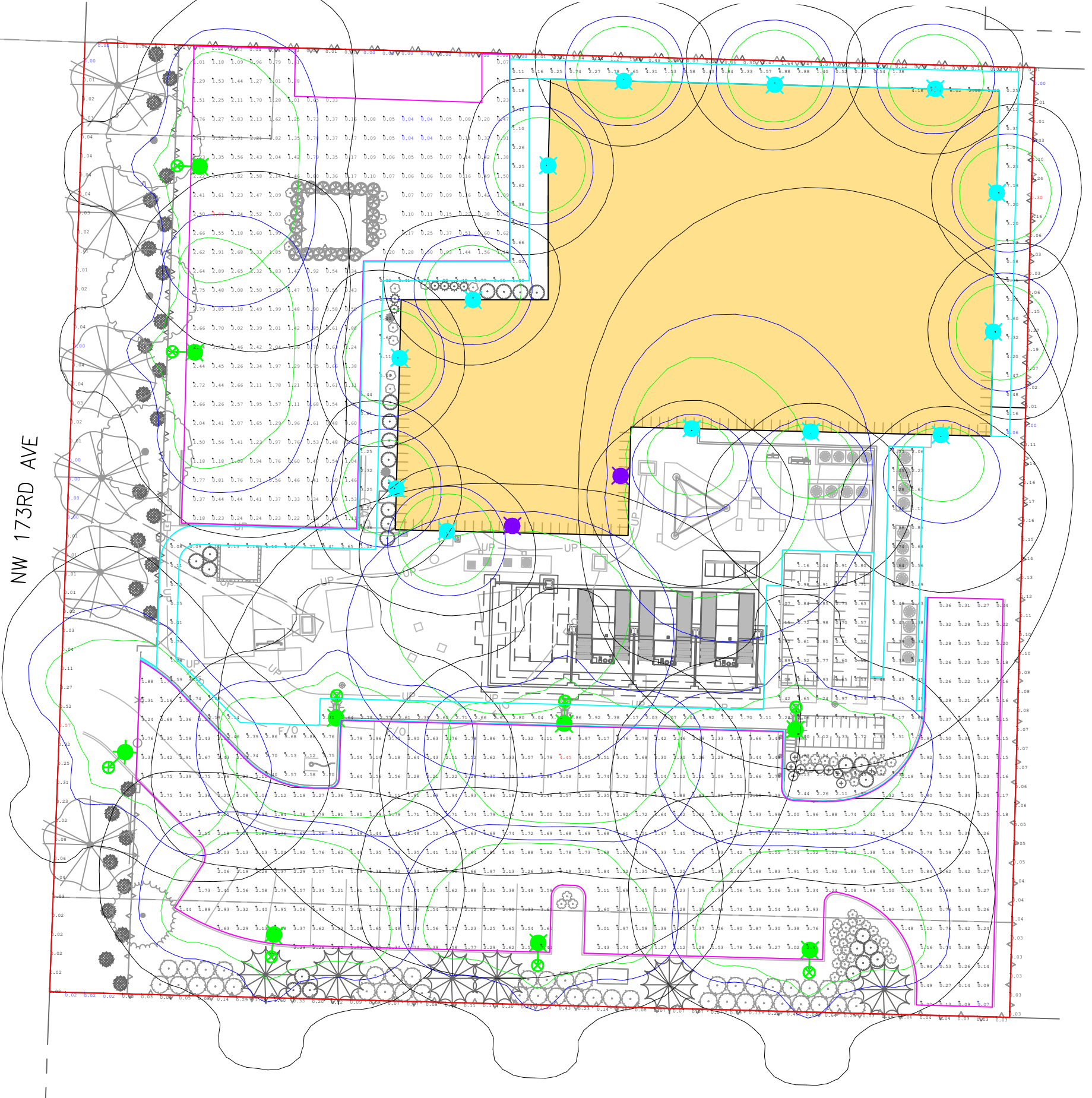


Received  
Planning Division  
03/10/2023



**GENERAL NOTES**

1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE EXISTING ON-SITE LIGHTING CONDITION. ALL LIGHTING IN THIS ANALYSIS ARE EXISTING TO REMAIN. NO NEW LIGHTING OR MODIFICATIONS TO THE EXISTING LIGHTING SYSTEM ARE PROPOSED FOR THIS PROJECT.
2. THE LOCATION OF EXISTING FEATURES AND UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE. NOT ALL EXISTING FEATURES AND UTILITIES MAY BE SHOWN.

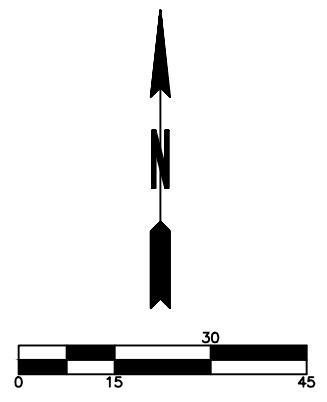
**LEGEND**

DESCRIPTION	SYMBOL
PARKING LOT CALCULATION AREA	
SIDEWALK CALCULATION AREA	
PROPERTY LINE CALCULATION AREA	
BUILDING LOCATION	

DESIGN AREA	CALCULATED LIGHT LEVELS			
	MINIMUM AVERAGE ILLUMINANCE (FC)		MAXIMUM ILLUMINANCE AT PROPERTY LINE (FC)	
	TARGET*	CALCULATED	TARGET*	CALCULATED
SIDEWALK	1.50	1.79	N/A	N/A
PARKING LOT N SIDE	1.50	1.30	N/A	N/A
PARKING LOT S SIDE	1.50	1.83	N/A	N/A
PROPERTY LINE				
PROPERTY LINE - E SIDE	N/A	0.09	0.50	0.30
PROPERTY LINE - N SIDE	N/A	0.25	0.50	2.35
PROPERTY LINE - S SIDE	N/A	0.23	0.50	1.93
PROPERTY LINE - W SIDE	N/A	0.07	0.50	0.57

\*PER CITY OF BEAVERTON DEVELOPMENT CODE TABLE 60.05-01.

LUMINAIRE TABLE					
SYMBOL	QUANTITY	FIXTURE TYPE	MOUNTING TYPE	MOUNTING HEIGHT	WATTAGE
	9	DURALED SMALL HAMPTON KITTY HAWK AREA LIGHT (KH25Q-D-1X65-U-3K-C)	POLE (EX)	14FT (EX)	65W (EX)
	2	LITELUME FLOOD LIGHT (LL-FL-135-50-UNV-N76-BZ-SF)	ROOF (EX)	29FT (EX)	135W (EX)
	13	SMALL LED ASTRA WALL ACCENT LIGHT (TV2C3-2X10-U-41K)	WALL (EX)	10FT (EX)	20W (EX)



**Comcast - Illumination Analysis**

1.23027.00 - Comcast Beaverton Lighting

February 21, 2023

FIGURE





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Comcast Beaverton Lighting  
Illumination Calculation Summary  
02/21/2023  
By: OS

Target Light Levels  
(Per City of Beaverton Development Code)

Commercial and Industrial  
Minimum Average Required Illuminance = 1.5fc  
Maximum Illuminance at Property Line = 0.5fc



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## Luminaire Definition(s)

### Luminaire: KH25QD1X65U3KC

Description	KH25QD1X65U3KC
Tag	Type IV 65W Parking Light
<u>Attributes</u>	
Filename	KH25QD1X65U3KC.ies
[MANUFAC]	DURAGUARD
[LUMCAT]	KH25QD1X65U3KC
<u>Photometry</u>	
Arrangement Luminaire Lumens	6158
Luminaire Lumens	6158
Luminaire Watts	67.6
Arrangement Watts	67.6
Luminaire Efficiency (%)	N.A.
S/P Ratio	1.00
Total Light Loss Factor	0.800
<u>Photometry-Luminous Box</u>	
Size (X, Y, Z)	0.2, 0.2, 0.2
Offset (X, Y, Z)	0, 0, 0
Photometric Center Offset (X, Y, Z)	0.1, 0, 0
<u>Metrics</u>	
Road Classification	Type IV, Short, N.A. (deprecated)
Indoor Classification	Direct
LER	91
Upward Waste Light Ratio	0.00
Max UGR	N.A.
BUG Rating	B1-U1-G2
<u>Symbols</u>	
Calculation Symbol	Pole Arm -- Rectangular 1
Insertion Point (Vertical, Horizontal)	Bottom, 180
Housing Color (R, G, B)	51, 51, 51
Luminous Color (R, G, B)	255, 255, 255
Drawing Symbol	Pole Arm -- Rectangular 1
<u>Configuration</u>	
Arrangement	Single
Arm Length	1
Offset	0
Pole Mounted	

### Luminaire: TV2C32X10U41K\_1

Description	TV2C3 with two 10w LED COBs
Tag	20W Wall Mount



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## Luminaire Definition(s) - Cont.

### Attributes

Filename TV2C32X10U41K.ies  
 [MANUFAC] DuraGuard  
 [LUMCAT] TV2C3 with two 10w LED COBs

### Photometry

Arrangement Luminaire Lumens 2299  
 Luminaire Lumens 2299  
 Luminaire Watts 20.16  
 Arrangement Watts 20.16  
 Luminaire Efficiency (%) N.A.  
 S/P Ratio 1.00  
 Total Light Loss Factor 0.800

### Photometry-Luminous Box

Size (X, Y, Z) 0.2, 0.2, 0.2  
 Offset (X, Y, Z) 0, 0, 0  
 Photometric Center Offset (X, Y, Z) 0.275, 0, -0.175

### Metrics

Road Classification Type II, Very Short, N.A. (deprecated)  
 Indoor Classification Direct  
 LER 114  
 Upward Waste Light Ratio 0.00  
 Max UGR N.A.  
 BUG Rating B1-U1-G0

### Symbols

Calculation Symbol Wall Surface -- Rectangular 1  
 Insertion Point (Vertical, Horizontal) Center, 180  
 Housing Color (R, G, B) 51, 51, 51  
 Luminous Color (R, G, B) 255, 255, 255  
 Drawing Symbol Wall Surface -- Rectangular 1

### Configuration

Arrangement Single  
 Arm Length 0  
 Offset 0

## Luminaire: LL-FL-135-50-UNV-N76-BZ

Tag 135W Flood Light

### Attributes

Filename LL-FL-135-50-UNV-N76-BZ.ies  
 [MANUFAC] LiteLume  
 [LUMCAT]

### Photometry

Lumens Per Lamp 17503.7  
 Number of Lamps 1  
 Total Lamp Lumens 17504



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## Luminaire Definition(s) - Cont.

Arrangement Lamp Lumens	17504
Arrangement Luminaire Lumens	17504
Luminaire Lumens	17504
Luminaire Watts	136
Arrangement Watts	136
Luminaire Efficiency (%)	100
S/P Ratio	1.00
Total Light Loss Factor	0.800
<u>Photometry-Luminous Box</u>	
Size (X, Y, Z)	0.2, 0.2, 0.2
Offset (X, Y, Z)	0, 0, 0
Photometric Center Offset (X, Y, Z)	0.1, 0, 0
<u>Metrics</u>	
Road Classification	Type I, Very Short, Cutoff (deprecated)
Indoor Classification	Direct
LER	129
Upward Waste Light Ratio	0.01
Max UGR	N.A.
BUG Rating	B4-U3-G2
<u>Symbols</u>	
Calculation Symbol	Pole Arm -- Rectangular 1
Insertion Point (Vertical, Horizontal)	Bottom, 180
Housing Color (R, G, B)	51, 51, 51
Luminous Color (R, G, B)	255, 255, 255
Drawing Symbol	Pole Arm -- Rectangular 1
<u>Configuration</u>	
Arrangement	Single
Arm Length	0
Offset	0
Pole Mounted	



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## Calculation Summary

### Parking Lot N Side

Project: Project\_1  
Polygon  
Coordinates in Feet

Point Spacing L-R	5
Point Spacing T-B	5
Grid Orient	0
Grid Tilt	0
Meter Type	Horizontal

Illuminance (Fc)	
Average	1.30
Maximum	3.88
Minimum	0.04
Avg/Min	32.50

### Parking Lot S Side

Project: Project\_1  
Polygon  
Coordinates in Feet

Point Spacing L-R	5
Point Spacing T-B	5
Grid Orient	0
Grid Tilt	0
Meter Type	Horizontal

Illuminance (Fc)	
Average	1.83
Maximum	4.45
Minimum	0.07
Avg/Min	26.14

### Property Line - E Side

Project: Project\_1  
Scattered points  
Coordinates in Feet

Meter Type	Horizontal
------------	------------

Illuminance (Fc)	
Average	0.09
Maximum	0.30
Minimum	0.00
Avg/Min	N.A.

### Property Line - N Side

Project: Project\_1



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## Calculation Summary – Cont.

Scattered points  
Coordinates in Feet

Meter Type                      Horizontal

Illuminance (Fc)	
Average	0.25
Maximum	2.35
Minimum	0.00
Avg/Min	N.A.

### Property Line – S Side

Project: Project\_1  
Scattered points  
Coordinates in Feet

Meter Type                      Horizontal

Illuminance (Fc)	
Average	0.23
Maximum	1.93
Minimum	0.02
Avg/Min	11.50

### Property Line – W Side

Project: Project\_1  
Scattered points  
Coordinates in Feet

Meter Type                      Horizontal

Illuminance (Fc)	
Average	0.07
Maximum	0.57
Minimum	0.00
Avg/Min	N.A.

### Sidewalk

Sidewalk  
Project: Project\_1  
Polygon  
Coordinates in Feet

Point Spacing L-R	5
Point Spacing T-B	5
Grid Orient	0
Grid Tilt	0
Meter Type	Horizontal





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## Calculation Summary – Cont.

Illuminance (Fc)

Average	1.79
Maximum	8.10
Minimum	0.06
Avg/Min	29.83



