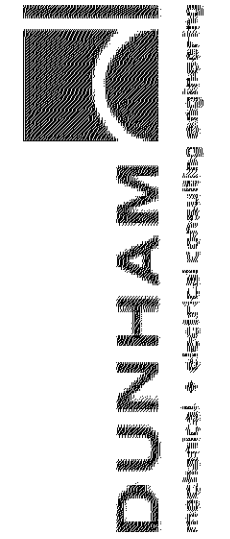
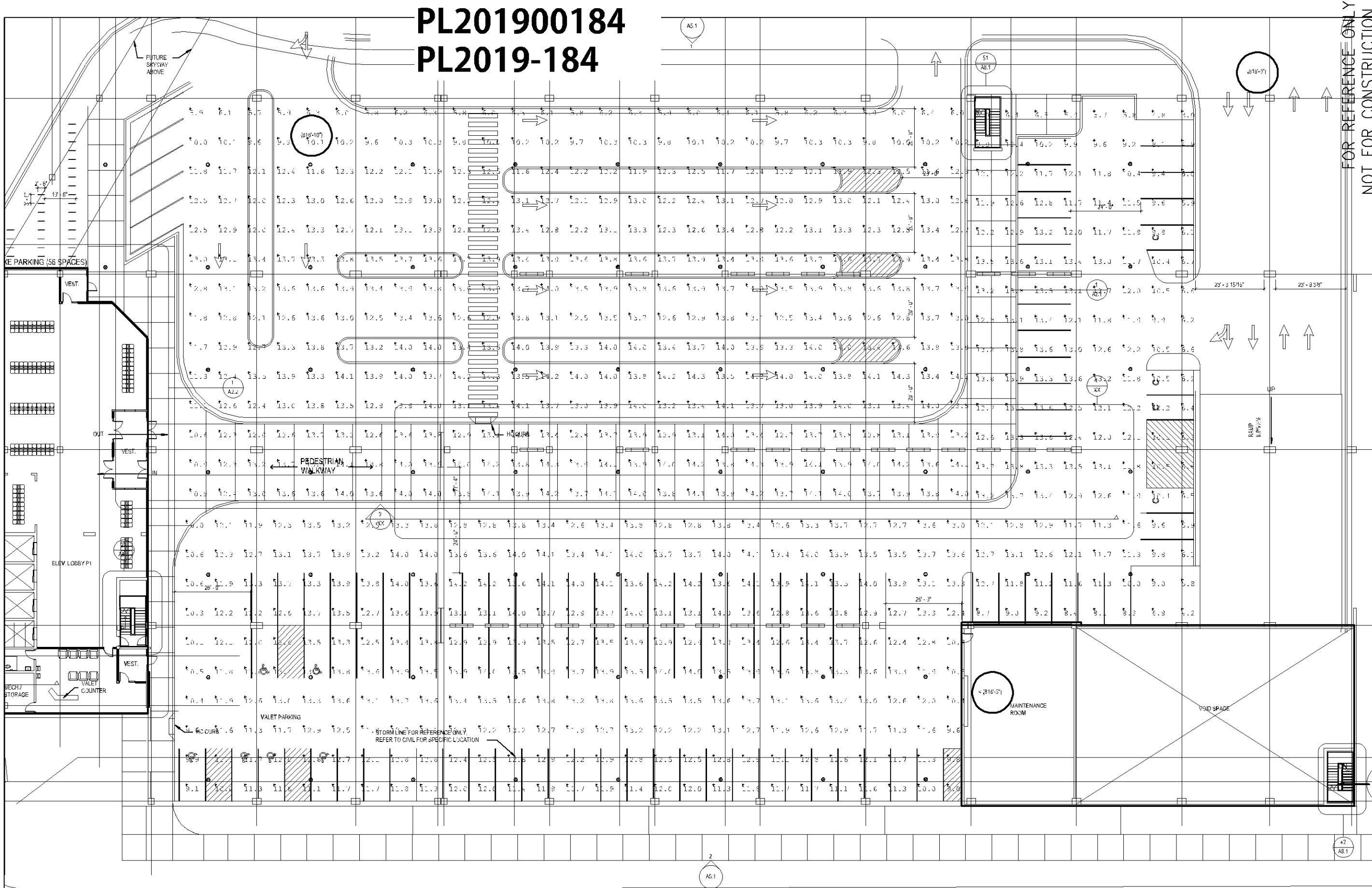


PL201900184 PL2019-184



Project:
SOUTH LOOP WATERPARK PARKING GARAGE

Sheet Title:
P1 LIGHTING

Project Number:
0420052-000

Checked By:
XXX

Drawn By:
JYK

Sheet Number:

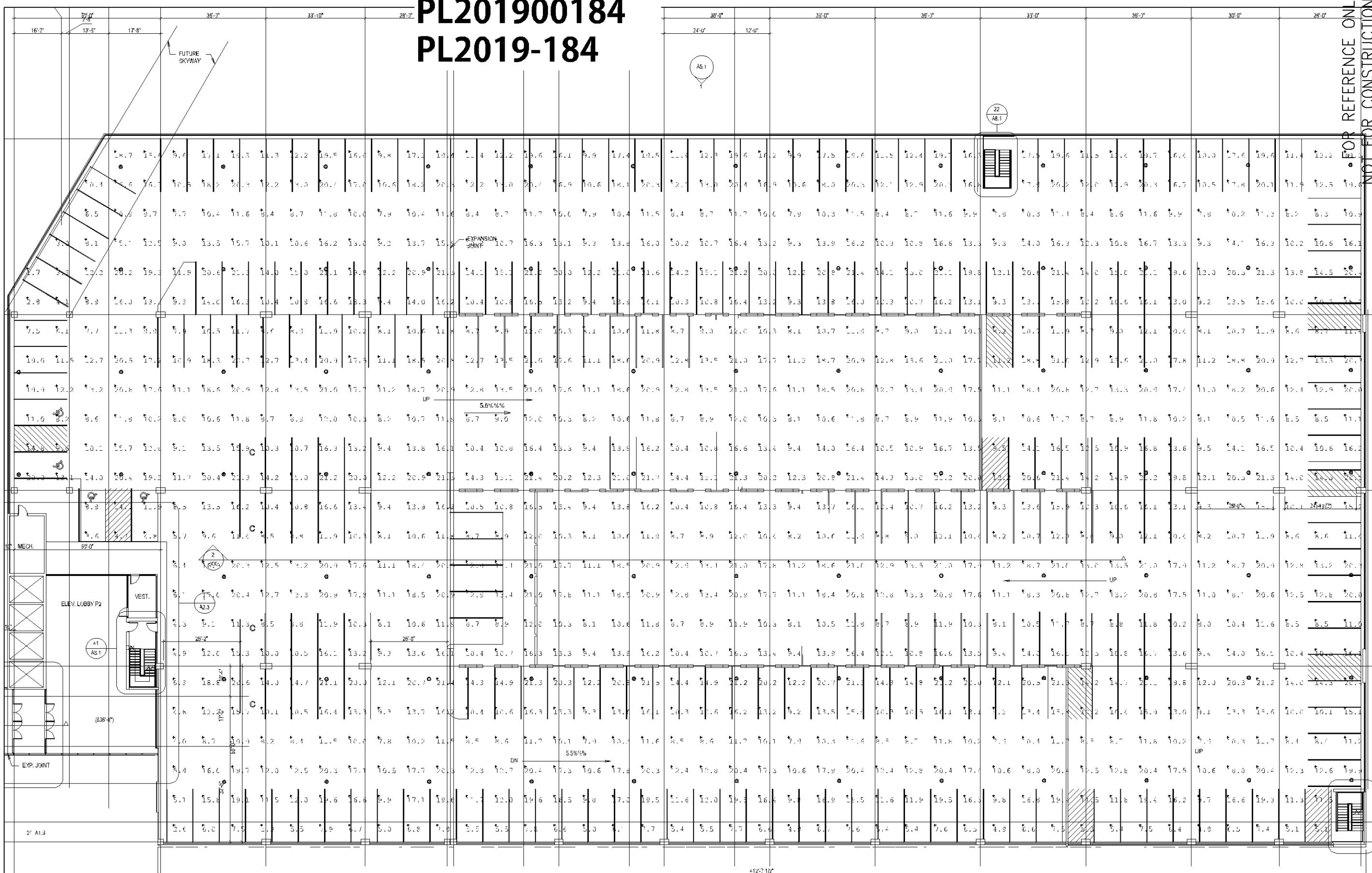
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Date:
10/02/2019

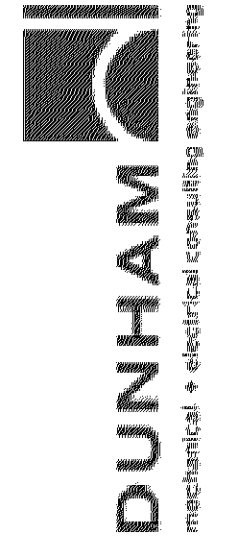
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	TFP	Description
○	68	VC 6 LAMP PG 5K TFM TYP	SINGLE	N.A.	1.000	VC6 LAMP PG 5K TFM TYP

Label	Calc Type	Units	40%	75%	90%	Avg/Min	Max/Min
P1 PARKING	Illuminance	Fc	2.20	14.2	3.0	4.03	2.73
P1 TRANSIT	Illuminance	Fc	2.52	14.3	5.7	2.20	2.51

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Project:
SOUTH LOOP WATERPARK PARKING GARAGE

Sheet Title:
P2 LIGHTING

Project Number:
0420052-000

Drawn By:
JYK

Checked By:
XXX

Sheet Number:

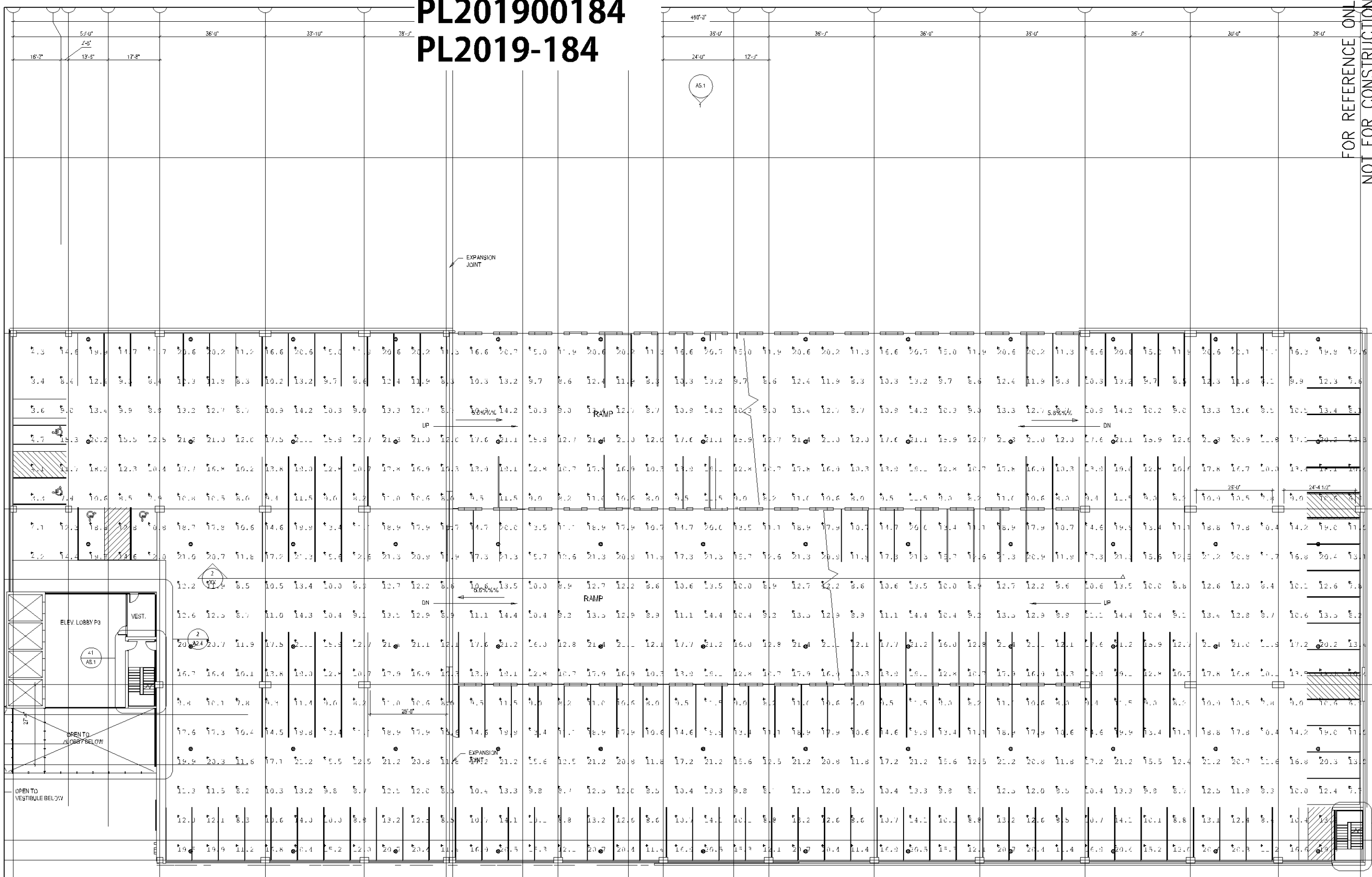
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Date:
10/02/2019

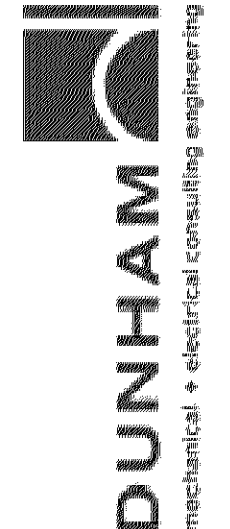
Fixture Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	Foot Candles	Description
	90	VCLG LED P7 50K T5M MVCLD	E-NGTR	1,000	1.000	VCLG LED P7 50K T5M MVCLD

Calculation Summary						
Label	Category	Units	Avg	Max	Min	Max/Min
P2 PARKING	Illuminance	FC	13.34	21.7	1.7	12.76

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Project:
SOUTH LOOP WATERPARK PARKING GARAGE

Sheet Title:
P3-4 LIGHTING

Project Number:
0420052-000

Drawn By:
JYK

Checked By:
XXX

Sheet Number:

EL 1.3

Date:
10/02/2019

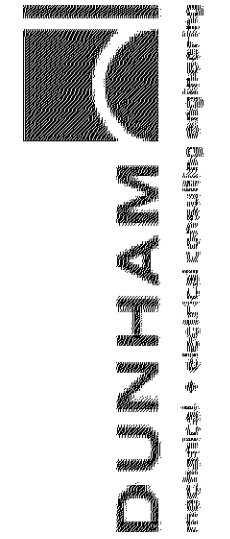
Fixture Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	CF	Description
⊙	75	VC-G LED P3 50K T5M INCH	5"X6"	N.A.	1,000	VC-G LED P3 50K T5M INCH

Calculation Summary						
Label	Calculation	Units	A6.1	Avg	Max	Min
P3-4 PARKING	Footcandle	Fc	⊙	15.58	21.7	5.5

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Project:
SOUTH LOOP WATERPARK PARKING GARAGE

Sheet Title:
P8 LIGHTING

Project Number:
0420052-000

Drawn By:
JYK

Checked By:
XXX

Sheet Number:

EL 1.08

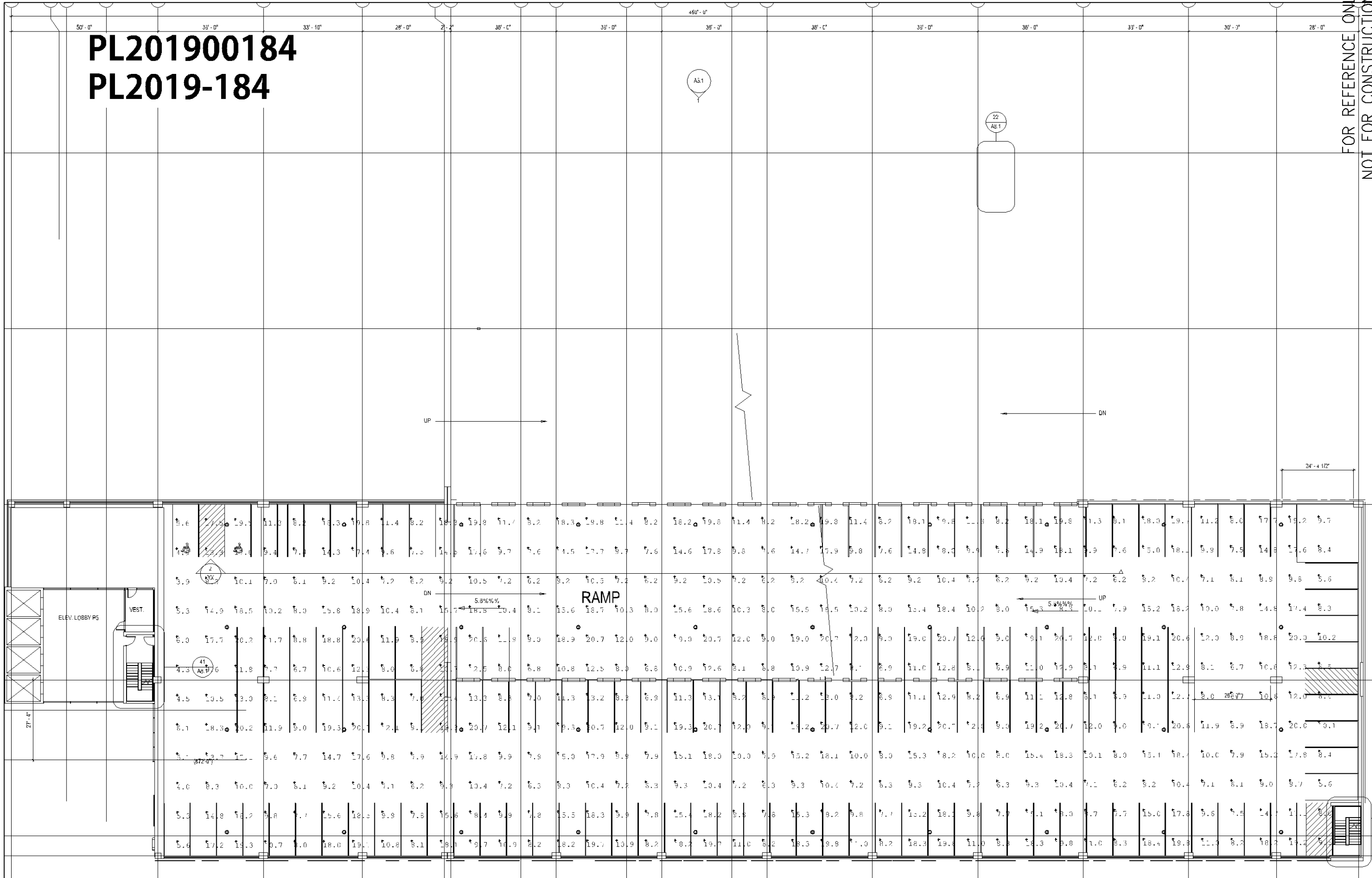
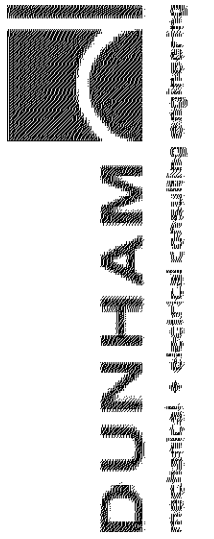
Date:
10/02/2019

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
□	34	DS20 LED P7 50K TSM MVCLP	SINGLE	N.A.	1.000	DS20 LED P7 50K TSM MVCLP

Calculation Summary						
Label	Unit Type	Units	Avg	Max	Min	Avg/Min
P8 PARKING	Illuminance	Fc	8.88	16.0	2.0	4.44

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Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	Description
⊙	40	VCPG LED 2' 50K T8M MVCLT	3 FSL6	N.A.	1,333 VCPG LED 2' 50K T8M MVCLT

Calculation Summary					
Label	Calc Type	Units	Value	Max	Min
P5-7 PARKING	Illuminance	Fc	22.09	20.7	3.9
				3.08	5.31

Project:
SOUTH LOOP WATERPARK PARKING GARAGE

Sheet Title:
P5-7 LIGHTING

Project Number:
0420052-000

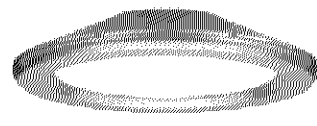
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JYK

Sheet Number:
EL1.5

Date:
10/02/2019

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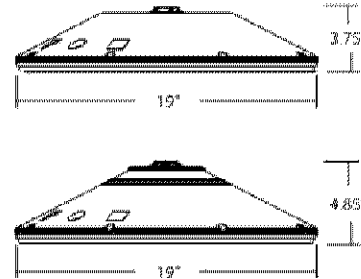


VCPG LED Parking Garage



Specifications

Diameter: 19"
Height: 3.75"
Weight 18 lbs
(max, with no options)

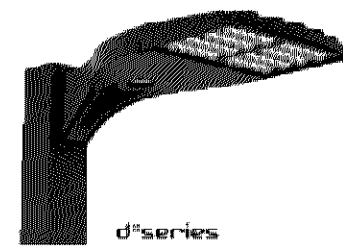


Type	VCPG LED P7 50K T5M MVOLT
Item	
Type	PI

Introduction

The all new VCPG LED (Visually Comfortable Parking Garage) luminaire is designed to bring glare control, optical performance and energy savings into one package. The recessed lens design of VCPG LED minimizes high angle glare, while its precision molded acrylic lens eliminates LED pixilation and delivers the required minimums, verticals and uniformity. The dedicated up-light module option reduces the contrast between the luminaire and the ceiling creating a more visually comfortable environment.

The VCPG LED delivers up to 87% in energy savings when replacing 175W metal halide luminaires. With over 100,000 hour life expectancy (12+ years of 24/7 continuous operation), the VCPG LED luminaire provides significant maintenance savings over traditional luminaires.

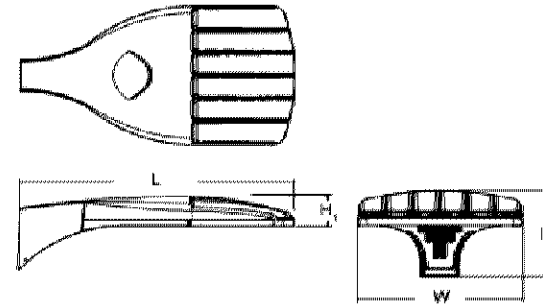


D-Series Size 0 LED Area Luminaire



Specifications

EPA: 0.95 ft²
Length: 26"
Width: 13"
Height: 3"
Weight 16 lbs
(max)



Rating Number	DSX0 LED P7 50K T5M MVOLT
Item	
Type	P2A, P2B

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

All Capable options indicated by this color background.

Ordering Information

EXAMPLE: VCPG LED V4 P4 40K 70CRI T5M MVOLT SRM DNAXD

VCPG LED	LED Light Engine	Package	Color Temperature	Color Rendering Index	Beam Spread	Power	Mounting
VCPG LED	V4 4-light Engines	P1	30K 3000K	70CRI	T5M Type V short	MVOLT ^{1,2,4}	Shipped included
	V4 4-light Engines	P2	35K 3500K	80CRI	T5P Type V wide	347	PM Pole mount standard 24-inch length supply lead ⁵
	V4 4-light Engines	P3	40K 4000K		T5W Type V wide	480	SRM Surface mount (24-inch length supply lead)
		P4	50K 5000K		T5E Type V wide	277	
		P5			LAMP Incandescent	347	Shipped separately
		P6				480	IK "A" luminaire mount ⁶
		P7					

Options	Finish
DNAXD	White
DNAXD	Aluminum
DBBXD	Black
DBLXD	Black

Shipped installed	Standalone Sensors/Controls ¹	DNAXD
UPL1 Up-Light 1000 lumens	PIR Motion/ambient sensor for 8-15' mounting heights	White
UPL2 Up-Light 2000 lumens	PIRHH Motion/ambient sensor for 15-30' mounting heights	Aluminum
EWMC Emergency sensor backup (certified in CA state 30 MAJES 1899, 2011 and 114)	PIR3FCV Motion/ambient sensor for 8-15' mounting heights, pre-programmed to 3% and 45% light return	Black
ETWBH Emergency sensor backup (certified in CA state 30 MAJES 1899, 2011 and 114)	PIR3FCV Motion/ambient sensor for 15-30' mounting heights, pre-programmed to 3% and 45% light return	
HA High ambient (50%, max) P1	PIR3FCV924 J-924 (PIR) motion/ambient sensor for emergency circuit for 8-15' mounting heights, pre-programmed to 3% and 45% light output ²	
SF Single face (120, 177, 247, 347)	PIR3FCV924 J-924 (PIR) motion/ambient sensor for emergency circuit for 15-30' mounting heights, pre-programmed to 3% and 45% light output ²	
DF Double face (230, 283, 340)		
SPD10RV 100% Ramp Park		
LDS36 36" (30" max) length		
LDS72 72" (60" max) length		
LDS108 108" (90" max) length		
DMSG Emergency 100% ramp controls ³		
Shipped Separately		
W6 Wire Guard		
BBS Back Mount		
HS Mount Side Shield		

All Capable options indicated by this color background.

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLAIR2 PIRHN DBBXD

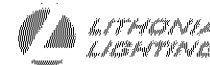
DSX0 LED	LED Light Engine	Package	Color Temperature	Color Rendering Index	Beam Spread	Power	Mounting
DSX0 LED	Forward optics	P1	30K 3000K	70CRI	T1S Type V short	MVOLT ^{1,2,4}	Shipped included
	Forward optics	P2	40K 4000K		T2S Type V short	120	SPA Square pole mounting
	Forward optics	P3	50K 5000K		T3M Type V short	208	NPA Round pole mounting
	Rotated optics	P10			T3W Type V wide	240	WPA Wall bracket
	Rotated optics	P11			T3E Type V wide	277	SPUMBA Square pole universal mounting adaptor ⁵
		P12			BLC Backlight control	347	RPUMBA Round pole universal mounting adaptor ⁵
		P13			ECDD Low color render	480	Shipped separately
		P14			ACC0 High color render		KMA&B DBBXD II When any mounting use on diagonal specify finish!
		P15			T3V5 Type V long short		

Shipped installed	PIR	Shipped installed	DBBXD
NLAIAR2 High/Low Ambient sensor ¹	PIR High/Low motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 3%	HS Mount side shield	Black
PIRHH High/Low motion/ambient sensor ¹	PIRHH High/Low motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 3%	SF Single face (120, 177, 247, 347)	Aluminum
PER 100% Ramp Park (control ordered separately) ³	PIR3FCV High/Low motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 3%	DF Double face (208, 240, 340)	White
PER5 50% Ramp Park (control ordered separately) ³	PIR3FCV924 High/Low motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 3%	DSB Double sided optics	Exposed dark finish
PER7 70% Ramp Park (control ordered separately) ³	PIR3FCV924 High/Low motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 3%	BSO Backlight optics	Exposed black
DMSG Emergency 100% ramp out back (control ordered separately) ³	FAQ Field adjustable output ²	DBL Diffused optics	Exposed natural aluminum
		Shipped separately	DNAXD Exposed natural aluminum
		BS Backlight	Exposed white
		EGS External glass shield ²	



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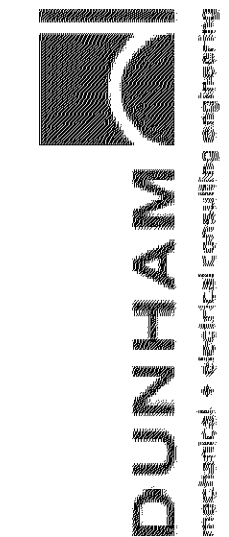
VCPG LED
Rev. 08/2019



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DSX0 LED
Rev. 09-12/19
Page 1 of 8

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Project:	SOUTH LOOP WATERPARK PARKING GARAGE
Sheet Title:	LIGHTING CUTSHEETS
Project Number:	0420052-000
Checked By:	XXX
Drawn By:	JYK

Sheet Number:

EL2.1

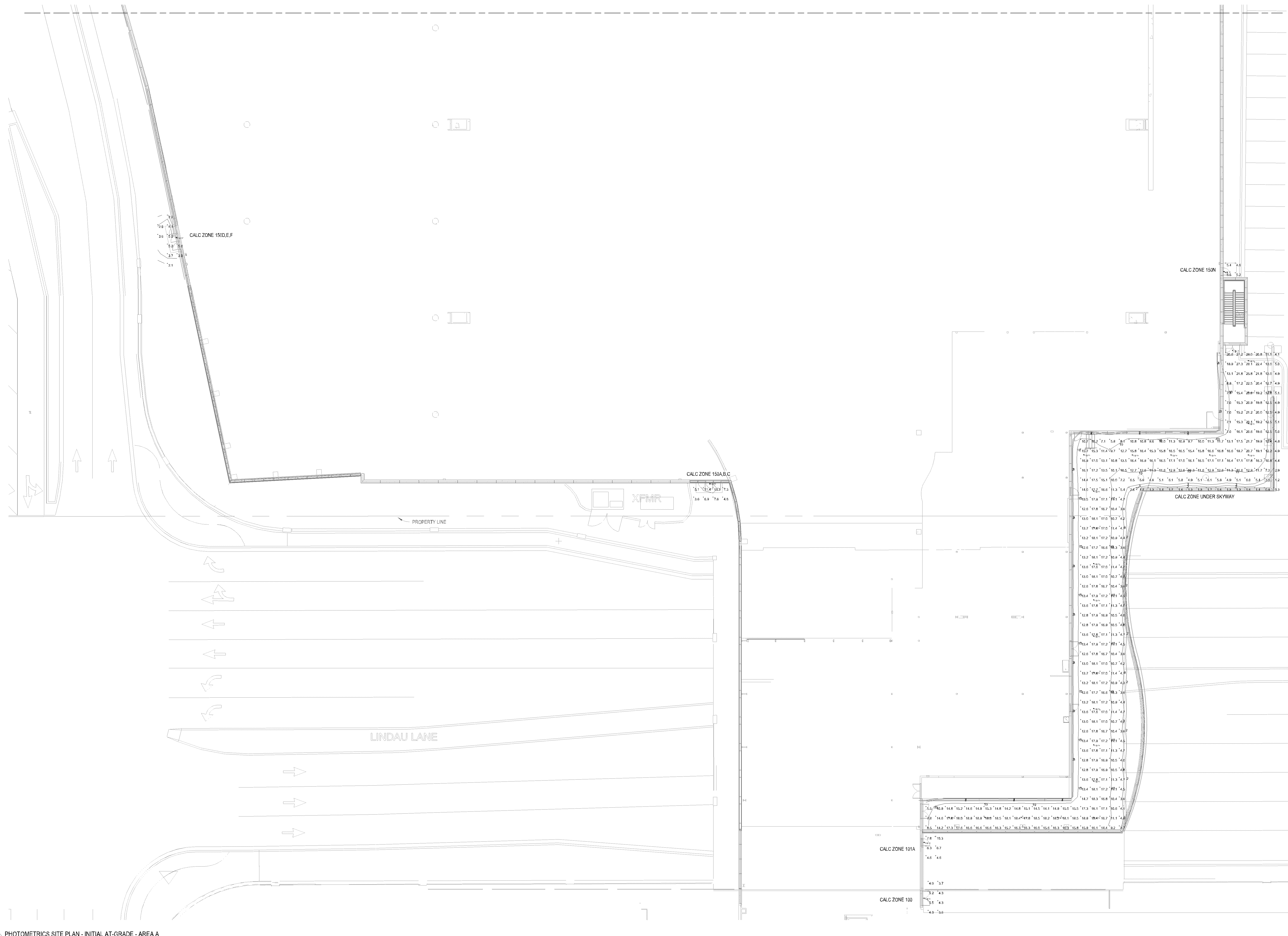
Date:
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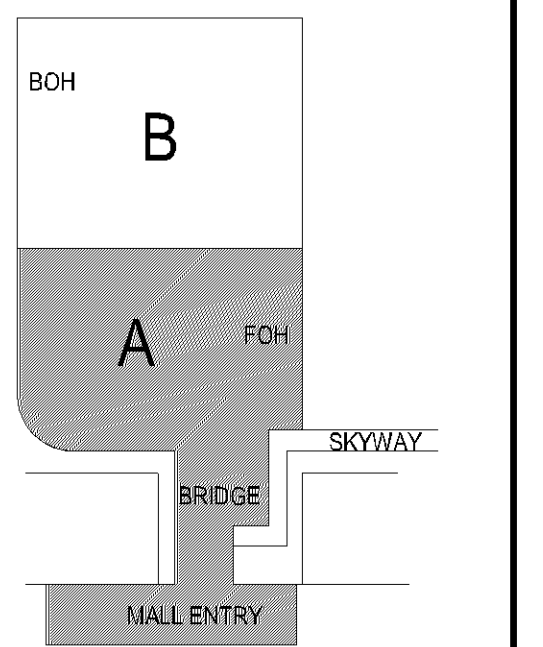
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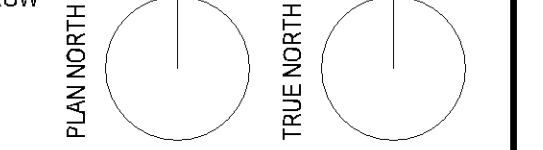
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BLOOMINGTON, MN 55425



KEY PLAN



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Daniel Paul Bisgar
DANIEL PAUL BISGAR
REG. NO. 28732 DATE: Issue Date

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REVISION SCHEDULE

NO	REVISION	DATE

SHEET NAME

PHOTOMETRIC SITE PLAN - INITIAL AT-GRADE - AREA A

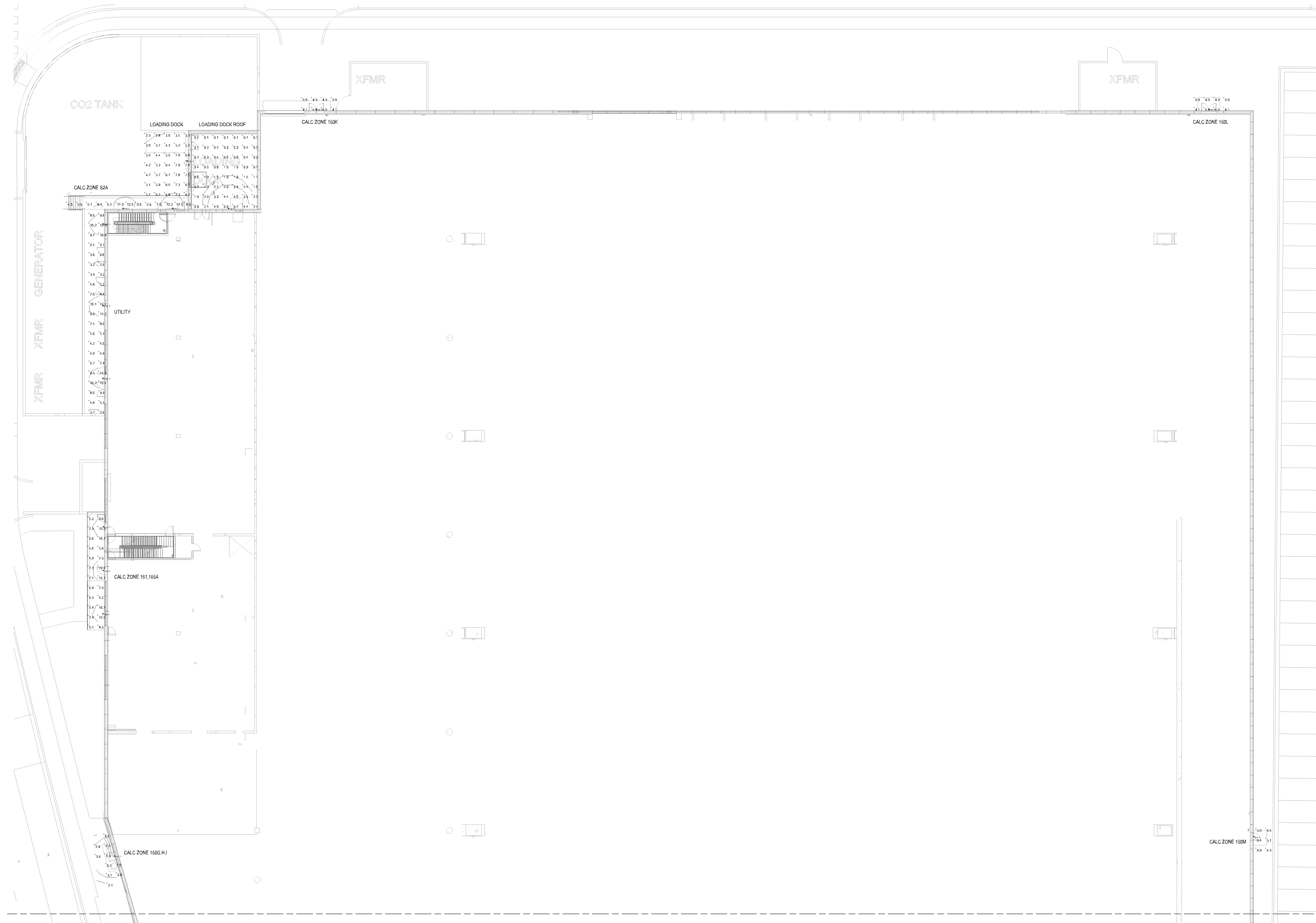
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DATE: 10/2/19
DRAWN: GG
CHECKED: DPB
SCALE: As indicated
SHEET NUMBER

1 PHOTOMETRICS SITE PLAN - INITIAL AT-GRADE - AREA A
1/16" = 1'-0"

Statistics - Area A						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone 100	+	4.4 fc	5.5 fc	3.6 fc	1.5:1	1.2:1
Calc Zone 101A	+	6.7 fc	10.3 fc	4.6 fc	2.2:1	1.5:1
Calc Zone 150A,B,C	+	7.5 fc	13.3 fc	3.6 fc	3.7:1	2.1:1
Calc Zone 150D,E,F	+	3.9 fc	5.8 fc	2.1 fc	2.8:1	1.9:1
Calc Zone 150N	+	5.4 fc	6.5 fc	4.6 fc	1.4:1	1.2:1
Calc Zone Under Skyway	+	12.8 fc	28.1 fc	0.3 fc	93.7:1	42.7:1

ES1.1A

PL201900184
PL2019-184



1 PHOTOMETRICS SITE PLAN - INITIAL AT-GRADE - AREA B
1/16" = 1'-0"

Statistics - Area B						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone 150G,H,I	+	3.9 fc	5.8 fc	2.1 fc	2.8:1	1.9:1
Calc Zone 150K	+	4.7 fc	6.0 fc	3.8 fc	1.6:1	1.2:1
Calc Zone 150L	+	4.7 fc	6.0 fc	3.8 fc	1.6:1	1.2:1
Calc Zone 150M	+	5.2 fc	6.4 fc	4.3 fc	1.5:1	1.2:1
Calc Zone 161,165A	+	7.8 fc	13.5 fc	4.0 fc	3.4:1	2.0:1
Calc Zone S2A	+	8.8 fc	14.2 fc	4.5 fc	3.2:1	2.0:1
Loading Dock	+	5.5 fc	7.9 fc	2.3 fc	3.4:1	2.4:1
Loading Dock Roof	+	1.4 fc	6.1 fc	0.1 fc	61.0:1	14.0:1
Utility	+	7.1 fc	12.4 fc	2.7 fc	4.6:1	2.6:1

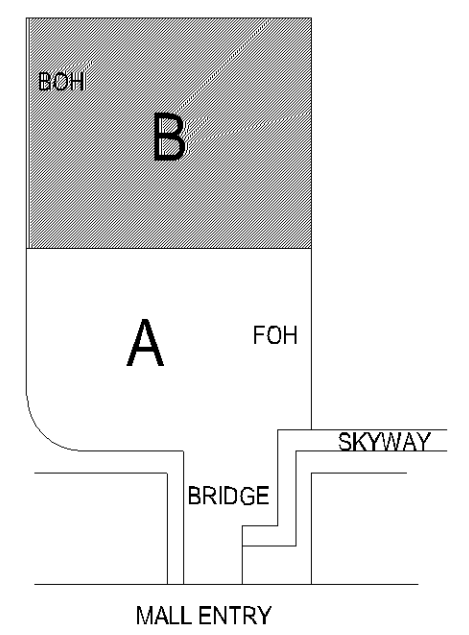
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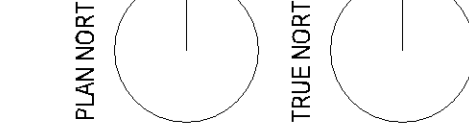
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REG. NO. 28752 DATE: Issue Date

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NO	REVISION	DATE

SHEET NAME

PHOTOMETRIC SITE PLAN - INITIAL AT-GRADE - AREA B

PROJECT NUMBER: 81799
DATE: 10/02/19
DRAWN: GS
CHECKED: DPB
SCALE: As indicated
SHEET NUMBER:

ES1.1B

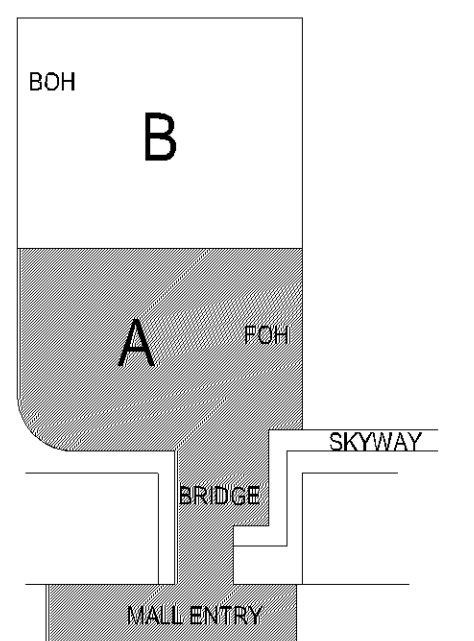
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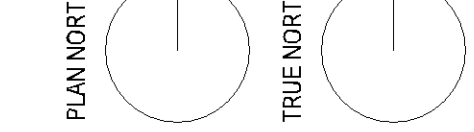
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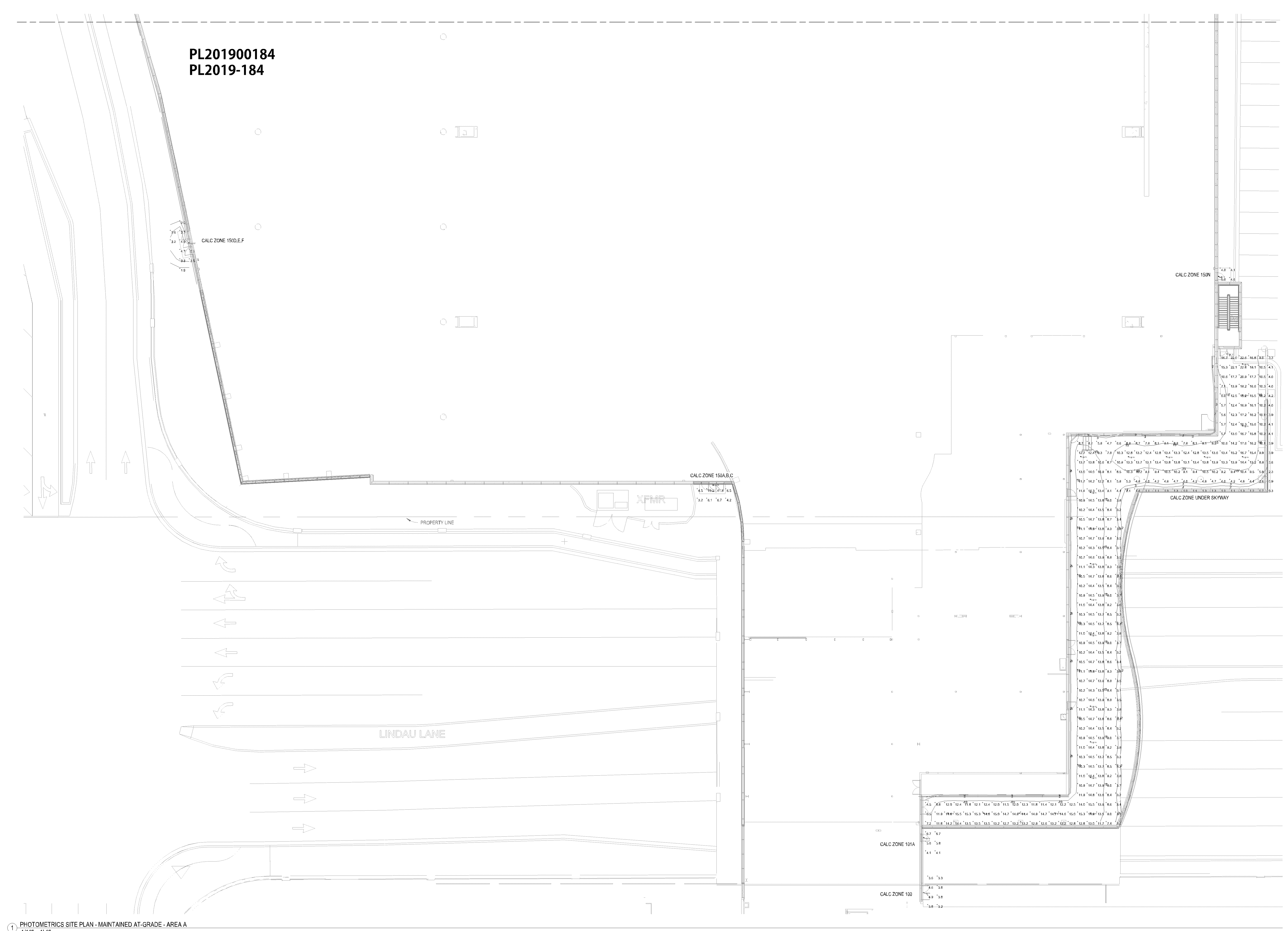
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SHEET NAME
PHOTOMETRIC SITE PLAN - MAINTAINED AT-GRADE - AREA A

PROJECT NUMBER: 81799
DATE: 10/2/19
DRAWN: GSG
CHECKED: DPB
SCALE: As indicated
SHEET NUMBER

ES1.2A

PL201900184
PL2019-184



1 PHOTOMETRICS SITE PLAN - MAINTAINED AT-GRADE - AREA A
1/16" = 1'-0"

Statistics - Area A						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone 100	+	3.9 fc	4.9 fc	3.2 fc	1.5:1	1.2:1
Calc Zone 101A	+	5.8 fc	8.7 fc	4.1 fc	2.1:1	1.4:1
Calc Zone 150A,B,C	+	6.6 fc	11.8 fc	3.2 fc	3.7:1	2.1:1
Calc Zone 150D,E,F	+	3.5 fc	5.2 fc	1.9 fc	2.7:1	1.8:1
Calc Zone 150N	+	4.8 fc	5.8 fc	4.1 fc	1.4:1	1.2:1
Calc Zone Under Skyway	+	10.4 fc	22.8 fc	0.3 fc	76.0:1	34.7:1

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PL2019-184



1 PHOTOMETRICS SITE PLAN - MAINTAINED AT-GRADE - AREA B
1/16" = 1'-0"

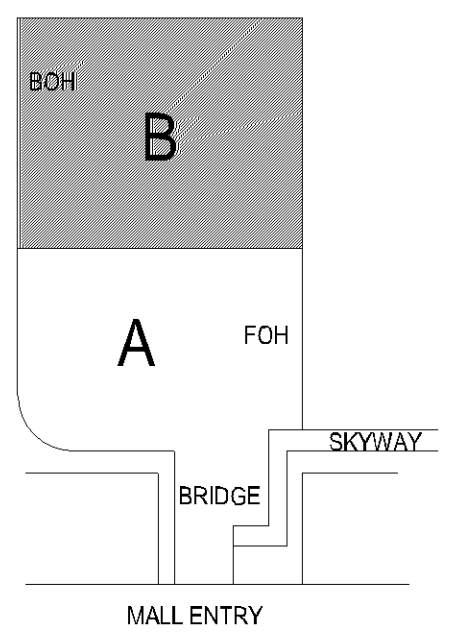
Statistics - Area B						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone 150G,H,I	+	3.5 fc	5.1 fc	1.9 fc	2.7:1	1.8:1
Calc Zone 150K	+	4.2 fc	5.4 fc	3.3 fc	1.6:1	1.3:1
Calc Zone 150L	+	4.2 fc	5.4 fc	3.3 fc	1.6:1	1.3:1
Calc Zone 150M	+	4.6 fc	5.7 fc	3.8 fc	1.5:1	1.2:1
Calc Zone 161,165A	+	6.9 fc	12.0 fc	3.6 fc	3.3:1	1.9:1
Calc Zone S2A	+	7.8 fc	12.6 fc	4.0 fc	3.2:1	2.0:1
Loading Dock	+	4.9 fc	7.0 fc	2.0 fc	3.5:1	2.5:1
Loading Dock Roof	+	1.3 fc	5.4 fc	0.1 fc	54.0:1	13.0:1
Utility	+	6.3 fc	11.0 fc	2.4 fc	4.6:1	2.6:1

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KEY PLAN



NORTH ARROW
PLAN NORTH
TRUE NORTH

SIGNATURE

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DANIEL PAUL BIGGAR
REG. NO. 28752 DATE: Issue Date

THIS DOCUMENT HAS BEEN PREPARED BY HUNT ELECTRIC CORPORATION WITH THE EXPRESSED UNDERSTANDING THAT THE INSTALLATION OF THE WORK DESCRIBED WILL BE SUPERVISED BY AN ELECTRIC CORPORATION QUALIFIED DIRECT SUPERVISOR. INSTALLATION OF THIS WORK UNDER ANY OTHER CIRCUMSTANCES IS NOT COVERED.

REVISION SCHEDULE

NO	REVISION	DATE

SHEET NAME

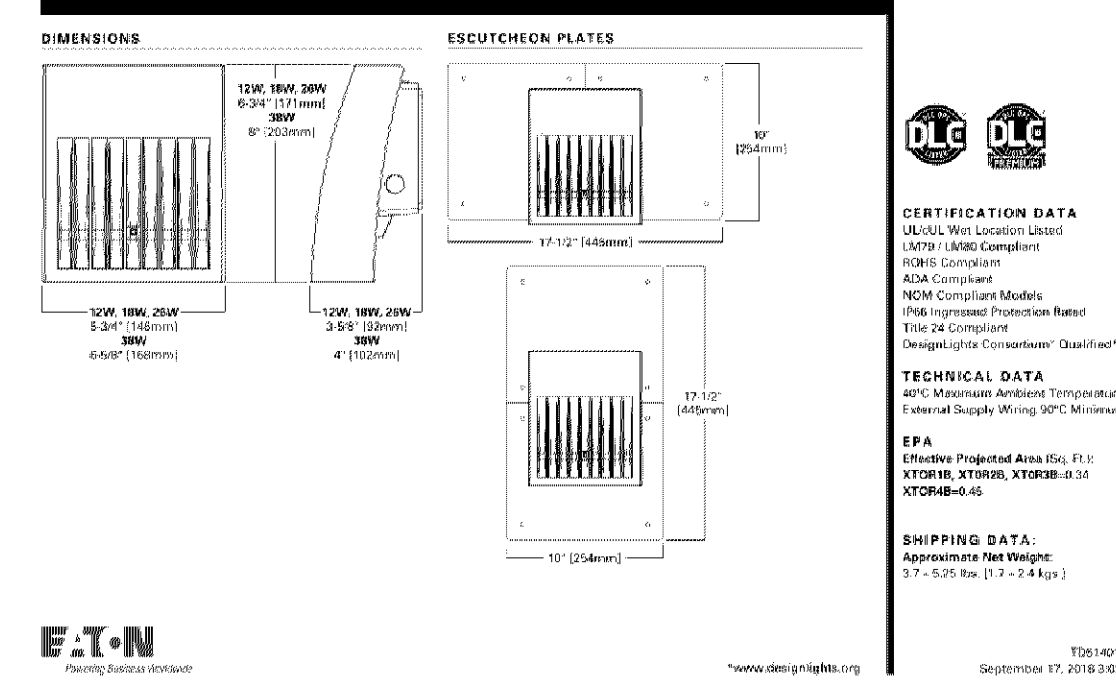
PHOTOMETRIC SITE PLAN - MAINTAINED AT-GRADE - AREA B

PROJECT NUMBER: 81799
DATE: 10/02/19
DRAWN: GS
CHECKED: DPB
SCALE: As indicated
SHEET NUMBER:

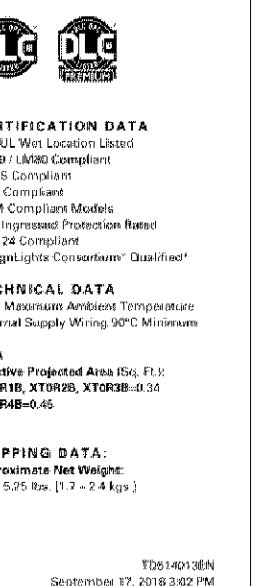
ES1.2B

PL201900184
PL2019-184

DESCRIPTION
The EATON Lumark Crosstour LED WALL Wash Series of luminaires are designed to provide a clean, bright, uniform wash of light to architectural surfaces. This luminaire is designed for use in outdoor applications. The luminaire is designed to be used in applications where a uniform wash of light is required. The luminaire is designed to be used in applications where a uniform wash of light is required.



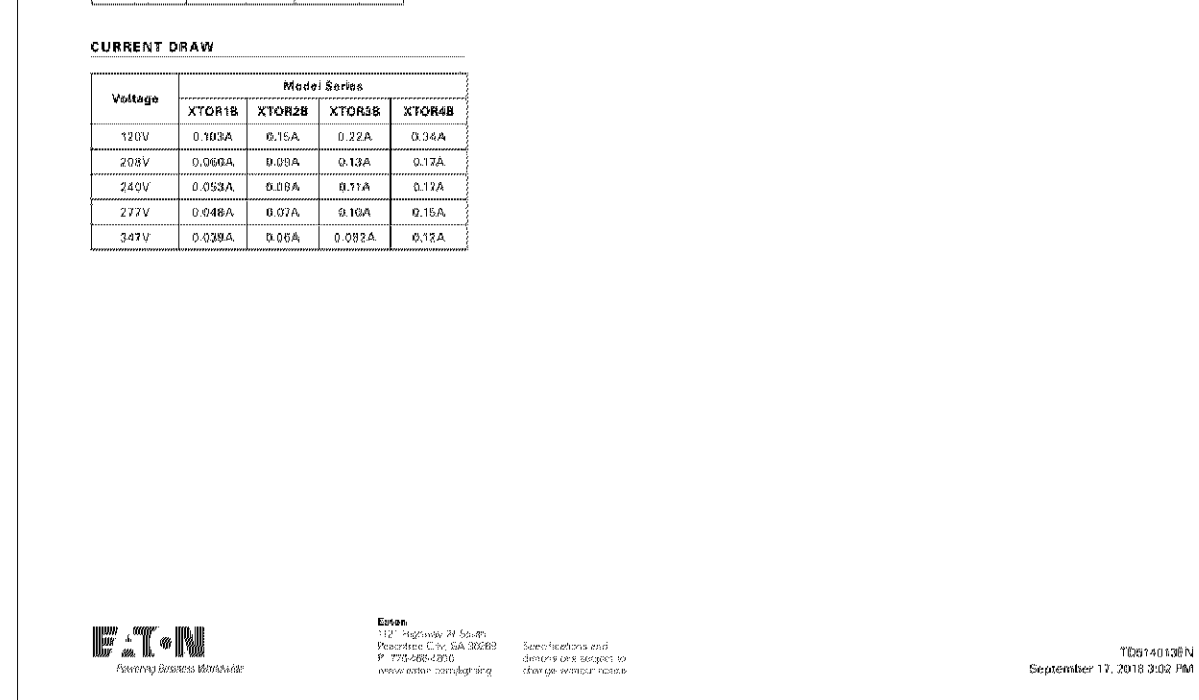
XTOR
CROSSTOUR LED



EATON
3005
11/2019

XTOR CROSSTOUR LED

LED Type	XTOR3	XTOR4	XTOR5	XTOR6	XTOR7	XTOR8	XTOR9	XTOR10	XTOR11
LED Type	3000K	3000K	3000K	3000K	3000K	3000K	3000K	3000K	3000K
LED Power	100W	150W	200W	250W	300W	350W	400W	450W	500W
LED Life	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000



EATON
3005
11/2019

XTOR CROSSTOUR LED

LED Type	XTOR3	XTOR4	XTOR5	XTOR6	XTOR7	XTOR8	XTOR9	XTOR10	XTOR11
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LED Life	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000



EATON
3005
11/2019

Schedule - Initial

Symbol	Label	Qty	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Fixture	Lumens Per Lamp	Light Loss Factor	Wattage
A	EATON - LUMARK FORMER COOPER LIGHTING	15	EATON	XTOR3B	CROSSTOUR 16W WALL MOUNT LED	EATON LED 5000K	1	XTOR3B Ins	2134	1	16.2
B	EATON - LUMARK FORMER COOPER LIGHTING	4	EATON	XTOR9RL	CROSSTOUR WALL MOUNT LED WITH REFLECTIVE LENS	EATON LED 5000K	1	XTOR9RL Ins	5216	1	58
C	EATON - PORTIFOLD (FORMER COOPER LIGHTING)	23	EATON	LDB4KDD00 E4UR83050500 BLWLI	PORTIFOLD 4 INCH HO DEGREE CUTOFF RECESSED DOWNLIGHT WIDE DISTRIBUTION WITH SPECULAR CLEAR TRIM WATTAGE DD01TR 40.2W DE010 40.5W DD2 41.53W DD4 41.87W DD6 41.57W DD3 44.71W DD8 38.31W	HIGH LUMEN LED ABSOLITE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN SICHROPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	1	LDB4KDD00 E4UR83050500 BLWLI Ins	4367	1	41.8

2 LIGHT FIXTURE SCHEDULE - INITIAL
1" = 1'-0"

Schedule - Maintained

Symbol	Label	Qty	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Fixture	Lumens Per Lamp	Light Loss Factor	Wattage
A	EATON - LUMARK FORMER COOPER LIGHTING	15	EATON	XTOR3B	CROSSTOUR 16W WALL MOUNT LED	EATON LED 5000K	1	XTOR3B Ins	2134	0.89	16.2
B	EATON - LUMARK FORMER COOPER LIGHTING	4	EATON	XTOR9RL	CROSSTOUR WALL MOUNT LED WITH REFLECTIVE LENS	EATON LED 5000K	1	XTOR9RL Ins	5216	0.89	58
C	EATON - PORTIFOLD (FORMER COOPER LIGHTING)	23	EATON	LDB4KDD00 E4UR83050500 BLWLI	PORTIFOLD 4 INCH HO DEGREE CUTOFF RECESSED DOWNLIGHT WIDE DISTRIBUTION WITH SPECULAR CLEAR TRIM WATTAGE DD01TR 40.2W DE010 40.5W DD2 41.53W DD4 41.87W DD6 41.57W DD3 44.71W DD8 38.31W	HIGH LUMEN LED ABSOLITE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN SICHROPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	1	LDB4KDD00 E4UR83050500 BLWLI Ins	4367	0.81	41.8

3 LIGHT FIXTURE SCHEDULE - MAINTAINED
1" = 1'-0"

GENERAL NOTES - SITE LIGHTING

ALL BUILDING MOUNTED LIGHTING SHALL BE CONTROLLED AS DUSK-TO-DAWN OPERATION VIA LIGHTING RELAYS CONTROLLED BY ENERGY MANAGEMENT SYSTEM.

B LIGHT FIXTURE SUBSTITUTIONS ARE ALLOWED PROVIDED COMPLIANCE TO CITY OF BLOOMINGTON ORDINANCE SECTION 21.301.07.

C FIXTURE FINISH TO BE DETERMINED BY ARCHITECT.

XTOR MAX LED

DESCRIPTION
The EATON Lumark Crosstour LED WALL Wash Series of luminaires are designed to provide a clean, bright, uniform wash of light to architectural surfaces. This luminaire is designed for use in outdoor applications. The luminaire is designed to be used in applications where a uniform wash of light is required.

XTOR CROSSTOUR MAX LED

XTOR CROSSTOUR MAX LED

LED Type	XTOR3	XTOR4	XTOR5	XTOR6	XTOR7	XTOR8	XTOR9	XTOR10	XTOR11
LED Type	3000K	3000K	3000K	3000K	3000K	3000K	3000K	3000K	3000K
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LED Life	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000

Schedule - Maintained

Symbol	Label	Qty	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Fixture	Lumens Per Lamp	Light Loss Factor	Wattage
A	EATON - LUMARK FORMER COOPER LIGHTING	15	EATON	XTOR3B	CROSSTOUR 16W WALL MOUNT LED	EATON LED 5000K	1	XTOR3B Ins	2134	0.69	16.2
B	EATON - LUMARK FORMER COOPER LIGHTING	4	EATON	XTOR9RL	CROSSTOUR WALL MOUNT LED WITH REFLECTIVE LENS	EATON LED 5000K	1	XTOR9RL Ins	5216	0.69	58
C	EATON - PORTIFOLD (FORMER COOPER LIGHTING)	23	EATON	LDB4KDD00 E4UR83050500 BLWLI	PORTIFOLD 4 INCH HO DEGREE CUTOFF RECESSED DOWNLIGHT WIDE DISTRIBUTION WITH SPECULAR CLEAR TRIM WATTAGE DD01TR 40.2W DE010 40.5W DD2 41.53W DD4 41.87W DD6 41.57W DD3 44.71W DD8 38.31W	HIGH LUMEN LED ABSOLITE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN SICHROPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	1	LDB4KDD00 E4UR83050500 BLWLI Ins	4367	0.61	41.8

PORTIFOLD

DESCRIPTION
The EATON Lumark Crosstour LED WALL Wash Series of luminaires are designed to provide a clean, bright, uniform wash of light to architectural surfaces. This luminaire is designed for use in outdoor applications. The luminaire is designed to be used in applications where a uniform wash of light is required.

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LED Life	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000

XTOR CROSSTOUR LED

LED Type	XTOR3	XTOR4	XTOR5	XTOR6	XTOR7	XTOR8	XTOR9	XTOR10	XTOR11
LED Type	3000K	3000K	3000K	3000K	3000K	3000K	3000K	3000K	3000K
LED Power	100W	150W	200W	250W	300W	350W	400W	450W	500W
LED Life	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000

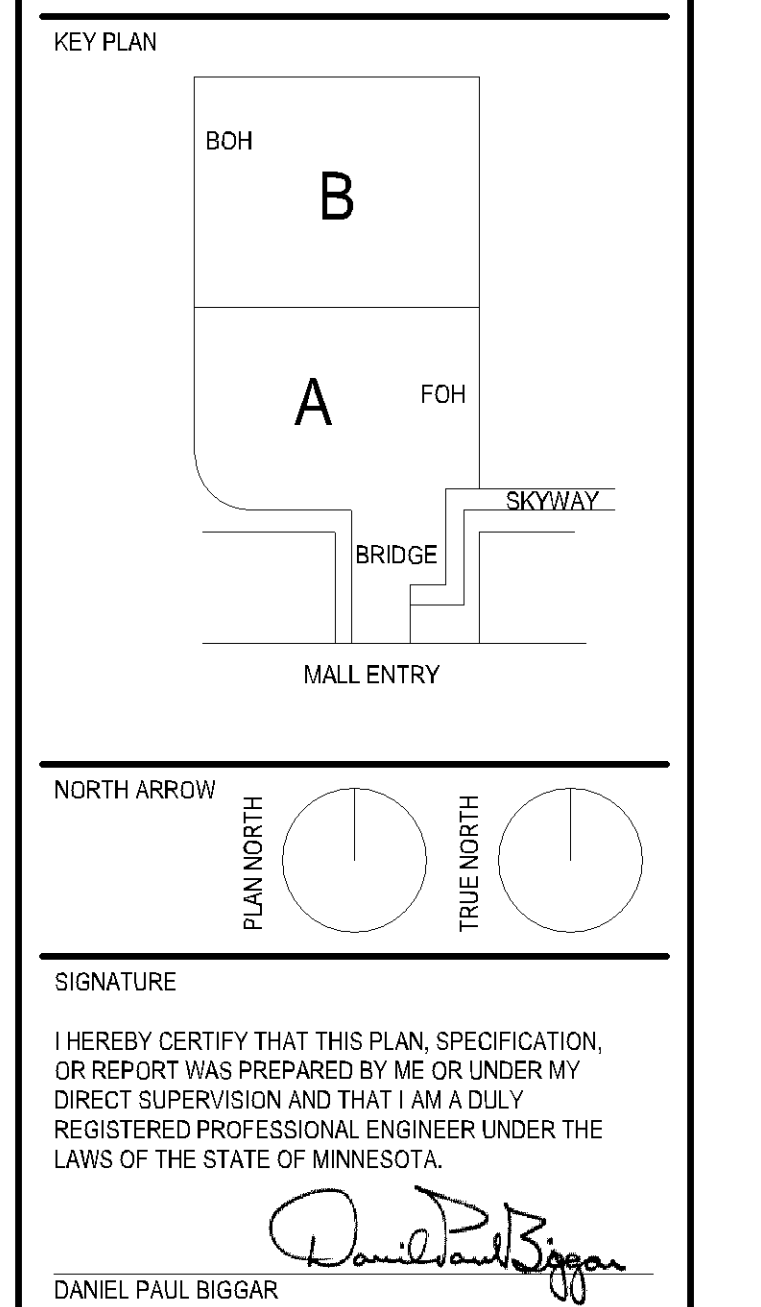
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LED Life	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000

HUNT
Electric Corporation

7900 Chicago Avenue S
Bloomington MN 55420
(651) 646 2911
Fax (651) 643 6575

SOUTH LOOP WATERPARK
BLOOMINGTON, MN 55425



KEY PLAN
BOH
FOH
SKYWAY
BRIDGE
MALL ENTRY

NORTH ARROW

PLAN NORTH
TRUE NORTH

SIGNATURE
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DANIEL PAUL BIGGAR
REG. NO. 28732 DATE: Issue Date

THIS DOCUMENT HAS BEEN PREPARED BY HUNT ELECTRIC CORPORATION WITH THE EXPRESSED INTENT AND KNOWLEDGE THAT THE INSTALLATION OF THE WORK DESCRIBED WILL BE SUPERVISED BY THE CITY OF BLOOMINGTON. HUNT ELECTRIC CORPORATION IS NOT PROVIDING INSTALLATION OF THE WORK UNDER ANY OTHER CIRCUMSTANCES.

REVISION SCHEDULE
NO REVISION DATE

SHEET NAME
CATALOG INFORMATION SHEETS & LIGHT FIXTURE SCHEDULES

PROJECT NUMBER: 61799
DATE: 10/2/19
DRAWN: GG
CHECKED: DPB
SCALE: As indicated
SHEET NUMBER:

PL201900184
PL2019-184

COMcheck Software Version 4.1.1.0
Exterior Lighting Compliance Certificate

Project Information

Energy Code: 90.1 (2010) Standard
Project Title: South Loop Waterpark
Project Type: New Construction
Exterior Lighting Code: 4 (High activity metropolitan commercial district)

Contractor Site: Linden Lane, Bloomington, MN 55425
Designer/Contractor: Greg Gepp, HUNT Electric Corporation, Bloomington, MN 55425

Allowed Exterior Lighting Power

Area/Surface Category	Quantity	B Allowed Watts/Unit	C Treatable Wattage	D Treatable Wattage	E Allowed Watts (B x C)
Other (not main entry)	103 ft ²	30	Yes	3040	
Walkway - 10 feet wide	634 ft ²	3.5	Yes	2219	
Landscaping		0.5	Yes	316	
			Total Treatable Watts (C) =	2575	
			Total Allowed Watts (E) =	2856	

(A) Wattage factors are only allowed between 9 inches products/feet.
(B) A supplemental allowance equal to 1000 watts may be applied toward compliance of both non-treatable and treatable areas/surfaces.

Proposed Exterior Lighting Power

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	B Lamps	C # of Fixtures	D Fixture Watt.	E Total (C x D)
Other (not main entry) (115 B of 90.10.2) Treatable Wattage				
LED 2 x 4 TOR Max Bay Other	1	3	50	150
LED 1 x 4 TOR Max Bay Other	1	15	10	150
Walkway - 10 feet wide (304 ft ²) Treatable Wattage				
LED 2 x 2 LED recessed Downlight Other	1	23	42	966
Landscaping (316 ft ²) Treatable Wattage				
LED 2 x 4 TOR Max Bay Other	1	1	58	58
			Total Proposed Watts =	1464

Exterior Lighting Compliance Statement

The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other conditions submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 90.1 (2010) Standard requirements, COMcheck Version 4.1.1.0 and to comply with any additional mandatory requirements listed in the Inspection Checklist.

Project Title: South Loop Waterpark
Data Filename: Untitled.ccx
Report date: 10/02/19
Page: 1 of 6

Greg Gepp, Electrical Designer
Date: 10/2/19

COMcheck Software Version 4.1.1.0
Inspection Checklist
Energy Code: 90.1 (2010) Standard

Requirements: 60 Ohm were addressed directly in the COMcheck software. Test in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is removed in a separate table, a reference to that table is provided.

Section #	Plan Review	Complies?	Comments/Assumptions
4.2.2.4	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and documents where applicable are checked. Field corrections noted in accordance with approved punch and punch status sheet for maximum drop of 3%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not Comply <input type="checkbox"/> Not Applicable	
4.2.2.4.1	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and documents where applicable are checked. Field corrections noted in accordance with approved punch and punch status sheet for maximum drop of 3%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not Comply <input type="checkbox"/> Not Applicable	Requirement will be met.
4.2.2.4.2	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the electrical systems and equipment and documents where applicable are checked. Field corrections noted in accordance with approved punch and punch status sheet for maximum drop of 3%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not Comply <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (For 1) | 2 Medium Impact (For 2) | 3 Low Impact (For 3)

Project Title: South Loop Waterpark
Data Filename: Untitled.ccx
Report date: 10/02/19
Page: 2 of 6

Section #	Rough to Electrical Inspection	Complies?	Comments/Assumptions
5.4.1.1	At least 50% of all 125 volt 15- and 20-amp receptacles are controlled by an automatic control device.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not Comply <input type="checkbox"/> Not Applicable	
5.4.1.2	Automatic lighting controls for exterior lighting installed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not Comply <input type="checkbox"/> Not Applicable	Requirement will be met.
5.4.3	Exterior ground lighting over 100 W provides 300 ft-cm candles in median sector or fixture is exterior from sector of look or from exterior LPI.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not Comply <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (For 1) | 2 Medium Impact (For 2) | 3 Low Impact (For 3)

Project Title: South Loop Waterpark
Data Filename: Untitled.ccx
Report date: 10/02/19
Page: 3 of 6

Section #	Final Inspection	Complies?	Comments/Assumptions
5.4.1.1	Exterior lighting power is consistent with what is shown on the approved lighting plan, connected wiring and ground paths are less than or equal to allowed paths.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not Comply <input type="checkbox"/> Not Applicable	See the Exterior Lighting schedule for values.

Additional Comments/Assumptions:

1 High Impact (For 1) | 2 Medium Impact (For 2) | 3 Low Impact (For 3)

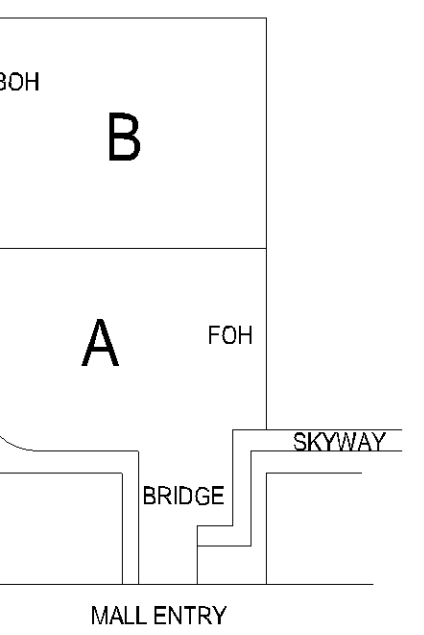
Project Title: South Loop Waterpark
Data Filename: Untitled.ccx
Report date: 10/02/19
Page: 4 of 6

HUNT
Electric Corporation

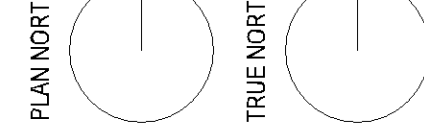
7900 Chicago Avenue S
Bloomington MN 55420
(651) 646 2911
Fax (651) 643 6575

SOUTH LOOP WATERPARK
BLOOMINGTON, MN 55425

KEY PLAN



NORTH ARROW



SIGNATURE

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DANIEL PAUL BINGGAR
REG. NO. 28732 DATE: Issue Date

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REVISION SCHEDULE

NO	REVISION	DATE

SHEET NAME

ENERGY CODE COMPLIANCE SHEETS

PROJECT NUMBER: 81799
DATE: 10/02/19
DRAWN: GG
CHECKED: DPB
SCALE: 1/2" = 1'-0"
SHEET NUMBER:

ES1.4