DATE:

May 28, 2020

TO:

Mayor and City Council

FROM:

A sist of City Manager

SUBJECT:

GDOT Pedestrian Lighting Agreement - Highway 20



RECOMMENDED ACTION

Approve the agreement with the Georgia Department of Transportation (GDOT) for the operation, maintenance, and costs associated with decorative pedestrian-scale streetlights along Highway 20 serving new developments on the north and south sides of the road.

The attached agreement details the requirements for placing pedestrian lighting in the state right-of-way of Highway 20. The City would be responsible for paying for the service (operating) and maintenance, both with a separate agreement with Georgia Power. There are 15 total post-top style lights proposed with 11 on the north side of the road and four (4) on the south.

All will be of a style, type (LED) and light color (3000K) to match the existing installations and those approved by GDOT for use along their state routes. The photometric plans have demonstrated appropriate minimum light levels for the new sidewalks proposed along the frontages of the new Bower project and the new assisted living project.

The cost to install will be borne by the developers of each development and like other residential developments, transferred to the city when complete. At that later date, the city will assume operational control of the lights and energy bills from Georgia Power associated with them, with an expected energy cost of approximately \$165 per month. Maintenance will be part of the structure of the agreement.

Attachments

Memorandum of Agreement – GDOT State Route 20/Buford Drive Near Hillcrest Photometric Plan – Dogwood Forest Photometric Plan – Bower Multi-Family

MEMORANDUM OF AGREEMENT

FOR

PEDESTRIAN LIGHTING ON STATE ROUTE 20/BUFORD DRIVE NEAR HILLCREST DRIVE, CITY OF SUGAR HILL, GWINNETT CO.

CONSISTING OF

Fifteen (15) new Pedestrian Lighting Structures by Permits No. 1198736 and 1201521 along State Route 20/Buford Drive near Hillcrest Drive, City of Sugar Hill, Georgia, Gwinnett County.

BETWEEN

The City of Sugar Hill, acting by and through its City Council, hereinafter called the CITY, and the Department of Transportation, an agency of the State of Georgia, hereinafter called the DEPARTMENT.

RELATIVE TO

The CITY is requesting to install fifteen (15) new pedestrian lighting structures by Permits No. 1198736 and 1201521 along State Route 20/Buford Drive near Hillcrest Drive, City of Sugar Hill, Georgia, Gwinnett County

I. IT IS THE INTENTION OF THE PARTIES:

- A. That the CITY, only to the extent that it may be bound by contracts that may hereafter be entered into, shall be responsible for the following:
- 1. The CITY shall Install, Locate, Provide the Energy, Operate,
 Maintain and Design additional roadway lighting in accordance with the

Georgia Department of Transportation's Design Policy Manual, by permits 1198736 and 1201521 along State Route 20/Buford Drive near Hillcrest Drive, City of Sugar Hill, Georgia, Gwinnett County

- 2. The CITY, in its operation and maintenance of the lighting systems, shall not in any way alter the type or location of any of the various components that make up the entire lighting system without prior written approval from the DEPARTMENT.
- 3. The CITY shall at all times indemnify and save harmless the DEPARTMENT and the State of Georgia, to the extent allowed by law, from any and all responsibility for damages or liability, or both, which may result from the installation, construction, reconstruction, operation, maintenance or repair, or any combination of any of the foregoing.
- 4. The **CITY** assumes full responsibility for the requirements of the Georgia Utility Facility Protection Act.
- II. IT IS FURTHER AGREED, that the DEPARTMENT, only to the extent that it may be bound by contracts which may hereafter be entered into, shall reserve the right to remove the aforementioned lighting upgrades in the event that the CITY elects to de-energize or fails to properly maintain any individual component within the systems or the complete system(s) including poles, mast arms, luminaires, foundations and associated wiring. In addition, the DEPARTMENT reserves the right, at its sole discretion, to remove or replace any lighting upgrades where the public safety is at any time compromised by the actions or inactions of the CITY.

III. IT IS FURTHER AGREED, that this Agreement shall remain in effect for a period of fifty (50) years.

IV. IT IS FURTHER AGREED, the covenants herein contained shall, except as otherwise provided accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

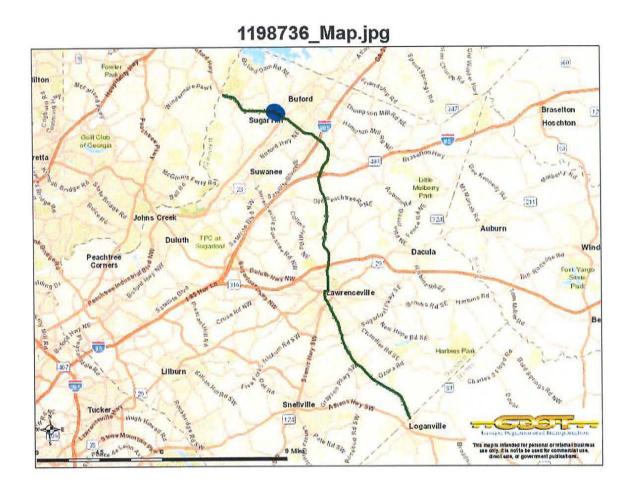
This document is a Memorandum of Agreement expressing the present intentions of the parties. Nothing contained herein shall require the undertaking of any act, project, study, analysis, or any other activity by any party until a contract for such activity is executed. Nor shall this document require the expenditure of any funds by any party until a contract authorizing such expenditure is executed.

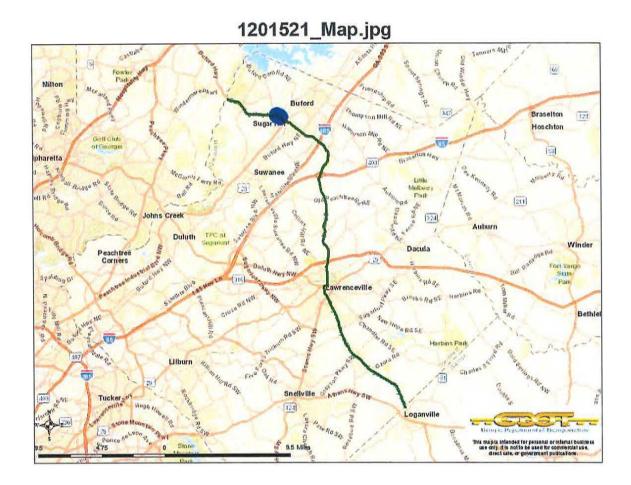
However, nothing contained herein shall be construed to prohibit any party's undertaking any act, project, study, analysis, or any other activity, which the party is required by law to contract to undertake as part of any other program, which fulfills some function shown herein as intended to be performed by the party undertaking such act, project, study, analysis, or any other activity.

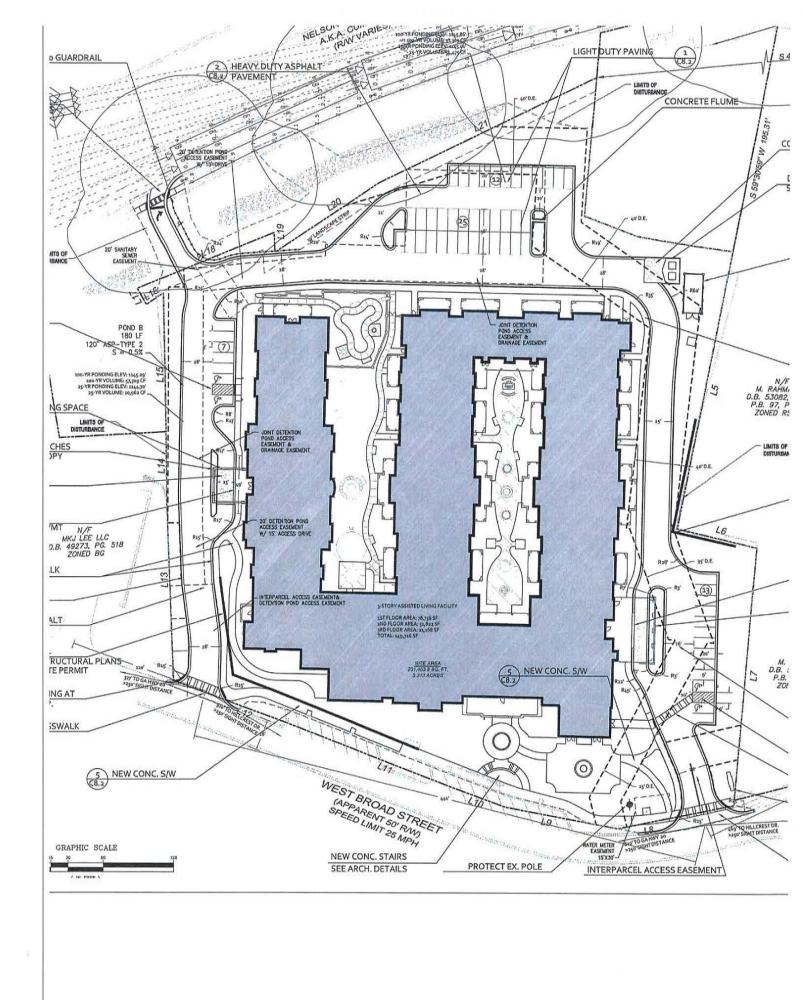
IN WITNESS WHEREOF, the parties hereto have executed this **Memorandum of Agreement** to be executed by their duly authorized officials, and their respective seals attached hereto.

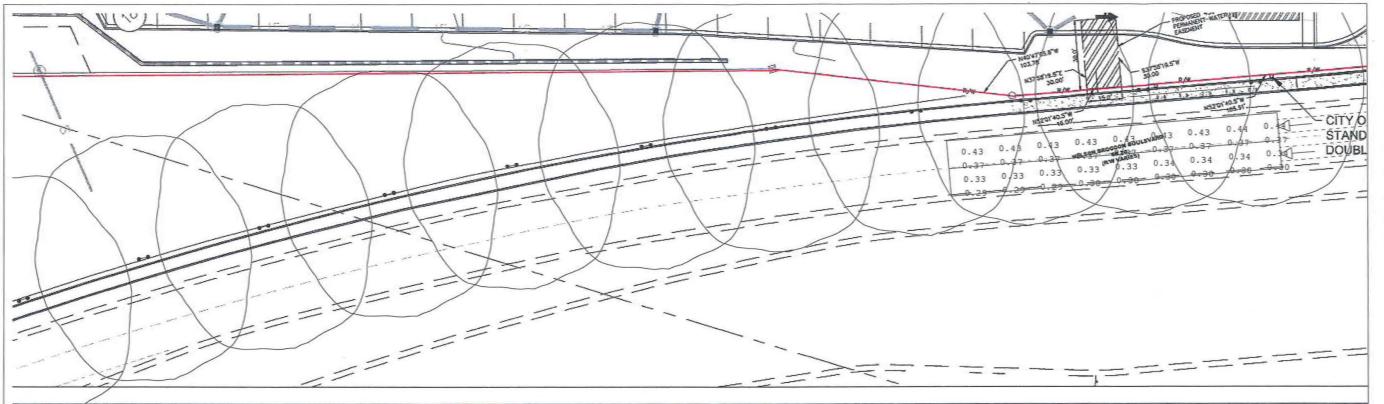
Signed and delivered this, day of, 202, in the presence of:	GEORGIA DEPARTMENT OF TRANSPORTATION
2011 11 the processes 02.	STATE UTILITIES ENGINEER
WITNESS	
REQUESTED BY: CITY OF SUGAR I	
BY:	BY:
TITLE:	WITNESS
BY: NOTARY PUBLIC My Commission Expires:	(OFFICIAL SEAL-CITY OF SUGAR HILL, GA.)
SWORN TO AND SUBSCRIBED BEFORME ON THIS DAY OF	
This Agreement approved by the City Council at a meeting help at on the day of, 202	ld
the,202	City Clerk

4-23-2020-cnw









Luminaire	Schedu	le						
Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watt	sLum. Lumen	sLLF	Description
0 0	11	L1	BACK-BACK	100	2200	5777	0.800	ACN_CLB_ARC-080-LED-E-U-33-3-6-X-BK 100W LED

Light Loss Factor calculated using a 50W LED module $.8\,(\text{LLF})$ * $.5\,(\text{Wattage})$ = $.4\,\,\text{LLF}$

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	LVRatio
Hwy 20 WB 1_Luminance	Luminance	Cd/Sq.m	0.95	1.56	0.51	1.86	3.06	N.A.
Hwy 20 WB 1_Veil_Lum	Veiling Luminance	Cd/Sq.m	0.36	0.44	0.29	1.24	1.52	0.46
Sidewalk Hor	Illuminance	Fc	1.78	2.5	1.2	1.48	2.08	N.A.
Sidewalk Vert EB	Illuminance	Fc	1.98	4.5	0.4	4.95	11.25	N.A.
Sidewalk Vert WB	Illuminance	Fc	2.32	5.2	0.5	4.64	10.40	N.A.

We make no representation as to its completeness, currency or accuracy because of reasons inherent to CAD and the additional digital data used to produce a lighting application. The end user of this data takes full responsibility for the accuracy and correctness of all measurements, area, inventories or other data extracted from this, with the use of a computer, or other measuring instruments either manual or digital in nature. This photometric analysis is an estimate only, and is based on estimated reflectance values for interior applications or estimated pole locations based on specified light levels for exterior applications. Any variance from reflectance values, obstructions, light loss factors (including both physical and electrical in nature) or dimensional data will affect the actual light levels obtained. This analysis is a mathematical model and can be only as accurate as is permitted by the third party software and the requested lighting levels or IES standards used. In addition calculated values may vary from actual measurements in certain situations due to variances, such as but not limited to, lamp output, input voltage variances, manufacturing tolerances and application variances. The presence of objects (i.e. cubical walls, foliage, etc) will decrease light levels and may cause shadowing. Lighting application drawings are being provided to the recipient of this disclaimer.

LumNo	Label	X	Υ .	Z	Orient	Tilt
1	L1	992	162.75	14	3.504	0
93	L1	943.203	159.53	14	2.892	0
94	L1	892.445	154.881	14	1.495	0
95	L1	845.175	150.35	14	186.823	0
96	L1	782.642	143.245	14	187.74	0
97	L1	728.573	135.625	14	190.456	0
98	L1	670.237	127.144	14	190.456	0
99	L1	617.154	115.003	14	193.196	0
100	L1	562.813	100.868	14	194.727	0
101	L1	510.62	87.386	14	194.727	0
102	L1	458.731	69.655	14	197.913	0

Luminance Method - Recommended Values RP-8-14

Road and Pedest Area	rian Conflict	Average Luminance	Avg. Uniformity	Max. Uniformity	Max.Veiling Luminance
*Roadways	Pedestrian Conflict Area	L _{ave} (cd/m ²)	Ratio L _{ave} /L _{min}	Ratio L _{max} /L _{min}	Ratio L _{Vmax} /L _{avg} (Mainum Alowed)
*Freeway Class A		0.6	3.5	6.0	0.3
*Freeway Class B		0.4	3.5	6.0	0.3
*Expressway		1.0	3.0	5.0	0.3
Streets					
Major	High	1,2	3.0	5.0	0.3
	Medium	0.9	3.0	5.0	0.3
Ī	Low	0.6	3.5	6.0	0.3
Collector	High	0.8	3.0	5.0	0.4
	Medium	0.6	3.5	6.0	0.4
	Low	0.4	4.0	8.0	0.4
Local	High	0.6	6.0	10.0	0.4
	Medium	0.5	6.0	10.0	0.4
	Low	0.3	6.0	10.0	0.4

Recommended Values for Medium Pedestrian Conflict Areas RP-8-14

Maintained Illu	uminance Values 1	or Walkways	
	E _H lux/fic	E lux/fc	E _{ave} /E _{min} *
Pedestrian Areas	5.0/0.5	2.0/0.2	4.0

Eavg - minimum maintained average horizontal illuminance at pavement

Clent: Andy McCelldon	Multifamily HWY 20 DOT Client: Andy McLendon B # Date Comments	South Consolitated Electrical Sales, Inc. Manufactures Representatives.	E 00	#- C	Revisions		Client: Andy McLendon Drawing Number: 15262C Date:4/27/2020	Sugar Hill Multifamily HWY 20 DOT
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