

PANEL HB, 3 PH, 4 WIRE, 277/480 VOLTS 400 A MLO SURFACE MOUNTED MIN INTERRUPTING RATING 65,000 RMS SYM AMPS LOCATION: ELEC. RM. NEMA 1									
CIRCUIT CKT #	CIRCUIT USE	CKT BKR RATING	CONNECTED LOAD VA			CIRCUIT USE	POLE SPACE CKT #	POLE SPACE CKT #	
			A	B	C			#	#
1	L-PATH/AREA	20/2	1860			50	2		
3	X	X	1860			50	4		
5	L-PARKING LOT	30/2			4190	50	6		
7	X	X	4190			50	8		
9	50					50	10		
11	50					50	12		
13	50					50	14		
15	50					50	16		
17	50					50	18		
19	50					50	20		
21	50					50	22		
23	50					50	24		
25	50					50	26		
27	50					50	28		
29	50					50	30		
31	50					50	32		
33	50					50	34		
35	50					50	36		
37	50					50	38		
39	50		25000			110/3	TRANSFORMER T-1	38	38
41	50			25000		X	X	40	
			31050	26860	29190	X	X	42	
			81100						

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NOTES: PROVIDE (4) 200A SPACES IN PANEL HB.

LIGHTING FIXTURE SCHEDULE									
FIXT ID	TYPE	MANUFACTURER AND CATALOG NO.	NO.	WATTS	TYPE	CKT VLTS	REMARKS AND MOUNTING		
F1	SINGLE HID ARM MOUNTED CUTOFF AREA FIXTURE	GARDCO H191Q-400HPS-480-SCLF	1	400	LU400	480	25 FT. POLE 36" AFF BASE 56625TD15C		
F2	DOUBLE HID ARM MOUNTED CUTOFF AREA FIXTURE	GARDCO H192Q-400HPS-480-SCLF	2	400	LU400	480	25 FT. POLE 36" AFF BASE 56625TD25C		
F3	SINGLE HID ARM MOUNTED CUTOFF AREA FIXTURE	GARDCO H191Q-400HPS-480-SCLF	1	400	LU400	480	12" AFF BASE 56625TD15C		
F4	NOT USED								
F5*	4" FLUORESCENT PICNIC SHELTER FIXTURE (FUTURE)	LITHONIA VDC240-120-U4220-STSM-ML COLOR TO MATCH BEAMS	2	40	F40/D830	120	SURFACE MOUNT TO BEAMS		

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F1, F2, F3 POLE AND FIXTURE COLOR = MCPHILBEN 'TEXTURED BEIGE'

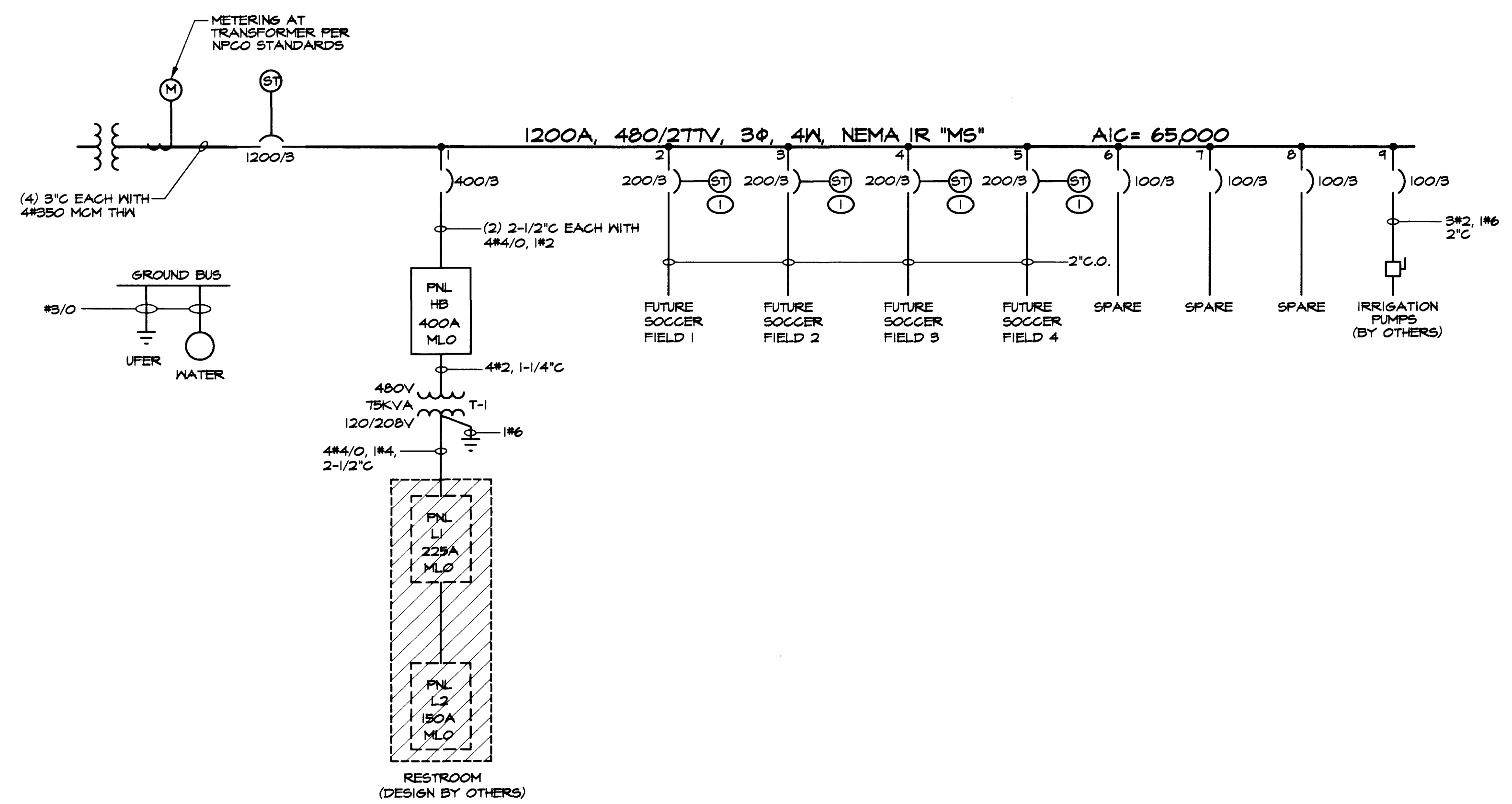
FURNISH THE FOLLOWING EXTRA ELECTRICAL ITEMS:
(4) FOUR GARDCO SINGLE ARM FIXTURES COMPLETE WITH 25'-0" POLES (F1, F3)
(2) TWO GARDCO DOUBLE ARM FIXTURES COMPLETE WITH 25'-0" POLES (F2)

INSTALLATION OF THESE ITEMS IS NOT REQUIRED. ALL ITEMS ARE TO BE DELIVERED TO THE DEPARTMENT OF PUBLIC WORKS-TRAFFIC/ELECTRICAL FIELD OPERATIONS DIVISION, 3100 E. BONANZA ROAD, LAS VEGAS, NV 89101, ATTENTION: GEORGE LEAVENS.

ELECTRICAL LEGEND

- PANELBOARD SURFACE MOUNTED
- SWITCHBOARD
- TRANSFORMER
- DISCONNECT SWITCH F INDICATES FUSIBLE (DASHED LINES = EXISTING)
- TELEPHONE TERMINAL BOARD 4 X 8 X 3/4" FIRE TREATED PLYWOOD
- DUPLEX RECEPTACLE (18" AFF UNLESS NOTED OTHERWISE) WP INDICATES WEATHERPROOF OUTLET
- SWITCH (48" AFF UNLESS NOTED OTHERWISE)
- ELECTRIC SHEET NOTE DESIGNATION
- MECHANICAL EQUIPMENT DESIGNATION
- BRANCH CIRCUIT CONSISTING OF 2#12 IN MINIMUM SIZE 1" CONDUIT NOT INCLUDING GROUND WIRE, OR AS NOTED ON DRAWINGS
- HOME RUN TO PANELBOARD OR DEVICE - NUMBER OF ARROW HEADS INDICATES NUMBER OF CIRCUITS
- BRANCH CIRCUIT - SHORT SLASHES INDICATE NUMBER OF PHASE OR SWITCH LESS, LONG SLASHES INDICATE NUMBER OF NEUTRALS, LONG SLASH W/ A DOT INDICATES A SEPARATE ISOLATED GROUND WIRE.
- CONDUIT IN SLAB OR UNDERGROUND
- INTERRUPTER SWITCH
- DUPLEX RECEPTACLE (18" AFF UNLESS NOTED OTHERWISE)
- JUNCTION BOX
- FUSE
- CIRCUIT BREAKER
- METERINGS (DASHED LINES = EXISTING)
- CONDUIT
- C.O. CONDUIT ONLY
- U.N.O. UNLESS NOTED OTHERWISE
- FULL BOX, SIZE No. 3-1/2 UNLESS NOTED OTHERWISE WITH NON-METALLIC LIDS (TYP.) STAMPED 'LIGHTING'
- IRRIGATION CONTROLLER(S) LOCATION
- CONTACTOR
- SHUNT TRIP OR CONTROL STATION
- PAY TELEPHONE OUTLET 48" AFF UNO
- ARM MOUNTED HID AREA FIXTURES
- ASTRONOMICAL TIMECLOCK
- LOCATION OF SOCCER FIELD POLE
- SOCCER FIELD LIGHT CONTROLLER

ELECTRICAL LOAD CALCULATION GOWAN SOCCER FIELD COMPLEX			
	LOAD	DF	DEMAND LOAD
LIGHTING - FUTURE SOCCER FIELDS (272) 1500W LUMINAIRES: 272 X 1,625VA =	442,000VA	1.25	552,500
LIGHTING - PARKING LOT (18) 400W LUMINAIRES: 18 X 465VA =	8,370VA	1.25	10,463
LIGHTING - PATHWAY (8) 400W LUMINAIRES: 8 X 465VA =	3,720VA	1.25	4,650
LIGHTING - PICNIC SHELTER (FUTURE) (6) 3-LAMP LUMINAIRES: 6 X 135VA =	810VA	1.25	1,013
RESTROOM BUILDING (PER SCHEDULE) BY OTHERS =	37,520	1.25	46,900
IRRIGATION PUMP (2-20 HP, 1-3 HP) (1) 460V, 3 PHASE, 27 FLA =	21,512VA	1.00	21,512
(1) 460V, 3 PHASE, 27 FLA =	21,512VA	1.00	21,512
(1) 460V, 3 PHASE, 4.8 FLA =	3,823VA	1.00	3,823
25% OF LARGEST MOTOR =	21,512VA	0.25	5,378
			667,751
667,751 / (480V X 1.732) =	803 AMPS		
USE 1200 AMP SERVICE			



1 ELECTRICAL ONE-LINE DIAGRAM - PHASE 1
ES-1 SCALE: NONE

- NOTES:
- ① SHUNT TRIP TO BE ACTIVATED BY WATER LEVEL SENSOR. SEE DETAILS ON SHEET ES-3.
 - ② ALL WIRE IS THW UNLESS NOTED OTHERWISE.

DATE: _____

REVISIONS: _____

CHECK BY: TOM KROB
DESIGN BY: DSNVCK

SCALE (H) AS SHOWN
JOB NO. T24/LEGEND
DATE 07/09/07

DEPARTMENT OF PARKS & LEISURE ACTIVITIES
PROJECT: GOWAN SOCCER FIELD COMPLEX

ELECTRICAL LEGEND

REGISTERED PROFESSIONAL ENGINEER STATE OF NEVADA
THOMAS KROB
ELECTRICAL ENGINEER
No. 63671

DRAWING NO. ES-1
7/19/07
28
675-V31 57

