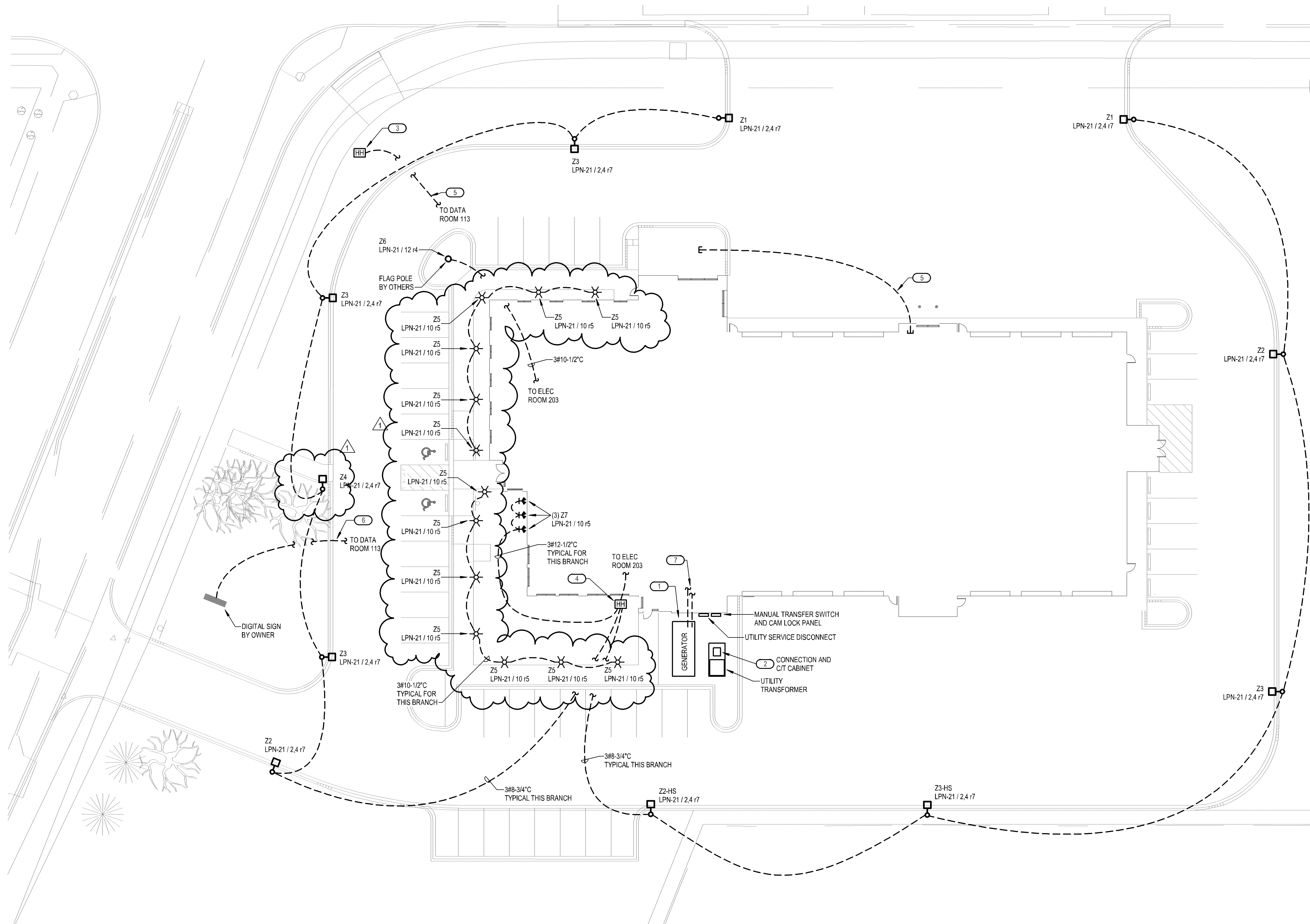
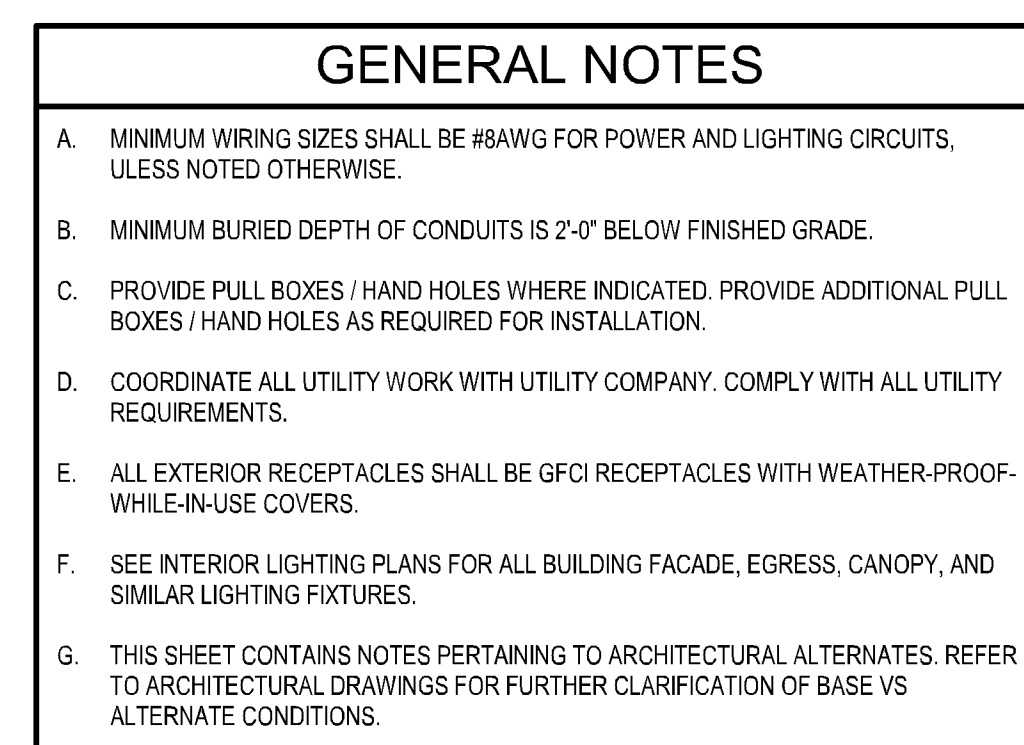


**CASE FILE #PL201800344**



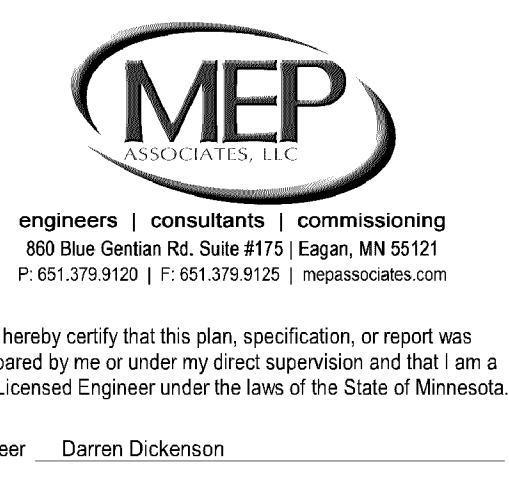
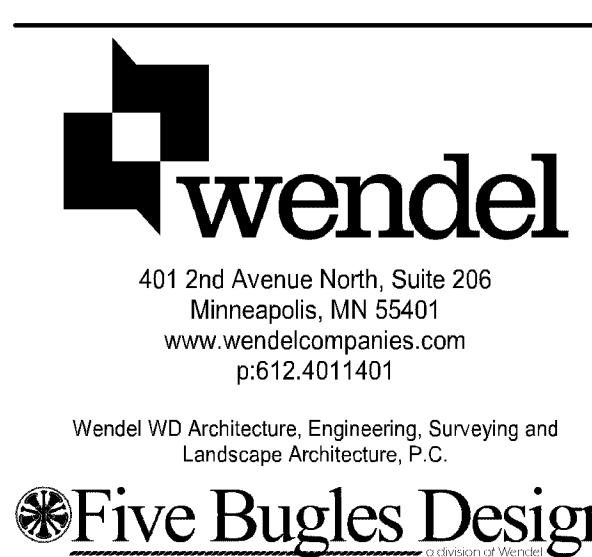
## 1 ELECTRICAL SITE PLAN



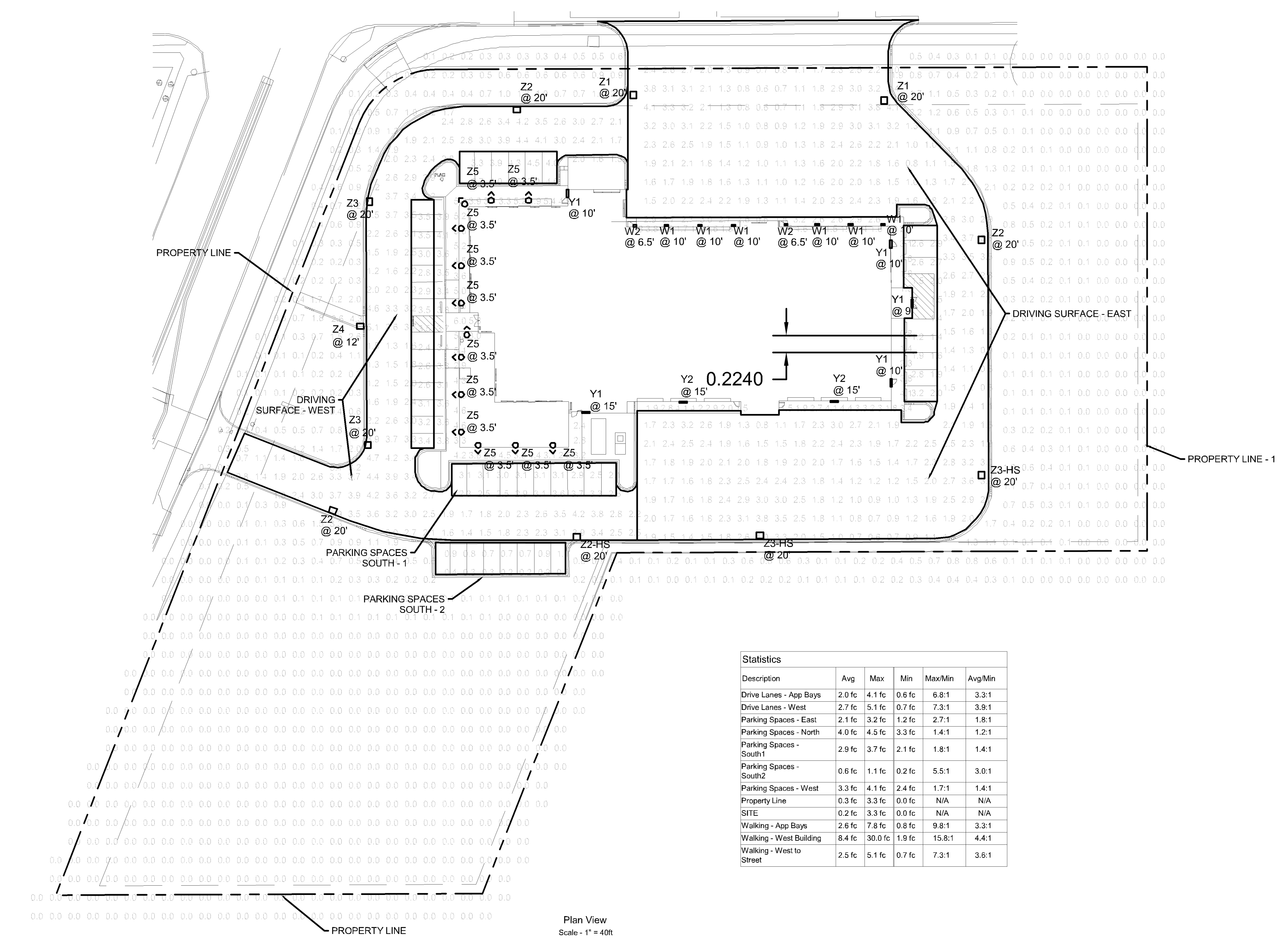
CASE FILE #PL201800344



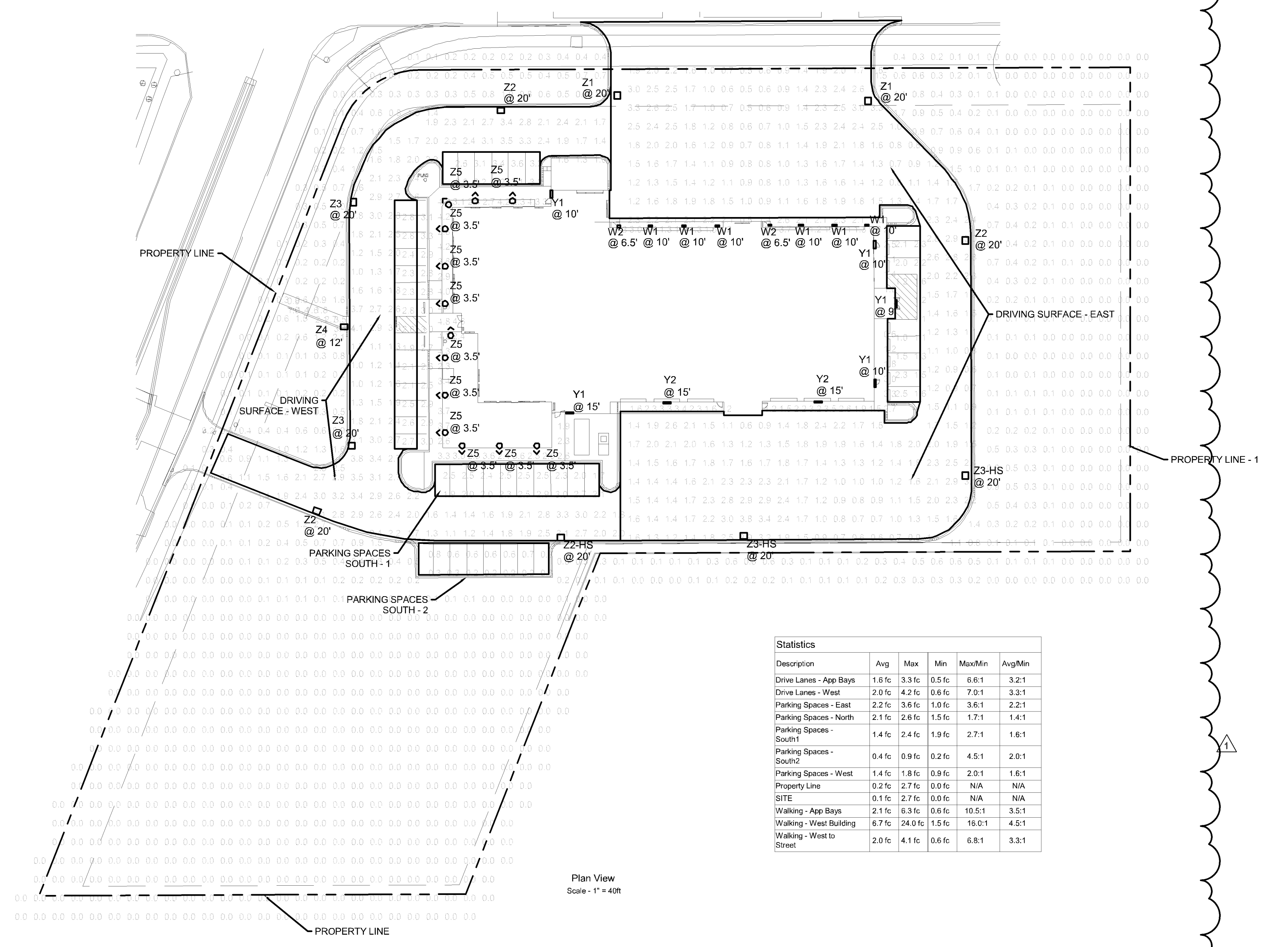
THE CITY OF  
BLOOMINGTON,  
MINNESOTA  
2301 EAST 86th STREET  
BLOOMINGTON, MN 55425  
BLOOMINGTON FIRE  
STATION NO. 3  
BID SET



Date: 02/28/2019 Reg. No.: 41678



1 SITE PHOTOMETRICS - INITIAL (LLF = 1.0)  
1" = 40'-0"



2 SITE PHOTOMETRICS - MAINTAINED (LLF = 0.8)  
1" = 40'-0"

LIGHTING PLAN APPROVED



*NMJ*

NMJ  
05/24/2019

NOTE:  
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ETHICS OF THE ARCHITECT AND ENGINEER.

NO.	REVISIONS	DATE
1	PR-002	09/10/2019

DWG. TITLE  
ELECTRICAL SITE  
PHOTOMETRY

0 1' 2'  
GENERIC SCALE BAR  
SCALE BAR SHOWN IS TWO TIMES THE ORIGINAL DRAWING  
AND NOT TO BE USED FOR THIS SHEET, ADJUST ACCORDINGLY

DATE: 02-28-2019  
SCALE: 1" = 40'-0"  
DWG: CAJ CHK: DRD  
PROJ. No.: 484401 CLIENT: No.: 2017-56  
DWG. No.:

E101



# CASE FILE #PL201800344

LIGHT FIXTURE SCHEDULE					
TYPE	DESCRIPTION	MOUNTING	MANUFACTURER, MODEL	LAMP	Voltage
A1	2' X 4' LED EDGE-LIT FLAT PANEL, 0-10V DIMMING	RECESSED - ACT	LITHONIA EPANL H.E. WILLIAMS LP-22 PHILIPS DAYBRITE 2PXP SYLVANIA EDGE-LIT FLAT PANEL EATON METALUX 22FP	LED 4800LM, 4000K, 80CRI	120 V
A2	2' X 2' LED EDGE-LIT FLAT PANEL, 0-10V DIMMING	RECESSED - ACT	LITHONIA EPANL H.E. WILLIAMS LP-22 PHILIPS DAYBRITE 2PXP SYLVANIA EDGE-LIT FLAT PANEL EATON METALUX 22FP	LED 2000LM, 4000K, 80CRI	120 V
A3	2' X 4' LED EDGE-LIT FLAT PANEL, 0-10V DIMMING	RECESSED - ACT	LITHONIA EPANL H.E. WILLIAMS LP-24 PHILIPS DAYBRITE 2PXP SYLVANIA EDGE-LIT FLAT PANEL EATON METALUX 24FP	LED 4800LM, 3000K, 80CRI	120 V
A4	2' X 2' LED EDGE-LIT FLAT PANEL, 0-10V DIMMING	RECESSED - ACT	LITHONIA EPANL H.E. WILLIAMS LP-22 PHILIPS DAYBRITE 2PXP SYLVANIA EDGE-LIT FLAT PANEL EATON METALUX 22FP	LED 2000LM, 3000K, 80CRI	120 V
B1	2' X 4' LED ARCHITECTURAL TROFFER, 0-10V DIMMING	RECESSED - ACT	MARK ARCH LTG. WMSRPLCTR PHILIPS DAYBRITE 2PXP PINNACLE ARCH LTG. ADEO EATON METALUX 24RLN	LED 4800LM, 4000K, 80CRI	120 V
B2	2' X 2' LED ARCHITECTURAL TROFFER, 0-10V DIMMING	RECESSED - ACT	MARK ARCH LTG. WMSRPLCTR PHILIPS DAYBRITE 2PXP PINNACLE ARCH LTG. ADEO EATON METALUX 24RLN	LED 2000LM, 4000K, 80 CRI	120 V
D1	8" APERTURE LED DOWNLIGHT	RECESSED - ACT	GOTHAM EVOR PATHWAY LTG. 8XFLUX SERIES ATLANTIC LEDS H.E. WILLIAMS L60	LED 1000LM, 3000K, 80CRI	120 V
D2	8" APERTURE LED DOWNLIGHT WET LOCATION LISTED	RECESSED - GYP	GOTHAM EVOR PATHWAY LTG. 8XFLUX PATHWAY LTG. 8XTRV VLE SERIES ATLANTIC LEDS H.E. WILLIAMS L60	LED 1000LM, 3000K, 80CRI	120 V FOR FIXTURES MOUNTED IN LID OF SHOWER, VERIFY INSTALLATION LOCATION WITH ARCHITECT BEFORE ROUGH-IN.
D3	3-1/4" SQUARE APERTURE DOWNLIGHT WHITE PAINTED FLANGE	RECESSED - GYP	GOTHAM EVOR PATHWAY LTG. 8XFLUX AMERLUX EVOR 2-1/2" HP TECH LTG. 3" ELEMENT FIXED	LED 1000LM, 3000K, 80CRI	120 V
EX1	UNIVERSAL MOUNTED, SINGLE FACE, LED EXT SIGN, PLASTIC HOUSING, GREEN LETTERS.	UNIVERSAL	LITHONIA EVR LIGHTALARS QLX50VRN EMERGLITE ELXN40 EATON SUB-LITE APXN7	LED	120 V
EX2	UNIVERSAL MOUNTED, DOUBLE FACE, LED EXT SIGN, PLASTIC HOUSING, GREEN LETTERS. SEE PLANS FOR ARROW DIRECTIONS	UNIVERSAL	LITHONIA EVR LIGHTALARS QLX50VRN EMERGLITE ELXN40 EATON SUB-LITE APXN7	LED	120 V
F4	SUSPENDED LINEAR LED LUMINAIRE: NOMINAL 3" WIDTH X 4'-0" LENGTH, DIRECT/INDIRECT LIGHT DISTRIBUTION, WHITE PAINTED FINISH.	SUSPENDED - STEM MOUNT	CORONET L33 UPDN MERCURY / ALM MLS3 EATON NEDARY DEFINE 3 PINNACLE ARCH LTG. EDGE EVO EXD LED	LED, 600 LMFT UP, 600 LMFT DN, 4000K, 80CRI	120 V
F4W	SAME AS F-4 WITH WALL MOUNTED CONFIGURATION	SURFACE - WALL			120 V 2'-0" AFF
F5	SAME AS F-4 WITH 10'-0" NOMINAL LENGTH				120 V
F12	SAME AS F-4 WITH 12'-0" NOMINAL LENGTH, AND HIGHER LUMEN PACKAGE			800 LMFT UP, 800 LMFT DN LED 4000LM, 3000K, 80 CRI, MED DISTR	120 V
H	HIGH BAY LED LUMINAIRE, 0-10V DIMMING	SUSPENDED - CHAIN HUNG	LITHONIA LBEAM BE PHILIPS DAYBRITE FBY EATON METALUX H8 LUMAX LTG. HRILED H.E. WILLIAMS GL	LED 4000LM, 3000K, 80 CRI	120 V
J	LINEAR LED LUMINAIRE, 3-1/4" NOMINAL WIDTH X 10'-0" LENGTH	RECESSED - GYP	MARK ARCH LTG. SLOTT 4 MERCURY / ALM MLS3 EATON NEDARY DEFINE 4 PINNACLE ARCH LTG. EDGE EVO3 LED	LED 750LMFT, 3500K, 80CRI	120 V
K	WALL MOUNTED LED SQUARE VANITY LUMINAIRE, 4" NOMINAL LENGTH, BRUSHED NICKEL FINISH.	SURFACE - GYP WALL	LITHONIA FANCSL BROWNLEE LTG. 5-1/2" TERON LTG. KATONA BFP LED 48"	3500K, 80CRI	120 V MOUNT ABOVE MIRROR VIFY MOUNTING HEIGHT WITH ARCH ON INSTALL
L	WALL MOUNTED LED LUMINAIRE, INDIRECT DISTRIBUTION, WITH FIELD ADJUSTABLE DISTRIBUTION RATCHETS.	SURFACE - GYP WALL	SPL LTG. ECHO REFLECTIONS EEW1086 WINONA VILAVIC4 SERIES EATON METRIC ASYMM S2	LED 6,000LM, 3000K	120 V 13'-0" AFF VIFY WITH ARCH ON INSTALL
N	LINEAR LED PENDANT, 8'-0" NOMINAL LENGTH, DIRECT & INDIRECT DISTRIBUTION, SINGLE CIRCUIT 0-10V DIMMING, WHITE PAINTED FINISH	SUSPENDED - FIELD ADJUSTABLE CABLE	LUMENWERX CAVSDRI PERLESS ORN SERIES FLUWEXX PFI SERIES PRUDENTIAL LTG. STREAM SQUARE LUMIAUX CVO	LED 500LMFT, 3500K, 80CRI	120 V 6'-0" AFF VIFY WITH ARCH ON INSTALL
P1	DECORATIVE PENDANT LED LUMINAIRE, 18" RADIUS X 11" HEIGHT - VIFY FINISH AT TIME OF SUBMITTAL, SINGLE LAMP OPTION.	SUSPENDED - FIELD ADJUSTABLE CABLE	TECH LTG. CUNEO PENDANT	LED VINTAGE STYLE LAMP BY MANUF.	120 V PROVIDE \$830 ALLOWANCE VIFY MOUNTING HEIGHT WITH ARCH ON INSTALL
P2	DECORATIVE PENDANT LED LUMINAIRE, 28" RADIUS X 13" HEIGHT - VIFY FINISH AT TIME OF SUBMITTAL, PROVIDE WITH LED LAMP BY OTHERS	SUSPENDED - FIELD ADJUSTABLE CABLE	TECH LTG. KONOS PENDANT	LED E26 BASE G40 LAMP BY OTHERS 800 LM, 3000K	120 V PROVIDE \$550 ALLOWANCE VIFY MOUNTING HEIGHT WITH ARCH ON INSTALL
S1	4'-0" LED STRIPLIGHT WITH DROP LENS, WHITE PAINTED FINISH	SUSPENDED - CHAIN HUNG	LITHONIA ZL10 H.E. WILLIAMS TSS SERIES PHILIPS DAYBRITE FSS SERIES EATON METALUX SNLED	LED, 2500LM, 4000K, 80CRI	120 V
S2	4'-0" LED SEALED AND GASKETED STRIPLIGHT FOR WET LOCATIONS, FROSTED POLYCARBONATE LENS, WHITE PAINTED FINISH	SURFACE - BLOCK WALL	LITHONIA FEM LED H.E. WILLIAMS 86 LED PHILIPS DWI SERIES EATON METALUX VAPORTITE LED	LED, 6000LM, 3000K, 90CRI	120 V
T	TRACK HEAD LUMINAIRE, WIDE 60 DEGREE DISTRIBUTION, ONE CIRCUIT TRACK ADAPTER, SOFTENING GLASS LENS LUMINAIRE HEAD, INTERIOR BEZEL, AND TRACK ADAPTER ALL TO BE MATTE BLACK FINISH.	TRACK MOUNTED	LUMENPULSE 3POT ZEN JUNO 138L SERIES PHILIPS LIGHTOLIER LC SERIES AMERLUX SPEOM	LED, 2000 LM, 3500K, 90+ CRI	120 V
T8	SURFACE MOUNTED SINGLE CIRCUIT LUMINAIRE TRACK, 8'-0" NOMINAL LENGTH, BLACK PAINTED FINISH.	SURFACE - GYP	LUMENPULSE DES ONE CIRCUIT TRACK JUNO 1 SERIES PHILIPS LIGHTOLIER 6000 LYTECAPAN SERIES AMERLUX GLOBAL TRACK 1 CIR	LED, 2000LM, 3500K, 90+ CRI	120 V
T10	SAME AS T8 WITH 10'-0" NOMINAL LENGTH				120 V
T12	SAME AS T8 WITH 12'-0" NOMINAL LENGTH				120 V
U-14	UNDERCABINET LED LUMINAIRE, NOMINAL 14" LENGTH X 3" WIDTH X 1" DEPTH, EXTRUDED ALUMINUM HOUSING, BLACK PAINTED FINISH, SOFT FOCUS DIFFUSER LENS	SURFACE - UNDERCABINET	JUNO PRO SERIES SOFTTASCK UNDERCABINET	LED, 300LM, 3000K, 90+CRI	120 V
U-22	SAME AS U-14, 22" NOMINAL LENGTH			LED 420LM, 3000K, 90+CRI	120 V
U-30	SAME AS U-14, 30" NOMINAL LENGTH			LED 750LM, 3000K, 90+CRI	120 V
U-40	SAME AS U-14, 40" NOMINAL LENGTH			LED 840LM, 3000K, 90+CRI	120 V
W	WALL MOUNTED LED LUMINAIRE, WITH INTEGRAL OCCUPANCY SENSING.	SURFACE - WALL VIFY WITH ARCH PLANS	LITHONIA VL SERIES PHILIPS DAYBRITE FSVI SERIES EATON METALUX SWLED	LED 2000LM, 4000K, 80CRI	120 V
Y1	EXTERIOR LED WALLPACK LUMINAIRE, TYPE 4 MEDIUM DISTRIBUTION	SURFACE - BLOCK WALL	LITHONIA DSXW1-100-1000 NATIONAL LTG SOLUTIONS NV-1-16L-53-30K VISIONAIRE LTG. VSC SERIES EATON MCGRAWEDSON GWC	LED 3500LM, 3000K	120 V 10'-0" AFF
Y2	EXTERIOR LED WALLPACK LUMINAIRE, TYPE 4 MEDIUM DISTRIBUTION	SURFACE - BLOCK WALL	LITHONIA DSXW1-100-1000 NATIONAL LTG SOLUTIONS NV-1-32L-7-30K VISIONAIRE LTG. VSC SERIES EATON MCGRAWEDSON GWC	LED 7000LM, 3000K	120 V 15'-0" AFF
Y3	ARCHITECTURAL WALL SCIENCE, WITH INTEGRAL LED DOWNLIGHT ON SEPARATE CIRCUIT, RECTANGULAR DIFFUSER, 51" HEIGHT X 8" WIDTH, CUSTOM CAGE WITH RED ACCENT AT BOTTOM	SURFACE - BLOCK WALL	ECLIPSE LTG. GAULLED DECO STYLE C EQUIGREEN LTG. CUSTOM FRAM57 MANNING LTG. HD-754-FINISH-384-35-DO-120 DEL TORO LTG. 616W	LED, 4000LM, 3000K	120 V
Y4	WALL MOUNTED LINEAR FACADE ACCENT LIGHT, 35'-0" CONTINUOUS RUN, MOUNTED ABOVE SIGN WITH 2'-0" STEM, SEE LIGHTING DETAIL.	SURFACE - WALL VIFY WITH ARCH PLANS	SPL LTG. STYK LINEAR LUMENPULSE LUMEN FACADE LOOH	LED, 3500K, 90+ CRI	120 V
Y5	EXTERIOR RATED FLEXIBLE RGB LED TAPE, PROVIDE WITH DRIVER AND HARDWARE TO CONTROL, ACCENT COLOR, LED TAPE TO TRACE OUTLINE OF "3" SIGNAGE. EC TO FIELD VERIFY TAPE LENGTHS REQUIRED, SEE ARCH DETAIL.	SURFACE - SEE DETAIL ON SHEET E370	NOVA FLEX RGB 60 KLUS DESIGN K-1225-RGB-24V LLI ARCHITECTURAL LLI4LCC4 4W-65 TIDILLI TR-RGBWVQ-24	LED, TUNABLE RGB	120 V
Y6	STEM MOUNTED FLOOD LIGHT, 24" STEM, MEDIUM FLOOD OPTIC, SOFT FOCUS LENS, BLACK PAINTED FINISH	SURFACE - BLOCK WALL	BRIGHTING TWIN SON STAR HYDREL PLACERTWIN SERIES HUNZA TWIN BAR LITE	LED, 400LM, 3000K	120 V
Z1	POLE MOUNTED AREA LIGHT, PROVIDE 17' ROUND STEEL POLE, FORWARD THROW MEDIUM DISTRIBUTION	POLE MOUNTED	LITHONIA DSXV-17FM-140 NATIONAL LTG SOLUTIONS NV-1 VISIONAIRE LTG. VSK-1 SERIES EATON MCGRAWEDSON GLEON	LED 19000LM, 3000K	208 V PROVIDE 17' ROUND STEEL POLE
Z2	POLE MOUNTED AREA LIGHT, PROVIDE 17' ROUND STEEL POLE, TYPE 2 MEDIUM DISTRIBUTION	POLE MOUNTED	LITHONIA DSXV-17FM-140 NATIONAL LTG SOLUTIONS NV-1 VISIONAIRE LTG. VSK-1 SERIES EATON MCGRAWEDSON GLEON	LED 11000LM, 3000K	208 V PROVIDE 17' ROUND STEEL POLE
Z2-HS	SAME AS Z2 WITH HOUSE SHIELD				208 V
Z3	POLE MOUNTED AREA LIGHT, PROVIDE 17' ROUND STEEL POLE, TYPE 4 MEDIUM DISTRIBUTION	POLE MOUNTED	LITHONIA DSXV-17FM-140 NATIONAL LTG SOLUTIONS NV-1 VISIONAIRE LTG. VSK-1 SERIES EATON MCGRAWEDSON GLEON	LED 11000LM, 3000K	208 V PROVIDE 17' ROUND STEEL POLE
Z3-HS	SAME AS Z3 WITH HOUSE SHIELD				208 V
Z4	POLE MOUNTED AREA LIGHT, PROVIDE 10' ROUND STEEL POLE, TYPE 2 MEDIUM DISTRIBUTION	POLE MOUNTED	LITHONIA DSXV-17FM-140 NATIONAL LTG SOLUTIONS NV-1 VISIONAIRE LTG. VSK-1 SERIES EATON MCGRAWEDSON GLEON	LED 5500LM, 3000K	208 V PROVIDE 10' ROUND STEEL POLE
Z5	6" DIAMETER X 4'-0" HEIGHT LED BOLLARD, ZERO UPLIGHT WITH FORWARD ASYMMETRIC THROW, BLACK PAINTED FINISH	ON-GRADE	LITHONIA DSXV-17FM-140 NATIONAL LTG SOLUTIONS NV-1 VISIONAIRE LTG. VSK-1 SERIES EATON MCGRAWEDSON GLEON	LED, 3000LM, 3000K	208 V
Z6	POLE MOUNTED FLAG LIGHT, GREY PAINTED FINISH	FLAGPOLE MOUNTED	POLE LED BASIC EXTENDED	LED, 3250LM, 3000K	120 V PROVIDE \$1,825 ALLOWANCE VERIFY RADIUS WITH FLAGPOLE SUBMITTAL PRIOR TO ORDER
Z7	ON-GRADE FLOODLIGHT, 40 DEGREE FLOOD OPTIC, BLACK PAINTED FINISH.	ON-GRADE	LUMENPULSE LUMENQUAD LARGE NORTHSTAR PRO1 SERIES PHILIPS GARDOL C35FS SERIES PERFORMANCE IN LTG. QUELLI SERIES 2	LED, 4000LM, 3000K	120 V VERIFY MOUNTING WITH CIVIL AND ARCH

## NOTES:

1. ALTERNATES MAY BE SUBMITTED WITH PRE-BID PRIOR APPROVAL BY ENGINEER.
2. VOLTAGES ARE SHOWN FOR CIRCUITING INFORMATION. LUMINAIRES SHALL INCLUDE VOLT/UNIVERSAL DRIVERS IF AVAILABLE.

MOTOR & EQUIPMENT SCHEDULE																		
TYPE	NUMBER	EQUIPMENT DESCRIPTION	LOCATION	VOLTAGE	PHASE	HP	FLA	NCA	CONDUIT & WIRE SIZE	STARTER BY	STARTER	DISCONNECT BY	DISCONNECT TYPE	PANEL	CIRCUIT NUMBER	NOTES		
AC	1	AIR COMPRESSOR	MEZZANINE A Z21	208 V	3		10	32.2	40.25	3/4" C, #8, 1H10GND	ELEC	NEMA 2	ELEC	FVNR	LPN-13	51,53,55	PROVIDE HAND-OFF AUTO SWITCH AT APP BAY FLOOR. SEE POWER PLAN FOR LOCATIONS.	
B	1	BOILER	MECH 202	120 V	1	-	16	20	1/2" C, 2H12, 1H12GND	N/A	N/A	N/A	N/A	N/A	LPN-23	26		
B	2	BOILER	MECH 202	120 V	1	-	16	20	1/2" C, 2H12, 1H12GND	N/A	N/A	N/A	N/A	N/A	LPN-23	28		
BF	1	BOOSTER FAN	DECON HALL 109	120 V	1	-	0.73	-	1/2" C, 2H12, 1H12GND	N/A	N/A	N/A	N/A	N/A	LPN-23	36		
CP	1	CIRCULATION PUMP	MECH 202	120 V	1	1/20	0.8	-	1/2" C, 2H12, 1H12GND	N/A	N/A	ELEC	MRS	LPN-23	30			
CUH	1	CABINET UNIT HEATER	VESTIBULE 100	120 V	1	1/4	5.8	-	1/2" C, 2H12, 1H12GND	N/A	N/A	ELEC	MRS	LPN-23	55	(2) 1/4 HP EACH UNIT		
CUH	2	CABINET UNIT HEATER	STAIR A 004	120 V	1	1/4	5.8	-	1/2" C, 2H12, 1H12GND	N/A	N/A	ELEC	MRS	LPN-23	57	(2) 1/4 HP EACH UNIT		
CUH	3	CABINET UNIT HEATER	STAIR B 003	120 V	1	1/4	5.8	-	1/2" C, 2H12, 1H12GND	N/A	N/A	ELEC	MRS	LPN-23	59	(2) 1/4 HP EACH UNIT		
DF	1	DESTRATIFICATION FAN	APPARATUS BAY 115	120 V	1	-	1	-	1/2" C, 2H12, 1H12GND	MECH	VFD	ELEC	MRS	LPN-13	35	KEYPAD WIRING BY MECH		
DF	2	DESTRATIFICATION FAN	APPARATUS BAY 115	120 V	1	-	1	-	1/2" C, 2H12, 1H12GND	MECH	VFD	ELEC	MRS	LPN-13	35	KEYPAD WIRING BY MECH		
DF	3	DESTRATIFICATION FAN	APPARATUS BAY 123	120 V	1	-	1	-	1/2" C, 2H12, 1H12GND	MECH	VFD	ELEC	MRS	LPN-13	37	KEYPAD WIRING BY MECH		
DF	4	DESTRATIFICATION FAN	APPARATUS BAY 123	120 V	1	-	1	-	1/2" C, 2H12, 1H12GND	MECH	VFD	ELEC	MRS	LPN-13	37	KEYPAD WIRING BY MECH		
EF	1	EXHAUST FAN	ROOF	120 V	1	1/2	9.8	15	1/2" C, 2H12, 1H12GND	MECH	ECM	MECH	DIV 20	LPN-23	15			
EF	2A	EXHAUST FAN	DECON TOILET 109A	120 V	1	FRAC	-	-	1/2" C, 2H12, 1H12GND	N/A	N/A	ELEC	MRS	LPN-23	17			
EF	2B	EXHAUST FAN	DECON TOILET 109B	120 V	1	FRAC	-	-	1/2" C, 2H12, 1H12GND	N/A	N/A	ELEC	MRS	LPN-23	17			
EF	3	EXHAUST FAN	ROOF	120 V	1	1/4	5.8	15	1/2" C, 2H12, 1H12GND	MECH	VFD	MECH	MECH	LPN-23	19	ELEC WIRE REVERSE ACT. THERM		
EF	4	EXHAUST FAN	ROOF	120 V	1	1/8	4.4	15	1/2" C, 2H12, 1H12GND	MECH	ECM	MECH	MRS	LPN-23	19			
EF	6	EXHAUST FAN	ROOF	208 V	1	2	24	30	3/4" C, 3H10, 1H10GND	MECH	ECM	MECH	MRS	LPN-23	23,25			
EF	7	EXHAUST FAN	ROOF	208 V	1	2	24	30	3/4" C, 3H10, 1H10GND	MECH	ECM	MECH	MRS	LPN-23	27,29			
EF	8	EXHAUST FAN	ROOF	208 V	1	2	24	30	3/4" C, 3H10, 1H10GND	MECH	ECM	MECH	MRS	LPN-23	31,33			
EF	9	EXHAUST FAN	ROOF	208 V	1	2	24	30	3/4" C, 3H10, 1H10GND	MECH	ECM	MECH	MRS	LPN-23	35,37			
EF	10	EXHAUST FAN	ROOF	120 V	1	1/10	-	-	1/2" C, 2H12, 1H12GND	MECH	ECM	MECH	MRS	LPN-23	39			
EF	11	EXHAUST FAN	ROOF	120 V	1	1/2	-	-	1/2" C, 2H12, 1H12GND	MECH	ECM	MECH	MRS	LPN-23	39			
EF	12	TRUCK EXHAUST	APPARATUS BAY 115	208 V	3	7.5	25.3	30	3/4" C, 4H10, 1H10GND	MECH	NEMA 1	ELEC	FVNR	LPN-13	45,47,49			
KH	1	KITCHEN HOOD	KITCHEN 201	115 V	1	4	-	-	1/2" C, 2H12, 1H12GND	N/A	N/A	N/A	N/A	N/A	LPN-23	53		
MAU	1	MAKE UP AIR UNIT	ROOF	208 V	3	5	17.5	20	3/4" C, 4H12, 1H10GND	MECH	VFD	ELEC	NFS	LPN-23	1,3,5			
MAU	2	MAKE UP AIR UNIT	ROOF	208 V	3	5	17.5	20	3/4" C, 4H12, 1H10GND	MECH	VFD	ELEC	NFS	LPN-23	7,9,11			
MAU	3	MAKE UP AIR UNIT	ROOF	120 V	1	1	16.64	20.8	3/4" C, 2H12, 1H12GND	ELEC	FVNR-NEMA 1	ELEC	NFS	LPN-23	13			
MS	1A	MINI SPLIT AC UNIT - INDOOR	DATA ROOM 113	24 V	1	-	-	-	WIRE TO MS-1B	N/A	N/A	N/A	N/A	N/A	LPN-23	41	ELEC TO PIPEWIRE TO ROOF UNIT	
MS	1B	MINI SPLIT AC UNIT - OUTDOOR	ROOF	208 V	1	-	14	13	1/2" C, 2H12, 1H12GND	ELEC	FVNR	ELEC	NEMA 0	LPN-23	41,43			
MS	2A	MINI SPLIT AC UNIT - INDOOR	SCBA 118	24 V	1	-	-	-	WIRE TO MS-2B	N/A	N/A	N/A	N/A	N/A	LPN-23	45,47	ELEC TO PIPEWIRE TO ROOF UNIT	
MS	2B	MINI SPLIT AC UNIT - OUTDOOR	ROOF	120 V	1	-	14	13	1/2" C, 2H12, 1H12GND	ELEC	FVNR	ELEC	NEMA 0	LPN-23	45,47	ELEC TO PIPEWIRE TO ROOF UNIT		
MS	3A	MINI SPLIT AC UNIT - INDOOR	ENG STORAGE 117	24 V	1	-	-	-	WIRE TO MS-2B	N/A	N/A	N/A	N/A	N/A	LPN-23	49,51		
MS	3B	MINI SPLIT AC UNIT - OUTDOOR	ROOF	120 V	1	-	14	13	1/2" C, 2H12, 1H12GND	ELEC	FVNR	ELEC	NEMA 0	LPN-23	49,51			
P	1A	PUMP	MECH 202	208 V	3	1.5	6.9	15	1/2" C, 4H12, 1H12GND	ELEC	FVNR	ELEC	FVNR	LPN-23	2,4,6			
P	1B	PUMP	MECH 202	208 V	3	1.5	6.9	15	1/2" C, 4H12, 1H12GND	ELEC	FVNR	ELEC	FVNR	LPN-23	8,10,12			
P	2A	PUMP	MECH 202	208 V	3	3	11	15	1/2" C, 2H12, 1H12GND	MECH	VFD	ELEC	NF	LPN-23	14,16,18			
P	2B	PUMP	MECH 202	208 V	3	3	11	15	1/2" C, 2H12, 1H12GND	MECH	VFD	ELEC	NF	LPN-23	20,22,24			
RTU	1	ROOF TOP UNIT	ROOF	208 V	3	-	88.5	100.2	2" C, 3H10, 1H10GND	MECH	VFD	MECH	NFS	MSB	6	SMOKE DETECTOR (RA) WIRE TO FIRE ALARM		
SG	1	STEAM GENERATOR	DECON HALL 109	208 V	3	-	34	42.5	1" C, 3H8, 1H10GND	INT	INT	N/A	N/A	N/A	LPN-23	38,40,42		
ES	1	ELEVATOR GUMP PUMP	TRAVELING STORAGE 112	120 V	1	-	8.5	10.8	1/2" C, 2H12, 1H12GND	INT	CTRL	CTRL	PML	INT	ELEC	LPN-23	38	
UH	1	UNIT HEATER	APPARATUS BAY 115	120 V	1	1/2	4.88	5.85	1/2" C, 2H12, 1H12GND	INT	INT	ELEC	MRS	LPN-13	39			
UH	2	UNIT HEATER	APPARATUS BAY 115	120 V	1	1/2	4.88	5.85	1/2" C, 2H12, 1H12GND	INT	INT	ELEC	MRS	LPN-13	39			
UH	3	UNIT HEATER	APPARATUS BAY 123	120 V	1	1/2	4.88	5.85	1/2" C, 2H12, 1H12GND	INT	INT	ELEC	MRS	LPN-13	41			
UH	4	UNIT HEATER	APPARATUS BAY 123	120 V	1	1/2	4.88	5.85	1/2" C, 2H12, 1H12GND	INT	INT	ELEC	MRS	LPN-13	41			
UH	5	UNIT HEATER	HOUSE/TRAINING TOWER 116	208 V	3	1/2	2.76	3.4375	1/2" C, 2H12, 1H12GND	INT	INT	ELEC	MRS	LPN-23	58,61,63			
UH	6	UNIT HEATER	MECH 202	120 V	1	1/8	1.58	1.975	1/2" C, 2H12, 1H12GND	INT	INT	ELEC	MRS	LPN-23	34			
WH	1	WATER HEATER	MECH 202	120 V	1	-	5	-	1/2" C, 2H12, 1H12GND	N/A	N/A	ELEC	NFS	LPN-23	32	POWERED VENT		
STARTER TYPE:																		
FVNR	FULL VOLTAGE NON-REVERSING																	
MSS	MOTOR STARTER SWITCH																	
MS	MOTOR RATED SWITCH																	
RELAY	RELAY																	
VFD	VARIABLE FREQUENCY DRIVE																	
DISCONNECT TYPE:																		
CB	CIRCUIT BREAKER																	
FS	FUSED SWITCH																	
MRS	MOTOR RATED SWITCH																	
NFS	NON-FUSED SWITCH																	
REC	RECEPTACLE																	
GENERAL NOTES:																		
A. PROVIDE GROUND CONDUCTORS IN ALL MOTOR FEEDERS PER NEC.																		
B. DISCOORDINATE L, M, AND LOCATIONS ARCHITECT AND MECHANICAL.																		
C. NOMINAL SYSTEM VOLTAGES ARE LISTED (IE: 120, 208, 480). IF NAMEPLATE UTILIZATION VOLTAGE (IE: 115, 200, 480) ARE NOT COMPATIBLE WITH THE NOMINAL VOLTAGE, NOTIFY ENGINEER.																		
D. WHERE MOTOR STARTER AND DISCONNECT ARE INDICATED AS IN THE SAME LOCATION PROVIDE A COMBINATION MOTOR STARTER.																		
KEYED NOTES:																		
1. PROVIDE CUT SMOKE DETECTOR ON THE RETURN DUCT OF MECHANICAL UNIT.																		