



- ONE-LINE KEYED NOTES**
- 25 FOOT MAXIMUM WIRE LENGTH.
 - SIZE ELECTRICAL PROTECTION PER MANUFACTURER OF SPD.
 - EQUIPMENT SHALL BE SIZED FOR EQUIPMENT SELECTED THROUGH THE BID AND THE SELECTION SEALED BY A LICENSED ELECTRICAL ENGINEER. THIS DOCUMENTATION SHALL BE INCLUDED WITHIN THE GENERATOR SUBMITTAL.
 - HYDRAULIC CONTROLLER WITH STARTERS BY OTHERS. WIRED BY ELECTRICAL CONTRACTOR.
 - SERVICE ENTRANCE RATED, SPD OVERCURRENT PROTECTION, WIRE AND CONDUIT PER MANUFACTURER OF SPD.
 - PANELBOARD HAS ASTRONOMIC TIMECLOCK WITH RELAY BREAKERS FOR ALL EXTERNAL LIGHTING CIRCUITS. SERIES RATING WITH SERVICE DISCONNECT DEVICE IS ACCEPTABLE.

ONE-LINE CABLE AND CONDUIT SCHEDULE

LOCATION	TAG	# OF PARALLELED CONDUCTORS PER PHASE	CONDUCTOR METAL	# OF POWER WIRES NOT INCLUDING NEUTRAL	POWER CONDUCTOR SIZE	QUANTITY OF NEUTRAL(S)	EQUIVALENT SIZE OF NEUTRAL	GROUND WIRE SIZE	ISOLATED GROUND WIRE SIZE	CONDUIT SIZE	MAIN/SYSTEM BONDING JUMPER MINIMUM SIZE
1	SERVICE FEEDER	1	Cu	3	# 4/0	1	#4/0 N	2 G	-	4"	2 G
2	GENERATOR	1	Cu	3	# 4/0	1	#4/0N	6 G	-	2-1/2"	-
3	PANEL H	1	Cu	3	# 4/0	1	#4/0N	6 G	-	2-1/2"	-
4	T-1	1	Cu	3	# 4	1	#4N	8 G	-	1-1/2"	-
5	PANEL L	1	Cu	3	# 3	1	#3N	8 G	-	1-1/2"	8 G
6	PUMP PANEL	1	Cu	3	# 6	1	#6N	8 G	-	1"	-
7	FEEDER	1	Cu	3	# 10	0	-	10 G	-	1"	-

PANEL H

WITH EQUIPMENT GROUND BUS, HINGED TRIM 277/ 480 VOLTS 3 Ø 4 W SURFACE MOUNTED 225 AMP MAIN BUS

CKT.	TYPE	DESCRIPTION	KVA	A/P	Ø	A/P	KVA	DESCRIPTION	TYPE	CKT.
1	SPARE		0.0	20/1	A	20/1	0.0	LIGHT	LIGHT	2
3	SPARE		0.0	20/1	B	20/1	0.0	SPARE		4
5	SPARE		0.0	20/1	C	20/1	0.0	SPARE		6
7	LIGHT		0.4	20/1	A	20/1	0.0	SPACE		8
9	SPARE		0.0	20/1	B	20/1	0.0	SPACE		10
11	SPARE		0.0	20/1	C	20/1	0.0	SPACE		12
13	SPACE		0.0	A	0.0	0.0	0.0	SPACE		14
15	SPACE		0.0	B	0.0	0.0	0.0	SPACE		16
17	SPACE		0.0	C	0.0	0.0	0.0	SPACE		18
19	SPACE		0.0	A	0.0	0.0	0.0	SPACE		20
21	SPACE		0.0	B	0.0	0.0	0.0	SPACE		22
23	SPACE		0.0	C	0.0	0.0	0.0	SPACE		24
25	SUB	T-1, PANEL L	18.0	80/3	A	60/3	23.3	HYDRAULIC PUMP PANEL	MISC	26
27					B					28
29					C					30
31	SPARE		0.0	20/1	A	20/1	0.0	SPARE		32
33	SPARE		0.0	20/1	B	20/1	0.0	SPARE		34
35	SPARE		0.0	20/1	C	20/1	0.0	SPARE		36
37	SPARE		0.0	20/1	A	20/1	0.0	SPARE		38
39	SPARE		0.0	20/1	B	20/1	0.0	SPARE		40
41	SPARE		0.0	20/1	C	20/1	0.0	SPARE		42

R - RELAY CIRCUIT BREAKER
*CIRCUITS 31-42 ARE NOT LINKED INTO AUTOCAD.

LOADS FOR PANEL H

LOAD TYPE	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
RECEPTACLES	0.00	1	0.00
RECEPTACLES>10K	0.00	0.5	0.00
MECHANICAL	0.00	1	0.00
LIGHTING	0.66	1.25	0.82
KITCHEN	0.00	1	0.00
SUB FEED	17.98	1	17.98
MISCELLANEOUS	23.27	1	23.27
TOTAL CONNECTED LOAD (KVA)			41.90
TOTAL DEMAND LOAD (KVA)			42.07
TOTAL DEMAND LOAD (AMP)			51

SITE CONDUIT AND CABLE SCHEDULE

TAG	FROM	TO	MINIMUM WIRING	CABLE	CONDUIT TYPE	MINIMUM CONDUIT SIZE	REMARKS
A	EXISTING CIRCUIT	LIGHT FIXTURE S	#10, #10 GND	-	ELECTRICAL GENERAL NOTE C.15	1"	DO NOT SHARE NEUTRAL CONDUCTORS, MATCH NUMBER OF CIRCUITS TO EXISTING CIRCUIT.
B	UTILITY	LIGHT POLES ON BRIDGE	BY WESTAR	-	RGS EXPOSED BELOW BRIDGE - ELECTRICAL GENERAL NOTE C.15	2"	SEE STRUCTURAL DETAIL FOR BENDING UP THROUGH BRIDGE.
C	PANEL H	CAMERA	2#10, #10 GND	-	ELECTRICAL GENERAL NOTE C.15	1"	120V BRANCH CIRCUIT.
D	PANEL H	LIGHT FIXTURE D DRIVERS	4#10, #10 GND	WITH WIRE	PVC COATED RGS	1"	DO NOT SHARE NEUTRAL CONDUCTORS BETWEEN CIRCUITS
E	EAST CIRCUIT	CAMERA	2#10, #10 GND	-	ELECTRICAL GENERAL NOTE C.15	1"	120V BRANCH CIRCUIT FROM SPRINKLER POWER IN WEATHERPROOF COVER (THAT ALSO HAS LIGHTING CONTACTOR FOR EXISTING LIGHTS ON PALISADE) LOCATED IN AN ALLEY OFF LINCOLN ST. BETWEEN WICHITA AND WATER ST. BY THE RAILROAD TRACKS.
F	UTILITY	TRANSFORMER	BY WESTAR	-	PVC WITH RGS ELBOWS SCHEDULE 80 PVC	4"	BORED UNDER McLEAN TO WEST SIDE POLE
REP	CONTROLS	CONTROLS		VARIES		VARIES	REFER TO CONTROLS CONTRACTOR AND SPECIFICATIONS SECTION 16900 AND ITS REFERENCES.

RGS RIGID GALVANIZED STEEL CONDUIT
PVC POLY VINYL CHLORIDE CONDUIT
NOTE: FOLLOW VOLTAGE DROP FOR 3% MAXIMUM ON ALL BRANCH CIRCUITS.

LIGHT FIXTURE SCHEDULE

FIXT. LTR.	MANUFACTURER	CATALOG NUMBER	LAMPS		FIXT. VOLT.	FINISH	MOUNTING	WATT	REMARKS
			NO.	TYPE					
A	WILLIAMS	92-4-2-32-DR-SS-SSMB-EB2-UNV	2	F028/835 RAPID START	120/277	WHITE	SURFACE	58	VAPORTIGHT, ENCLOSED AND GASKETED WITH STAINLESS STEEL LATCHES, MOUNTING BRACKETS, 50% DR CREPE DUFFUSER, INSTALL WATERTIGHT.
D	IO LIGHTING	LINE 2.0 - 05V-E-27K-30-102-1-36-2-DR60MGD	-	LED, 2700K, 96W DIMMING DRIVER	277	ALUMINUM	WALL (DAM PEDISTAL) NOTE 2	34	WET LOCATION LED STRIP LIGHT, FIELD ADJUSTABLE WITH LOCKING AIMING. INITIAL AIM IS 45 DEGREES DOWN. MOUNT HORIZONTAL AT TOP OF PEDISTALS.
S	SPAULDING VISIONAIRE	WN2-A-S15-V4-F-Q-CC-F4 // ARM-W-6-R4-CC CAR-1-T4-150-HPS-277-BOA6-CC-SF277-RPP	1	150W ED17 HPS	MATCH EXISTING CIRCUIT	CUSTOM SELECTED AT SUBMITTAL	ROUND POLE NOTE 1	175	FULL CUTOFF TYPE IV DISTRIBUTION, 15" MAXIMUM HEIGHT. CONNECT TO EXISTING LIGHTING CIRCUIT ON PALISADES.
W		BY WESTAR FOR NEW ON WOOD POLE, TAG INCLUDES W. SHOWN AS "WW"	1	250W HPS	120/208/240/277	ALUMINUM	40' GALVANIZED ROUND POLE	275	STREET LIGHT ON BRIDGE - PROVIDED, INSTALLED AND POWERED BY WESTAR
WE		BY WESTAR - EXISTING OR RELOCATED	1	250W HPS	120/208/240/277	ALUMINUM	WOOD ROUND POLE	275	STREET LIGHT - PROVIDED, INSTALLED AND POWERED BY WESTAR

PANEL L

WITH EQUIPMENT GROUND BUS, HINGED TRIM 120/ 208 VOLTS 3 Ø 4 W SURFACE MOUNTED 100 AMP MAIN BUS

CKT.	TYPE	DESCRIPTION	KVA	A/P	Ø	A/P	KVA	DESCRIPTION	TYPE	CKT.
1	REC	RECEPTACLE	0.4	20/1	A	50/3	15.0	HVAC	MECH	2
3	REC	RECEPTACLE	0.4	20/1	B	50/3	0.0			4
5	REC	RECEPTACLE	0.4	20/1	C	50/3	0.0			6
7	SPARE		0.0	20/1	A	20/1	1.9	CONTROLS	MISC	8
9	SPARE		0.0	20/1	B	20/1	0.0	SPARE		10
11	SPACE		0.0	C	20/1	0.0	0.0	SPACE		12
13	SPACE		0.0	A	0.0	0.0	0.0	SPACE		14
15	SPACE		0.0	B	0.0	0.0	0.0	SPACE		16
17	SPACE		0.0	C	0.0	0.0	0.0	SPACE		18
19	SPACE		0.0	A	0.0	0.0	0.0	SPACE		20
21	SPACE		0.0	B	0.0	0.0	0.0	SPACE		22
23	SPACE		0.0	C	0.0	0.0	0.0	SPACE		24
25	SPACE		0.0	A	0.0	0.0	0.0	SPACE		26
27	SPACE		0.0	B	0.0	0.0	0.0	SPACE		28
29	SPACE		0.0	C	0.0	0.0	0.0	SPACE		30

LOADS FOR PANEL L

LOAD TYPE	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
RECEPTACLES	1.08	1	1.08
RECEPTACLES>10K	0.00	0.5	0.00
MECHANICAL	15.00	1	15.00
LIGHTING	0.00	1.25	0.00
KITCHEN	0.00	1	0.00
SUB FEED	0.00	1	0.00
MISCELLANEOUS	1.90	1	1.90
TOTAL CONNECTED LOAD (KVA)			17.98
TOTAL DEMAND LOAD (KVA)			17.98
TOTAL DEMAND LOAD (AMP)			50

PALISADES ROAD	
LIGHTS ADDED	2.84 KW
LIGHTS REMOVED	3.60 KW
NET ADDED	-0.76 KW



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