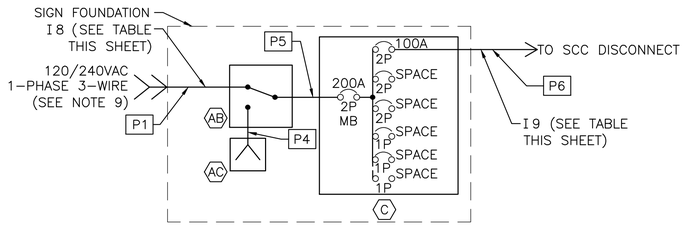


HCMS MAINLINE – SINGLE

120/240VAC POWER SOURCE

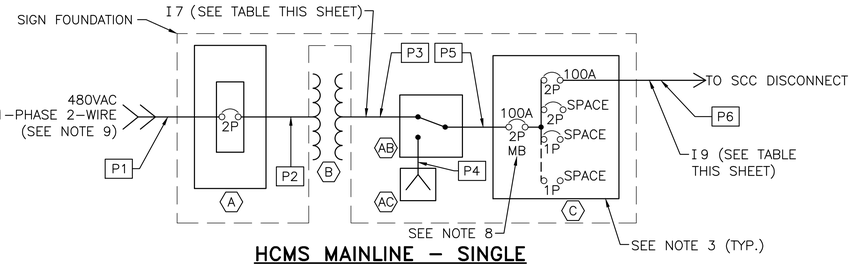
(NOT TO SCALE)



HCMS RAMP/MAINLINE – DOUBLE

120/240VAC POWER SOURCE

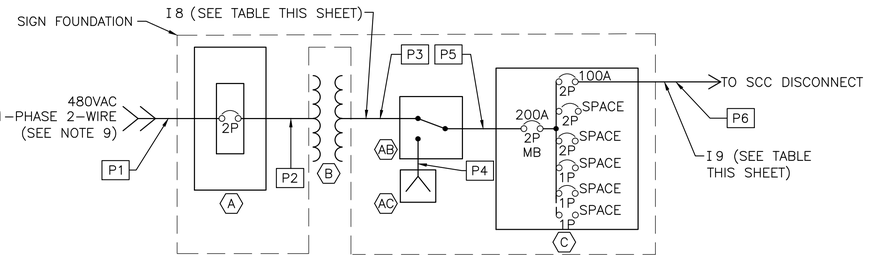
(NOT TO SCALE)



HCMS MAINLINE – SINGLE

480VAC POWER SOURCE

(NOT TO SCALE)



HCMS RAMP/MAINLINE – DOUBLE

480VAC POWER SOURCE

(NOT TO SCALE)

POWER DISTRIBUTION ONE–LINE DIAGRAMS

Ⓒ ITSS PANELBOARD DESIGN LOAD (VA)*			
	LEG A	LEG B	TOTAL
VMS/CMS	4200	3660	7860
UPS	–	540	540
SPARE	7500	7500	15000
TOTAL	9600	9600	19200

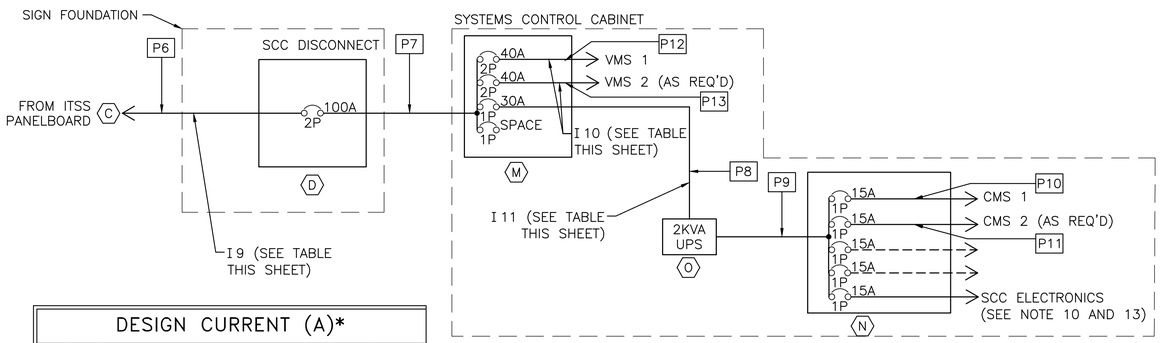
Ⓐ ITSS DISCONNECT*		
POWER DISTRIBUTION FOR:	CIRCUIT BREAKER:	ENCLOSURE:
HCMS SINGLE 120/240VAC	SQUARE D #FAL22100	SQUARE D #FA100RB
HCMS DOUBLE 120/240VAC	SQUARE D #QBL22200	SQUARE D #Q22200NRB
HCMS SINGLE/ DOUBLE 480VAC	SQUARE D #FAL24100	SQUARE D #FA100RB

DESIGN CURRENT (A)*				
I7	I8	I9	I10	I11
35	70	HCMS MAINLINE/SINGLE – 35 HCMS MAINLINE/DOUBLE – 70	35	4.5

*SEE NOTE 2

POWER DESIGN VALUES

(SEE NOTE 12)



HCMS ONE–LINE DIAGRAM

NOTES:

1. FOR LEGEND, ABBREVIATIONS, CABLE AND CONDUIT SCHEDULES SEE STANDARD DRAWING ITS–37 AND ITS–38
2. EQUIPMENT SPECIFICATIONS, WIRE SIZES, CURRENT VALUES, AND LOAD VALUES SHOWN SHALL BE USED UNLESS OTHERWISE SUPERSEDED BY THE CONTRACT PLANS. SEE THE CONTRACT PLANS FOR LOCATIONS OF EQUIPMENT AND ROUTING OF CONDUIT.
3. FOR PANEL SCHEDULE SEE THE CONTRACT PLANS.
4. JUNCTION BOXES AND CONDUIT SHALL BE INSTALLED AS REQUIRED ON THE CONTRACT PLANS FOR ITSS POWER DISTRIBUTION.
5. GROUNDING NOT SHOWN BUT SHALL BE INSTALLED ACCORDING TO ARTICLE 250 OF THE NEC.
6. SEE HCMS INSTALLATION DETAILS FOR INFORMATION ON CONDUITS AND CABLES AS WELL AS EQUIPMENT SHOWN ON THIS SHEET.
7. ADDITONAL BREAKERS SHALL BE INSTALLED TO POWER ADDITIONAL SCCS AS REQUIRED IN THE PLANS.
8. WHEN ONLY A SINGLE HCMS IS INSTALLED WITH 480V SERVICE, A 100A MAIN BREAKER SHALL BE INSTALLED IN THE ITSS PANELBOARD WHERE DIRECTED ON THE CONTRACT PLANS OR BY THE ENGINEER.
9. POWER SOURCE, SUCH AS A METER CABINET, LOAD CENTER, AND/OR OTHER EQUIPMENT SHALL BE AS SHOWN ON THE CONTRACT PLANS.
10. FOR DETAILS ON THE TYPE OF ELECTRONIC EQUIPMENT INSTALLED IN THE SCC SEE STANDARD DRAWING ITS–45.
11. SEE STANDARD DRAWING ITS–47 FOR COMMUNICATION DIAGRAM.
12. CURRENT AND LOAD VALUES PROVIDED FOR USE IN DESIGN. BASED ON A SINGLE MAINLINE HCMS WITH NO ADDITIONAL LOADS (ITS EQUIPMENT, ETC.). ALL WIRES SHALL BE SIZED TO ACCOMODATE A 3% MAXIMUM VOLTAGE DROP. FOR 120/240 VOLT DISTRIBUTION, VOLTAGE DROP SHALL BE PERFORMED AT 120 VOLTS, ASSUMING FULL DESIGN CURRENT RETURNING ON THE NEUTRAL CONDUCTOR.
13. REFER TO PLANS FOR LOCATION AND QUANTITY OF CCTV REQUIRED.

	BY	DATE
MADE	EMG	10/2013
TRACED	MDC	10/2013
CHECKED	EMG	10/2013
SUPERVISED	ALB	10/2013

0 ½ 1 2 3 4

ORIGINAL SIZE IN INCHES

APP.	NO.	DATE	REVISION
	0	11/2013	ORIGINAL DRAWING

NEW JERSEY TURNPIKE AUTHORITY

NEW JERSEY TURNPIKE

HCMS POWER DISTRIBUTION DIAGRAMS

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ANTHONY L. BARTELLO
New Jersey Professional Engineer License No. GE 45842

STANDARD DRAWING ITS–46

ACAD FILE NAME: NJTA–SD ITS–46.dwg Layout: .Layout1

CONTRACT NO. SHEET NO. OF

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PLOTTED: Nov 27, 2013 - 12:18 BY: MCroney