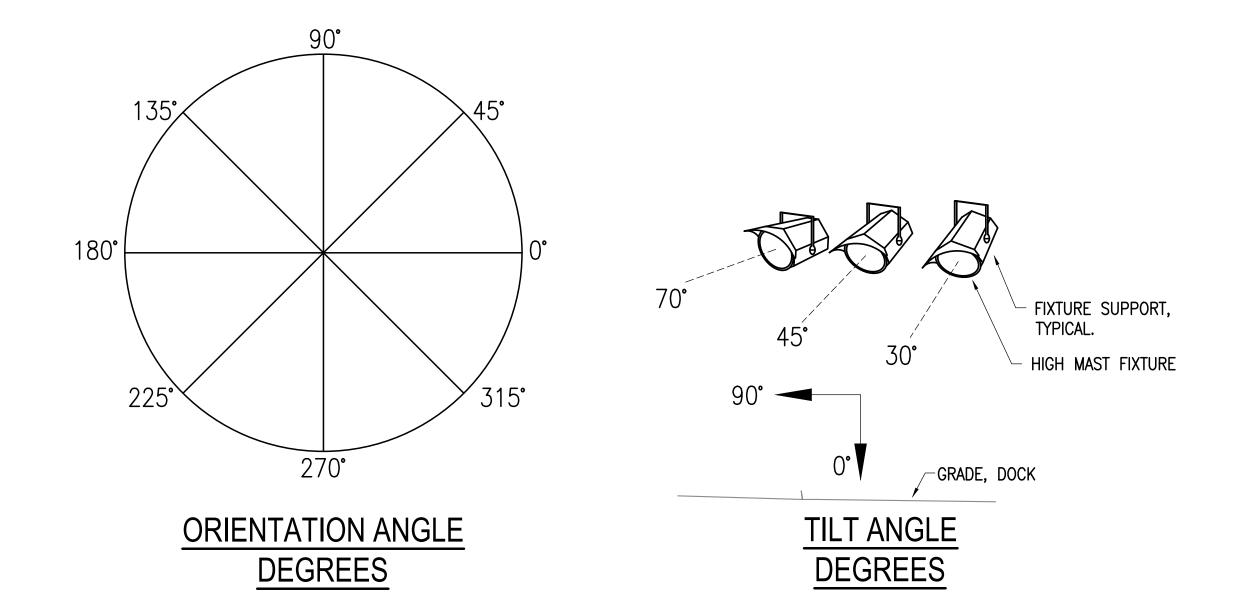
				LIGHT FIXTURE SCHEDULE					
	TYPE	LOCATION	MANUFACTURER AND CATALOG	LUMINAIRE DESCRIPTION	MOUNTING				TOTAL INPUT
	111 L		NUMBER (OR APPROVED EQUAL)		TYPE	HEIGHT	LAMPS	BALLAST/DRIVER	WATTS
	Α	AS SHOWN	LITHONIA #HLF1LED-P3-40K-NFL-480 -DDBXD	POLE MOUNTED HIGH MAST 25"X10" LED WITH NARROW FLOOD (45°) DISTRIBUTION AND DARK BRONZE FINISH. SEE E2.1, NOTE 3 FOR MOUNTING OPTIONS.	POLE MOUNTED	50'-0" AFG +/- 3'	4000K LED 31,383LM	480V DRIVER	295W
	A1	AS SHOWN	LITHONIA #HLF2LED-P3-40K-VNSP-480 -DDBXD	SAME AS FIXTURE TYPE 'A' EXCEPT WITH 25"x22" LED AND VERY NARROW SPOT LIGHT (7°) DISTRIBUTION.	POLE MOUNTED	50'-0" AFG	4000K LED 52,610LM	480V DRIVER	598W
	A2	AS SHOWN	LITHONIA #HLF2LED-P3-40K-SP-480 -DDBXD	SAME AS FIXTURE TYPE 'A1' EXCEPT WITH SPOT LIGHT (22°) DISTRIBUTION.	POLE MOUNTED	50'-0" AFG	4000K LED 62,257LM	480V DRIVER	598W
	A3	AS SHOWN	LITHONIA #HLF2LED-P3-40K-NFL-480 -DDBXD	SAME AS FIXTURE TYPE 'A1' EXCEPT WITH NARROW FLOOD (45°) DISTRIBUTION.	POLE MOUNTED	50'-0" AFG	4000K LED 61,742LM	480V DRIVER	598W
	A4	AS SHOWN	LITHONIA #HLF2LED-P3-40K-MNFL-480 -DDBXD	SAME AS FIXTURE TYPE 'A1' EXCEPT MEDIUM NARROW FLOOD (70°) DISTRIBUTION.	POLE MOUNTED	50'-0" AFG	4000K LED 61,461LM	480V DRIVER	598W
	A5	AS SHOWN	LITHONIA #HLF2LED-P3-40K-MFL-480 -DDBXD	SAME AS FIXTURE TYPE 'A1' EXCEPT MEDIUM FLOOD (6x6) DISTRIBUTION.	POLE MOUNTED	50'-0" AFG	4000K LED 64,248LM	480V DRIVER	598W
	В	AS SHOWN	LITHONIA #ATB0-30BLEDE15-MVOLT-R2	POLE MOUNTED AUTOBAHN LED ROADWAY FIXTURE WITH 30B CHIPS, 1500mA DRIVER, AND TYPE 2 DISTRIBUTION.	POLE MOUNTED	MATCH EXISTING	4000K LED 16,251LM	120-277V DRIVER	145W
>	B1	AS SHOWN	FIXTURE: LITHONIA #ATBO-30BLEDE15-MVOLT-R4 ARM: LITHONIA #SMAC-T20-US6-GALV	SAME AS FIXTURE TYPE 'B' EXCEPT WITH TYPE 4 DISTRIBUTION. ARM IS STEEL CANTILEVER WITH 2-3/8" PIPE SIZE AND 6' LONG.	POLE MOUNTED	MATCH EXISING	4000K LED 16,463LM	120-277V DRIVER	145W
	С	AS SHOWN	LITHONIA #DSX1LED-20C-530-40K- T4M-MVOLT	WALL-MOUNTED AREA LIGHT WITH 10LEDs (ONE ENGINE), 530mA DRIVE CURRENT, AND TYPE IV MEDIUM DISTRIBUTION.	WALL MOUNTED	MATCH EXISTING	4000K LED 4,201LM	120-277V DRIVER	35W
	D	AS SHOWN	KENALL #S1414L-P-MW-15L40K-DV- SA	14"x14" SURFACE—MOUNTED DROPPED LENS FIXTURE WITH POLYCARBONATE LENS, MATTE WHITE FINISH, CENTER—PIN TORX FASTENERS, AND SURFACE ADAPTER.	SURFACE	CEILING	4000K LED 2,223 LM	120-277V DRIVER	20W
	F	TOWER/GYM	LITHONIA #DSXF2LED-P3-40K-MFL- MVOLT-THK-DDBXD	SURFACE-MOUNTED FLOOD LIGHT WITH MEDIUM FLOOD DISTRIBUTION, KNUCKLE WITH 1/2"NPS THREADED PIPE, AND DARK BRONZE FINISH.	AS NOTED ON PLANS	MATCH EXISTING	4000K LED 12,044 LM	120-277V DRIVER	102W
	G	MAIN ENTRY	SPECTRUM #SR12SQLEDOA-33L-40K-E- 1-FT1212-MW-FO	1'x1' SQUARE LENSED LED FIXTURE WITH FLUSH TRIM, EXTRUDED ALUMINUM DOOR, MATTE WHITE FINISH AND MATTE WHITE ACRYLIC LENS.	RECESSED	CEILING	4000K LED 3,300 LM	120V DRIVER	37W



HIGHMAST FIXTURE AIMING DETAIL

LEGEND				
0	ROUND LIGHT FIXTURE - PENDANT OR SURFACE MTD CLG			
Ю	LIGHT FIXTURE - SURFACE MTD ON WALL			
0	LIGHT FIXTURE - RECESSED DOWNLIGHT			
	LINEAR LIGHT FIXTURE - SURFACE MTD CLG			
中	POLE MOUNTED PEDESTRIAN LIGHT - OUTDOORS, WEATHERPROOF			
Ф	POLE MOUNTED AREA LIGHT - OUTDOORS, WEATHERPROOF			
A	FIXTURE TAG (LETTER INDICATES TYPE)			
(3)	LIGHT FIXTURE TO BE REMOVED (DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED TYPICAL)			
	NOTE TAG (No. INDICATES NOTE)			
AFG	ABOVE FINISHED GRADE			
С	CONDUIT			
E	DENOTES EXISTING ITEM			
LED	LIGHT EMITTING DIODE			
LM	LUMENS			
NTS	NOT TO SCALE			
TYP	TYPICAL			
WP	WEATHERPROOF			

	EXISTING LIGHT FIXTURE SCHEDULE				
TYPE	EXISTING LUMINAIRE DESCRIPTION	TOTAL WATTAGE			
A	HIGH MAST FLOOD LIGHT	400W- 1000W			
B	POLE MOUNTED STREET LIGHTING FIXTURE	1000W			
0	WALL MOUNTED FLOOD LIGHT	200W			
0	SEMI RECESSED HID FIXTURE	60W			
E	SURFACE-MOUNTED HID/INCANDESCENT FIXTURE	100W- 175W			

ELECTRICAL LOAD RED	JCTION (CALC	CULATION
EXISTING LOADS REMOVED (IN KVA):			
HIGH MAST FIXTURES	56.25 KVA		
ROADWAYFIXTURES	3.6 KVA		
BUILDING MOUNTED FIXTURES	9.8 KVA		
FLOOD LIGHTS	4.0_KVA		
SUBTOTAL	: 73.65 KVA		
TOTAL LOADS REMOVED:		-73.7	KVA
TOTAL LOADS REMOVED (IN AMPS):		-89	A
NEW LOADS ADDED (IN KVA)			
HIGH MAST FIXTURES	34.03 KVA		
ROADWAYFIXTURES	1.45 KVA		
BUILDING MOUNTED FIXTURES			
FLOOD LIGHTS	2.45_KVA		
SUBTOTAL	: 39.78 KVA		
TOTAL LOADS ADDED:		39.8	KVA
TOTAL LOADS ADDED (IN AMPS):		48	A
NET LOAD CHANGE:		-33.9	KVA
NET LOAD CHANGE (IN AMPS):		-41	A

SHEET NOTES:

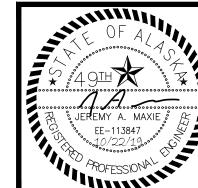
- 1. ARM LENGTH IS ASSUMED BASED ON VISUAL INSPECTION, VERIFY PRIOR TO ORDERING.
- 2. ALL LOCATIONS ARE WOODEN HIGH-MAST POLES. SEE 1/E0.1 FOR ORIENTATION AND TILT ANGLE REFERENCE.

PROJECT SEQUENCE

HIGH-MAST LIGHTING SHALL BE REPLACED PRIOR TO BUILDING AND POLE-MOUNTED FIXTURES, WITH ONLY ONE POLE AT A TIME ALLOWED TO BE DARK. EACH HIGH-MAST POLE HAS A FUSED DISCONNECT FOR ITS FLOOD LIGHTS.

HIGH MAST LUMINAIRE AIMING SCHEDULE

POLE	FIXTURE	ORIENTATION	TILT	FIXTURE	
NUMBER	NUMBER	ANGLE	ANGLE	TYPE	
P1	F1	184°	36°	A5	
P1	F2	305°	36°	Α	
P1	F3	0°	76°	A5	
P1	F4	68°	61°	Α	
P2	F5	87°	28°	A5	
P2	F6	161°	66°	A	
P2	F7	296°	74°	A3	
P2	F8	332°	71°	A	
P3	F9	90°	27°	A5	
P3	F10	168°	65°	А	
P3	F11	243°	67°	A	
P3	F12	351°	49°	A3	
P4	F13	58°	57°	A4	
P4	F14	178°	67°	A3	
P4	F15	248°	62°	A4	
P4	F16	318°	68°	A3	
P5	F17	123°	65°	A3	
P5	F18	173°	47°	A	
P5	F19	272°	65°	A4	
P5	F20	12°	50°	Α	
P6	F21	152°	70°	Α	
P6	F22	207°	63°	Α	
P6	F23	252°	63°	Α	
P6	F24	7°	31°	A5	
P7	F25	130°	63°	Α	
P7	F26	170°	80°	A	
P7	F27	215°	80°	A	
P7	F28	16°	35°	A5	
P8	F29	112°	51°	A3	
P8	F30	163°	70°	A4	
P8	F31	208°	55°	A3	
P8	F32	335°	28°	A5	
P9	F33	101°	61°	A3	
P9	F34	149°	73°	A4	
P9	F35	200°	51°	A3	
P9	F36	337°	50°	A5	
P10	F37	234°	66°	A3	
P10	F38	192°	72°	A3	
P10	F39	89°	66°	A3	
P10	F40	348°	30°	A5	
P11	F41	135°	77°	A3	
P11	F42	166°	80°	A2	
P11	F43	192°	77°	A1	
P11	F44	221°	67°	A3	
P11	F45	349°	29°	A5	
P12	F46	86°	80°	A3	
P12	F47	46°	72°	A2	
P12	F48	13°	66°	A2	
P12	F49	348°	78°	A1	
P12	F50	322°	76°	A3	
P12	F51	195°	26°	A5	
P13	F52	191°	74°	A3	
P13	F53	239°	66°	A3	
P13	F54	291°	83°	A2	
P13	F55	302°	64°	A3	
P14	F56	84°	64°	A4	
P14	F57	202°	61°	A5	
P14	F58	273°	77°	A1	
P14	F59	292°	75°	A2	
P14	F60	348°	50°	A3	
				ļ	
P15	F61	131°	61°	A4	
P15	F62	259°	83°	A2	
P15	F63	325°	60°	A3	
P15	F64	42°	56°	A5	



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REVISIONS:

DRAWN BY: KB

CHECKED BY: JAM,CPL

DATE: 10/22/2019

JOB NUMBER: L9137

DWG FILE: L9137-ESERIES

DRAWING TITLE:
ELECTRICAL LEGEND,
SCHEDULES, AND
DETAILS

HEET:

E0.1

ELECTRICAL SPECIFICATIONS

<u>26 05 00 - COMMON WORK RESULTS FOR ELECTRICAL</u>

- A. SCOPE OF WORK: FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT FOR AN EXTENSION OF THE EXISTING ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS AND IN THESE SPECIFICATIONS.
- B. STANDARDS, CODES AND REGULATIONS: COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, AND INTERNATIONAL FIRE CODE INCLUDING ALL STATE AND LOCAL AMENDMENTS TO THESE CODES. COMPLY WITH THE LATEST PUBLISHED VERSION OF THE NECA STANDARD OF INSTALLATION.
- DRAWINGS: THE DRAWINGS ARE DIAGRAMMATIC, NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. UNLESS SPECIFICALLY DIMENSIONED. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITIES REGULATIONS TO THE ATTENTION OF THE OWNER. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.
- D. RECORD DRAWINGS: MARK UP A CLEAN SET OF DRAWINGS AS THE WORK PROGRESSES TO SHOW THE DIMENSIONED LOCATION AND ROUTING OF ALL ELECTRICAL WORK WHICH WILL BECOME PERMANENTLY CONCEALED. SHOW COMPLETE ROUTING AND SIZING OF ANY SIGNIFICANT REVISIONS TO THE SYSTEMS
- WORKMANSHIP: INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS SHALL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND/OR INSTALLATION DRAWINGS AND IN ACCORDANCE WITH NECA STANDARDS. MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM WITH APPLICABLE INDUSTRY STANDARDS, NEMA STANDARDS AND UNDERWRITERS LABORATORIES STANDARDS WHERE APPLICABLE.
- F. SUBMITTALS: PROVIDE MATERIAL AND EQUIPMENT SUBMITTALS CONTAINING A COMPLETE LISTING OF MATERIAL AND EQUIPMENT SHOWN ON THE DRAWINGS. INCLUDE CATALOG NUMBERS, WIRING DIAGRAMS, ROUGH-IN DIMENSIONS AND PERFORMANCE DATA FOR ALL MATERIAL AND EQUIPMENT. SUBMITTALS SHALL BE IN ELECTRONIC .PDF FORMAT. INDEX AND CLEARLY IDENTIFY ALL MATERIAL AND EQUIPMENT BY ITEM, NAME OR DESIGNATION USED ON THE DRAWINGS. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT ONLY AND DOES NOT RELIEVE THE CONTRACTOR FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SUBMITTALS ARE NOT CHECKED FOR QUANTITY, DIMENSION, OR FOR PROPER OPERATION. WHERE DEVIATIONS OF A SUBSTITUTE PRODUCT OR SYSTEM PERFORMANCE HAVE NOT BEEN SPECIFICALLY NOTED IN THE SUBMITTAL BY THE CONTRACTOR, PROVISIONS OF A COMPLETE AND SATISFACTORY WORKING INSTALLATION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- G. OPERATION AND MAINTENANCE MANUALS: PROVIDE OPERATION AND MAINTENANCE MANUALS FOR TRAINING OF THE OWNER'S PERSONNEL. DESCRIBE THE PROCEDURES NECESSARY TO OPERATE THE SYSTEM INCLUDING START-UP. OPERATION. EMERGENCY OPERATION AND SHUTDOWN. PROVIDE INSTRUCTIONS AND A SCHEDULE OF PREVENTIVE MAINTENANCE IN TABULAR FORM FOR ALL ROUTINE CLEANING, INSPECTION AND LUBRICATION WITH RECOMMENDED LUBRICANTS. PROVIDE INSTRUCTIONS FOR MINOR REPAIR OR ADJUSTMENTS REQUIRED FOR PREVENTIVE MAINTENANCE ROUTINES. PROVIDE MANUFACTURER'S DESCRIPTIVE LITERATURE INCLUDING APPROVED SHOP DRAWINGS COVERING DEVICES USED IN ANY CONTRACTOR-PROVIDED EQUIPMENT OR SYSTEMS WITH ILLUSTRATION, EXPLODED VIEWS, ETC.
- WARRANTY: THE CONTRACTOR SHALL GUARANTEE ALL WORK EXECUTED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM BENEFICIAL OCCUPANCY. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE GUARANTEE PERIOD.
- PERMITS: SECURE AND PAY FOR ALL FEES, PERMITS, ETC. REQUIRED BY LOCAL AND STATE AGENCIES.
- REFERENCE SYMBOLS: THE ELECTRICAL "LEGEND" ON THE DRAWINGS IS A STANDARDIZED VERSION, AND ALL SYMBOLS SHOWN MAY NOT BE USED. USE THE "LEGEND" AS A REFERENCE FOR THE SYMBOLS USED ON THE DRAWINGS.

26 05 05 - SELECTIVE DEMOLITION FOR ELECTRICAL

- A. DEMOLITION DRAWINGS ARE BASED ON A NON-DESTRUCTIVE FIELD OBSERVATION AND EXISTING RECORD DRAWING. REPORT DISCREPANCIES TO ENGINEER BEFORE DISTURBING THE EXISTING INSTALLATION. DISABLE SYSTEMS ONLY TO MAKE SWITCHOVERS AND CONNECTIONS.
- B. OBTAIN PERMISSION FROM OWNER AT LEAST 24 HOURS BEFORE PARTIALLY OR COMPLETELY DISABLING SYSTEM. MINIMIZE OUTAGE DURATION AND MAKE TEMPORARY CONNECTIONS TO MAINTAIN SERVICE IN AREAS ADJACENT TO WORK AREA. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS.
- C. REMOVE, RELOCATE AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION. REMOVE ABANDONED WIRING TO SOURCE OF SUPPLY.
- DISCONNECT AND REMOVE ELECTRICAL DEVICES AND EQUIPMENT SERVING UTILIZATION EQUIPMENT THAT HAS BEEN REMOVED. DISCONNECT AND REMOVE ABANDONED LUMINAIRES. REMOVE BRACKETS, STEMS, HANGERS AND OTHER ACCESSORIES. REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK. MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS WHICH REMAIN ACTIVE.

<u>26 05 19 – WIRE AND CABLE</u>

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- 1. ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW, THWN, THW OR THHN INSULATION. MINIMUM BRANCH CIRCUIT CONDUCTOR SIZE SHALL BE 12 AWG. MINIMUM CONTROL CIRCUIT CONDUCTOR SIZE SHALL
- 2. CONTROL CIRCUITS SHALL BE COPPER, STRANDED CONDUCTOR, 600V INSULATION, THHN/THWN, MINIMUM SIZE 18 AWG.
- C. INSTALLATION:
- 1. COLOR CODE WIRES BY LINE OR PHASE. COLOR CODE THE 120/208V CONDUCTORS BLACK, RED, BLUE, AND WHITE. COLOR CODE THE 277/480V CONDUCTORS BROWN, ORANGE, YELLOW AND GREY. 2. USE PROPERLY SIZED INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR ALL CONDUCTORS #8
- AWG AND SMALLER. TERMINATE #6 AWG AND LARGER CONDUCTORS WITH CRIMP OR COMPRESSION TYPE CONNECTORS INSTALLED WITH TOOL RECOMMENDED BY CONNECTION MANUFACTURER AND INSULATE WITH PROPERLY SIZED 600 VOLT RATED HEAT SHRINK TUBING. 3. INSTALLATION SCHEDULE: BUILDING WIRE IN RACEWAYS AT ALL LOCATIONS UNLESS OTHERWISE NOTED.
- PROVIDE XHHW-2 FOR EXTERIOR LOCATIONS.

26 05 33 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION. B. MATERIALS

- 1. RIGID STEEL CONDUIT: ANSI C80.1. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; THREADED TYPE WITH INSULATED THROAT BUSHINGS, MATERIAL TO MATCH CONDUIT.
- 2. INTERMEDIATE METAL CONDUIT (IMC): GALVANIZED STEEL. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; USE FITTINGS AND CONDUIT BODIES SPECIFIED ABOVE FOR RIGID STEEL CONDUIT.
- 3. ELECTRICAL METALLIC TUBING CONDUIT (EMT): ANSI C80.3. GALVANIZED TUBING. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1: STEEL OR MALLEABLE IRON. COMPRESSION TYPE FITTINGS WITH INSULATED THROAT BUSHINGS. DIE-CAST OR SET-SCREW FITTINGS ARE NOT ACCEPTABLE. MAXIMUM SIZE SHALL BE 2". PROVIDE FACTORY ELBOWS ON SIZES 1-1/2" AND LARGER.
- 4. FLEXIBLE METAL CONDUIT: FS WW-C-566; STEEL, FULL WALL OR REDUCED WALL THICKNESS. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL OR MALLEABLE IRON WITH INSULATED THROAT BUSHINGS. DIE CAST FITTINGS ARE NOT ACCEPTABLE.
- 5. LIQUIDTIGHT FLEXIBLE CONDUIT: FLEXIBLE METAL CONDUIT WITH PVC JACKET. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL OR MALLEABLE IRON WITH INSULATED THROAT BUSHINGS. DIE CAST

FITTINGS ARE NOT ACCEPTABLE.

- 6. PROVIDE GALVANIZED OR CADMIUM PLATED, ONE PIECE PRESSED STEEL OUTLET BOXES 4 INCH SQUARE OR OCTAGONAL, 1 1/2 INCHES DEEP MINIMUM SIZE FOR USE IN INTERIOR AREAS.
- 7. PROVIDE CAST ALUMINUM OR FERALLOY TYPE BOXES WITH GASKETED COVER, THREADED HUBS AND NEMA 3R RATING FOR USE IN EXTERIOR OR WET LOCATIONS. C. INSTALLATION:
- 1. INSTALL CONDUIT FOR ALL SYSTEMS UNLESS OTHERWISE NOTED, 1/2 INCH MINIMUM SIZE. EXPOSED OUTDOOR LOCATIONS SHALL BE RIGID STEEL CONDUIT OR INTERMEDIATE METAL CONDUIT
- 2. EXPOSED DRY INTERIOR LOCATIONS SHALL BE RIGID STEEL CONDUIT OR INTERMEDIATE METAL CONDUIT. ELECTRICAL METALLIC TUBING MAY BE USED EXPOSED WHEN INSTALLED ON THE CEILING. A MINIMUM OF TEN FEET ABOVE THE FLOOR OR WHERE NOT SUBJECT TO PHYSICAL DAMAGE. EMT MAY ALSO BE USED FOR CONCEALED. DRY. INTERIOR LOCATIONS.
- 3. PROVIDE OUTLET BOXES AS REQUIRED FOR SPLICES, TAPS, WIRE PULLING, EQUIPMENT CONNECTIONS, DEVICE INSTALLATION AND CODE COMPLIANCE.
- 4. SUPPORT BOXES INDEPENDENTLY OF CONDUIT.

26 05 53 - IDENTIFICATION FOR ELECTRICAL SYSTEMS A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.

- B. MATERIALS:
- 1. TAPE LABELS: ADHESIVE TAPE LABELS, WITH 3/16 INCH BOLD BLACK LETTERS ON CLEAR BACKGROUND
- MADE USING DYMO RHINO SERIES OR EQUAL LABEL PRINTER. 2. WIRE AND CABLE MARKERS: CLOTH MARKERS, SPLIT SLEEVE OR TUBING TYPE.

C. INSTALLATION:

- 1. CONDUITS: MARK ALL CONDUITS ENTERING OR LEAVING PANELBOARDS WITH INDELIBLE BLACK MAGIC MARKER WITH THE CIRCUIT NUMBERS OF THE CIRCUITS CONTAINED INSIDE. LABEL FEEDER CONDUITS AND SPARE CONDUITS AT EACH END WITH SOURCE AND TERMINATION POINT.
- 2. JUNCTION BOXES: MARK ALL CIRCUIT NUMBERS OF WIRING ON ALL JUNCTION BOXES WITH SHEET STEEL COVERS. MARK WITH INDELIBLE BLACK MARKER. ON EXPOSED JUNCTION BOXES IN PUBLIC AREAS, MARK ON INSIDE OF COVER.
- 3. WIRE IDENTIFICATION: PROVIDE WIRE MARKERS ON EACH CONDUCTOR IN PANELBOARD GUTTERS, PULL BOXES, OUTLET AND JUNCTION BOXES, AND AT LOAD CONNECTION. MARKERS SHALL BE LOCATED WITHIN ONE INCH OF EACH CABLE END, EXCEPT AT PANELBOARDS, WHERE MARKERS FOR BRANCH CIRCUIT CONDUCTORS SHALL BE VISIBLE WITHOUT REMOVING PANEL DEADFRONT.

26 09 23 - LIGHTING CONTROL DEVICES

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.

B. MATERIALS:

- 1. EXTERIOR PHOTOCELLS: PROVIDE DUSK-TO-DAWN LIGHTING CONTROL WITH A DELAY ACTION. FULLY ENCLOSED WEATHERPROOF HOUSING, SONIC-WELDED POLYCARBONATE CASE AND LENS TO SEAL OUT MOISTURE, RATED FOR MOUNTING ON BUILDING EXTERIOR AND -20°F TEMPERATURE OPERATION. C. INSTALLATION:
- 1. FIELD LOCATE PHOTOCELL FOR PROPER OPERATION AND ADJUST TO TURN FIXTURES ON AT DUSK AND OFF AT DAWN.

<u>26 50 00 - LIGHTING FIXTURES</u>

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.

B. MATERIALS:

- 1. LUMINAIRES: PROVIDE AND INSTALL ALL LIGHTING EQUIPMENT OR APPROVED EQUAL AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE "FIXTURE SCHEDULE". PROVIDE LIGHTING EQUIPMENT COMPLETE, WIRED, ASSEMBLED, WITH PROPER FLANGES, MOUNTING SUPPORTS, HARDWARE, ETC.
- 2. LED DRIVERS: PROVIDE UL LISTED POWER SUPPLY AS RECOMMENDED BY THE LED FIXTURE MANUFACTURER FOR OPERATION OF THE SPECIFIED LED LAMPS. POWER SUPPLY SHALL BE INTEGRAL TO THE LUMINAIRE UNLESS OTHERWISE NOTED ON THE PLANS. POWER SUPPLY SHALL OPERATE AT THE SUPPLY VOLTAGE INDICATED ON THE PLANS AND SHALL BE LISTED FOR STARTING AND OPERATING THE LAMPS AT 75F AVERAGE INDOOR TEMPERATURE AND -20F WHERE INSTALLED OUTDOORS.
- 3. LED LAMPS: UNLESS OTHERWISE SCHEDULED ON THE PLANS, PROVIDE NOMINAL 4000 K, WITH MINIMUM
- 75CRI AND A MINIMUM L70 LAMP LIFE OF 50,000 HOURS. C. INSTALLATION:
- 1. PROVIDE LUMINAIRE DISCONNECTING MEANS IN BALLAST/DRIVER CHANNEL OF EACH LIGHT FIXTURE. WHERE THE LUMINAIRE IS FED FROM A MULTI-WIRE BRANCH CIRCUIT, PROVIDE MULTI-POLE DISCONNECT TO SIMULTANEOUSLY BREAK ALL SUPPLY CONDUCTORS TO THE BALLAST, INCLUDING THE GROUNDED CONDUCTOR.
- 2. AIM ALL LUMINAIRES THAT HAVE ADJUSTABLE LAMPS OR LENSES.

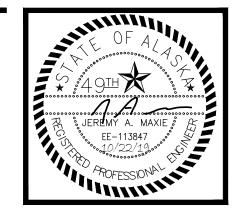


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REVISIONS:

DRAWN BY: **KB** CHECKED BY: JAM, CPL 10/22/2019 JOB NUMBER: L9137 DWG FILE: L9137-ESERIES

DRAWING TITLE: ELECTRICAL SPECIFICATIONS



GENERAL NOTES:

- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM RECORD DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.
- B. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS TO A WAREHOUSE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS. NOTE THAT DOC INTENDS TO RETAIN A NUMBER OF FIXTURES.
- C. DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED. SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- D. EACH HIGH-MAST POLE HAS A FUSED DISCONNECT FOR ITS FLOOD LIGHTS.

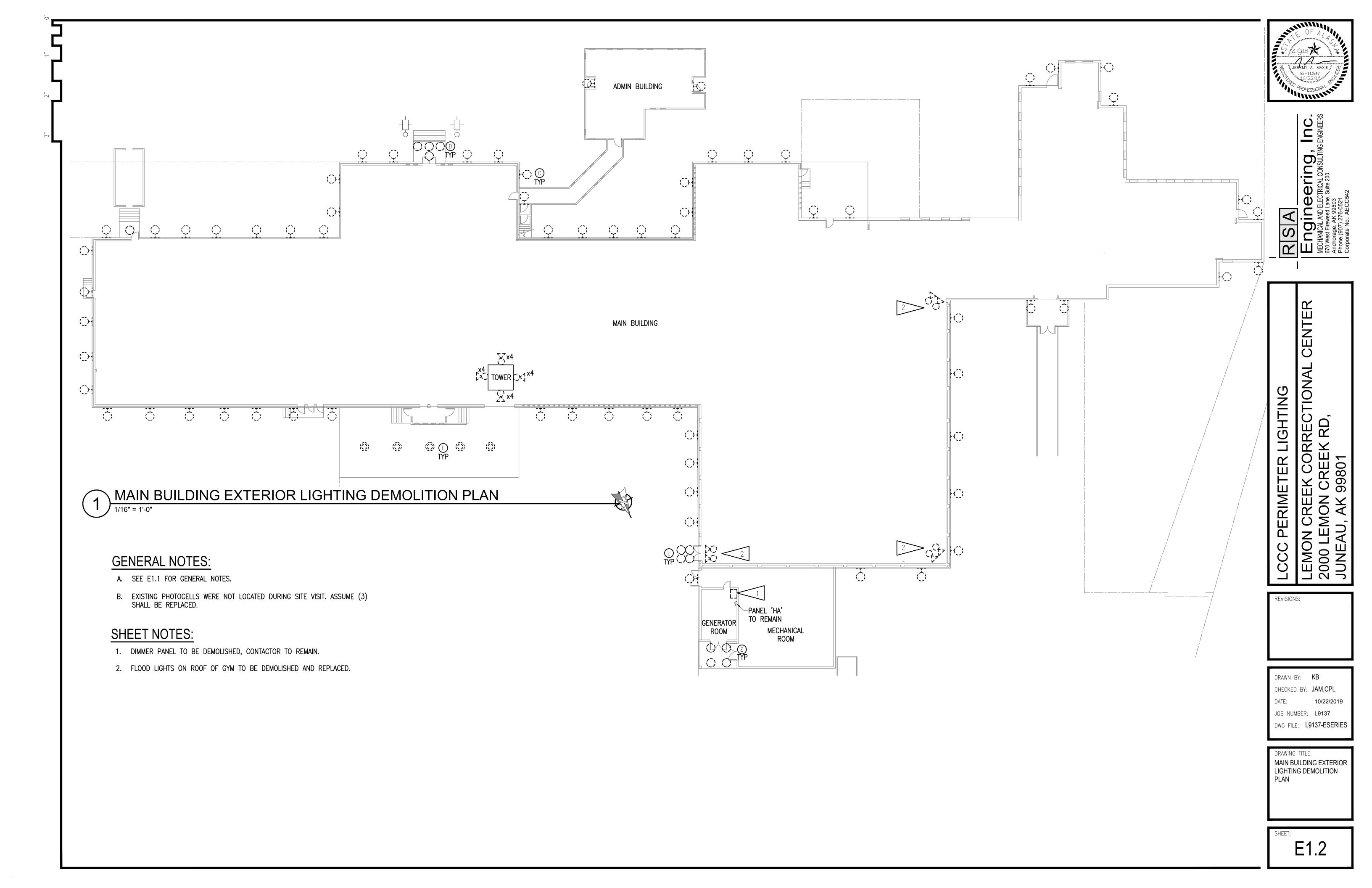
SHEET NOTES:

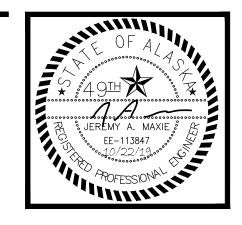
- 1. NOT ALL EXISTING POLE MOUNTED FIXTURES ARE SHOWN FOR CLARITY. DEMOLISH ALL EXISTING FIXTURES AND BRACKETS AND SAVE CIRCUIT FOR REUSE. TYPE 'A' POLES HAVE FROM 3 TO 8 FLOOD LIGHTS ON EACH. SEE QUANTITY NOTED AT EACH LOCATION.
- 2. PEDESTRIAN-HEIGHT POLES HAVE LED RETROFIT BULBS INSTALLED AND WILL NOT BE INCLUDED IN THE SCOPE OF WORK.

METER LIGHTING PERI **REVISIONS:**

DRAWN BY: KB CHECKED BY: JAM, CPL 10/22/2019 JOB NUMBER: L9137 DWG FILE: L9137-ESERIES

DRAWING TITLE: SITE LIGHTING DEMOLITION PLAN





GENERAL NOTES:

A. ALL HIGH MAST FIXTURES TO BE CONTROLLED THROUGH EXISTING LIGHTING CONTACTOR.

SHEET NOTES:

- 1. NEW FIXTURE AT EXISTING LOCATION. CONNECT NEW FIXTURE TO EXISTING CIRCUIT.
- 2. NEW FIXTURE AND ARM ON EXISTING POLE. DRILL POLE AND PROVIDE NEW ARM FOR NEW FIXTURE. CONNECT NEW FIXTURE TO EXISTING CIRCUIT.
- NEW FIXTURES ON EXISTING WOODEN HIGH-MAST POLE. PROVIDE NEW MOUNTING BRACKETS AT HEIGHT INDICATED IN FIXTURE SCHEDULE, RATED FOR SIZE AND WEIGHT OF FIXTURES. PER THE LIGHTING REPRESENTATIVE, LOCALLY FABRICATED ALUMINUM BRACKETS WITH SLIPFITTERS HAVE BEEN UTILIZED ON SIMILAR PROJECTS AND ARE ACCEPTABLE BY THE MANUFACTURER. AT CONTRACTOR'S OPTION EXISTING BRACKETS MAY BE RELOCATED AND RE-USED IF IN GOOD CONDITION. DOC RESERVES THE RIGHT TO INSPECT AND APPROVE HARDWARE SUBJECT TO POTENTIAL RE-USE. CONNECT NEW FIXTURES TO EXISTING CIRCUIT. ISOLATE EACH POLE WITH ITS EXISTING FUSED DISCONNECT.
- 4. NUMBER REFERS TO POLE NUMBER.
- 5. SEE HIGH MAST LUMINAIRE AIMING SCHEDULE, SHEET EO.1 FOR ORIENTATION ANGLE, TILTING ANGLE, AND FIXTURE TYPE RELATED TO THE FIXTURE NUMBÉR.

LIGHTING

JOB NUMBER: L9137 DWG FILE: L9137-ESERIES

DRAWING TITLE: SITE LIGHTING REMODEL PLAN

E2.1

