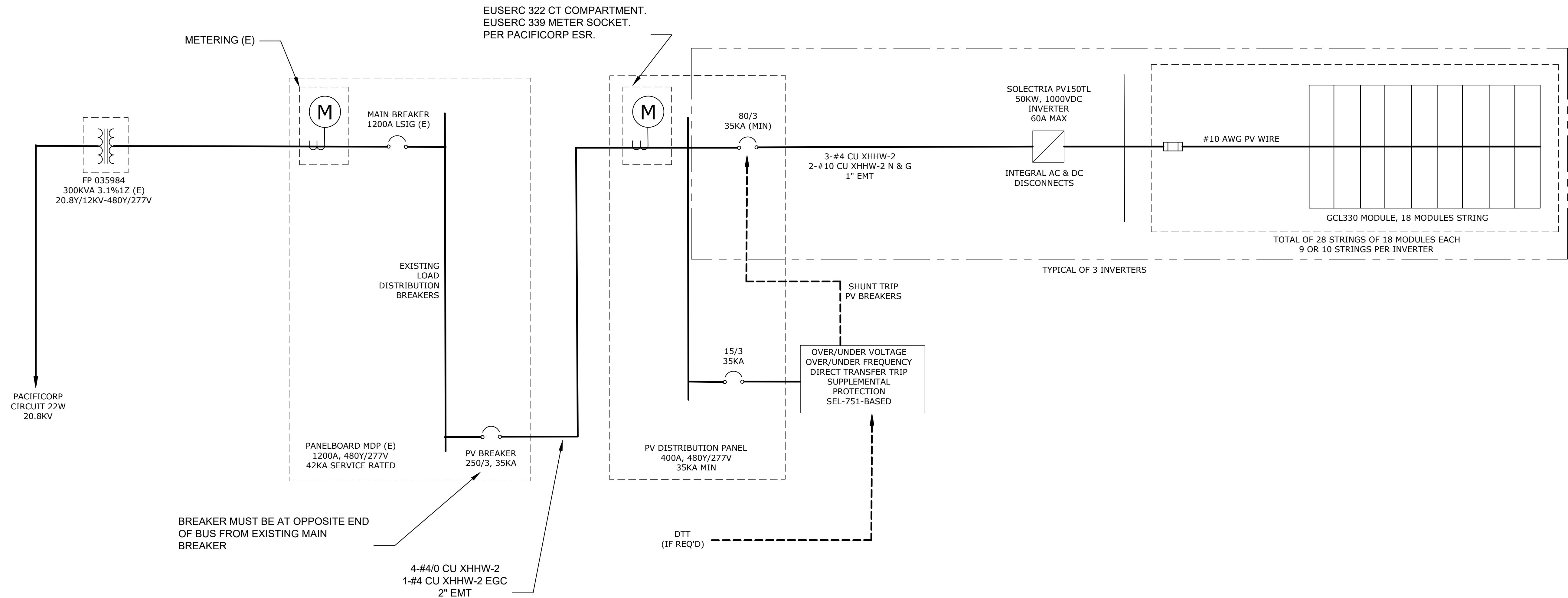


SPORTS PERFORMANCE CENTER 150KW PHOTOVOLTAIC PROJECT

Blue = Panel area
Green = Dedicated clear areas

THREE 50KW INVERTERS
TWO WITH 9 STRINGS OF 18
ONE WITH 10 STRINGS OF 18
504 TOTAL MODULES
166.320 WDC STC RATING
1.11 DC/AC RATIO

1. MODULES ARE ASSUMED TO BE 1500V, 3.28FT X 6.56FT IN DIMENSION, INSTALLED FLAT ON ROOF.
2. OREGON CODE REQUIRES MINIMUM 4FT PATHS, ALL EDGES, NOT MORE THAN 150FT APART.
3. INTERNATIONAL FIRE CODE REQUIRES CENTRAL PATHS TO INCLUDE ROOM FOR CUTOUTS.
4. CODE REQUIRES AT LEAST 4FT ON ALL SIDES OF VENTILATION STRUCTURES.
5. ONCE PATHS AND EDGES ARE ASSIGNED, MOUNTING AREA IS DETERMINED.
6. MODULE COUNT IS REDUCED TO FIT ENTIRE MODULES, LEAVING ADDITIONAL PATH SPACE.
7. 2 SQMETER MODULE WILL BE RATED ~325-335W.
8. MAXIMUM MODULE COUNT IS 513 MODULES.
9. MAXIMUM STC PEAK RATING IS 169,200W.
10. ASSUMING ABOUT 1.15 DC/AC RATING, INVERTER RATING COULD BE ~147KW.
11. SUGGEST THREE 50KW INVERTERS FOR 150KW AC RATING.
12. WITH 18 MODULES PER STRING, 28 STRINGS MAX, 504 MODULES, 166.3KW, 1.11 DC/AC RATIO.
13. THREE 50KW INVERTERS WITH 2@9 AND 1@10 STRINGS



BREAKER MUST BE AT OPPOSITE END OF BUS FROM EXISTING MAIN BREAKER

4-#4/0 CU XHHW-2
1-#4 CU XHHW-2 EGC
2" EMT

SPC 150KW PHOTOVOLTAIC PROJECT

THREE 50KW INVERTERS
28 STRINGS OF 18 MODULES
504 TOTAL MODULES
166 KWDC STC RATING
1.11 DC/AC RATIO

SYSTEM DESIGN NOTE:

INVERTERS WILL COMPLY WITH PACIFICORP POLICY 138, SPECIFICALLY THE REQUIREMENT FOR COMPLIANCE WITH IEEE 1547-2018 7.4.2 FOR TOV.

NO.	DATE	REVISION	DR	BY	APVD
A	09/09/19	PRELIMINARY	RCH	MB	MB

DESIGNED BY: M BEANLAND	DATE: SEP 2019
DRAFTED BY: R HAMMEL	DRAWING NO.: SINGLE LINE DIAGRAMS
CHECKED BY: M ANTONISHEN	PROJECT NO.: ORSU0000-8101
APPROVED BY: M BEANLAND	REVISION NO.: A

OREGON STATE UNIVERSITY

SPORTS PERFORMANCE CENTER SINGLE LINE DIAGRAM
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SHEET NO. 1
