

# PHOTOVOLTAIC SYSTEM FOR Ai3 ARCHITECT - LOWELL ES

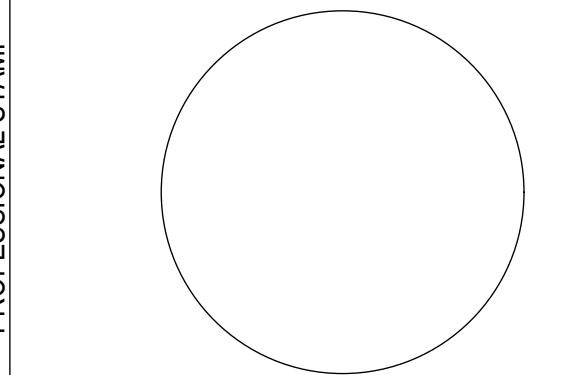
## 175 ORCHARD ST, WATERTOWN MA 02472

NOT FOR CONSTRUCTION  
SCHEMATIC PURPOSES ONLY

THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. CERTIFICATION OR VALIDATION IS TO BE DONE BY A PROFESSIONAL WITH EXPERTISE IN THE REQUIRED FIELD AND A LICENSE IN THE STATE THAT THE INSTALLATION WILL RESIDE. CERTIFICATION OR VALIDATION TO BE INCLUDED AS PART OF THE SUBMITTALS FOR PERMITTING OF THE OVERALL PROJECT.

**Ai3 ARCHITECT - LOWELL ES**

SCHEMATIC  
Tuesday, July 6, 2021



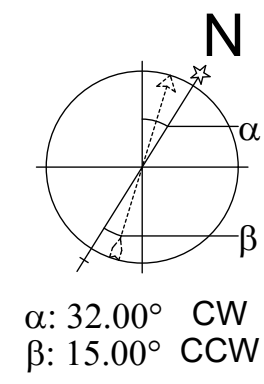
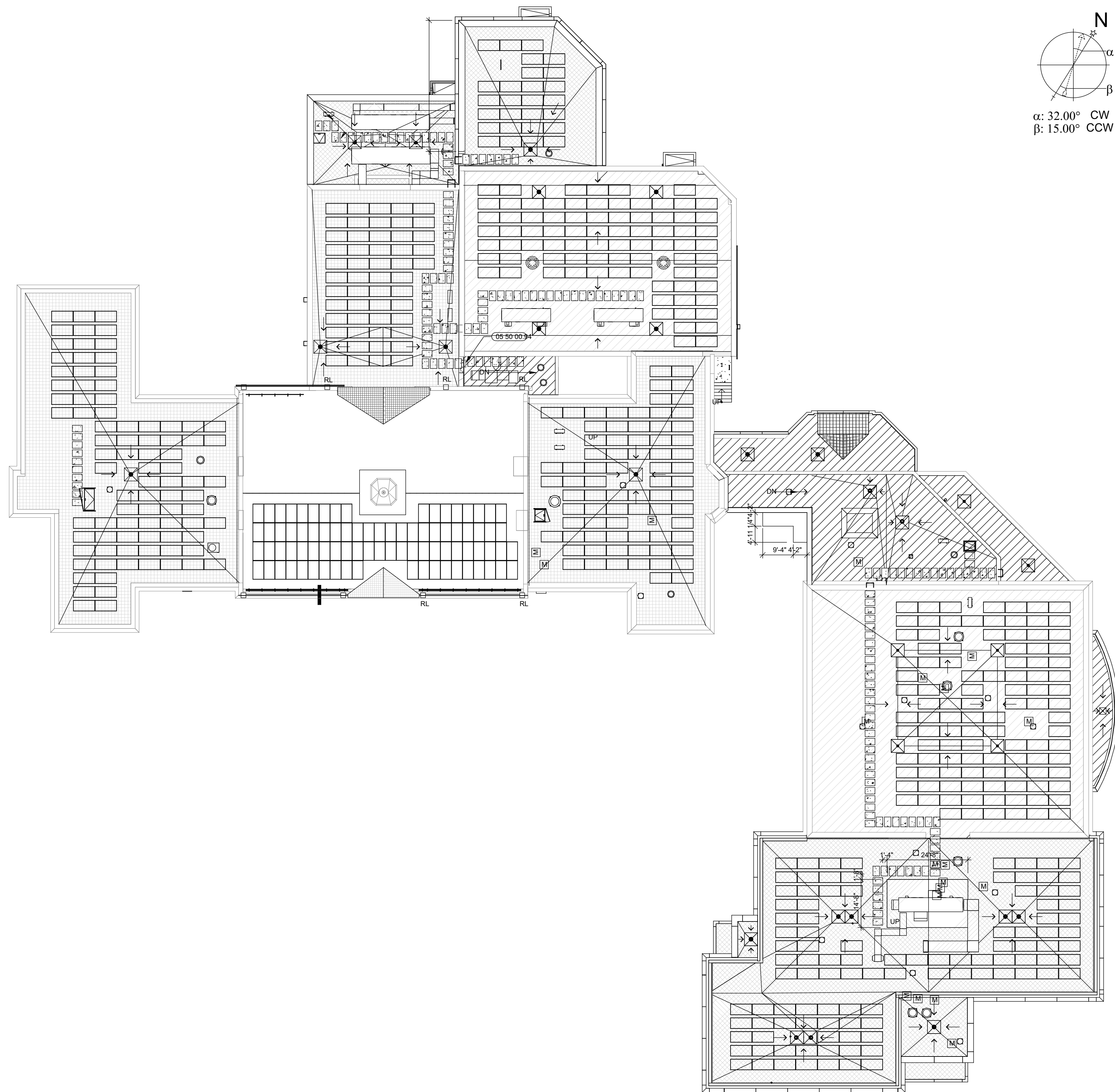
MARK	DATE	DESCRIPTION
-	06/28/2021	SCHEMATIC

CONTRACTOR	NAME
	STREET
	CITY/ST/ZIP
	NOTES

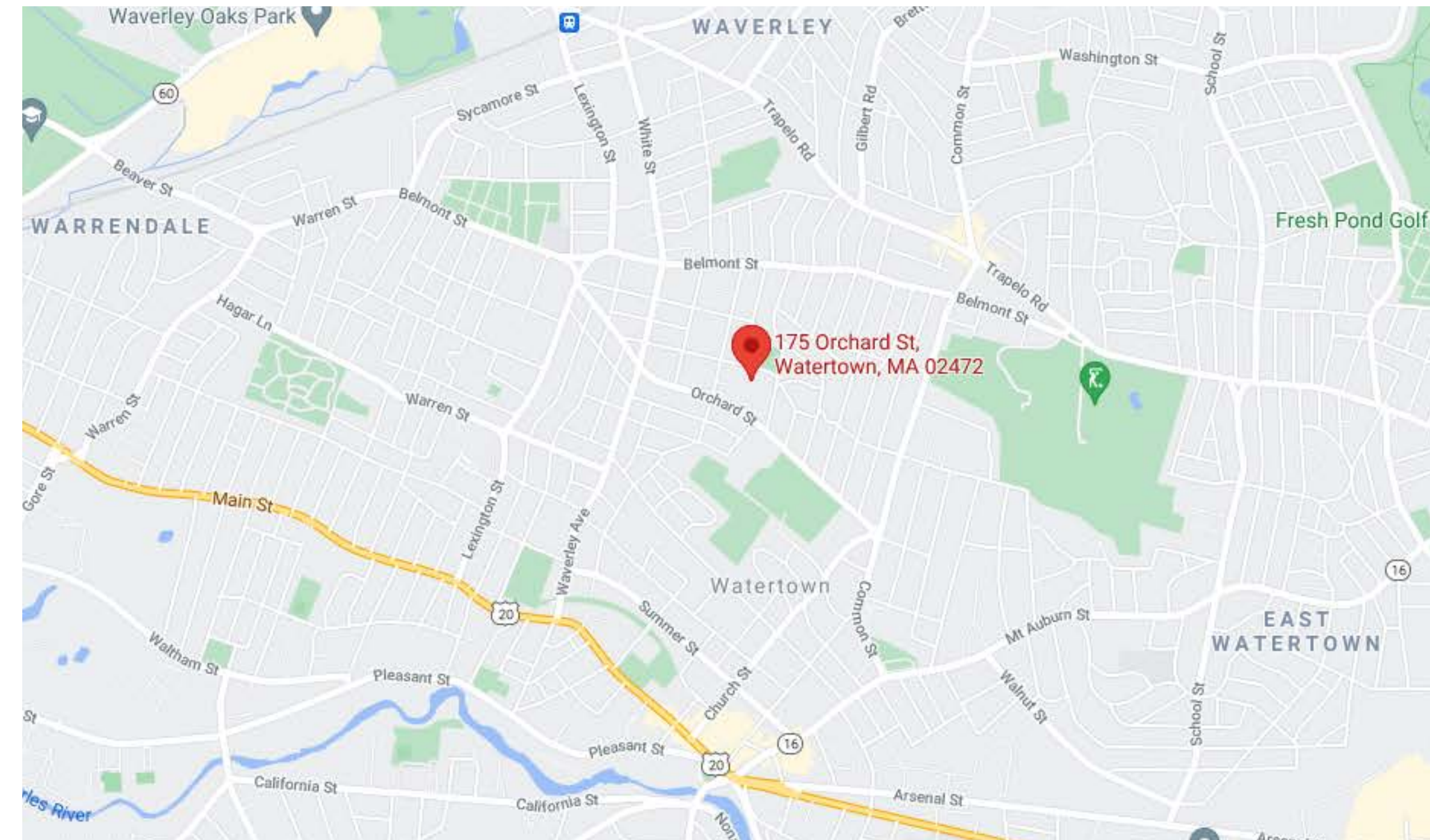
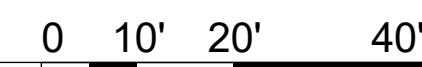
SITE	NAME
	STREET
	CITY/ST/ZIP
	NOTES

FILE NAME	2021-0701 Ai3 Architects - Watertown, MA - Lowell ES.p
SCALE	AS NOTED
DRAWN BY	SMC DATE DRAFTED: 7/6/2021
CHECKED BY	SMC SHEET SIZE: ARCH D

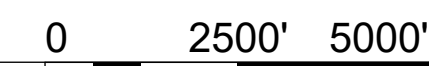
DRAWING NO.	<b>PV001</b>
DRAWING TITLE	<b>PV SITE PLAN</b>



**1** 277.65 kWdc PV ARRAY WITH 617QTY 450W MODULES AT MULTIPLE TILT ANGLES



**2** LOCUS MAP



**3** SIMILAR PV ARRAY

	10° & 32° FIXED TILT PV ARRAYS AZIMUTH: 148°	ESTIMATED ANNUAL ENERGY PRODUCTION BASED ON: PVWATTS CALCULATOR LAT, LON 42.37, -71.18 WEATHER DATA PREMIUM MODULE 16% SYSTEM LOSSES FIXED (ROOF MOUNT) 96% INV EFFICIENCY		
	MODULES	DC POWER	AC POWER	ANNUAL AC ENERGY
10° BALLASTED ARRAY	617/ 450W	277.65 kWdc	- kWac	282,000 kWh/yr
32° FLUSH MOUNT ARRAY	84/ 450W	37.8 kWdc	- kWac	48,000 kWh/yr

ESTIMATED ANNUAL ENERGY PRODUCTION BASED ON:  
PVWATTS CALCULATOR  
LAT, LON 42.37, -71.18 WEATHER DATA  
PREMIUM MODULE  
16% SYSTEM LOSSES  
FIXED (ROOF MOUNT)  
96% INV EFFICIENCY