PANEL DPA

VOLT 277/480V,3Ø,4W MAINS 400A MLO
OTHER WITH GROUND BUS MTG. SURFACE

LOAD SERVED	C.B.	CKT.		CKT.	C.B.	LOAD SERVED
PANEL HA (55095W)	225/3	1		2	175/3	TRANSFORMER (99058W)
		3		4		
		5		6		
WCU-1 (75000W)	200/3	7		8	-	SPACE
		9		10	-	
		11		12	-	
PANEL DP (36600W)	100/3	13		14	30/3	SURGE SUP. (3000W)
		15		16		
		17		18		

TOTAL CONNECTED LOAD =268753W =304A
INSTALL LIGHTNING ARRESTER AND SURGE CAPACITOR. REFER TO SPECIFICATION.

PANEL DP

VOLT 277/480V,3Ø,4W MAINS 100A MLO
OTHER WITH GROUND BUS MTG. SURFACE

LOAD SERVED	C.B.	CKT.		CKT.	C.B.	LOAD SERVED
AHU-1 (11200W)	30/3	1		2	20/3	CHWP-1 (6100W)
		3		4		
		5		6		
AHU-2 (11200W)	30/3	7		8	15/3	HWP-1 (2100W)
		9		10		
		11		12		
AIR COMPRESSOR (6000W)	20/3	13		14	30/3	SURGE SUP. (3000W)
		15		16		
		17		18		

TOTAL CONNECTED LOAD =39600W =46A
INSTALL SINGLE PHASING PROTECTION FOR ALL BREAKERS. REFER TO SPECIFICATION.

PANEL HA

VOLT 277/480V,3Ø,4W MAINS 225A MCB
OTHER WITH GROUND BUS MTG. SURFACE

LOAD SERVED	C.B.	CKT.		CKT.	C.B.	LOAD SERVED
LIGHTING (2800W)	20/1	1		2	20/1	LIGHTING (1000W)
(3000W)		3		4		(2350W)
(2800W)		5		6		(1500W)
(2800W)		7		8		(2100W)
(2600W)		9		10		(2000W)
(1500W)		11		12		(1500W)
(1500W)		13		14		(1900W)
(1250W)		15		16		SPARE
(2800W)		17		18		
(2800W)		19		20		
(350W)		21		22		
(1050W)		23		24		
(350W)		25		26		
(1000W)		27		28		
(2000W)		29		30		
(210W)		31		32	30/3	SURGE SUP. (3000W)
(490W)		33		34		
(210W)		35		36		
(140W)		37		38	30/1	LIGHTING (6000W)
(420W)		39		40	20/1	NIGHT LIGHT (1550W)
SPARE		41		42		(1900W)

TOTAL CONNECTED LOAD =55095W =67A
INSTALL LOCK-ON DEVICE FOR NIGHT LIGHT BREAKERS.

PANEL LA

VOLT 120/208V,3Ø,4W MAINS 400A MCB
OTHER WITH GROUND BUS MTG. SURFACE

LOAD SERVED	C.B.	CKT.		CKT.	C.B.	LOAD SERVED
PANEL LB (39283W)	225/3	1		2	20/1	CASE LIGHTING(1260W)
		3		4		(900W)
		5		6		(360W)
PANEL LC (27460W)	225/3	7		8		(540W)
		9		10		CONTACTORS (300W)
		11		12		LIGHTING (720W)
WCU-1 (1000W)	20/1	13		14		(500W)
COPIER (1500W)		15		16		(720W)
(1500W)		17		18		(720W)
REFRIGERATOR (600W)		19		20		(450W)
EDF (600W)		21		22		(495W)
EDF (600W)		23		24		HAND DRYER (1800W)
DISPOSAL (900W)		25		26		(1800W)
MICROWAVE+HOOD(1350W)		27		28		CP-1 (900W)
DISHWASHER (1100W)		29		30		DOOR (1800W)
COPIER (3000W)	20/2	31		32		(1800W)
		33		34		GRILLE (800W)
COPIER (3000W)	20/2	35		36		(800W)
		37		38	30/3	SURGE SUP. (3000W)
RANGE (7500W)	50/2	39		40		
		41		42		

TOTAL CONNECTED LOAD =105058W =292.0A

PANEL LB

VOLT 120/208V,3Ø,4W MAINS 225A MLO
OTHER WITH GROUND BUS MTG. SURFACE

LOAD SERVED	C.B.	CKT.		CKT.	C.B.	LOAD SERVED
RECEPTACLES (720W)	20/1	1		2	20/1	HAND DRYER (1800W)
(540W)		3		4		(1800W)
(900W)		5		6		BOILER (1000W)
(900W)		7		8		DRYER (1000W)
(1080W)		9		10		SF-1 (600W)
(1260W)		11		12		SF-2 (600W)
(720W)		13		14		SF-3 (600W)
(1080W)		15		16		TEF-1 (600W)
(1260W)		17		18		TEF-2 (600W)
(1260W)		19		20		FAN (33W)
(1080W)		21		22		RECEPTACLES (180W)
(180W)		23		24		(180W)
(900W)		25		26		DRYER (1800W)
(1080W)		27		28		(1800W)
(360W)		29		30	30/3	SURGE SUP. (3000W)
(360W)		31		32		
(360W)		33		34		
(360W)		35		36	20/1	IRRIGATION (1000W)
(180W)		37		38		MICROWAVE (1350W)
(180W)		39		40		REFRIGERATOR(600W)
SIGN (300W)		41		42		J-BOX (1500W)

TOTAL CONNECTED LOAD =39283W =98A

PANEL LC

VOLT 120/208V,3Ø,4W MAINS 225A MLO
OTHER WITH GROUND BUS MTG. SURFACE

LOAD SERVED	C.B.	CKT.		CKT.	C.B.	LOAD SERVED
RECEPTACLES (180W)	20/1	1		2	20/1	SPARE
(180W)		3		4		RECEPTACLE (180W)
(180W)		5		6		(180W)
SPARE		7		8		(180W)
		9		10		(540W)
		11		12		(180W)
		13		14		(540W)
		15		16		(180W)
		17		18		(180W)
		19		20		J-BOX (1500W)
RECEPTACLES (360W)		21		22		(1500W)
(180W)		23		24		(1500W)
(180W)		25		26		J-BOX (1500W)
(360W)		27		28		(1500W)
(360W)		29		30		(1500W)
J-BOX (1500W)		31		32		J-BOX (1500W)
(1500W)		33		34		(1500W)
(1500W)		35		36		(1500W)
SECURITY (500W)		37		38	30/3	SURGE PROTECTOR(3000W)
ENERGY MGT. (1000W)		39		40		
FIRE ALARM (1000W)		41		42		

TOTAL CONNECTED LOAD =27460W =76.31A

FAULT CURRENT SCHEDULE

DESCRIPTION OF THE LOAD	FAULT CURRENT AVAILABLE	COMMENTS
AVAILABLE FROM HL&P	10,600A	
PANEL DPA	10,000A	USE 25K BREAKERS
PANEL DP	8,500A	
PANEL HA	9,500A	USE 14K BREAKERS
PANEL LA	15,100A	USE 22K BREAKERS
PANEL LB	15,000A	
PANEL LC	13,400A	

ELECTRICAL LOAD ANALYSIS

DESCRIPTION OF LOAD		AMPS. AT 480., 3Ø ØA	ØB	ØC	N
LIGHTING					
CODE: 17000 SQ.FT.X3W/SQ.FT.X1.25	=63750W				
ACTUAL: 58760WX1.25	=73450W	89	89	89	89
RECEPTACLES: 107 @ 180W		24	24	24	-
*HEATING/COOLING		135	135	135	-
MISC. 73133W		88	88	88	-
25% LARGEST MOTOR		22	22	22	-
TOTAL CONNECTED LOAD		358	358	358	89
SPARE		42	42	42	311
SERVICE SIZE		400	400	400	400

* HEATING IS GAS.

GENERAL NOTES: (APPLIES TO DWG.- E-3.1)

1. COORDINATE ALL WORK WITH OTHER TRADES.
2. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
3. CONTRACTOR SHALL BE RESPONSIBLE TO VISIT THE JOB-SITE AND FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS BEFORE BIDDING ON THIS PROJECT AS NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THIS PROJECT DUE TO HIS FAILURE TO DO SO.
4. VERIFY EXACT LOCATION OF ALL OUTLETS WITH THE ARCHITECT IN THE FIELD BEFORE PROCEEDING WITH ANY WORK.
5. ROUTE 1" EMPTY CONDUIT WITH PULL WIRE FROM EACH TELEPHONE AND DATA OUTLET TO CEILING SPACE. TELEPHONE INSTALLER TO USE RATED CABLES IN THE CEILING PLENUM.
6. ALL RECEPTACLES WITH NOTATION D BESIDE IT SHALL BE CONNECTED TO DEDICATED CIRCUIT WITH GROUND WIRE.
7. INSTALL BLANK COVERPLATE FOR DATA AND TELEPHONE OUTLETS TO MATCH WITH SWITCHPLATE.
8. FURNISH AND INSTALL CLOCKS WHEREVER CLOCK HANGER IS SHOWN ON THIS DRAWING. CLOCKS SHALL BE RAULAND-BORG CORP. #2460, SURFACE MOUNTED ANALOG CLOCK OR APPROVED EQUAL.
9. SECURITY SYSTEM WILL BE INSTALLED BY OWNER'S CONTRACTOR AND WILL BE COMPLETED BEFORE SUBSTANTIAL COMPLETION IS ACCEPTED. ELECTRICAL CONTRACTOR SHALL COORDINATE AND SHALL BE AVAILABLE ON THE JOB-SITE DURING THE INSTALLATION OF SECURITY SYSTEM FOR COORDINATION AND ASSISTANCE.

FOR REFERENCE ONLY

EXISTING ELECTRICAL PANEL LAYOUTS & REST OF ELECTRICAL INFORMATION MAY NOT REFLECT THE ACTUAL EXISTING CONDITIONS, FIELD VERIFY BY GENERAL CONTRACTOR PRIOR TO SUBMIT PRICING

1 EXISTING ELECTRICAL PANEL LAYOUT

CITY OF HOUSTON TEXAS
GENERAL SERVICES DEPARTMENT
DESIGN & CONSTRUCTION DIVISION
900 Bagby HOUSTON TEXAS 77002
ph: 832-393-8111 fax: 832.393.8009

REVISIONS

date	revision	comments

PROJECT LOCATION
PARK PLACE LIBRARY
8145 Parkplace Blvd.
Houston, Texas

HOUSTON TEXAS
ELECTRICAL VEHICLE CHARGING STATION SITE PLAN

PROJECT NUMBER

ISSUE 12/07/10
SCALE REFER TO DRAWING
DRAWN BY A.R.
DRAWING NUMBER 2 OF 6
SHEET NUMBER

E1.0