

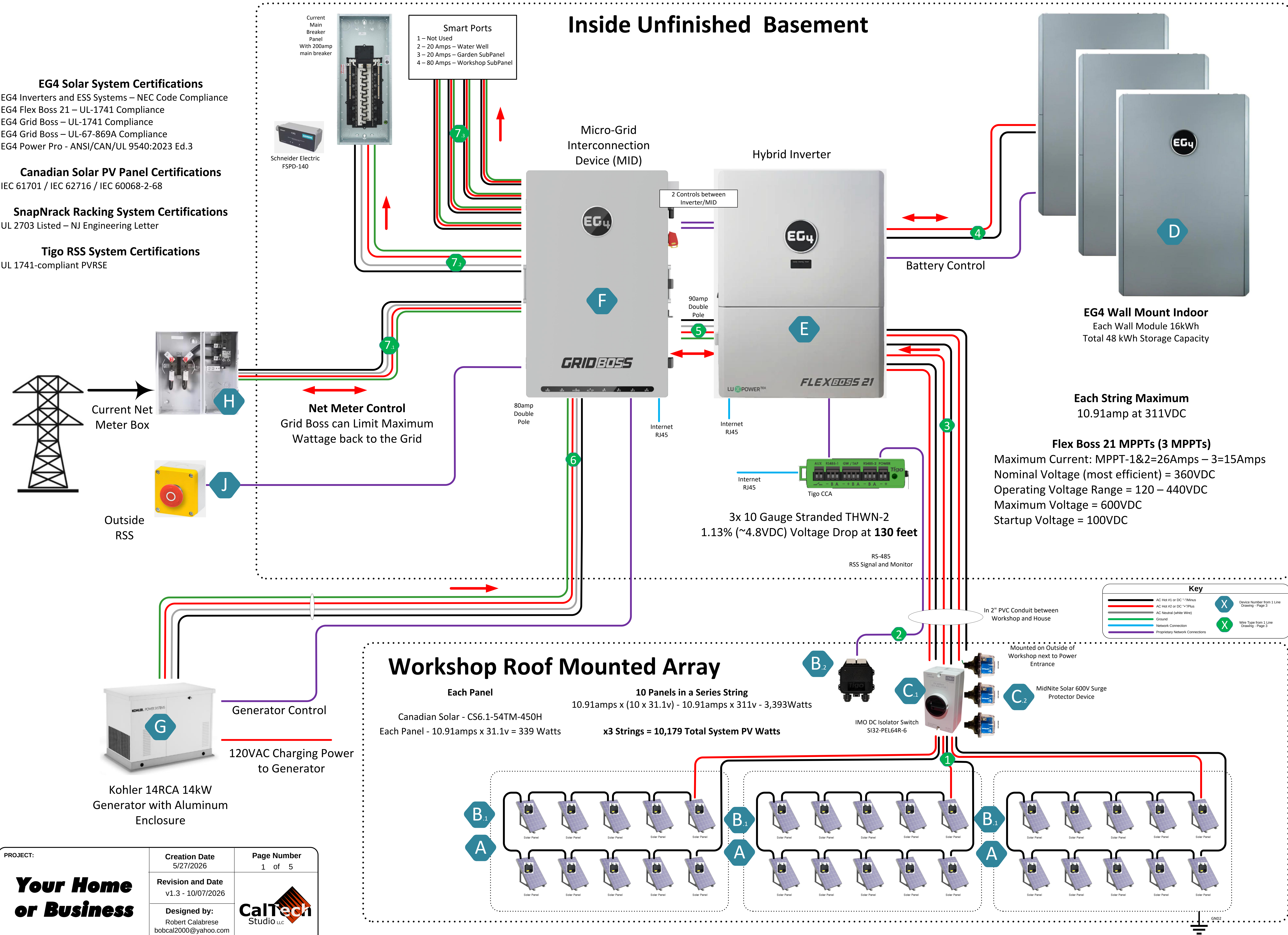
Logical Design - Sample

EG4 Solar System Certifications
EG4 Inverters and ESS Systems – NEC Code Compliance
EG4 Flex Boss 21 – UL-1741 Compliance
EG4 Grid Boss – UL-1741 Compliance
EG4 Grid Boss – UL-67-869A Compliance
EG4 Power Pro - ANSI/CAN/UL 9540:2023 Ed.3

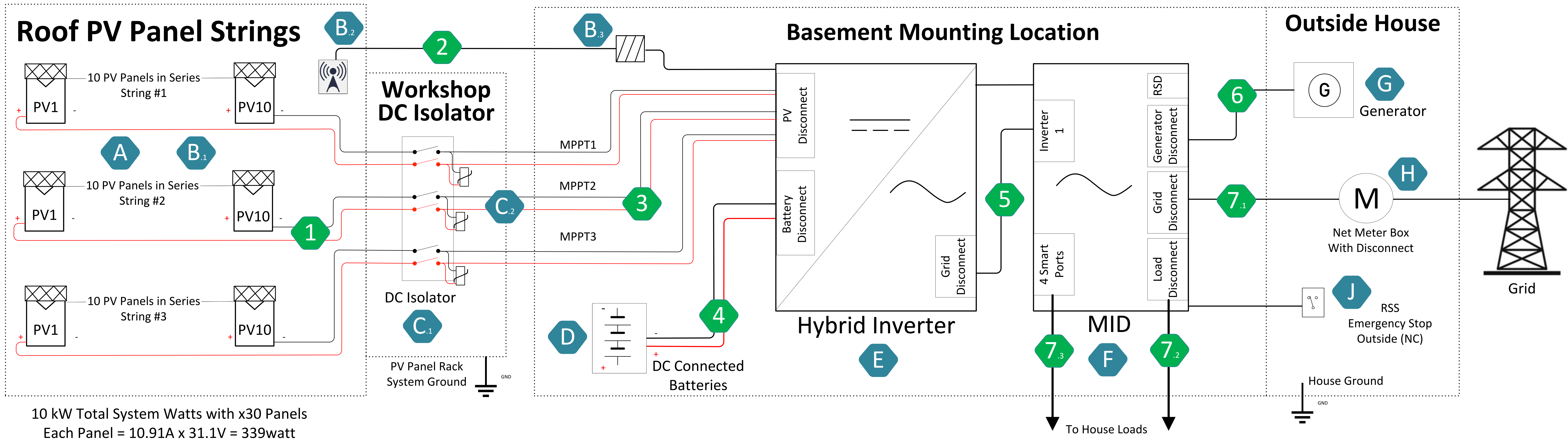
Canadian Solar PV Panel Certifications
IEC 61701 / IEC 62716 / IEC 60068-2-68

SnapNrack Racking System Certifications
UL 2703 Listed – NJ Engineering Letter

Tigo RSS System Certifications
UL 1741-compliant PVRSE



Single Line Drawing - Sample



SYSTEM SPECIFICATIONS

A	PV Panels (Under Normal Module Operating Temperature (NMOT))												
	Make	Model	Quantity	Pmax	Vmp	Imp	Voc	Isc	(Pmax)	(Voc)	(Isc)	Nominal Temp	Calls & Type
	Canadian Solar	CS6.1-54TM-450H	30	339 W	31.1V	10.91A	36.7V	11.74A	-.34 % / C	-0.25 % / C	0.05 % / C	42 C	108 TOPCon
B	Rapid Shutdown System (RSS)												
	Make	Model	Quantity	Description									
	1 - Tigo	TS4-A-O	30	Provides Optimization, Monitoring, Rapid Shutdown									
	2 - Tigo	158-00000-02	1	Wireless Access Point for TS4-A-O									
	3 - Tigo	346-00000-00	1	Cloud Connected Advanced Data Logger/Gateway									
C	DC Isolator / MOV												
	Make	Model	Quantity	Poles	Max Current	Max Voltage	Notes						
	1 - IMO	SI32-PEL64R-4	1	6	32 amp DC	700 VDC	NEMA type 4X, IP67 - 9.44" x 6.92" x 4.72"						
	2 - MidNite Solar	MNSPD-600	3	n/a	n/a	485 VAC / 600 VDC							
D	Energy Storage Solution (ESS)												
	Make	Model	Quantity	Voltage	Amp Hours	Watt Hours	Description						
	EG4 Electronics	WM-48-314-IN-	3	48V	314Ah	16 kWh	Wall Mount Indoor 3x 16 kWh = 48 kWh total						
E	Hybrid Inverter												
	Make	Model	Quantity	MPPT DC Input Range	Nominal MPPT Voltage	PV Max input Current per MPPT (3 MPPTs)	Max Solar Input	Battery Max V / Discharge A	Max AC Current A				
	EG4 Electronics	FlexBOSS 21	1	120 - 440V	360V	26A MPPT#1&2 - 15A MPPT#3	21kW	48V / 208A	50A				
F	Micro-Grid Interconnection Device (MID)												
	Make	Model	Quantity	Description	Nominal AC Voltage	Grid Frequency	Max Generator A	Max Throughput A					
	EG4 Electronics	Grid BOSS	1	Service entrance equipment MID	120/240V	60	125A	200A					
G	Generator (ESS)												
	Make	Model	Quantity	Voltage	Phases	Hz	kWa/kVA	Amps	Description				
	Military	MEP-803A	1	120/240	1	60	10/10	52	MEP-803A 100% Duty Cycle Generator				
H	Net Meter Box with Disconnect												
	Make	Model	Quantity	Description									
	Siemens	MM0202B1200R	1	200 Amp 2-Space 2-Circuit 4 Jaw Overhead/Underground Outdoor Meter Main Load Center									
J	Emergency Stop Switch												
	Make	Model	Quantity	Description									
	IMO	BG10P34-11	1	IMO Emergency Stop Button Twist to release 500VAC 1NO + 1NC									

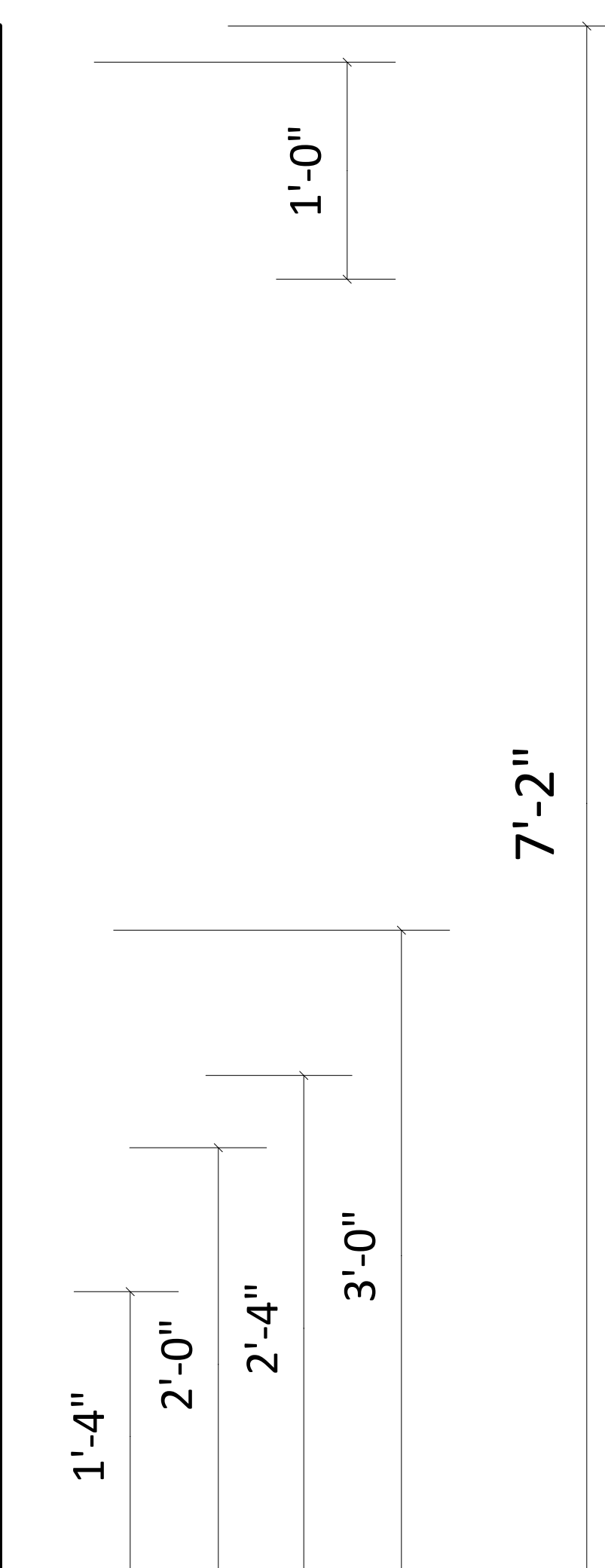
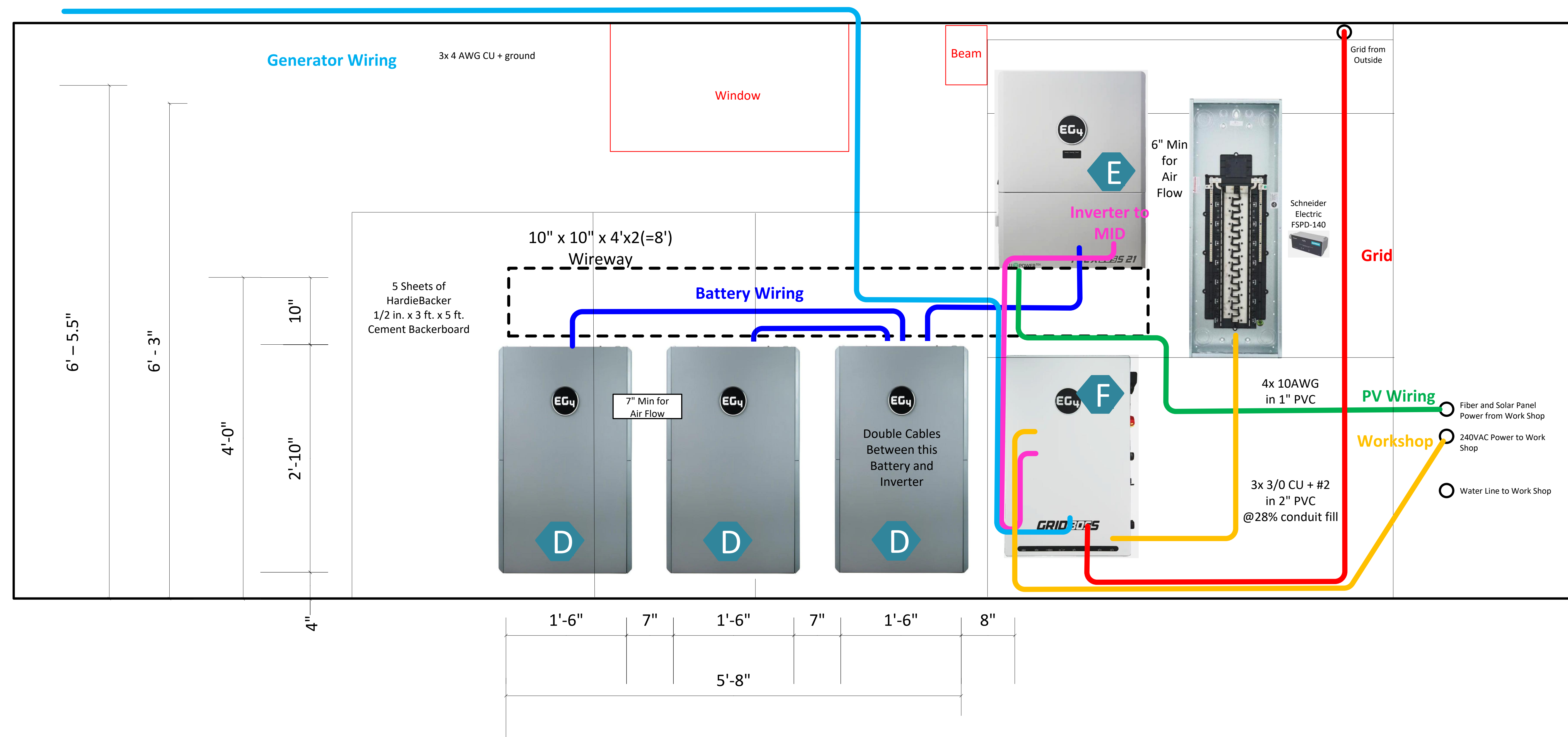
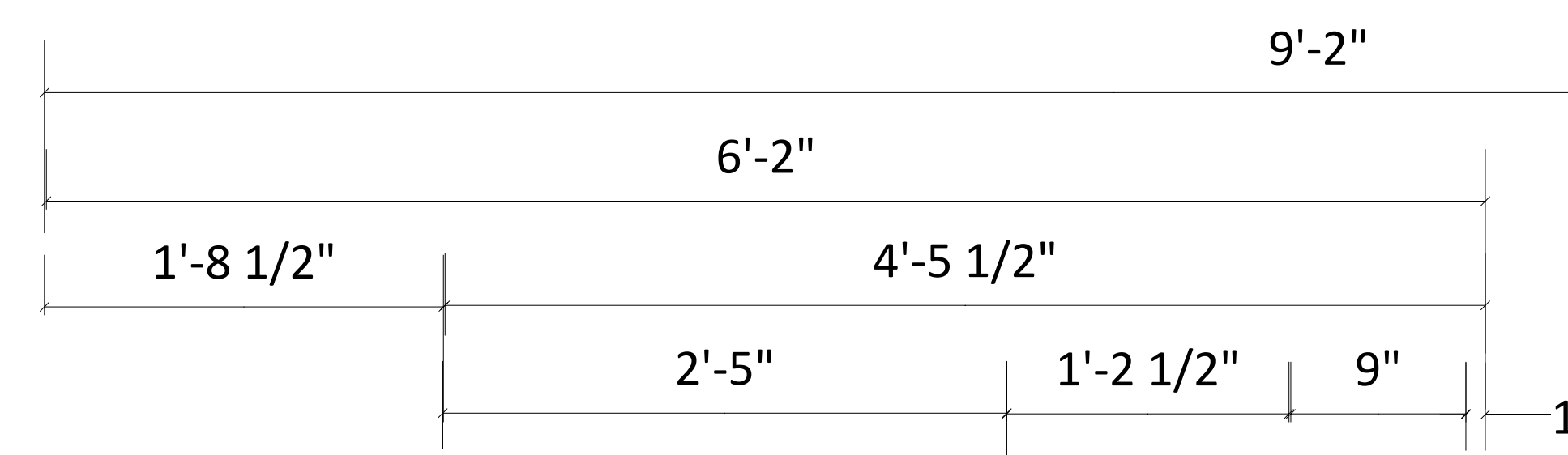
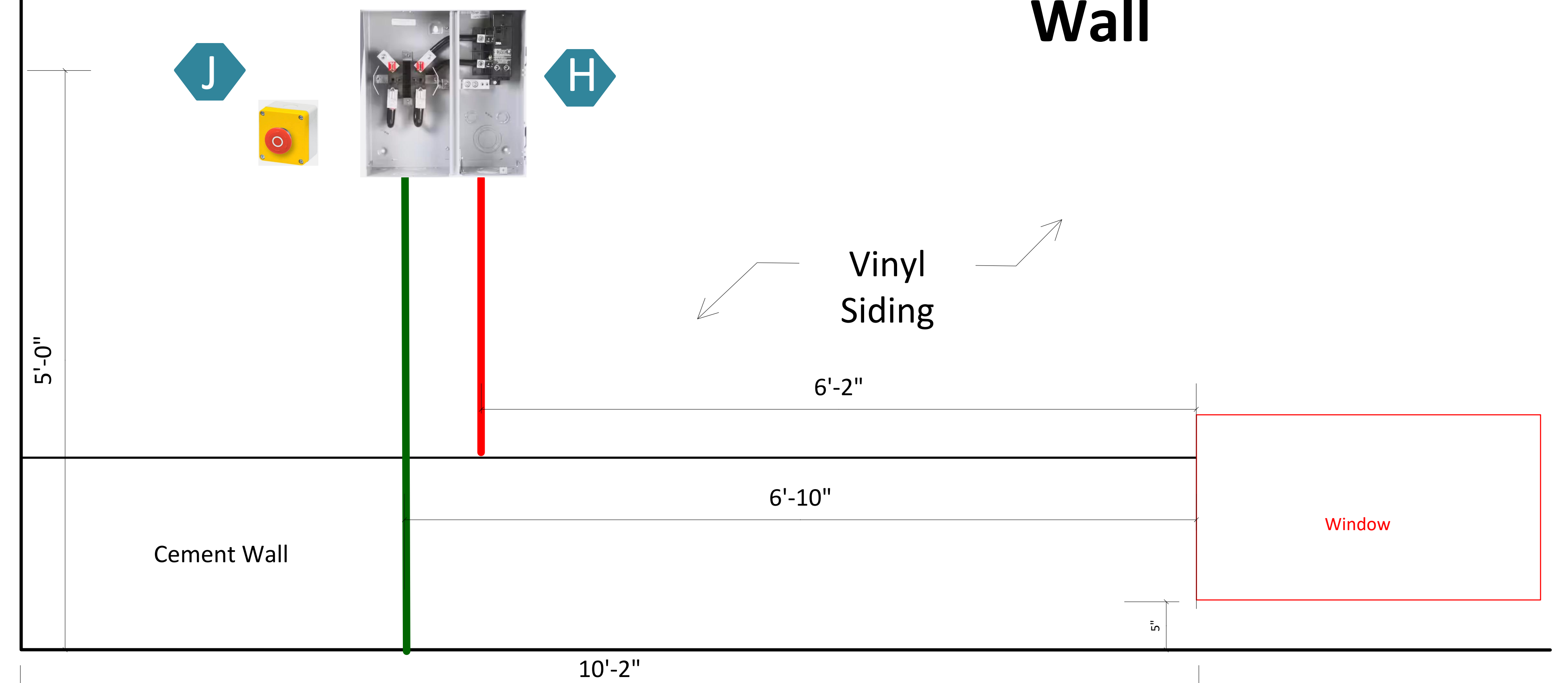
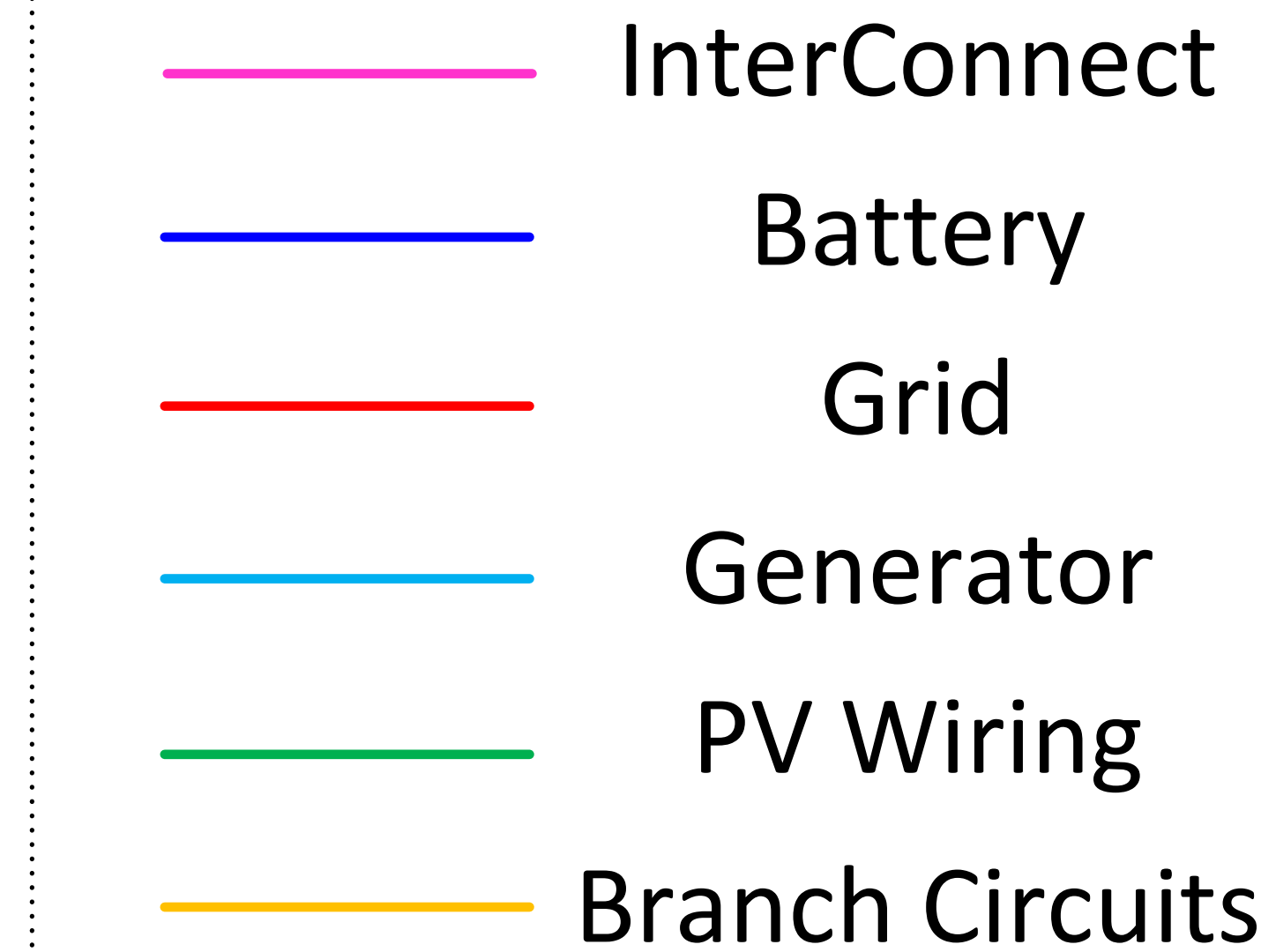
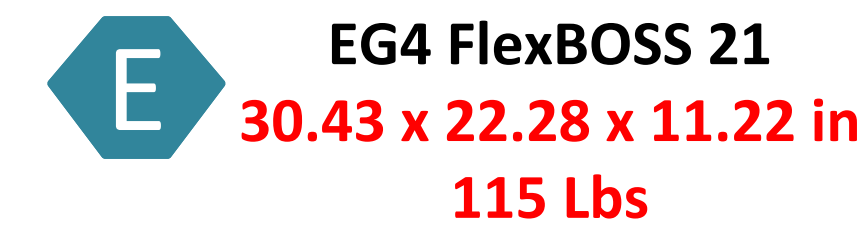
WIRING SCHEDULE

	Description	Size	Type	Material	Distance
1	Solar Photovoltaic Wire (1500V)	10AWG	PV	CU	~ 70 Feet
2	RS-485 4 Conductor (600V)	18AWG	600V	CU	~ 150 Feet
3	DC Isolator to Inverter	10AWG	THWN	CU	~ 130 feet
4	Battery to Inverter	EG4 Supplied Cables			~ 5 feet
5	Inverter to MID	2 AWG	THHN	CU	~ 5 Feet
6	Generator to MID	4 AWG	THHN	CU	~ 40 Feet
7	1 - Grid Meter to MID 2 - MID to Main Breaker Panel 3 - 220VAC House Circuits	3/0AWG 3/0AWG Circuit Dependent	THNN THNN CU	CU CU CU	~ 8 feet ~ 5 feet N/A

PROJECT DETAILS

Lat Long - (xx.xx.xx, -yy.yy)	
GPS Coordinates - w° x' y.z" N w° x' y.z" W	
Workshop Roof Azimuth: 158 degrees South	
Roof is 3/12 Pitch 14 degrees	

PROJECT: Your Home or Business	Creation Date 5/27/2026	Page Number 2 of 5	
	Revision and Date v1.3 - 10/07/2026	Designed by: Robert Calabrese bobcal2000@yahoo.com (908) 917-8281	



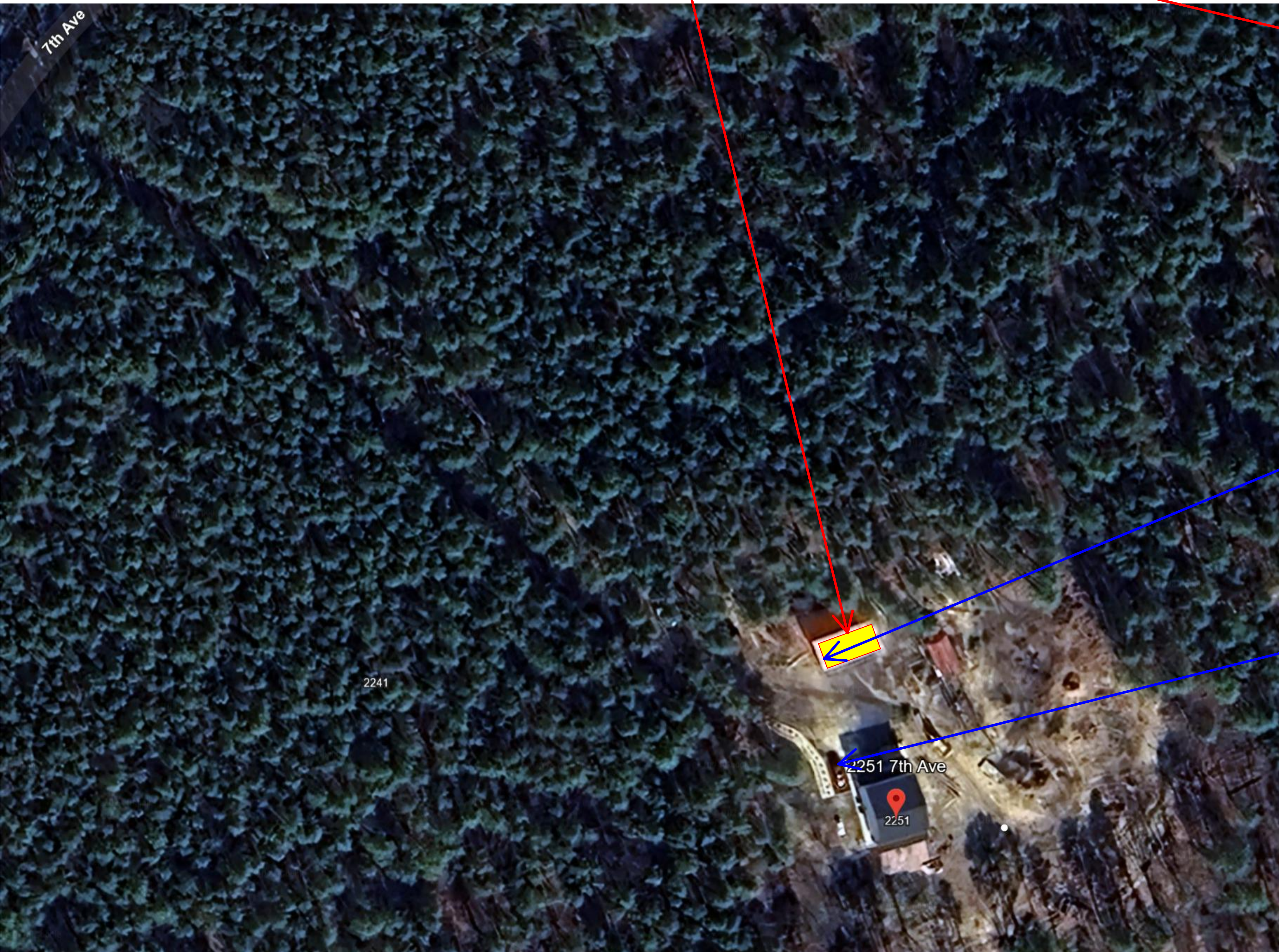
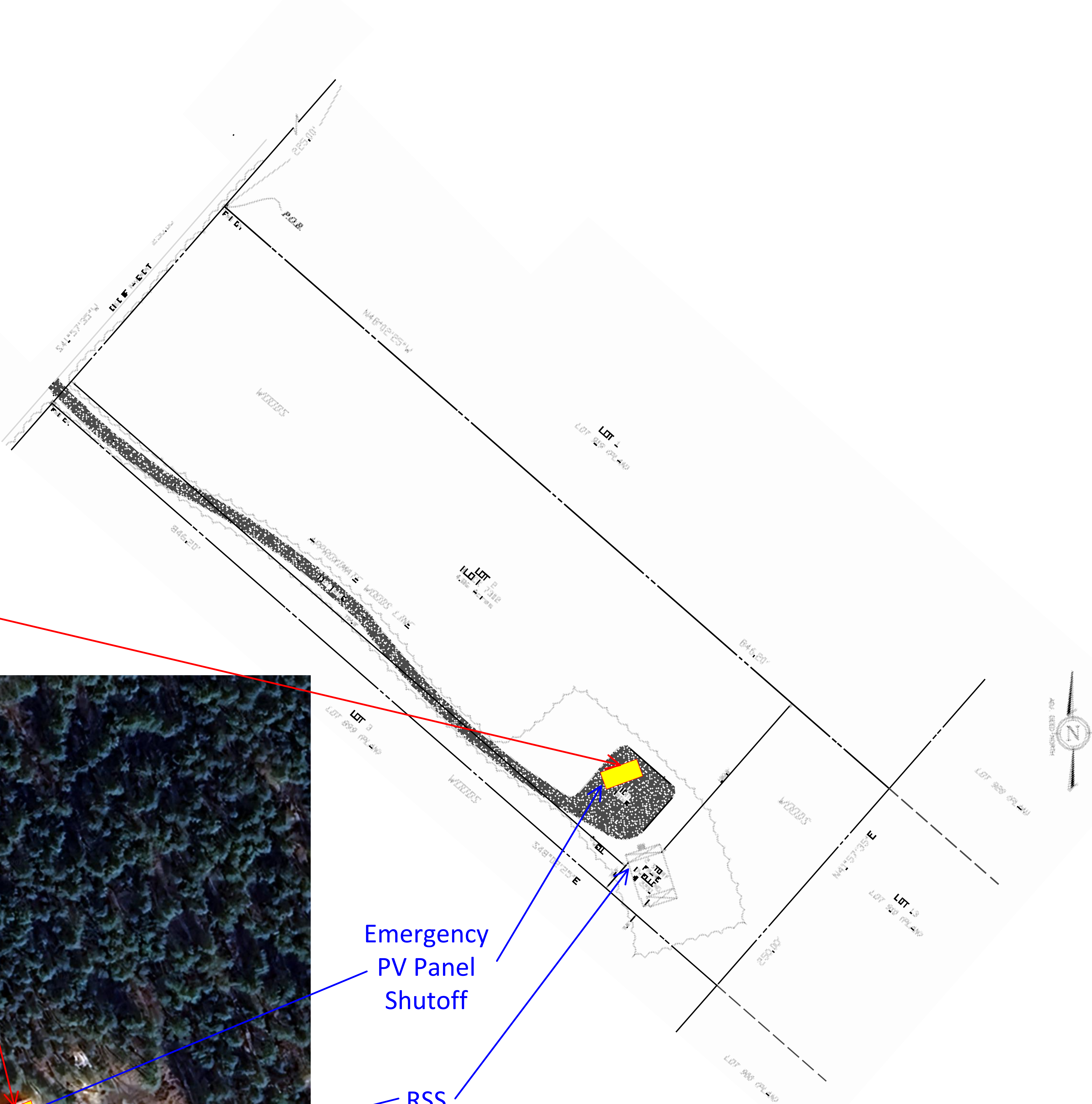
Unfinished Basement Power Wall

► Plot Plan - Sample

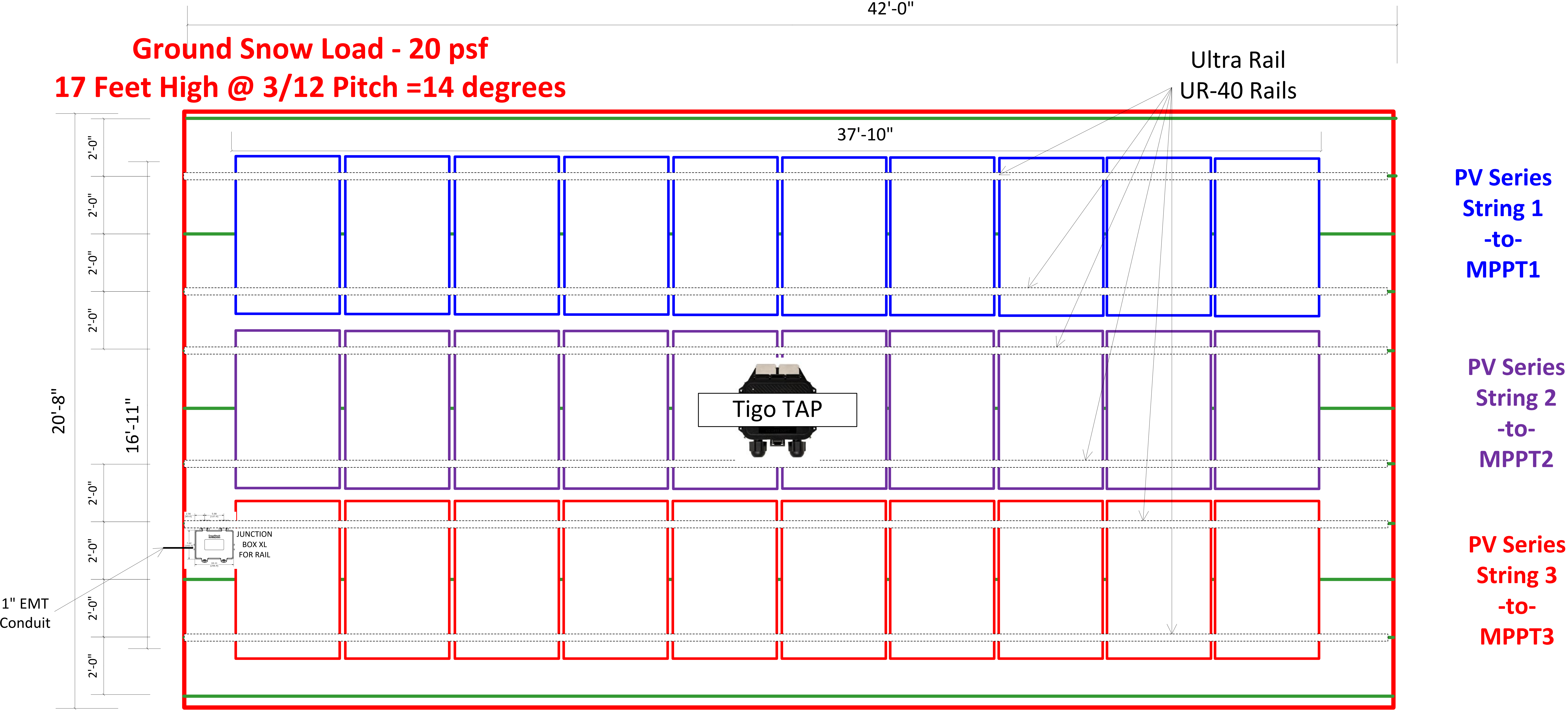
PROJECT DETAILS

Address:
Street
City ST Zip

Lat Long - (xxx, -yyy)
GPS Coordinates - xx° yy' zz.zz" N
 xx° yy' zz.zz" W
Workshop Roof Azimuth: 100 degrees South
Roof is 3/12 Pitch 14 degrees



► PV Panel Detail - Sample



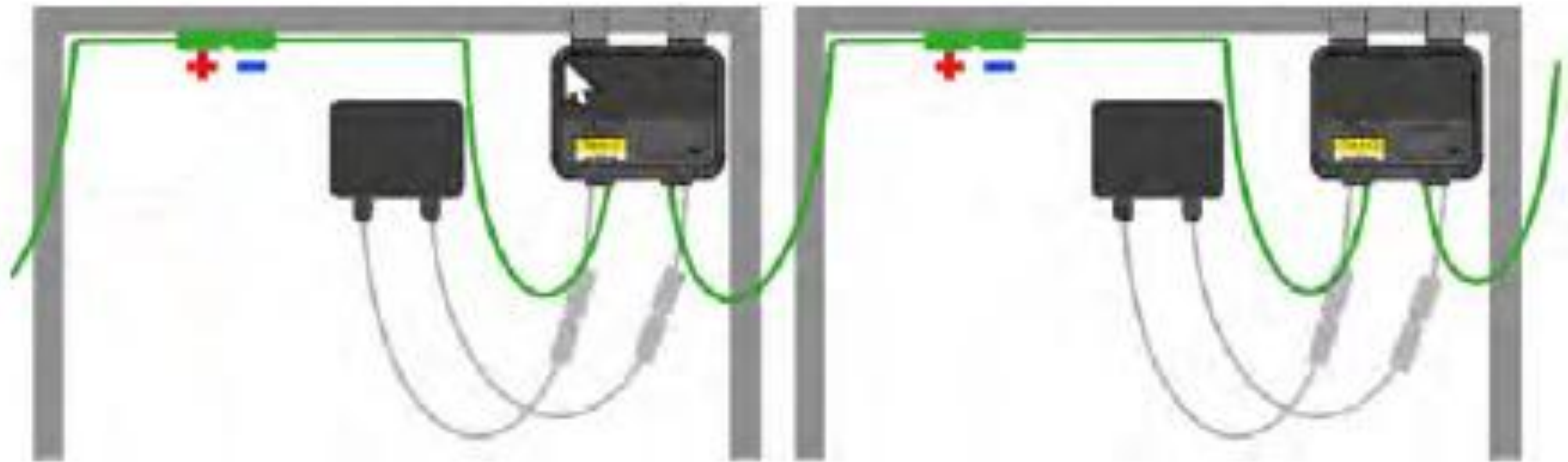
30 - Canadian Solar - CS6.1-54TM-450H
70.9 x 44.6 x 1.38 inches

Roof Perling - on 24" centers
Roof Edge

SnapNrack - (SnapNrack.com)
Ultra Rail - UR-40 Rail
Metal Roof Base w/ "L" Foot
SnapNrack Ultra Rail Splice (for UR-40)
UL 2703 Listed – NJ Engineering Letter

- Array Size –
37' - 9" Wide
17' - 11" Tall

Project Dimensions and System Weights	
Attribute	Value
SnapNrack System Weight	165.85 lbs
Total Module Weight	1521 lbs
Total System Weight	1686.85 lbs
Array Square Footage	658.78 sq. ft.
Distributed Load	2.56 lbs/sq. ft.



RSS

Tigo TS4-A-O - Optimization, Monitoring, Rapid Shutdown – One on Each Panel
Tigo 158-00000-02 Wireless Access Point for TS4-A-O
Tigo 346-00000-00 Cloud Connected Advanced Data Logger/Gateway