

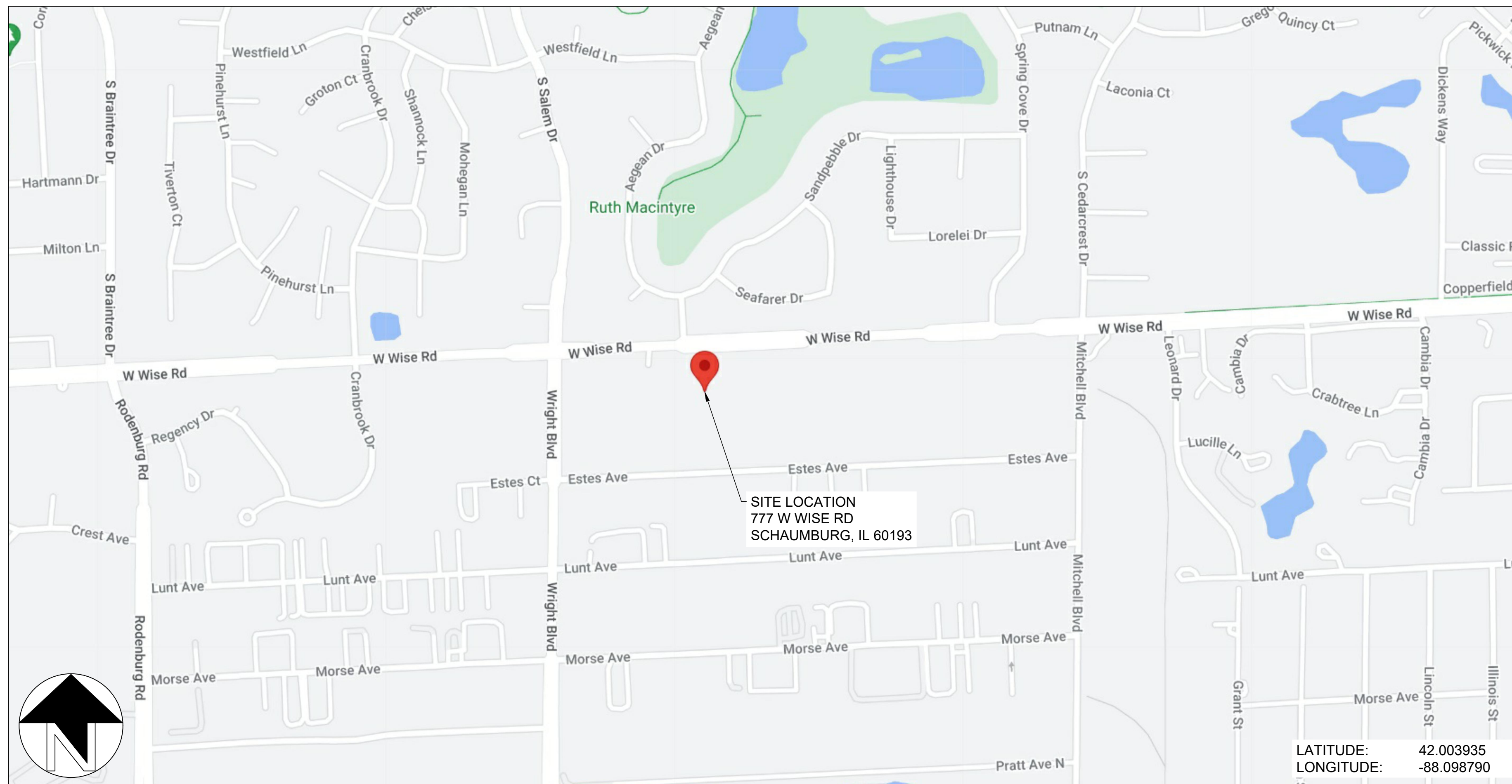
PUBLIC STORAGE #07008 - 777 W WISE RD

777 W WISE RD, SCHAUMBURG, IL 60193

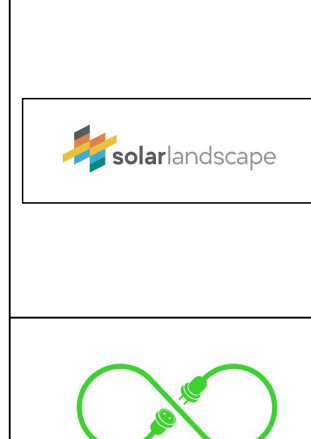
ROOFTOP PV SYSTEM - ISSUED FOR PERMIT

DRAWING INDEX

- G01 - TITLE SHEET
- G10 - OVERALL SITE PLAN
- G20 - ARRAY PLAN
- G21 - ARRAY DIMENSIONS
- G22 - BUILDING ELEVATION
- G30 - FIRE ACCESS PLAN
- E01 - ELECTRICAL NOTES
- E10 - ELECTRICAL SITE PLAN
- E11 - EQUIPMENT PLANS / ELEVATION
- E20 - DC STRINGING PLAN
- E30 - LINE DIAGRAM
- E31 - AC & DC CALCULATIONS
- E32 - AC & DC CALCULATIONS
- E33 - AC & DC CALCULATIONS
- E40 - ELECTRICAL DETAILS
- E50 - LABELING
- E60 - GROUNDING DETAILS
- E70 - EQUIPMENT SPECS
- E71 - EQUIPMENT SPECS



DEVELOPER INFORMATION	
DEVELOPER	SOLAR LANDSCAPE
ADDRESS	601 BANGS AVE, UNIT 3
MUNICIPALITY	ASBURY PARK, NJ 07712
PHONE	(646) 419-2645
EMAIL	LUCAS@SOLARLANDSCAPE.COM



SYSTEM CHARACTERISTICS	
DC SIZE (KW DC)	774.88
AC SIZE (KW AC)	500.00
DC/AC RATIO	1.55

MODULE INFORMATION	
MANUFACTURER	JINKO
MODEL NUMBER(S)	JKM580N-72HL4-8DV
PMAX @ STC (W)	580
ISC (A)	14.37
IMP (A)	13.62
VOC (V)	51.47
VMP (V)	42.59
TEMP COEFF OF VOC (%/°C)	-0.25
TEMP COEFF OF PMAX (%/°C)	-0.29
VOC @ MIN TEMP.	58.84
VMP @ MAX TEMP.	37.65
NUMBER OF MODULES	1336

INVERTER INFORMATION	
MANUFACTURER	SOLAREDGE
MODEL NUMBER(S)	SE100K-US8xxxx (480V)
MAXIMUM DC INPUT VOLTAGE (V)	1000
MAXIMUM DC INPUT POWER (W)	175000
NOMINAL AC OUTPUT VOLTAGE (V)	480
MPPT OPERATING VOLTAGE RANGE (V)	SEE OPTIMIZER SPECS
NOMINAL AC POWER (W)	100000
MAX CONTINUOUS OUTPUT CURRENT (A)	120
NUMBER OF INVERTERS	5

OPTIMIZER INFORMATION	
MANUFACTURER	SOLAREDGE
MODEL NUMBER(S)	S1201
MODULES PER OPTIMIZER	2
MAXIMUM SYSTEM VOLTAGE (V)	1000
RATED DC INPUT POWER (W)	1200
MAX CONTINUOUS OUTPUT CURRENT (A)	18
MPPT VOLTAGE RANGE	12.5 - 125
NUMBER OF OPTIMIZERS	684

ELECTRICAL CERTIFICATION



PUBLIC STORAGE #07008 - 777 W WISE RD
777 W WISE RD
SCHAMBURG, IL 60193

DRAWN BY
IE

CHECKED BY
PB

DATE
01-Aug-2024

DRAWING LEVEL
ISSUED FOR PERMIT

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
5. AHJ: SCHAMBURG VILLAGE

COMMERCIAL CONSTRUCTION DESIGN PARAMETERS

HIGH TEMPERATURE:	31.3°C
LOW TEMPERATURE:	-20.4°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 (UL1741SB WHERE APPLICABLE)
 UL 2703 - RACKING RAILS, MOUNTS AND CLAMPS FOR PV MODULES
 2021 INTERNATIONAL BUILDING CODE (IBC)
 2021 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
 2021 INTERNATIONAL FIRE CODE (IFC)

FOR OFFICIAL USE ONLY:

	EXISTING BUILDING	PROPOSED ALTER
IBC OCCUPANCY CLASSIFICATION	STORAGE S2	STORAGE S2
NFPA 101 CLASSIFICATION	STORAGE	STORAGE
TYPE OF CONSTRUCTION	TYPE 1 & 2	TYPE 1 & 2
NUMBER OF STORIES ABOVE GRADE	2	2
HIGH RISE (Y / N)	N	N
COVERED MALL (Y / N)	N	N
FULLY SPRINKLERED (Y / N)	N	N
FIRE ALARM (Y / N)	Y	Y
FLOOR AREA OF RENOVATION	NA	ROOFTOP SOLAR - 42,000 SQ. FT.

DRAWING LEVEL	ISSUED FOR PERMIT	ISSUED FOR PERMIT

REV.	DATE
A	09-JUL-2024
B	01-AUG-2024
C	
D	
E	

SHEET SIZE
36X24 SHOULD MEASURE 1":

SCALE
NTS

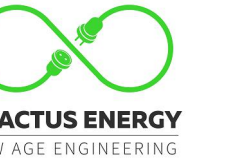
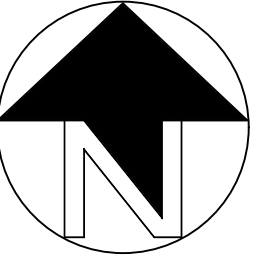
SHEET TITLE

G01

TITLE SHEET

NOTES:

1. ALL DIMENSIONS TO BE FIELD VERIFIED. LOCATIONS SHOWN ARE APPROXIMATE.
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.



ELECTRICAL CERTIFICATION



PUBLIC STORAGE #07008 - 777 W WISE RD
777 W WISE RD
SCHAUMBURG, IL 60193

DRAWN BY
IE

CHECKED BY
PB

DATE
01-AUG-2024

DRAWING LEVEL
ISSUED FOR PERMIT

ISSUED FOR PERMIT

DRAWING LEVEL

ISSUED FOR PERMIT

ISSUED FOR PERMIT

DATE

09-JUL-2024

01-AUG-2024

REV.

A B C D E

SHEET SIZE
36X24 SHOULD
MEASURE 1":

SCALE
1:275

SHEET TITLE

G21
ARRAY
DIMENSIONS

LEGEND

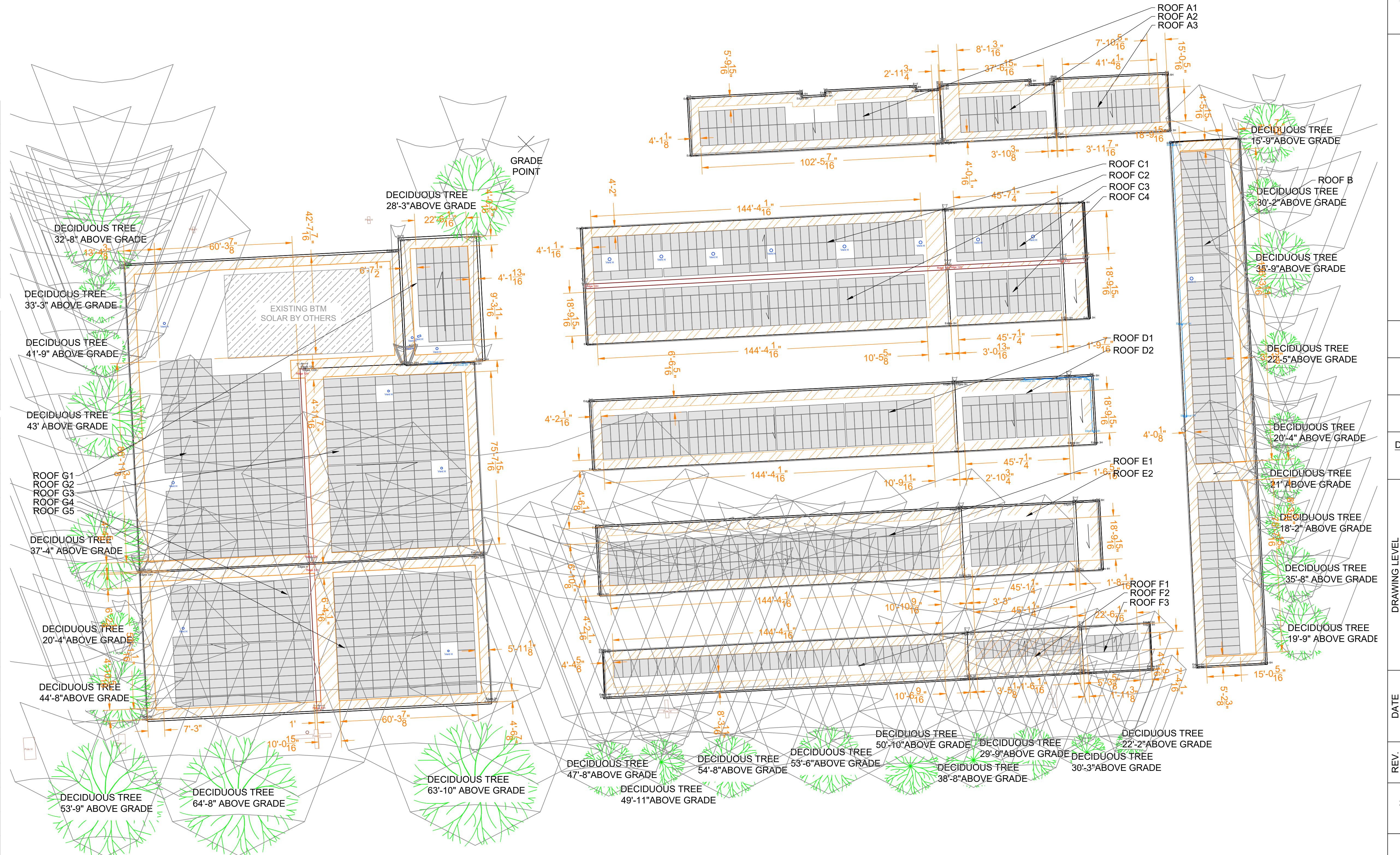
	DRAIN		ACCESS
	VENT		ELECTRICAL
	GAS		ROOF SEAM
	RTU		SATELLITE
	BOX		SKYLIGHT
	SHADOW		SUPPORT
	TREE		UNSURVEYED
	RIDGE		FIRE ACCESS PATH
	STRUCTURAL KEEPOUT		

PROJECT DETAILS

SYSTEM SIZE	774.88 KW DC
NUMBER OF MODULES	1336
MODULE MODEL	JINKO-JKM580N-72HL4-BDV (580W)
MODULE SIZE	89.69" X 44.65"
SITE SURVEY DATE	27-MAR-2024

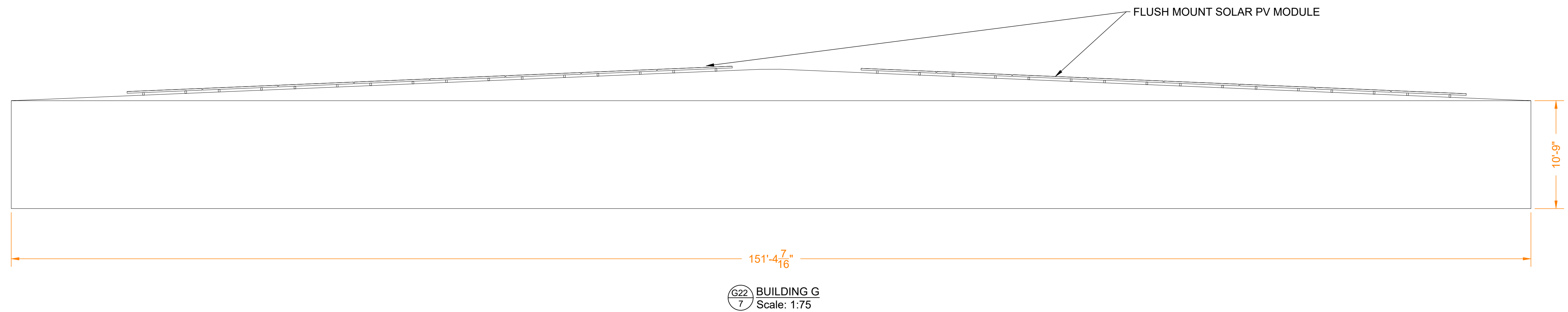
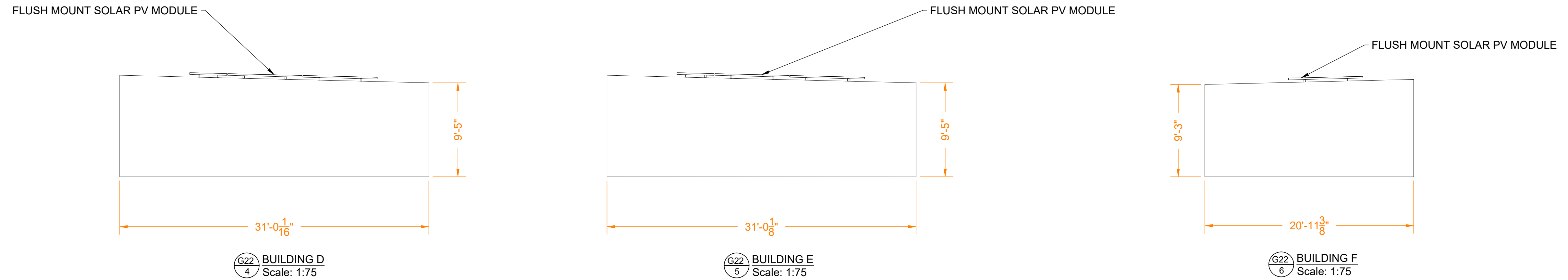
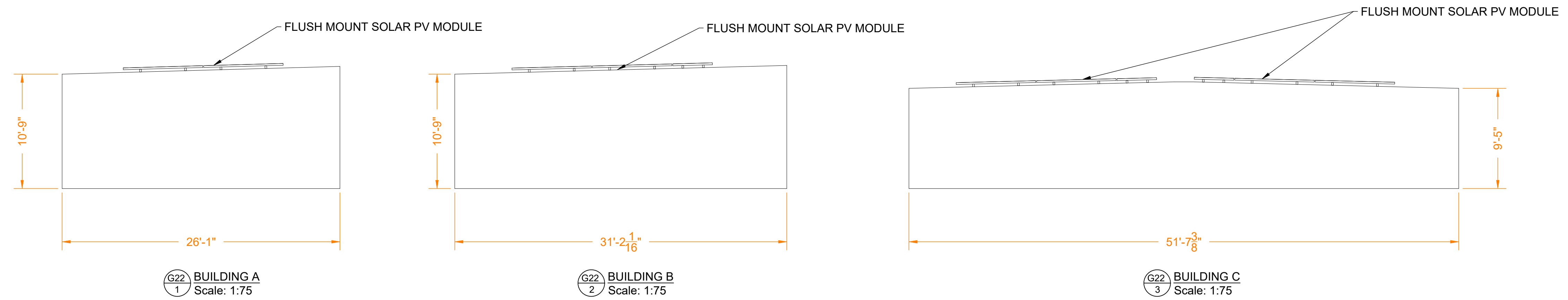
ROOF DETAILS

ROOF #	PITCH	ARRAY AZIMUTH	MODULE TILT	MODULE COUNT	MATERIAL	HEIGHT ABOVE GRADE
A1	1.6°	177°	FLUSH MOUNT	45	METAL	10' - 9"
A2	1.3°	177°	FLUSH MOUNT	17	METAL	10' - 9"
A3	1.6°	177°	FLUSH MOUNT	21	METAL	10' - 9"
B	1.5°	177°	FLUSH MOUNT	128	METAL	10' - 9"
C1	1.4°	357°	FLUSH MOUNT	85	METAL	9' - 5"
C2	1.4°	177°	FLUSH MOUNT	95	METAL	9' - 5"
C3	1.4°	357°	FLUSH MOUNT	27	METAL	9' - 5"
C4	1.4°	177°	FLUSH MOUNT	30	METAL	9' - 5"
D1	1.4°	177°	FLUSH MOUNT	95	METAL	9' - 5"
E1	1.3°	177°	FLUSH MOUNT	95	METAL	9' - 5"
E2	1.3°	177°	FLUSH MOUNT	30	METAL	9' - 5"
F1	1.5°	357°	FLUSH MOUNT	38	METAL	9' - 3"
F2	1.5°	357°	FLUSH MOUNT	12	METAL	9' - 3"
F3	1.5°	357°	FLUSH MOUNT	6	METAL	9' - 3"
G1	2°	357°	FLUSH MOUNT	35	METAL	17' - 11"
G2	2.4°	267°	FLUSH MOUNT	171	METAL	10' - 9"
G3	2.4°	87°	FLUSH MOUNT	156	METAL	10' - 9"
G4	2.4°	267°	FLUSH MOUNT	110	METAL	10' - 9"
G5	2.4°	87°	FLUSH MOUNT	110	METAL	10' - 9"



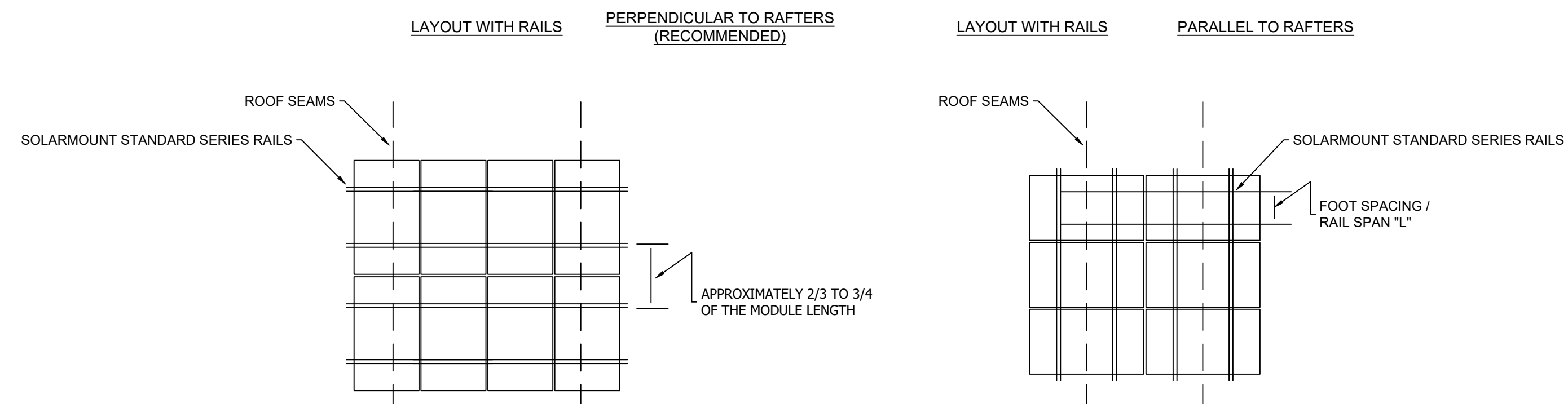
NOTES:

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



NOTES:

- 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.
- MODULE GAP IS 1/2" (E-W) AND 1" FOR ROW SPACING (N-S).
- THERE IS 6" MODULE TO MODULE GAP FOR EVERY 12 MODULES MAXIMUM FOR THERMAL EXPANSION.



G22 8 RACKING DETAILS - SOLARMOUNT STANDARD SERIES SCALE: NTS

LEGEND

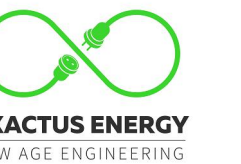
	DRAIN		ACCESS
	VENT		ELECTRICAL
	GAS		ROOF SEAM
	RTU		SATELLITE
	BOX		SKYLIGHT
	SHADOW		SUPPORT
	TREE		UNSURVEYED
	RIDGE		FIRE ACCESS PATH
	STRUCTURAL KEEPOUT		

PROJECT DETAILS

SYSTEM SIZE	774.88 KW DC
NUMBER OF MODULES	1336
MODULE MODEL	JINKO-JKM580N-72HL4-BDV (580W)
MODULE SIZE	89.69" X 44.65"
SITE SURVEY DATE	27-MAR-2024

ROOF DETAILS

ROOF #	PITCH	ARRAY AZIMUTH	MODULE TILT	MODULE COUNT	MATERIAL	HEIGHT ABOVE GRADE
A1	1.6°	177°	FLUSH MOUNT	45	METAL	10' - 9"
A2	1.3°	177°	FLUSH MOUNT	17	METAL	10' - 9"
A3	1.6°	177°	FLUSH MOUNT	21	METAL	10' - 9"
B	1.5°	177°	FLUSH MOUNT	128	METAL	10' - 9"
C1	1.4°	357°	FLUSH MOUNT	85	METAL	9' - 5"
C2	1.4°	177°	FLUSH MOUNT	95	METAL	9' - 5"
C3	1.4°	357°	FLUSH MOUNT	27	METAL	9' - 5"
C4	1.4°	177°	FLUSH MOUNT	30	METAL	9' - 5"
D1	1.4°	177°	FLUSH MOUNT	95	METAL	9' - 5"
D2	1.4°	177°	FLUSH MOUNT	30	METAL	9' - 5"
E1	1.3°	177°	FLUSH MOUNT	95	METAL	9' - 5"
E2	1.3°	177°	FLUSH MOUNT	30	METAL	9' - 5"
F1	1.5°	357°	FLUSH MOUNT	38	METAL	9' - 3"
F2	1.5°	357°	FLUSH MOUNT	12	METAL	9' - 3"
F3	1.5°	357°	FLUSH MOUNT	6	METAL	9' - 3"
G1	2°	357°	FLUSH MOUNT	35	METAL	17' - 11"
G2	2.4°	267°	FLUSH MOUNT	171	METAL	10' - 9"
G3	2.4°	87°	FLUSH MOUNT	156	METAL	10' - 9"
G4	2.4°	267°	FLUSH MOUNT	110	METAL	10' - 9"
G5	2.4°	87°	FLUSH MOUNT	110	METAL	10' - 9"



ELECTRICAL CERTIFICATION



PUBLIC STORAGE #07008 - 777 W WISE RD
777 W WISE RD
SCHAUMBURG, IL 60193

DRAWN BY IE

CHECKED BY PB

DATE 01-AUG-2024

DRAWING LEVEL ISSUED FOR PERMIT

DRAWING LEVEL	ISSUED FOR PERMIT	ISSUED FOR PERMIT

REV.	DATE	DATE
A	09-JUL-2024	01-AUG-2024
B		
C		
D		
E		

SHEET SIZE 36X24 SHOULD MEASURE 1":

SCALE 1:75

SHEET TITLE

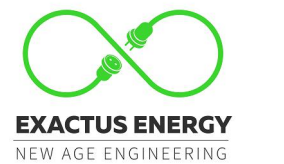
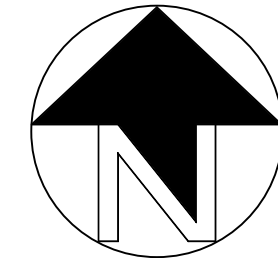
G22

BUILDING ELEVATION

NOTES:

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

SUMMARY OF CODES APPLIED	
CODE	DESCRIPTION
2021 IFC SECTION 1205.3.1 EXCEPTION	BUILDINGS WHERE EITHER AXIS IS LESS THAN 250' ARE PERMITTED TO USE 4' PERIMETER FIRE ACCESS PATHWAYS.
2021 IFC SECTION 1205.3.2.1	INTERIOR PATHWAYS SHOULD BE PROVIDED BETWEEN ARRAY SECTIONS AT INTERVALS NOT GREATER THAN 150' THROUGHOUT THE LENGTH AND WIDTH OF THE ROOF.
2021 IFC SECTION 1205.3.3.3.1	8' SMOKE VENTILATION PATHWAYS ARE PROVIDED BETWEEN ARRAY SECTIONS



ELECTRICAL CERTIFICATION



PUBLIC STORAGE #07008 - 777 W WISE RD
777 W WISE RD
SCHAUMBURG, IL 60193

DRAWN BY IE

CHECKED BY PB

DATE 01-Aug-2024

DRAWING LEVEL ISSUED FOR PERMIT

REV.	DATE	ISSUED FOR PERMIT	ISSUED FOR PERMIT
A	09-JUL-2024		
B	01-AUG-2024		
C			
D			
E			

REV.	DATE	ISSUED FOR PERMIT	ISSUED FOR PERMIT
A	09-JUL-2024		
B	01-AUG-2024		
C			
D			
E			

SHEET SIZE 36X24 SHOULD MEASURE 1":

SCALE 1:275

SHEET TITLE

G30
FIRE ACCESS PLAN

LEGEND

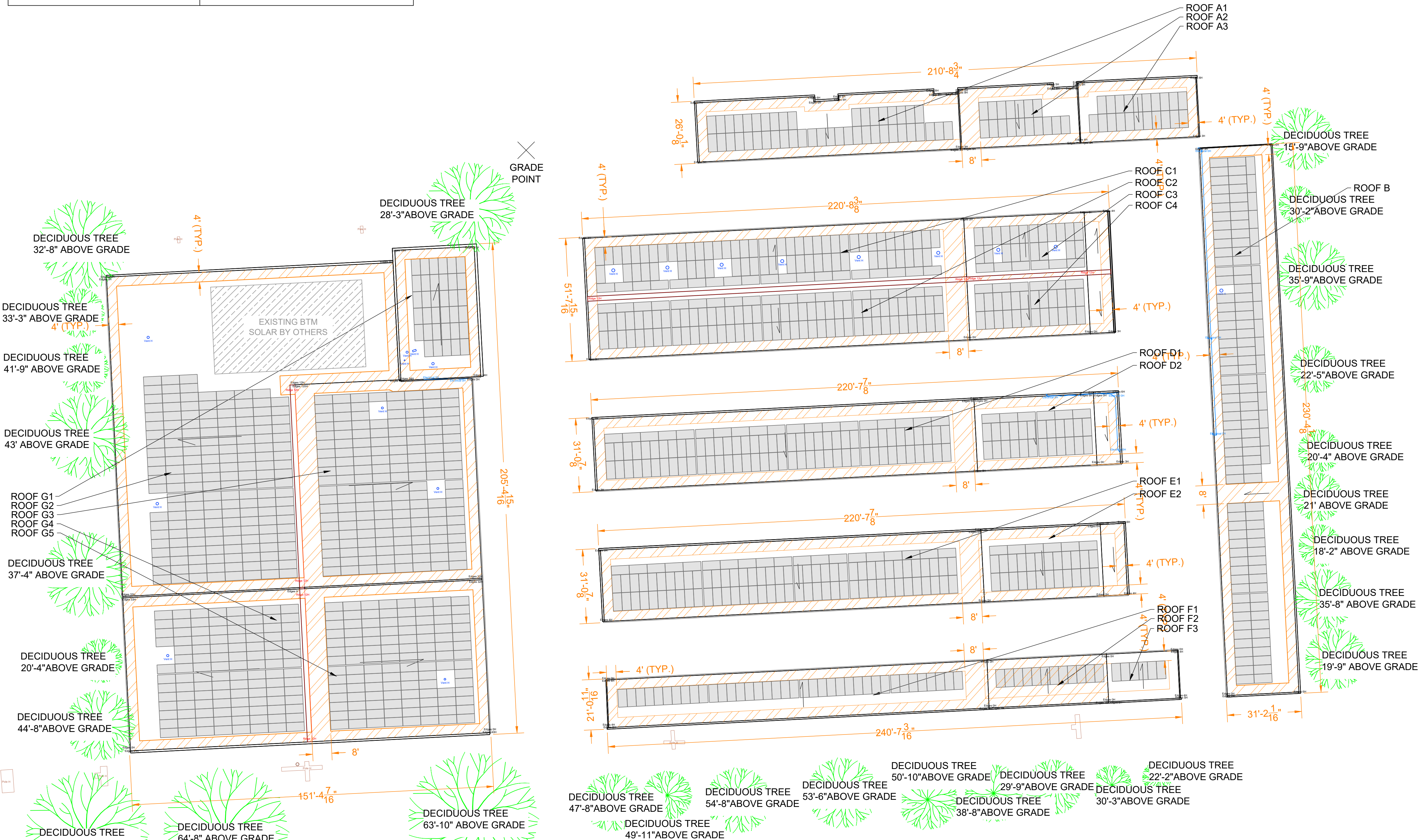
	DRAIN		ACCESS
	VENT		ELECTRICAL
	GAS		ROOF SEAM
	RTU		SATELLITE
	BOX		SKYLIGHT
	SHADOW		SUPPORT
	TREE		UNSURVEYED
	RIDGE		FIRE ACCESS PATH
	STRUCTURAL KEEPOUT		

PROJECT DETAILS

SYSTEM SIZE	774.88 KW DC
NUMBER OF MODULES	1336
MODULE MODEL	JINKO-JKM580N-72HL4-BDV (580W)
MODULE SIZE	89.69" X 44.65"
SITE SURVEY DATE	27-MAR-2024

ROOF DETAILS

ROOF #	PITCH	ARRAY AZIMUTH	MODULE TILT	MODULE COUNT	MATERIAL	HEIGHT ABOVE GRADE
A1	1.6°	177°	FLUSH MOUNT	45	METAL	10' - 9"
A2	1.3°	177°	FLUSH MOUNT	17	METAL	10' - 9"
A3	1.6°	177°	FLUSH MOUNT	21	METAL	10' - 9"
B	1.5°	177°	FLUSH MOUNT	128	METAL	10' - 9"
C1	1.4°	357°	FLUSH MOUNT	85	METAL	9' - 5"
C2	1.4°	177°	FLUSH MOUNT	95	METAL	9' - 5"
C3	1.4°	357°	FLUSH MOUNT	27	METAL	9' - 5"
C4	1.4°	177°	FLUSH MOUNT	30	METAL	9' - 5"
D1	1.4°	177°	FLUSH MOUNT	95	METAL	9' - 5"
D2	1.4°	177°	FLUSH MOUNT	30	METAL	9' - 5"
E1	1.3°	177°	FLUSH MOUNT	95	METAL	9' - 5"
E2	1.3°	177°	FLUSH MOUNT	30	METAL	9' - 5"
F1	1.5°	357°	FLUSH MOUNT	38	METAL	9' - 3"
F2	1.5°	357°	FLUSH MOUNT	12	METAL	9' - 3"
F3	1.5°	357°	FLUSH MOUNT	6	METAL	9' - 3"
G1	2°	357°	FLUSH MOUNT	35	METAL	17' - 11"
G2	2.4°	267°	FLUSH MOUNT	171	METAL	10' - 9"
G3	2.4°	87°	FLUSH MOUNT	156	METAL	10' - 9"
G4	2.4°	267°	FLUSH MOUNT	110	METAL	10' - 9"
G5	2.4°	87°	FLUSH MOUNT	110	METAL	10' - 9"



GRADE POINT

205'-4 15/16"

151'-4 7/16"

