Cable Number	From Equipment	To Equipment	Voltage	Load	HP/kVA/KW	Number of Phases	FLA Amps	1.25xFLA Amps	Number of Conductors	Cable Size	Cable Type	GND (AWG)	Conduit Size (Inches)	Conduit Type	Approx. Cable Length (ft)	Approx. Conduit Length (ft)	Notes/Comments
C1-CHWP-24-1	SWG-24-2-E	Motor CHWP-24-1 Start-Stop Control Station	120V						1-4/C	#12 AWG	XHHW		0.75	RGS	158	154	Re-use exisitng conduit where possible
C2-CHWP-24-1	SWG-24-2-E	Motor CHWP-24-1 Safe-Run Control Station	120V						1-4/C	#12 AWG	XHHW		0.75	RGS	163	158	Re-use exisitng conduit where possible
C-CHWP-24-2	SWG-24-2-E	Motor CHWP-24-2 Safe-Run Control Station	120V						1-4/C	#12 AWG	XHHW		0.75	RGS	176	172	Re-use exisitng conduit where possible
C-CHWP-24-3	SWG-24-2-E	Motor CHWP-24-3 Safe-Run Control Station	120V						1-4/C	#12 AWG	XHHW		0.75	RGS	199	195	Re-use exisitng conduit where possible
C-CHWP-24-4	SWG-24-4-4D	Motor CHWP-24-4 Safe-Run Control Station	120V						1-4/C	#12 AWG	XHHW		0.75	RGS	226	222	Re-use exisitng conduit where possible
C-CHWP-24-5	SWG-24-4-3B	Motor CHWP-24-5 Safe-Run Control Station	120V						1-4/C	#12 AWG	XHHW		0.75	RGS	254	250	Re-use exisitng conduit where possible
C-CHWP-24-6	SWG-24-4-3C	Motor CHWP-24-6 Safe-Run Control Station	120V						1-4/C	#12 AWG	XHHW		0.75	RGS	285	281	Re-use exisitng conduit where possible
C-CHWP-24-7	SWG-24-2-D	Motor CHWP-24-7 Safe-Run Control Station	120V						1-4/C	#12 AWG	XHHW		0.75	RGS	306	302	Re-use exisitng conduit where possible
P-CHWP-24-1	SWG-24-2-E	Disconnect Switch #1	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	158	154	Re-use exisitng conduit where possible
P-CHWP-24-2	SWG-24-2-E	Disconnect Switch #2	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	176	172	Re-use exisitng conduit where possible
P-CHWP-24-3	SWG-24-2-E	Disconnect Switch #3	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	199	195	Re-use exisitng conduit where possible
P-CHWP-24-4	SWG-24-4-4D	VFD #4	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	204	200	Re-use exisitng conduit where possible
P-CHWP-24-5	SWG-24-4-3B	VFD #5	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	234	230	Re-use exisitng conduit where possible
P-CHWP-24-6	SWG-24-4-3C	VFD #6	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	264	260	Re-use exisitng conduit where possible
P-CHWP-24-7	SWG-24-2-D	VFD #7	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	284	280	Re-use exisitng conduit where possible
P-CHWP-24-1A	Disconnect Switch #1	Motor CHWP-24-1	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	5	4	Use liquidtight flexible metal conduit
P-CHWP-24-2A	Disconnect Switch #2	Motor CHWP-24-2	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	5	4	Use liquidtight flexible metal conduit
P-CHWP-24-3A	Disconnect Switch #3	Motor CHWP-24-3	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	5	4	Use liquidtight flexible metal conduit
P-CHWP-24-4A	VFD #4	Disconnect Switch #4	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	22	20	Re-use exisitng conduit where possible
P-CHWP-24-5A	VFD #5	Disconnect Switch #5	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	22	20	Re-use exisitng conduit where possible
P-CHWP-24-6A	VFD #6	Disconnect Switch #6	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	22	20	Re-use exisitng conduit where possible
P-CHWP-24-7A	VFD #7	Disconnect Switch #7	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	22	20	Re-use exisitng conduit where possible
P-CHWP-24-4B	Disconnect Switch #4	Motor CHWP-24-4	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	5	4	Use liquidtight flexible metal conduit
P-CHWP-24-5B	Disconnect Switch #5	Motor CHWP-24-5	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	5	4	Use liquidtight flexible metal conduit
P-CHWP-24-6B	Disconnect Switch #6	Motor CHWP-24-6	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	5	4	Use liquidtight flexible metal conduit
P-CHWP-24-7B	Disconnect Switch #7	Motor CHWP-24-7	480V	250	HP	3Ø	302	378	1-3/C	500 kcmil	XHHW	#2 Incl	3.5	RGS	5	4	Use liquidtight flexible metal conduit
P-CH-24-1-CTRL-PNL	MCC-24-1 South - C2	CHILLER-24-1 Control Panel	480V				36	45	1-3/C	#8 AWG	XHHW	#10 Incl	1	RGS	158	154	Re-use exisitng conduit where possible
P-HE-24-1-CTRL-PNL	MCC-24-1 South - D2	HEAT EXHANGER-24-1 Control Panel	480V	4	HP		6.8	8.5	1-4/C	#12 AWG	XHHW	#12 Incl	0.75	RGS	84	80	
P-HE-24-2-CTRL-PNL	MCC-24-1 South - D4	HEAT EXHANGER-24-2 Control Panel	480V	4	HP		6.8	8.5	1-4/C	#12 AWG	XHHW	#12 Incl	0.75	RGS	89	85	
P-TRENCH-PNL	TBD	Discharge Trench Instrument Panel	120V			1Ø			3-1/C	#10 AWG	XHHW	#12	0.75	RGS	144	140	
P-TRENCH-EXTREC	TBD/1	Discharge Trench Exterior Receptacle	120V			1Ø			3-1/C	#10 AWG	XHHW	#12	0.75	RGS	142	136	

OPTION #1

Notes:

1. All conduits and cables shall be new unless identified otherwise.
2. Cable and conduit lengths are approximate and shall be the responsibility of the contractor to verify and confirm length before procurement and installation.

STATE OF TEXAS
JOHN E. CARLSON, JR.
102512
LICENSED
PROFESSIONAL ENGINEER

Engineering License No. F-845

2/10/11

ISSUED FOR CONSTRUCTION

Burns & McDonnell SINCE 1898

THE REGISTRANT OF THE NEWLY APPLIED SEAL, DATED 02/10/11, ONLY ASSUMES RESPONSIBILITY FOR THE CHANGES AS INDICATED BY THE FOLLOWING REVISION(S) 1.

REVISION	DATE	DESCRIPTION
1	02-10-11	REVISED AS NOTED
0	09-24-10	ISSUED FOR CONSTRUCTION

SIGNATURES		DATE
DR. DC	ENG MWT	1-22-08
CH CP	APPR SPK	1-22-08
REV		
DISCP		
PE		
APPR		

NATIONAL AERONAUTICS & SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER HOUSTON, TEXAS

BUILDING 24
CENTRAL HEATING AND COOLING PLANT

CONDUIT AND CABLE SCHEDULE

PROJECT NO.
PROJECT ID WB
CODE IDENT NO. 21556
SIZE F
SHEET NO. ___ OF ___
DWG NO. E-24-301

CAD FILE NAME: E24Z301.DGN

COPYRIGHT © 2010 BURNS & McDONNELL ENGINEERING COMPANY, INC.