

AGENDA CITY OF ROCHELLE PLANNING AND ZONING COMMISSION MEETING

Monday, October 03, 2022 at 6:00 PM

City of Rochelle Council Chambers—420 North 6th Street, Rochelle, IL 61068

- I. CALL TO ORDER:
- II. ROLL CALL:
- III. APPROVE/ACCEPT MINUTES:
 - 1. 09-06-2022 Planning and Zoning Commission Meeting Minutes
- IV. PUBLIC COMMENTARY:
- V. COMMISSIONER COMMENTS:
- VI. BUSINESS ITEMS:
 - 1. PZC-07-22 City of Rochelle
 - 2. PZC-08-22 Rochelle Hospitality, LLC
 - <u>3.</u> PZC-16-22 Petition of Sky Team, Inc. for a proposed special use for solar for the property located at 1207 Gurler Road. (Public Hearing and Action).
- VII. **DISCUSSION ITEMS:**
- VIII. ADJOURNMENT:

Anyone interested in participating in public commentary remotely should contact Michelle Knight at mknight@rochelleil.us or call 815-562-6161 to make arrangements.

The meeting will be held in the Council Chambers of the Rochelle City Hall, 420 N. 6th Street.

PLANNING & ZONING COMMISSION Tuesday, September 6, 2022 MINUTES

The Rochelle Planning and Zoning Commission met at 6:00 p.m. on Tuesday, September 6, 2022 in the Council Chambers of City Hall, 420 N. 6th Street, Rochelle, IL 61068. Present on Roll Call were Board members: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Absent: None. Non-voting members absent: None. There was a quorum of seven present. Also present were Michelle Pease, Geoff Starr and Rose Hueramo. Colwill moved, seconded by McKibben, "I move the minutes of the August 1, 2022 Planning and Zoning Commission meeting as presented be approved." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0. *Public Commentary:* None

Commissioner Comments: None

Business Items: Pease stated that a notice was published in the paper and mailed to property owners and that the City of Rochelle has requested to continue their petition. Motion made by Myers, seconded by McLachlan, "I move the Planning and Zoning Commission Continue the Public Hearing to October 3, 2022 regarding the proposed Preliminary and Final Plat of Subdivision for the City of Rochelle located at 1123 N. 7th Street." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0.

Pease stated that a notice was published in the paper and mailed to property owners and that the Rochelle Hospitality, LLC has requested to continue their petition. Motion made by Myers, seconded by McLachlan, "I move the Planning and Zoning Commission Continue the Public Hearing to October 3, 2022 regarding the proposed Preliminary and Final Plat of Subdivision for the Rochelle Hospitality, LLC located at 1133 N. 7th Street." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0.

PZC-12-22 Seldal Properties, LLC rezone from B2 to R5. Pease stated that a notice was published in the paper and mailed to property owners. Motion made by McLachlan, seconded by McNeilly, "I move the Planning and Zoning Commission open the Public Hearing regarding the proposed rezone for the property located at 450 Willis Ave.." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0. 450 Willis Avenue, parcel number 24-36-127-001, is vacant land and sits at the corner of Willis Avenue and Lake Lida Lane. It is 1.59 acres and is currently zoned B2, Commercial Highway. The petitioner is requesting to rezone the subject property from a B2 Commercial Highway to an R5 Multi-Family, High Density Residential. The purpose for the request to rezone to an R5 is to build an apartment building. The property is surrounded by B-2 Commercial Highway on the west, north and south and R5 Multi-Family, High Density Residential immediately to the east, northeast and southeast. Section 110-314 – Buffer Yards. Multiple-family residential districts. A minimum fifteen (15) foot wide planting strip shall be provided along the entire length of the buffer yard. Bruce Seldal was present to answer any questions. Motion made by Myers, seconded by McKibben: "I move the Planning and Zoning

Commission close the Public Hearing." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0. **Findings:** 1. Is the proposed zoning allowed in the proposed zoning district? res: ___/_ Explanation: _____ No: _____ If the answer to any of the following questions is "Yes", then the Commission should recommend that the City Council deny the petition for a special use permit. If the answer to all of the following questions is "No", then the Commission may recommend that the City Council approve or deny the petition for a special use permit. Each question should state an answer and give an explanation. If the answers to all of the questions is "No", but the Commission votes to recommend denying the petition, the Commission should provide an explanation as to why. 2. Is the proposed zoning detrimental or dangerous to public health? Yes: _____ No: ___7__ Explanation: 3. Will the proposed zoning impair property value in the neighborhood? Yes: ____ No: ____7_ Explanation: ____ 4. Will the proposed zoning impede the normal development of the surrounding properties? No: ___7__ Yes: Explanation: 5. Will the proposed zoning: (a) impair light and air to adjacent property; (b) congest public streets; (c) increase the risk of fire; (d) substantially diminish property values within the vicinity; or (e) endanger the public health? Yes: _____ No: __7___ Explanation: ____ **Recommendation:** Based on the findings above, the Planning and Zoning Commission hereby recommends to the Rochelle City Council that: That the Petitioner be granted zoning for the proposed use at the Subject Property, without conditions other than the other applicable requirements of the Rochelle Municipal Code. Motion made by Myers, seconded by McLachlan, "I move the Planning and Zoning Commission recommend to the City Council that it Approve the proposed rezone from B2 to R5 Multi Family High Density Residential for the property located at 450 Willis Ave., based on the report of findings." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0. PZC-13-22 Toby and Betsy Petrie variance of setbacks for a fence. Pease stated that a notice was published in the paper and mailed to property owners. Motion made by McLachlan, seconded by McKibben, "I move the Planning and Zoning Commission open the Public

Hearing regarding the proposed variance of setbacks for a fence for the property located at

421 S. 3rd Street." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0. The petitioner is seeking a variance of setbacks to construct a proposed four-foot chain link fence beyond the building line at 421 S. 3rd Street. The property is zoned R5, Multi Family High Density Residential. The petitioner is requesting to extend the fence beyond the building line from the southeast corner of the driveway, south up to the public sidewalk, west parallel along the public sidewalk, then back north to the front southeast corner of the house. Sec. 110-545- Residential, Security and Farm Fences (1). On corner lots, no fence or wall will extend beyond the street setback requirements, or building line, whichever is greater. Compliance with Sec. 110-545 would place the petitioners fence directly through the middle of their usable yard, reducing the enclosed area to a 10' wide strip. The petitioner's reason for the request is to "ensure the safety of children by providing a minimally adequate enclosed play area along a busy street." Motion made by McLachlan, seconded by Myers: "I move the Planning and Zoning Commission close the Public Hearing." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0. **Findings:** 1. Is the proposed variance allowed in the proposed zoning district? Yes: __7___ No: ____ Explanation: If the answer to any of the following questions is "Yes", then the Commission should recommend that the City Council deny the petition for a special use permit. If the answer to all of the following questions is "No", then the Commission may recommend that the City Council approve or deny the petition for a special use permit. Each question should state an answer and give an explanation. If the answers to all of the questions is "No", but the Commission votes to recommend denying the petition, the Commission should provide an explanation as to why. 2. Is the proposed variance detrimental or dangerous to public health? No: ____7__ Yes: _____ Explanation: __ ___ 3. Will the proposed variance impair property value in the neighborhood? Yes: ____ No: _______
Explanation: _____ 4. Will the proposed variance impede the normal development of the surrounding properties? Yes: _____ No: ____7__ Explanation:_____ 5. Will the proposed variance: (a) impair light and air to adjacent property; (b) congest public streets; (c) increase the risk of fire; (d) substantially diminish property values within the vicinity; or (e) endanger the public health? Yes: ____ No: __7__ Explanation: ____

Recommendation:

Based on the findings above, the Planning and Zoning Commission hereby recommends to the Rochelle City Council that:

Motion made by Myers, seconded by Swinton, "I move the Planning and Zoning Commission recommend to the City Council that it Approve the proposed variance of setbacks for a fence for the property located at 421 S. 3rd St., based on the report of findings." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0.

PZC-14-22 Robert Kuehl variance of setbacks and landscaping. Pease stated that a notice was published in the paper and mailed to property owners. Motion made by McLachlan, seconded by Myers, "I move the Planning and Zoning Commission open the Public Hearing regarding the proposed variance of setbacks and landscaping buffer for the property located at 323 W. 2nd Ave." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0. The petitioner is seeking a variance of setbacks to construct a proposed Body/Mechanic Shop, located at 323 W. 2nd Ave. The subject property is zoned I1, Light Industry. The petitioner is requesting a variance of building setbacks and landscape buffer. Sec. 110-313. - Interior parkways, (3) a. Industrial districts, A minimum 50' interior parkway from the Right of Way is required for a landscape buffer. The property at 323 W. 2nd Ave. is a corner lot which gives the property two frontages. Sec. 110-140, I-1 Light Industry District requires a 15' side yard setback and corner lots have a 20' setback requirement on both frontages. The petitioner is requesting the following variances: Variance of landscaping buffer (Sec. 110-314) (3) a. 38' variance on the west side and 28' variance on the south side.

Variance of building setbacks (Sec. 110-140) 5' variance on the east side and 8' on the west side. The petitioner is requesting to construct a building that requires setback variances because where his business is currently located is being sold and he is being forced to relocate. No alternative locations are available; therefore, he purchased the adjacent lot. The petitioner wants to continue to be located close to the downtown central business district and continue to run a successful business that is supported by our community. This has been a viable business for ten years. The size of the building he is requesting the variance for is the smallest possible footprint to fit the paint booth and everything necessary to operate his body shop. With the required building setbacks combined with landscaping buffer requirements, there is no buildable area left on the property without a variance. Mr. and Mrs. Kuehl were present to answer any questions. Motion made by Myers, seconded by McLachlan: "I move the Planning and Zoning Commission close the Public Hearing." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0.

Findings: (Variance of Building Setbacks)

1. Is the proposed varianc	e allowed in the proposed	zoning district, but only	with a variance?
Yes:7	No:		
Explanation:			
If the answer to any of the	e following questions is "Y	Yes", then the Commission	on should
recommend that the City	Council deny the petition f	for a special use permit.	If the answer to all
of the following questions	s is "No", then the Commis	ssion may recommend th	nat the City Council
approve or deny the petiti	on for a special use permit	t. Each question should s	state an answer and

_	we an explanation. If the answers to all of the questions is "No", but the Commission votes to
	commend denying the petition, the Commission should provide an explanation as to why.
2.	Is the proposed variance detrimental or dangerous to public health?
	Yes: No:7 Explanation: Will the proposed variance impair property value in the neighborhood?
	Explanation:
3.	Will the proposed variance impair property value in the neighborhood?
	Yes: No:
	Explanation:
4	Will the proposed variance impede the normal development of the surrounding properties?
٠.	
	Yes: No: Explanation:
5	Will the proposed variance:
٥.	1 1
	(a) impair light and air to adjacent property;
	(b) congest public streets;
	(c) increase the risk of fire;
	(d) substantially diminish property values within the vicinity; or
	(e) endanger the public health?
	Yes: No: <u>7</u>
	Explanation:
Re	ecommendation:
Ba	sed on the findings above, the Planning and Zoning Commission hereby recommends to the
Ro	ochelle City Council that:
	the Subject Property, without conditions other than the other applicable
	requirements of the Rochelle Municipal Code.
M	otion made by McKibben, seconded by Swinton, "I move the Planning and Zoning
	ommission recommend to the City Council that it Approve the proposed variance of
	backs for the property located at 323 W. 2 nd Ave., based on the report of findings." A
	ll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and
	olter. Nays: none. Motion carried 7-0.
	ndings: (Variance of Landscape Buffer)
	Is the proposed variance allowed in the proposed zoning district, but only with a variance?
1.	Yes:7 No:
	Explanation:
Tf .	the answer to any of the following questions is "Yes", then the Commission should
	commend that the City Council deny the petition for a special use permit. If the answer to all
	the following questions is "No", then the Commission may recommend that the City Council
	prove or deny the petition for a special use permit. Each question should state an answer and
_	ve an explanation. If the answers to all of the questions is "No", but the Commission votes to
	commend denying the petition, the Commission should provide an explanation as to why.
2.	Is the proposed variance detrimental or dangerous to public health?
	Yes: No:
	Explanation:
3.	Will the proposed variance impair property value in the neighborhood?
	Ves: No: 7

Explanation:
4. Will the proposed variance impede the normal development of the surrounding properties? Yes: No:7 Explanation:
5. Will the proposed variance:(a) impair light and air to adjacent property;
 (b) congest public streets; (c) increase the risk of fire; (d) substantially diminish property values within the vicinity; or
(e) endanger the public health? Yes: No:7 Explanation:
Recommendation:
Based on the findings above, the Planning and Zoning Commission hereby recommends to the
Rochelle City Council that:
the Subject Property, without conditions other than the other applicable requirements of the Rochelle Municipal Code.
Motion made by Myers, seconded by McLachlan, "I move the Planning and Zoning
Commission recommend to the City Council that it Approve the proposed variance of

Commission recommend to the City Council that it Approve the proposed variance of landscape buffer for the property located at 323 W. 2nd Ave., based on the report of findings." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0.

PZC-15-22 City of Rochelle text amendments to the Zoning Code. Pease stated that a notice was published in the paper. Motion made by Myers, seconded by McLachlan, "I move the Planning and Zoning Commission open the Public Hearing regarding the proposed text amendment to B1 District regarding Special Use requirements." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0. The City of Rochelle is proposing text amendments to the Zoning Code, Section 110-120, B-1 Central Commercial District to add the following: (2) Special uses and developments. The following alterations to any vacant land or existing structure may be permitted within the B-1 Central Commercial District under the conditions and requirements specified in (Sec. 110-31. Special Uses):

- a. The new construction of any primary or accessory structure.
- b. Any addition to an existing structure.
- c. Any project that would change the physical appearance of any elevation of any side of an existing structure. By adding this language to the B-1 Central Commercial District, the Planning and Zoning Commission will have the opportunity to review each potential new special use/construction project on a case-by-case basis. Motion made by Myers, seconded by McLachlan: "I move the Planning and Zoning Commission close the Public Hearing." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0.

Findings:

1.	Does the proposed text amendment assist with the Comprehensive Plan and future growth and land use?
	Yes:7 No:
	Explanation:
2.	welfare?
	Yes: No:7
	Explanation:
3.	planning concepts, or other social, technological, or economic conditions in the areas affected? Yes:7 No:
	Explanation: Special Uses to Downtown
4.	Will the proposed amendment impede the normal development of the surrounding properties
	within the zoning district?
	Yes: No: <u>7</u>
	Explanation:
	ecommendation:
	sed on the findings above, the Planning and Zoning Commission hereby recommends to the
	ochelle City Council that:
	That the Petitioner be granted a text amendment for the proposed Zoning Code, Section
	0-120, B-1 Central Commercial District, without conditions other than the other applicable
	quirements of the Rochelle Municipal Code. Motion made by McKibben, seconded by
	cLachlan, "I move the Planning and Zoning Commission recommend to the City Council
	at it Approve the proposed text amendment to B1 District regarding Special Use
	quirements, based on the report of findings." A roll call vote was taken. Ayes: Colwill,
Μ 0.	cKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-
Di	scussion Items: None

Adjournment: Motion made by Colwill, seconded by McLachlan, "I move to adjourn the regularly scheduled meeting of the Planning and Zoning Commission of September 6, 2022." A roll call vote was taken. Ayes: Colwill, McKibben, McLachlan, McNeilly, Myers, Swinton and Wolter. Nays: none. Motion carried 7-0.

The Planning and Zoning Commission adjourned at 6:45 p.m.

Michelle Knight City of Rochelle

CITY OF ROCHELLE PLANNING & ZONING COMMISSION REPORT OF FINDINGS

Case No.: Applicant: Address:	16-22 Sky Team, Inc. 1207 Gurler Road, Rochelle, IL
Narrative:	
property is zon	is seeking a special use permit for the addition of solar to a building. The subject ned A – Airport. Division 4 – Airport District, Section 110-132 Permitted Uses, all Airport District shall be classified as Special Uses.
There would be is an interconn	e. is requesting to cover both the hangar and office building with solar panels. There is a total of 424 panels with a maximum net rated output of 140 Kilowatts. There is agreement already approved with the City of Rochelle. FAA approval is into the petitioner.
•	oticed public hearing, the City of Rochelle Planning & Zoning Commission will e relevant evidence presented at said hearing on October 3, 2022.
Staff Recomn	nends:
Staff is presen	ting the special use.
Findings: 1. Is the propopermit? Yes:	osed use allowed in the proposed zoning district, but only with a special use
Explanation	n:
recommend the of the following approve or design give an explan	o any of the following questions is "Yes", then the Commission should at the City Council deny the petition for a special use permit. If the answer to all ag questions is "No", then the Commission may recommend that the City Council my the petition for a special use permit. Each question should state an answer and ation. If the answers to all of the questions is "No", but the Commission votes to enying the petition, the Commission should provide an explanation as to why.
2. Is the proportion Yes:	osed use detrimental or dangerous to public health?No:
Explanation	n:

3. Will the proposed use impair property value in the neighborhood?

No: _____

Yes: _____

	Explanation:				
4.	Will the proposed use impede the normal development of the surrounding properties? Yes: No:				
	Explanation:				
5.	Will the proposed use: (a) impair light and air to adjacent property; (b) congest public streets; (c) increase the risk of fire; (d) substantially diminish property values within the vicinity; or (e) endanger the public health? Yes: No:				
R	Explanation:ecommendation:				
	In the Petitioner be granted a special use permit for the proposed use at the Subject Property, without conditions other than the other applicable requirements of the Rochelle Municipal Code. That the Petitioner be granted a special use permit for the proposed use at the Subject Property, with the following conditions attached thereto, in addition to the requirements of the Rochelle Municipal Code: That the Petitioner be denied a special use permit for the proposed use at the Subject Property, with the following conditions attached thereto, in addition to the requirements of the Rochelle Municipal Code: That the Petitioner be denied a special use permit for the proposed use at the Subject Property. If this is based on any reason other than a "Yes" response above, the Planning and Zoning Commission explains as follows:				
Pa	assed by the Planning & Zoning Commission:				
	Vote:				
	Ayes: Nays: Abstain:				
	CHAIRMAN				

Section VI. Item 3.

verde

VERDE SOLUTIONS LLC

2211 NORTH ELSTON,

SUITE 208

CHICAGO, IL 60614, USA +1 800-541-1137

150,00

1.22

HANWHA

Q.PEAK DUO XL-G10.3 480

480

11.12

10.59

53.39

45,33

-0.27

-0.34

63.34

40.07

382

CHINT CPS SCA25KTL-DO/US-208

1000

45000

208

200 - 950

25000

69.5

6

APSmart

RSD-S-PLC

1500

N/A

80

Yes

382

CLIENT ADDRESS

MUNICIPALITY

PHONE

DC SIZE (kW DC)

AC SIZE (kW AC)

DC/AC RATIO

MANUFACTURER

MODEL NUMBER(S)

PMAX @ STC (W)

ISC (A)

IMP (A)

VOC (V)

VMP (V)

TEMP COEFF OF VOC

(%/°C) TEMP COEFF OF PMAX

VOC @ MIN TEMP.

VMP @ MAX TEMP.

NUMBER OF MODULES

MANUFACTURER

MAXIMUM DC INPUT

VOLTAGE (V)

MAXIMUM DC INPUT

POWER (W) NOMINAL AC OUTPUT

MPPT OPERATING

VOLTAGE RANGE (V)

NOMINAL AC POWER (W)

MAX CONTINUOUS OUTPUT CURRENT (A)

NUMBER OF INVERTERS

MANUFACTURER

MODEL NUMBER(S)

MODULES PER MLPE MAXIMUM SYSTEM

VOLTAGE (V) RATED DC INPUT POWER

MAX VOLTAGE PER INPUT

RSD INTEGRATED?

NUMBER OF MLPES

SYSTEM CHARACTERISTICS

MODULE INFORMATION

INVERTER INFORMATION

MLPE INFORMATION



DRAWN BY

DATE 28-Jul-2022

CHECKED BY

DRAWING LEVEL ISSUED FOR CONSTRUCTION

SHEET SIZE 36X24 SHOULD MEASURE 1":

SCALE

SHEET TITLE

E0.0

CHICAGOLAND SKYDIVING CENTER ROOFTOP PV SYSTEM - ISSUED FOR CONSTRUCTION DRAWINGS

DRAWING INDEX

E0.0 - COVER PAGE

E0.1 - GENERAL NOTES

E1.0 - OVERALL SITE PLAN E1.1 - ELECTRICAL SITE PLAN

E1.2 - ARRAY LAYOUT

E1.3 - MODULE STRINGING LAYOUT

E2.0 - LINE DIAGRAM - SYSTEM 1

E2.1 - LINE DIAGRAM - SYSTEM 2

E2.2 - LINE DIAGRAM - SYSTEM 3

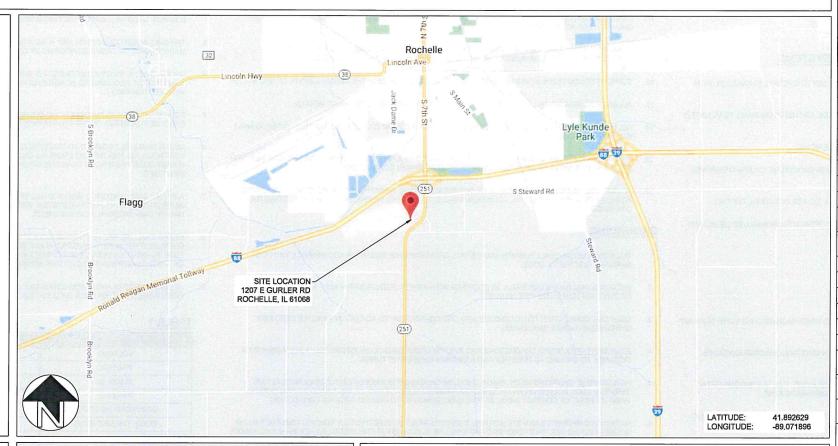
E2.3 - INVERTER SUMMARY

E2.4 - CONDUCTOR/CONDUIT SCHEDULE & DC STRING SUMMARY E3.0 - TYPICAL EQUIPMENT ELEVATIONS/PLANVIEWS

E5.0 - LABELING

E7.0 - EQUIPMENT SPEC SHEETS

David C. Hernandez Digitally signed by David C. Hernandez Date: 2022.08.10 07:20:39 -04:00



PROJECT NOTES:

1. CONSULT VERDE SOLUTIONS LLC BEFORE DEVIATING FROM THIS DRAWING

APPLICABLE CODES

NATIONAL ELECTRICAL CODE - NFPA 70 2017 (NEC) STANDARD FOR ELECTRICAL SAFETY IN THE WORKFORCE - NFPA 70E 2015 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

COMMERCIAL CON	STRUCTION DESIGN PARAMETERS
HIGH TEMPERATURE:	84.4°F (29.1°C)
LOW TEMPERATURE:	-47.2°F (-44.0°C)

FOR OFFICIAL USE ONLY:

APPLICABLE CODES AND STANDARDS

- 1. ADOPTED NEC VERSION: 2017
- 2. NATIONAL ELECTRICAL CODE NFPA 70 2017 (NEC)
- 3. STANDARD FOR ELECTRICAL SAFETY IN THE WORKFORCE NFPA 70E 2015
- 4. INTERNATIONAL ELECTRICAL TESTING ASSOCIATION ANSI/NETA STANDARD
- 5. UL 1703 SOLAR MODULES
- 6. UL 1741 INVERTERS, COMBINER BOXES (UL1741SA WHERE APPLICABLE)
- 7. UL 2703 RACKING RAILS, MOUNTS AND CLAMPS FOR PV MODULES

ELECTRICAL NOTES SPECIFIC TO PHOTOVOLTAIC SYSTEMS

- UNLESS SPECIFIED OTHERWISE THIS SOLAR PV SYSTEM IS CONNECTED TO OPERATE IN PARALLEL WITH UTILITY ELECTRICAL SERVICE.
- ALL EQUIPMENT (INCLUDING PV INVERTERS, COMBINERS, PULL BOXES, ENCLOSURES) SHALL BE UL LISTED 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 SOURCE CIRCUITS MUST BE PROTECTED AND ABLE TO BE ISOLATED FOR INDIVIDUAL TESTING.
- 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

- HAND HOLE, PULL BOXES, OR CONDUIT BODIES SHALL BE INSTALLED WHEN RACEWAY HAS MORE THAN 360' OF WIRE BENDS. (NEC 358,26)
- RMC TO BE USED WHEN CONDUIT IS EXPOSED TO DAMAGE OR WHEN ENTERING BUILDING ENVELOPE. CONDUIT INTERIOR TO BE SEALED TO PREVENT MOISTURE.
- EXPANSION FITTING (MTH BONDING JUMPERS) TO BE INSTALLED FOR EVERY 100' OF STRAIGHT METAL CONDUIT RUN AND WHERE CONDUIT RUN PASSES OVER EXISTING EXPANSION JOINT.
- EMT ACCEPTABLE AS RACEWAY WHERE NOT EXPOSED TO PHYSICAL DAMAGE. OTHERWISE IMC OR RMC SHALL BE USED.
- USE MYERS (OR APPROVED EQUIVALENT) HUB LISTED TO PROVIDE MOISTURE PROTECTION FOR CONDUIT ENTRANCES IN ALL APPLICABLE LOCATIONS AS REQUIRED BY NEC 314.15.
- 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 (NEC 350.30).
- 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.
- SUPPORT AND SECURELY FASTEN EMT CONDUIT EVERY 10', NO MORE THAN 3' FROM OUTLET OR JUNCTION BOX, TERMINATION ETC (NEC 358,30)
- 9. CONDUITS LONGER THAN 200' WITH NEGATIVE SLOPE TOWARD ELECTRICAL EQUIPMENT SHALL HAVE A PULL BOX OR VAULT ADJACENT TO THE ENTRY POINT INTO THE ELECTRICAL EQUIPMENT.
- 15" WIDE OR LESS BUCKET TO BE USED FOR TRENCHING. RESTORE GROUND TO MATCH EXISTING CONDITIONS.

CONDUCTORS AND CONDUCTOR INSTALLATION

- 11. SEE TABLE 1 FOR CONDUCTOR COLOR CODING.
- 12. 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 (HELLERMAN TYTON PA66UV OR EQUAL)
- MODULE TO SOURCE CIRCUIT CONNECTORS MUST BE OF THE SAME MAKE AND MODEL AS THE MODULE TO MODULE CONNECTORS. CONNECTORS MUST BE MC-4.
- 14. 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.

- 15. 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
- 16. NOALOX TO BE USED WITH ALL ALUMINUM LUGS.
- 17. COMPRESSION LUGS SHALL BE USED ON ALL ALUMINUM CABLE TERMINATIONS. MECHANICAL LUGS MAY ONLY BE USED FOR COPPER CABLE TERMINATIONS
- CONNECTION SHALL BE TORQUED PER DEVICE LISTING, OR MANUFACTURES RECOMMENDATIONS. CONNECTORS ARE TO BE MARKED WITH PERMANENT MARKING PAINT, AFTER TORQUING.
- 19. SUPPORT CONDUCTORS IN VERTICAL CONDUITS IN ACCORDANCE WITH THE REQUIREMENTS OF NEC 300.19.
- 20. ALL BARE CU WIRES SHALL BE INSTALLED AWAY FROM CONTACT WITH DISSIMILAR METALS.
- 21. ALL LOW VOLTAGE AC WIRING SHALL BE TYPE THWN-2 RATED AT 90°C UNLESS OTHERWISE NOTED, XHHW-2 IS ALSO ACCEPTABLE.
- 22. IF PLANS INDICATE ALUMINUM CONDUCTORS TERMINATED AT A FEEDER OR BRANCH CIRCUIT BREAKER, THE BREAKER LUGS SHALL BE SPECIFICALLY RATED FOR ALUMINUM CONDUCTORS.
- ALL 600 VOLT CLASS AC WIRING SHALL BE COPPER WIRE, TYPE THHN/THWN-2 RATED AT 90°C, AND RATED FOR 600V, OR APPROVED EQUAL ALUMINUM SHALL ONLY BE USED WHERE EXPRESSLY PERMITTED ON DRAWINGS.

GROUNDING

- 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.
- ONLY ONE CONNECTION TO DC CIRCUITS AND ONE CONNECTION TO AC CIRCUITS WILL BE USED FOR SYSTEM GROUNDING. (NEC 690.42)
- 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.
- B. 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.
- 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

- EQUIPMENT AND COMPONENTS SHALL BE LISTED AND LABELED BY A NATIONALLY-RECOGNIZED TESTING LABORATORY (NRTL) SUCH AS UL OR ETL, WHERE SUCH LISTING IS AVAILABLE FOR THE APPLICATION
- PROVIDE DANGER WARNING, AND CAUTION LABELS AS REQUIRED BY NESC, NEC OR OSHA STANDARDS ON EQUIPMENT ENCLOSURES, DOORS, ACCESS PLATES AND BARRIERS.
- 3. ALL OUTDOOR ENCLOSURES SHALL BE NEMA 3R, 4 OR 4X. ALL INDOOR ENCLOSURES SHALL BE NEMA 1.
- 4. ALL OUTDOOR ENCLOSURES REQUIRE AN APPROVED MEANS OF DRAINAGE AND VENTILATION, ALL NEMA 4R SHALL BE EQUIPPED WITH LISTED DRAIN PLUGS, ALL NEMA 3R SHALL BE EQUIPPED WITH A WEEP HOLE OR A LISTED DRAIN PLUG.
- CONDUIT TERMINATING IN OUTDOOR ENCLOSURES SHALL USE MYERS-TYPE HUBS WITH GROUND SCREW. UTILIZE RAINTIGHT FITTINGS FOR ALL CABLE ENTRIES.
- 5. DOORS PROVIDING ACCESS TO PARTS NORMALLY ENERGIZED AT OVER 600V SHALL BE PADLOCKABLE CLOSED. REMOVABLE PANELS PROVIDING ACCESS TO PARTS NORMALLY ENERGIZED AT OVER 600V SHALL REQUIRE TOOLS FOR REMOVAL OR BE PADLOCKABLE CLOSED.
- 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.
- CAULK ALONG BOTTOM PERIMETER OF EQUIPMENT MOUNTED ON CONCRETE PADS, OR TOP AND SIDE PERIMETERS OF WALL-MOUNTED EQUIPMENT, TO PREVENT WATER ENTRY BETWEEN ENCLOSURE AND MOUNTING SURFACE.
- 9. INSTALL BOLLARDS AS REQUIRED.

DISCONNECTING MEANS

- MEANS SHALL BE PROVIDED TO DISCONNECT ALL CURRENT CARRYING CONDUCTORS OF THE PHOTOVOLTAIC POWER SOURCE FROM ALL OTHER EXISTING CONDUCTORS.
- 2. WHERE A CIRCUIT GROUNDING CONNECTION IS NOT DESIGNED TO BE AUTOMATICALLY INTERRUPTED AS PART OF THE GROUND-FAULT PROTECTION SYSTEM REQUIRED BY SECTION 690.5, A SWITCH OR CIRCUIT BREAKER USED AS A DISCONNECTING MEANS SHALL NOT HAVE A POLE IN THE GROUNDED CONDUCTOR.
- THE GROUNDED CONDUCTOR MAY HAVE A BOLTED OR TERMINAL DISCONNECTING MEANS TO ALLOW MAINTENANCE OR TROUBLESHOOTING BY QUALIFIED PERSONNEL.
- UNLESS THE PV SYSTEM DISCONNECT IS SERVICING A SUPPLY-SIDE TAP, THE DISCONNECTING MEANS SHALL NOT BE REQUIRED TO BE SUITABLE AS SERVICE EQUIPMENT AND SHALL BE RATED IN ACCORDANCE WITH SECTION 890 17.
- 5. EQUIPMENT SUCH AS PHOTOVOLTAIC SOURCE CIRCUITS, OVER CURRENT DEVICES, AND BLOCKING DIODES SHALL BE PERMITTED ON THE PHOTOVOLTAIC SIDE OF THE PHOTOVOLTAIC DISCONNECTING MEANS.
- MEANS SHALL BE PROVIDED TO DISCONNECT EQUIPMENT SUCH AS INVERTERS, BATTERIES, CHARGE
 CONTROLLERS, AND THE LIKE FROM ALL UNGROUNDED CONDUCTORS OF ALL SOURCES. IF THE EQUIPMENT
 IS ENERGIZED FROM MORE THAN ONE SOURCE, THE DISCONNECTING MEANS SHALL BE GROUPED AND
 IDENTIFIED.
- A SINGLE DISCONNECTING MEANS SHALL BE PERMITTED FOR THE COMBINED A.C. OUTPUT OF ONE OR MORE INVERTERS IN AN INTERACTIVE SYSTEM, PROVIDED EACH INVERTER ASSOCIATED WITH THE DISCONNECT HAS ITS OWN INTERNAL AC DISCONNECT.
- 8. MEANS SHALL BE PROVIDED TO DISCONNECT A FUSE FROM ALL SOURCES OF SUPPLY IF THE FUSE IS ENERGIZED FROM BOTH DIRECTIONS AND IS ACCESSIBLE TO OTHER THAN QUALIFIED PERSONS. SUCH A FUSE IN A PHOTOVOLTAIC SOURCE CIRCUIT SHALL BE CAPABLE OF BEING DISCONNECTED INDEPENDENTLY OF FUSES IN OTHER PHOTOVOLTAIC SOURCE CIRCUITS.
- 9. ALL DISCONNECTS AND COMBINERS SHALL BE SECURED FROM UNAUTHORIZED AND UNQUALIFIED PERSONNEL BY EITHER LOCK OR LOCATION.

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 W/ ORANGE			
	DC CONDUCTORS			
UNGROUNDED SOURCE CIRCUIT	(+) FROM MODULE PERMANENTLY DYED BLACK WITH RED STRIPE. WHITE NOT PERMITTED	(-) FROM MODULE PERMANENTLY DYED BLACK. WHITE NOT PERMITTED		
EQUIPMENT GROUND (EGC)	GREEN OR BARE			

Section VI. Item 3.

veroe



CHICAGOLAND SKYDINING CENTER PROJECT ADDRESS 1207 E GURLER RD ROCHELLE, IL 61068 SHEET TITLE GENERAL NOTES

DRAWN BY

<u>DATE</u> 28-Jul-2022

CHECKED BY

DRAWING LEVEL
ISSUED FOR
CONSTRUCTION

 REV.
 DATE
 DRAWING LEVEL

 A
 05-JUL-2022
 ISSUED FOR CONSTRUCTION

 B
 12-JUL-2022
 ISSUED FOR CONSTRUCTION

 C
 26-JUL-2022
 ISSUED FOR CONSTRUCTION

 D
 D

 E
 E

FO 1

SHEET SIZE

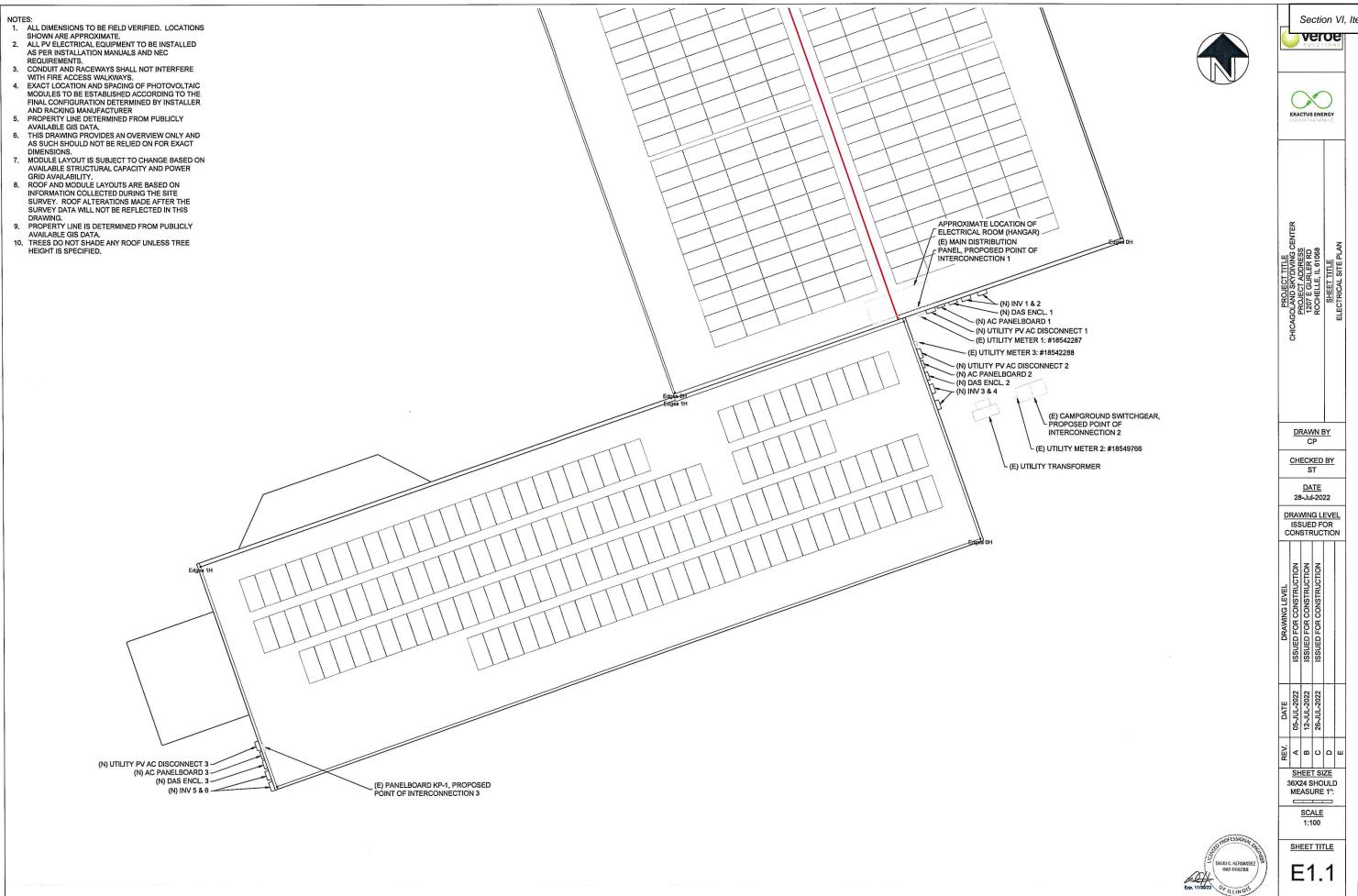
36X24 SHOULD

MEASURE 1":

SCALE



E GURLER RD



Section VI, Item 3.

- 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. CONDUIT AND RACEWAYS SHALL NOT INTERFERE 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 DATA WILL NOT BE REFLECTED IN THIS DRAWING.

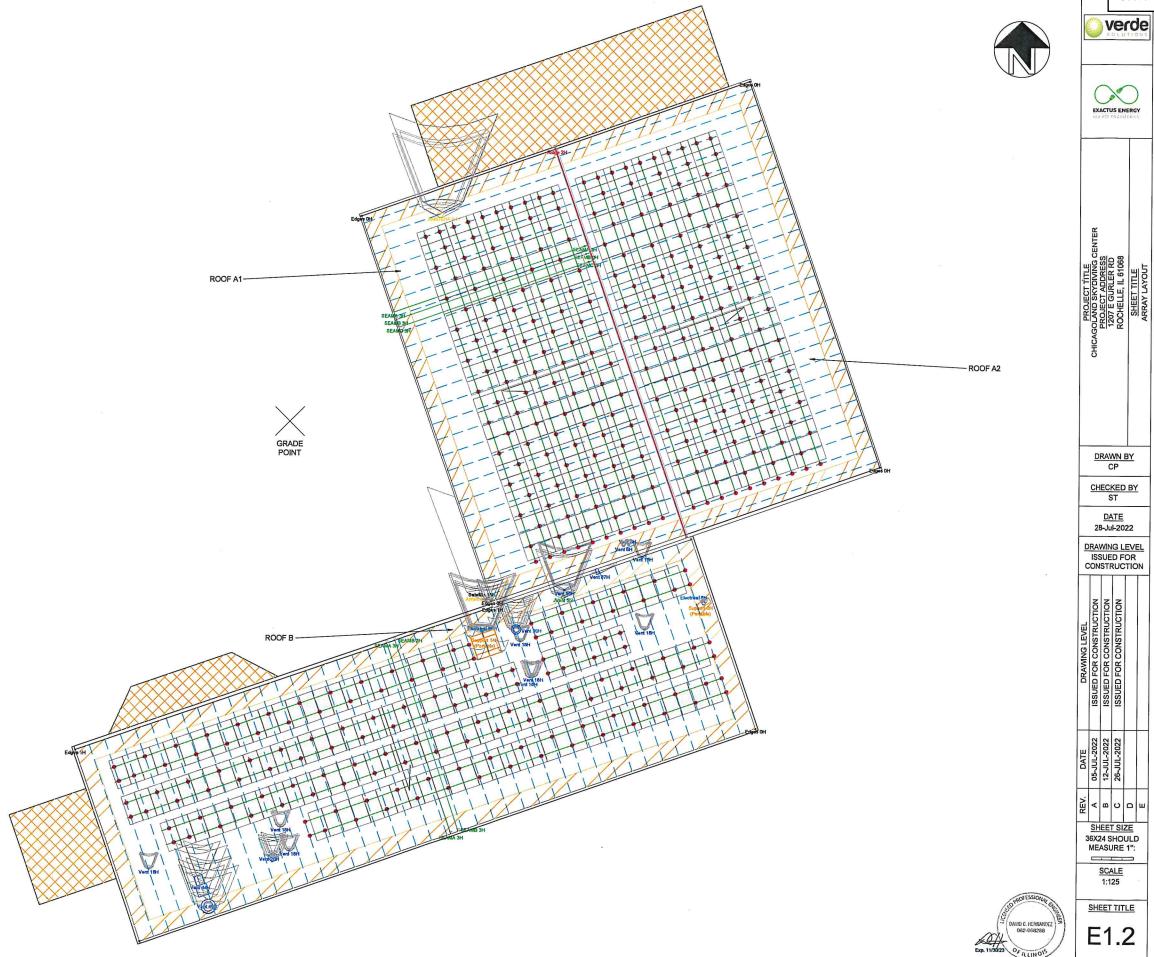
 9. PROPERTY LINE IS DETERMINED FROM PUBLICLY
- DRAWING.

 9. PROPERTY LINE IS DETERMINED FROM PUBLICLY
- AVAILABLE GIS DATA.

 10. TREES DO NOT SHADE ANY ROOF UNLESS TREE HEIGHT IS SPECIFIED.

LEGEND					
0	DRAIN	-	ACCESS		
0	VENT	-	ELECTRICAL		
-	GAS	_	ROOF SEAM		
	RTU	0	SATELLITE		
	BOX		SKYLIGHT		
V	SHADOW	_	SUPPORT		
%	TREE		UNSURVEYED		
_	RIDGE		FIRE ACCESS PATH		

	ROOF DETAILS					
		ARRAY AZIMUTH	MODULE MODULE COUNT		MATERIAL	HEIGHT ABOVE GRADE
A1	2.3°	251°	0°	120	METAL	P: 26'-6" E: 24' -2"
A2	2.3°	71°	0°	120	METAL	P: 26'-6" E: 24' -2"
В	2.5°	161°	6°	142	METAL	P: 15'-2" E: 13'-1"



Section VI, Item 3.

