

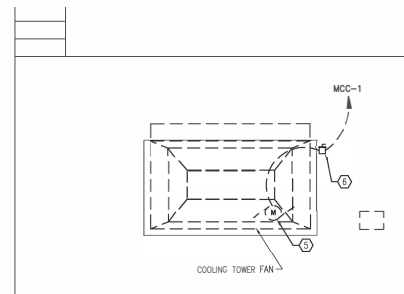
SOUTH CHILLER PLANT - FLOOR PLAN
SCALE: 1/4" = 1'-0"

PLAN NOTES:

- ① EXISTING CHILLER STARTER EQUIPMENT TO BE DEMOLISHED.
- ② EXISTING PUMP MOTOR TO BE DEMOLISHED BY MECHANICAL.
- ③ EXISTING PUMP STARTER/DISCONNECT SWITCH TO BE DEMOLISHED.
- ④ EXISTING DOUBLE THROW DISCONNECT SWITCH TO BE DEMOLISHED.
- ⑤ EXISTING COOLING TOWER FAN MOTOR TO BE DEMOLISHED.
- ⑥ EXISTING COOLING TOWER DISCONNECT SWITCH TO BE DEMOLISHED.

SHEET NOTES:

- 1. ALL SHOWN EQUIPMENT IS EXISTING TO REMAIN UNLESS SHOWN OTHERWISE.
- 2. REMOVE AND DISPOSE OF ALL ELECTRICAL CONDUIT, WIRING AND EQUIPMENT ASSOCIATED WITH EXISTING WATER TREATMENT EQUIPMENT. REFER TO DWG. CWPB11-E-100.
- 3. REMOVE AND DISPOSE OF ABANDONED EQUIPMENT ALONG WITH ASSOCIATED WIRING.
- 4. FOR EQUIPMENT TO BE DEMOLISHED: ALL EXISTING CONDUIT AND WIRING SHALL BE REMOVED. PERMISSION TO USE EXISTING CONDUIT (WIRES REMOVED) SHALL BE REQUESTED FROM AR.

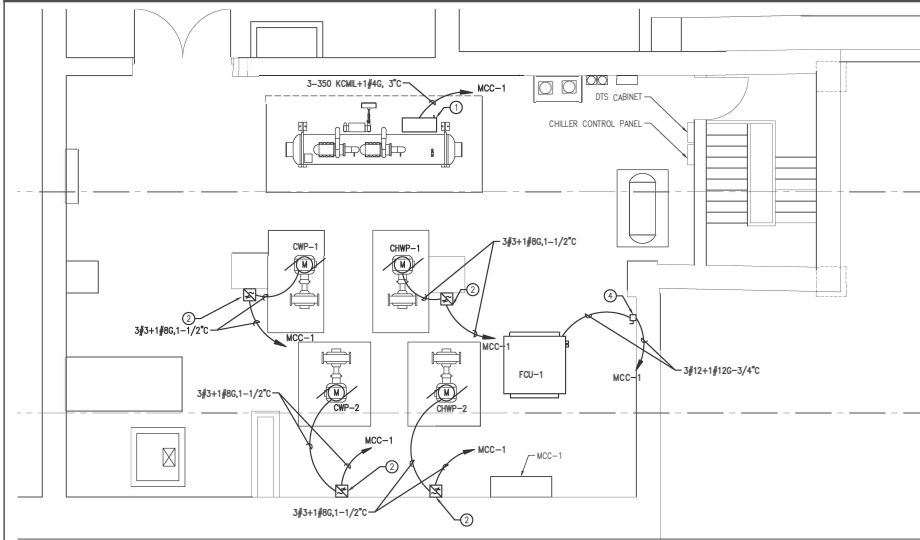


COOLING TOWER - FLOOR PLAN
SCALE: 1/4" = 1'-0"

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 24687, Expiration Date: 2018-03-15

CONTRACT NO.
FQ17162

DESIGNED C. HILL DATE 05/17	REFERENCE DRAWINGS	REVISIONS		WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM APPROVED <i>[Signature]</i>	GFP A GANNETT FLEMING/PARSONS JOINT VENTURE SUBMITTED <i>[Signature]</i> PROJECT MANAGER	REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS CWPB11 - GLENMONT ELECTRICAL PLANS - DEMOLITION	SCALE: 1/4" = 1'-0" 1 0 1 2 3 4 5 DRAWING NO. CWPB11-E-100	M1299-045
DRAWN C. HILL DATE 05/17	NUMBER DESCRIPTION	DATE BY DESCRIPTION						
CHECKED S. SULLS DATE 05/17								
APPROVED D. KHAN DATE 05/17								



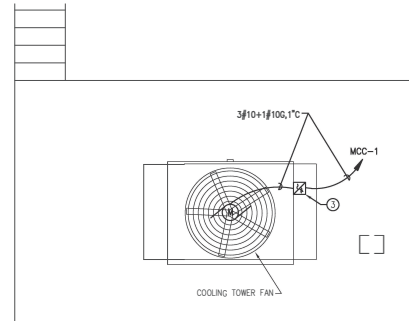
SOUTH CHILLER PLANT - FLOOR PLAN
SCALE: 1/4" = 1'-0"

PLAN NOTES:

- ① CHILLER VFD/DISCONNECT SUPPLIED WITH CHILLER, INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.
- ② PROVIDE AND INSTALL VFD/DISCONNECT FOR CHILLED WATER AND CONDENSER WATER PUMPS. PROVIDE AND INSTALL WIRING FROM MOTOR TO VFD AND FROM VFD TO MCC-1.
- ③ PROVIDE AND INSTALL VFD/DISCONNECT FOR COOLING TOWER MOTOR. PROVIDE AND INSTALL WIRING FROM MOTOR TO VFD AND FROM VFD TO MCC-1.
- ④ PROVIDE AND INSTALL DISCONNECT SWITCH FOR FCU-1. PROVIDE AND INSTALL WIRING FROM FCU TO DISCONNECT AND DISCONNECT TO MCC-1.

SHEET NOTES:

1. PROVIDE FILTERS FOR VFD'S AS REQUIRED.
2. ALL WIRING FOR VFD'S SHALL BE VFD RATED CABLES.



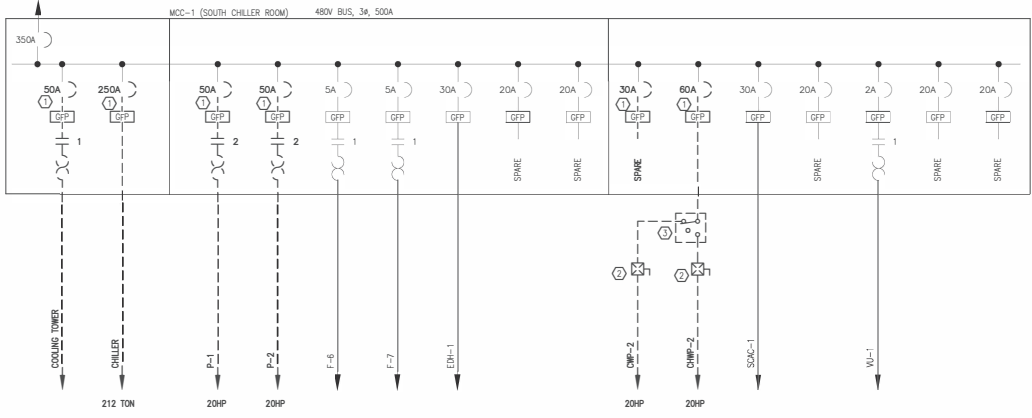
COOLING TOWER - FLOOR PLAN
SCALE: 1/4" = 1'-0"

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DRAWN C. HILL 05/17	NUMBER DESCRIPTION	DATE BY DESCRIPTION					
CHECKED S. DUBS 05/17							
APPROVED D. KHAN 05/17							

TO SOUTH NONESSENTIAL POWER SWB



PLAN NOTES:

- ① EXISTING CIRCUIT BREAKER TO BE REMOVED.
- ② EXISTING PUMP STARTER/DISCONNECT SWITCH TO BE DEMOLISHED.
- ③ EXISTING DOUBLE THROW DISCONNECT SWITCH TO BE DEMOLISHED.

SHEET NOTE:

- 1. FOR EQUIPMENT TO BE DEMOLISHED, ALL EXISTING CONDUIT AND WIRING SHALL BE REMOVED. PERMISSION TO USE EXISTING CONDUIT (WIRES REMOVED) SHALL BE REQUESTED FROM AR.

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CONTRACT NO. FQ17162

DESIGNED	C. HILL	05/17
DRAWN	C. HILL	05/17
CHECKED	B. SULLS	05/17
APPROVED	D. KHAN	05/17

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION

REVISIONS	
DATE	DESCRIPTION



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
 OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED: *[Signature]*

GFP A GANNETT FLEMING/PARSONS JOINT VENTURE
 SUBMITTED: *[Signature]*
 PROJECT MANAGER

REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS
 CWPB11 - GLENMONT
 ELECTRICAL SINGLE LINE DIAGRAM - DEMOLITION

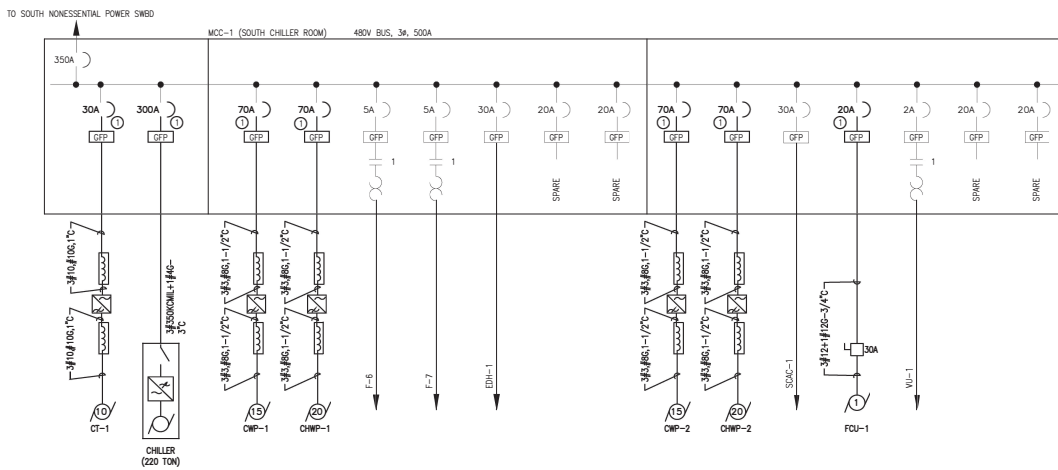
SCALE: NONE
 DRAWING NO. CWPB11-E-600
 M1299-047

PLAN NOTE:

- ① PROVIDE NEW CIRCUIT BREAKER WITH GROUND FAULT PROTECTION IN EXISTING MCC-1. CONNECT NEW WIRING AS SHOWN ON CWPB11-E-101.

SHEET NOTES:

- 1. PROVIDE FILTERS FOR VFD'S AS REQUIRED.
- 2. ALL WIRING FOR VFD'S SHALL BE VFD RATED CABLES.



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		NUMBER	DESCRIPTION	DATE	DESCRIPTION
C. HILL	06/17				
DRAWN	DATE				
C. HILL	06/17				
CHECKED	DATE				
B. EXLER	06/17				
APPROVED	DATE				
D. KIM	06/17				



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
 OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED: *Mark H. Magnum*

GFP GARRETT FLEMING/PERKINS JOINT VENTURE
 SUBMITTED: *J. C. [Signature]*
 PROJECT MANAGER

REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS
 CWPB11 - GLENMONT
 ELECTRICAL SINGLE LINE DIAGRAM - NEW WORK

SCALE: NONE
 DRAWING NO. CWPB11-E-601
 M1299-048

ELECTRICAL EQUIPMENT SCHEDULE


ITEM	QTY	DESCRIPTION
1	1	MCC BUCKET TO MATCH EXISTING WITH 300A/400AF BREAKER
2	4	MCC BUCKET TO MATCH EXISTING WITH 70A/100AF BREAKER
3	1	MCC BUCKET TO MATCH EXISTING WITH 30A/100AF BREAKER
4	1	MCC BUCKET TO MATCH EXISTING WITH 20A/100AF BREAKER
5	2	REACTOR/FILTER 480V, 3PH, 15A, 10HP, 60HZ, NEMA 4X ENCLOSURE
6	4	REACTOR/FILTER 480V, 3PH, 23A, 15HP, 60HZ, NEMA 4X ENCLOSURE
7	4	REACTOR/FILTER 480V, 3PH, 31A, 20HP, 60HZ, NEMA 4X ENCLOSURE
8	1	VFD 480V, 3PH, 15A, 10HP, NEMA 4X ENCLOSURE
9	2	VFD 480V, 3PH, 23A, 15HP, NEMA 4X ENCLOSURE
10	2	VFD 480V, 3PH, 31A, 20HP, NEMA 4X ENCLOSURE
11	LOT	1" GRS CONDUIT
12	LOT	3/4" GRS CONDUIT
13	LOT	1-1/2" GRS CONDUIT
14	LOT	#12 AWG RHW-2 WIRE
15	LOT	#10 AWG RHW-2 WIRE (VFD RATED)
16	LOT	#8 AWG RHW-2 WIRE (GND)
17	LOT	#3 AWG RHW-2 WIRE (VFD RATED)
18	LOT	1" LITFC
19	1	NON-FUSED DISCONNECT SWITCH, 600VAC, 30A
20	LOT	# 350KCMIL RHW-2 WIRE (VFD RATED)
21	LOT	3" GRS CONDUIT
22	LOT	#10 AWG RHW-2 WIRE (GND)
23	LOT	1-1/2" LITFC

PLAN NOTES:

- ① PROVIDE NEMA/UL TYPE 3R ENCLOSURE FOR VFD DRIVE WITH THERMOSTATICALLY CONTROLLED HEATING AND COOLING.
- ② FLA VALUES SHOWN ARE BASED ON NEC TABLE 430.250.

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DRAWN <u>C. HILL</u> DATE <u>05/17</u>	NUMBER	DESCRIPTION		DATE		BY	DESCRIPTION
CHECKED <u>B. DUBS</u> DATE <u>05/17</u>							
APPROVED <u>D. KHAN</u> DATE <u>05/17</u>							
				APPROVED <u>D. Khan</u>	SUBMITTED <u>[Signature]</u>	SCALE NONE	
					PROJECT MANAGER	DRAWING NO. CWPB11-E-602	
						M1299-049	