


**CITY OF BLOOMINGTON MINNESOTA**

# LIGHTING PLAN

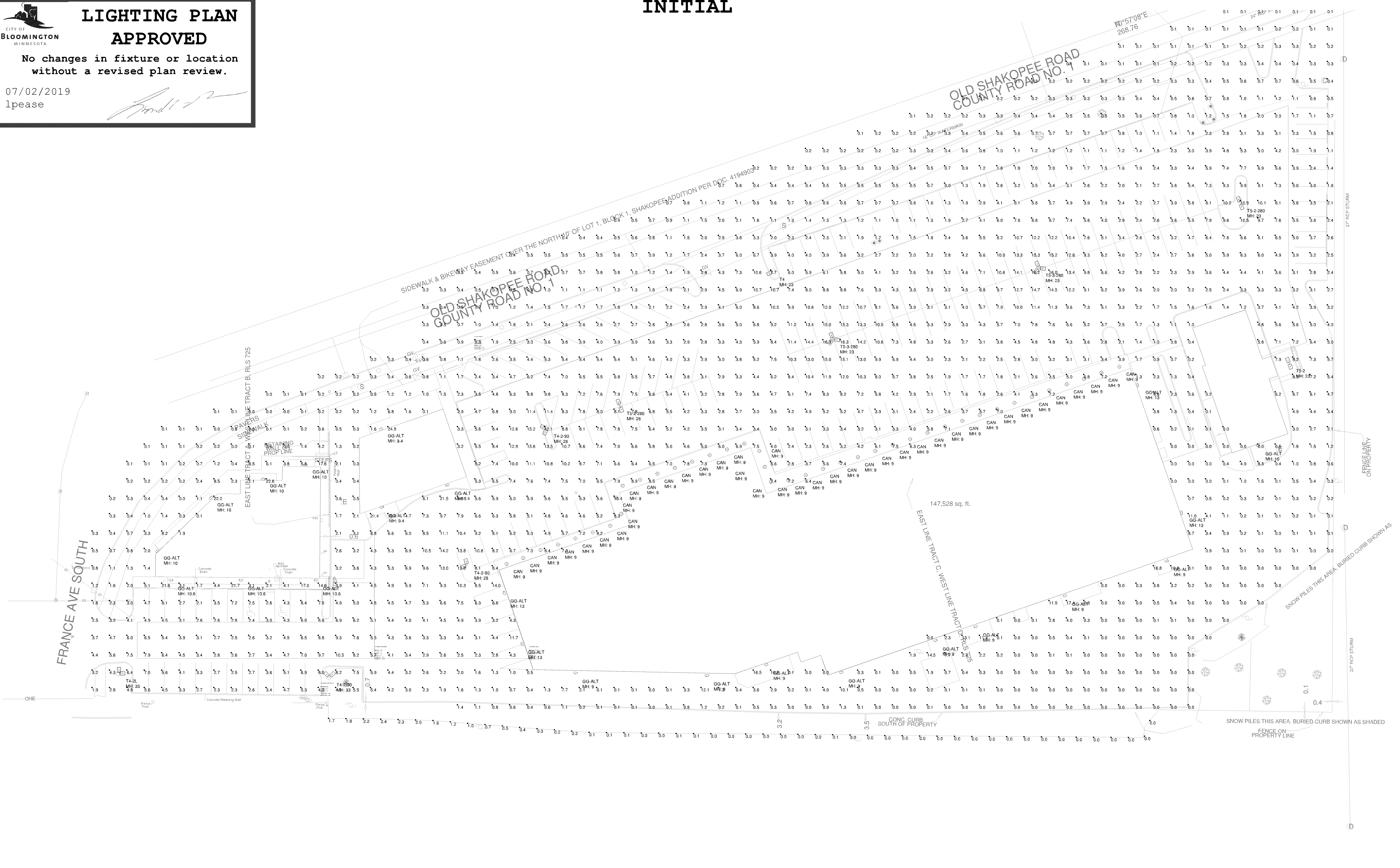
## APPROVED

No changes in fixture or location without a revised plan review.

07/02/2019  
lpease



INITIAL



Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_3	ILLUMINANCE	Fc	3.47	24.9	0.0	N.A.	N.A.
SOUTH PROPERTY LINE	ILLUMINANCE	Fc	0.39	2.4	0.0	N.A.	N.A.
1 FC MAINTAINED	ILLUMINANCE	Fc	3.13	10.7	0.8	3.91	13.38
1 FC MAINTAINED WEST_1	ILLUMINANCE	Fc	4.30	8.4	2.1	2.05	4.00
2 FC MAINTAINED WEST	ILLUMINANCE	Fc	5.32	10.5	2.5	2.13	4.20
2 FC MAINTAINED WEST_1	ILLUMINANCE	Fc	5.93	21.5	0.0	N.A.	N.A.

Symbol	Qty	Label	Description	Arrangement	Total Lamp Lumens	Lum. Lumens	Lum. Watts	LLF
⊕	1	T4-2L	ALM 210 T4 G3 5K	2 @ 90 DEGREES	20700	20697	153.1	1.000
⊕	1	T4	ALM 210 T4 G3 5K	SINGLE	20700	20697	153.1	1.000
⊕	3	T4-2-90	ALM 280 T4 G3 5K	2 @ 90 DEGREES	27163.8	27164	201.8	1.000
⊕	23	GG-ALT	WL38501	SINGLE	4960.8	4961	41	1.000
⊕	1	T5-2	ALM 210 T5 G3 5K	BACK-BACK	21273.7	21274	145.8	1.000
⊕	40	CAN	LBSLEDA10L30K9_WH (4)	SINGLE	N.A.	1032	16.37	1.000
⊕	2	T5-2-280	ALM 280 T5 G3 5K	BACK-BACK	28200	28200	201.1	1.000
⊕	2	T5-3-280	ALM 280 T5 G3 5K	3 @ 120 DEGREES	28200	28200	201.1	1.000

- Standard Reflectance of 80/50/20 unless noted otherwise
- Not a Construction Document, for Design purposes only
- Standard indoor calc points @ 30" A.F.F. unless noted otherwise
- Standard outdoor calc points @ Grade unless noted otherwise
- Mlazgar Associates assumes no responsibility for installed light levels due to field conditions, etc.

MLAZGAR ASSOCIATES  
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SUITE 150  
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#	Date	Comments

Revisions

RLMA Project #: 64963  
Drawn By: BS  
Date: 7/1/2019  
Scale: 1" = 20'

**SITE PLAN**


**TYME PROPERTIES**  
BLOOMINGTON, MN

**CITY OF BLOOMINGTON MINNESOTA**

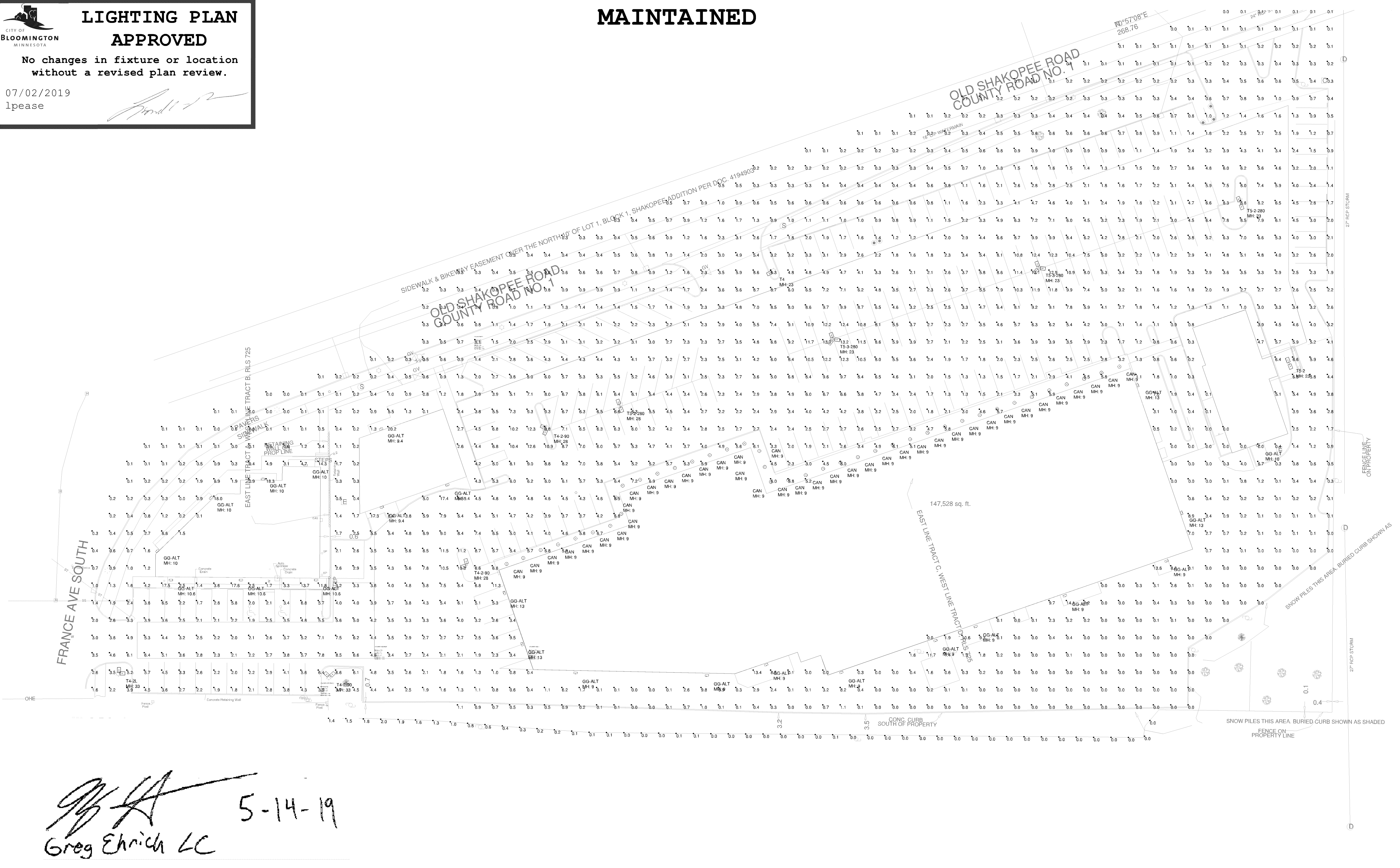
# LIGHTING PLAN APPROVED

No changes in fixture or location without a revised plan review.

07/02/2019  
lpease



**MAINTAINED**



*Greg Ehrlich* 5-14-19  
Greg Ehrlich LC

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_3	ILLUMINANCE	Fc	2.81	20.2	0.0	N.A.	N.A.
SOUTH PROPERTY LINE	ILLUMINANCE	Fc	0.32	2.0	0.0	N.A.	N.A.
1 FC MAINTAINED	ILLUMINANCE	Fc	2.53	8.7	0.6	4.22	14.50
1 FC MAINTAINED WEST_1	ILLUMINANCE	Fc	3.47	6.8	1.7	2.04	4.00
2 FC MAINTAINED WEST	ILLUMINANCE	Fc	4.31	8.5	2.0	2.16	4.25
2 FC MAINTAINED WEST_1	ILLUMINANCE	Fc	4.81	17.4	0.0	N.A.	N.A.

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Symbol	Qty	Label	Description	Arrangement	Total Lamp Lumens	Lum. Lumens	Lum. Watts	LLF
⊕	1	T4-2L	ALM 210 T4 G3 5K	2 @ 90 DEGREES	20700	20697	153.1	0.810
⊕	1	T4	ALM 210 T4 G3 5K	SINGLE	20700	20697	153.1	0.810
⊕	3	T4-2-90	ALM 280 T4 G3 5K	2 @ 90 DEGREES	27163.8	27164	201.8	0.810
⊕	23	GG-ALT	WL38501	SINGLE	4960.8	4961	41	0.810
⊕	1	T5-2	ALM 210 T5 G3 5K	BACK-BACK	21273.7	21274	145.8	0.810
⊕	40	CAN	LBSLEDA10L30K9_WH (4)	SINGLE	N.A.	1032	16.37	0.810
⊕	2	T5-2-280	ALM 280 T5 G3 5K	BACK-BACK	28200	28200	201.1	0.810
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#	Date	Comments
Revisions		

RLMA Project #: 64963  
Drawn By: BS  
Date: 5/14/2019  
Scale: 1" = 20'

**SITE PLAN**  
**TYME PROPERTIES**  
**BLOOMINGTON, MN**



# COMcheck Software Version COMcheckWeb Exterior Lighting Compliance Certificate

## Project Information

Energy Code: 2012 IECC  
 Project Title:  
 Project Type: New Construction  
 Permit Date: July 2019  
 Permit No. PREL201907039  
 Exterior Lighting Zone 2 (Residential mixed use area)

Construction Site:  
 3701 West Old Shakopee Road  
 Bloomington, Minnesota 55437

Owner/Agent:  
 VORANDESOTO LLC  
 3435 Labore Road #150  
 Vadnais Heights, Minnesota 55110

Designer/Contractor:  
 Multitech Electric  
 2515 White Bear Ave Ste 8a 187  
 St Paul, Minnesota 55109  
 612-325-1181  
 jerry@multitechelectric.com

## Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Lot and aisle (Parking area)	73000 ft2	0.06	Yes	4380
Walkway < 10 feet wide	700 ft of	0.7	Yes	490
All doors (Main entry)	36 ft of	20	Yes	720
Total Tradable Watts (a) =				7090
Total Allowed Watts =				7490
Total Allowed Supplemental Watts (b) =				600

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.

(b) A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

## Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
<u>Lot and aisle (Parking area, 73000 ft2): Tradable Wattage</u>				
LED: ALM 210 T4 G3 5K: LED Roadway-Parking Unit 42W:	1	3	153	459
LED: ALM 280 T5 G3 5K: LED Roadway-Parking Unit 42W:	1	4	201	804
LED: ALM 210 T5 G3 5K: LED Roadway-Parking Unit 42W:	1	2	146	292
LED: ALM 280 T4 G3 5K: LED Roadway-Parking Unit 42W:	1	6	202	1211
<u>Walkway &lt; 10 feet wide (700 ft of walkway length): Tradable Wattage</u>				
LED: WL38501: LED PAR 7W:	1	23	41	943
<u>All doors (Main entry, 36 ft of door width): Tradable Wattage</u>				
LED: LBSLEDA10L30K9_WH (4): LED PAR 7W:	1	40	16	656
<u>Driveway (25000 ft2): Tradable Wattage</u>				
<u>DQ (Drive-up windows/doors, 1 windows or doors): Non-tradable Wattage</u>				
Total Tradable Proposed Watts =				4365

**Exterior Lighting Compliance Statement**

*Compliance Statement:* The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2012 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

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Name - Title

Signature

Date