obstacles in the landscape, there is room but the care of the trees is costly. There are many trees on the property currently.

Acting Chairman Minx asked if the trees could be planted on Hynes and remainder at Golf.

Ms. Ewanio discussed the cost of taking care of the trees, and the safety of students.

Minx said they have given options, perhaps they could donate the trees to the Village.

The landscape architects said they would take the options under advisement.

Mr. Nolin said a fee-in-lieu could be given to the tree preservation fund as an option. He noted the waiver of 12 trees could be reduced to 10 trees based on the tree preservation plan.

Commissioner Dahlberg said the trees are important and she does not want to hold up the improvements to the school.

Commissioner Zimmer moved to approve case AC 25-17, for an Appearance Certificate for site, landscape, and building plans, for the expansion and modification of an existing school under Special Use Permit (PC 25-12) for the property commonly known as 9000 Belleforte Avenue in Morton Grove, Illinois, staff recommends the following conditions of approval:

1. *Prior to filing any Building Permit Application, the owner/applicant shall provide the Village with final plans, elevations and material specifications for review and approval. Final plans, elevations and materials must be deemed consistent with the approved materials, as determined by the Community Development Administrator and Appearance Commission Chairperson. This shall include brick screening for new ground-mounted utilities. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
2. *Prior to filing any Building Permit Application, the owner/applicant shall submit a revised lighting plan that includes full cutoff fixtures along the south property line, and glare shields or other enhancements, so as to prevent light glare visible to adjacent properties. The final lighting plan will be subject to review and approval by the Community Development Administrator and must be deemed consistent with representations made to the Appearance Commission. If such plans are deemed to be inconsistent with the approved plans or if fixtures are deemed to be of a lower quality than the approved fixtures, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
3. *Prior to filing any Building Permit Application, the owner/applicant shall submit a tree inventory and tree preservation plan subject to review and approval by the Community Development Administrator. If such plans are deemed to be inconsistent with representations made to the Appearance Commission, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*
4. *Prior to filing any Building Permit Application, the owner/applicant shall submit a revised landscape plan that provides for a total of 33 shade trees to be planted at the subject property, or the owner/applicant shall submit a landscape plan for another property owned by School District 67 that includes the planting of 12 shade trees. If such plans are deemed to be inconsistent with representations made to the Appearance Commission, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*

The motion was seconded by Commissioner Dahlberg.

Commissioner Block voting	aye
Commissioner Dahlberg voting	aye
Commissioner Minx voting	aye
Commissioner Manno voting	aye
Commissioner Zimmer voting	aye

Motion passed 5 -0.

CASE: **AC 25-18**

APPLICANT: Village of Morton Grove

LOCATION: 6101 Capulina Avenue
Morton Grove, Illinois 60053

PETITION: The Village Department of Community and Economic Development requests approval of a Text Amendment to Sections 7-2-1, 7-2-4, 7-2-11, and creation of a new Section 7-2-14, to modify and establish regulations relating to tree preservation and protection.

In the case of AC 25-18, the Village of Morton Grove ("applicant") is proposing amendments to Chapter 7-2 to modify and establish regulations relating to tree preservation and protection. Staff is seeking the Appearance Commission's review and recommendation of approval of the proposed amendment prior to consideration by the Village Board of Trustees.

In March 2025, the Village was awarded a grant to assist with street tree plantings throughout the community from the Chicago Region Trees Initiative at the Morton Arboretum. In accepting the grant, the Village agreed to subject our Tree Ordinance to review by the Morton Arboretum and make needed revisions to meet the organization's requirements. While much of the Village's recent Tree Ordinance were aligned with the Morton Arboretum's goals and addressed desired components, some revisions were needed to meet grant requirements. The five text changes are procedural in nature, have been approved by the Morton Arboretum, and serve to further strengthen the Village's ordinance

Commissioner Dahlberg moved to approve case AC 25-18, a request by the Department of Community and Economic Development for approval of a Text Amendment to Sections 7-2-1, 7-2-4, 7-2-11, and creation of a new Section 7-2-14, to modify and establish regulations relating to tree preservation and protection, as presented in the staff report for Case AC 25-18 dated October 28, 2025.

The motion was seconded by Commissioner Manno.

Commissioner Block voting aye
Commissioner Dahlberg voting aye
Commissioner Minx voting aye
Commissioner Manno voting aye
Commissioner Zimmer voting aye

Motion passed 5 -0.

Other Business

Mr. Nolin provided an overview of the proposed 2026 Appearance Awards Program. Chairperson Pietron and Commissioner Zimmer requested that Staff develop a 2026 Appearance Awards program for consideration by the Appearance Commission. Historically, the Appearance Commission oversaw an Appearance Awards program that

recognized property owners for maintaining quality front yards and facades that improved the appearance of the Morton Grove community. It has been several years since such a program existed and Staff researched examples in surrounding communities to develop a proposed program for 2026. Numerous communities throughout the Chicago region have programs designed to recognize the efforts of residents and business owners that contribute positively to the local community's image. Communities surveyed by Staff include, but are not limited to Mt. Prospect, Oak Park, Palatine, Park Forest, Park Ridge, Romeoville, and Skokie.

Hearing no further business, Commissioner Manno moved to adjourn the meeting. The motion was seconded by Commissioner Dahlberg. The motion to adjourn the meeting was approved unanimously pursuant to a voice vote at 7:21 p.m.

Minutes by: Anne Ryder Kirchner

To: **Chairperson Pietron and Members of the Appearance Commission**

From: **Brandon Nolin, AICP, Community Development Administrator**
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: **November 25, 2025**

Re: **Appearance Commission Case AC 25-19**
Request for approval of an Appearance Certificate for new illuminated canopy signage at an existing automobile mini mart and service station in the C-1 General Commercial District for the property commonly known as 8801 Waukegan Road (PIN 10-18-321-042/044/044/045/053/055) in Morton Grove, Illinois. The applicant is Graham Enterprise, Inc.

STAFF REPORT

Application Summary

Graham Enterprise, Inc. ("applicant"), submitted a complete Appearance Commission Application to the Department of Community and Economic Development requesting an Appearance Certificate for new fascia on existing canopy sign at the automobile mini mart and service station at 8801 Waukegan Road.

Subject Property

The subject property consists six (6) parcels at 8801 Waukegan Road in Morton Grove, Illinois on the northeast corner of Dempster Street and Waukegan Road. The parcels are zoned C-1 General Commercial and are 26,485 sq. ft. (0.61 acres) in total area. The adjoining property to the north and east is recently reconstructed and expanded car dealership. The properties to the south and west across Dempster Street and Waukegan Road are also zoned C-1 General Commercial and improved with commercial buildings.

Subject Property Location Map

Project Overview

The applicant is proposing to update the existing canopy of the gas pumps at the automobile mini mart and service station at 8801 Waukegan Road. The existing canopy has a gable roof configuration with a BP logo at the center below to the roof peak. The proposed canopy would be a flat roof configuration that features the BP logo on three (3) sides along with color banding. No other changes to the property are proposed at this time.

Existing "Gable Roof" Canopy (LEFT) and Proposed "Flat Roof" Canopy

A similar canopy was installed at the BP gas station at 5601 Dempster Street.

BP Station at 5601 Dempster Street

Signage

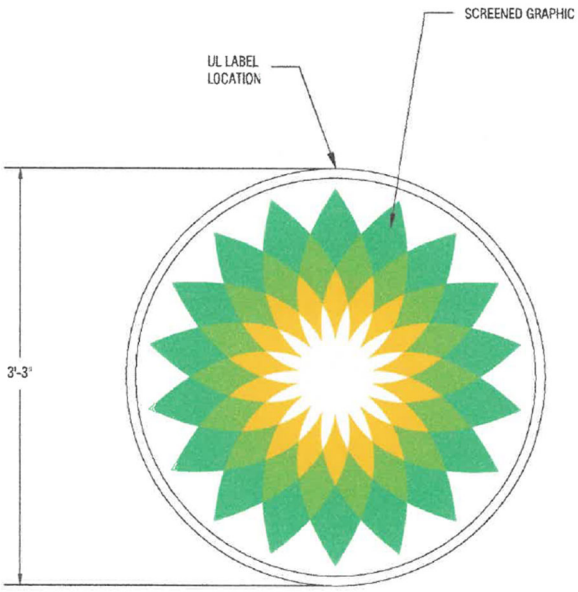
The Village's applicable sign requirements for the updated gas canopy signs are outlined in the following table.

M-2 SIGN CONTROLS	REQUIREMENT	PROPOSED	*COMPLIANCE*
Wall Signs Size – Primary Frontage (Waukegan Road) (10-10-7.F.3)	Up to one and one-half (1.5) sq. ft. of wall signage per each linear foot of frontage or one hundred twenty (120) sq. ft. of signage (whichever is less) shall be allowed on the primary frontage of each tenant space of a nonresidential building. Max. 120 sq. ft.	21.12 sq. ft. canopy signs + 47.06 sq. ft. existing "To Go" wall sign = 68.18 sq. ft.	*Compliant*
Wall Signs Size – Secondary Frontage (Dempster Street) (10-10-7.F.4)	Up to one and one-half (1.5) sq. ft. of additional wall signage per each linear foot of frontage or thirty two (32) sq. ft. of signage (whichever is less) shall be allowed on the secondary frontage of each tenant space of a nonresidential building. Max. 32. sq. ft.	Dempster Street: 21.12 sq. ft. North Elevation: 10.56 sq. ft. East Elevation: 10.56 sq. ft.	***Waiver to permit two (2) additional wall signs on the north and east elevations.***
Canopies and Pump Islands (12-5-5:A.5)	Canopies shall conform to the minimum building setback. 0 ft. in C-1 district	South Setback: 6.5 ft. East Setback: 2 ft.	*Compliant*

Illuminated Canopy Signs

The applicant proposes to replace each canopy and install a new fascia that will feature green striping along with three (3) identical illuminated wall signs to be installed on three sides of each canopy. Each sign consists of the BP logo measuring 39 inches square (10.56 sq. ft.).

Per Section 10-10.7.F, the maximum area for wall signs on the primary frontage is 120 sq. ft. and the maximum area for wall signs on a secondary frontage is 32 sq. ft. The west elevation (facing Waukegan Road) is considered to the primary frontage because it the longer of the two frontages and the primary entrance faces the corner. The west-facing canopy signs contribute to the total sign area on the primary frontage along with any additional signage facing Oakton. The existing "to go" sign (47.06 sq. ft.) located above the building entrance on the primary structure also contributes to total sign area. The total Waukegan Road sign area including two logos and the primary business sign is 68.18 sq. ft. The south-facing canopy signs contribute to sign area on the secondary frontage facing Dempster Street and total 21.12 sq. ft. in area.



Proposed BP Logo Sign

BP logo signs are also proposed to be installed on the east face of south canopy, and the north face of the north canopy. These elevations do not face with the primary or secondary frontage and a waiver must be granted to permit the logos to be located on the additional side of each canopy. The logos would be visible to vehicles travelling west on Dempster Street and south on Waukegan Road. Taken as a whole, the proposed signage does not exceed the sign area permitted per frontage and similar signage has been permitted at another BP gas station located in the Village (5601 Dempster St.).

Appearance Commission Review

In accordance with Unified Development Code Section 2-10-2:A, the Appearance Commission shall conduct design reviews and approve or disapprove applications for sign permits and relief from the technical requirements of the sign code in accordance with title 10, chapter 10 of this code.

The Sign Variance Standards (Sec. 10-10-3:E) established in the Code are as follows:

1. In the opinion of the appearance commission the proposed sign displays a level of creativity which might not be achieved if strict adherence to the technical requirements of this chapter were imposed; or
2. There are special circumstances unique to the property that would create practical difficulties if the technical requirement of this chapter were imposed. By way of example, but not by way of limitation, such circumstances include the size, shape, topography, location or surroundings affecting the property; however,
3. Under no circumstances may a sign be approved if the proposed sign violates the standards set forth in subsection D2 or D3 of this section. (See below)
4. The appearance commission may approve and amend a sign plan for a building or development with multiple tenants. Upon such approval, the village administrator shall approve all signs for such building or developments which conform to said plan without further design review by the appearance commission.

As referenced in Section 10-10-3:E, the standards established in subsections D2 and D3 are as follows:

D. Standards For Permit Approval: The village administrator shall approve an application if all of the following standards have been met or can be met with conditions as may be included in a conditional approval:
   2. The sign as proposed does not violate any other applicable code provisions and/or standards of the village of Morton Grove, state of Illinois, or federal government; and
   3. The sign will not:
      a. Cause substantial injury to the value of other properties in the vicinity, or
      b. Be detrimental to the public safety or welfare in the neighborhood where it is located, or
      c. Unreasonably impair the visibility to adjacent property or public right of way, or
      d. Be inconsistent with any approved plan for the building or the district or area where it is located, or
      e. Be inconsistent with other signs on the property, or with the architectural character of the building, or
      f. Alter the essential character of the neighborhood, or
      g. Violate the purpose, spirit, or intent of this code.

Recommendation

If the Appearance Commission approves the request for an Appearance Certificate for new illuminated canopy signage, under Appearance Certificate (AC 25-19) for the property commonly known as 8801 Waukegan Road in Morton Grove, Illinois, staff recommends the following conditions of approval:

1. *Prior to filing any Sign Permit Application, the owner/applicant shall provide the Village with final details regarding all sign locations and dimensions on the subject property, including existing signs on the primary structure that are to remain, that must be deemed consistent with the approved signs, as determined by the Community Development Administrator and Appearance Commission Chairperson. Illuminated signage and other illuminating features on the property may not exceed 5,000K (degrees Kelvin). If such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*

Appearance Commission Application

Village of Morton Grove Department of Community & Economic Development
6101 Capulina Avenue, Morton Grove, Illinois 60053 | 847-663-3063 | commdev@mortongroveil.org

Case Number: AC 25-19 Date Application Filed: 10/29/2025

APPLICANT INFORMATION

Applicant Name: GRAHAM ENTERPRISE, INC.
Applicant Address: 8801 WAUKEGAN ROAD
Applicant City / State / Zip Code: MORTON GROVE, IL 60053
Applicant Phone: (847) 417 0500 Mobil / Other: (___)
Applicant Email: J.TATZ@sbcglobal.net
Applicant Legal Interest in Property (Owner, Tenant, Etc.): OWNER
Applicant Signature: [signature]

PROPERTY INFORMATION

Common Address of Property: 8801 WAUKEGAN ROAD MORTON GROVE 60053
Property Identification Number (PIN): 10-18-324-042 | -043 | -044 | -045 | -053 | -055
Zoning District: _____ Property's Current Use: GAS STATION

APPLICANT'S REQUEST (ATTACH ADDITIONAL SHEETS AS NECESSARY):

1. Applicant is requesting Appearance Commission approval for the following:
Current CANOPY FASCIA Upgrade

2. Provide detailed information to explain the reason for the request (attach additional sheets as necessary):
INSTALLATION of Current BP CANOPY FASCIA from Gable style TO "FLAT" Roof Style

1

(2)

(3)

CANOPY SITE INFO

JOBBER: GRAHAM ENTERPRISE

ADDRESS: 8801 WAUKEGAN RD, MORTON GROVE, IL, 60053

SVB: 8936577

FASCIA HEIGHT: 36"

HELIOS SIZE: 39"

DATE: 10.3.2025

DESIGNER: ERIC STARK

REVISON #: ORIGINAL

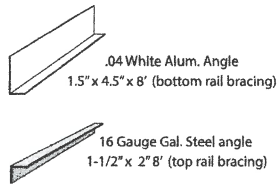
CANOPY INSTALL SEQUENCE

1. Corners
2. Helios Base Panels
3. Tapered and Rounded End Capanels
4. Bullnose Panels

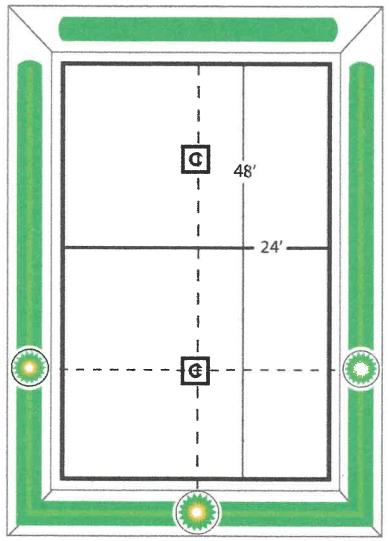
PLOT LEGEND

CANOPY PLOT 1 OF 1

- FLAT PANEL **WITHOUT** DECAL — FLAT ACM PANELS WITHOUT DECAL
- FLAT PANEL **WITH** DECAL — FLAT ACM PANELS WITH DECAL
- FLAT DECAL PANEL **WITH** LIGHTBAR — FLAT ACM PANELS WITH DECAL & BLAIR LIGHTBAR
- BULLNOSE **WITH** LIGHTBAR — BULLNOSE ACM PANELS WITH BLAIR LIGHTBAR
- BULLNOSE **WITHOUT** LIGHTBAR — BULLNOSE ACM PANELS WITHOUT BLAIR LIGHTBAR
- COMBINED HELIOS W/ TAPERED END CAP PANELS
- ROUNDED END CAP W/ BLANK CORNER
- BUILDING
- C COLUMN



FLAT PANEL WITH DECAL



CENTER OVER THE COLUMNS

BULLNOSE WITH LIGHTBAR

CENTER OVER THE COLUMNS

BULLNOSE WITH LIGHTBAR

CENTER BETWEEN THE COLUMNS

BULLNOSE WITH LIGHTBAR

4

APPROVAL SIGNATURE

APPROVED BY

Signoff indicates that the above product has been permitted with any municipalities involved. By signing this document, the product will be manufactured to these specifications

Waukegan Rd

BIG RED ROOSTER FLOW

CANOPY SITE INFO

JOBBER: GRAHAM ENTERPRISE

ADDRESS: 8801 WAUKEGAN RD, MORTON GROVE, IL, 60053

SVB: 8936577

FASCIA HEIGHT: 36"

HELIOS SIZE: 39"

DATE: 10.3.2025

DESIGNER: ERIC STARK

REVISON #: ORIGINAL

CANOPY INSTALL SEQUENCE

1. Corners
2. Helios Base Panels
3. Tapered and Rounded End Capanels
4. Bullnose Panels

PLOT LEGEND

CANOPY PLOT 1 OF 1

- FLAT PANEL **WITHOUT** DECAL — FLAT ACM PANELS WITHOUT DECAL
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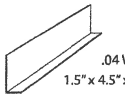
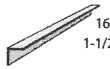
- FLAT DECAL PANEL **WITH** LIGHTBAR — FLAT ACM PANELS WITH DECAL & BLAIR LIGHTBAR
- BULLNOSE **WITH** LIGHTBAR — BULLNOSE ACM PANELS WITH BLAIR LIGHTBAR
- BULLNOSE **WITHOUT** LIGHTBAR — BULLNOSE ACM PANELS WITHOUT BLAIR LIGHTBAR
- COMBINED HELIOS W/ TAPERED END CAP PANELS
- ROUNDED END CAP W/ BLANK CORNER
- BUILDING
- C COLUMN

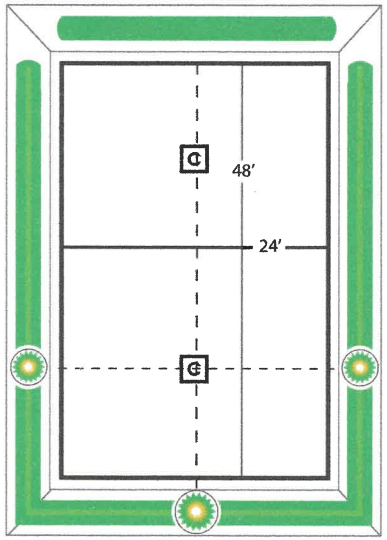


.04 White Alum. Angle
1.5" x 4.5" x 8' (bottom rail bracing)



16 Gauge Gal. Steel angle
1-1/2" x 2" 8' (top rail bracing)

FLAT PANEL WITH DECAL



CENTER OVER THE COLUMNS

BULLNOSE WITH LIGHTBAR

CENTER OVER THE COLUMNS

BULLNOSE WITH LIGHTBAR

CENTER BETWEEN THE COLUMNS

BULLNOSE WITH LIGHTBAR

5

APPROVAL SIGNATURE

Dempster

APPROVED BY

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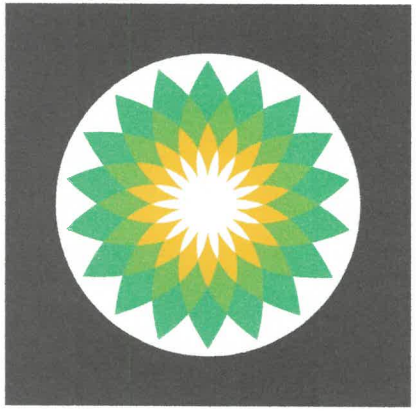
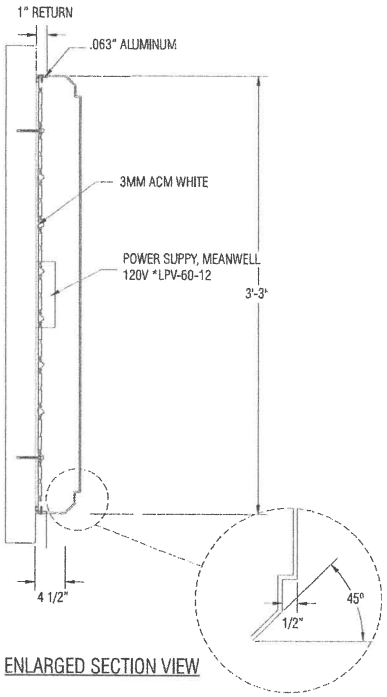
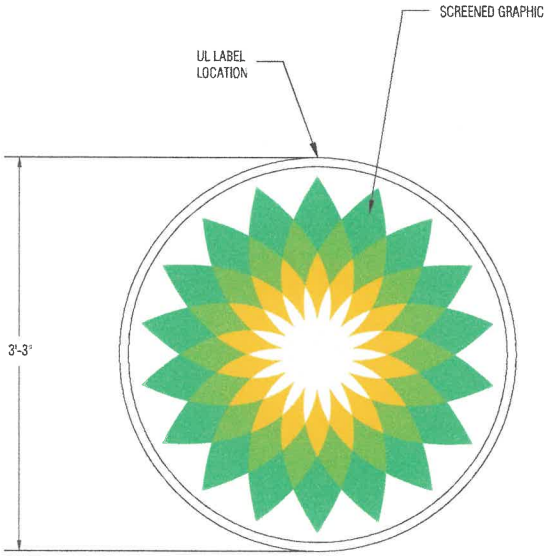
BIG RED ROOSTER FLOW



NIGHT TIME VIEW



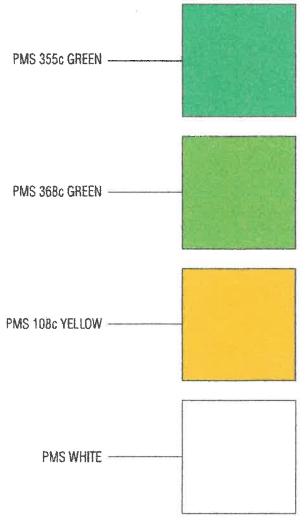
ENLARGED SECTION VIEW



FACE VIEW

SCALE: 1"=1'-0"

BP BRIGHT GREEN BEACON, 3'-3" HELIOS BUTTON



SPECIFICATION:
1. Silk Screen- BP Dk. Green PMS 355C 2. Silk Screen- BP Lt. Green PMS 368C 3. Silk Screen- BP Yellow PMS 109C

COLOR SCHEDULE:
A. SILK SCREEN

BLAIR COMPANIES
ARCHITECTURAL IMAGING
SIGNS · FIXTURES · LIGHTING

address: 5107 Kissell Avenue
Altoona PA 16601
telephone: 814.949.8287
fax: 814.949.8293
web: blaircompanies.com

project information

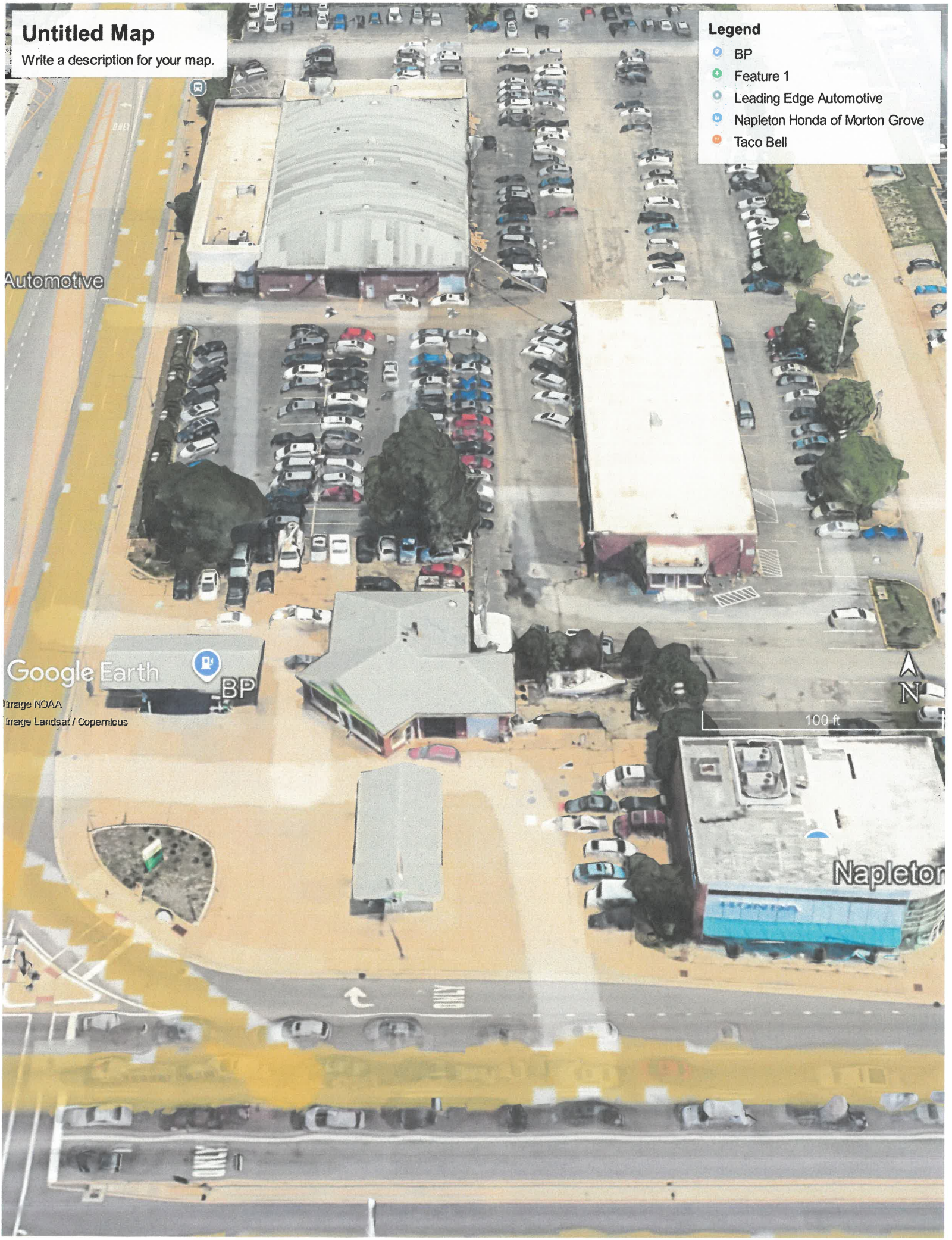
client: BP
address: Altoona, PA

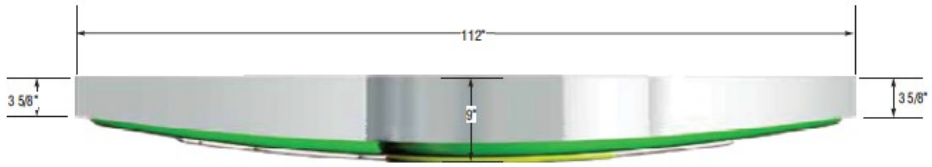
store #:
m number: 54213
date: 07.10.15
rendered: JC
file name: BPL 54213_15
category:

revisions

a.
b. 6
c.
d.
e.

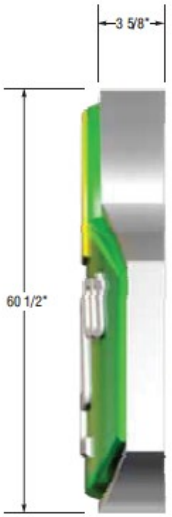
sign code:


Untitled Map
Write a description for your map.
Legend
BP
Feature 1
Leading Edge Automotive
Napleton Honda of Morton Grove
Taco Bell
Automotive
Google Earth
BP
Image NOAA
Image Landsat / Copernicus
N
100 ft
Napleton



TOP VIEW

FINISHED VIEW



SIDE VIEW

FRONT VIEW - LARGE SINGLE FACED BUILDING SIGN (ToGo)

BGB-BPToGo-BLDG-LG

blair IMAGE ELEMENTS

5107 Kissell Ave.
Altoona, PA 16601

P: 814.949.8287

F: 814.949.8293

www.blairimage.com

PROJECT INFORMATION

CLIENT: BP

ADDRESS:
5107 KISSELL AVENUE
ALTOONA, PA 16630

M NUMBER:
93240 - GROUP 7

DATE:
10.21.20

RENDERED:
JMETZ

FILE NAME:
BPL93240_20

CATEGORY:

REVISION

Drawing will expire 90 days after date on cover. If production request is sent in after 90 days, 24 hours is required to review approval.

2017 nec

CUSTOMER INITIALS

Initials

To: **Chairperson Pietron and Members of the Appearance Commission**

From: **Brandon Nolin, AICP, Community Development Administrator**
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: **November 25, 2025**

Re: **Appearance Commission Case AC 25-20**
Request for approval of an Appearance Certificate for wall signs, including a variation for a wall sign on a third frontage pursuant Section 10-10-7, at a business located in the C-1 General Commercial District for the property commonly known as 7130 Dempster Street (PIN 10-18-328-011-0000) in Morton Grove, Illinois. The applicant is Neon Art LLC.

STAFF REPORT

Application Summary

Neon Art, LLC, on behalf of Bianco Properties and Blossom Orthodontics ("applicant"), submitted a complete Appearance Commission Application to the Department of Community and Economic Development requesting an Appearance Certificate for a series of three wall signs for a new business located at 7130 Dempster Street within the Dempster Crossing shopping center.

Subject Property

The subject property consists one (1) parcel at 7130 Dempster Street in Morton Grove, Illinois on the northwest corner of Dempster Street and Shermer Road. The parcel is the location of the Dempster Crossing shopping center, is zoned C-1 General Commercial, and is 95,173.30 sq. ft. (2.18 acres) in total area. The properties to the west across Harlem Avenue are also zoned C-1 General Commercial and improved with commercial buildings. The properties to the south across Dempster Street are located in the Village of Niles and improved with commercial buildings. The properties to the rear of the subject property are zoned R-1and improved with single-family homes. The properties to the east across Shermer Road are improved with single-family homes and zoned R-2.

Subject Property Location Map

Project Overview

The applicant is proposing to install a series of three (3) wall signs at the south end cap in the Dempster Crossing shopping center. Proposed signs include one (1) sign above the business entrance (facing west), one (1) sign on the south façade facing Dempster Street, and one (1) on the east façade facing Shermer Road. No other changes to the property are proposed at this time. All three signs would be backlit and of the same design, but will vary in size.

Wall Signs

Per Section 10-10-7:F, the maximum area for wall signs on the primary frontage is 120 sq. ft. and the maximum area for wall signs on a secondary frontage is 32 sq. ft. The west elevation is considered to be the primary frontage because it features the primary entrance to the tenant space from Harlem Avenue. As proposed, the primary sign is smaller than the maximum area permitted by 88.65 sq. ft.

The applicant is seeking a waiver to authorize a wall sign along the secondary elevation facing Dempster Street that exceeds the maximum permitted size of 32 sq. ft. As Dempster has higher traffic volumes and the combined proposed sign area of 103.42 sq. ft., is still less than the collective total permitted of 152 sq. ft. if frontage sign area maximums for two frontages were combined. Staff acknowledge the importance of signage visibility on both Harlem Avenue and Dempster Street and are supportive of the applicant's proposal to locate the largest sign on Dempster Street.

The applicant is also seeking a waiver to install an additional wall sign along a third frontage (Shermer Road). The proposed sign would be identical to the primary entrance sign and 31.35 sq. ft. The commercial property is unique in that is has three frontages, however the Shermer Road frontage is directly across the street from residential properties. Staff has concerns with posting an additional sign that would also be illuminated along Shermer Road given the residential context.

Proposed Signs facing West toward Harlem Avenue

Proposed sign facing South toward Dempster Street (TOP) and sign facing East toward Shermer Road (BOTTOM)

Signage

The Village's applicable sign requirements for the updated gas canopy signs are outlined in the following table.

M-2 SIGN CONTROLS	REQUIREMENT	PROPOSED	*COMPLIANCE*
Wall Signs Size – Primary Frontage (Harlem Avenue) (10-10-7.F.3)	Up to one and one-half (1.5) sq. ft. of wall signage per each linear foot of frontage or one hundred twenty (120) sq. ft. of signage (whichever is less) shall be allowed on the primary frontage of each tenant space of a nonresidential building. Max. 120 sq. ft.	31.35 sq. ft.	*Compliant*
Wall Signs Size – Secondary Frontage (Dempster Street) (10-10-7.F.4)	Up to one and one-half (1.5) sq. ft. of additional wall signage per each linear foot of frontage or thirty two (32) sq. ft. of signage (whichever is less) shall be allowed on the secondary frontage of each tenant space of a nonresidential building. Max. 32. sq. ft.	Dempster Street: 40.72 sq. ft. Shermer Road: 31.35 sq. ft.	***Waiver of 8.72 sq. ft. to permit a sign of 40.72 sq. ft. (Dempster St.)*** ***Waiver to permit two (2) additional wall signs on the north and east elevations.***

As outlined in the table above, the proposed wall signage requires two waivers to the following section of the Morton Grove Municipal Code:

- *Section 10-10-7:F.4* – Waivers to the maximum sign area permitted on a secondary frontage to allow a wall sign measuring 40.72 sq. ft. and to allow an additional wall sign on an additional frontage.

Appearance Commission Review

In accordance with Unified Development Code Section 2-10-2:A, the Appearance Commission shall conduct design reviews and approve or disapprove applications for sign permits and relief from the technical requirements of the sign code in accordance with title 10, chapter 10 of this code.

The Sign Variance Standards (Sec. 10-10-3:E) established in the Code are as follows:

1. In the opinion of the appearance commission the proposed sign displays a level of creativity which might not be achieved if strict adherence to the technical requirements of this chapter were imposed; or
2. There are special circumstances unique to the property that would create practical difficulties if the technical requirement of this chapter were imposed. By way of example, but not by way of limitation, such circumstances include the size, shape, topography, location or surroundings affecting the property; however,
3. Under no circumstances may a sign be approved if the proposed sign violates the standards set forth in subsection D2 or D3 of this section. (See below)
4. The appearance commission may approve and amend a sign plan for a building or development with multiple tenants. Upon such approval, the village administrator shall approve all signs for such building or developments which conform to said plan without further design review by the appearance commission.

As referenced in Section 10-10-3:E, the standards established in subsections D2 and D3 are as follows:

D. Standards For Permit Approval: The village administrator shall approve an application if all of the following standards have been met or can be met with conditions as may be included in a conditional approval:
   2. The sign as proposed does not violate any other applicable code provisions and/or standards of the village of Morton Grove, state of Illinois, or federal government; and
   3. The sign will not:
      a. Cause substantial injury to the value of other properties in the vicinity, or
      b. Be detrimental to the public safety or welfare in the neighborhood where it is located, or
      c. Unreasonably impair the visibility to adjacent property or public right of way, or
      d. Be inconsistent with any approved plan for the building or the district or area where it is located, or
      e. Be inconsistent with other signs on the property, or with the architectural character of the building, or
      f. Alter the essential character of the neighborhood, or
      g. Violate the purpose, spirit, or intent of this code.

Recommendation

If the Appearance Commission approves the request for an Appearance Certificate for new illuminated canopy signage, under Appearance Certificate (AC 25-20) for the property commonly known as 7130 Dempster Street in Morton Grove, Illinois, staff recommends the following conditions of approval:

1. *Prior to filing any Sign Permit Application, the owner/applicant shall provide the Village with final details regarding all sign locations and dimensions on the subject property, including existing signs on the primary structure that are to remain, that must be deemed consistent with the approved signs, as determined by the Community Development Administrator and Appearance Commission Chairperson. Illuminated signage and other illuminating features on the property may not exceed 5,000K (degrees Kelvin). If such designs are deemed to be inconsistent with the approved plans, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*

Appearance Commission Application

Village of Morton Grove Department of Community & Economic Development
6101 Capulina Avenue, Morton Grove, Illinois 60053 | 847-663-3063 | commdev@mortongroveil.org

Case Number: AC 25-20 Date Application Filed: 11/19/2025

APPLICANT INFORMATION

Applicant Name: Neon Art LLC

Applicant Address: 4752 N Avers Ave.

Applicant City / State / Zip Code: Chicago, IL 60625

Applicant Phone: (773)-588-5883 Mobil / Other: (____)_____

Applicant Email: permitsneonart@gmail.com

Applicant Legal Interest in Property (Owner, Tenant, Etc.): Sign Contractor

Applicant Signature: _____

PROPERTY INFORMATION

Common Address of Property: 7130 Dempster St, Morton Grove, IL 60053

Property Identification Number (PIN): _____

Zoning District: _____ Property's Current Use: _____

APPLICANT'S REQUEST (ATTACH ADDITIONAL SHEETS AS NECESSARY):

1. Applicant is requesting Appearance Commission approval for the following:
Permanent Signage

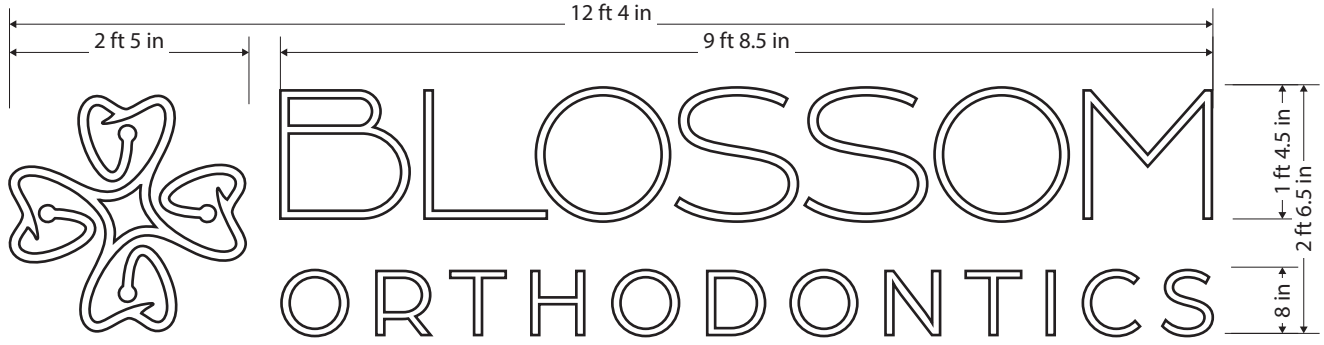
2. Provide detailed information to explain the reason for the request (attach additional sheets as necessary):
Installation of 3 wall signs, need approval for third sign

1

Back-Lit Channel Letters | Standoff Mounted

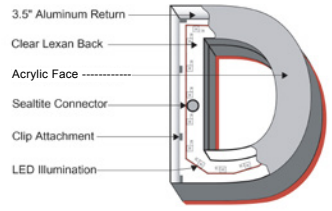
Revision Date: 11/13/2025

R2 **Total SQ FT 31’**

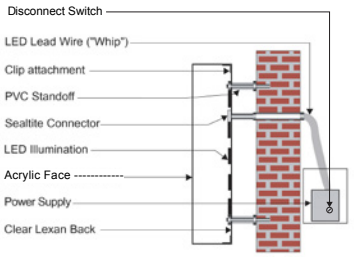


R1

BACKLIT CHANNEL LETTERS



FRONT VIEW



SIDE VIEW

Sign Specs

Face Material	1/8” Acrylic
Face Color	WHITE
Trim Color	BLACK
Back Material	.040 Alum
Return Material	.040Alum
Return Width	3.5 Return
Return Color	BLACK
LED Color	WHITE
Raceway Color	N/A

Underwriters Laboratories, Inc.

Site Surveyed	☑
Site Installation Ready	☑

NEON ART SIGN CO EST. 1988

4752 N Avers Ave
Chicago, IL 60625
Tel: (847) 508-9907
Website: neonartchicago.com
Phone : (773) 588-5883
Neonartchicago@gmail.com

Client: **BLOSSOM OTHODONTICS**

Date: 08/29/25

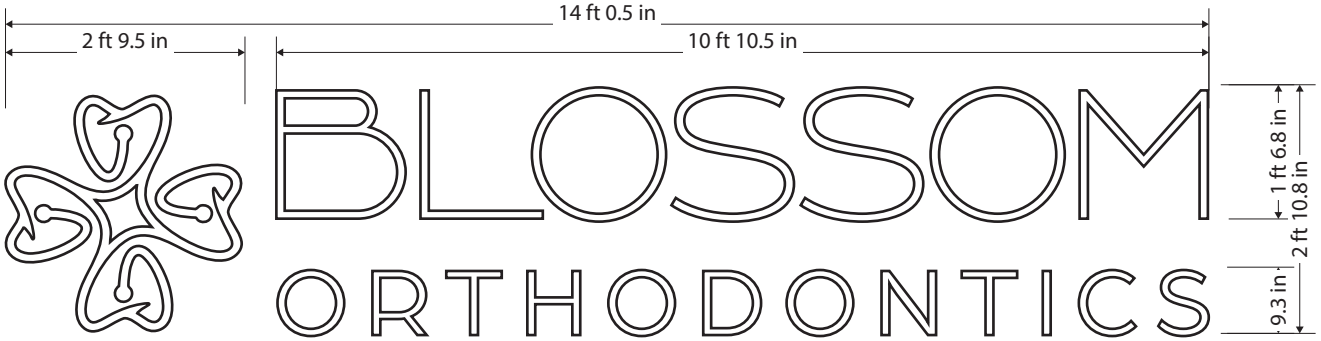
Address: 7130 Dempster St,

City: Morton Grove, IL 60053

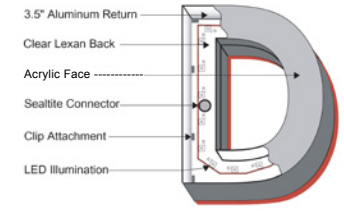
30th ANNIVERSARY

X_____

2 Back-Lit Channel Letters | Standoff Mounted - Main Road Facing Sign **R4** **Revision Date: 11/13/2025** **Total SQ FT 40.72’**



BACKLIT CHANNEL LETTERS



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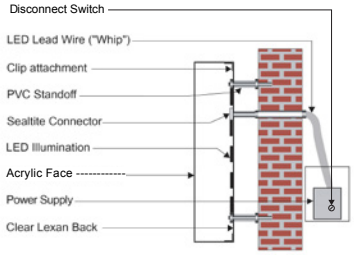
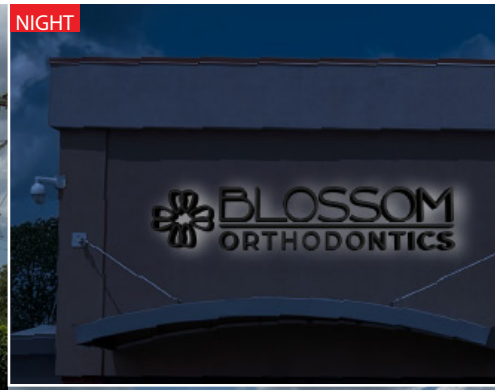


SIDE VIEW



Sign Specs

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Underwriters Laboratories, Inc.

Site Surveyed	☑
Site Installation Ready	☑

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Neonartchicago@gmail.com

Client: **BLOSSOM OTHODONTICS**
Date: 08/29/25
Address: 7130 Dempster St,
City: Morton Grove, IL 60053

30th ANNIVERSARY

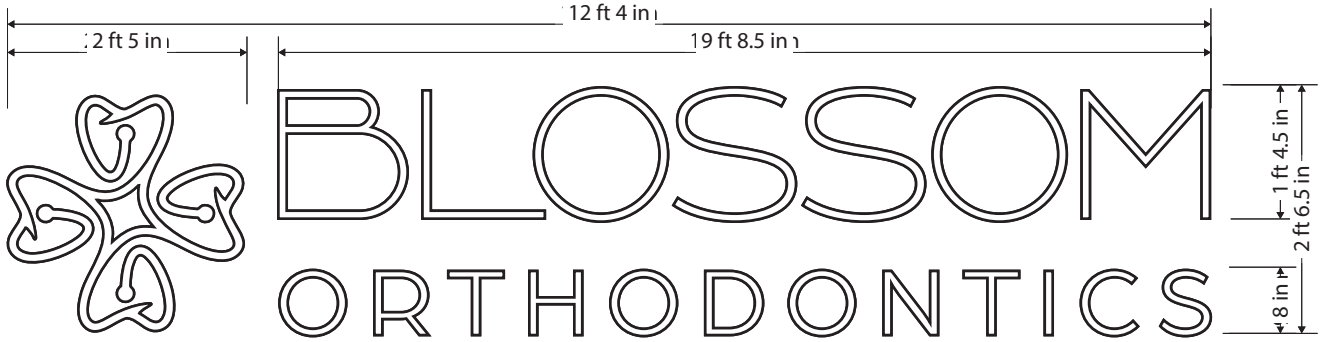
X_____

3

Back-Lit Channel Letters | Standoff Mounted

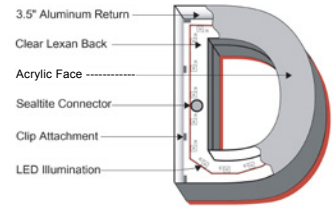
Revision Date: 11/13/2025

R6 Total SQ FT 31’

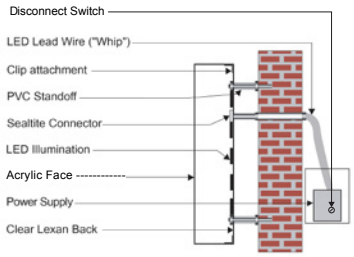


R5

BACKLIT CHANNEL LETTERS



FRONT VIEW



SIDE VIEW

Sign Specs

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Face Color	WHITE
Trim Color	BLACK
Back Material	.040 Alum
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Return Color	BLACK
LED Color	WHITE
Raceway Color	N/A

Underwriters Laboratories, Inc.

Site Surveyed	☑
Site Installation Ready	☑

NEON ART SIGN CO EST. 1988

4752 N Avers Ave
Chicago, IL 60625
Tel: (847) 508-9907
Website: neonartchicago.com
Phone : (773) 588-5883
Neonartchicago@gmail.com

Client: **BLOSSOM OTHODONTICS**

Date: 08/29/25

Address: 7130 Dempster St,

City: Morton Grove, IL 60053

30th ANNIVERSARY

X_____

To: **Chairperson Pietron and Members of the Appearance Commission**

From: **Brandon Nolin, AICP, Community Development Administrator**
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: **November 26, 2025**

Re: **Appearance Commission Case AC 25-21**
Request for approval to amend a Special Use Permit (Ord. 04-21) to allow for the installation of a roof-mounted community solar project at the property commonly known as 8625 Waukegan Road (PIN 10-19-103-002-0000) in Morton Grove, Illinois.

STAFF REPORT

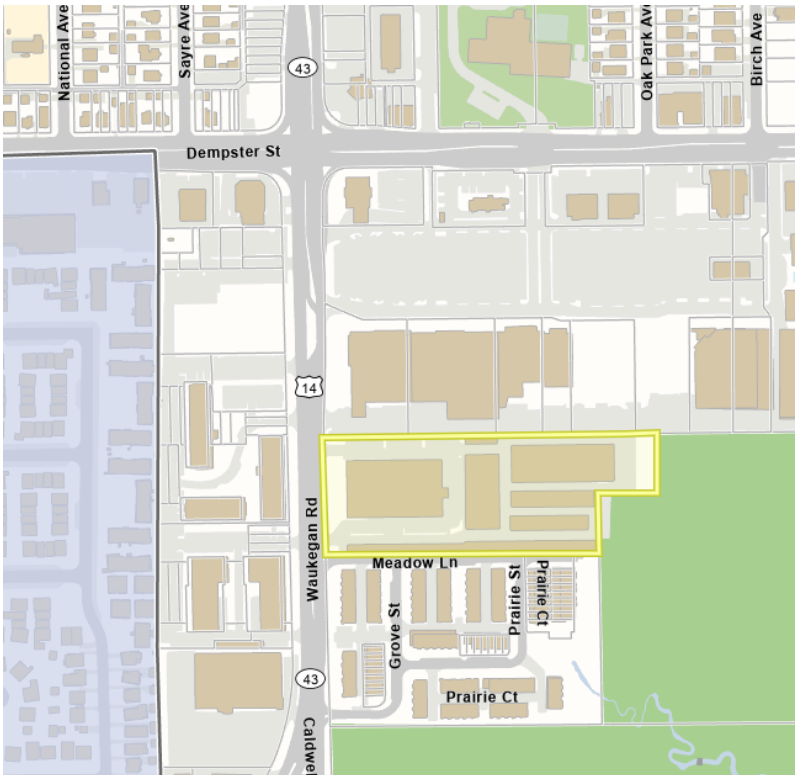
Application Summary

SLDIL Portfolio LLC, on behalf of Public Storage, Inc. ("applicant"), submitted a complete Special Use Permit application to the Department of Community and Economic Development (under PC 25-13) and an Appearance Certificate is requested for the installation of a roof-mounted community solar energy collection system.

Per Section 12-16-2:C, any renovation or remodeling involving the exterior of any existing structure, except for one- and two-family residential buildings, requires appearance commission review. As proposed, the solar arrays would protrude from the roof approximately 10 in. Though the solar arrays would likely not be visible from street level, they would be visible from elevated positions of adjacent townhomes to the south and apartments to the west across Waukegan.

Subject Property

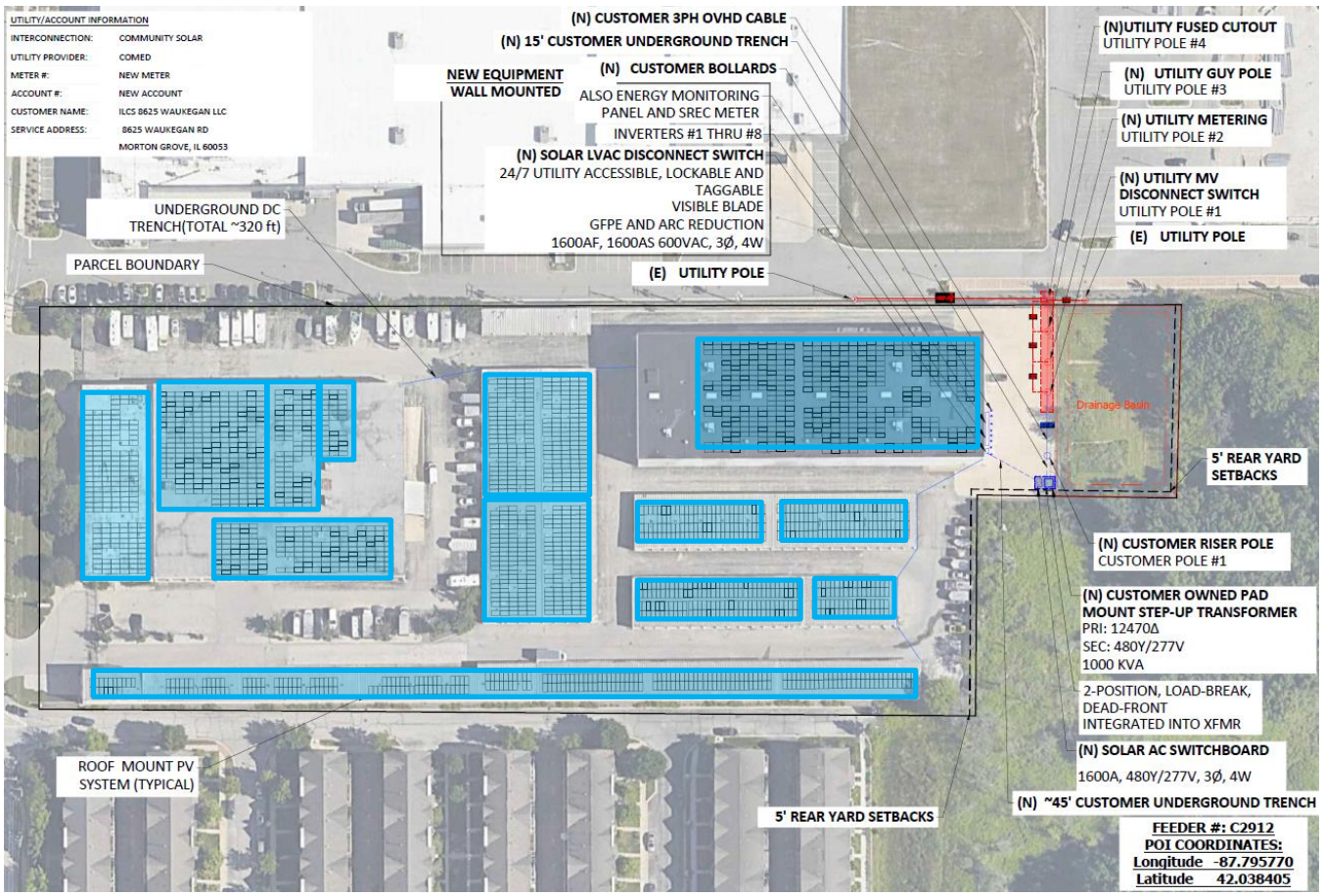
The subject property consists of one (1) parcel occupied by the existing Public Storage facility at 8625 Waukegan Road in Morton Grove, Illinois. The parcel is approximately 285,305.21 sq. ft. and zoned C-1 General Commercial. All surrounding properties to the north, south, and west across Waukegan Road are also zoned C-1. The subject property is located to the south of the Samwill Station shopping center and north of the Trafalgar Woods townhome development. The properties to the east are located within the Forest Preserves of Cook County and zoned R-1 Single Family Residence.



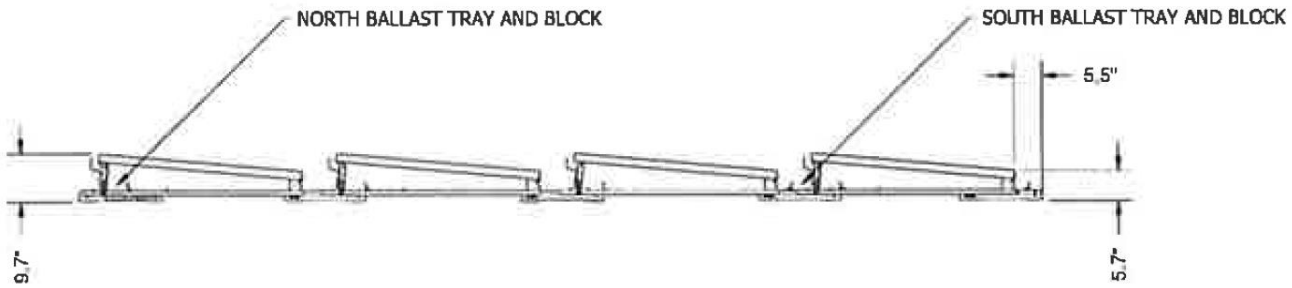
Subject Property Location Map

Project Overview

Solar Landscape, a renewable energy development company located in Asbury Park, NJ, proposes to develop a community solar project at the subject property. The project consists of roof mounted solar panels and will be installed on the existing Public Storage building located on the property. The total system size is 960kW AC and interconnection has been approved by ComEd. The project has been approved as part of the Illinois Shines Community-Driven Community Solar Program (CDCS). CDCS allows customers to subscribe to a shared solar project, offsetting their electricity costs with energy credits from the system's production.



Proposed Site Plan with Generalized Solar Array Locations Highlighted in Blue



Proposed Solar Array Racking Details (Typical)

Glare Analysis

Solar Landscape is proposing solar arrays to be mounted to the roof of every building at the subject property. This includes locating solar arrays on the westernmost building that fronts Waukegan Road as well as on the buildings located along the south lot line immediately adjacent the Trafalgar Woods townhome complex. Staff has concerns regarding the potential for glare to impact the adjacent townhome project. There is potential for light to reflect off of the roof-mounted solar arrays visible from upper stories of adjacent townhomes. In response to Staff comments, the applicant provides a glare report that summarizes the results of simulated glare from various observation points.

The analysis evaluates both "glint" which is defined as a bright, momentary flash of light; and "glare" which is defined as a more continuous and sustained presence of light that may appear to "sparkle" from viewing locations. The report also notes that the solar arrays are designed specifically not to reflect light, thus reducing the potential for glint and glare. The report found to potential for glare at any of the observation points. Latitude and longitude for each observation point were shared and Staff has requested a map to help illustrate observation point locations. The applicant has indicated they will provide a map prior to Appearance Commission meeting on December 2, 2025. Several observation points were located along the south lot line at a height of 12 ft. in an effort to simulate second-floor observation points from adjacent residences. ***The applicant should speak to the glare analysis results and potential impacts to adjacent residential properties.***

The applicant is also proposing the installation of three (3) utility poles, a transformer, and a switchboard in the northeast corner of the site. That area is screened from public view by privacy fencing and the subject property buildings to the west. The utility poles would be visible from the Sawmill Station property, but would be concealed from view by a future building to be located on the undeveloped pad at the shopping center.

Solar Energy Collection Systems Code Update

A proposed update to the Unified Development Code that was approved by the Plan Commission (PC 25-04) and is currently up for consideration by the Village Board, will provide guidance regarding the location and installation of solar energy collection systems. The applicant has been provided a copy of the Plan Commission staff report including draft ordinance language approved by the Plan Commission and it is included as "**Attachment A**" in this report. The first reading of the draft ordinance is December 9, 2025 with approval anticipated in January 2026.

The proposed code update requires a Special Use Permit for grid-connected solar energy systems that sell back to the energy grid. The application meets that requirement as an amendment to an existing special use permit. The proposed code update also includes requirements for building-mounted solar energy collection systems including standards for location, quantity, roof overhang, and height. The proposed installation meets all proposed standards.

Decommissioning Plan Required

The proposed code update also indicates that a decommissioning plan shall be required for all installations in commercial or industrial zoning districts and such a plan shall run with the land. The decommissioning would then be required for all solar energy collection system installations in commercial and industrial zoning districts, when the primary structure is vacant for a period of three hundred and sixty-five (365) days. ***Staff recommend as a condition of approval that the applicant be required to submit revised final plans that include a decommissioning plan subject to review and approval by the Village Administrator.***

Appearance Commission Review

In accordance with Unified Development Code Section 12-12-1:C, all site, landscape and building plans are to be reviewed by the Appearance Commission, and an Appearance Certificate by the Commission granted, prior to the issuance of a building permit. Further, per Section 12-16-2:C.2, the Appearance Commission is charged with reviewing the exterior elevations, sketches, and materials and other exhibits as to whether they are appropriate to or compatible with the character of the immediate neighborhood and whether the submitted plans comply with the provisions of the regulations and standards set forth in chapter, 12 "Design Standards," of this title.

The Design Standards (Sec. 12-12-1:D) are as follows:

D. Criteria and Evaluation Elements: The following factors and characteristics relating to a unit or development and which affect appearance, will govern the appearance review commission's evaluation of a design submission:

1. Evaluation Standards:
    a. Property Values: Where a substantial likelihood exists that a building will depreciate property values of adjacent properties or throughout the community, construction of that building should be barred.
    b. Inappropriateness: A building that is obviously incongruous with its surroundings or unsightly and grotesque can be inappropriate in light of the comprehensive plan goal of preserving the character of the municipality.
    c. Similarity/Dissimilarity: A builder should avoid excessively similar or excessively dissimilar adjacent buildings.
    d. Safety: A building whose design or color might, because of the building's location, be distracting to vehicular traffic may be deemed a safety hazard.
2. Design Criteria:
    a. Standards: Appearance standards as set forth in this chapter.
    b. Logic Of Design: Generally accepted principles, parameters and criteria of validity in the solution of design problems.
    c. Architectural Character: The composite or aggregate of the components of structure, form, materials and functions of a building or group of buildings and other architectural and site composing elements.
    d. Attractiveness: The relationship of compositional qualities of commonly accepted design parameters such as scale, mass, volume, texture, color and line, which are pleasing and interesting to the reasonable observer.
    e. Compatibility: The characteristics of different uses of activities that permit them to be located near each other in harmony and without conflict. Some elements affecting compatibility include intensity of occupancy as measured by dwelling units per acre; floor area ratio; pedestrian or vehicular traffic generated; parking required; volume of goods handled; and such environmental effects as noise, vibration, glare, air pollution, erosion, or radiation.
    f. Harmony: A quality which produces an aesthetically pleasing whole as in an arrangement of varied architectural and landscape elements.
    g. Material Selection: Material selection as it relates to the evaluation standards and ease and feasibility of future maintenance.
    h. Landscaping: All requirements set forth in chapter 11, "Landscaping and Trees", of this title. (Ord. 07-07, 3-26-2007)

Recommendation

If the Appearance Commission approves the request for an Appearance Certificate for the installation of a roof-mounted community solar energy collection system under Special Use Permit (PC 25-13) for the property commonly known as 8625 Waukegan Road in Morton Grove, Illinois, staff recommends the following conditions of approval:

1. *Prior to filing any Building Permit Application, the owner/applicant shall submit final plans, including a decommissioning plan, that meet the requirements of draft Ordinance 25-22 subject to review and approval by the Village Administrator.*
2. *Final plans, elevations and materials must be deemed consistent with the approved materials, as determined by the Community Development Administrator and Appearance Commission Chairperson. If such designs are deemed to be inconsistent with the approved plans or if materials are deemed to be of a lower quality than the approved materials, then the owner/applicant will be required to file an application for an amendment to the Appearance Certificate.*

Attachment A – Staff Report for PC 25-04 – Solar Energy Collection Systems Text Amendments, dated November 12, 2025

To: **Chairperson Kintner and Members of the Plan Commission**

From: **Brandon Nolin, AICP, Community Development Administrator**
Anne Ryder Kirchner, Planner/Zoning Administrator

Date: **November 12, 2025**

Re: **Plan Commission Case PC 25-04**
Request for approval of various Text Amendments to establish Sections 12-3-9 and 12-3-10 of the Morton Grove Unified Development Code (Title 12) to provide guidance for the installation and use of solar energy collection systems. The applicant is the Village of Morton Grove.

STAFF REPORT

Public Notice

The Village provided public notice for the November 18, 2025, Plan Commission public hearing for Case PC 25-04 in accordance with the Unified Development Code. The Morton Grove Champion published a public notice on October 30, 2025. Letters to surrounding property owners and a public notice sign were not required due to the application being for a Text Amendment to the Unified Development Code (Title 12) and not in relation to any particular property.

Background

The Department of Community and Economic Development continuously reviews and updates the Unified Development Code (Title 12, Morton Grove Municipal Code) as needed to keep regulations current and promote predictable and desirable development. This report outlines several text amendments recommended by Staff based on input received throughout 2024 and discussion with the Plan Commission on December 17, 2024, and March 18, 2025.

Solar Energy

Solar energy collection systems are not currently defined within the UDC and Staff reviews requests on a case-by-case basis. The Building Code provides some guidance on solar such as requirements for the use of electrical conduit and structural supports, but there is not guidance to ensure such installations do not have a negative impact on adjacent properties. Staff recommend the following definition and treatment of solar energy collection systems to provide fair certainty to applicants and avoid inconsistent guidance.

NOTE: *Following Plan Commission discussion on March 18, 2025, the proposed permitted height for solar energy collection systems on pitched roofs was reviewed by Staff. Staff determined that allowing for systems to extend up to five feet (5') above the surface of a pitched roof was appropriate to allow users to angle solar panels to optimize solar capture. Accommodating all manner of roof angles would be impractical within the Code. The following statement has been included in Section 12-3-9:A.5 to highlight the concern: "System mounting angles should be minimized so as to parallel roof pitch as closely as practical for the functionality of the system."*

12-3-9 New Section for Solar

12-3-9: Solar Energy Collection Systems

Solar energy collection systems are allowed as an accessory use in all districts with the following conditions:

A. Building-Mounted Systems
   1. Location:
      a. Roof-mounted: Solar energy collection systems may be mounted on any roof face of principal or accessory structures. Systems should be flush mounted when possible.
      b. Façade-mounted: Solar energy collection systems may be applied flat against a building façade, or project off a building facade up to three feet (3'), but shall not be mounted to any façade facing the front of the property nor encroach in required yards.
   2. Quantity: The total square footage of the system panels may not exceed the total area of roof surface of the structure to which the system is attached. For facade-mounted panels, the total square footage of the system panels may not exceed twenty percent (20%) of the facade area.
   3. Roof Overhang: No part of a roof-mounted system shall extend over the edge of the roof.
   4. Measuring Height: Height is measured from the roof surface on which the system is mounted to the highest edge of the system.
   5. Maximum Height: Systems may exceed the maximum height for a district, but shall not extend more than five feet (5') above the surface of a flat roof or the highest peak of a pitched roof. System mounting angles should be minimized so as to parallel roof pitch as closely as practical for the functionality of the system.

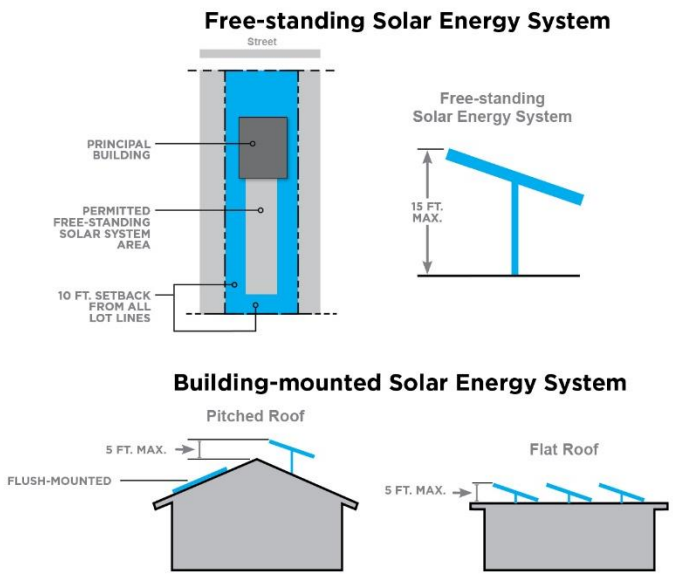
B. Free-Standing Systems
   1. Location: Systems are permitted in the rear and side yards only, but may not be located in a required side yard. All parts of a freestanding system shall be located within the buildable area of a parcel.
   2. Maximum Height: Maximum height shall be fifteen feet (15') measured from the grade at the base of the pole to the highest edge of the system.
   3. Setbacks: All parts of the freestanding system shall follow the requirements of a detached accessory structure pursuant Section 12-2-5:B of this Chapter, however no freestanding system shall be located closer than ten feet (10') from a lot line of an adjacent residential use.
   4. Accessory Structure: A free-standing system shall count toward the maximum number of accessory structures allowed, but does not count toward the maximum gross floor area of accessory structures.
   5. Coverage: The area of a free-standing system shall be included in lot coverage and yard coverage calculations, and shall not occupy greater than seventy-five percent (75%) of the lot area when accessory to a commercial use.

C. Requirements for all Solar Energy Collection Systems.
   1. Grid-connected Solar Energy System. A grid-connected solar energy collection system is one that is connected to an electric circuit served by a utility company.
      a. Net Metering Permitted: All energy produced by a grid-connected solar energy collection system shall be utilized on site, except for net metering as authorized by the applicable electric or other utility.
      b. Special Use Permit required for Resale: Grid-connected solar energy systems shall only be permitted to sell energy for use off-site in select zoning districts by special use permit as indicated in Section 12-3-4.

c. Traffic Movement: All structures shall be designed so as to not impede or impair vehicular and pedestrian traffic movement, or exacerbate the potential for pedestrian/vehicular conflicts.
d. Location: Grid-connected systems shall be building-mounted. Free-standing systems shall be prohibited.
e. Utility Company Notification: No grid-connected system shall be installed until the owner or operator has provided evidence of notification to the electric utility company of the customer's intent to install an interconnected system that complies with the interconnection requirements of the electric utility company.

2. Blending: Efforts shall be made in the design of solar energy systems to incorporate the use of materials, colors, textures, screening and landscaping that will aid in blending the system into the natural setting and existing environment.
3. Wiring and Piping: All exterior electrical and plumbing lines for solar energy collection systems shall be placed in a conduit or copper piping, shall be installed underground or contained within a raceway that complements the building materials of the principal structure, and shall otherwise comply with all other Village requirements relative to electrical or plumbing lines.
4. Glare and Heat: No glare or heat from a solar energy collection system shall be detectable at any point off the lot on which the system is located. Flickering or intense sources of light shall be controlled or shielded so as not to cause a nuisance across lot lines.
5. No Advertising: Solar energy collection systems shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the system. In no case shall any identification be visible from a property line.
6. Decommissioning Plan: A decommissioning plan shall be required for all installations in commercial or industrial zoning districts and such a plan shall run with the land. A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) shall be recorded with the Cook County recorder of deeds office. The decommissioning plan shall address the following:
    a. Defined conditions upon which decommissioning will be initiated;
    b. Removal of all non-utility owned equipment, conduit, structures, fencing, roads, and foundations;
    c. Restoration of property to condition prior to development of the solar energy system;
    d. Timeframe for completion of decommissioning activities, not to exceed twelve (12) months;
    e. Description and copy of any lease or any other agreement with landowner regarding decommissioning;
    f. Name and address of person or party responsible for decommissioning; and
    g. Plans and schedule for updating this decommission plan.
7. Vacancy of Primary Structure: For all installations in commercial and industrial zoning districts, decommissioning shall be required to initiate if the primary structure is vacant for a period of three hundred and sixty-five (365) days. Temporary or partial use of the primary structure shall not be considered in determining the vacancy status.

SOLAR ENERGY COLLECTION SYSTEMS



[12-3-10 Wind Energy Collection Systems removed]

UTILITY/ACCOUNT INFORMATION	
INTERCONNECTION:	COMMUNITY SOLAR
UTILITY PROVIDER:	COMED
METER #:	NEW METER
ACCOUNT #:	NEW ACCOUNT
CUSTOMER NAME:	ILCS 8625 WAUKEGAN LLC
SERVICE ADDRESS:	8625 WAUKEGAN RD
	MORTON GROVE, IL 60053

(N) CUSTOMER 3PH OVHD CABLE

(N) 15' CUSTOMER UNDERGROUND TRENCH

NEW EQUIPMENT WALL MOUNTED

(N) CUSTOMER BOLLARDS

ALSO ENERGY MONITORING PANEL AND SREC METER

INVERTERS #1 THRU #8

(N) SOLAR LVAC DISCONNECT SWITCH

24/7 UTILITY ACCESSIBLE, LOCKABLE AND TAGGABLE
VISIBLE BLADE
GFPE AND ARC REDUCTION
1600AF, 1600AS 600VAC, 3Ø, 4W

(N)UTILITY FUSED CUTOUT
UTILITY POLE #4

(N) UTILITY GUY POLE
UTILITY POLE #3

(N) UTILITY METERING
UTILITY POLE #2

(N) UTILITY MV DISCONNECT SWITCH
UTILITY POLE #1

(E) UTILITY POLE

UNDERGROUND DC TRENCH(TOTAL ~320 ft)

PARCEL BOUNDARY

(E) UTILITY POLE

160'-3"

50'

25'

25'

25'

25'-3"

Drainage Basin

5' REAR YARD SETBACKS

(N) CUSTOMER RISER POLE
CUSTOMER POLE #1

(N) CUSTOMER OWNED PAD MOUNT STEP-UP TRANSFORMER
PRI: 12470Δ
SEC: 480Y/277V
1000 KVA

2-POSITION, LOAD-BREAK, DEAD-FRONT
INTEGRATED INTO XFMR

(N) SOLAR AC SWITCHBOARD

1600A, 480Y/277V, 3Ø, 4W

(N) ~45' CUSTOMER UNDERGROUND TRENCH

ROOF MOUNT PV SYSTEM (TYPICAL)

5' REAR YARD SETBACKS

FEEDER #: C2912
POI COORDINATES:
Longitude -87.795770
Latitude 42.038405

1 E10 ELECTRICAL PLAN
SCALE: CUSTOM

N

REV	DATE	REVISION DESCRIPTION	ENGR
0	6/25/2024	Issued for IC	DN
1	7/30/2025	POST SITE WALK	AG
2	8/20/2025	ADDED CUSTOMER RISER	AG
3	10/9/2025	MV EQUIPMENT SHIFT	AG

solarlandscape
Project Developer
Solar Landscape, LLC. | 522 Cookman Ave, Suite 3, Asbury Park NJ. 07712 (646) 419-2645

PROJECT DETAILS

SYSTEM SIZE:	1,365.90 KW DC / 960.00 KW AC
INTERCONNECTION:	COMMUNITY SOLAR
INSTALLATION TYPE:	ROOF MOUNT
MODULE (TYPE 1):	(2,355) Jinkosolar, JKM580N-72HL4- BDV (580W)
MODULE (TYPE 2):	(000)
INVERTER:	(8) SE120KUS (120 KW)
RACKING / ROOF TYPE:	PANELCLAW CLAW FR SD (5°) / TBD

PROJECT: PS IL 8625 WAUKEGAN RD
8625 WAUKEGAN RD
MORTON GROVE, IL 60053
1,365.90 KW DC / 960.00 KW AC

PAGE NO. 1 of 2
SHEET NO. E10
SHEET TITLE: SITE PLAN

601 Bangs Ave, Suite 301
Asbury Park, NJ 07712
O. 844.765.2769
SOLARLANDSCAPE.COM

July 9, 2025
Village of Morton Grove
Department of Community Development
6101 Capulina Avenue, Morton Grove, Illinois 60053

Solar Landscape – Rooftop Community Solar Project. 8625 Waukegan Rd, Morton Grove, IL

Mr. Nolin,

Please find enclosed the Special Use Application for 8625 Waukegan Rd, Morton Grove, IL. Solar Landscape, a renewable energy development company located in Asbury Park, NJ, proposes to develop a community solar project at the above mentioned address.

This project has been approved as part of the Illinois Shines Community-Driven Community Solar Program (CDCS). CDCS allows customers to subscribe to a shared solar project, offsetting their electricity costs with energy credits from the system's production.

The project consists of roof mounted solar panels and will be installed on the existing Public Storage building located on the property. The total system size is 960kW AC and interconnection has been approved by ComEd. The project will comply with all code-required setbacks.

Solar Landscape is a leading commerical and industrial rooftop community solar developer in the U.S. currently operating one of the largest community solar portfolios in the country.

I am available to answer any questions you may have or to provide more information as needed.

Sincerely,

Emily McCue

Emily McCue
Sr. Analyst, Preconstruction
Solar Landscape
emccue@solarlandscape.com

TABLE OF CONTENTS

SPECIAL USE APPLICATION REQUIREMENTS

30 hard copies and a digital copy of each item listed below (unless otherwise noted) are required. All submitted items must be printed at a scale and size that provides easily legible text. 24" x 36" plan sets are encouraged for larger scale development projects.

- ☒ **Special Use Application** with authorized signatures (1 copy only)
- ☑ **Evidence of ownership** such as deed, affidavit, contract purchase, or disclosure of beneficial trust (1 copy only)
- ☑ **Draft lease agreement or draft purchase contract** if applicant is not the property owner (1 copy only)
- ☑ **Written authorization from the property owner** to file application and accept conditions of approval regarding the project and the property (1 copy only)
- ☑ **Current plat of survey** by a registered land surveyor showing lot lines, existing buildings and physical features including paved areas, utility lines, easements, rights of way, and other property interests
- ☑ **Site plan** (scaled) including the following:
    - Locations of building(s)
    - Vehicular accessways and fire lanes relative to existing roadways
    - Parking stalls and loading docks, including accessible spaces, counts, and dimensions
    - Calculations, including building footprint area, floor area and floor area ratio, impervious surface area and site percentage
    - For residential projects, number of units and composition
- N/A ☐ **Interior floor plans**
- N/A ☐ **Landscape plan** (scaled) including the following:
    - Landscape areas with dimensions
    - Planting details
    - Species list with quantities and specifications
    - Existing trees to be preserved with details
    - Existing trees to be removed with details
- N/A ☐ **Lighting plan** including location, type of luminaire, wattage, and photometric analysis
- N/A ☐ **Building elevations** (color)
- N/A ☐ **Materials palette** (color)
- ☑ **Engineering plans** including the following:
    - Topography
    - Demolition plan
    - Existing and proposed utilities
    - Grading plan
    - Stormwater detention and supporting calculations
    - Streets, alleys, easements, and utility rights-of-way
    - Floodplain notation
- N/A ☐ **Traffic and parking impact study** prepared by a licensed engineer
- ☑ **Checks** made payable to the Village of Morton Grove, for:
    - Application fee (*$550 for properties in commercial and manufacturing districts, $275 for properties in residential districts)*
    - Escrow fee for administrative processing *($1000 for all requests*)

SPECIAL USE APPLICATION

Village of Morton Grove
Department of Community Development
6101 Capulina Avenue, Morton Grove, Illinois 60053
commdev@mortongroveil.org | 847-663-3063

Case Number: _____ Date Application Filed: _____

APPLICANT INFORMATION

Applicant Name: SLDIL Portfolio LLC
Applicant Organization: New Jersey limited liability company
Applicant Address: 601 Bangs Ave., Ste. 301
Applicant City / State / Zip Code: Asbury Park, NJ 07712
Applicant Phone: 856-437-9711
Applicant Email: emccue@solarlandscape.com
Applicant Relationship to Property Owner: Lessee
Applicant Signature: Emily McCue

PROPERTY OWNER INFORMATION (IF DIFFERENT FROM APPLICANT)

Owner Name: Public Storage, Inc., through its affiliate PS Co-Investment Partners
Owner Address: 701 Western Avenue
Owner City / State / Zip Code: Glendale, CA 91201
Owner Phone: 818-244-8080
Owner Email: _____
Owner Signature: See Authorization Document

PROPERTY INFORMATION

Common Address of Property: 8625 Waukegan Road, Morton Grove, IL
Property Identification Number (PIN): 10-19-103-002-0000
Property Square Footage: 285,305 square feet
Legal Description (attach as necessary): See attached
Property Zoning District: C-1

APPLICATION INFORMATION

Requested Special Use: Roof top community solar project
Purpose of Special Use (attach as necessary): Establish a roof top community solar project located upon the roofs of existing self storage facility

RESPONSES TO STANDARDS FOR SPECIAL USE

Provide responses to the seven (7) Standards for Special Use as listed in Section 12-16-4-C-5 of the Village of Morton Grove Unified Development Code. The applicant must present this information for the official record of the Planning Commission. The Special Use Standards are as follows:

a. The establishment, maintenance, or operation of the Special Use will not be detrimental to, or endanger the public health, safety, morals, comfort, or general welfare.

Roof top solar projects generate clean renewable energy utilizing existing roof space. These projects will not create any noise, fumes, traffic or other impacts that are harmful to surrounding parcels.

b. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.

Roof top solar projects generate clean renewable energy utilizing existing roof space. These projects will not create any noise, fumes, traffic or other impacts that are harmful to surrounding parcels.

c. The establishment of the Special Use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.

The surrounding parcels are already developed with commercial uses and because the project will not cause any negative impacts, it will not impede or prevent any redevelopment or improvement of the area.

d. Adequate utilities, access roads, drainage and/or necessary facilities have been or are being provided.

No new public facilities, utility or access roads are necessary for the project. All necessary facilities will be provided by the applicant.

e. Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

Once construction is completed, the project will only require periodic maintenance and inspection and will not create any traffic congestion.

f. The proposed Special Use is not contrary to the objectives of the current Comprehensive Plan for the Village of Morton Grove.

Roof-top solar projects are not inconsistent or incompatible with any of the statements of the Comprehensive Plan.

g. The Special Use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be modified pursuant to the recommendations of the Commission.

The use will meet all requirements for the C-1 Zoning District.

EXHIBIT A

LEGAL DESCRIPTION

That part of Lot 2 in White's Subdivision of the West half of the Northeast quarter and part of the Northwest quarter of Section 19, Township 41 North, Range 13 East of the Third Principal Meridian in Cook County, Illinois bounded and described as follows: Beginning at a point in the West line of said Lot 2 lying 330 feet South of the Northwest corner of said Lot 2 (as measured on the West line thereof); thence North along the West line of said Lot 2 a distance of 330 feet to the Northwest corner of said Lot 2; thence East along the North line of said Lot 2 a distance of 1019.22 feet to a point of intersection of said North line and the center line of Oak Park Avenue as laid out in Schrader's Addition to Morton Grove, thence South along said center line of Oak Park Avenue a distance of 167.76 feet to a point of intersection of said center line and the center line of Main Street as laid out in said Schrader's Addition; thence West along said center line of Main Street a distance of 166.0 feet to a point of intersection of said center line of Main Street and the center line of a North and South 16 foot alley extended and laid out in Block 7 of said Schrader's Addition; thence South a distance of 162.33 feet along the center line of said alley to a point of intersection of the center line of said alley and a line parallel with and 330 feet South of the North line of said Lot 2 (as measured along the West line thereof), thence West along said parallel line a distance of 843.92 feet to the place of beginning (except West 50 feet thereof taken or used for Waukegan Road), in Cook County, Illinois.

93460025

PIN: 10-19-103-002

8625 Waukegan Rd, Morton Grove, IL 60053-2218, Cook County

PS27006

Authorization of Property Owner to File Zoning Applications

On behalf of Public Storage, Inc., the property owner of 8625 Waukegan Road, Morton Grove, Illinois (PIN #10-19-103-002-0000), the property owner hereby authorizes Solar Landscape LLC to file for a special use application, amendment to the current special use on the subject property, and any other zoning approvals necessary for a roof top community solar energy project on the subject property.

Jerry Crouse
Public Storage, Inc.

Jerry Crouse
Name

Project Manager
Title

June 11, 2025

Any Counterparty to Any Agreement or
Other Document with a Public Storage
Entity and Any Governmental or
Regulatory Authority or Agency Having
Authority or Oversight Regarding Any
Facility or Project Owned, Operated, or
Undertaken by a Public Storage Entity

Re: Public Storage Entities

To Whom It May Concern:

Public Storage is a Maryland real estate investment trust that primarily acquires, develops, owns, and operates self-storage facilities. It has been in operation for over 50 years, growing from a single facility in El Cajon, California to today, where Public Storage and its subsidiaries and affiliates own or operate approximately 3,400 facilities in the Unites States and over 300 additional facilities worldwide. All facilities in the United States operate under the "Public Storage" brand and utilizing Public Storage's distinctive Orange trade dress, which are protected by an extensive trademark and intellectual property portfolio. Public Storage is listed on the New York Stock Exchange under the symbol "PSA".

Public Storage currently conducts its business through over 400 direct and indirect subsidiaries. Historically, it has operated through hundreds of additional subsidiaries that have subsequently been merged or otherwise dissolved out of existence. Public Storage's subsidiaries own all of its real estate and conduct all of its operations—Public Storage itself is the public parent company.

Given Public Storage's extensive current and historical subsidiary network, questions can arise as to the association of a given entity with Public Storage itself. This letter, which is non-exhaustive and current only as of the date of this letter, confirms the association of the following entities with Public Storage:

- CCP/Shurgard Venture, LLC
- Eurolux Partners II
- MSC Spartanburg, LLC
- PS Atlantic Coast Solar, Inc., now known as PS Atlantic Coast Solar, LLC
- PS Atlantic Coast Solar, LLC
- PS Atlantic Coast, LLC
- PS Boynton Beach Industrial Road 2013, LLC
- PS Co-Investment Partners
- PS Florida One, Inc., now known as PS Florida One, LLC
- PS Florida One, LLC
- PS Illinois Trust
- PS LADWP Solar, Inc., now known as PS Socal LA Solar, LLC
- PS LPT Solar, Inc., now known as PS LPT Solar, LLC
- PS LPT Solar, LLC
- PS Mid-West One Solar, Inc., now known as PS Mid-West One Solar, LLC
- PS Mid-West One Solar, LLC

PUBLIC STORAGE
Trusted nationwide since 1972™
701 Western Avenue, Glendale, CA 91201
Tel: 818-244-8080
publicstorage.com

- PS Mid-West One, LLC
- PS Mountain West, Inc., now known as PS Mountain West, LLC
- PS Mountain West, LLC
- PS NC I, L.P.
- PS NC II, L.P.
- PS NC III, L.P.
- PS North Miami, LLC
- PS Northeast, LLC
- PS Northern CA Solar, Inc., now known as PS Northern CA Solar, LLC
- PS Northern CA Solar, LLC
- PS Northern California One, LLC
- PS Partners II, Ltd.
- PS Partners III, Ltd.
- PS Partners IV, Ltd.
- PS Partners V, Ltd.
- PS Partners VI, Ltd.
- PS Partners VIII, Ltd.
- PS Partners, Ltd.
- PS Properties Advisors, Inc., now known as Public Storage Operating Company
- PS Socal LA Solar, Inc., now known as PS Socal LA Solar, LLC
- PS Socal LA Solar, LLC
- PS Solar, Inc.
- PS Southeast One Solar, Inc., now known as PS Southeast One Solar, LLC
- PS Southeast One Solar, LLC
- PS Southeast One, LLC
- PS Southeast Two Solar, Inc., now known as PS Southeast Two Solar, LLC
- PS Southeast Two Solar, LLC
- PS Southeast Two, LLC
- PS Southern CA Solar, Inc., now known as PS Southern CA Solar, LLC
- PS Southern CA Solar, LLC
- PS Southern California One, LLC
- PS Weston Commerce 2013, LLC
- PSA Institutional Partners, L.P.
- PSAF Development Partners, L.P.
- Public Storage
- Public Storage Institutional Fund
- Public Storage Institutional Fund II
- Public Storage Institutional Fund III
- Public Storage Management, Inc., now known as Public Storage Operating Company
- Public Storage, Inc., now known as Public Storage Operating Company
- Public Storage, now known as Public Storage Operating Company
- SEI PSP V Joint Ventures
- SSC Property Holdings, LLC
- Shurgard Illinois Properties, LLC
- Shurgard Storage Centers, LLC
- Shurgard/Fremont Partners I
- Shurgard/Fremont Partners II
- South Beach Associates

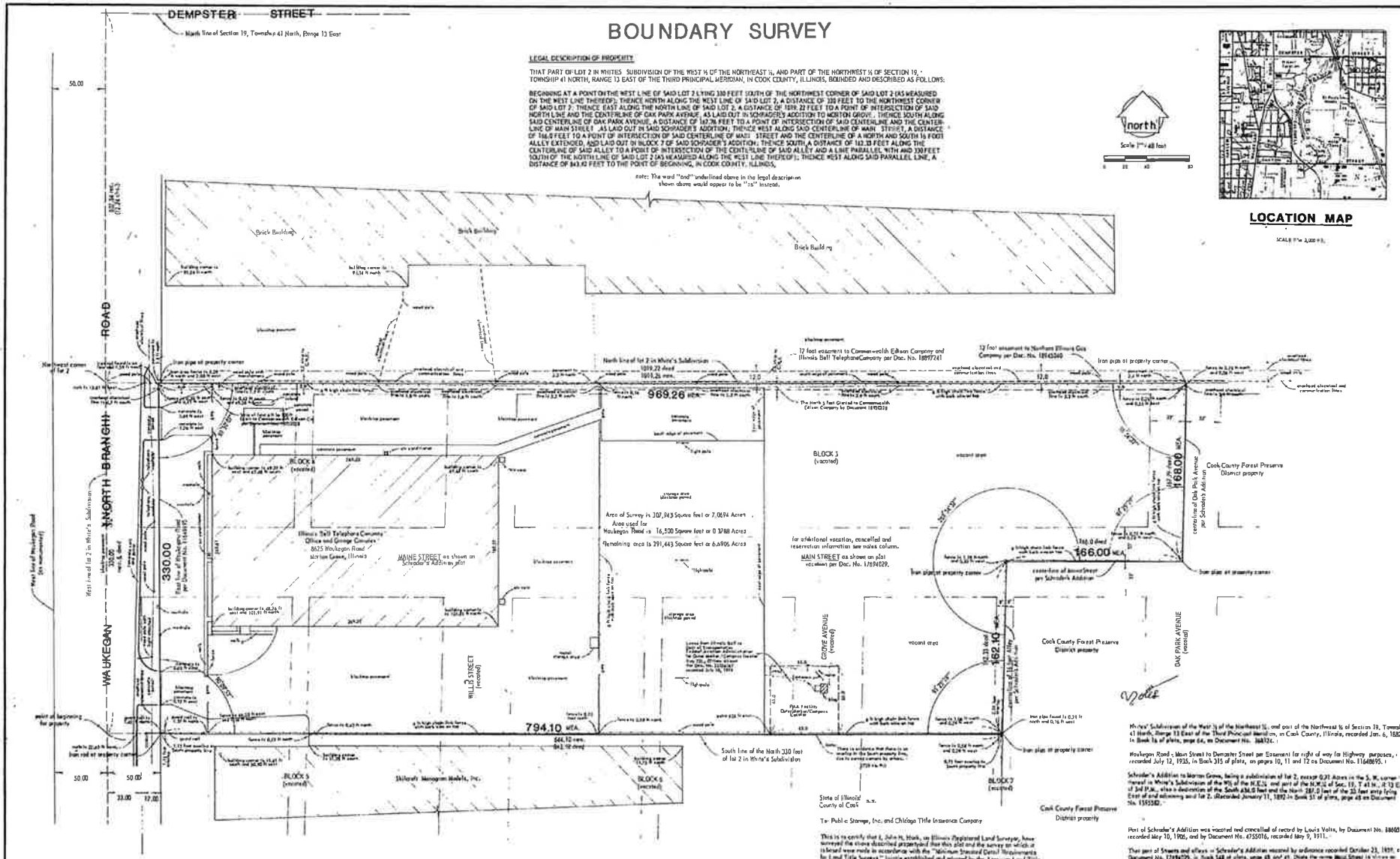
* * * * *

Should you have additional questions regarding any of the foregoing entities and their place in the Public Storage structure, or regarding any Public Storage entity not listed above, please direct those to your primary Public Storage contact. This letter is for informational purposes only.

Very truly yours,

Steven C. Babinski
Vice President, Associate General Counsel
Public Storage

BOUNDARY SURVEY



LEGAL DESCRIPTION OF PROPERTY

THAT PART OF LOT 2 IN WHITES SUBDIVISION OF THE WEST ½ OF THE NORTHEAST ¼, AND PART OF THE NORTHWEST ¼ OF SECTION 19, TOWNSHIP 41 NORTH, RANGE 13 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WEST LINE OF SAID LOT 2 LYING 330 FEET SOUTH OF THE NORTHWEST CORNER OF SAID LOT 2 (AS MEASURED ON THE WEST LINE THEREOF); THENCE NORTH ALONG THE WEST LINE OF SAID LOT 2, A DISTANCE OF 330 FEET TO THE NORTHWEST CORNER OF SAID LOT 2; THENCE EAST ALONG THE NORTH LINE OF SAID LOT 2, A DISTANCE OF 1019.22 FEET TO A POINT OF INTERSECTION OF SAID NORTH LINE AND THE CENTERLINE OF OAK PARK AVENUE, AS LAID OUT IN SCHRADER'S ADDITION TO MORTON GROVE; THENCE SOUTH ALONG SAID CENTERLINE OF OAK PARK AVENUE, A DISTANCE OF 167.76 FEET TO A POINT OF INTERSECTION OF SAID CENTERLINE AND THE CENTERLINE OF MAIN STREET, AS LAID OUT IN SAID SCHRADER'S ADDITION; THENCE WEST ALONG SAID CENTERLINE OF MAIN STREET, A DISTANCE OF 166.0 FEET TO A POINT OF INTERSECTION OF SAID CENTERLINE OF MAIN STREET AND THE CENTERLINE OF A NORTH AND SOUTH 16 FOOT ALLEY EXTENDED, AND LAID OUT IN BLOCK 7 OF SAID SCHRADER'S ADDITION; THENCE SOUTH, A DISTANCE OF 162.10 FEET ALONG THE CENTERLINE OF SAID ALLEY TO A POINT OF INTERSECTION OF THE CENTERLINE OF SAID ALLEY AND A LINE PARALLEL WITH AND 330 FEET SOUTH OF THE NORTH LINE OF SAID LOT 2 (AS MEASURED ALONG THE WEST LINE THEREOF); THENCE WEST ALONG SAID PARALLEL LINE, A DISTANCE OF 843.92 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

note: The word "and" underlined above in the legal description shown above would appear to be "as" instead.

LOCATION MAP

SCALE 1" = 2,000 ft.

To: Public Storage, Inc. and Chicago Title Insurance Company

This is to certify that I, John H. Monk, an Illinois Registered Land Surveyor, have surveyed the above described property and that plat and the survey on which it is based were made in accordance with the "Minimum Standard Detail Requirements for Land Title Surveys" jointly established and adopted by the American Land Title Association and the American Congress on Surveying and Mapping in 1962.

I, also certify that the property included in this survey is not within Flood Boundary Limits as depicted on the National Flood Insurance program's "Flood Insurance rate Map", Community panel number 170049 0005B, dated June 15, 1983.

Given under my hand and seal this 23rd day of September A.D. 1988.

BY:

J. H. Monk & Associates
900 Busse Highway, Suite 104
Park Ridge, Illinois 60068
(312) 696 - 0010

REGISTERED LAND SURVEYOR JOHN H. MONK 1215 STATE OF ILLINOIS

White's Subdivision of the West ½ of the Northeast ¼, and part of the Northeast ¼ of Section 19, Township 41 North, Range 13 East of the Third Principal Meridian, in Cook County, Illinois, recorded Jan. 6, 1882, in Book 14 of plats, page 66, as Document No. 368124.

Waukegan Road - Main Street to Dempster Street per Easement for right of way for Highway purposes, recorded July 12, 1935, in Book 315 of plats, on pages 10, 11 and 12 as Document No. 11648695.

Schrader's Addition to Morton Grove, being a subdivision of lot 2, except 0.21 Acres in the S. W. corner thereof in White's Subdivision of the W½ of the N.E¼ and part of the N.W¼ of Sec. 19, T 41 N., R 13 E. of 3rd P.M., also a dedication of the South 63.0 feet and the North 287.0 feet of the 33 feet strip lying East of and adjoining said lot 2. (Recorded January 11, 1892 in Book 51 of plats, page 45 as Document No. 1555582.

Part of Schrader's Addition was vacated and cancelled of record by Louis Valos, by Document No. 8860514, recorded May 10, 1906, and by Document No. 4755076, recorded May 9, 1911.

That part of Streets and alleys in Schrader's Addition vacated by ordinance recorded October 23, 1959, as Document No. 17694029, in Book 348 of plats, page 48 and 49. (Note the name West Street is shown on this plat). Also this vacation contains a reservation to Public Service Company of Northern Illinois.

The name Monte Street is shown as said Schrader's Addition to Morton Grove plat.

Maximum positional tolerance of corners is 0.07 feet.

This survey reflects questions of title as shown on Chicago Title Insurance Company policy number 71 24 876 dated July 2, 1987.

ORDER NO. 88 - 2139
SCALE 1" = 40 FEET
DATED SEPT. 23, 1988
ORDERED BY: PUBLIC STORAGE, INC.

Compare all points before building by same and at once report any difference. For building line and other restrictions not shown herein refer to your abstract, deed, contract and zoning ordinance.

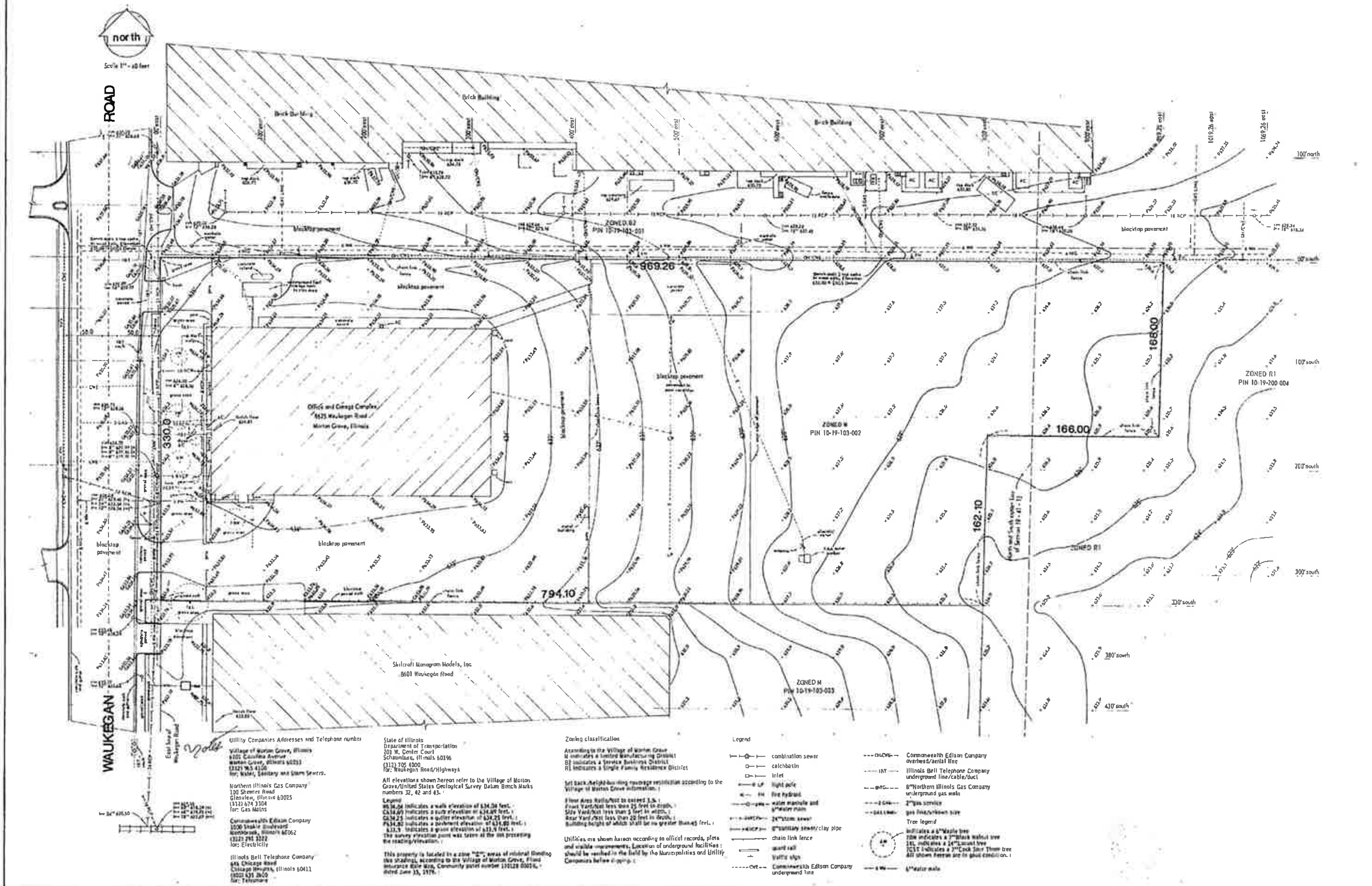
J. H. MONK & ASSOCIATES
900 BUSSE HIGHWAY, SUITE 104
PARK RIDGE, ILLINOIS 60068
312 - 696 - 0010

DESIGNED: C.F.B.
DRAWN: C.F.B.
CHECKED: J.H.M.
SCALE: 1" = 40'

PUBLIC STORAGE Inc.
Rental Spaces

PROJECT: BOUNDARY AND TOPOGRAPHIC SURVEY
PROJECT NO.
PUBLIC STORAGE FACILITY, MORTON GROVE/WAUKEGAN IL#340
SHEET NUMBER
2
1 OF 3 SHEETS
DRAWING NO.
ORIGINAL

TOPOGRAPHIC SURVEY



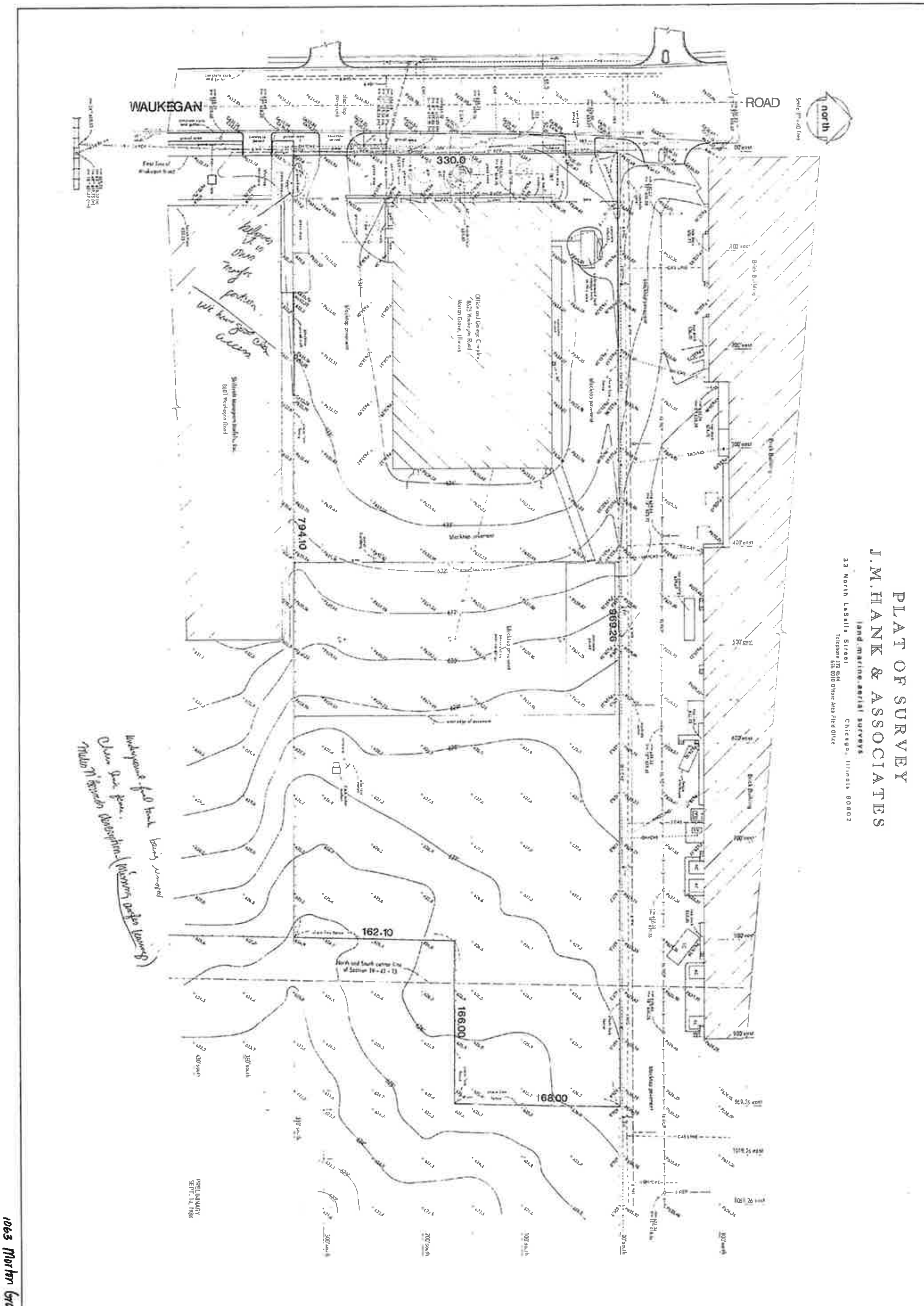
BOUNDARY AND TOPOGRAPHIC SURVEY	
PROJECT TITLE	PUBLIC STORAGE FACILITY/MORTON GROVE/WAUKEGAN ROAD
PROJECT NO.	

PUBLIC STORAGE Inc.
Rental Spaces

DRAWN BY: C. T. B.
SCALE: 1" = 40'

J. M. IIANK & ASSOCIATES
800 BUSSE HIGHWAY, SUITE 104
PARK RIDGE, ILLINOIS 60068
312 - 696 - 0010

SHEET NUMBER: 2 OF 3 SHEETS
DRAWING NO. G22



1063 Morton Grove Waukegan

PUBLIC STORAGE Inc.
Rental Spaces

PROJECT TITLE

PROJECT NO.

RECEIVED

WORKING COPY

RECEIVED

WORKING COPY

UTILITY/ACCOUNT INFORMATION	
INTERCONNECTION:	COMMUNITY SOLAR
UTILITY PROVIDER:	COMED
METER #:	NEW METER
ACCOUNT #:	NEW ACCOUNT
CUSTOMER NAME:	ILCS 8625 WAUKEGAN LLC
SERVICE ADDRESS:	8625 WAUKEGAN RD
	MORTON GROVE, IL 60053

(N) CUSTOMER 3PH OVHD CABLE

(N) 15' CUSTOMER UNDERGROUND TRENCH

NEW EQUIPMENT WALL MOUNTED

(N) CUSTOMER BOLLARDS

ALSO ENERGY MONITORING PANEL AND SREC METER

INVERTERS #1 THRU #8

(N) SOLAR LVAC DISCONNECT SWITCH

24/7 UTILITY ACCESSIBLE, LOCKABLE AND TAGGABLE
VISIBLE BLADE
GFPE AND ARC REDUCTION
1600AF, 1600AS 600VAC, 3Ø, 4W

(N)UTILITY FUSED CUTOUT
UTILITY POLE #4

(N) UTILITY GUY POLE
UTILITY POLE #3

(N) UTILITY METERING
UTILITY POLE #2

(N) UTILITY MV DISCONNECT SWITCH
UTILITY POLE #1

(E) UTILITY POLE

UNDERGROUND DC TRENCH(TOTAL ~320 ft)

PARCEL BOUNDARY

(E) UTILITY POLE

160'-3"

50'

25'

25'

25'

25'-3"

Drainage Basin

5' REAR YARD SETBACKS

(N) CUSTOMER RISER POLE
CUSTOMER POLE #1

(N) CUSTOMER OWNED PAD MOUNT STEP-UP TRANSFORMER
PRI: 12470Δ
SEC: 480Y/277V
1000 KVA

2-POSITION, LOAD-BREAK, DEAD-FRONT
INTEGRATED INTO XFMR

(N) SOLAR AC SWITCHBOARD

1600A, 480Y/277V, 3Ø, 4W

(N) ~45' CUSTOMER UNDERGROUND TRENCH

ROOF MOUNT PV SYSTEM (TYPICAL)

5' REAR YARD SETBACKS

FEEDER #: C2912
POI COORDINATES:
Longitude -87.795770
Latitude 42.038405

1 E10 ELECTRICAL PLAN
SCALE: CUSTOM

N

REV	DATE	REVISION DESCRIPTION	ENGR
0	6/25/2024	Issued for IC	DN
1	7/30/2025	POST SITE WALK	AG
2	8/20/2025	ADDED CUSTOMER RISER	AG
3	10/9/2025	MV EQUIPMENT SHIFT	AG

solarlandscape
Project Developer
Solar Landscape, LLC. | 522 Cookman Ave, Suite 3, Asbury Park NJ. 07712 (646) 419-2645

PROJECT DETAILS

SYSTEM SIZE:	1,365.90 KW DC / 960.00 KW AC
INTERCONNECTION:	COMMUNITY SOLAR
INSTALLATION TYPE:	ROOF MOUNT
MODULE (TYPE 1):	(2,355) Jinkosolar, JKM580N-72HL4- BDV (580W)
MODULE (TYPE 2):	(000)
INVERTER:	(8) SE120KUS (120 KW)
RACKING / ROOF TYPE:	PANELCLAW CLAW FR SD (5°) / TBD

PROJECT: PS IL 8625 WAUKEGAN RD
8625 WAUKEGAN RD
MORTON GROVE, IL 60053
1,365.90 KW DC / 960.00 KW AC

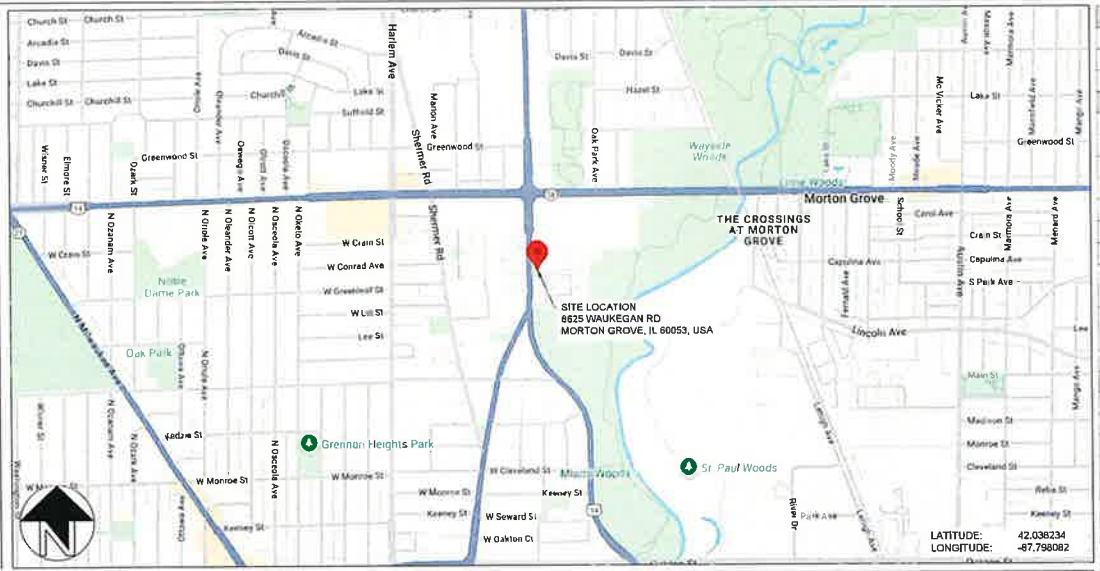
PAGE NO. 1 of 2
SHEET NO. E10
SHEET TITLE: SITE PLAN

PUBLIC STORAGE (8625 WAUKEGAN RD)

8625 WAUKEGAN RD, MORTON GROVE, IL 60053, USA

ROOFTOP PV SYSTEM - ISSUED FOR PERMIT

DRAWING INDEX



PROJECT NOTES:

1. CONSULT SOLAR LANDSCAPE BEFORE DEVIATING FROM THIS DRAWING PACKAGE.
2. PROJECT TYPE: COMMUNITY SOLAR
3. UTILITY COMPANY: COMED
4. INTERCONNECTION VOLTAGE: 12470V DELTA

COMMERCIAL CONSTRUCTION DESIGN PARAMETERS

HIGH TEMPERATURE:	30.1°C
LOW TEMPERATURE:	-31.8°C

APPLICABLE CODES

NATIONAL ELECTRICAL CODE - NFPA 70 2020 (NEC)

STANDARD FOR ELECTRICAL SAFETY IN THE WORKFORCE - NFPA 70E 2018

INTERNATIONAL ELECTRICAL TESTING ASSOCIATION - ANSI/NETA STANDARD

UL 1703 - SOLAR MODULES

UL 1741 - INVERTERS, COMBINER BOXES (UL1741SA WHERE APPLICABLE)

UL 2703 - RACKING RAILS, MOUNTS AND CLAMPS FOR PV MODULES

FOR OFFICIAL USE ONLY:

	EXISTING BUILDING	PROPOSED ALTER
IBC OCCUPANCY CLASSIFICATION	STORAGE S2	STORAGE S2
NFPA 101 CLASSIFICATION	STORAGE	STORAGE
TYPE OF CONSTRUCTION	TYPE I & TYPE II	TYPE I & TYPE II
NUMBER OF STORIES ABOVE GRADE	1 & 3	1 & 3
HIGH RISE (Y / N)	N	N
COVERED MALL (Y / N)	N	N
FULLY SPRINKLERED (Y / N)	Y	Y
FIRE ALARM (Y / N)	Y	Y
FLOOR AREA OF RENOVATION	NA	127,445 SQ. FT.

DEVELOPER INFORMATION	

SYSTEM CHARACTERISTICS	

MODULE INFORMATION	

INVERTER INFORMATION	

OPTIMIZER INFORMATION	

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1".

SCALE
NTS

SHEET TITLE
G01
TITLE SHEET

NOTES:

1. ALL DIMENSIONS TO BE FIELD VERIFIED. LOCATIONS SHOWN ARE APPROXIMATE.
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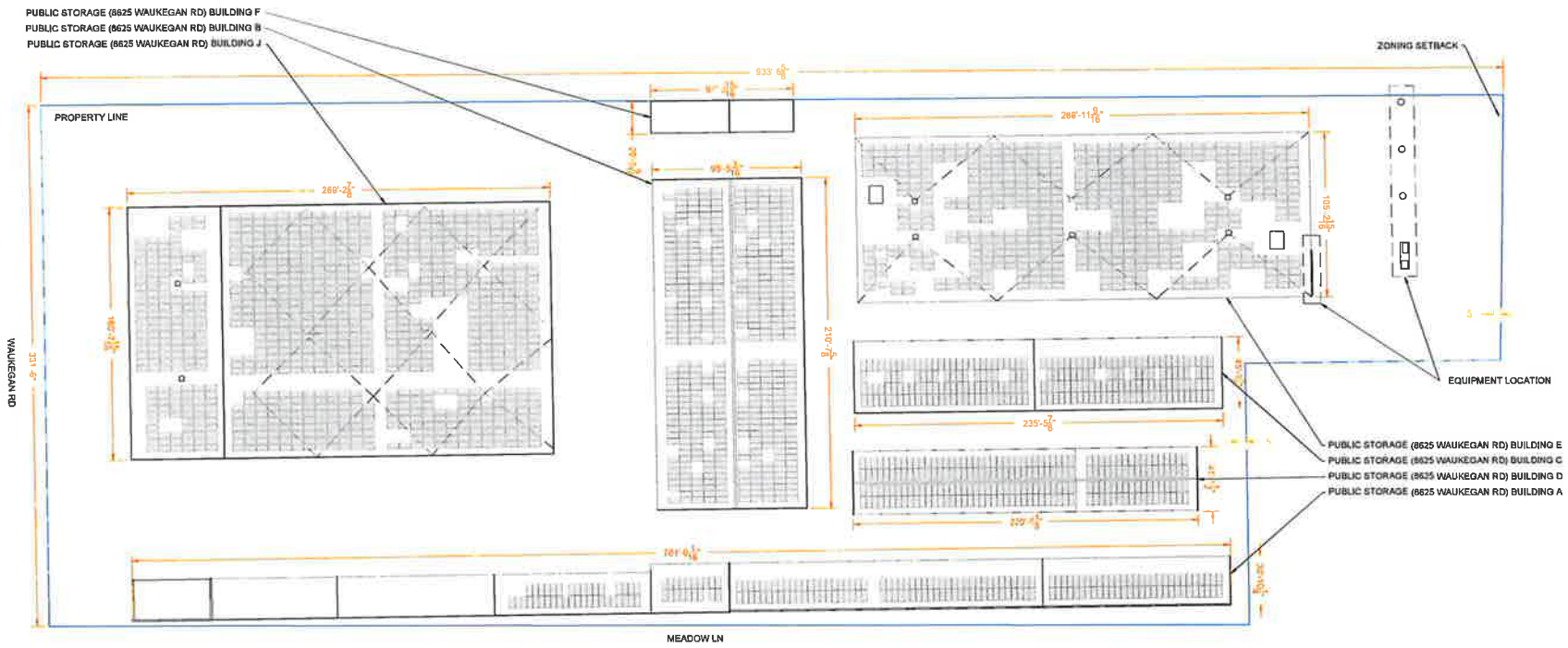
8. ROOF AND MODULE LAYOUTS ARE BASED ON INFORMATION COLLECTED DURING THE SITE SURVEY. ROOF ALTERATIONS MADE AFTER THE SURVEY DATE WILL NOT BE REFLECTED IN THIS DRAWING.
9. TREES DO NOT SHADE ANY ROOF UNLESS TREE HEIGHT IS SPECIFIED.
10. ALL DIMENSIONS REPRESENT THREE-DIMENSIONAL PATH PROJECTIONS OF WHICH THE ROOF'S PITCH CAN INFLUENCE THE ACCURACY OF THE MEASUREMENTS.



IDEACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1":

SCALE
1:400

SHEET TITLE

G10

OVERALL SITE PLAN

NOTES:

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LEGEND

○	DRAIN	—	ACCESS
○	VENT	—	ELECTRICAL
	GAS		ROOF SEAM
□	RTU	○	SATELLITE
□	BOX	□	SKYLIGHT
	SHADOW	—	SUPPORT
	TREE	▨	UNSURVEYED
	RIDGE	▨	FIRE ACCESS PATH
■	STRUCTURAL KEEPOUT		

PROJECT DETAILS

SYSTEM SIZE	1487.70 KW DC
NUMBER OF MODULES	2565
MODULE MODEL	JINKO SOLAR JKM580N-72HL4-BDV (580W)
MODULE SIZE	89.69" X 44.65"
SITE SURVEY DATE	06-SEP-24

ROOF DETAILS

ROOF #	PITCH	ARRAY AZIMUTH	MODULE TILT	MODULE COUNT	MATERIAL	HEIGHT ABOVE GRADE
A1	3.1°	-	-	-	METAL	10'-3"
A2	3.1°	-	-	-	METAL	10'-3"
A3	3.1°	359°	-	38	METAL	10'-3"
A4	2.6°	359°	-	19	METAL	10'-3"
A5	2.3°	359°	-	86	METAL	10'-6"
A6	2.3°	359°	-	58	METAL	10'-3"
B1	2.2°	269°	-	225	METAL	9'-4"
B2	2.5°	89°	-	233	METAL	8'-4"
C1	1.7°	359°	-	103	METAL	10'-2"
C2	1.7°	359°	-	110	METAL	10'-2"
D1	2.3°	359°	-	72	METAL	10'-6"
D2	2.3°	359°	-	34	METAL	10'-6"
D3	2.3°	179°	-	72	METAL	10'-6"
D4	2.3°	179°	-	34	METAL	10'-6"
E1	1.7°	179°	5°	44	EPDM	34'-6"
E2	2.1°	179°	5°	27	EPDM	34'-6"
E3	1.6°	179°	5°	20	EPDM	34'-6"
E4	1.8°	179°	5°	52	EPDM	34'-6"
E5	2.1°	179°	5°	42	EPDM	34'-6"
E6	1.6°	179°	5°	81	EPDM	34'-6"
E7	3.8°	179°	5°	32	EPDM	34'-6"
E8	1.5°	179°	5°	98	EPDM	34'-6"
E9	1.7°	179°	5°	42	EPDM	34'-6"
E10	1.5°	179°	5°	43	EPDM	34'-6"
E11	2°	179°	5°	31	EPDM	34'-6"
E12	1.5°	179°	5°	45	EPDM	34'-6"
F1	2.3°	179°	-	-	METAL	10'-2"
F2	2.2°	179°	-	-	METAL	10'-2"
J1	FLAT	179°	5°	173	TPO/PVC	18'-6"
J2	FLAT	179°	5°	741	MOD. BIT.	22'-11"
G	2.8°	-	-	-	METAL	10'-3"

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1"

SCALE
1:400

SHEET TITLE
G20
ARRAY PLAN

NOTES:

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LEGEND

○	DRAIN	—	ACCESS
○	VENT	—	ELECTRICAL
	GAS		ROOF SEAM
□	RTU	○	SATELLITE
□	BOX	□	SKYLIGHT
▽	SHADOW	—	SUPPORT
●	TREE	▨	UNSURVEYED
	RIDGE	▨	FIRE ACCESS PATH
■	STRUCTURAL KEEPOUT		

PROJECT DETAILS

SYSTEM SIZE	1487.70 KW DC
NUMBER OF MODULES	2565
MODULE MODEL	JINKO SOLAR JKM580N-72HL4-BDV (580W)
MODULE SIZE	89.69" X 44.65"
SITE SURVEY DATE	06-SEP-24

ROOF DETAILS

ROOF #	PITCH	ARRAY AZIMUTH	MODULE TILT	MODULE COUNT	MATERIAL	HEIGHT ABOVE GRADE
A1	3.1°	-	-	-	METAL	10'-3"
A2	3.1°	-	-	-	METAL	10'-3"
A3	3.1°	359°	-	38	METAL	10'-3"
A4	2.6°	359°	-	19	METAL	10'-3"
A5	2.3°	359°	-	86	METAL	10'-6"
A6	2.3°	359°	-	58	METAL	10'-3"
B1	2.2°	269°	-	225	METAL	9'-4"
B2	2.5°	89°	-	233	METAL	9'-4"
C1	1.7°	359°	-	103	METAL	10'-2"
C2	1.7°	359°	-	110	METAL	10'-2"
D1	2.3°	359°	-	72	METAL	10'-6"
D2	2.3°	359°	-	34	METAL	10'-6"
D3	2.3°	179°	-	72	METAL	10'-6"
D4	2.3°	179°	-	34	METAL	10'-6"
E1	1.7°	179°	5°	44	EPDM	34'-6"
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E10	1.5°	179°	5°	43	EPDM	34'-6"
E11	2°	179°	5°	31	EPDM	34'-6"
E12	1.5°	179°	5°	45	EPDM	34'-6"
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J1	FLAT	179°	5°	173	TPO/PVC	18'-6"
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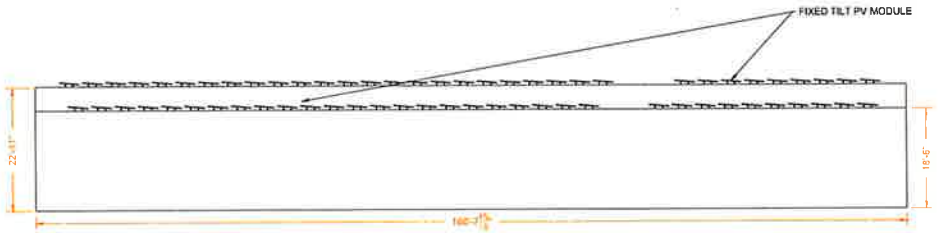
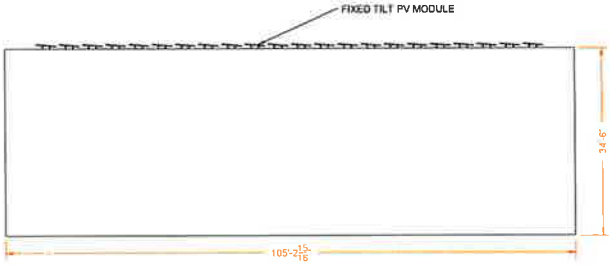
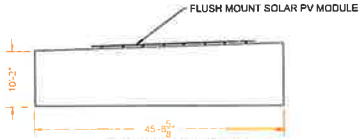


G21 / 1 ROOF J1 & J2 (BUILDING J)
Scale 1:125

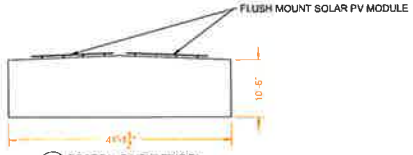
G21 / 2 ROOF B1, & B2 (BUILDING B)
Scale 1.125



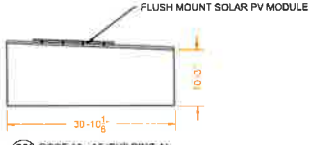
G21 / 3 ROOF E1 - E12 (BUILDING E)
Scale 1.125



G21 / 4 ROOF C1 & C2 (BUILDING C)
Scale 1:125



G21 / 5 ROOF D1 - D4 (BUILDING D)
Scale 1:125



G21 / 6 ROOF A3 - A6 (BUILDING A)
Scale 1.125

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1".

SCALE
1:125

SHEET TITLE

G21
BUILDING ELEVATIONS

NOTES:
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LEGEND

○	DRAIN	—	ACCESS
○	VENT	—	ELECTRICAL
	GAS		ROOF SEAM
□	RTU	○	SATELLITE
□	BOX	□	SKYLIGHT
▽	SHADOW	—	SUPPORT
🌳	TREE	▨	UNSURVEYED
	RIDGE	▨	FIRE ACCESS PATH
■	STRUCTURAL KEEPOUT		

PROJECT DETAILS

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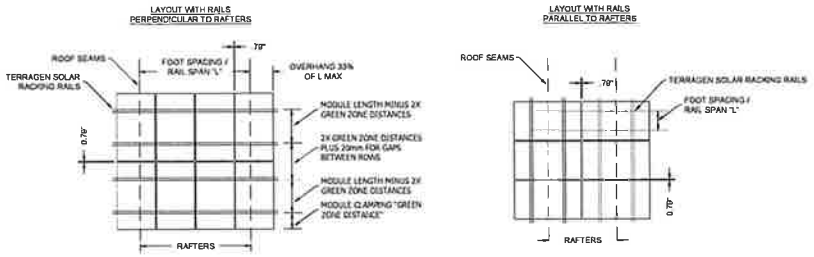
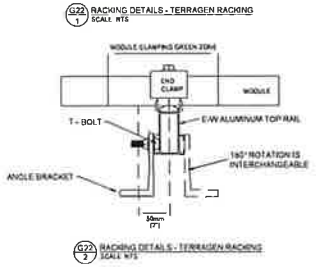
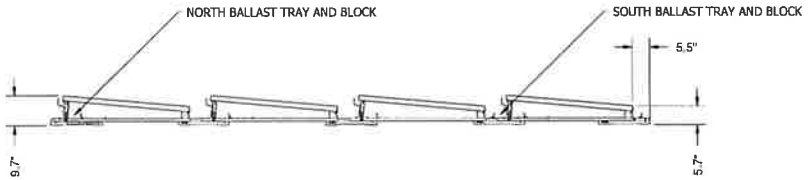
E1	1.7°	178°	5°	44	EPDM	34'-6"
E2	2.1°	179°	5°	27	EPDM	34'-6"
E3	1.6°	179°	5°	20	EPDM	34'-6"
E4	1.6°	179°	5°	52	EPDM	34'-6"
E5	2.1°	179°	5°	42	EPDM	34'-6"
E6	1.6°	179°	5°	81	EPDM	34'-6"
E7	3.8°	178°	5°	32	EPDM	34'-6"
E8	1.5°	179°	5°	98	EPDM	34'-6"
E9	1.7°	179°	5°	42	EPDM	34'-6"
E10	1.5°	179°	5°	43	EPDM	34'-6"
E11	2°	179°	5°	31	EPDM	34'-6"
E12	1.5°	179°	5°	45	EPDM	34'-6"
F1	2.3°	179°	-	-	METAL	10'-2"
F2	2.2°	179°	-	-	METAL	10'-2"
J1	FLAT	179°	5°	173	TPO/PVC	16'-6"
J2	FLAT	179°	5°	741	MOD. BIT.	22'-11"
G	2.6°	-	-	-	METAL	10'-3"

NOTES:
1. MODULES SHOULD BE POSITIONED SO THAT RAILS ARE FLUSH WITH EDGE OF MODULE OR EXTENDING NO MORE THAN 1/2" BEYOND EDGE OF MODULE. THE MODULES SHOULD NOT EXTEND PAST (OVERHANG) THE ENDS OF RAILS.
2. MODULE GAP IS .79" (E-W) AND 1" FOR ROW SPACING (N-S).
3. THERE IS 4.75" MODULE TO MODULE GAP FOR EVERY 12 MODULES MAXIMUM FOR THERMAL EXPANSION.







G22 3 RACKING DETAILS: PANELCLAW CLAWFRPLUS 5D
Scale: NTS

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY: IE
CHECKED BY: WD
DATE: 18-Oct-2024
DRAWING LEVEL: ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE: 36X24 SHOULD MEASURE 1":
SCALE: NTS
SHEET TITLE: G22 RACKING DETAILS

NOTES:

1. ALL DIMENSIONS TO BE FIELD VERIFIED. LOCATIONS SHOWN ARE APPROXIMATE.
2. ALL PV ELECTRICAL EQUIPMENT TO BE INSTALLED AS PER INSTALLATION MANUALS AND NEC REQUIREMENTS.
3. CARE SHALL BE TAKEN TO ENSURE CONDUITS AND RACEWAYS ARE ORIENTED TO MINIMIZE INTERFERENCE WITH FIRE ACCESS WALKWAYS.
4. EXACT LOCATION AND SPACING OF PHOTOVOLTAIC MODULES TO BE ESTABLISHED ACCORDING TO THE FINAL CONFIGURATION DETERMINED BY INSTALLER AND RACKING MANUFACTURER.
5. PROPERTY LINE DETERMINED FROM PUBLICLY AVAILABLE GIS DATA.
6. THIS DRAWING PROVIDES AN OVERVIEW ONLY AND AS SUCH SHOULD NOT BE RELIED ON FOR EXACT DIMENSIONS.
7. MODULE LAYOUT IS SUBJECT TO CHANGE BASED ON AVAILABLE STRUCTURAL CAPACITY AND POWER GRID AVAILABILITY.
8. ROOF AND MODULE LAYOUTS ARE BASED ON INFORMATION COLLECTED DURING THE SITE SURVEY. ROOF ALTERATIONS MADE AFTER THE SURVEY DATE WILL NOT BE REFLECTED IN THIS DRAWING.
9. TREES DO NOT SHADE ANY ROOF UNLESS TREE HEIGHT IS SPECIFIED.
10. ALL DIMENSIONS REPRESENT THREE-DIMENSIONAL PATH PROJECTIONS OF WHICH THE ROOF'S PITCH CAN INFLUENCE THE ACCURACY OF THE MEASUREMENTS.

LEGEND

◯	DRAIN	—	ACCESS
◯	VENT	—	ELECTRICAL
	GAS		ROOF SEAM
□	RTU	◯	SATELLITE
□	BOX	□	SKYLIGHT
	SHADOW	—	SUPPORT
	TREE		UNSURVEYED
	RIDGE		FIRE ACCESS PATH
	STRUCTURAL KEEPOUT		

PROJECT DETAILS

SYSTEM SIZE	1487.70 KW DC
NUMBER OF MODULES	2565
MODULE MODEL	JINKO SOLAR JKM580N-72HL4-BDV (580W)
MODULE SIZE	89.68" X 44.65"
SITE SURVEY DATE	06-SEP-24

ROOF DETAILS

ROOF #	PITCH	ARRAY AZIMUTH	MODULE TILT	MODULE COUNT	MATERIAL	HEIGHT ABOVE GRADE
A1	3.1"	-	-	-	METAL	10'-3"
A2	3.1"	-	-	-	METAL	10'-3"
A3	3.1"	359°	-	38	METAL	10'-3"
A4	2.6"	359°	-	19	METAL	10'-3"
A5	2.3"	359°	-	86	METAL	10'-8"
A6	2.3"	359°	-	58	METAL	10'-3"
B1	2.2"	269°	-	225	METAL	9'-4"
B2	2.5"	89°	-	233	METAL	9'-4"
C1	1.7"	359°	-	103	METAL	10'-2"
C2	1.7"	359°	-	110	METAL	10'-2"
D1	2.3"	359°	-	72	METAL	10'-6"
D2	2.3"	359°	-	34	METAL	10'-6"
D3	2.3"	179°	-	72	METAL	10'-6"
D4	2.3"	179°	-	34	METAL	10'-6"
E1	1.7"	179°	5°	44	EPDM	34'-6"
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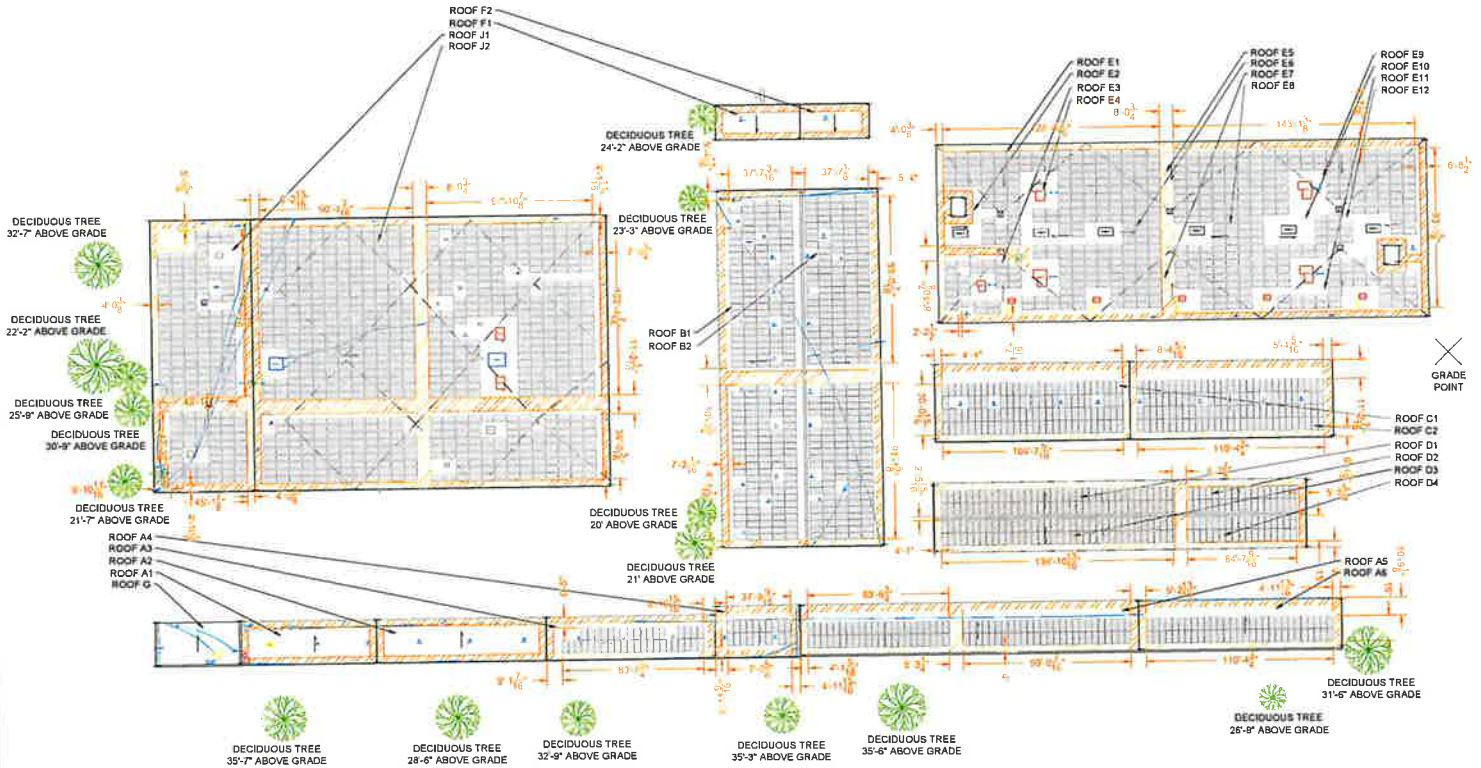
J2	FLAT	179°	5°	741	MOD. BIT.	22'-11"
G	2.8"	-	-	-	METAL	10'-3"



EXACTIVE ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY: IE

CHECKED BY: WD

DATE: 18-Oct-2024

DRAWING LEVEL: ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE: 36X24 SHOULD MEASURE 1":

SCALE: 1:400

SHEET TITLE

G23

ARRAY DIMENSIONS

NOTES:

1. ALL DIMENSIONS TO BE FIELD VERIFIED. LOCATIONS SHOWN ARE APPROXIMATE.
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3. CARE SHALL BE TAKEN TO ENSURE CONDUITS AND RACEWAYS ARE ORIENTED TO MINIMIZE INTERFERENCE WITH FIRE ACCESS WALKWAYS.
4. EXACT LOCATION AND SPACING OF PHOTOVOLTAIC MODULES TO BE ESTABLISHED ACCORDING TO THE FINAL CONFIGURATION DETERMINED BY INSTALLER AND RACKING MANUFACTURER
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LEGEND

	DRAIN		ACCESS
	VENT		ELECTRICAL
	GAS		ROOF SEAM
	RTU		SATELLITE
	BOX		SKYLIGHT
	SHADOW		SUPPORT
	TREE		UNSURVEYED
	RIDGE		FIRE ACCESS PATH
	STRUCTURAL KEEPOUT		

PROJECT DETAILS

SYSTEM SIZE	1487.70 KW DC
NUMBER OF MODULES	2585
MODULE MODEL	JINKO SOLAR JKM580N-72HL4-BDV (580W)
MODULE SIZE	89.69" X 44.65"
SITE SURVEY DATE	05-SEP-24

ROOF DETAILS

ROOF #	PITCH	ARRAY AZIMUTH	MODULE TILT	MODULE COUNT	MATERIAL	HEIGHT ABOVE GRADE
A1	3.1°	-	-	-	METAL	10'-3"
A2	3.1°	-	-	-	METAL	10'-3"
A3	3.1°	359°	-	38	METAL	10'-3"
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E3	1.6°	179°	5°	20	EPDM	34'-6"
E4	1.6°	179°	5°	52	EPDM	34'-6"
E5	2.1°	179°	5°	42	EPDM	34'-6"
E6	1.6°	179°	5°	61	EPDM	34'-6"
E7	3.8°	179°	5°	32	EPDM	34'-6"
E8	1.5°	179°	5°	88	EPDM	34'-6"
E9	1.7°	179°	5°	42	EPDM	34'-6"
E10	1.5°	179°	5°	43	EPDM	34'-6"
E11	2°	179°	5°	31	EPDM	34'-6"
E12	1.5°	179°	5°	45	EPDM	34'-6"
F1	2.3°	179°	-	-	METAL	10'-2"
F2	2.2°	179°	-	-	METAL	10'-2"
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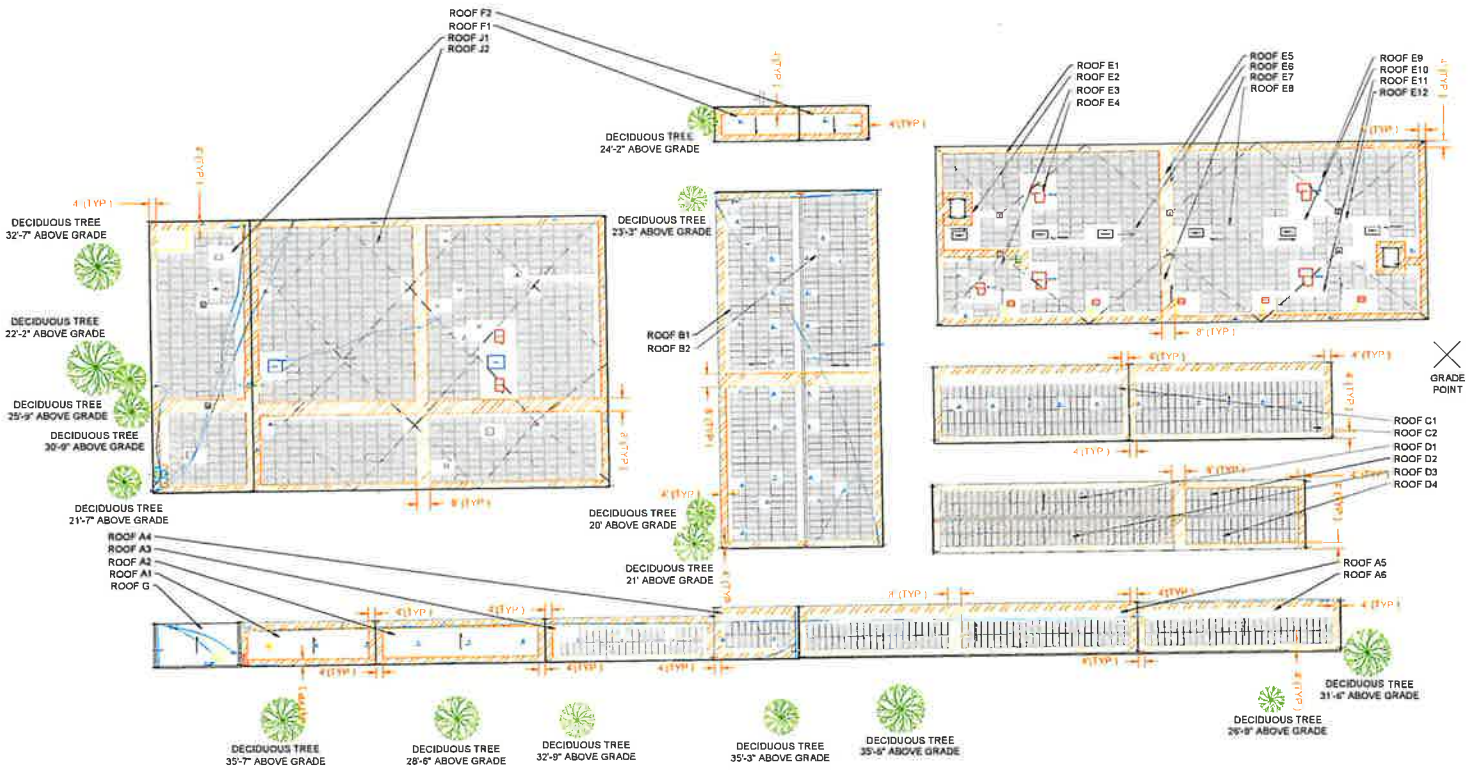
J2	FLAT	179°	5°	741	MOD. BIT.	22'-11"
G	2.8°	-	-	-	METAL	10'-3"



ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY: IE

CHECKED BY: WD

DATE: 18-Oct-2024

DRAWING LEVEL: ISSUED FOR PERMIT

REV	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE: 36X24 SHOULD MEASURE 1":

SCALE: 1:400

SHEET TITLE

G30

FIRE ACCESS PLAN

ELECTRICAL NOTES SPECIFIC TO PHOTOVOLTAIC SYSTEMS

1. UNLESS SPECIFIED OTHERWISE THIS SOLAR PV SYSTEM IS CONNECTED TO OPERATE IN PARALLEL WITH UTILITY ELECTRICAL SERVICE.
2. ALL EQUIPMENT (INCLUDING PV INVERTERS, COMBINERS, PULL BOXES, ENCLOSURES) SHALL BE LISTED BY A NATIONAL RECOGNIZED TESTING LABORATORY (NRTL) FOR ITS PURPOSE.
3. INVERTERS TO BE INSTALLED AT 90° (VERTICAL) UNLESS OTHERWISE NOTED.
4. CONDUITS AND CABLES SHALL NOT ENTER THE TOP OF ANY OUTDOOR ENCLOSURE UNLESS OTHERWISE NOTED OR REVIEWED AND APPROVED BY PROJECT ENGINEER.
5. ALL CIRCUIT BREAKERS INSTALLED THAT ARE SUBJECT TO REVERSE POWER FLOW SHALL BE LISTED AND LABELED AS BACKFEED COMPATIBLE.

WIRING AND WIRING METHODS

CONDUITS AND RACEWAYS

1. HAND HOLE, PULL BOXES, OR CONDUIT BODIES SHALL BE INSTALLED WHEN RACEWAY HAS MORE THAN 360° OF WIRE BENDS.
2. RMC TO BE USED WHEN CONDUIT IS EXPOSED TO DAMAGE OR BETWEEN POINT OF INTERCONNECTION AND FIRST OVERCURRENT PROTECTION DEVICE (EXCLUDING CABLE LIMITERS) WHEN MAKING SUPPLY-SIDE CONNECTIONS TO EXISTING EQUIPMENT.
3. EXPANSION FITTING (WITH BONDING JUMPERS) TO BE INSTALLED FOR EVERY 100' OF STRAIGHT METAL CONDUIT RUN AND WHERE CONDUIT RUN PASSES OVER EXISTING EXPANSION JOINT.
4. EMT ACCEPTABLE AS RACEWAY WHERE NOT EXPOSED TO PHYSICAL DAMAGE. OTHERWISE IMC OR RMC SHALL BE USED.
5. USE MYERS (OR APPROVED EQUIVALENT) HUB LISTED TO PROVIDE MOISTURE PROTECTION FOR CONDUIT ENTRANCES IN ALL APPLICABLE LOCATIONS.
6. LIQUID TIGHT FLEXIBLE METAL CONDUIT IS GENERALLY SUITABLE FOR INSTALLATION IN WET AND DRY LOCATIONS. SHOULD IT BE EMPLOYED, SUPPORTS WILL BE NO MORE 12 INCHES FROM BOXES (JUNCTION BOX, CABINETS, OR CONDUIT FITTING) AND NO MORE THAN 36 INCHES APART.
7. FURNISH AND INSTALL ALL FITTINGS AND SPECIAL DEVICES NECESSARY FOR THE PROPER INSTALLATION, CONNECTION AND OPERATION OF THE SYSTEM. CONDUIT ELBOWS SHALL BE OF THE SAME MAKE, QUALITY AND FINISH AS THE CONDUIT USED.
8. SUPPORT AND SECURELY FASTEN CONDUIT AS PER NEC CHAPTER 3 REQUIREMENTS FOR THE SPECIFIC CONDUIT TYPE.
9. OUTDOOR CONDUITS WITH A NEGATIVE SLOPE TOWARDS ELECTRICAL EQUIPMENT SHALL HAVE A PULL BOX OR VAULT ADJACENT TO THE ENTRY POINT INTO THE ELECTRICAL EQUIPMENT. EQUIP PULL BOXES WITH METHOD FOR DRAINING CONDENSATION AND/OR WATER ENTRY.
10. CONDUIT SHALL BE TYPE LFMC FOR A MINIMUM OF 24" WHERE CONDUIT CONNECTIONS ARE MADE TO DRY-TYPE TRANSFORMERS.
11. PV SOURCE CIRCUITS AND PV OUTPUT CIRCUITS USING SINGLE-CONDUCTOR CABLE LISTED AND IDENTIFIED AS PHOTOVOLTAIC (PV) WIRE OF ALL SIZES, WITH OR WITHOUT A CABLE TRAY MARKING/RATING, SHALL BE PERMITTED IN CABLE TRAYS INSTALLED IN OUTDOOR LOCATIONS, PROVIDED THAT THE CABLES ARE SUPPORTED AT INTERVALS NOT TO EXCEED 12" AND SECURED AT INTERVALS NOT TO EXCEED 54".
12. WHEREVER THE CONDUIT ENTERS OR LEAVES THE BUILDING ENVELOPE THE RACEWAY OR SLEEVE SHALL BE FILLED WITH AN APPROVED MATERIAL TO PREVENT THE CIRCULATION OF WARM AIR TO A COLDER SECTION OF THE RACEWAY OR SLEEVE, PER NEC 300.7(A).

CONDUCTORS AND CONDUCTOR INSTALLATION

12. SEE TABLE 1 FOR LOW VOLTAGE CONDUCTOR COLOR CODING.
13. EXPOSED PV SOLAR MODULE WIRING WILL BE PV WIRE, 90°C, WET RATED AND UV RESISTANT - NO EXCEPTIONS. STRING WIRING AND HOMERUNS SHALL BE SECURED TO UNDERSIDE OF RACKING AND MODULES USING ZIP TIES OUTDOOR RATED FOR UV OR INDUSTRY APPROVED ALTERNATIVE.
14. THE MATING CONNECTORS SHALL BE OF THE LATCHING OR LOCKING TYPE. WHERE MATING CONNECTORS ARE NOT OF THE IDENTICAL TYPE AND BRAND, THEY SHALL BE LISTED AND IDENTIFIED FOR INTERMATABILITY, AS DESCRIBED IN THE MANUFACTURER'S INSTRUCTIONS.
15. PV STRING HOME RUNS SHALL BE LABELED ON BOTH ENDS, AT ARRAY AND INVERTERS. INVERTER OUTPUT CONDUCTORS SHALL BE LABELED AT BOTH ENDS, AT INVERTER AND PANELBOARD. LABELS SHALL MATCH DESIGNATIONS IN THESE DRAWINGS.
16. THE PHOTOVOLTAIC SOURCE CIRCUITS AND PHOTOVOLTAIC OUTPUT CIRCUITS OF THIS PROPOSED SOLAR SYSTEM SHALL NOT BE CONTAINED IN THE SAME RACEWAY, CABLE TRAY, CABLE, OUTLET BOX, JUNCTION BOX, OR SIMILAR FITTING AS FEEDERS OR BRANCH CIRCUITS OF OTHER SYSTEMS UNLESS THE CONDUCTORS OF THE DIFFERENT SYSTEMS ARE SEPARATED BY A PARTITION OR ARE CONNECTED TOGETHER.
17. WHEN PERFORMING TERMINATIONS WITH ALUMINUM WIRE, STRIP INSULATION TO EXPOSE APPROPRIATE LENGTH OF CONDUCTOR, APPLY CORROSION INHIBITING COMPOUND AND WORK INTO CONDUCTOR WITH EMERY CLOTH OR WIRE BRUSH, APPLY COMPOUND TO TERMINATION (IF NOT PROVIDED BY MANUFACTURER), MAKE TERMINATION AND CLEAN EXCESS COMPOUND FROM INSULATION AND TERMINATION. MANUFACTURER'S SPECIFICAITONS FOR CABLE AND TERMINATIONS (MECHANICAL OR COMPRESSION-TYPE) SHALL BE FOLLOWED FOR ALL TERMINATIONS.
18. ALL TERMINATIONS, WHETHER MECHANICAL, COMPRESSION OR PART OF ASSEMBLIES SUCH AS CIRCUIT BREAKERS SHALL BE RATED FOR THE SIZE AND TYPE (CU/AL) OF CONDCUTOR TO BE TERMINATED. COORDINATE NUMBER AND TYPE OF TERMINATIONS BETWEEN CONDUCTOR SIZE(S) ON PLANS AND EQUIPMENT.
19. CONNECTION SHALL BE TORQUED PER DEVICE LISTING, OR MANUFACTURES RECOMMENDATIONS. CONNECTORS ARE TO BE MARKED WITH PERMANENT MARKING PAINT, AFTER TORQUING.
20. SUPPORT CONDUCTORS IN VERTICAL CONDUITS IN ACCORDANCE WITH THE REQUIREMENTS OF NEC.
21. ALL BARE CU WIRES SHALL BE INSTALLED AWAY FROM CONTACT WITH DISSIMILAR METALS.
22. ALL LOW VOLTAGE AC WIRING SHALL BE TYPE THWN-2 RATED AT 90°C UNLESS OTHERWISE NOTED. XHHW-2 IS ALSO ACCEPTABLE.
23. PV WIRE SHALL BE SUPPORTED AND SECURED BY CABLE TIES LISTED AND IDENTIFIED FOR SECUREMENT AND SUPPORT (OR SIMILAR FITTINGS DESIGNED AND INSTALLED SO AS NOT TO DAMAGE THE CABLE) AT INTERVALS NOT EXCEEDING 24" AND WITHIN 12" OF EVERY CABLE ENTRY INTO ENCLOSURES SUCH AS JUNCTION BOXES.
24. CONTRACTOR SHALL AVOID LOCATING ROOF-MOUNTED CONDUITS IN IDENTIFIED FIRE PATHS/FIRE CLEARANCE AREAS. IF CONDUIT IS TO BE RUN IN THESE AREA, IT SHALL BE FOR AS SHORT A DISTANCE AS POSSIBLE.

GROUNDING

1. THE CONTRACTOR SHALL FURNISH AND INSTALL GROUNDING NECESSARY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
2. PHOTOVOLTAIC INVERTERS SHALL BE EQUIPPED WITH INTEGRATED GROUND FAULT AND ARC FAULT PROTECTION TO REDUCE FIRE HAZARDS.
3. ONLY ONE CONNECTION TO DC CIRCUITS AND ONE CONNECTION TO AC CIRCUITS WILL BE USED FOR SYSTEM GROUNDING.
4. EQUIPMENT GROUNDING CONDUCTORS AND SYSTEM GROUNDING CONDUCTORS WILL HAVE AS SHORT A DISTANCE TO GROUND AS POSSIBLE AND A MINIMUM NUMBER OF TURNS.
5. NON-CURRENT CARRYING METAL PARTS SHALL BE CHECKED FOR PROPER GROUNDING; NOTING THAT TERMINAL LUGS BOLTED ON AN ENCLOSURE'S FINISHED SURFACE MAY BE INSULATED BY PAINT/FINISH. PAINT AT POINT OF CONTACT SHALL BE PROPERLY REMOVED TO ENSURE GROUND CONNECTION.
6. RACKING COMPONENTS AND STRUCTURAL SUPPORTS MUST BE ELECTRICALLY BONDED TOGETHER BY AN ACCEPTABLE MEANS. PROPOSED RACKING SHALL BE UL2703 LISTED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
7. MODULES SHALL BE GROUNDED WITH EQUIPMENT GROUNDING CONDUCTORS BONDED TO A LOCATION APPROVED BY THE MANUFACTURER WITH A MEANS OF BONDING LISTED FOR THIS PURPOSE.
8. GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, INCLUDING BUT NOT LIMITED TO GROUND RODS, GROUNDING LUGS, GROUNDING CLAMPS, ETC.
9. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL BE COPPER, UNLESS OTHERWISE NOTED.

GENERAL EQUIPMENT/ENCLOSURES

1. PROVIDE DANGER WARNING, AND CAUTION LABELS AS REQUIRED BY NESC, NEC OR OSHA STANDARDS ON EQUIPMENT ENCLOSURES, DOORS, ACCESS PLATES AND BARRIERS.
2. ALL OUTDOOR ENCLOSURES SHALL BE NEMA 3R, 4 OR 4X.
3. ALL OUTDOOR ENCLOSURES REQUIRE AN APPROVED MEANS OF DRAINAGE AND VENTILATION. ALL NEMA 3R SHALL BE EQUIPPED WITH A WEEP HOLE OR A LISTED DRAIN PLUG.
4. UTILIZE RAINTIGHT FITTINGS FOR ALL CABLE ENTRIES. CONDUITS WITH ONE OPEN END (I.E. PV WIRE FROM UNDER PV ARRAY TRANSITIONING TO CONDUIT) SHALL BE SEALED TO PREVENT WATER INGRESS.
5. WHERE DISCONNECTING MEANS OF EQUIPMENT OPERATING ABOVE 30V ARE READILY ACCESSIBLE TO UNQALIFIED PERSONS, ANY ENCLOSURE DOOR OR HINGED COVER THAT EXPOSES LIVE PARTS WHEN OPEN SHALL BE LOCKED OR REQUIRE A TOOL TO OPEN.
6. WHERE REQUIRED, EQUIPMENT SHALL BE ANCHORED TO CONCRETE PADS OR FOUNDATIONS PER MANUFACTURER'S INSTRUCTIONS USING GALVANIZED STEEL ANCHOR BOLTS EMBEDDED IN PAD OR WITH 6 INCH DEEP EPOXY ANCHOR BOLTS.
7. WHERE ELECTRICAL EQUIPMENT IS INSTALLED IN A LOCATION THAT IS LIKELY TO BE EXPOSED TO PHYSICAL DAMAGE, THE ELECTRICAL EQUIPMENT SHALL BE APPROPRIATELY PROTECTED (I.E. BOLLARDS).

TABLE 1

AC CONDUCTORS		
VOLTAGE	480Y/277V	208Y/120V
PHASE A	BROWN	BLACK
PHASE B	ORANGE	RED
PHASE C	YELLOW	BLUE
GROUNDED (NEUTRAL)	GREY	WHITE
EQUIP. GROUND (EGC)	GREEN	
GROUNDING ELECTRODE CONDUCTOR (GEC)	GREEN	
DC CONDUCTORS		
UNGROUNDED SOURCE CIRCUIT	(+) PERMANENTLY DYED RED. WHITE NOT PERMITTED.	(-) PERMANENTLY DYED BLACK. WHITE OR RED NOT PERMITTED.
EQUIPMENT GROUND (EGC)	GREEN OR BARE	

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
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SHEET SIZE
36X24 SHOULD MEASURE 1".

SCALE
NTS

SHEET TITLE

E01

ELECTRICAL NOTES

NOTES.

1. ALL DIMENSIONS TO BE FIELD VERIFIED. LOCATIONS SHOWN ARE APPROXIMATE.
2. ALL PV ELECTRICAL EQUIPMENT TO BE INSTALLED AS PER INSTALLATION MANUALS AND NEC REQUIREMENTS.
3. CARE SHALL BE TAKEN TO ENSURE CONDUITS AND RACEWAYS ARE ORIENTED TO MINIMIZE INTERFERENCE WITH FIRE ACCESS WALKWAYS.
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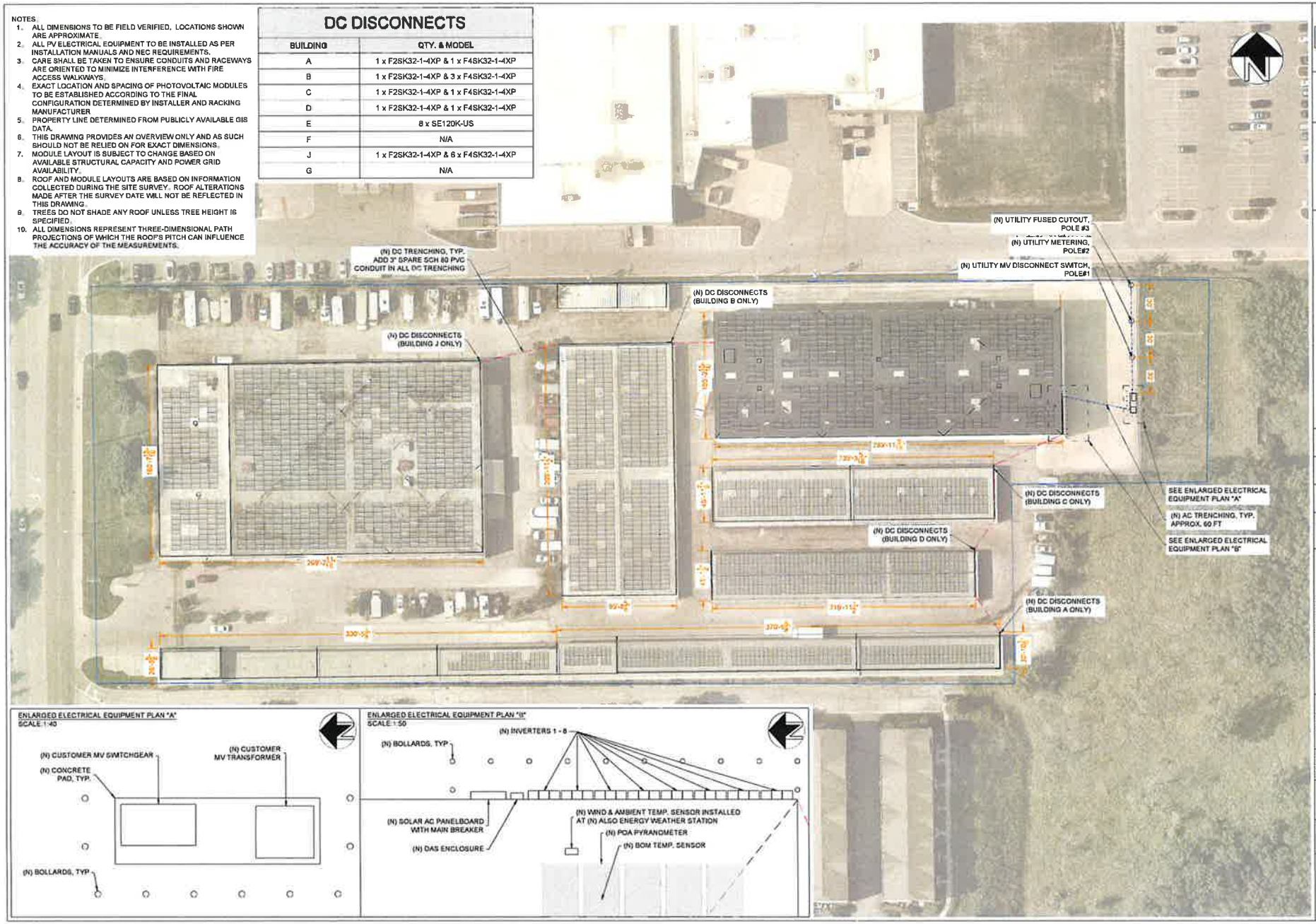
7. MODULE LAYOUT IS SUBJECT TO CHANGE BASED ON AVAILABLE STRUCTURAL CAPACITY AND POWER GRID AVAILABILITY.
8. ROOF AND MODULE LAYOUTS ARE BASED ON INFORMATION COLLECTED DURING THE SITE SURVEY. ROOF ALTERATIONS MADE AFTER THE SURVEY DATE WILL NOT BE REFLECTED IN THIS DRAWING.
9. TREES DO NOT SHADE ANY ROOF UNLESS TREE HEIGHT IS SPECIFIED.
10. ALL DIMENSIONS REPRESENT THREE-DIMENSIONAL PATH PROJECTIONS OF WHICH THE ROOF'S PITCH CAN INFLUENCE THE ACCURACY OF THE MEASUREMENTS.

DC DISCONNECTS

BUILDING	QTY. & MODEL
A	1 x F2SK32-1-4XP & 1 x F4SK32-1-4XP
B	1 x F2SK32-1-4XP & 3 x F4SK32-1-4XP
C	1 x F2SK32-1-4XP & 1 x F4SK32-1-4XP
D	1 x F2SK32-1-4XP & 1 x F4SK32-1-4XP
E	8 x SE120K-US
F	N/A
J	1 x F2SK32-1-4XP & 6 x F4SK32-1-4XP
G	N/A



ENLARGED ELECTRICAL EQUIPMENT PLAN "A"
SCALE: 1:40

ENLARGED ELECTRICAL EQUIPMENT PLAN "B"
SCALE: 1:50

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY: IE

CHECKED BY: WD

DATE: 18-Oct-2024

DRAWING LEVEL: ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE: 36X24 SHOULD MEASURE 1":

SCALE: 1:400

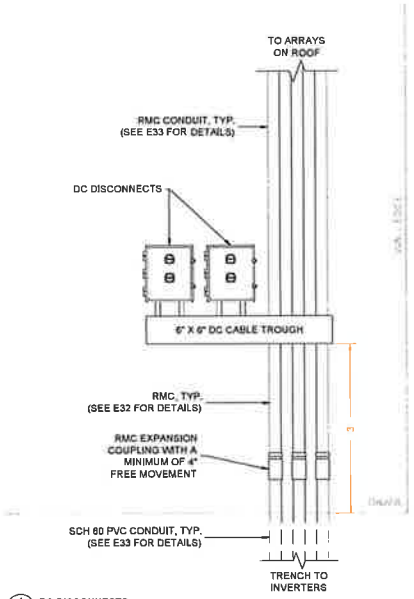
SHEET TITLE

E10

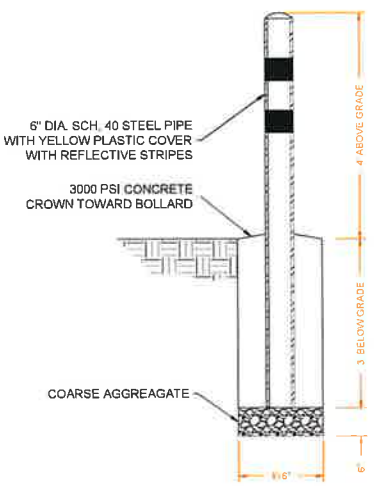
ELECTRICAL SITE PLAN

NOTES

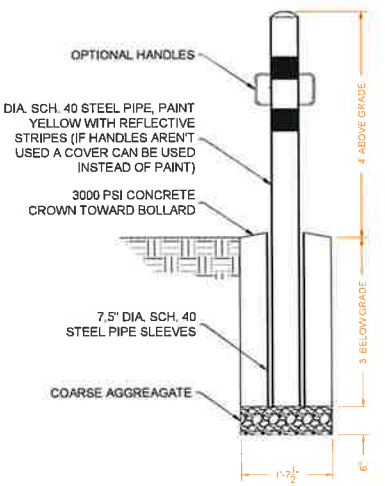
1. EQUIPMENT DIMENSIONS ARE APPROXIMATE. DIMENSIONS TO BE CONFIRMED PRIOR TO CONSTRUCTION.
2. THE CENTER OF THE OPERATING HANDLE OF THE AC DISCONNECT SWITCH, WHEN IN ITS HIGHEST POSITION, SHALL NOT BE MORE THAN 6'-7" ABOVE GRADE AS PER NEC 404.8(A).
3. BOLLARDS SHALL BE INSTALLED TO PROTECT EQUIPMENT FROM PHYSICAL DAMAGE. BOLLARDS SHALL NOT INTERFERE WITH WORKING SPACE REQUIREMENTS OUTLINED IN NEC 110.26(A)(1).
4. MAXIMUM NUMBER OF CURRENT-CARRYING CONDUCTORS IN A WIRE TROUGH AT ANY GIVEN CROSS-SECTION SHALL NOT EXCEED 30 AS PER NEC 376.22(B). OTHERWISE FILL FACTOR DERATES MUST BE APPLIED.
5. TROUGHS CAN BE SPLIT INTO MULTIPLE SECTIONS USING CONDUIT NIPPLES TO CONNECT THEM. CONDUIT NIPPLES SHALL NOT EXCEED A LENGTH OF 24".
6. TROUGHS CAN BE SPLIT INTO MULTIPLE SECTIONS USING CONDUIT NIPPLES TO CONNECT THEM. CONDUIT NIPPLES SHALL NOT EXCEED A LENGTH OF 24".
7. WHERE CONDUIT NIPPLES ARE INSTALLED BETWEEN TROUGHS AND ENCLOSURES, THE NIPPLES SHALL BE PERMITTED TO BE FILLED TO 60 PERCENT OF THEIR TOTAL CROSS-SECTIONAL AREA, AND 310.15(B)(3)(a) ADJUSTMENT FACTORS NEED NOT APPLY TO THIS CONDITION (NEC CHAPTER 9 NOTE 4).
8. EXPANSION COUPLINGS SHALL BE USED TO TRANSITION CONDUIT FROM UNDERGROUND TO ABOVEGROUND.
9. RUN 3" SPARE CONDUIT IN THE DC TRENCH.



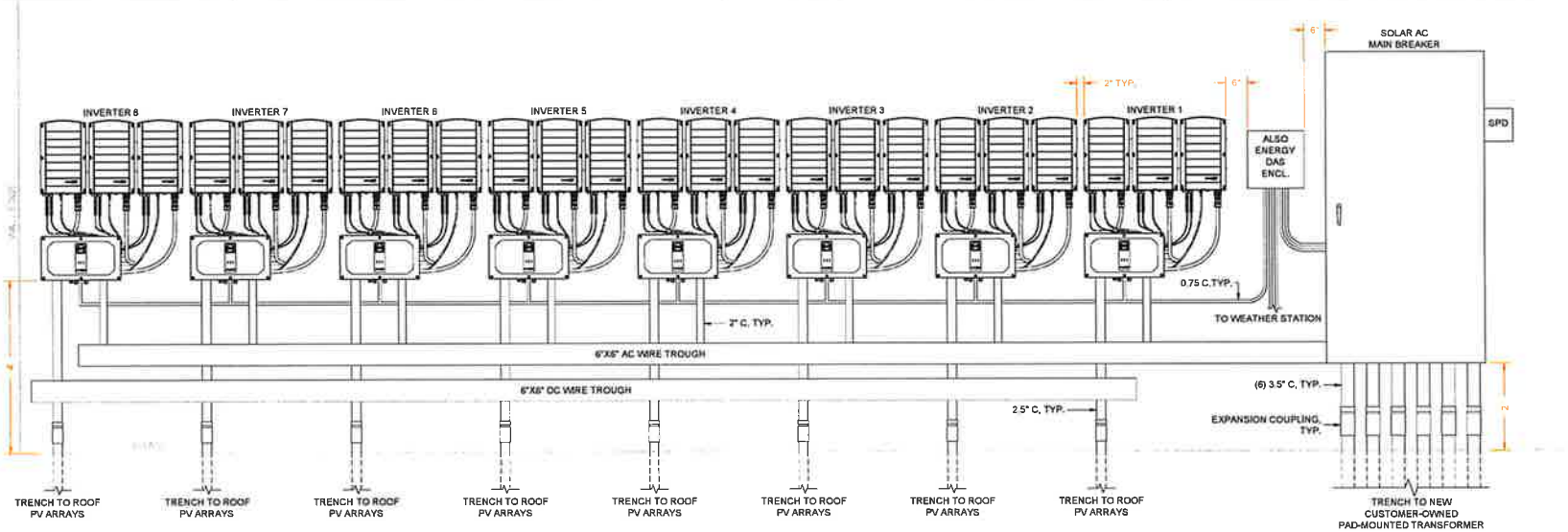
1 E11 DC DISCONNECTS
SCALE: 1:12



2 E11 BOLLARD DETAILS
SCALE: 1:12



3 E11 REMOVABLE BOLLARD DETAILS
SCALE: 1:12



4 E11 EQUIPMENT ELEVATION
SCALE: 1:15

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
16-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

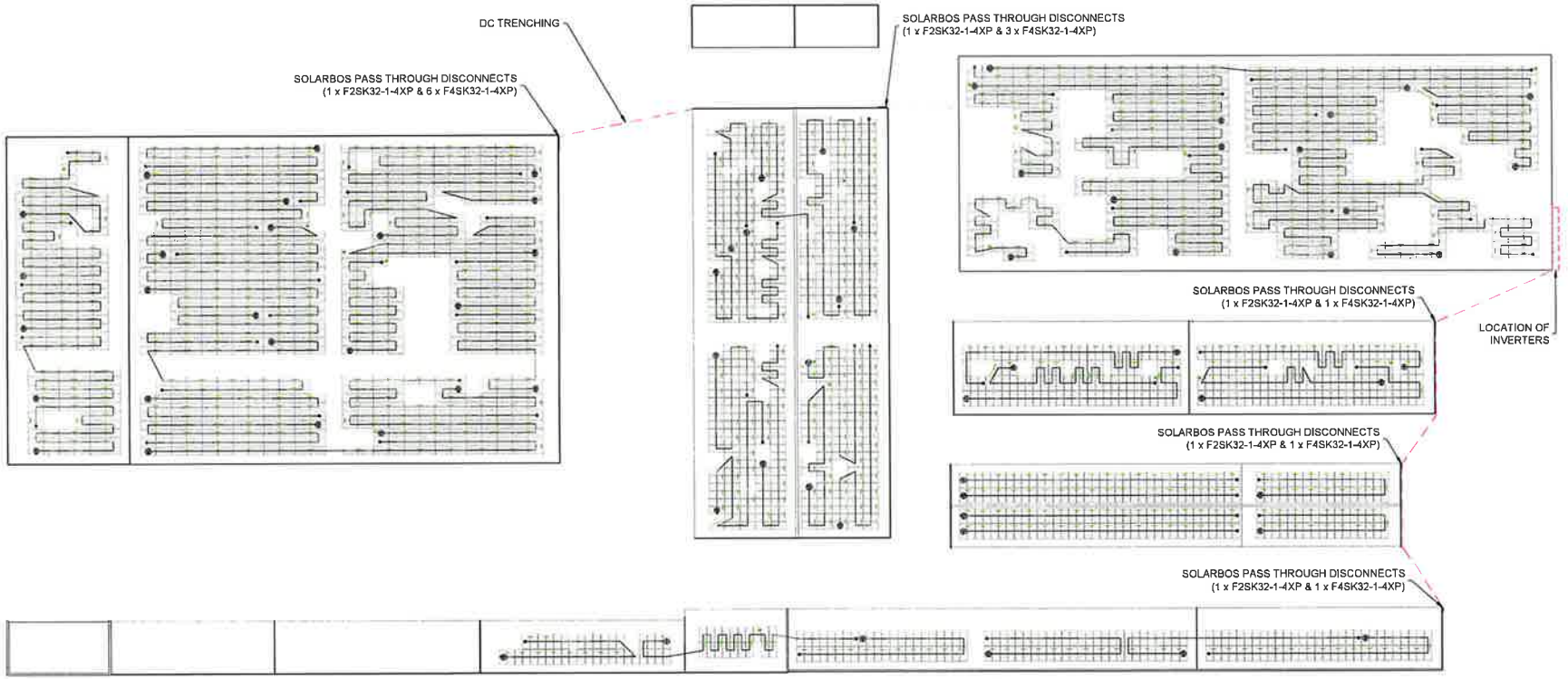
SHEET SIZE
36X24 SHOULD MEASURE 1"

SCALE
AS NOTED

SHEET TITLE

E11

EQUIPMENT PLAN / ELEVATION

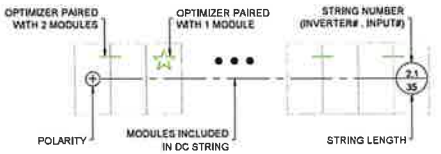


NEC 690.12 RAPID SHUTDOWN NOTE:
THIS SYSTEM INCLUDES MODULE-LEVEL POWER ELECTRONICS WHICH SHUT DOWN DC VOLTAGE AT THE MODULE LEVEL WHEN AC POWER GOES OUT. TIMING AND VOLTAGE LEVELS ARE IN COMPLIANCE WITH NEC 690.12 RAPID SHUTDOWN.

SOLAREDGE OPTIMIZER NOTES:

1. WHEN USING 2:1 OPTIMIZERS, FOR STRINGS WITH AN ODD NUMBER OF MODULES, ONE MODULE WILL BE CONNECTED TO A SINGLE OPTIMIZER. SEAL THE UNUSED OPTIMIZER INPUTS WITH SEALING CONNECTORS.
2. JUMPERS BETWEEN SUBARRAYS MUST BE BETWEEN OPTIMIZERS: CONNECTIONS FROM MODULE TO OPTIMIZER MUST BE WITHIN THE SAME SUBARRAY.

MC4 NOTE:
AFTER OPTIMIZERS ARE MOUNTED, MC4 CONNECTORS SHALL BE PLUGGED UNTIL THEY ARE CONNECTED TO MODULES



ERACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1":

SCALE
1:300

SHEET TITLE
E20
DC STRINGING PLAN

MAX STRING LENGTH CALCULATION:
OPTIMIZER MAKE: SOLAREDGE
OPTIMIZER MODEL: S1201

CALCULATION
MAX STRING POWER / MODULE POWER @ STC
23000 / 580 = 39.7 = 39 MODULES

REFER TO SOLAREDGE S1201 SPEC SHEET FOR RULES REGARDING MAXIMUM STRING POWER.

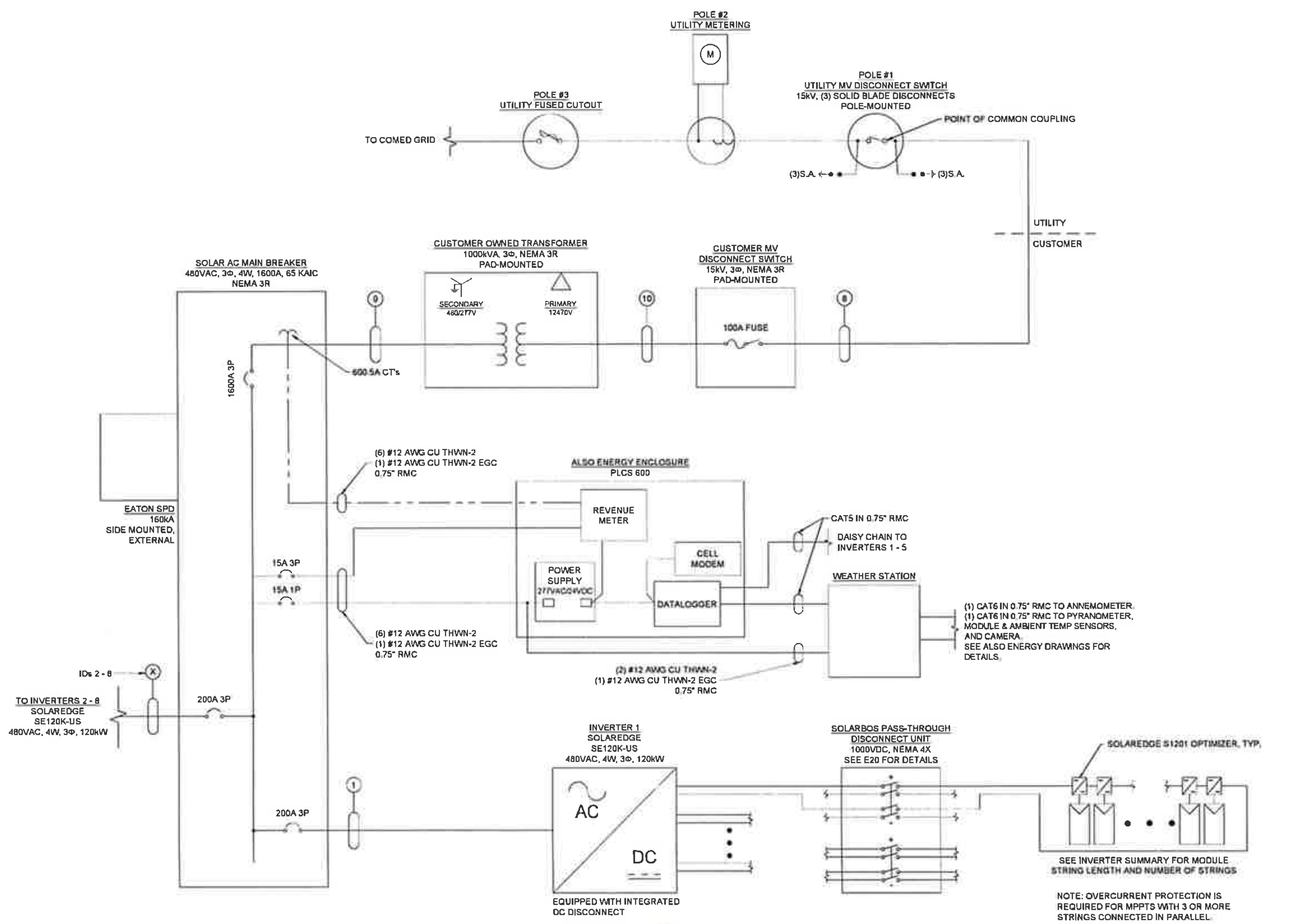
POINT OF INTERCONNECTION NOTES

1. PRIOR TO COMMENCEMENT OF INSTALLATION, THE ELECTRICAL CONTRACTOR SHALL OPEN AND VISUALLY INSPECT THE ELECTRICAL EQUIPMENT WHERE THE POI HAS BEEN PROPOSED. IF ANY ISSUES OR DISCREPANCIES ARE OBSERVED WITH RESPECT TO WHAT IS SHOWN ON THE DRAWINGS AND THE DESIGN INTENT, THE ELECTRICAL CONTRACTOR SHALL PROVIDE DETAIL ON THE POTENTIAL ISSUE AND INDICATE AN ALTERNATIVE APPROACH / SUGGESTIONS FOR THE POI.
2. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE BEST METHOD TO TERMINATE THE CONDUCTORS AT THE PROPOSED POI. IF THE PROPOSED CONNECTION WILL VOID THE UL (UNDERWRITERS LABORATORY) LISTING OF THE EQUIPMENT (E.G. DRILLING BUSBARS), THE ELECTRICAL CONTRACTOR SHALL ARRANGE FOR THE SERVICES OF A UL TECHNICIAN TO APPROVE THE CONNECTION METHOD PRIOR TO COMMENCING WORK, TO WITNESS THE INSTALLATION, AND TO CERTIFY THE MODIFICATIONS ARE ACCEPTABLE BY APPLYING A UL LABEL TO THE MODIFIED EQUIPMENT.

SYSTEM CHARACTERISTICS	
[illegible]	[illegible]
AC SIZE [illegible]	[illegible]
[illegible]	[illegible]
MODULE INFORMATION	
MANUFACTURER	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
INVERTER INFORMATION	
MANUFACTURER	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	1000
[illegible]	[illegible]
[illegible]	SEE OPTIMIZER SPECS
[illegible]	[illegible]
MAX CONTINUOUS OUTPUT CURRENT (A)	[illegible]
[illegible]	8
OPTIMIZER INFORMATION	
MANUFACTURER	SOLAREDGE
[illegible]	[illegible]
[illegible]	2
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

AC CONDUCTOR SCHEDULE

ID	From	To	Phase	AC Voltage	Circuit Current	80% or 100% Rated OCPD?	OCPD (if Present)	Parallel Conduit Runs	Conductor Material	Conductor Type	# of CCCs	Fill Factor	Ambient Temp	Temp Factor	Terminal Temp Rating (°C)	Conductor Size	Conductor Ampacity @ Terminal Temp. Rating	Conductor Temp. Rating (°C)	Conductor Ampacity @ Conductor Temp. Rating	Derated Ampacity	# of Neutrals	Neutral Size	Ground	Ground Material	Ground Type	Ground Size	Conduit Type	Conduit Size	1-Way Length	Voltage Drop
1	SolarEdge Inverter 1	Solar AC Main Breaker	3Φ	480 (V)	144.3 (A)	80%	200 (A)	1	CU	THWN-2	3	1.00	30	0.96	75	3/0 AWG	200 (A)	90	225 (A)	216.0 (A)	1	3/0 AWG	EGC	CU	THWN-2	6 AWG	RMC	2.00 (in)	7 (ft)	0.03%
2	SolarEdge Inverter 2	Solar AC Main Breaker	3Φ	480 (V)	144.3 (A)	80%	200 (A)	1	CU	THWN-2	3	1.00	30	0.96	75	3/0 AWG	200 (A)	90	225 (A)	216.0 (A)	1	3/0 AWG	EGC	CU	THWN-2	6 AWG	RMC	2.00 (in)	11 (ft)	0.05%
3	SolarEdge Inverter 3	Solar AC Main Breaker	3Φ	480 (V)	144.3 (A)	80%	200 (A)	1	CU	THWN-2	3	1.00	30	0.96	75	3/0 AWG	200 (A)	90	225 (A)	216.0 (A)	1	3/0 AWG	EGC	CU	THWN-2	6 AWG	RMC	2.00 (in)	14 (ft)	0.06%
4	SolarEdge Inverter 4	Solar AC Main Breaker	3Φ	480 (V)	144.3 (A)	80%	200 (A)	1	CU	THWN-2	3	1.00	30	0.96	75	3/0 AWG	200 (A)	90	225 (A)	216.0 (A)	1	3/0 AWG	EGC	CU	THWN-2	6 AWG	RMC	2.00 (in)	18 (ft)	0.07%
5	SolarEdge Inverter 5	Solar AC Main Breaker	3Φ	480 (V)	144.3 (A)	80%	200 (A)	1	CU	THWN-2	3	1.00	30	0.96	75	3/0 AWG	200 (A)	90	225 (A)	216.0 (A)	1	3/0 AWG	EGC	CU	THWN-2	6 AWG	RMC	2.00 (in)	21 (ft)	0.09%
6	SolarEdge Inverter 6	Solar AC Main Breaker	3Φ	480 (V)	144.3 (A)	80%	200 (A)	1	CU	THWN-2	3	1.00	30	0.96	75	3/0 AWG	200 (A)	90	225 (A)	216.0 (A)	1	3/0 AWG	EGC	CU	THWN-2	6 AWG	RMC	2.00 (in)	24 (ft)	0.10%
7	SolarEdge Inverter 7	Solar AC Main Breaker	3Φ	480 (V)	144.3 (A)	80%	200 (A)	1	CU	THWN-2	3	1.00	30	0.96	75	3/0 AWG	200 (A)	90	225 (A)	216.0 (A)	1	3/0 AWG	EGC	CU	THWN-2	6 AWG	RMC	2.00 (in)	28 (ft)	0.12%
8	SolarEdge Inverter 8	Solar AC Main Breaker	3Φ	480 (V)	144.3 (A)	80%	200 (A)	1	CU	THWN-2	3	1.00	30	0.96	75	3/0 AWG	200 (A)	90	225 (A)	216.0 (A)	1	3/0 AWG	EGC	CU	THWN-2	6 AWG	RMC	2.00 (in)	31 (ft)	0.13%
9	Solar AC Main Breaker	Customer Owned Transformer	3Φ	480 (V)	1154.4 (A)	80%	1600 (A)	6	AL	THWN-2	3	1.00	30	0.96	75	400 kcmil	1620 (A)	90	1830 (A)	1756.8 (A)	1	400 kcmil	SEE GROUNDING & BONDING DIAGRAM				Sch 80 PVC	3.50 (in)	60 (ft)	0.22%
10	Customer Owned Transformer	Customer MV Fused Cutout	3Φ	12470 (V)	44.4 (A)	80%	100 (A)	1	AL	AAC	3	1.00	30	0.96	75	1 AWG	100 (A)	90	115 (A)	110.4 (A)	1	1 AWG					Free Air	N/A	15 (ft)	0.00%
11	Customer MV Fused Cutout	Utility MV Disconnect	3Φ	12470 (V)	44.4 (A)	80%	[illegible]	1	AL	AAC	3	1.00	30	0.96	75	1 AWG	100 (A)	90	115 (A)	110.4 (A)	1	1 AWG					Free Air	N/A	30 (ft)	0.00%



EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1".

SCALE
NTS

SHEET TITLE

E30

LINE DIAGRAM

SOLAREDGE INVERTER SUMMARY

Inverter ID	Inverter Manufacturer	Inverter Model	Inverter Input	Module Manufacturer	Module Model	Optimizer Manufacturer	Optimizer Model	Circuit Current	String Length	# of Optimizers	String Power	Total DC Power	Total AC Power	Total DC:AC Ratio
SolarEdge Inverter 1	SolarEdge	SE120K-USx8xxxx (480V)	1	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	[illegible]	16	[illegible]	181,540W	120,000W	1.51
			2	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			3	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			4	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			5	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			6	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	34	17	19,720W			
			7	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	34	17	19,720W			
			8	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			9	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	34	17	19,720W			
			10	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	37	19	21,460W			
			11	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	35	18	20,300W			
			12	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	14A	0	0	0W			
SolarEdge Inverter 2	SolarEdge	SE120K-USx8xxxx (480V)	1	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	35	18	20,300W	181,540W	120,000W	1.51
			2	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	33	17	19,140W			
			3	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	32	16	18,560W			
			4	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			5	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	32	16	18,560W			
			6	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	37	19	21,460W			
			7	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			8	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			9	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	39	20	22,620W			
			10	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			11	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	33	17	19,140W			
			12	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
SolarEdge Inverter 3	SolarEdge	SE120K-USx8xxxx (480V)	1	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	34	17	19,720W	185,600W	120,000W	1.55
			2	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			3	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	35	18	20,300W			
			4	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			5	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	39	20	22,620W			
			6	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	34	17	19,720W			
			7	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	34	17	19,720W			
			8	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			9	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			10	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			11	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			12	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
SolarEdge Inverter 4	SolarEdge	SE120K-USx8xxxx (480V)	1	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W	[illegible]	120,000W	[illegible]
			2	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			3	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			4	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			5	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			6	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			7	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	35	18	20,300W			
			8	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			9	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	30	15	17,400W			
			10	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	39	20	22,620W			
			11	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			12	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
SolarEdge Inverter 5	SolarEdge	SE120K-USx8xxxx (480V)	1	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	33	17	19,140W	185,600W	120,000W	1.55
			2	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			3	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	34	17	19,720W			
			4	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			5	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			6	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			7	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	37	19	21,460W			
			8	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			9	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			10	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	35	18	20,300W			
			11	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	33	17	19,140W			
			12	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
SolarEdge Inverter 6	SolarEdge	SE120K-USx8xxxx (480V)	1	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	30	15	17,400W	187,140W	120,000W	1.56
			2	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	30	15	17,400W			
			3	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			4	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			5	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	37	19	21,460W			
			6	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			7	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	37	19	21,460W			
			8	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			9	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	39	20	22,620W			
			10	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			11	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			12	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
SolarEdge Inverter 7	SolarEdge	SE120K-USx8xxxx (480V)	1	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W	[illegible]	120,000W	1.55
			2	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	37	19	21,460W			
			3	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			4	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			5	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			6	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			7	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			8	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			9	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			10	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			11	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			12	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
SolarEdge Inverter 8	SolarEdge	SE120K-USx8xxxx (480V)	1	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	37	19	21,460W	[illegible]	120,000W	1.56
			2	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			3	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	38	19	22,040W			
			4	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			5	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			6	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	35	18	20,300W			
			7	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	34	17	19,720W			
			8	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			
			9	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			10	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	36	18	20,880W			
			11	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	32	16	18,560W			
			12	JINKO	JKM580N-72HL4-BDV	SolarEdge	S1201 (2:1)	18A	0	0	0W			

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1":

SCALE
NTS

SHEET TITLE

E31

AC & DC CALCULATIONS

SOLAREDGE DC STRING SUMMARY

Inverter Number	String Number	Number of Modules	Number of Optimizers	One Way Run Length (ft)	Conductor Material	Conductor Type	Conductor Size	Fixed String Voltage	Optimizer Max Output Current	125% Multiplier	Overcurrent Protection	Voltage Drop
1	1	31	16	90	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	0.49%
	2	36	18	155	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	0.85%
	3	36	18	110	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	0.60%
	5	36	18	160	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	0.87%
	6	34	17	195	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.07%
	7	34	17	185	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.01%
	9	34	17	175	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	0.96%
	10	37	19	110	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	0.60%
	11	35	18	250	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.37%
2	1	35	18	390	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	1.34%
	2	33	17	335	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.83%
	3	32	16	255	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.39%
	5	32	16	265	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.45%
	6	37	19	255	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.39%
	7	36	18	245	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.34%
	9	49	20	305	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.67%
	10	36	18	295	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.61%
	11	33	17	300	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.64%
3	1	34	17	305	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.67%
	2	36	18	180	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	0.98%
	3	35	18	180	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	0.98%
	5	39	20	205	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.12%
	6	34	17	250	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.37%
	7	34	17	270	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.48%
	9	36	18	325	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.78%
	10	36	18	335	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.83%
	11	36	18	345	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.88%
4	1	36	18	350	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.91%
	2	38	19	340	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.86%
	3	36	18	345	CU	PV Wire	10 AWG	850V	18.00A	22.50A	25A	1.88%
	5	36	18	485	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	1.66%
	6	36	18	560	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	1.92%
	7	35	18	595	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.04%
	9	30	15	715	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.45%
	10	39	20	650	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.23%
	11	39	20	620	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.12%
5	1	33	17	690	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.36%
	2	36	18	680	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.33%
	3	34	17	680	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.33%
	5	38	19	725	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.48%
	6	38	19	520	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	1.78%
	7	37	19	570	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	1.95%
	9	36	18	560	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	1.92%
	10	35	18	595	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.04%
	11	33	17	595	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.04%
6	1	30	15	615	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.11%
	2	30	15	615	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.11%
	3	38	19	745	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.55%
	5	37	19	710	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.43%
	6	38	19	805	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.76%
	7	37	19	740	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.54%
	9	39	20	850	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.91%
	10	36	18	790	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.71%
	11	38	19	805	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.76%
7	1	38	19	845	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.90%
	2	37	19	865	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.96%
	3	36	18	970	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.32%
	5	36	18	980	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.36%
	6	36	18	965	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.31%
	7	36	18	950	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.26%
	9	36	18	915	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.14%
	10	36	18	925	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.17%
	11	38	19	895	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.07%
8	1	37	19	890	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.05%
	2	38	19	855	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.93%
	3	38	19	865	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.96%
	5	36	18	845	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	2.90%
	6	35	18	955	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.27%
	7	34	17	985	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.37%
	9	36	18	1025	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.51%
	10	36	18	1050	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.60%
	11	32	16	1085	CU	PV Wire	8 AWG	850V	18.00A	22.50A	25A	3.72%

Average DC Voltage Drop
2.12%

TOTAL DC STRING RUN LENGTHS (2-WAY DISTANCE):
#10 AWG - 15,540 FEET
#8 AWG - 77,090 FEET

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1"

SCALE
NTS

SHEET TITLE

E32

AC & DC CALCULATIONS

SOLAREDGE DC CONDUCTOR SCHEDULE

(A) FREE AIR

*TEMPERATURE FACTOR IS BASED ON 2% DRY BULB HIGH TEMPERATURE OF 30.1°C WITH A 0°C TEMPERATURE ADDER THEREFORE RACEWAYS MUST BE AT LEAST 0.875 INCHES ABOVE ROOF AS PER NEC 310.15(B)(3)(C)

Number of Strings	Conductor Material	Conductor Type	Conductor Size	Ampacity @ 90°C	*Temperature Factor	Fill Factor	Derated Ampacity	Circuit Current	Ampacity @ 75°C (Terminal Temp)	Min. OCPD (If Required)	EGC Material	EGC Type	EGC Size	Conduit
No Limit	CU	PV Wire	10 AWG	40A	0.96	1.00	38.40A	18.00A	35A	25A	CU	BARE	6 AWG	N/A - Free Air

(B) IN CONDUIT

*TEMPERATURE FACTOR IS BASED ON 2% DRY BULB HIGH TEMPERATURE OF 30.1°C WITH A 0°C TEMPERATURE ADDER THEREFORE RACEWAYS MUST BE AT LEAST 0.875 INCHES ABOVE ROOF AS PER NEC 310.15(B)(3)(C)

**CALCULATIONS ARE BASED ON THE LARGEST CIRCUIT CURRENT (WORST CASE SCENARIO).

***THERE ARE 2 CURRENT-CARRYING CONDUCTORS PER STRING.

****TABLE ASSUMES ONE EGC PER CONDUIT. MINIMUM ONE EGC IS REQUIRED PER INVERTER PER CONDUIT.

Number of Strings	Conductor Material	Conductor Type	Conductor Size	Ampacity @ 90°C	*Temperature Factor	Fill Factor	Derated Ampacity	**Circuit Current	Ampacity @ 75°C (Terminal Temp)	Min. OCPD (If Required)	EGC Material	EGC Type	EGC Size	Min. RMC Size	Min. Sch 40 PVC Size
1	CU	PV Wire	10 AWG	40A	0.96	1.00	38.40A	18.00A	35A	25A	CU	PV Wire	10 AWG	0.75 in.	0.75 in.
2	CU	PV Wire	10 AWG	40A	0.96	0.80	30.72A	18.00A	35A	25A	CU	PV Wire	10 AWG	1.00 in.	1.00 in.
3	CU	PV Wire	10 AWG	40A	0.96	0.80	30.72A	18.00A	35A	25A	CU	PV Wire	10 AWG	1.25 in.	1.25 in.
4	CU	PV Wire	10 AWG	40A	0.96	0.70	26.88A	18.00A	35A	25A	CU	PV Wire	10 AWG	1.25 in.	1.25 in.
5	CU	PV Wire	10 AWG	40A	0.96	0.50	19.20A	18.00A	35A	25A	CU	PV Wire	10 AWG	1.25 in.	1.50 in.
6	CU	PV Wire	10 AWG	40A	0.96	0.50	19.20A	18.00A	35A	25A	CU	PV Wire	10 AWG	1.50 in.	1.50 in.
7	CU	PV Wire	10 AWG	40A	0.96	0.50	19.20A	18.00A	35A	25A	CU	PV Wire	10 AWG	1.50 in.	2.00 in.
8	CU	PV Wire	10 AWG	40A	0.96	0.50	19.20A	18.00A	35A	25A	CU	PV Wire	10 AWG	2.00 in.	2.00 in.
9	CU	PV Wire	10 AWG	40A	0.96	0.50	19.20A	18.00A	35A	25A	CU	PV Wire	10 AWG	2.00 in.	2.00 in.

DC CABLE TRAY FILL

TRAY WIDTH (IN.)	# OF SINGLE CONDUCTORS
6	118
9	173
12	237
18	356
24	474
30	593
36	712

FOR 10 AWG PV WIRE IN LADDER OR VENTILATED TROUGH CABLE TRAYS, AS PER NEC 392.22(B)(1)(b)

SOLAREDGE DC CONDUCTOR SCHEDULE

(A) FREE AIR

*TEMPERATURE FACTOR IS BASED ON 2% DRY BULB HIGH TEMPERATURE OF 30.1°C WITH A 0°C TEMPERATURE ADDER THEREFORE RACEWAYS MUST BE AT LEAST 0.875 INCHES ABOVE ROOF AS PER NEC 310.15(B)(3)(C)

Number of Strings	Conductor Material	Conductor Type	Conductor Size	Ampacity @ 90°C	*Temperature Factor	Fill Factor	Derated Ampacity	Circuit Current	Ampacity @ 75°C (Terminal Temp)	Min. OCPD (If Required)	EGC Material	EGC Type	EGC Size	Conduit
No Limit	CU	PV Wire	8 AWG	55A	0.96	1.00	52.80A	18.00A	50A	25A	CU	BARE	6 AWG	N/A - Free Air

(B) IN CONDUIT

*TEMPERATURE FACTOR IS BASED ON 2% DRY BULB HIGH TEMPERATURE OF 30.1°C WITH A 0°C TEMPERATURE ADDER THEREFORE RACEWAYS MUST BE AT LEAST 0.875 INCHES ABOVE ROOF AS PER NEC 310.15(B)(3)(C)

**CALCULATIONS ARE BASED ON THE LARGEST CIRCUIT CURRENT (WORST CASE SCENARIO).

***THERE ARE 2 CURRENT-CARRYING CONDUCTORS PER STRING.

****TABLE ASSUMES ONE EGC PER CONDUIT. MINIMUM ONE EGC IS REQUIRED PER INVERTER PER CONDUIT.

Number of Strings	Conductor Material	Conductor Type	Conductor Size	Ampacity @ 90°C	*Temperature Factor	Fill Factor	Derated Ampacity	**Circuit Current	Ampacity @ 75°C (Terminal Temp)	Min. OCPD (If Required)	EGC Material	EGC Type	EGC Size	Min. RMC Size	Min. Sch 40 PVC Size
1	CU	PV Wire	8 AWG	55A	0.96	1.00	52.80A	18.00A	50A	25A	CU	PV Wire	10 AWG	0.75 in.	1.00 in.
2	CU	PV Wire	8 AWG	55A	0.96	0.80	42.24A	18.00A	50A	25A	CU	PV Wire	10 AWG	1.25 in.	1.25 in.
3	CU	PV Wire	8 AWG	55A	0.96	0.80	42.24A	18.00A	50A	25A	CU	PV Wire	10 AWG	1.25 in.	1.25 in.
4	CU	PV Wire	8 AWG	55A	0.96	0.70	36.96A	18.00A	50A	25A	CU	PV Wire	10 AWG	1.50 in.	1.50 in.
5	CU	PV Wire	8 AWG	55A	0.96	0.50	26.40A	18.00A	50A	25A	CU	PV Wire	10 AWG	1.50 in.	2.00 in.
6	CU	PV Wire	8 AWG	55A	0.96	0.50	26.40A	18.00A	50A	25A	CU	PV Wire	10 AWG	2.00 in.	2.00 in.
7	CU	PV Wire	8 AWG	55A	0.96	0.50	26.40A	18.00A	50A	25A	CU	PV Wire	10 AWG	2.00 in.	2.00 in.
8	CU	PV Wire	8 AWG	55A	0.96	0.50	26.40A	18.00A	50A	25A	CU	PV Wire	10 AWG	2.00 in.	2.00 in.
9	CU	PV Wire	8 AWG	55A	0.96	0.50	26.40A	18.00A	50A	25A	CU	PV Wire	10 AWG	2.50 in.	2.50 in.

DC CABLE TRAY FILL

TRAY WIDTH (IN.)	# OF SINGLE CONDUCTORS
6	84
9	123
12	168
18	253
24	337
30	422
36	506

FOR 8 AWG PV WIRE IN LADDER OR VENTILATED TROUGH CABLE TRAYS, AS PER NEC 392.22(B)(1)(b)

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY: IE

CHECKED BY: WD

DATE: 18-Oct-2024

DRAWING LEVEL: ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE: 36X24 SHOULD MEASURE 1":

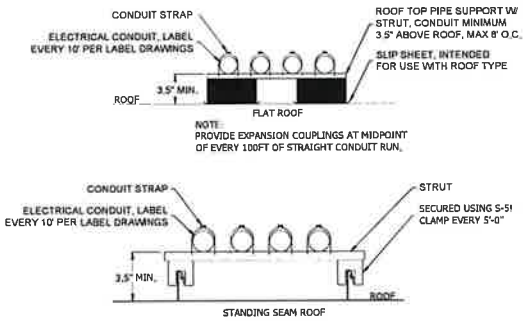
SCALE: NTS

SHEET TITLE

E33

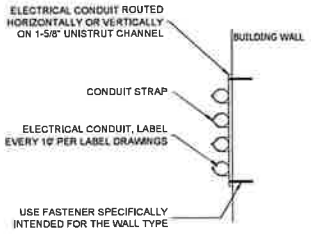
AC & DC CALCULATIONS

CONDUIT SUPPORT AT LEAST EVERY 10'-0", SUPPORT 3'-0" FROM ANY OUTLET, JUNCTION BOX, ETC.



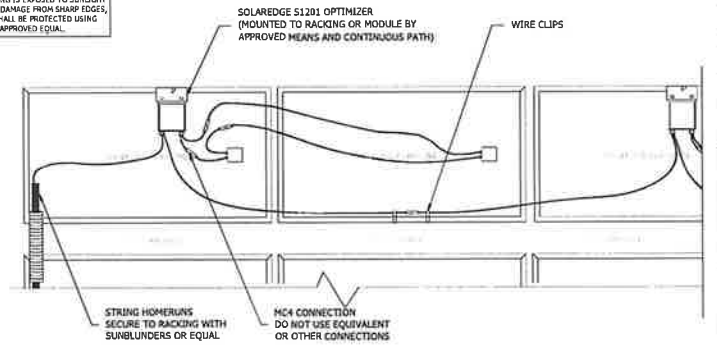
1 / E40 CONDUIT SUPPORT (HORIZONTAL)

CONDUIT SUPPORT AT LEAST EVERY 10'-0", SUPPORT 3'-0" FROM ANY OUTLET, JUNCTION BOX, ETC.



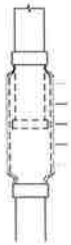
2 / E40 CONDUIT SUPPORT (VERTICAL)

NOTE:
WHERE DC WIRING IS EXPOSED TO SUNLIGHT OR SUBJECT TO DAMAGE FROM SHARP EDGES, CONDUCTORS SHALL BE PROTECTED USING WIRE LOOM OR APPROVED EQUAL.



3 / E40 MODULE WIRING - S1201 OPTIMIZERS

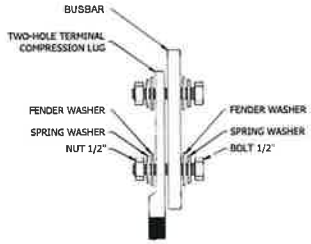
NOTES:
1. INSTALL EXPANSION COUPLING AT MIDPOINT OF EVERY 100' OF STRAIGHT CONDUIT RUN.
2. IF EXPANSION COUPLINGS ARE SEPARATED BY LENGTHS GREATER OR LESS THAN 100', THE DISTANCES OF EXPANSION/CONTRACTION SHALL BE ADJUSTED PROPORTIONALLY.
3. IF EXPANSION JOINT IS NOT PROVIDED WITH INTERNAL BONDING JUMPER, AN EXTERNAL BONDING JUMPER MUST BE INSTALLED.



- 0°F - EXTEND 1/2" BEYOND CENTER
- 30°F - EXTEND 1/4" BEYOND CENTER
- 60°F - CENTERED
- 90°F - CONTRACT 1/4" BEYOND CENTER
- 120°F - CONTRACT 1/2" BEYOND CENTER

NOTE: THE COEFFICIENT OF THERMAL EXPANSION IN STEEL CONDUIT = 6.65 X 10^{-6} IN./IN./°F AT 120°F, THE LENGTH CHANGE IS 0.94 INCHES PER 100 FEET OF CONDUIT RUN.

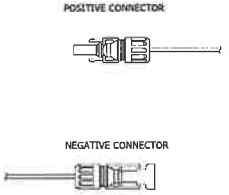
4 / E40 EXPANSION COUPLING



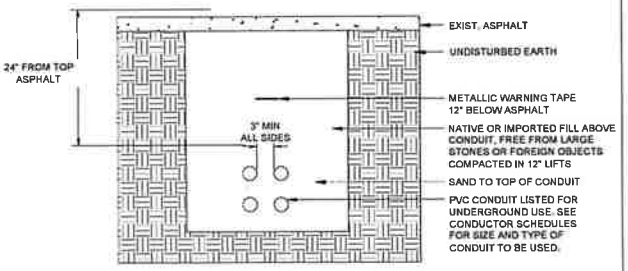
5 / E40 COMPRESSION LUG

CONNECTOR NOTES:

1. OF SAME MANUFACTURE
2. LOCKING TYPE, 1000VDC
3. COMPATIBLE WITH MANUFACTURER'S CONNECTORS
4. CRIMPED ONTO SOURCE CIRCUIT WIRE USING PROCEDURE AND TOOLS RECOMMENDED BY MANUFACTURER
5. SECURED UNDER MODULES OR IN A MANNER TO AVOID EXPOSURE TO RAIN
6. MC4 TO BE USED UNLESS OTHERWISE NOTED, MC4 MUST BE USED WITH SOLAREDGE INVERTERS/OPTIMIZERS



6 / E40 MODULE CONNECTOR



7 / E40 DC CONDUIT TRENCH DETAIL

DC WIRING IN THE INVERTER TERMINAL BOX SHALL BE "C" SHAPED TO ALLOW EASY ACCESS FOR CLAMP TYPE METERS.

8 / E40 "C" SHAPED WIRING

9 / E40 PYRANOMETER MOUNTING

10 / E40 ALSOENERGY WEATHER STATION

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY: IE

CHECKED BY: WD

DATE: 18-Oct-2024

DRAWING LEVEL: ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE: 36X24 SHOULD MEASURE 1":

SCALE: NTS

SHEET TITLE

E40

ELECTRICAL DETAILS

1

WARNING

ELECTRIC SHOCK HAZARD

TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION.

2

WARNING

TURN OFF PHOTOVOLTAIC AC DISCONNECT PRIOR TO WORKING INSIDE THIS PANEL

3

PHOTOVOLTAIC POWER SOURCE

OR

3

SOLAR PV DC CIRCUIT

4

PHOTOVOLTAIC DC DISCONNECT

5

PHOTOVOLTAIC AC DISCONNECT

6

WARNING: DO NOT DISCONNECT UNDER LOAD

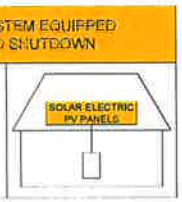
7

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

8

SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUTDOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN ARRAY.



9

CAUTION

PHOTOVOLTAIC SYSTEM CIRCUIT IS BACKFED.

10

WARNING

POWER SOURCE OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE.

11

WARNING

THIS EQUIPMENT FED BY MULTIPLE SOURCES. TOTAL RATING OF ALL OVERCURRENT DEVICES EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE SHALL NOT EXCEED AMPACITY OF BUSBAR.

12

WARNING: DUAL POWER SOURCE SECOND SOURCE IS PV SYSTEM

13

MAXIMUM DC VOLTAGE
1000V
OF PV SYSTEM

PLACE AT INVERTERS 1 - 8

14

PHOTOVOLTAIC AC DISCONNECT
RATED AC OUTPUT CURRENT 1154.40A
NOMINAL OPERATING AC VOLTAGE 480V

PLACE AT SOLAR AC DISCONNECT

16

MV TRANSFORMER
PRIMARY: 12.47GV Δ SECONDARY: 480Y/277V
POWER RATING: 1000 kVA

PLACE AT CUSTOMER MV TRANSFORMER

17

MV DISCONNECT
RATED AC OUTPUT CURRENT 48.44A
NOMINAL OPERATING AC VOLTAGE 12470V
WARNING: ONLY OPERATE WITH PPE

PLACE AT CUSTOMER & UTILITY MV DISCONNECTS

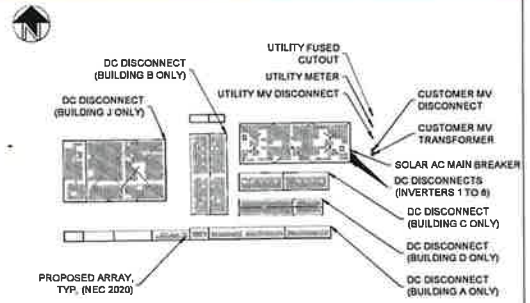
18

SOLAR AC PANELBOARD
1600A SWITCH, 1600A FUSE
480VAC, 3Φ, 4WIRE

PLACE AT SOLAR AC PANELBOARD

15

CAUTION: MULTIPLE SOURCES OF POWER



PLACE PLAQUE/DIRECTORY AT EACH ELECTRIC POWER SOURCE DISCONNECTING MEANS. IF MULTIPLE POWER SOURCE DISCONNECTING MEANS ARE WITHIN SIGHT OF EACH OTHER, THEY CAN BE CONSIDERED A GROUP AND ONE DIRECTORY PER GROUP IS SUFFICIENT.

WARNING LABELS SCHEDULE

EQUIPMENT	LABEL NO.	QTY.
CONDUIT / RACEWAY	3	EVERY 10'
DC COMBINER	1, 2, 6	N/A
DC DISCONNECT	1, 4, 13	25
AC COMBINER	1, 2, 6, 12	1
AC DISCONNECT	1, 5, 14	N/A
MAIN SERVICE DISCONNECT	1, 2, 8, 12	2
RAPID SHUTDOWN SWITCH	7, 8	1
MV TRANSFORMER	16	1
MV DISCONNECT	17	2
POWER SOURCE DISCONNECTS	15	2

NOTES:

1. LABELING PROVIDED IS A GUIDE ONLY. CONTRACTOR IS RESPONSIBLE TO ENSURE ALL SYSTEM LABELING AND WORDING IS PER NEC 2020 REQUIREMENTS.
2. ALL LABELING USED OUTDOORS MUST BE ENGRAVED METAL, UV STABILIZED ENGRAVED PLASTIC OR OF A MATERIAL SUFFICIENTLY DURABLE TO WITHSTAND THE ENVIRONMENT INVOLVED. VALUES HAND WRITTEN OR IN WRITTEN MARKER ARE NOT ACCEPTABLE PER NEC 2020.
3. LABELS USED INDOORS MAY BE MADE OF DURABLE VINYL OR PAPER.
4. DO NOT COVER ANY EXISTING MANUFACTURER APPLIED LABELS WITH INSTALLATION SPECIFIC LABELS.
5. LABEL COLORS CHOSEN PER NFPA 70 2020 DIRECTION THAT ANSI Z535-2011 BE USED.
6. ALL WARNING SIGNS OR LABELS SHALL COMPLY WITH NEC 110.21(B)
7. LABELS ON THIS SHEET REPRESENT THE MINIMUM REQUIREMENTS AS PER NEC 2020. ADDITIONAL LABELS MAY BE REQUIRED BY THE AHJ AND/OR THE SYSTEM/BUILDING OWNER.

FORMAT

1. WHITE LETTERING ON A RED BACKGROUND (UNLESS SHOWN OTHERWISE)
2. MINIMUM 3/8 INCHES LETTER HEIGHT
3. ALL LETTERS SHALL BE CAPITALIZED
4. ARIAL OR SIMILAR FONT (NON-BOLD)

MATERIAL

REFLECTIVE, WEATHER RESISTANT MATERIAL SUITABLE FOR THE ENVIRONMENT (USE UL-969 AS STANDARD FOR WEATHER RATING). USE DURABLE ADHESIVE MATERIALS.

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY: IE

CHECKED BY: WD

DATE: 18-Oct-2024

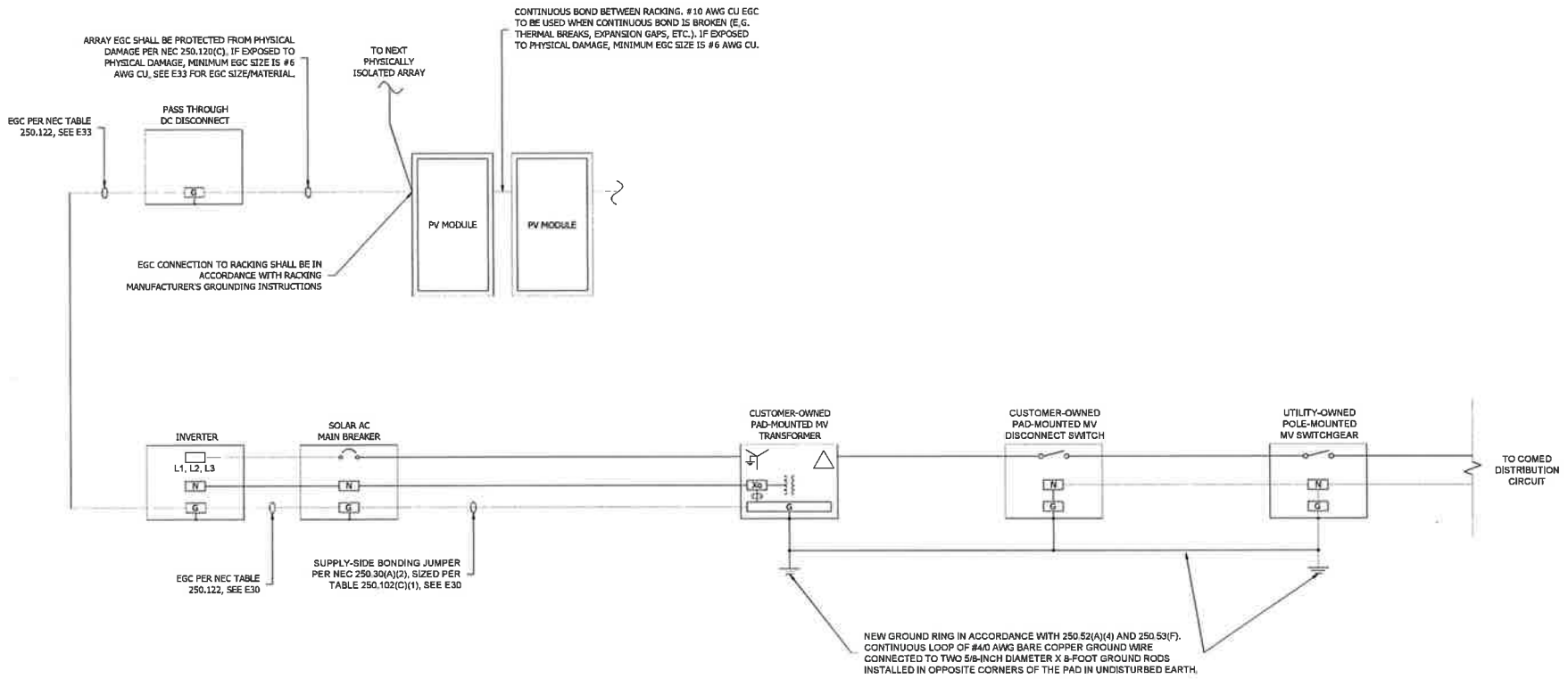
DRAWING LEVEL: ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE: 36X24 SHOULD MEASURE 1":

SCALE: NTS

SHEET TITLE: E50 LABELING



NOTES
1. RACKING COMPONENTS WITHIN THE ARRAY ARE REQUIRED TO BE ELECTRICALLY BONDED TO OTHER DC GROUNDING PATHS VIA THE USE OF APPROPRIATELY SIZED COPPER WIRE.
2. RACKING SHALL BE BONDED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
3. IF EQUIPMENT GROUNDING CONDUCTORS ARE NOT PROTECTED FROM PHYSICAL DAMAGE BY AN IDENTIFIED RACEWAY OR CABLE ARMOR THEY SHALL NOT BE SMALLER THAN 6 AWG AS PER NEC 250.120(C).
4. A PERIODIC REINSPECTION OF THE SYSTEM SHALL BE PERFORMED FOR LOOSE COMPONENTS, LOOSE FASTENERS, AND ANY CORROSION. IF FOUND, THEY SHOULD BE IMMEDIATELY REPLACED OR REMIDIED IN ACCORDANCE WITH THE SYSTEM INSTALLATION INSTRUCTIONS.
5. OPTIMIZERS AND MODULE LEVEL POWER ELECTRONICS (IF USED) SHALL BE BONDED TO MODULES IN ACCORDANCE WITH THE REQUIREMENTS OF NEC 690.43.

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1"

SCALE
NTS

SHEET TITLE
E60
GROUNDING DETAILS

EAGLE

THE MOST DEPENDABLE SOLAR PRODUCT

EAGLE 72 G6B

565-585 WATT • N-TYPE BIFACIAL

KEY FEATURES

N-Type Technology

Industrial Grade Construction

Shade Tolerant

Protected Against All Environments

Low Temperature Coefficient

Warranty

BUILDING YOUR TRUST IN SOLAR. WWW.JINKOSOLAR.US

JinKO

ENGINEERING DRAWINGS

MECHANICAL CHARACTERISTICS

TEMPERATURE CHARACTERISTICS

MAXIMUM RATINGS

PACKAGING CONFIGURATION

ELECTRICAL PERFORMANCE & TEMPERATURE DEPENDENCE

ELECTRICAL CHARACTERISTICS

BUILDING YOUR TRUST IN SOLAR. WWW.JINKOSOLAR.US

JinKO

POWER OPTIMIZER

Power Optimizer
For North America

S1201

SolarEdge's most advanced, cost-effective Power Optimizer for commercial and large field Installations

Maximum Protection with Built-In Safety

Lower BoS Costs

Simpler O&M

solaredge

Power Optimizer
For North America

S1201

INVERTER

Three Phase Inverter with Synergy Technology
For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

Powered by unique pre-commissioning process for rapid system installation

solaredge

Three Phase Inverter with Synergy Technology
For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

COMMUNICATION

Cellular Plug-in with Data Plan for the US

For Commercial Systems:
CELL-B-R05-US-S-S4
CELL-B-R05-US-S-S5

And for Residential Systems:
CELL-B-R05-US-S-S2
CELL-B-R12-US-S-S2

Cellular Internet Connectivity for Commercial and Residential Installations

solaredge

Cellular Plug-in with Data Plan
For The US

Single or Multiple Commercial Inverters

Single or Multiple Residential Inverters

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY
IE

CHECKED BY
WD

DATE
18-Oct-2024

DRAWING LEVEL
ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE
36X24 SHOULD MEASURE 1":

SCALE
NTS

SHEET TITLE

E70

EQUIPMENT SPECS

AlsoEnergy

PowerLogger Commercial Solution 600 (PLCS 600)

Standard PLCS 600 includes

Solution Features

[illegible]

Facility-wide surge protection

A necessity for business continuity

Eaton SPC Series: Robust protection in a compact design

Features

[illegible]

EATON

clawFR® 5°

Flat Roof Racking Specialists

PanelClaw® is the only major racking provider in North America focused exclusively on flat roof racking. Our 11+ years of focus on flat roof result in a com[illegible] advantage for our partners. No one knows more about flat roof racking than [illegible] no one delivers a more thoroughly tested and reliable platform, and no one matches our level of service. Our mission is to accelerate the deployment of flat roof PV and the best way to do this is to continue to lower its life cycle cost while maintaining the highest levels of reliability. The clawFR platform is the result of this experience and commitment to flat roof.

PANELCLAW

Engineered for Speed

[illegible]

String Inverter Solutions

SOLAR BOS

SPECIFICATIONS

AVAILABLE OPTIONS

[illegible]

AlsoEnergy

Specifications

PLCS 600

[illegible]

Technical specifications

[illegible]

SPC Series catalog number configuration

[illegible]

Eaton.com/spc

EATON

SYSTEM COMPONENTS

Applications

Wind Exposure Category

Roof Type Compatibility

USGS Seismic Categories

Platform Load

Module Orientation

Module Attachment

Basic Wind Speed

Corrosion Resistance

Warranty and Certifications

Intelligent Component Design

[illegible]

Safety and Reliability

[illegible]

PANELCLAW

panelclaw.com

O&M Features

[illegible]

clawFR® 5°

EXACTUS ENERGY

ELECTRICAL CERTIFICATION

PUBLIC STORAGE (8625 WAUKEGAN RD)
8625 WAUKEGAN RD
MORTON GROVE, IL 60053, USA

DRAWN BY: IE

CHECKED BY: WD

DATE: 16-Oct-2024

DRAWING LEVEL: ISSUED FOR PERMIT

REV.	DATE	DRAWING LEVEL
A		
B		
C		
D		
E		

SHEET SIZE: 36X24 SHOULD MEASURE 1":

SCALE: NTS

SHEET TITLE

E71

EQUIPMENT SPECS

Section 466.APPENDIX D Levels 1 to 4 Contract

STANDARD AGREEMENT FOR INTERCONNECTION OF DISTRIBUTED ENERGY RESOURCES FACILITIES WITH A CAPACITY LESS THAN OR EQUAL TO 10 MVA

This agreement (together with all attachments, the "Agreement") is made and entered into this 23rd day of September, 2024, by and betweenSolar Landscape LLC ("interconnection customer"), as a Limited Liability Company organized and existing under the laws of the State of New Jersey and Commonwealth Edison Company, ("Electric Distribution Company" or "EDC"), a corporation existing under the laws of the State of Illinois. Interconnection customer and EDC each may be referred to as a "Party", or collectively as the "Parties".

Recitals:

Whereas, interconnection customer is proposing to install or direct the installation of a distributed energy (DER) resources or is proposing a generating capacity addition to an existing DER facility, consistent with the interconnection request application form completed by interconnection customer on 7/1/2024; and

Whereas, the interconnection customer will operate and maintain, or cause the operation and maintenance of, the DER facility; and

Whereas, interconnection customer desires to interconnect the DER facility with EDC's electric distribution system.

Now, therefore, in consideration of the premises and mutual covenants set forth in this Agreement, and other good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, the Parties covenant and agree as follows:

Article 1. Scope and Limitations of Agreement

1.1 This Agreement shall be used for all approved interconnection requests for DER facilities that fall under Levels 2, 3 and 4 according to the procedures set forth in Part 466 of the Commission's rules (83 Ill. Adm. Code 466) (referred to as the Illinois Distributed Energy Resources Interconnection Standard).

1.2 This Agreement governs the terms and conditions under which the DER facility will interconnect to, and operate in parallel with, the EDC's electric distribution system.

1.3 This Agreement does not constitute an agreement to purchase or deliver the interconnection customer's power.

1.4 Nothing in this Agreement is intended to affect any other agreement between the EDC and the interconnection customer.

1.5 Terms used in this agreement are defined as in Section 466.30 of the Illinois Distributed Generation Interconnection Standard unless otherwise noted.

1.6 Responsibilities of the Parties

1.6.1 The Parties shall perform all obligations of this Agreement in accordance with all applicable laws and regulations.

1.6.2 The EDC shall construct, own, operate, and maintain its interconnection facilities in accordance with this Agreement.

1.6.3 The interconnection customer shall construct, own, operate, and maintain its DER facility and interconnection facilities in accordance with this Agreement.

1.6.4 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for, the facilities that it now or subsequently may own unless otherwise specified in the attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of its respective lines and appurtenances on its respective sides of the point of interconnection.

1.6.5 The interconnection customer agrees to design, install, maintain and operate its DER facility so as to minimize the likelihood of causing an adverse system impact on the electric distribution system or any other electric system that is not owned or operated by the EDC.

1.7 Parallel Operation Obligations
Once the DER facility has been authorized to commence parallel operation, the interconnection customer shall abide by all operating procedures established in IEEE Standard 1547 and any other applicable laws, statutes or guidelines, including those specified in Attachment 4 of this Agreement.

1.8 Metering
The interconnection customer shall be responsible for the cost to purchase, install, operate, maintain, test, repair, and replace metering and data acquisition equipment specified in Attachments 5 and 6 of this Agreement.

1.9 Reactive Power

1.9.1 Interconnection customers with a DER facility larger than or equal to 1 MVA shall design their DER facilities to maintain a power factor at the point of interconnection between .95 lagging and .95 leading at all times. Interconnection customers with a DER facility smaller than 1 MVA shall design their DER facility to maintain a power factor at the point of interconnection between .90 lagging and .90 leading at all times.

1.9.2 Any EDC requirements for meeting a specific voltage or specific reactive power schedule as a condition for interconnection shall be clearly specified in Attachment 4. Under no circumstance shall the EDC's additional requirements for voltage or reactive power schedules exceed the normal operating capabilities of the DER facility.

1.9.3 If the interconnection customer does not operate the DER facility within the power factor range specified in Attachment 4, or does not operate the distribute generation facility in accordance with a voltage or reactive power schedule specified in Attachment 4, the interconnection customer is in default under this Agreement, and the terms of Article 6.5 apply.

1.10 Standards of Operations

The interconnection customer must obtain all certifications, permits, licenses and approvals necessary to construct, operate and maintain the facility and to perform its obligations under this Agreement. The interconnection customer is responsible for coordinating and synchronizing the DER facility with the EDC's system. The interconnection customer is responsible for any damage that is caused by the interconnection customer's failure to coordinate or synchronize the DER facility with the electric distribution system. The interconnection customer agrees to be primarily liable for any damages resulting from the continued operation of the DER facility after the EDC ceases to energize the line section to which the DER facility is connected. In Attachment 4, the EDC shall specify the shortest reclose time setting for its protection equipment that could affect the DER facility. The EDC shall notify the interconnection customer at least 10 business days prior to adopting a faster reclose time on any automatic protective equipment, such as a circuit breaker or line recloser, that might affect the DER facility.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection
The interconnection customer shall test and inspect its DER facility including the interconnection equipment prior to interconnection in accordance with IEEE Standard 1547 (2003) and IEEE Standard 1547.1 (2005). The interconnection customer shall not operate its DER facility in parallel with the EDC's electric distribution system without prior written authorization by the EDC as provided for in Articles 2.1.1-2.1.3.

2.1.1 The EDC shall perform a witness test after construction of the DER facility is completed, but before parallel operation, unless the EDC specifically waives the witness test. The interconnection customer shall provide the EDC at least 15 business days' notice of the planned commissioning test for the DER facility. If the EDC performs a witness test at a time that is not concurrent with the commissioning test, it shall contact the interconnection customer to schedule the witness test at a mutually agreeable time within 10 business days after the scheduled commissioning test designated on the application. If the EDC does not perform the witness test within 10 business days after the commissioning test, the witness test is deemed waived unless the Parties mutually agree to extend the date for scheduling the witness test, or unless the EDC cannot do so for good cause, in which case, the Parties shall agree to another date for scheduling the test within 10 business days after the original scheduled date. If the witness test is not acceptable to the EDC, the EDC shall deliver in writing a detailed technical description of all deficiencies of the DER facility identified by the EDC during the witness test. The interconnection customer has 30 business days after receipt of the written description to address and resolve any deficiencies. This time period may be extended upon agreement between the EDC and the interconnection customer. If the interconnection customer fails to address and resolve the deficiencies to the satisfaction of the EDC, the applicable cure provisions of Article 6.5 shall apply. The interconnection customer shall, if requested by the EDC, provide a copy of all documentation in its possession regarding testing conducted pursuant to IEEE Standard 1547.1.

2.1.2 If the interconnection customer conducts interim testing of the DER facility prior to the witness test, the interconnection customer shall obtain permission from the EDC before each occurrence of operating the DER facility in parallel with the electric distribution system. The EDC may, at its own expense, send qualified personnel to the DER facility to observe such interim testing, but it cannot mandate that these tests be considered in the final witness test. The EDC is not required to observe the interim testing or precluded from requiring the tests be repeated at the final witness test. During and leading up to the witness test, the EDC shall not limit the interconnection customer's ability to test the DER facility during normal working hours except for safety and reliability reasons.

2.1.3 After the DER facility passes the witness test, the EDC shall affix an authorized signature to the certificate of completion and return it to the interconnection

customer approving the interconnection and authorizing parallel operation. The authorization shall not be conditioned or delayed and the EDC shall return the signed certificate of completion to interconnection customer no more than 10 business days after the date that the DER facility passes the witness test.

2.2 Commercial Operation
The interconnection customer shall not operate the DER facility, except for interim testing as provided in Article 2.1, until such time as the certificate of completion is signed by all Parties.

2.3 Right of Access
The EDC must have access to the disconnect switch and metering equipment of the DER facility at all times. When practical, the EDC shall provide notice to the interconnection customer prior to using its right of access.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date
This Agreement shall become effective upon execution by all Parties.

3.2 Term of Agreement
This Agreement shall become effective on the effective date and shall remain in effect unless terminated in accordance with Article 3.3 of this Agreement.

3.3 Termination

3.3.1 The interconnection customer may terminate this Agreement at any time by giving the EDC 30 calendar days prior written notice.

3.3.2 Either Party may terminate this Agreement after default pursuant to Article 6.5.

3.3.3 The EDC may terminate, upon 60 calendar days' prior written notice, for failure of the interconnection customer to complete construction of the DER facility within 12 months after the in-service date as specified by the Parties in Attachment 2, which may be extended by agreement between the Parties.

3.3.4 The EDC may terminate this Agreement, upon 60 calendar days' prior written notice, if the interconnection customer has abandoned, cancelled, permanently disconnected or stopped development, construction, or operation of the DER facility, or if the interconnection customer fails to operate the DER facility in parallel with the EDC's electric system for three consecutive years.

3.3.5 Upon termination of this Agreement, the DER facility will be disconnected from the EDC's electric distribution system. Terminating this Agreement does not relieve either Party of its liabilities and obligations that are owed or continuing when the Agreement is terminated.

3.3.6 If the Agreement is terminated, the interconnection customer loses its position in the interconnection queue.

3.4 Temporary Disconnection

A Party may temporarily disconnect the DER facility from the electric distribution system in the event one or more of the following conditions or events occurs:

3.4.1 Emergency conditions – shall mean any condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that the EDC determines is likely to cause an adverse system impact, or is likely to have a material adverse effect on the EDC's electric distribution system, interconnection facilities or other facilities, or is likely to interrupt or materially interfere with the provision of electric utility service to other customers; or (3) that is likely to cause a material adverse effect on the DER facility or the interconnection equipment. Under emergency conditions, the EDC or the interconnection customer may suspend interconnection service and temporarily disconnect the DER facility from the electric distribution system. The EDC must notify the interconnection customer when it becomes aware of any conditions that might affect the interconnection customer's operation of the DER facility. The interconnection customer shall notify the EDC when it becomes aware of any condition that might affect the EDC's electric distribution system. To the extent information is known, the notification shall describe the condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Scheduled maintenance, construction, or repair – the EDC may interrupt interconnection service or curtail the output of the DER facility and temporarily disconnect the DER facility from the EDC's electric distribution system when necessary for scheduled maintenance, construction, or repairs on EDC's electric distribution system. The EDC shall provide the interconnection customer with notice no less than 5 business days before an interruption due to scheduled maintenance, construction, or repair, or the EDC shall provide notice immediately if the scheduled maintenance, construction, or repair is scheduled less than 5 business days in advance. The EDC shall coordinate the reduction or temporary disconnection with the interconnection customer; however, the interconnection customer is responsible for out-of-pocket costs incurred by the EDC for deferring or rescheduling maintenance, construction or repair at the interconnection customer's request.

3.4.3 Forced outages – The EDC may suspend interconnection service to repair the EDC's electric distribution system. The EDC shall provide the interconnection customer with prior notice, if possible. If prior notice is not possible, the EDC shall, upon written request, provide the interconnection customer with written documentation, after the fact, explaining the circumstances of the disconnection.

3.4.4 Adverse system impact – the EDC must provide the interconnection customer with written notice of its intention to disconnect the DER facility, if the EDC determines that operation of the DER facility creates an adverse system impact. The documentation that supports the EDC's decision to disconnect must be provided to the interconnection customer. The EDC may disconnect the DER facility if, after receipt of the notice, the interconnection customer fails to remedy the adverse system impact, unless emergency conditions exist, in which case, the provisions of Article 3.4.1 apply. The EDC may continue to leave the generating facility disconnected until the adverse system impact is corrected.

3.4.5 Modification of the DER facility – The interconnection customer must receive written authorization from the EDC prior to making any change to the DER facility, other than a minor equipment modification. If the interconnection customer modifies its facility without the EDC's prior written authorization, the EDC has the right to disconnect the DER facility until such time as the EDC concludes the modification poses no threat to the safety or reliability of its electric distribution system.

3.4.6 The EDC's compliance with Article 3 shall preclude any claim for damage for any lost opportunity or other costs incurred by the interconnection customer as a result of an interruption of service under Article 3. Any dispute over whether the EDC complied with Article 3 shall be resolved in accordance with the dispute resolution mechanism set forth in Article 8.

Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

4.1 Interconnection Facilities

4.1.1 The interconnection customer shall pay, or reimburse the EDC, as applicable, for the cost of the interconnection facilities itemized in Attachment 3. The EDC shall identify the additional interconnection facilities necessary to interconnect the DER facility with the EDC's electric distribution system, the cost of those facilities, and the time required to build and install those facilities, as well as an estimated date of completion of the building or installation of those facilities.

4.1.2 The interconnection customer is responsible for its expenses, including overheads, associated with owning, operating, maintaining, repairing, and replacing its interconnection equipment.

4.2 Distribution Upgrades

The EDC shall design, procure, construct, install, and own any distribution upgrades. The actual cost of the distribution upgrades, including overheads, shall be directly assigned to the interconnection customer whose DER facility caused the need for the distribution upgrades.

Article 5. Billing, Payment, Milestones, and Financial Security

5.1 Billing and Payment Procedures and Final Accounting (Applies to additional reviews conducted under a Level 1, 2 or 3 review with EDC construction necessary for accommodating the DER facility and Level 4 reviews)

5.1.1 The EDC shall bill the interconnection customer for the design, engineering, construction, and procurement costs of EDC-provided interconnection facilities and distribution upgrades contemplated by this Agreement as set forth in Attachment 3. The billing shall occur on a monthly basis, or as otherwise agreed to between the Parties. The interconnection customer shall pay each bill within 30 calendar days after receipt, or as otherwise agreed to between the Parties.

5.1.2 Unless waived by the interconnection customer, within 90 calendar days after completing the construction and installation of the EDC's interconnection facilities and distribution upgrades described in Attachments 2 and 3 to this Agreement, the EDC shall provide the interconnection customer with a final accounting report of any difference between (1) the actual cost incurred to complete the construction and installation of the EDC's interconnection facilities and distribution upgrades; and (2) the interconnection customer's previous deposit and aggregate payments to the EDC for the interconnection facilities and distribution upgrades. If the interconnection customer's cost responsibility exceeds its previous deposit and aggregate payments, the EDC shall invoice the interconnection customer for the amount due and the interconnection customer shall pay the EDC within 30 calendar days. If the interconnection customer's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, the EDC shall refund to the interconnection customer an amount equal to the difference within 30 calendar days after the final accounting report. Upon request from the interconnection customer, if the difference between the budget estimate and the actual cost exceeds 20%, the EDC will provide a written explanation for the difference.

5.1.3 If a Party disputes any portion of its payment obligation pursuant to this Article 5, the Party shall pay in a timely manner all non-disputed portions of its invoice, and the disputed amount shall be resolved pursuant to the dispute resolution provisions contained in Article 8. A Party disputing a portion of an Article 5 payment shall not be considered to be in default of its obligations under this Article.

5.2 Interconnection Customer Deposit
Within 15 business days after signing and returning the interconnection agreement to the EDC, the interconnection customer shall provide the EDC with a deposit equal to 100% of the estimated, non-binding cost to procure, install, or construct any such facilities (the "Security Deposit"). However, when the estimated date of completion of the building or installation of facilities exceeds three months from the date of notification, pursuant to Article 4.1.1 of this Agreement, this deposit may be held in escrow by a mutually agreed-

upon third-party, with any interest to inure to the benefit of the interconnection customer. To the extent that this interconnection agreement is terminated for any reason, the EDC shall return all deposits provided by the interconnection customer, less any actual costs incurred by the EDC.

Article 6. Assignment, Limitation on Damages, Indemnity, Force Majeure, and Default

6.1 Assignment

This Agreement may be assigned by either Party. If the interconnection customer attempts to assign this Agreement, the assignee must agree to the terms of this Agreement in writing and such writing must be provided to the EDC. Any attempted assignment that violates this Article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason of the assignment. An assignee is responsible for meeting the same obligations as the assignor.

6.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate (including mergers, consolidations, or transfers, or a sale of a substantial portion of the Party's assets, between the Party and another entity), of the assigning Party that has an equal or greater credit rating and the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement.

6.1.2 The interconnection customer can assign this Agreement, without the consent of the EDC, for collateral security purposes to aid in providing financing for the DER facility.

6.2 Limitation on Damages

Except for cases of gross negligence or willful misconduct, the liability of any Party to this Agreement shall be limited to direct actual damages and reasonable attorney's fees, and all other damages at law are waived. Under no circumstances, except for cases of gross negligence or willful misconduct, shall any Party or its directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits, lost revenues, replacement power, cost of capital or replacement equipment. This limitation on damages shall not affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement. The provisions of this Article 6.2 shall survive the termination or expiration of the Agreement.

6.3 Indemnity

6.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 6.2.

6.3.2 The interconnection customer shall indemnify and defend the EDC and the EDC's directors, officers, employees, and agents, from all damages and expenses resulting from a third party claim arising out of or based upon the interconnection customer's (a) negligence or willful misconduct or (b) breach of this Agreement.

6.3.3 The EDC shall indemnify and defend the interconnection customer and the interconnection customer's directors, officers, employees, and agents from all damages and expenses resulting from a third party claim arising out of or based upon the EDC's (a) negligence or willful misconduct or (b) breach of this Agreement.

6.3.4 Within 5 business days after receipt by an indemnified Party of any claim or notice that an action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply has commenced, the indemnified Party shall notify the indemnifying Party of such fact. The failure to notify, or a delay in notification, shall not affect a Party's indemnification obligation unless that failure or delay is materially prejudicial to the indemnifying Party.

6.3.5 If an indemnified Party is entitled to indemnification under this Article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this Article, to assume the defense of such claim, that indemnified Party may, at the expense of the indemnifying Party, contest, settle or consent to the entry of any judgment with respect to, or pay in full, the claim.

6.3.6 If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this Article, the amount owing to the indemnified person shall be the amount of the indemnified Party's actual loss, net of any insurance or other recovery.

6.4 Force Majeure

6.4.1 As used in this Article, a force majeure event shall mean any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A force majeure event does not include an act of gross negligence or intentional wrongdoing by the Party claiming force majeure.

6.4.2 If a force majeure event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the force majeure event ("Affected Party") shall notify the other Party of the existence of the force majeure event within one

business day. The notification must specify the circumstances of the force majeure event, its expected duration, and the steps that the Affected Party is taking and will take to mitigate the effects of the event on its performance. If the initial notification is verbal, it must be followed up with a written notification within one business day. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the force majeure event until the event ends. The Affected Party may suspend or modify its obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the force majeure event cannot be otherwise mitigated.

6.5 Default

6.5.1 No default shall exist when the failure to discharge an obligation (other than the payment of money) results from a force majeure event as defined in this Agreement, or the result of an act or omission of the other Party.

6.5.2 A Party shall be in default ("Default") of this Agreement if it fails in any material respect to comply with, observe or perform, or defaults in the performance of, any covenant or obligation under this Agreement and fails to cure the failure within 60 calendar days after receiving written notice from the other Party. Upon a default of this Agreement, the non-defaulting Party shall give written notice of the default to the defaulting Party. Except as provided in Article 6.5.3, the defaulting Party has 60 calendar days after receipt of the default notice to cure the default; provided, however, if the default cannot be cured within 60 calendar days, the defaulting Party shall commence the cure within 20 calendar days after original notice and complete the cure within six months from receipt of the default notice; and, if cured within that time, the default specified in the notice shall cease to exist.

6.5.3 If a Party has assigned this Agreement in a manner that is not specifically authorized by Article 6.1, fails to provide reasonable access pursuant to Article 2.3, and is in default of its obligations pursuant to Article 7, or if a Party is in default of its payment obligations pursuant to Article 5 of this Agreement, the defaulting Party has 30 days from receipt of the default notice to cure the default.

6.5.4 If a default is not cured as provided for in this Article, or if a default is not capable of being cured within the period provided for in this Article, the non-defaulting Party shall have the right to terminate this Agreement by written notice, and be relieved of any further obligation under this Agreement and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due under this Agreement, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article shall survive termination of this Agreement.

Article 7. Insurance

For DER facilities with a nameplate capacity of 1 MVA or above, the interconnection customer shall carry sufficient insurance coverage so that the maximum comprehensive/general liability coverage that is continuously maintained by the interconnection customer during the term shall be not less than $2,000,000 for each occurrence, and an aggregate, if any, of at least $4,000,000. The EDC, its officers, employees and agents shall be added as an additional insured on this policy. The interconnection customer agrees to provide the EDC with at least 30 calendar days advance written notice of cancellation, reduction in limits, or non-renewal of any insurance policy required by this Article.

Article 8. Dispute Resolution

8.1 Parties shall attempt to resolve all disputes regarding interconnection as provided in this Article in a good faith manner.

8.2 If there is a dispute between the Parties about implementation or an interpretation of the Agreement, the aggrieved Party shall issue a written notice to the other Party to the agreement that specifies the dispute and the Agreement articles that are disputed.

8.3 A meeting between the Parties shall be held within 10 days after receipt of the written notice. Persons with decision-making authority from each Party shall attend the meeting. If the dispute involves technical issues, persons with sufficient technical expertise and familiarity with the issue in dispute from each Party shall also attend the meeting. The meeting may be conducted by teleconference. The informal process between the parties shall extend 30 days after the receipt of written notice, after which the dispute is deemed resolved and the timeframes for decisions within the interconnection process procedures described in Article 8.4 or files a formal complaint at the Commission prior to the end of the 30-day period.

8.4 If the parties are unable to resolve the dispute through the process outlined in Article 8.3, either party may submit the interconnection dispute to an Ombudsman for non-binding arbitration. The party electing non-binding arbitration shall notify the other party of the request in writing. The non-binding arbitration process is limited to 60 days, absent mutual agreement of the parties and the Ombudsman to a longer period.

8.5 Each party shall bear its own fees, costs and expenses and an equal share of the expenses of the non-binding arbitration.

8.6 Within 10 days after the conclusion of the procedures in Article 8.4, either party may initiate a formal complaint with the Commission and ask for an expedited resolution of the dispute. If the complaint seeks expedited resolution, any written recommendation of the Ombudsman shall be appended to the complaint. The formal complaint shall proceed as a contested hearing pursuant to the Commission's Rules of Practice.

8.7 A party may, after good faith negotiations have failed, decline to pursue non-binding arbitration and instead initiate a formal complaint with the Commission. The formal complaint shall proceed as a contested hearing pursuant to the Commission's Rules of Practice.

8.8 Pursuit of dispute resolution may not affect an interconnection request or an interconnection applicant's position in the EDC's interconnection queue.

8.9 If the Parties fail to resolve their dispute under the dispute resolution provisions of this Article, nothing in this Article shall affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement.

Article 9. Miscellaneous

9.1 Governing Law, Regulatory Authority, and Rules
The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of Illinois, without regard to its conflicts of law principles. This Agreement is subject to all applicable laws and regulations. Each Party expressly reserves the right to seek change in, appeal, or otherwise contest any laws, orders or regulations of a governmental authority. The language in all parts of this Agreement shall in all cases be construed as a whole, according to its fair meaning, and not strictly for or against the EDC or interconnection customer, regardless of the involvement of either Party in drafting this Agreement.

9.2 Amendment
Modification of this Agreement shall be only by a written instrument duly executed by both Parties.

9.3 No Third-Party Beneficiaries
This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations in this Agreement assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

9.4 Waiver

9.4.1 Except as otherwise provided in this Agreement, a Party's compliance with any obligation, covenant, agreement, or condition in this Agreement may be waived by the Party entitled to the benefits thereof only by a written instrument signed by the Party granting the waiver, but the waiver or failure to insist upon strict compliance with the obligation, covenant, agreement, or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure.

9.4.2. Failure of any Party to enforce or insist upon compliance with any of the terms or conditions of this Agreement, or to give notice or declare this Agreement or the

rights under this Agreement terminated, shall not constitute a waiver or relinquishment of any rights set out in this Agreement, but the same shall be and remain at all times in full force and effect, unless and only to the extent expressly set forth in a written document signed by that Party granting the waiver or relinquishing any such rights. Any waiver granted, or relinquishment of any right, by a Party shall not operate as a relinquishment of any other rights or a waiver of any other failure of the Party granted the waiver to comply with any obligation, covenant, agreement, or condition of this Agreement.

9.5 Entire Agreement

Except as provided in Article 9.1, this Agreement, including all attachments, constitutes the entire Agreement between the Parties with reference to the subject matter of this Agreement, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

9.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument.

9.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties, or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

9.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority, (1) that portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by the ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

9.9 Environmental Releases

Each Party shall notify the other Party of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the DER facility or the interconnection facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided that Party makes a good faith effort to provide the notice no later than 24 hours after that Party becomes aware of the occurrence, and (2) promptly furnish

to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

9.10 Subcontractors

Nothing in this Agreement shall prevent a Party from using the services of any subcontractor it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing services and each Party shall remain primarily liable to the other Party for the performance of the subcontractor.

9.10.1 A subcontract relationship does not relieve any Party of any of its obligations under this Agreement. The hiring Party remains responsible to the other Party for the acts or omissions of its subcontractor. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of the hiring Party.

9.10.2 The obligations under this Article cannot be limited in any way by any limitation of subcontractor's insurance.

Article 10. Notices

10.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to Interconnection Customer:

Interconnection Customer: Solar Landscape LLC

Attention:

Address: 601 Bangs Ave Unit 301

City: Asbury Park State: New Jersey Zip: 07712

Phone: 201-543-7102 Fax: E-Mail: interconnection@solarlandscape.com

If to EDC:

EDC: Commonwealth Edison Company

Attention: DER Interconnection

Address: 2 Lincoln Center

City: Oakbrook Terrace State: IL Zip: 60181

Phone: 630-576-8158 E-Mail: interconnect@comed.com

Alternative Forms of Notice

Any notice or request required or permitted to be given by either Party to the other Party and not required by this Agreement to be in writing may be given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out above.

10.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

If to Interconnection Customer

Interconnection Customer: Solar Landscape LLC

Attention:

Address: 601 Bangs Ave Unit 301

City: Asbury Park State: New Jersey Zip: 07712

Phone 201-543-7102 Fax _____ Email interconnection@solarlandscape.com

If to EDC:

EDC: Commonwealth Edison

Attention: DER Interconnection

Address: 2 Lincoln Center

City: Oakbrook Terrace State: IL Zip: 60181

Phone _____ Fax _____ E-Mail _____

10.3 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications that may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative: _____

Attention: James McCarten - Director of Interconnection

Address: 601 Bangs Ave, Suite 301

City: Asbury Park State: NJ Zip: 07712

Phone: 201-543-7102 Fax: _____ Email: interconnection@solarlandscape.com

Phone _____ Fax _____ E-Mail _____

EDC's Operating Representative: Commonwealth Edison Company

Attention: Customer Operations

Address: ComEd - 2 Lincoln Center – Call Center

City: Oakbrook State: IL Zip: 60181

Phone 1-800-334-7661 Fax _____ E-Mail _____

_____

10.4 Changes to the Notice Information

Either Party may change this notice information by giving five business days written notice before the effective date of the change.

Article 11. Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

Project Name: 8625 Waukegan

For the Interconnection Customer:

Name: James McCarten

Title: Director of Interconnection

Date: 9/19/2024

For EDC:

Name: Kelli Freiberg

Title: Principal Contract Specialist

Date: 9/23/2024

Attachment 1

Definitions

Adverse system impact – A negative effect that compromises the safety or reliability of the electric distribution system or materially affects the quality of electric service provided by the electric distribution company (EDC) to other customers.

Applicable laws and regulations – All duly promulgated applicable federal, State and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any governmental authority, having jurisdiction over the Parties.

Commissioning test – Tests applied to a energy resources facility by the applicant after construction is completed to verify that the facility does not create adverse system impacts. At a minimum, the scope of the commissioning tests performed shall include the commissioning test specified by IEEE Standard 1547 Section 5.4 "Commissioning tests."

Distributed energy resources (DER) facility – The equipment used by an interconnection customer to generate or store electricity that operates in parallel with the electric distribution system. A DER facility typically includes an electric generator, prime mover, and the interconnection equipment required to safely interconnect with the electric distribution system or a local electric power system.

Distribution upgrades – A required addition or modification to the EDC's electric distribution system at or beyond the point of interconnection to accommodate the interconnection of a DER facility. Distribution upgrades do not include interconnection facilities.

Electric distribution company or EDC – Any electric utility entity subject to the jurisdiction of the Illinois Commerce Commission.

Electric distribution system – The facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries from interchanges with higher voltage transmission networks that transport bulk power over longer distances. The voltage levels at which electric distribution systems operate differ among areas but generally carry less than 100 kilovolts of electricity. Electric distribution system has the same meaning as the term Area EPS, as defined in 3.1.6.1 of IEEE Standard 1547.

Facilities study – An engineering study conducted by the EDC to determine the required modifications to the EDC's electric distribution system, including the cost and the time required to build and install the modifications, as necessary to accommodate an interconnection request.

Force majeure event – Any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any

other cause beyond a Party's control. A force majeure event does not include an act of gross negligence or intentional wrongdoing.

Governmental authority – Any federal, State, local or other governmental regulatory or administrative agency, court, commission, department, board, other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that this term does not include the interconnection customer, EDC or any affiliate of either.

IEEE Standard 1547 – The Institute of Electrical and Electronics Engineers, Inc. (IEEE), 3 Park Avenue, New York NY 10016-5997, Standard 1547 (2003), "Standard for Interconnecting Distributed Resources with Electric Power Systems."

IEEE Standard 1547.1 – The IEEE Standard 1547.1 (2005), "Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems."

Illinois standard distributed energy resources Interconnection Rules – The most current version of the procedures for interconnecting distributed energy resources facilities adopted by the Illinois Commerce Commission. See 83 Ill. Adm. Code 466

Interconnection agreement or Agreement – The agreement between the interconnection customer and the EDC. The interconnection agreement governs the connection of the DER facility to the EDC's electric distribution system and the ongoing operation of the DER facility after it is connected to the EDC's electric distribution system.

Interconnection customer – The entity entering into this Agreement for the purpose of interconnecting a DER facility to the EDC's electric distribution system.

Interconnection equipment – A group of components or an integrated system connecting an electric generator with a local electric power system or an electric distribution system that includes all interface equipment, including switchgear, protective devices, inverters or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.

Interconnection facilities – Facilities and equipment required by the EDC to accommodate the interconnection of a DER facility. Collectively, interconnection facilities include all facilities, and equipment between the DER facility and the point of interconnection, including modification, additions, or upgrades that are necessary to physically and electrically interconnect the DER facility to the electric distribution system. Interconnection facilities are sole use facilities and do not include distribution upgrades.

Interconnection request – An interconnection customer's request, on the required form, for the interconnection of a new DER facility, or to increase the capacity or change the operating

characteristics of an existing DER facility that is interconnected with the EDC's electric distribution system.

Interconnection study – Any of the following studies, as determined to be appropriate by the EDC: the interconnection feasibility study, the interconnection system impact study, and the interconnection facilities study.

Load customer – An EDC customer whose primary business classification is not the production of electricity.

Parallel operation or Parallel – The state of operation that occurs when a DER facility is connected electrically to the electric distribution system.

Point of interconnection – The point where the DER facility is electrically connected to the electric distribution system. Point of interconnection has the same meaning as the term "point of common coupling" defined in 3.1.13 of IEEE Standard 1547.

Witness test – For lab-certified equipment, verification (either by an on-site observation or review of documents) by the EDC that the interconnection installation evaluation required by IEEE Standard 1547 Section 5.3 and the commissioning test required by IEEE Standard 1547 Section 5.4 have been adequately performed. For interconnection equipment that has not been lab-certified, the witness test shall also include verification by the EDC of the on-site design tests required by IEEE Standard 1547 Section 5.1 and verification by the EDC of production tests required by IEEE Standard 1547 Section 5.2. All tests verified by the EDC are to be performed in accordance with the test procedures specified by IEEE Standard 1547.1.

Attachment 2

Construction Schedule, Proposed Equipment & Settings

This attachment is to be completed by the interconnection customer and shall include the following:

1. The construction schedule for the DER facility.

   The proposed construction schedule for the DER facility is identified in Attachment 3, Schedule for Customer Work.

2. A one-line diagram indicating the DER facility, interconnection equipment, interconnection facilities, metering equipment, and distribution upgrades.

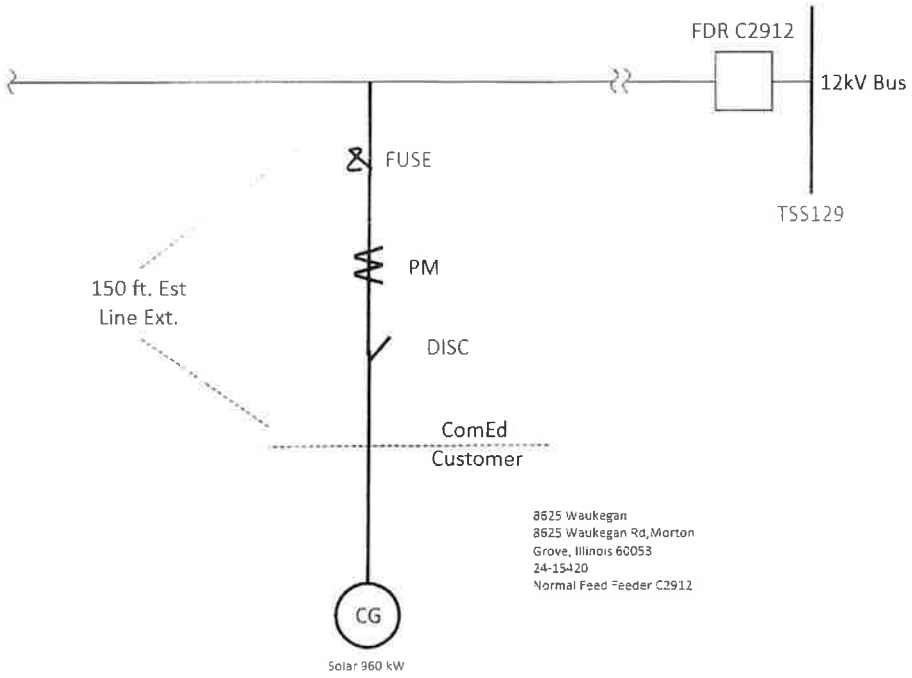
3. Component specifications for equipment identified in the one-line diagram.

4. Component settings.

5. Proposed sequence of operations.

6. A three line diagram showing current potential circuits for protective relays.

7. Relay tripping and control schematic diagram.



Project Number: 24-15420 960kW

Attachment 3

Description, Costs and Time Required to Build and Install the EDC's Interconnection Facilities

This attachment is to be completed by the EDC and shall include the following:

1. Facilities Address/ Location: 8625 Waukegan Rd,Morton Grove, Illinois 60053

2. Capacity: 960 kW

3. Required interconnection facilities, including any required metering*.

   1) Install approx. 150ft of 3-ph OVHD line extension

   2) Install normally closed fuse

   3) Install OVHD primary meter

   4) Install normally closed OVHD disconnect

4. An estimate of itemized costs charged by the EDC for interconnection, including overheads, is provided below*.

Cost Summary	
Labor	$157,000
Materials	$25,000
Indirects	$38,000
AIA	$20,000
Tax Gross Up	$30,000
Estimated Grand Total*	$270,000

**The scope of work and cost provided are intended to be an initial estimate based on information provided by the interconnection customer about its distributed generation system, and ComEd's engineering and design standards. The scope of work may be revised as location-specific conditions are identified during detailed design.*

5. An estimate for the time required to build and install the EDC's interconnection facilities based on results from prior studies and an estimate of the date upon which the facilities will be completed.

Schedule for EDC Work:

Project Authorization:	**Day 1 – The latter of execution of this agreement and receipt by the EDC of the security deposit set forth in Attachment 3.**
Deed, plat of Survey and Demarcation Approval *	**Day 0 - 90**
Project Design	**Day 20-254**
Material Procurement:	**Day 196-318**
Construction – Feeder Tie-In:	**Day 319-333**
Constructions – Substations Modifications:	**Day 334-341**
Acceptance Testing:	**Day 342-344**

**Deed and plat of survey need to be provided within 1 month of Project Authorization to start a site walkdown. The demarcation drawing will be issued by the EDC after the site walkdown and needs to be approved by the customer.*

Schedule for Customer Work per Attachment 2, Step 1:

Schedule for Customer Work		
Milestone	Description	Schedule (on/before)
2.1	Submittal of remainder of 100% deposit date	10/11/2024
2.1A	Submittal of deed, plat of survey and demarcation approval	11/11/24
2.2	Begin construction date	07/11/25
2.3	Generator step-up transformers receive back feed power date	10/11/2025
2.4	Generating Test Date	12/11/25
2.5	Desired In-Service Date	02/11/26

**Construction date means customer has issued a notice to proceed to any contractor performing substantial work at the site AND physical activity has occurred at the site, such as grading, earthwork, equipment installation, or other civil works, signaling construction has begun.*
EDC/ComEd requires a schedule amendment to be reviewed for any change in milestone >90 calendar days

6. Contingency Projects – Any contingencies noted: N/A

Other projects in the interconnection queue, upon which the scope, costs and schedule in Attachment 3 are contingent. This project may be required to include additional scope and costs to complete the EDC's interconnection facilities if a contingency project(s) withdraws from the interconnection queue.

Attachment 4

Operating Requirements for Distributed Energy Resources Facilities Operating in Parallel

The EDC shall list specific operating practices that apply to this DER interconnection and the conditions under which each listed specific operating practice applies.

See Articles 1,7 Parallel Operation Obligations 1.9, Reactive Power, 1.10, Standards of Operation and as identified in the prior studies.

Any additional operational practices listed below:

Attachment 5

Monitoring and Control Requirements

This attachment is to be completed by the EDC and shall include the following:

1. The EDC's monitoring and control requirements must be specified, along with a reference to the EDC's written requirements documents from which these requirements are derived.

2. An internet link to the requirements documents.

3. The If applicable, a copy of any agreement between the interconnection customer and the EDC enabling the EDC to monitor and control the distributed energy resources facility in order to preserve distribution system reliability.

https://www.comed.com/MyAccount/MyService/Pages/DistributionLess10k.aspx

http://standards.ieee.org

Attachment 6

Metering Requirements

This attachment is to be completed by the EDC and shall include the following:

1. The metering requirements for the energy resources facility.

   The specific metering requirements and equipment will be specified as part of the Detailed Engineering.

2. Identification of the appropriate tariffs that establish these requirements.

3. An internet link to these tariffs.

https://www.comed.com/MyAccount/MyService/Pages/DistributionLess10k.aspx

https://www.comed.com/MyAccount/MyBillUsage/Pages/CurrentRatesTariffs.aspx

Attachment 7

As Built Documents

This attachment is to be completed by the interconnection customer and shall include the following:

When it returns the certificate of completion to the EDC, the interconnection customer shall provide the EDC with documents detailing the as-built status of the following:

1. A one-line diagram indicating the distributed energy resources facility, interconnection equipment, interconnection facilities, and metering equipment.

2. Component specifications for equipment identified in the one-line diagram.

3. Component settings.

4. Proposed sequence of operations.

5. A three-line diagram showing current potential circuits for protective relays.

6. Relay tripping and control schematic diagram.

Attachment 8
Other Provisions

The Parties agree to the following terms and conditions in connection with the distributed generation facility.

1.1 Nothing in this Agreement shall constitute an express or implied representation or warranty on the part of EDC with respect to the current or future availability of transmission service or create any obligation on the part of EDC to accept deliveries of energy unless the interconnection customer or a third party taking delivery of such energy has arranged for transmission service with PJM Interconnection LLC, or its successor in interest, the organization that operates the EDC's transmission system ("PJM") in accordance with the PJM tariff and applicable laws and regulations. EDC may charge for service over its electric distribution system to deliver energy or power from the distributed generation facility to or from the facilities controlled or operated by PJM that are used to provide transmission service pursuant to the PJM tariff.

1.2 This Agreement does not constitute an agreement to interconnect the interconnection customer to a PJM point of interconnection.

1.3 The interconnection customer shall not be allowed to construct any facilities or install any equipment which will be owned or operated by the EDC, without the prior written consent of the EDC, which consent may be conditioned on the Parties negotiating and agreeing upon provisions to govern such construction or installation.

1.4 Tax Status. Based on information provided by the interconnection customer, EDC will make the determination as to whether all costs and other amounts payable, and property to be transferred, by interconnection customer to EDC under this Agreement (collectively, the "Paid Amounts") satisfy the tax law provisions for non-taxable status, as referenced in this Section 1.4. For any amounts that EDC determines do not qualify for non-taxable status, the interconnection customer shall comply with this Section 1.4, including without limitation paying the applicable income tax gross-up as set forth herein.

1.4.1 Tax Status

A. To qualify for non-taxable treatment with respect to the Paid Amounts, the interconnection customer must meet all qualifications and requirements as set forth in the tax laws ("Non-Taxable Treatment"). The determination of whether the Paid Amounts qualify for Non-Taxable Treatment shall be made by EDC, based on the information furnished by interconnection customer to determine tax treatment under the relevant tax law provisions.

B. To the extent EDC reasonably determines that all or a portion of the Paid Amounts qualify for Non-Taxable Treatment, both Parties intend to treat such

amounts as non-taxable contributions from interconnection customer to EDC for federal and state income tax purposes. With respect to any such Paid Amounts, interconnection customer agrees to maintain Non-Taxable Treatment for such amounts, and interconnection customer shall remain subject to the terms of this Section 1.4, in any subsequent or interim agreement related to this Agreement. To the extent EDC determines that all or a portion of the Paid Amounts are taxable, interconnection customer agrees to pay the income tax gross-up amount referenced in this Section 1.4.

1.4.2 Tax Indemnity

For any amounts the Parties treat as non-taxable pursuant to Section 1.4.1, interconnection customer shall indemnify and hold harmless EDC for any costs or taxes, penalties, and interest that EDC incurs in the event that the IRS and/or a state taxing authority determines that the Paid Amounts are taxable income to EDC. In such an event, interconnection customer shall pay to EDC, on demand, the amount of any income taxes that the IRS or a state taxing authority assesses EDC in connection with the Paid Amounts, plus any applicable interest and/or penalties assessed EDC. In the event that EDC in its sole discretion chooses to contest such assessment and prevails in reducing or eliminating the tax, interest and/or penalties assessed against it, EDC shall refund to interconnection customer the excess of the amount paid to EDC pursuant to this Section 1.4 over the amount of the tax, interest and penalties for which EDC is finally determined to be liable. Interconnection customer's tax indemnification obligation under this section shall survive any termination of this Agreement or of any subsequent or interim agreement related to this Agreement.

1.4.3 Income Tax Gross-Up

A. In the event that interconnection customer does not establish to EDC's satisfaction within 15 days of the execution of this Agreement (the "Specified Date") that the Paid Amounts are or will be non-taxable, interconnection customer shall increase the amount of the Security Deposit to include any amounts described under this Section 1.4 regarding income tax gross-up.

B. The required increase in the Security Deposit shall equal the amount necessary to permit EDC to pay all applicable income taxes ("Current Taxes") on the amounts to be paid by interconnection customer under this Agreement after taking into account the present value of future tax deductions for depreciation that would be available as a result of the anticipated payments or property transfers (the "Present Value Depreciation Amount"), with respect to such amounts. For this purpose, Current Taxes shall be computed based on the composite federal and state income

tax rates applicable to EDC at the time the Security Deposit is increased, determined using the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting EDC's anticipated tax depreciation deductions associated with such payments or property transfers by its current weighted average cost of capital. EDC may draw on the Security Deposit on a quarterly basis based on the Paid Amounts received by EDC.

C. Interconnection customer must provide the increase in the Security Deposit, in a form and with terms as acceptable to EDC, within 15 days of the Specified Date unless EDC notifies interconnection customer otherwise. The requirement for the increase in the Security Deposit under this Paragraph shall be treated as a milestone for purposes of Attachment 3 of this Agreement.

D. Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect any entity's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

E. In the event, and to the extent, (i) EDC subsequently determines that amounts for which interconnection customer has paid EDC are non-taxable, and (ii) EDC successfully obtains a refund of federal and/or state income tax originally paid with respect to such amounts, EDC shall timely return such amounts to the interconnection customer. For purposes hereof, EDC may make such a determination in light of subsequent IRS guidance, or other relevant authority. In the event of a successful refund claim by EDC, EDC shall return the remaining Security Deposit attributable to this Section 1.4, but no more than it obtains from the relevant taxing authority, less any reasonable fees incurred to secure such tax refund, to interconnection customer.

1.5 If any of EDC's facilities, in addition to those described in Section 2.3, are or will be located on interconnection customer's property, EDC shall have access to such facilities at all times and when practical, the EDC shall provide notice to the interconnection customer prior to using its right of access. Upon EDC's completion of final, detailed engineering, if EDC identifies any facilities which will be located on interconnection customer's property and requests written property rights in order to have such access, the interconnection customer shall provide such rights.

1.6 Interconnection customer shall also be responsible for paying in full to EDC all approved FERC and ICC rates and charges applicable to interconnection customer's connection to and usage of the electric distribution system, if any.

1.7 Interconnection customer shall not disclose any information labeled "CEII" or "Critical Energy Infrastructure Information" or other information labeled "Confidential" obtained pursuant to or in connection with this Agreement to any third party without the express written consent of the EDC, provided that interconnection customer may produce such information in response to a subpoena, discovery request or other compulsory process issued by a judicial body or governmental agency upon reasonable notice to the interconnection customer.

1.8 Each of the Parties shall provide the other party access to areas under its control as reasonably necessary to permit the other Party to perform its obligations under this Agreement, including operation and maintenance obligations. A Party that obtains such access shall comply with all safety rules applicable to the area to which access is obtained. Each Party agrees to inform the other Party's representatives of safety rules applicable to an area.

1.9 Article 5.1.2 of the Interconnection Agreement shall be modified as followed;

The parties agree Article 5 Section 1.2 is stricken in its entirety and replaced with, "Within 120 calendar days after completing the construction and installation of the EDC's interconnection facilities and distribution upgrades described in Attachments 2 and 3 to this Agreement, the EDC shall provide the interconnection customer with a final accounting report of any difference between (1) the actual cost incurred to complete the construction and installation of the EDC's interconnection facilities and distribution upgrades; and (2) the interconnection customer's previous deposit and aggregate payments to the EDC for the interconnection facilities and distribution upgrades. If the interconnection customer's cost responsibility exceeds its previous deposit and aggregate payments, the EDC shall invoice the interconnection customer for the amount due and the interconnection customer shall make payment to the EDC within 30 calendar days. If the interconnection customer's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, the EDC shall refund to the interconnection customer an amount equal to the difference within 30 calendar days after the final accounting report. Upon request from the interconnection customer, if the difference between the budget estimate and the actual cost exceeds 20%, the EDC will provide a written explanation for the difference."

DocuSign

Certificate Of Completion

Envelope Id: 9D5F0601FB424B3DB2B9E60827F2DE8F
Subject: Complete with Docusign: 24-15420 8625 Waukegan Rd- App D Blank.pdf
Source Envelope:
Document Pages: 33
Certificate Pages: 1
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Signatures: 1
Initials: 0

Status: Completed

Envelope Originator:
Alex Gross
522 Cookman Ave
Ste. 3
Asbury Park, NJ 07712
agross@solarlandscape.com
IP Address: 173.54.193.75

Record Tracking

Status: Original
9/19/2024 11:50:44 AM

Holder: Alex Gross
agross@solarlandscape.com

Location: DocuSign

Signer Events	Signature	Timestamp
James McCarten jmccarten@solarlandscape.com Director of Interconnection Solar Landscape LLC Security Level: Email, Account Authentication (None)	DocuSigned by: James McCarten 4C854E6664954EB Signature Adoption: Pre-selected Style Using IP Address: 173.54.193.75	Sent: 9/19/2024 1:54:39 PM Viewed: 9/19/2024 1:55:12 PM Signed: 9/19/2024 1:55:52 PM

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

In Person Signer Events	Signature	Timestamp
Editor Delivery Events	**Status**	**Timestamp**
Agent Delivery Events	**Status**	**Timestamp**
Intermediary Delivery Events	**Status**	**Timestamp**
Certified Delivery Events	**Status**	**Timestamp**
Carbon Copy Events	**Status**	**Timestamp**
Witness Events	**Signature**	**Timestamp**
Notary Events	**Signature**	**Timestamp**

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	9/19/2024 1:54:40 PM
Certified Delivered	Security Checked	9/19/2024 1:55:12 PM
Signing Complete	Security Checked	9/19/2024 1:55:52 PM
Completed	Security Checked	9/19/2024 1:55:52 PM

Payment Events	Status	Timestamps

James H. Weil
Senior Manager, Pre-Construction
Solar Landscape LLC
601 Bangs Avenue, Suite 301
Asbury Park, NJ 07712

October 4th, 2025

Village of Morton Grove Appearance Commission
6101 Capulina Avenue
Morton Grove, IL 60053

Technical Memorandum

Introduction

Solar Landscape proposes to construct, operate, and maintain a rooftop solar system that will participate in the Illinois Shines Community Solar program. The project is located at 8625 Waukegan Rd, Morton Grove, IL. Project is sited adjacent a major road to the west, residential dwellings to the south, forest and field to the east, and a commercial shopping center to the north.

Purpose

The purpose of this technical memorandum is to summarize potential glinting and glare effects of the project. Based on the results of these effects, potential health, safety, and visual mitigation measures associated with these glinting and glare effects may be proposed. For the purposes of this technical memorandum, glint is defined as a bright, momentary flash of light; glare is defined as a more continuous and sustained presence of light that may appear to "sparkle" from public viewing locations.

The source of potential glint and glare for the project is the proposed photovoltaic (PV) panels. However, PV panel surfaces are designed specifically not to reflect light, thus reducing the potential for glint and glare.

Glint and Glare Analysis

The analysis focused on potential glare effects on observation points. These observation points consist of each building on the north end of the Trafalgar Woods townhouse community and the internal streets. Waukegan road is also included as an observation point.

Assumptions

- The proposed solar project will operate 365 days per year, during daylight hours.
- "Green" glare is glare with low potential to cause an afterimage (flash blindness) when observed prior to a typical blink response time.
- "Yellow" glare is glare with potential to cause an afterimage (flash blindness) when observed prior to a typical blink response time.
- "Red" glare is glare with potential to cause retinal burn (permanent eye damage) when observed prior to a typical blink response time.
- Panels are designed to absorb sunlight and will be treated with anti-reflective coatings that will absorb and transmit light rather than reflect it

Software

Analysis for the project was conducted using the GlareGauge model (also known as Solar Glare Hazard Analysis Tool [SGHAT]) developed by Forge Solar and the U.S. Department of Energy's Sandia National Laboratories to evaluate potential glare. GlareGauge employs an interactive Google map where the user can quickly locate a site, draw an outline of the proposed solar energy system, and specify observer locations and, if needed, aircraft approach paths. Latitude, longitude, and elevation are automatically recorded through the Google interface, providing necessary information for sun position and vector calculations. Additional information regarding the orientation and tilt of the solar energy panels, reflectance, environment, and ocular factors are entered by the user.

Results

The project has been found to create no potential for glare at any of the observation points.

FORGESOLAR GLARE ANALYSIS

Project: **8625 Waukegan Rd, Morton Grove, IL 60053**
Proposed Community Solar Array

Site configuration: **BTM Revision**

Client: Solar Landscape

Created 03 Oct, 2025
Updated 03 Oct, 2025
Time-step 1 minute
Timezone offset UTC-6
Minimum sun altitude 0.0 deg
DNI peaks at 1,000.0 W/m^2
Category 500 kW to 1 MW
(1,000 kW / 8 acre limit)
Site ID 161008.25741

Ocular transmission coefficient 0.5
Pupil diameter 0.002 m
Eye focal length 0.017 m
Sun subtended angle 9.3 mrad
PV analysis methodology V2

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Flat Roof 1A	5.0	180.0	0	0.0	0	0.0	-
Flat Roof 1B	5.0	180.0	0	0.0	0	0.0	-
Flat Roof 2	5.0	180.0	0	0.0	0	0.0	-
Pitched Roof 1A	3.0	270.0	0	0.0	0	0.0	-
Pitched Roof 1B	3.0	90.0	0	0.0	0	0.0	-
Pitched Roof 2	3.0	0.0	0	0.0	0	0.0	-
Pitched Roof 3A	3.0	0.0	0	0.0	0	0.0	-
Pitched Roof 3B	3.0	180.0	0	0.0	0	0.0	-
Pitched Roof 3B2	0.0	180.0	0	0.0	0	0.0	-
Pitched Roof 4	3.0	0.0	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Component Data

PV Arrays

Name: Flat Roof 1A
Axis tracking: Fixed (no rotation)
Tilt: 5.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038453	-87.798527	635.46	22.80	658.26
2	42.038455	-87.797781	632.30	22.80	655.10
3	42.038031	-87.797774	632.78	22.80	655.58
4	42.038027	-87.798524	632.47	22.80	655.27

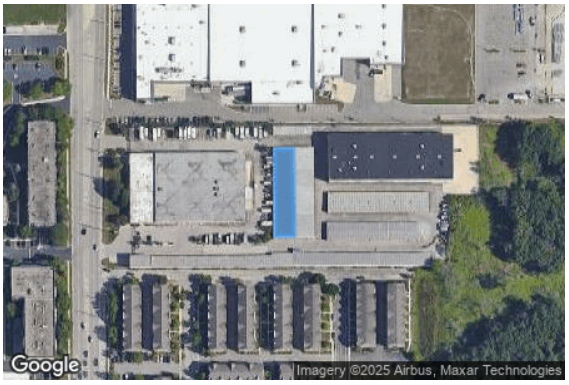
Name: Flat Roof 1B
Axis tracking: Fixed (no rotation)
Tilt: 5.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038448	-87.798744	635.37	18.80	654.17
2	42.038448	-87.798553	635.46	18.80	654.26
3	42.038029	-87.798553	632.60	18.80	651.40
4	42.038027	-87.798740	633.96	18.80	652.76

Name: Flat Roof 2
Axis tracking: Fixed (no rotation)
Tilt: 5.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038569	-87.797039	630.91	32.80	663.71
2	42.038571	-87.795992	626.67	32.80	659.47
3	42.038299	-87.795992	626.80	32.80	659.60
4	42.038293	-87.797037	632.09	32.80	664.89

Name: Pitched Roof 1A
Axis tracking: Fixed (no rotation)
Tilt: 3.0°
Orientation: 270.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038487	-87.797358	632.19	12.00	644.19
2	42.037934	-87.797349	633.80	12.00	645.80
3	42.037932	-87.797511	633.03	10.00	643.03
4	42.038486	-87.797515	632.28	10.00	642.28

Name: Pitched Roof 1B
Axis tracking: Fixed (no rotation)
Tilt: 3.0°
Orientation: 90.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038488	-87.797186	632.99	10.00	642.99
2	42.037934	-87.797181	631.20	10.00	641.20
3	42.037934	-87.797331	633.77	12.00	645.77
4	42.038487	-87.797336	632.19	12.00	644.19

Name: Pitched Roof 2
Axis tracking: Fixed (no rotation)
Tilt: 3.0°
Orientation: 0.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038207	-87.797056	632.15	10.00	642.15
2	42.038211	-87.796200	628.66	10.00	638.66
3	42.038086	-87.796193	628.84	11.50	640.34
4	42.038083	-87.797059	632.35	11.50	643.85

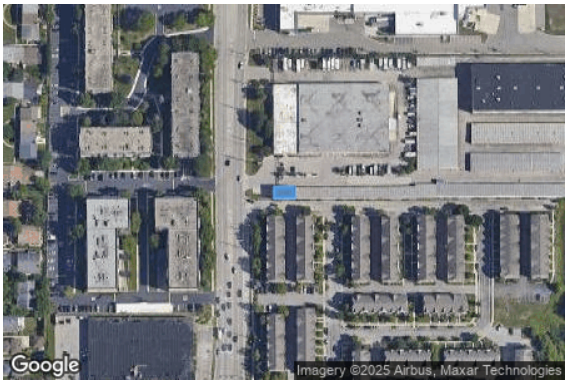
Name: Pitched Roof 3A
Axis tracking: Fixed (no rotation)
Tilt: 3.0°
Orientation: 0.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.038016	-87.797063	632.35	10.00	642.35
2	42.038018	-87.796254	629.48	10.00	639.48
3	42.037964	-87.796253	628.66	10.00	638.66
4	42.037961	-87.797063	631.76	10.00	641.76

Name: Pitched Roof 3B
Axis tracking: Fixed (no rotation)
Tilt: 3.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037960	-87.797064	631.76	10.00	641.76
2	42.037963	-87.796254	628.66	10.00	638.66
3	42.037909	-87.796252	627.66	10.00	637.66
4	42.037907	-87.797063	630.48	10.00	640.48

Name: Pitched Roof 3B2
Axis tracking: Fixed (no rotation)
Tilt: 0.0°
Orientation: 180.0°
Rated power: -
Panel material: Light textured glass with AR coating
Reflectivity: Vary with sun
Slope error: correlate with material



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037805	-87.798754	632.45	21.00	653.45
2	42.037807	-87.798586	633.76	21.00	654.76
3	42.037741	-87.798583	634.95	22.50	657.45
4	42.037740	-87.798754	633.09	22.50	655.59

Name: Pitched Roof 4
Axis tracking: Fixed (no rotation)
Tilt: 3.0°
Orientation: 0.0°
Rated power: -
Panel material: Light textured glass without AR coating
Reflectivity: Vary with sun
Slope error: correlate with material

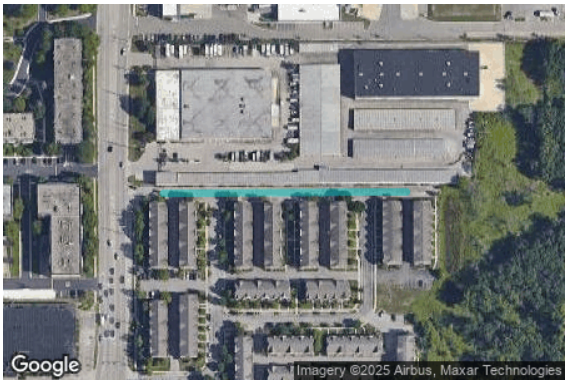
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037750	-87.796180	626.84	13.00	639.84
2	42.037737	-87.798558	635.05	13.00	648.05
3	42.037801	-87.798559	634.34	10.50	644.84
4	42.037807	-87.797543	632.10	10.50	642.60
5	42.037822	-87.797543	632.14	10.50	642.64
6	42.037828	-87.796180	627.49	10.50	637.99

Route Receptors

Name: Grove Street
Path type: Two-way
Azimuthal view angle: 45.0°
Downward view angle: 10.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037678	-87.798249	631.79	0.00	631.79
2	42.036704	-87.798238	630.77	0.00	630.77

Name: Meadow Lane
Path type: Two-way
Azimuthal view angle: 45.0°
Downward view angle: 0.0°



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037679	-87.798709	634.33	0.00	634.33
2	42.037688	-87.796617	629.30	0.00	629.30

Name: Prairie Street
Path type: Two-way
Azimuthal view angle: 45.0°
Downward view angle: 10.0°

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.037687	-87.796959	629.90	0.00	629.90
2	42.036965	-87.796945	627.45	0.00	627.45

Name: Waukegan Drive
Path type: Two-way
Azimuthal view angle: 45.0°
Downward view angle: 10.0°

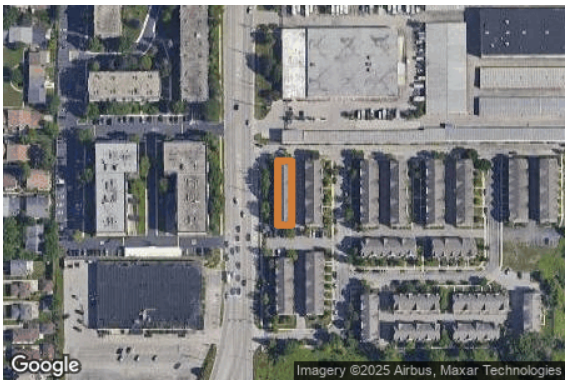
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)	Height above ground (ft)	Total elevation (ft)
1	42.039242	-87.799116	634.72	0.00	634.72
2	42.036398	-87.799121	631.06	0.00	631.06

Discrete Observation Point Receptors

Name	ID	Latitude (°)	Longitude (°)	Elevation (ft)	Height (ft)
OP 1	1	42.037630	-87.798612	635.33	5.00
OP 2	2	42.037628	-87.797883	632.63	4.00
OP 3	3	42.037626	-87.797317	631.99	5.00
OP 4	4	42.037632	-87.796595	629.46	5.00
OP 5	5	42.037598	-87.798822	633.52	12.00
OP 6	6	42.037597	-87.798657	634.87	14.00
OP 7	7	42.037596	-87.798571	634.88	12.00
OP 8	8	42.037598	-87.798403	632.28	12.00
OP 9	9	42.037598	-87.798101	631.96	11.00
OP 10	10	42.037598	-87.797934	632.46	12.00
OP 11	11	42.037597	-87.797835	632.73	12.00
OP 12	12	42.037596	-87.797681	632.81	12.00
OP 13	13	42.037598	-87.797532	632.85	12.00
OP 14	14	42.037593	-87.797372	632.27	12.00
OP 15	15	42.037587	-87.797275	631.79	12.00
OP 16	16	42.037590	-87.797117	630.72	12.00
OP 17	17	42.037608	-87.796819	629.80	11.00
OP 18	18	42.037595	-87.796648	629.41	12.00
OP 19	19	42.037596	-87.796559	629.11	12.00
OP 20	20	42.037602	-87.796391	626.24	12.00

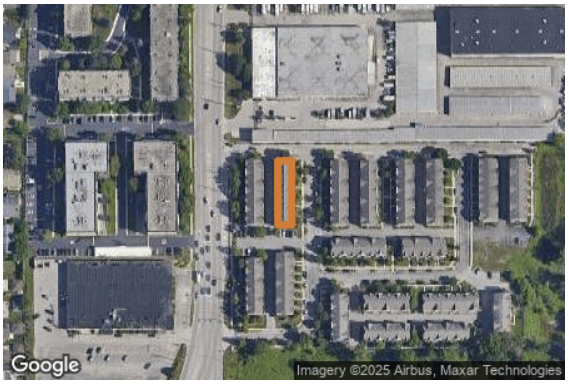
Obstruction Components

Name: Building 1
Top height: 35.0 ft



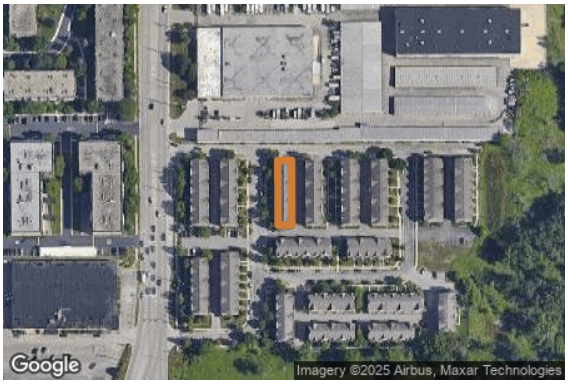
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037617	-87.798800	633.44
2	42.037210	-87.798800	633.41
3	42.037209	-87.798679	631.95
4	42.037617	-87.798678	634.91
5	42.037618	-87.798800	633.44

Name: Building 2
Top height: 35.0 ft



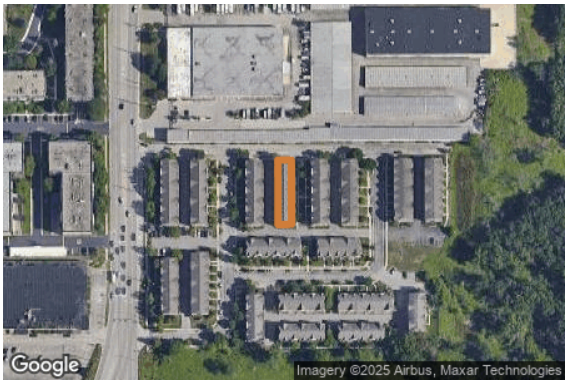
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037616	-87.798547	635.06
2	42.037211	-87.798546	630.63
3	42.037210	-87.798427	630.50
4	42.037618	-87.798427	632.76
5	42.037617	-87.798548	635.06

Name: Building 3
Top height: 35.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037617	-87.798073	632.22
2	42.037208	-87.798070	631.11
3	42.037209	-87.797951	632.62
4	42.037620	-87.797953	632.49
5	42.037619	-87.798074	632.22

Name: Building 4
Top height: 35.0 ft

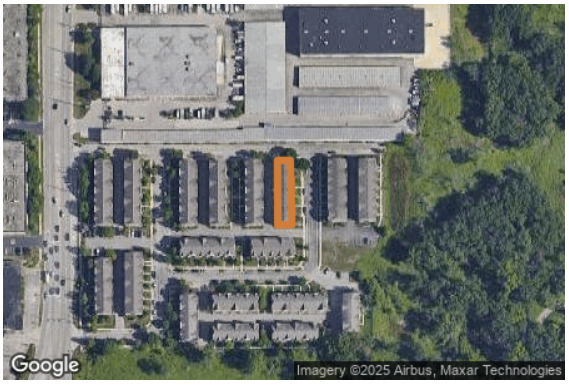


Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037619	-87.797814	632.71
2	42.037208	-87.797812	633.14
3	42.037211	-87.797696	633.35
4	42.037619	-87.797699	632.54
5	42.037619	-87.797814	632.71

Name: Building 5
Top height: 35.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037619	-87.797507	632.58
2	42.037209	-87.797499	631.69
3	42.037212	-87.797383	631.12
4	42.037620	-87.797388	632.30
5	42.037621	-87.797507	632.58

Name: Building 6
Top height: 35.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037621	-87.797251	631.78
2	42.037211	-87.797248	630.77
3	42.037212	-87.797127	629.76
4	42.037622	-87.797141	631.25
5	42.037622	-87.797251	631.78

Name: Building 7
Top height: 35.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037626	-87.796800	629.73
2	42.037240	-87.796795	629.05
3	42.037241	-87.796668	628.12
4	42.037627	-87.796674	629.54
5	42.037626	-87.796800	629.73

Name: Building 8
Top height: 35.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037626	-87.796539	629.28
2	42.037243	-87.796533	627.31
3	42.037242	-87.796406	625.48
4	42.037628	-87.796409	627.52
5	42.037628	-87.796539	629.28

Name: Building FR 1A
Top height: 22.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038463	-87.797768	632.29
2	42.038022	-87.797764	632.71
3	42.038016	-87.798535	632.51
4	42.038461	-87.798541	635.47
5	42.038463	-87.797768	632.29

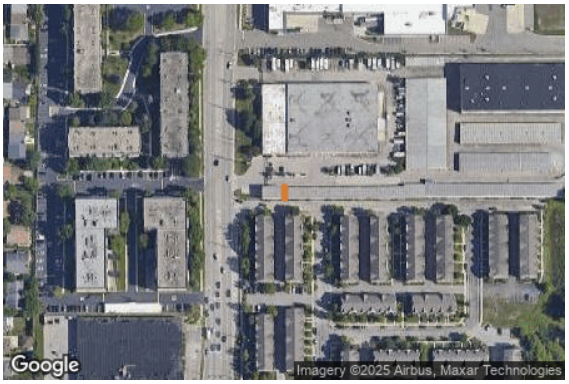
Name: Building FR 1B
Top height: 18.0 ft

Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038457	-87.798547	635.47
2	42.038459	-87.798757	635.27
3	42.038018	-87.798756	634.02
4	42.038017	-87.798542	632.51

Name: Building FR 2
Top height: 32.0 ft

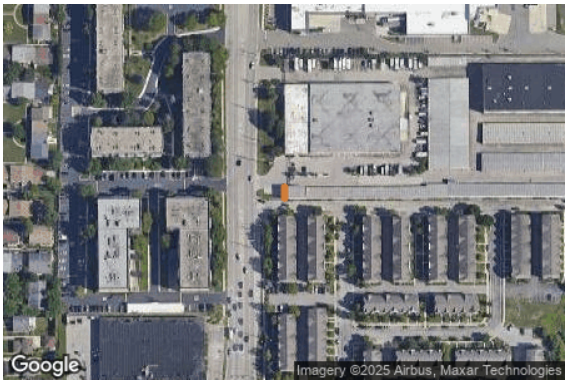
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038574	-87.797049	631.00
2	42.038578	-87.795979	626.65
3	42.038292	-87.795979	626.70
4	42.038286	-87.797047	632.08
5	42.038574	-87.797049	631.00

Name: Obstruction 20
Top height: 21.5 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037809	-87.798572	634.07
2	42.037736	-87.798570	635.00

Name: SBU2
Top height: 22.0 ft

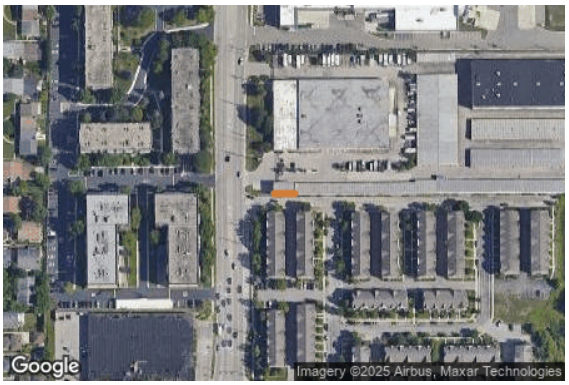


Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037737	-87.798761	632.94
2	42.037809	-87.798761	632.40

Name: South Building Lower Level
Top height: 13.0 ft

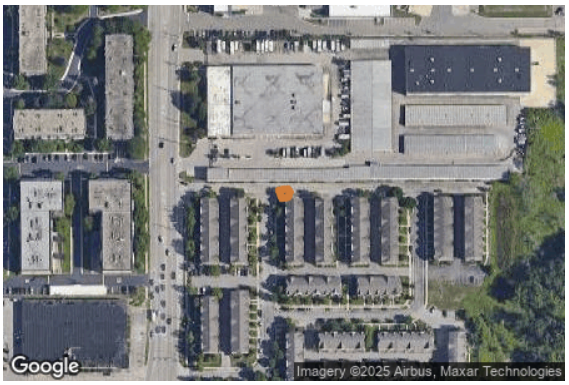
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037734	-87.798570	635.13
2	42.037746	-87.796181	626.84

Name: South Building Upper Level
Top height: 22.0 ft



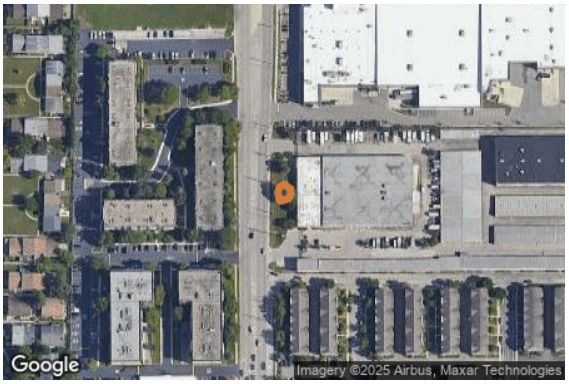
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037736	-87.798753	633.09
2	42.037737	-87.798576	634.95

Name: Tree1
Top height: 32.8 ft



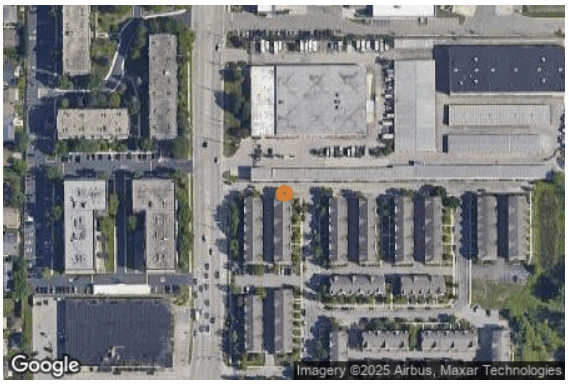
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037679	-87.798102	632.31
2	42.037672	-87.798146	632.03
3	42.037621	-87.798121	631.97
4	42.037628	-87.798067	632.27
5	42.037661	-87.798049	632.49
6	42.037681	-87.798071	632.46

Name: Tree 2
Top height: 40.0 ft



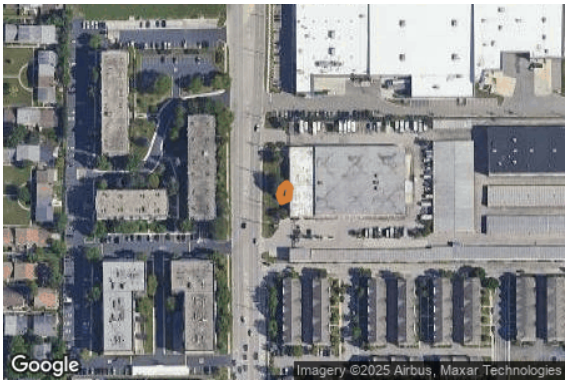
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038288	-87.798872	634.93
2	42.038271	-87.798919	634.85
3	42.038231	-87.798929	634.60
4	42.038181	-87.798916	634.52
5	42.038196	-87.798838	634.49
6	42.038229	-87.798817	634.66
7	42.038257	-87.798819	634.83
8	42.038271	-87.798848	634.77
9	42.038288	-87.798872	634.93

Name: Tree2
Top height: 32.8 ft



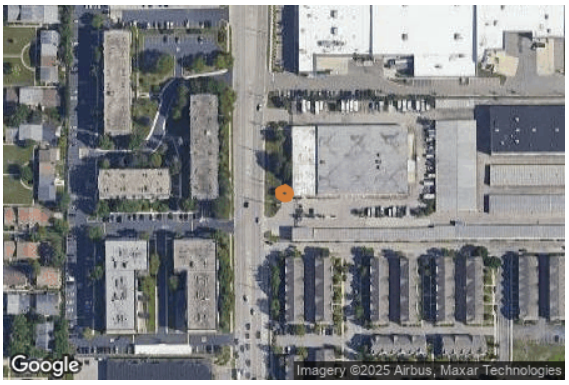
Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.037682	-87.798485	634.43
2	42.037661	-87.798519	635.09
3	42.037632	-87.798521	634.93
4	42.037620	-87.798491	634.07
5	42.037627	-87.798442	632.96
6	42.037654	-87.798432	632.95
7	42.037675	-87.798449	633.53
8	42.037682	-87.798485	634.43

Name: Tree 3
Top height: 40.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038226	-87.798790	634.89
2	42.038203	-87.798765	634.91
3	42.038133	-87.798777	634.94
4	42.038113	-87.798836	634.87
5	42.038154	-87.798854	634.43
6	42.038197	-87.798838	634.49
7	42.038226	-87.798795	634.89

Name: Tree 4
Top height: 25.0 ft



Vertex	Latitude (°)	Longitude (°)	Ground elevation (ft)
1	42.038068	-87.798823	635.21
2	42.038050	-87.798877	635.19
3	42.038015	-87.798873	634.94
4	42.037998	-87.798831	634.40
5	42.038003	-87.798794	634.00
6	42.038030	-87.798777	634.41
7	42.038050	-87.798788	634.85
8	42.038068	-87.798823	635.21

Glare Analysis Results

Summary of Results No glare predicted

PV Array	Tilt	Orient	Annual Green Glare		Annual Yellow Glare		Energy
	°	°	min	hr	min	hr	kWh
Flat Roof 1A	5.0	180.0	0	0.0	0	0.0	-
Flat Roof 1B	5.0	180.0	0	0.0	0	0.0	-
Flat Roof 2	5.0	180.0	0	0.0	0	0.0	-
Pitched Roof 1A	3.0	270.0	0	0.0	0	0.0	-
Pitched Roof 1B	3.0	90.0	0	0.0	0	0.0	-
Pitched Roof 2	3.0	0.0	0	0.0	0	0.0	-
Pitched Roof 3A	3.0	0.0	0	0.0	0	0.0	-
Pitched Roof 3B	3.0	180.0	0	0.0	0	0.0	-
Pitched Roof 3B2	0.0	180.0	0	0.0	0	0.0	-
Pitched Roof 4	3.0	0.0	0	0.0	0	0.0	-

Total glare received by each receptor; may include duplicate times of glare from multiple reflective surfaces.

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
OP 20	0	0.0	0	0.0

PV: Flat Roof 1A no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Flat Roof 1A and Route: Grove Street

No glare found

Flat Roof 1A and Route: Meadow Lane

No glare found

Flat Roof 1A and Route: Prairie Street

No glare found

Flat Roof 1A and Route: Waukegan Drive

No glare found

Flat Roof 1A and OP 1

No glare found

Flat Roof 1A and OP 2

No glare found

Flat Roof 1A and OP 3

No glare found

Flat Roof 1A and OP 4

No glare found

Flat Roof 1A and OP 5

No glare found

Flat Roof 1A and OP 6

No glare found

Flat Roof 1A and OP 7

No glare found

Flat Roof 1A and OP 8

No glare found

Flat Roof 1A and OP 9

No glare found

Flat Roof 1A and OP 10

No glare found

Flat Roof 1A and OP 11

No glare found

Flat Roof 1A and OP 12

No glare found

Flat Roof 1A and OP 13

No glare found

Flat Roof 1A and OP 14

No glare found

Flat Roof 1A and OP 15

No glare found

Flat Roof 1A and OP 16

No glare found

Flat Roof 1A and OP 17

No glare found

Flat Roof 1A and OP 18

No glare found

Flat Roof 1A and OP 19

No glare found

Flat Roof 1A and OP 20

No glare found

PV: Flat Roof 1B no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Flat Roof 1B and Route: Grove Street

No glare found

Flat Roof 1B and Route: Meadow Lane

No glare found

Flat Roof 1B and Route: Prairie Street

No glare found

Flat Roof 1B and Route: Waukegan Drive

No glare found

Flat Roof 1B and OP 1

No glare found

Flat Roof 1B and OP 2

No glare found

Flat Roof 1B and OP 3

No glare found

Flat Roof 1B and OP 4

No glare found

Flat Roof 1B and OP 5

No glare found

Flat Roof 1B and OP 6

No glare found

Flat Roof 1B and OP 7

No glare found

Flat Roof 1B and OP 8

No glare found

Flat Roof 1B and OP 9

No glare found

Flat Roof 1B and OP 10

No glare found

Flat Roof 1B and OP 11

No glare found

Flat Roof 1B and OP 12

No glare found

Flat Roof 1B and OP 13

No glare found

Flat Roof 1B and OP 14

No glare found

Flat Roof 1B and OP 15

No glare found

Flat Roof 1B and OP 16

No glare found

Flat Roof 1B and OP 17

No glare found

Flat Roof 1B and OP 18

No glare found

Flat Roof 1B and OP 19

No glare found

Flat Roof 1B and OP 20

No glare found

PV: Flat Roof 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Flat Roof 2 and Route: Grove Street

No glare found

Flat Roof 2 and Route: Meadow Lane

No glare found

Flat Roof 2 and Route: Prairie Street

No glare found

Flat Roof 2 and Route: Waukegan Drive

No glare found

Flat Roof 2 and OP 1

No glare found

Flat Roof 2 and OP 2

No glare found

Flat Roof 2 and OP 3

No glare found

Flat Roof 2 and OP 4

No glare found

Flat Roof 2 and OP 5

No glare found

Flat Roof 2 and OP 6

No glare found

Flat Roof 2 and OP 7

No glare found

Flat Roof 2 and OP 8

No glare found

Flat Roof 2 and OP 9

No glare found

Flat Roof 2 and OP 10

No glare found

Flat Roof 2 and OP 11

No glare found

Flat Roof 2 and OP 12

No glare found

Flat Roof 2 and OP 13

No glare found

Flat Roof 2 and OP 14

No glare found

Flat Roof 2 and OP 15

No glare found

Flat Roof 2 and OP 16

No glare found

Flat Roof 2 and OP 17

No glare found

Flat Roof 2 and OP 18

No glare found

Flat Roof 2 and OP 19

No glare found

Flat Roof 2 and OP 20

No glare found

PV: Pitched Roof 1A no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 1A and Route: Grove Street

No glare found

Pitched Roof 1A and Route: Meadow Lane

No glare found

Pitched Roof 1A and Route: Prairie Street

No glare found

Pitched Roof 1A and Route: Waukegan Drive

No glare found

Pitched Roof 1A and OP 1

No glare found

Pitched Roof 1A and OP 2

No glare found

Pitched Roof 1A and OP 3

No glare found

Pitched Roof 1A and OP 4

No glare found

Pitched Roof 1A and OP 5

No glare found

Pitched Roof 1A and OP 6

No glare found

Pitched Roof 1A and OP 7

No glare found

Pitched Roof 1A and OP 8

No glare found

Pitched Roof 1A and OP 9

No glare found

Pitched Roof 1A and OP 10

No glare found

Pitched Roof 1A and OP 11

No glare found

Pitched Roof 1A and OP 12

No glare found

Pitched Roof 1A and OP 13

No glare found

Pitched Roof 1A and OP 14

No glare found

Pitched Roof 1A and OP 15

No glare found

Pitched Roof 1A and OP 16

No glare found

Pitched Roof 1A and OP 17

No glare found

Pitched Roof 1A and OP 18

No glare found

Pitched Roof 1A and OP 19

No glare found

Pitched Roof 1A and OP 20

No glare found

PV: Pitched Roof 1B no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 1B and Route: Grove Street

No glare found

Pitched Roof 1B and Route: Meadow Lane

No glare found

Pitched Roof 1B and Route: Prairie Street

No glare found

Pitched Roof 1B and Route: Waukegan Drive

No glare found

Pitched Roof 1B and OP 1

No glare found

Pitched Roof 1B and OP 2

No glare found

Pitched Roof 1B and OP 3

No glare found

Pitched Roof 1B and OP 4

No glare found

Pitched Roof 1B and OP 5

No glare found

Pitched Roof 1B and OP 6

No glare found

Pitched Roof 1B and OP 7

No glare found

Pitched Roof 1B and OP 8

No glare found

Pitched Roof 1B and OP 9

No glare found

Pitched Roof 1B and OP 10

No glare found

Pitched Roof 1B and OP 11

No glare found

Pitched Roof 1B and OP 12

No glare found

Pitched Roof 1B and OP 13

No glare found

Pitched Roof 1B and OP 14

No glare found

Pitched Roof 1B and OP 15

No glare found

Pitched Roof 1B and OP 16

No glare found

Pitched Roof 1B and OP 17

No glare found

Pitched Roof 1B and OP 18

No glare found

Pitched Roof 1B and OP 19

No glare found

Pitched Roof 1B and OP 20

No glare found

PV: Pitched Roof 2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 2 and Route: Grove Street

No glare found

Pitched Roof 2 and Route: Meadow Lane

No glare found

Pitched Roof 2 and Route: Prairie Street

No glare found

Pitched Roof 2 and Route: Waukegan Drive

No glare found

Pitched Roof 2 and OP 1

No glare found

Pitched Roof 2 and OP 2

No glare found

Pitched Roof 2 and OP 3

No glare found

Pitched Roof 2 and OP 4

No glare found

Pitched Roof 2 and OP 5

No glare found

Pitched Roof 2 and OP 6

No glare found

Pitched Roof 2 and OP 7

No glare found

Pitched Roof 2 and OP 8

No glare found

Pitched Roof 2 and OP 9

No glare found

Pitched Roof 2 and OP 10

No glare found

Pitched Roof 2 and OP 11

No glare found

Pitched Roof 2 and OP 12

No glare found

Pitched Roof 2 and OP 13

No glare found

Pitched Roof 2 and OP 14

No glare found

Pitched Roof 2 and OP 15

No glare found

Pitched Roof 2 and OP 16

No glare found

Pitched Roof 2 and OP 17

No glare found

Pitched Roof 2 and OP 18

No glare found

Pitched Roof 2 and OP 19

No glare found

Pitched Roof 2 and OP 20

No glare found

PV: Pitched Roof 3A no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 3A and Route: Grove Street

No glare found

Pitched Roof 3A and Route: Meadow Lane

No glare found

Pitched Roof 3A and Route: Prairie Street

No glare found

Pitched Roof 3A and Route: Waukegan Drive

No glare found

Pitched Roof 3A and OP 1

No glare found

Pitched Roof 3A and OP 2

No glare found

Pitched Roof 3A and OP 3

No glare found

Pitched Roof 3A and OP 4

No glare found

Pitched Roof 3A and OP 5

No glare found

Pitched Roof 3A and OP 6

No glare found

Pitched Roof 3A and OP 7

No glare found

Pitched Roof 3A and OP 8

No glare found

Pitched Roof 3A and OP 9

No glare found

Pitched Roof 3A and OP 10

No glare found

Pitched Roof 3A and OP 11

No glare found

Pitched Roof 3A and OP 12

No glare found

Pitched Roof 3A and OP 13

No glare found

Pitched Roof 3A and OP 14

No glare found

Pitched Roof 3A and OP 15

No glare found

Pitched Roof 3A and OP 16

No glare found

Pitched Roof 3A and OP 17

No glare found

Pitched Roof 3A and OP 18

No glare found

Pitched Roof 3A and OP 19

No glare found

Pitched Roof 3A and OP 20

No glare found

PV: Pitched Roof 3B no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 3B and Route: Grove Street

No glare found

Pitched Roof 3B and Route: Meadow Lane

No glare found

Pitched Roof 3B and Route: Prairie Street

No glare found

Pitched Roof 3B and Route: Waukegan Drive

No glare found

Pitched Roof 3B and OP 1

No glare found

Pitched Roof 3B and OP 2

No glare found

Pitched Roof 3B and OP 3

No glare found

Pitched Roof 3B and OP 4

No glare found

Pitched Roof 3B and OP 5

No glare found

Pitched Roof 3B and OP 6

No glare found

Pitched Roof 3B and OP 7

No glare found

Pitched Roof 3B and OP 8

No glare found

Pitched Roof 3B and OP 9

No glare found

Pitched Roof 3B and OP 10

No glare found

Pitched Roof 3B and OP 11

No glare found

Pitched Roof 3B and OP 12

No glare found

Pitched Roof 3B and OP 13

No glare found

Pitched Roof 3B and OP 14

No glare found

Pitched Roof 3B and OP 15

No glare found

Pitched Roof 3B and OP 16

No glare found

Pitched Roof 3B and OP 17

No glare found

Pitched Roof 3B and OP 18

No glare found

Pitched Roof 3B and OP 19

No glare found

Pitched Roof 3B and OP 20

No glare found

PV: Pitched Roof 3B2 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 3B2 and Route: Grove Street

No glare found

Pitched Roof 3B2 and Route: Meadow Lane

No glare found

Pitched Roof 3B2 and Route: Prairie Street

No glare found

Pitched Roof 3B2 and Route: Waukegan Drive

No glare found

Pitched Roof 3B2 and OP 1

No glare found

Pitched Roof 3B2 and OP 2

No glare found

Pitched Roof 3B2 and OP 3

No glare found

Pitched Roof 3B2 and OP 4

No glare found

Pitched Roof 3B2 and OP 5

No glare found

Pitched Roof 3B2 and OP 6

No glare found

Pitched Roof 3B2 and OP 7

No glare found

Pitched Roof 3B2 and OP 8

No glare found

Pitched Roof 3B2 and OP 9

No glare found

Pitched Roof 3B2 and OP 10

No glare found

Pitched Roof 3B2 and OP 11

No glare found

Pitched Roof 3B2 and OP 12

No glare found

Pitched Roof 3B2 and OP 13

No glare found

Pitched Roof 3B2 and OP 14

No glare found

Pitched Roof 3B2 and OP 15

No glare found

Pitched Roof 3B2 and OP 16

No glare found

Pitched Roof 3B2 and OP 17

No glare found

Pitched Roof 3B2 and OP 18

No glare found

Pitched Roof 3B2 and OP 19

No glare found

Pitched Roof 3B2 and OP 20

No glare found

PV: Pitched Roof 4 no glare found

Receptor results ordered by category of glare

Receptor	Annual Green Glare		Annual Yellow Glare	
	min	hr	min	hr
Grove Street	0	0.0	0	0.0
Meadow Lane	0	0.0	0	0.0
Prairie Street	0	0.0	0	0.0
Waukegan Drive	0	0.0	0	0.0
OP 1	0	0.0	0	0.0
OP 2	0	0.0	0	0.0
OP 3	0	0.0	0	0.0
OP 4	0	0.0	0	0.0
OP 5	0	0.0	0	0.0
OP 6	0	0.0	0	0.0
OP 7	0	0.0	0	0.0
OP 8	0	0.0	0	0.0
OP 9	0	0.0	0	0.0
OP 10	0	0.0	0	0.0
OP 11	0	0.0	0	0.0
OP 12	0	0.0	0	0.0
OP 13	0	0.0	0	0.0
OP 14	0	0.0	0	0.0
OP 15	0	0.0	0	0.0
OP 16	0	0.0	0	0.0
OP 17	0	0.0	0	0.0
OP 18	0	0.0	0	0.0
OP 19	0	0.0	0	0.0
OP 20	0	0.0	0	0.0

Pitched Roof 4 and Route: Grove Street

No glare found

Pitched Roof 4 and Route: Meadow Lane

No glare found

Pitched Roof 4 and Route: Prairie Street

No glare found

Pitched Roof 4 and Route: Waukegan Drive

No glare found

Pitched Roof 4 and OP 1

No glare found

Pitched Roof 4 and OP 2

No glare found

Pitched Roof 4 and OP 3

No glare found

Pitched Roof 4 and OP 4

No glare found

Pitched Roof 4 and OP 5

No glare found

Pitched Roof 4 and OP 6

No glare found

Pitched Roof 4 and OP 7

No glare found

Pitched Roof 4 and OP 8

No glare found

Pitched Roof 4 and OP 9

No glare found

Pitched Roof 4 and OP 10

No glare found

Pitched Roof 4 and OP 11

No glare found

Pitched Roof 4 and OP 12

No glare found

Pitched Roof 4 and OP 13

No glare found

Pitched Roof 4 and OP 14

No glare found

Pitched Roof 4 and OP 15

No glare found

Pitched Roof 4 and OP 16

No glare found

Pitched Roof 4 and OP 17

No glare found

Pitched Roof 4 and OP 18

No glare found

Pitched Roof 4 and OP 19

No glare found

Pitched Roof 4 and OP 20

No glare found

Assumptions

"Green" glare is glare with low potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
"Yellow" glare is glare with potential to cause an after-image (flash blindness) when observed prior to a typical blink response time.
Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
The algorithm does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results. However, we have validated our models against several systems, including a PV array causing glare to the air-traffic control tower at Manchester-Boston Regional Airport and several sites in Albuquerque, and the tool accurately predicted the occurrence and intensity of glare at different times and days of the year.
Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.
Random number computations are utilized by various steps of the annual hazard analysis algorithm. Predicted minutes of glare can vary between runs as a result. This limitation primarily affects analyses of Observation Point receptors, including ATCTs. Note that the SGHAT/ ForgeSolar methodology has always relied on an analytical, qualitative approach to accurately determine the overall hazard (i.e. green vs. yellow) of expected glare on an annual basis.
The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.
The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
The variable direct normal irradiance (DNI) feature (if selected) scales the user-prescribed peak DNI using a typical clear-day irradiance profile. This profile has a lower DNI in the mornings and evenings and a maximum at solar noon. The scaling uses a clear-day irradiance profile based on a normalized time relative to sunrise, solar noon, and sunset, which are prescribed by a sun-position algorithm and the latitude and longitude obtained from Google maps. The actual DNI on any given day can be affected by cloud cover, atmospheric attenuation, and other environmental factors.
The ocular hazard predicted by the tool depends on a number of environmental, optical, and human factors, which can be uncertain. We provide input fields and typical ranges of values for these factors so that the user can vary these parameters to see if they have an impact on the results. The speed of SGHAT allows expedited sensitivity and parametric analyses.
The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid based on aggregated research data. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
Refer to the Help page at **www.forgesolar.com/help/** for assumptions and limitations not listed here.

Default glare analysis parameters and observer eye characteristics (for reference only):

- Analysis time interval: 1 minute
- Ocular transmission coefficient: 0.5
- Pupil diameter: 0.002 meters
- Eye focal length: 0.017 meters
- Sun subtended angle: 9.3 milliradians

OE/AAA Pre-screening Results

Fri Jun 27 2025 10:08:50 GMT-0400 (Eastern Daylight Time)

Structure: Building

Latitude	Longitude	Height	Site Elevation	AMSL
42.038436	-87.798744	15	634	649
42.038544	-87.795999	17	630	647
42.037751	-87.796186	30	628	658
42.037738	-87.798729	41	634	675

Based on the information you provided, you are not required to file notice with the FAA.

Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602
August 24, 2023

To Whom It May Concern,

Go Green Skokie is a community of individuals who live, work, or have children who currently attend school in Skokie. Our mission is to promote environmental sustainability and justice in our Village. Community solar is in line with our mission and we are excited that local projects will be coming to our community.

This is a letter in support of the Illinois Adjustable Block Community Solar Program and Solar Landscape's five proposed Community-Driven Community Solar projects to be located in Niles Township. We have met with members of the Community Engagement team from Solar Landscape and are committed to continuing to collaborate with Solar Landscape in an effort to support the benefits the project will bring to our community.

On Monday August 14th, Lauren Grodnicki of Go Green Skokie joined an in person meeting with Kevin Dunshee, the Chief Commercial Office of Solar Landscape and gave a comprehensive overview of Illinois Community Solar and the work Solar Landscape is doing in and around Skokie and the greater Niles Township community. Kevin made us aware that the five proposed CDCS projects will, when completed, will power approximately 1,000 homes. Kevin stayed and answered questions and attendees offered feedback regarding the benefits the project will bring to our community through a QR code he provided. Lauren also joined a participatory community workshop hosted via Zoom by Solar Landscape on August 15th.

On August 23rd, Jennifer Schneider met with the entire Go Green Skokie team during our monthly meeting. We have provided input regarding the project development process through these meetings, additional calls, and a stakeholder benefits survey. Solar Landscape has actively engaged with us to solicit our participation in this process, and we look forward to continuing to provide consultation as the project is constructed and energized. We value our role as stakeholders in a local community solar project that will provide lower costs, cleaner air, job training, and other benefits in and around our community. As such, we are committed to having at least four or more members of our organization provide on-going collaboration with Solar Landscape as the project development process continues.

We look forward to weighing in project-related decisions that arise and provide input on the dissemination of the local scholarship program and any other programs we determine are most appropriate and impactful for our community. Go Green Skokie will ensure that four or more of our team members will participate with the ongoing collaborative input related to this project as it is built, energized, operated, and maintained.

We will continue to collaborate with Solar Landscape on the development of this community solar projects in Niles Township which will provide opportunities for our members to subscribe to the project, receive meaningful electricity bill savings, help us meet some of the goals in Skokie's Environmental Sustainability Plan, and continue to participate in the state's goal of 100% clean energy.

Sincerely,

Go Green Skokie

GARFIELD PARK COMMUNITY COUNCIL

Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602

August 24th, 2023

To Whom it May Concern,

This is a letter in support of the Illinois Adjustable Block Community Solar Program and Solar Landscape's Community-Driven Community Solar (CDCS) project application(s) that will benefit Niles Township:

Project Application ID	Project Address
SLDIL 114754	6460 Lincoln Ave, Lincolnwood
SLDIL 114750	8050 McCormick Blvd, Skokie
SLDIL 114767	8625 Waukegan Rd, Morton Grove
SLDIL 114742	6400-6430 Howard St, Niles
SLDIL 114798	6350 Howard St, Niles

The Garfield Park Community Council (GPCC) is a community-building organization made up of dedicated residents and allies working together to develop leaders and create opportunities and programs that build a vital Garfield Park and greater Chicago-metro area community. Since 2012, GPCC developed and implemented more than 60 local projects with at least 50 partner organizations throughout Cook County and facilitated more than $50 million in community investment, an outgrowth of the original comprehensive approach to improving the quality of life for neighborhood residents. GPCC has become a leader in community development initiatives and engages various public and private institutions, including private developers, law enforcement, city officials, and funders, to ensure that community residents are involved in new projects and policies.

Since November of 2022, we have been engaged in the community solar project planning process with Solar Landscape. GPCC's Executive Director attended Solar Landscape's Community Solar Forum hosted in Garfield Park at the Legler Regional Library to understand the proposed projects and be informed about the locations, sizes, environmental benefits, and projected number of subscribers for all projects listed above as well as others in the area we serve (Cook County). We gave input on our priorities for the Community Solar projects through a community stakeholder survey and made recommendations via in person and phone conversations. We are aware through our collaboration that members of the greater GPCC community may be served by the proposed projects we collaborated on last year and look forward to continuing to do so.

Since that time:

- On July 21st, 2023, Jennifer Schneider from Solar Landscape's community engagement team met with our Sustainable Housing Associate, Aretha Berdell, via a zoom call. Jennifer made us aware of Solar Landscape's project applications for this year's round of CDCS and shared ways for us to provide input through a stakeholder benefits survey and provided follow-up resources. During the meeting, Aretha shared that she is now a Solar for All grassroots educator and is interested in also educating residents on and sharing Illinois Shines subscription opportunities. Additionally, Aretha shared that GPCC has been looking for solar panel training material grants to sponsor educational programming opportunities for local Boys and Girls Club, of which Solar Landscape has committed to sponsoring.
- Jennifer reached out again on July 24th to schedule an in-person meeting for Ms. Berdell with Solar Landscape's Chief Commercial Officer, Kevin Dunshee.
- On July 27th, Jennifer shared with Ms. Berdell an update on Solar Landscape's awarded projects from last year that GPCC supported and provided input on the same day they were announced by the Illinois Power Agency.

- On August 1st, Mr. Dunshee met with Ms. Berdell at our office, located at 300 N Central Park Ave, Chicago. Mr. Dunshee reviewed both Illinois community solar programs in greater detail and explained the locations, sizes, environmental benefits, and projected number of subscribers of Solar Landscape's proposed CDCS projects. Ms. Berdell discussed at length the GPCC's plans to build the Garfield Park Community Orchard and shared the blueprints and artist depictions with Mr. Dunshee. She shared with Solar Landscape GPCC's vision and recommendation that any funds available from the project may be best utilized in the construction of the garden. Mr. Dunshee and Ms. Berdell agreed to meet again to discuss CDCS project benefits further.
- On August 16th, Mr. Dunshee met Ms. Berdell at the Garfield Park Conservatory at 1:30pm. They spoke at length about the solar initiatives as well as the community garden. Mr. Dunshee committed to being at the GPCC's Nature Day event on September 22nd with his team members, and to provide a solar demonstration for the students present.
- On August 18th, Mr. Dunshee met via Zoom call with our team as well as one of our major sponsors, Wells Fargo, to review the GPCC project kick-off event and committed to a donation to offset food costs for the day.

Lowering the utility costs for residents in the communities we serve while reducing carbon emissions through Community Solar is something we strongly support. In addition to supporting this Solar Landscape project application, we will continue to consult with Solar Landscape to meaningfully engage our community around these projects while providing support and guidance in the following ways:

- GPCC will work with Solar Landscape to provide educational opportunities and information about Community Solar for low-to-moderate income households that the organization serves.
- GPCC will promote any annual scholarship programs from the project, including Solar Landscape's Community Sustainability Challenge scholarship for high school students to its community members.
- Solar Landscape has committed to providing a $200 donation to GPCC for any resident that subscribes to one of their community solar projects using our unique promo-code.
- Solar Landscape will provide marketing and public relations support to facilitate our involvement in educating our community about Community Solar.

We are pleased that our team has been involved in providing input to shape the community solar programs being designed in collaboration with Solar Landscape. We are excited to support the work of community solar developers like Solar Landscape to help bring clean energy, jobs training, and lower utility costs to our community. We will continue to collaborate with Solar Landscape through Ms. Berdell, myself, and other members of our organization and continue to offer our consultation on ways to provide benefits to the communities we serve during the building and operation of the solar projects.

We fully support Solar Landscape's community solar projects that will bring environmental justice, solar access for all, and lower energy costs to Niles Township.

Sincerely,

Mike Thomas
CEO
Garfield Park Community Council

Seven
Generations
Ahead

-Great Law of the Iroquois

In every deliberation we must consider the impact on the seventh generation.

Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602

August 23rd, 2023

To Whom it May Concern,

Seven Generations Ahead (SGA) works with local government, community, and private sector leaders to help communities make the changes they need to build a healthy and sustainable future. Through community-wide sustainability planning and implementation, project design and implementation, educational conferences and forums, community network development, consulting, and programs, SGA is a catalyst for local community solutions to global environmental issues.

This is a letter in support of the Illinois Adjustable Block Program and Solar Landscape's Illinois Community-Driven Community Solar (CDCS) project application(s). Since the fall of 2022, we have been engaged with the Community Engagement Team from Solar Landscape through meetings and regular correspondence. We are committed to continuing to collaborate with Solar Landscape in an effort to support local community solar projects and the benefits the projects will bring to the communities we serve. We informed Solar Landscape about how SGA networks in Niles Township could be served by and benefit from the proposed projects, and how they are in line with SGA's goals.

Solar Landscape has actively engaged with us to solicit our participation in this process, and we look forward to continuing to provide consultation as the projects are constructed and energized. For example, Solar Landscape gave us a presentation on the community solar program and informed us about the Niles Township project location(s), size(s), environmental benefits, and projected number of subscribers for the following application(s):

Project Application ID	Project Address
SLDIL 114754	6460 Lincoln Ave, Lincolnwood
SLDIL 114750	8050 McCormick Blvd, Skokie
SLDIL 114767	8625 Waukegan Rd, Morton Grove
SLDIL 114742	6400-6430 Howard St, Niles
SLDIL 114798	6350 Howard St, Niles

P.O. Box 3125 Oak Park, Illinois 60303 Main 708.660.9909 Fax 708.660.9913 E-mail act@sevengenerationsahead.org
www.sevengenerationsahead.org

We also gave Solar Landscape input on our priorities for the projects and Solar Landscape agreed to make a charitable donation to SGA for every subscriber that uses our invite code.

We value our role as stakeholders in CDCS community solar projects that will provide lower costs, cleaner air, job training, and other benefits in and around our community. As such, we are committed to SGA leadership including myself and SGA Solar Consultant Mark providing ongoing collaboration with Solar Landscape as the project development process continues.

Lowering the utility costs for our community while reducing carbon emissions is something we strongly support. In addition to supporting Solar Landscape's Niles Township project application(s), we will continue to consult with Solar Landscape to meaningfully engage the Niles Township community around these projects while providing support and guidance in the following ways:

- SGA will work with Solar Landscape to provide educational opportunities and information about Community Solar for Niles Township community members and leaders.
- SGA will work with Solar Landscape to provide information on Community Solar to staff and volunteers who are eligible to subscribe.
- SGA will promote the Niles Township project(s') annual scholarship program funding to its community members.
- SGA will promote local community solar projects on social media and our website.
- Solar Landscape will provide support for SGA's initiatives and events.
- Solar Landscape will provide marketing and public relations support to facilitate our involvement with educating our community about Community Solar.

I am pleased to have been involved in providing input to shape the community solar programs being designed in collaboration with Solar Landscape. We are excited to continue to work with Solar Landscape to help bring clean energy, additional benefits, and lower utility costs to our community, and look forward to continuing to weigh in on ways to provide meaningful benefits to the community during the building and operation of the solar projects.

We fully support Solar Landscape's community solar projects that will bring environmental justice, solar access for all, and lower energy costs to Niles Township residents and the communities we serve.

Sincerely,

Gary Cuneen, Founder and Executive Director, Seven Generations Ahead

P.O. Box 3125 Oak Park, Illinois 60303 Main 708.660.9909 Fax 708.660.9913 E-mail act@sevengenerationsahead.org
www.sevengenerationsahead.org

Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602

August 23, 2023

To Whom it May Concern,

This is a letter in support of the Illinois Adjustable Block Community Solar Program and Solar Landscape's Illinois Community-Driven Community Solar (CDCS) project application(s) for Niles Township:

Project Application ID	Project Address
SLDIL 114754	6460 Lincoln Ave, Lincolnwood
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SLDIL 114798	6350 Howard St, Niles

A 501 (c) (6) organization founded in 1979, the Hispanic American Construction Industry Association (HACIA) works to ensure the equitable participation of its members in the construction industry, while also promoting the growth, quality of work, professionalism and integrity of these individuals and businesses. We have fought for diversity in the construction world for over 40 years and continue to clear paths of opportunity for Minority- and Woman-owned Business Enterprises across the Midwest. From advocating for public policy, providing the tools necessary to seize and succeed at new business opportunities and providing training and education that assist Hispanics in growing their own construction-related businesses, HACIA believes in pushing its community beyond what have become traditional roles for Hispanics in the construction industry and we realize the importance of our participation in the growing reenable energy industry. HACIA works with individuals from across the state.

We have been partnering with solar developer Solar Landscape since 2022. At that time, we held a solar installation training for our cohorts in collaboration with Solar Landscape and the SAFER Foundation. Since that time, we have had collaborative discussions with the firm's Chief Commercial Officer, Kevin Dunshee. As a result of our conversations, we have included additional training courses focusing on commercial solar installation for interested cohorts enrolled in our pre-apprenticeship programs. The details are provided below. Solar Landscape has shared with us their proposed project applications for the Illinois Shines CDCS program, and we have collaborated to provide input on project development and organization, as well as the ways HACIA cohorts will benefit from employment as these projects enter the construction phase.

Please note:

- On May 25th, 2023, Solar Landscape team of Kevin Dunshee and Raphaela Hsu-Flanders had a planning call with Hector Tello and Dennis Esquivel regarding the next training event.
- Additional planning calls were held on June 1st, June 7th, June 21st, and June 27th as well as July 18th, 2023.
- From July 31st through August 4th, 2023, the Solar Landscape team trained 20 HACIA trainees on commercial solar installation. The training was held at 2810 W Addison St, Chicago, a location rented by Solar Landscape. Cohorts were provided a $300 stipend upon completion of the training and Solar Landscape will be providing interested cohorts with introductions to career opportunities through local companies that are hiring Equity Eligible Persons (EEPS) for their workforce.
- HACIA works with individuals from throughout Illinois. The cohorts for these two trainings were from the following areas: Pingree Grove, Chicago, Bellwood, Gainwood, Pingree Grove, Midlothian, Lincoln, Cisero, Edgewater, Chicago-Pilsen, Chicago South Side, Burrwood, Wheaton, Garfield Park

- Mr. Dunshee was a speaker at our HACIA graduation on Thursday, August 3rd where he spoke about the opportunities available to our cohorts through the Illinois community solar programs and the federal government's Inflation Reduction Act.
- On August 16, 2023, Mr. Dunshee met with Mr. Tello and Mr. Esquivel at our HACIA headquarters in Chicago to review the training video that was created and to begin planning for additional training.
- On August 23, 2023, Mr. Dunshee met with HACIA Executive Director Jaqueline Gomez and Director of Programs Alma Tello to review the training and begin planning for additional and more advanced training for HACIA cohorts.
- Mr. Dunshee explained how Solar Landscape's nationally recognized Solar Training and Educational Partnership (STEP-UP) for solar workforce development can collaborate with us on how to best train and employ HACIA cohorts.
- Solar Landscape has provided us informed us about their project locations, sizes, economic benefits, social benefits, environmental benefits, and projected number of subscribers.

Thanks to Illinois' initiatives in our groundbreaking community solar program, more and more solar projects are being built throughout the state. Solar panels are warrantied for 25 years and have a useful life of at least ten years longer. Even if all solar construction stopped, solar installations would have to be operated and maintained for decades, ensuring job opportunities for properly trained solar professionals. With this in mind, we are continuing out partnering with Solar Landscape in the following ways:

- Providing training in solar panel operations and maintenance to our more advanced, NABCEP certified green energy graduates.
- Solar Landscape will write the curriculum and deliver the training with their certified team of O&M professionals.
- Cohorts will learn how a solar project production is measured in real-time through the use of advanced computer software systems.
- Cohorts will learn about commissioning a solar energy system and the preventive maintenance that goes into project construction.
- Cohorts will get exposure to the additional software that is used to monitor and diagnose problem areas in a solar system.
- Cohorts will be taken on a tour at a jobsite of an operational solar array to demonstrate how a technician trouble shoots a system.
- Cohorts will be taken on a tour of a solar system being constructed to determine best practices on the roof, including safety and installation.
- HACIA will work with Solar Landscape to provide educational opportunities and information about Community Solar for communities that the organization serves.
- HACIA will work with Solar Landscape to provide Community Solar information to staff and volunteers who are eligible to subscribe.
- HACIA will promote local community solar projects on social media and feature HACIA cohorts that have helped in the project construction.
- Solar Landscape has agreed to provide marketing, public relations, and other support to HACIA to assist with our training expenses and to facilitate our involvement in educating our community about Community Solar.

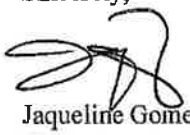
Our organization is pleased to have built this relationship with Solar Landscape as we work to train HACIA cohorts and help them find a path to employment.

Lowering utility costs for our community while reducing carbon emissions is something we strongly support. In addition to supporting Solar Landscape's Niles Township project applications, we will continue to consult with Solar Landscape and meaningfully engage with them surrounding career opportunities projects will provide to our cohorts.

We have a large and active board, and we are committed to having in on-going collaborative discussions and analysis to ensure these solar projects bring the desired benefits to our community. We are excited to work with Solar Landscape to help bring clean energy, jobs training, and lower utility costs to our community, and look forward to continuing to weigh in on ways to provide benefits to the community during the building and operation of the solar projects.

We fully support Solar Landscape's community solar projects that will bring environmental justice, solar access for all, and lower energy costs to Niles Township and in all the other communities we serve.

Sincerely,



Jaqueline Gomez
CEO
HACIA

650 W. Lake Street, Suite 415
Chicago, IL 60661
haciaworks.org | (312) 575-0389

Chicago Muslims Green Team
EIN: 85-2049059
Website: https://chicagomuslimsgreenteam.org/
Email: contact@chicagomuslimsgreenteam.org

Illinois Power Agency
105 West Madison Street, Suite 1401
Chicago, Illinois 60602

August 22, 2023

To Whom it May Concern,

This is a letter in support of the Illinois Shines Adjustable Block Program and Solar Landscape's Illinois Community-Driven Community Solar (CDCS) project application(s):

SLDIL 114754	6460 Lincoln Ave, Lincolnwood
SLDIL 114750	8050 McCormick Blvd, Skokie
SLDIL 114767	8625 Waukegan Rd, Morton Grove
SLDIL 114742	6400-6430 Howard St, Niles - Howard Industrial Center
SLDIL 114798	6350 Howard St, Niles - Howard Industrial Center

Chicago Muslim Green Team (CMGT) connects Chicago Muslims and the greater community to issues of environmental justice and spreads awareness about an Eco-friendly lifestyle based on Islamic teachings. CMGT inspires Chicago Muslims to lead in building an environmentally friendly city that restores balance and connection between nature and people. We plan to engage the Solar Landscape Community Solar Projects through our Building Bridges, Green Ramadan, Green Mosque, and Capacity Building programs to educate our community about the environmental, social, cultural, and economic benefits of community solar. With over 60 Muslim community centers we have a great opportunity to engage large portions of the community around these projects. Additionally, we provide information about and opportunities to train our local community on skills that will help them find jobs in the clean energy transition that Illinois is making.

We have been engaged in collaborative discussions with Solar Landscape's Chief Commercial Officer Kevin Dunshee and the Director of Partnerships, Jennifer Schneider. During in-person meetings and zoom calls, Solar Landscape has shared with us their proposed project application for all projects in Niles Township and we have collaborated through these meetings to provide input on project development and organization as well as the most meaningful ways our community can benefit from the program.

During our project development process CMGT and Solar Landscape have worked together on the following:

- CMGT created a website to promote the Solar Landscape's Community Solar workshops for education and community input. The website will be the community solar landing page for Solar Landscape's Community Stakeholder Survey as well as community solar education. The website: https://bit.ly/2023SOLAR was shared to the CMGT's social media and "WhatsApp" groups.
- The webpage will be updated regularly with our plans to do more educational programs and outreach as the project is built, energized, operated, and maintained.
- On July 20, 2023, Caroline Williams and Layalee Beirat had a Zoom call with Jennifer Schneider from Solar Landscape to find out more about our organization and our community-based initiatives. Jennifer updated us on Illinois Community solar and shared a stakeholder survey with us to complete which has been sent to our entire Board of Directors.
- On August 4, 2023, Kevin Dunshee, Solar Landscape's Chief Commercial Officer met with Caroline Williams and Layalee Beirat at the South Shore Cultural Center on South Shore Road at 6 pm to provide a refresher presentation on Illinois Community Solar program and discuss the benefits they provide.
- Solar Landscape has informed us about the Niles Township project(s) location, size, economic benefits, social benefits, environmental benefits, and projected number of subscribers.
- On August 16, 2023, at 4:40 pm, Mr. Dunshee met with an additional **five** of our stakeholders at the Masjid Al Farooq Mosque located at 8950 S. Stoney Island Ave. in Chicago.

- CMGT gave Solar Landscape, via Kevin, our input on our priorities for the projects, which included tree planting as it relates to our Tree Ambassador Program, sponsoring our Green Mosque initiative, and continuing to educate, inform and benefit our community. This includes education programs for students which they will provide through the Green Ambassador Program for high school students interested in STEM fields of study.
- Solar Landscape will help us form and train a Solar Ambassador Team (similar to our Tree Ambassador Team) to help direct community members on where to get more information and education on the benefits of CDCS and how to enroll in a project.
- Solar Landscape agreed to make a charitable donation to CMGT of at least $200 for every project subscriber that uses our promo code.
- Solar Landscape agreed to provide us required analysis as we work on our Green Mosque program.

Lowering the utility costs for our community while reducing carbon emissions is something we strongly support. In addition to supporting Solar Landscape's Niles Township project application(s), we will continue to consult with Solar Landscape and meaningfully engage with them and our community surrounding these projects while providing support and guidance in the following ways:

- CMGT is aware that Solar Landscape has developed a solar workforce development program with HACIA. We will work with Solar Landscape to bring this training to Niles Township as well. We will host and enlist people to Solar Landscape's workforce training opportunities for our members and the local Niles Township community.
- CMGT will work with Solar Landscape to promote the projects' annual scholarship program funding to its community members.
- CMGT will work with Solar Landscape to provide educational opportunities and information about Community Solar for the Niles Township community.
- CMGT will work with Solar Landscape to provide Community Solar information to staff and volunteers who are eligible to subscribe.
- CMGT will promote this community solar project on social media.
- Solar Landscape will provide support in the form of tabling and sponsorships for CMGT initiatives and events.
- Solar Landscape will provide marketing and public relations support to facilitate our involvement educating our community about Community Solar.

Our organization is pleased to have been involved in providing input that has helped shape Solar Landscape's community solar project in Niles Township. We appreciate that Solar Landscape has met with us in person several times and listened to and included our recommendations. We have a large and active board, and we are committed to providing at least four members per project to work in on-going collaborative discussions and analysis to ensure these projects bring the desired benefits to our community and the Niles Township community. We are excited to work with Solar Landscape to help bring clean energy, jobs training, and lower utility costs to our community, and look forward to continuing to weigh in on ways to provide benefits to the community during the building and operation of the solar projects.

We fully support Solar Landscape's community solar projects that will bring environmental justice, solar access for all, and lower energy costs to Niles Township residents and the communities we serve.

Sincerely,

Caroline K. Williams
CEO