



CITY OF HENDERSONVILLE
CITY COUNCIL SECOND MONTHLY MEETING
Operations Center - Assembly Room | 305 Williams St. | Hendersonville NC 28792
Wednesday, January 25, 2023 – 4:00 PM

AGENDA

1. **CALL TO ORDER**
2. **CONSIDERATION OF AGENDA**
3. **CONSENT**
 - A. Letter of Support for the Land of Sky Regional Council (LOSRC) to Apply for Funding to Secure a Safe Routes to School Coordinator
 - B. Purchase Approval for New Sewer Combination Truck – *Chad Freeman, Utility Operations Manager*
4. **PRESENTATIONS**
 - A. Edwards Park Update – January 2023 – *Brian Pahle, Assistant City Manager*
5. **UNFINISHED BUSINESS**
 - A. Zoning Text Amendment: Lightning Ordinance (P22-100-ZTA) – *Lew Holloway, Community Development Director*
 - B. Parks & Recreation Master Plan Committee Appointment - Council Member Roundtree
6. **NEW BUSINESS**
 - A. Consideration of a Resolution Requesting a Local Option One-Quarter Cent City Sales and Use Tax – *John Connet, City Manager*
 - B. Water & Sewer Joint Commission Appointees - John Connet
7. **ADJOURN**
 - A. City Council Photo – *John Connet, City Manager*

The City of Hendersonville is committed to providing accessible facilities, programs and services for all people in compliance with the Americans with Disabilities Act (ADA). Should you need assistance or an accommodation for this meeting please contact the City Clerk no later than 24 hours prior to the meeting at 697-3005.



CITY OF HENDERSONVILLE AGENDA ITEM SUMMARY

SUBMITTER: Brent Detwiler **MEETING DATE:** January 25, 2023

AGENDA SECTION: CONSENT **DEPARTMENT:** Engineering

TITLE OF ITEM: Letter of Support for the Land of Sky Regional Council (LOSRC) to Apply for Funding to Secure a Safe Routes to School Coordinator

SUGGESTED MOTION(S):

I move that City Council approve a Letter of Support for the Land of Sky Regional Council to apply for funding to secure a Safe Routes to School Coordinator as presented and for the Mayor to execute said letter.

SUMMARY:

This is a letter of support for Land of Sky Regional Council (LOSRC) to apply for funding to secure a Safe Routes to School Coordinator, through NCDOT's Safe Routes to School Program, for the five-county region that includes Buncombe, Haywood, Henderson, Madison, and Transylvania counties. This position will not only work with students and parents to improve individual awareness and confidence, but also work with community partners and NCDOT to improve walking and biking conditions where necessary. A dedicated coordinator to facilitate the planning, education, and encouragement of active transportation to schools in our region will help improve the health and well-being of our students and residents and the community's quality of life.

BUDGET IMPACT: \$0

Is this expenditure approved in the current fiscal year budget? N/A

If no, describe how it will be funded. N/A

ATTACHMENTS:

Safe Routes to School Coordinator Letter of Support

January 25, 2023

North Carolina Department of Transportation
1 S. Wilmington St.
Raleigh, NC 27601

To Whom It May Concern:

The City of Hendersonville offers our support for Land of Sky Regional Council (LOSRC) to apply for funding to secure a Safe Routes to School Coordinator, through NCDOT's Safe Routes to School Program, for the five-county region that includes Buncombe, Haywood, Henderson, Madison, and Transylvania counties. We support this grant application and the focus of improving the safety of students and their families accessing our region's schools.

The City of Hendersonville believes strongly in creating an environment that promotes safe, healthy, and equitable transportation for our student population. Tens of thousands of children access schools across Western North Carolina, many of whom face walking and biking conditions that can be less-than-ideal or dangerous. Providing greater training for kids to increase their awareness and confidence to make more trips by walking and biking has been proven to have positive impacts in academic performance as well as safety.

With a Safe Routes to School Coordinator in the region, more children will have the opportunity to have education and encouragement activities for walking and biking that is not currently available. This position will not only work with students and parents to improve individual awareness and confidence, but also work with community partners and NCDOT to improve walking and biking conditions where necessary. We believe that having a dedicated coordinator to facilitate the planning, education, and encouragement of active transportation to schools in our region will help improve the health and well-being of our students and residents and the community's quality of life.

The City of Hendersonville's City Council voted unanimously on January 25, 2023, to support LOSRC's request for funding for a Safe Routes to School Coordinator through the Safe Routes to School Program.

Sincerely,
Mayor Barbara M. Volk

CITY OF HENDERSONVILLE



CITY OF HENDERSONVILLE AGENDA ITEM SUMMARY

SUBMITTER: Drew Finley, *Assistant to the Utilities Director* **MEETING DATE:** 1/25/2023

AGENDA SECTION: CONSENT **DEPARTMENT:** Water and Sewer

TITLE OF ITEM: Purchase Approval for New Sewer Vector Truck – *Chad Freeman, Utility Operations Manager*

SUGGESTED MOTION(S):

I move that City Council approve the purchase of the GapVax vector truck described below.

SUMMARY:

The City is in need of a new sewer vector truck. Vector trucks are an integral piece of equipment and are necessary for the inspection, maintenance, and repair of sewer mains. After performing the appropriate due diligence activities required by law, the City has settled on the GapVax brand for this new sewer vector truck. The cost to purchase this vector truck is \$523,071.36. The attached Sourcewell quote provides a pricing summary along with additional information about the truck. City Council approval is required for purchases exceeding \$500,000. We ask that City Council approve this purchase and would be happy to answer any questions.

BUDGET IMPACT: \$ 523,071.36

Is this expenditure approved in the current fiscal year budget? Yes

If no, describe how it will be funded. N/A

ATTACHMENTS:

Sourcewell Quote for GapVax Contract No. 101221-GPV

SOURCEWELL CONTRACT NO. 101221-GPV

GapVax[®]

PREPARED BY

AQUIP

Peter Berko

PREPARED FOR

Tim Sexton

City of Hendersonville Utilities
305 Williams Street
Hendersonville, NC 28792

QUOTE

GapVax[®]



QUOTE ID
22460

UPDATED:
1/4/23



2023 MC1510-3S3X COMBINATION JET/VAC

QUOTE ID: 22460

January 10, 2023

NOTE: THE GAPVAX MC UNIT MAY EXCEED FEDERAL BRIDGE ALLOWABLE WEIGHTS WHEN LOADED WITH WATER, OR DEBRIS, AND/OR BOTH WATER AND DEBRIS COMBINED. PLEASE CONSULT FACTORY.

OPTION DESCRIPTION		NOTES	QTY
CHASSIS OPTIONS			
CHA001	WESTERN STAR 47X-SF (6 X 4) - 455 HP - 66,000 LB. GVWR - AUTO	MODEL YEAR 2023	1
	CUMMINS X12 RATED FOR 455 HP	CONSULT FACTORY	
	ALLISON 6 SPEED AUTOMATIC	PRICES MAY VARY	
	22,000 LB FRONT AXLE		
	46,000 LB REAR AXLE		
	WHITE CAB COLOR		1
	STOCK CHASSIS ARE SUBJECT TO PRIOR SALE, LIMITED QUANTITY ARE AVAILABLE		1
DEBRIS BODY OPTIONS			
STD	10 USABLE YARD DEBRIS TANK MADE OF 3/16" ASTM A-572 GRADE 50 EXTEN STEEL		STANDARD
STD	FULL-OPENING REAR TAILGATE		STANDARD
STD	STAINLESS STEEL TAILGATE SEALING ROD		STANDARD
STD	FOUR HYDRAULIC REAR DOOR LOCKS		STANDARD
STD	DUAL TAILGATE LIFT CYLINDERS		STANDARD
STD	FRONT MOUNTED HOIST CYLINDER, POWER UP AND DOWN, 55,000 LB CAPACITY		STANDARD
STD	THREE TIE-OFF ANCHORS ON TOP OF BODY		STANDARD
STD	FIVE YEAR WARRANTY ON DEBRIS TANK AGAINST RUST THROUGH, DISTORTION AND CRACKS		STANDARD
STD	THREE TIE-OFF ANCHORS ON TOP OF THE BODY 6' APART		STANDARD
A1	DEBRIS BODY FLUSH OUT SYSTEM		1
A2A	DRAIN AT BOTTOM OF TAILGATE - 6" BRASS LEVER VALVE WITH 15' OF LAYFLAT HOSE	VALVE IS NOT 100% LEAK PROOF	1
A3	FLOAT TYPE LIQUID LEVEL INDICATOR ON TAILGATE		1
A12A	FILTER SCREEN FOR DRAIN VALVE (LONG BOX)	REQUIRES A2	1
A24E	FILTER SCREEN FOR 6" OR 4" DECANT VALVE HALF WAY UP THE TAILGATE	REQUIRES A24	1
A21	CURBSIDE LADDER TO PORT INSPECTION AREA		1
A18	PURGE VALVE AT GRAVITY DRAIN (1-1/4" BALL VALVE)		1
A22A	GALVANIZED BOLT ON TAILGATE SPLASH SHIELDS		1
A37A	UPGRADE BODY INLET CANNON TO 12" HX STYLE WITH 3" CLEANOUT		1
A44	PNEUMATIC TAILGATE PROP (IN ADDITION TO STANDARD TAILGATE PROP ROD)		1
WATER TANK OPTIONS			
STD	1500 GALLON WATER TANK MADE OF 3/16" 304 STAINLESS STEEL		STANDARD
STD	4" HIGH ANTI-SIPHON RING WITH (4) 2-1/2" HOLES		STANDARD
STD	WATER TANK LEVEL SIGHT TUBE ON CURBSIDE		STANDARD
STD	DRAIN VALVE AT BOTTOM OF WATER TANK		STANDARD
STD	3" FILL LINE WITH 2-1/2" FIRE HOSE CONNECTION CURBSIDE		STANDARD
STD	3" WATER STRAINER WITH STAINLESS STEEL SCREEN ON WATER TANK FILL LINE		STANDARD

STD	3" SUPPLY LINE TO WATER PUMP MOUNTED AT REAR HINGE PIN	STANDARD
STD	FIVE YEAR WARRANTY ON WATER TANK AGAINST RUST THROUGH, DISTORTION AND CRACKS	STANDARD
B23A	GALVANIZED BAFFLES IN THE WATER TANK	1
B30	UPGRADE TO BUTTERFLY VALVE IN 3" SUPPLY LINE	STANDARD
VACUUM SYSTEM OPTIONS		
STD	TRUE 8" DIAMETER VACUUM SYSTEM	STANDARD
STD	VACUUM PUMP DRIVEN VIA MID-SHIP MOUNTED SPLIT SHAFT TRANSFER CASE GEARBOX (PTO)	STANDARD
STD	NOISE & VIBRATION DAMPENING MOUNTS ON VACUUM PUMP AND TRANSFER CASE	STANDARD
STD	NOISE ATTENUATED VACUUM PUMP DISCHARGE SILENCER WITH RAIN CAP AND DRAIN	STANDARD
STD	24" CENTRIFUGAL CYCLONE SEPARATOR WITH 20" CHAMBER	STANDARD
STD	DUAL STAINLESS STEEL SHUTOFF FLOAT BALLS MOUNTED AT THE REAR OF DEBRIS TANK	STANDARD
STD	STAINLESS STEEL VEE-WIRE SAFETY SCREEN	STANDARD
STD	6" SAFETY VACUUM RELIEF	STANDARD
STD	PANIC SWITCH FUNCTION FOR VACUUM	STANDARD
C8	UPGRADE TO ROOTS TYPE VACUUM PUMP 4,500 CFM AND 18" HG (4) 18" Hg VACUUM RELIEF VALVES	1
C19	UPGRADE TO XL TRANSFER CASE 9-LITER ENGINE = UP TO 5300 CFM, REQUIRES OPTION C8	1
WATER SYSTEM OPTIONS		
STD	TRI-PLEX WATER PUMP SYSTEM	STANDARD
STD	800 PSI WASHDOWN CIRCUIT WITH 50' X 1/2" HOSE	STANDARD
STD	AIR PURGE SYSTEM FOR PRIMARY CIRCUIT	STANDARD
STD	LOW POINT DRAIN VALVES ON WATER LINES	STANDARD
STD	SET WASHDOWN CIRCUIT TO FULL WORKING PRESSURE	OPTION D4 IS RECOMMENDED
D3A	GIANT GP8000 SERIES WATER PUMP RATED 80 GPM @ 2,500 PSI	1
D4	UPGRADE TO URACA MULTIFLOW VALVE - SET WASHDOWN CIRCUIT TO FULL PRESSURE FOR HANDGUN APPLICATIONS	1
D7A	50' X 1/2" HAND GUN REEL FOR WASHDOWN CIRCUIT	1
D20A	NON-REMOVABLE LATERAL HOSE REEL - 150' X 1/2" HOSE	REQUIRES OPTION D4
D28A	GLYCOL INJECTION SYSTEM - JETTER PUMP ONLY	REQUIRES G2
D35D	3/8" HX LANCE WITH 6' EXTENSION AND TURBO NOZZLE	1
BOOM OPTIONS		
STD	8" FRONT MOUNTED TELESOPING BOOM WITH 26' REACH AND 180 DEG. ROTATION	STANDARD
STD	180 DEGREE POWER ROTATION VIA WORM DRIVE	STANDARD
STD	DUAL 4" LIFT CYLINDERS	STANDARD
STD	CAB PROTECTION RACK	STANDARD
E6	REMOTE LUBE FOR BOOM LIFT AND ROTATION	1
HOSE REEL OPTIONS		
STD	FRONT FRAME MOUNTED HOSE REEL WITH 180 DEGREE ARTICULATION	STANDARD
STD	HOSE REEL RATED FOR 800' OF HOSE AND 3,000 PSI	STANDARD
STD	EXTERIOR HOSE EXPANSION RIBS	STANDARD
F1A	FOOTAGE COUNTER ON SIDE OF SPOOL	1
F11	AUTOMATIC HOSE LEVEL WINDER (INCLUDES "J-HOOK" STLYE HOSE GUIDE)	1
CONTROLS, GUAGES, ACCESSORIES OPTIONS		
STD	CAB-MOUNTED AIR SHIFT CONTROLS FOR BLOWER, HYDRAULICS, AND WATER PUMP	STANDARD
STD	CONTROL PANEL MOUNTED AT FRONT HOSE REEL	STANDARD
STD	OPERATOR CONTROL PANEL INCLUDES GUAGES FOR ENGINE, HYDRAULICS, VACUUM, AND WATER PUMP	STANDARD
STD	PANIC SWITCH TO RELIEVE WATER PRESSURE AND VACUUM	STANDARD

Item B.

G2B	G2B CONTROL SYSTEM WITH DM430 DISPLAY INCLUDES:		WIRELESS NOT INCLUDED, SELECT OPTION G19 OR G21 BELOW	Item B.
	LOW WATER SHUTDOWN PROTECTION			
	HIGH WATER TEMPERATURE SHUTDOWN PROTECTION			
	ENGINE OVERSPEED PROTECTION			
	ON-SCREEN DIAGNOSTICS FOR WATER, PTO AND ENGINE LEVELS			
G6	BLOWER TEMPERATURE GUAGE WIRED TO VACUUM RELIEF		1	
G19	WIRELESS REMOTE WITH BOOM AND VACUUM FUNCTIONS		1	
G21-TD	UPGRADE TO AARCOMM TRIDENT REMOTE	REQUIRES OPTION G21	1	
G21-AWR	ADDITIONAL WIRELESS TRANSMITTER	REQUIRES OPTION G19 OR G21	1	
LIGHTING				
STD	TRUCK-LITE LED RUNNING (MARKER) LIGHTS		STANDARD	
STD	LED STOP/TAIL/TURN LIGHT WITH POLISHED STAINLESS STEEL BOXES		STANDARD	
H1	ONE LED STROBE BEACON LIGHT - FRONT (SAE CLASS-1 (SAE J595) COMPLIANT)	(WHELEN L10 OR EQUAL)	1	
H2	ONE LED STROBE BEACON LIGHT - REAR (SAE CLASS-1 (SAE J595) COMPLIANT)	(WHELEN L10 OR EQUAL)	1	
H5B	(2) BOOM WORK LIGHTS - HELLA LED WORK LIGHTS (PN: LHT022429)		1	
H6B	(2) REAR WORK LIGHTS - HELLA LED WORK LIGHTS (PN: LHT022429)		1	
H7BA	(2) SIDE WORK LIGHTS - HELLA LED WORK LIGHTS (PN: LHT022429) (1 PER SIDE)		1	
H22	REAR ARROW LIGHT - LOW PROFILE LED ARROW STICK (CLASS-1 (SAE J595))	WHELEN TAM85 OR EQUAL	1	
STORAGE OPTIONS				
STD	25' FIRE HOSE BASKET		STANDARD	
STD	TWO (2) GALVANIZED STEEL TUBE TRAYS		STANDARD	
I6E-DS	ALUMINUM, 36" WIDE X 24" TALL X 24" DEEP, MOUNTED ON THE DRIVER'S SIDE		1	
I9B	48" TOOL BOX - ALUMINUM, 48" WIDE X 24" TALL X 24" DEEP, MOUNTED ON THE CURBSIDE		1	
I14	TRAFFIC CONE HOLDER ON DRIVER'S SIDE		1	
I16A	WHEEL CHOCK HOLDER (PER SIDE) - DRIVER'S SIDE		1	
I16B	WHEEL CHOCK HOLDER (PER SIDE) - CURBSIDE		1	
I17A	NOZZLE RACK - SIX (6) NOZZLES, 1"		1	
I20A	REAR DRAIN HOSE RACK FOR 6" LAYFLAT HOSE X 15' LONG		1	
CHASSIS OPTIONS				
STD	DOT LIGHTING / FENDERS / MUD FLAPS / TAILGATE SAFETY PROP, ICC LIGHTS		STANDARD	
STD	REMOTE ACTUATED BODY SAFETY PROP		STANDARD	
STD	70 GALLONS AW-46 HYDRAULIC OIL, LEVEL/TEMPERATURE GAUGE, SHUTOFF ON SUCTION		STANDARD	
STD	REAR BUMPER, TRIANGLE KIT, FIRE EXTINGUISHER, BACKUP ALARM		STANDARD	
STD	ALLISON 10-BOLT PTO UPGRADE		STANDARD	
J0	FRONT BUMPER - MAY NOT BE REQUIRED IN ALL STATES		1	
J3	TOW HOOKS FRONT		1	
J4B	TOW HOOKS REAR - FRAME MOUNTED		1	
PAINT OPTIONS				
STD	PAINTED WITH PPG URETHANE PAINT		STANDARD	
STD	PAINT BODY WHITE		STANDARD	
STD	PAINT FRAME AND PARTS BLACK		STANDARD	
STD	PAINT HOSE REEL AND BOOM BLACK		STANDARD	
STD	FLEET FINISH		STANDARD	
MISCELLANEOUS OPTIONS				
STD	25 FEET OF VACUUM TUBING (5) AND CLAMPS		STANDARD	8

STD	TIGER TAIL HOSE GUIDE	STANDARD
STD	TWO BLUE STAR SEWER CLEANING NOZZLES	STANDARD
M3	FILL HOSE 25' X 2 1/2"	1
M5A	LEADER HOSE 20' X 1"	1
M8G	1" PIRHANA SEWER HOSE - 2,500 PSI X 600 FT PLASTIC (ORANGE) (PN: HOS022393)	1
M12	MANHOLE LIFTING HOOK	1
M13	HYDRANT WRENCH	1
M26	1" SIX WIRE EXTENDER	1
M27	TIGER TAIL (TOTAL OF TWO)	1
M28	(5) TRAFFIC CONES - 28" LIME GREEN WITH REFLECTIVE STRIPE	1
M29	ONE CAMERA - BACK-UP CAMERA SYSTEM WITH 7" COLOR MONITOR (RV-505A), INCLUDES DVR-916 REAR CAMERA	1
CUSTOM OPTIONS		
**		
*****	COMPLIMENTARY 40 HOUR TRAINING	1

**PRICING SUMMARY**

PRICE OF BASE UNIT WITH OPTIONS:		\$ 528,747.30
SOURCWELL DISCOUNT:		\$ 7,175.95
DELIVERY: (\$1,000.00 MINIMUM)	@ \$3.00 PER MILE	\$ 1,500.00
ESTIMATED SUBTOTAL:		\$ 523,071.36
SALES TAX:		\$ -
FEDERAL EXCISE TAX (BODY):		\$ -
FEDERAL EXCISE TAX (CHASSIS):		\$ -
TOTAL PRICE (PER UNIT):		\$ 523,071.36

ALL PRICES ARE IN US DOLLARS

DUE TO EXTREME MARKET VOLATILITY AND PENDING U.S. GOVERNMENT SECTION 232 TRADE CASES ALL PRICES AND AVAILABILITY ARE SUBJECT TO CHANGE
WITHOUT NOTICE, ALL QUOTES TO BE CONFIRMED AT TIME OF ORDER

***** FOB DESTINATION *****

SIGNATURE

DATE

Please return a signed copy to betty@gapvax.com**QUOTE ID**

22460

LAST UPDATED:

1/4/23

GapVax Incorporated

Terms and Conditions of Sale

1. **ORDERS.** All orders are subject to acceptance by an officer of GapVax Inc. Orders for products not regularly carried in stock or requiring special engineering or manufacture are in every case subject to approval by an officer of GapVax.
2. **PERFORMANCE.** GapVax Inc. shall not be liable for failure to complete the contract in accordance with its terms if failure is due to wars, strikes, fires, floods, accidents, delays in transportation or other causes beyond its reasonable control.
3. **EXPERIMENTAL WORK.** Work performed at customer's request such as sketches, drawings, design, testing, fabrication and materials shall be charged at current rates.
4. **SKETCHES, ENGINEERING DRAWINGS, MODELS** and all preparatory work created or furnished by GapVax Inc. shall remain its exclusive property; and no use of same shall be made, nor may ideas obtained therefrom be used, except with the consent of and on terms acceptable to GapVax Inc.
5. **CANCELLATION.** Orders regularly entered cannot be canceled except upon terms that will compensate GapVax Inc. for any loss or damage sustained.
6. **SHIPMENT.** All proposals are based on continuous and uninterrupted delivery of the order upon completion unless specifications distinctly state otherwise. In the event that an agreement is reached for GapVax Inc. to store completed items, they will be immediately invoiced to the customer and become due and payable. Storage shall be at the risk of the customer and GapVax Inc. shall be liable only for ordinary care of the property.
7. **CUSTOMER'S PROPERTY.** GapVax Inc. shall charge the customer at current rates, for handling and storing customer's property (e.g., truck chassis) held for more than thirty (30) days after notification of availability for shipment. All customer's property, or third party's property, that is stored by GapVax Inc. is at the customer's or other party's risk. GapVax is not liable for any loss or damage thereto caused by fire, water, corrosion, theft, negligence, or any cause beyond its reasonable control.
8. **PRICES.** All orders are subject to current prices in effect at the time of order acknowledgment. Prices and Specifications are Subject to Change Without Notice. **PRICING DISCLAIMER:** While we make every effort to maintain and preserve pricing accuracy, prices are subject to change without notice. Although the information on this quotation is presented in good faith and believed to be correct at the time of printing, we make no representations or warranties as to the completeness or accuracy of this information. We reserve the right to change, delete, or otherwise modify the pricing information which is represented herein without any prior notice. We carefully check pricing specifications, but occasionally errors can occur, therefore we reserve the right to change such prices without notice. We disclaim all liability for any errors or omissions in the materials. In no event will we be responsible for any damages of any nature whatsoever from the reliance upon information from these materials. Please check your order to confirm your pricing information.
9. **F.O.B. POINT.** Unless otherwise stated, all prices listed are F.O.B. point of manufacture.
10. **TAXES.** Unless specifically stated, prices listed do not include Federal, State, City or other excise occupation, sales, use or similar taxes which are extra and are to be added at rates in effect at time of shipment. If federal Excise Taxes are included or listed on the reverse side of this paper, they are stated at the rates and regulations in effect at the time this order is written and are subject to revision in accordance with rates and regulations in effect at time of shipment.
11. **PRODUCT IMPROVEMENT.** GapVax Inc. reserves the right to change manufacturing specifications and procedures without incurring any responsibility for modifying previously shipped products.
12. **MOUNTING PRICES.** Mounting prices assumes normal factory installation on a truck chassis suitable for the unit purchased. Relocation of batteries, gas tanks, mufflers, air tanks, etc. will be an additional charge, billed at the standard factory labor rate.
13. **WARRANTY.** GapVax Inc. warrants its products to be free from defects in material and workmanship, subject to the limitations and conditions set forth in its current published warranty but makes no warranty of merchantability or fitness for any particular purpose. GapVax Inc. does not assume liability for any loss of product, time or any direct, indirect, or consequential damage, losses or delay or any nature whatsoever. No warranty, express or implied, is made or authorized to be made and no obligation is assumed or authorized to be assumed with respect to products of GapVax Inc. other than that set forth in the current, published warranty. It is to be understood that the acceptance this order is expressly conditioned upon your acceptance of GapVax Inc. standard written warranty for the products sold hereunder. GapVax Inc. hereby disclaims any responsibility or liability for any consequential losses delays or downtime resulting from orders hereunder the use of its products. GapVax does not and will not warranty any tank coating or tank lining. PTO damage is not covered when the PTO protection system or low water shut down system is not selected / installed / and operational. GapVax does not and will not warranty any water system component(s) that show any sign or indication of ice or freeze damage.
14. This agreement shall be construed according to the laws of the State of Pennsylvania. Our failure at any time to exercise any right we may have under the agreement shall not constitute a waiver thereof nor prejudice our right to enforce same thereafter.
15. This order, including the above terms and conditions contains the complete and final agreement between the parties hereto and no other agreement in any way modifying any of said terms and conditions will be binding on us unless in writing and agreed to by authorized representative of this company.



CITY OF HENDERSONVILLE AGENDA ITEM SUMMARY

SUBMITTER: Brian Pahle, Assistant City Manager

MEETING DATE: January 25th, 2023

AGENDA SECTION: Presentations

DEPARTMENT: Administration

TITLE OF ITEM: Edwards Park Update – January 2023 – *Brian Pahle, Assistant City Manager*

SUGGESTED MOTION(S):

N/A

SUMMARY:

An update on the Edwards Park project. Decision on public art expenditure.

BUDGET IMPACT: \$TBD

Is this expenditure approved in the current fiscal year budget? No.

If no, describe how it will be funded. Transfer from General Fund or Allowance/Contingencies in the project fund (21019).

ATTACHMENTS:

Presentation



CITY OF HENDERSONVILLE AGENDA ITEM SUMMARY PLANNING DIVISION

SUBMITTER:	Matthew Manley	MEETING DATE:	January 5, 2023
AGENDA SECTION:	Public Hearing	DEPARTMENT:	Community Development
TITLE OF ITEM:	Zoning Text Amendment: Lightning Ordinance (P22-100-ZTA) – <i>Lew Holloway, Community Development Director</i>		

SUGGESTED MOTION(ZONING TEXT AMENDMENT):

For Recommending Approval:

I move City Council **adopt** an ordinance amending the official City of Hendersonville Zoning Ordinance, Article VI. – General Provisions adding Section 6-19, revising Section 6-2. Nonconformities and Section 6-13. Nuisances and Article VII. Development Review and Article XII. Definition of Terms, based on the following:

1. The petition is found to be consistent with the City of Hendersonville 2030 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition aligns with the Comprehensive Plan's goals to minimize the negative impacts of growth (Strategy LU-3.5) and to protect wildlife habitat (Strategy NR-1.2).

2. We [find] this petition, in conjunction with the recommendations presented by staff, to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because:

1. The proposed text amendment establishes standards which allow for the sufficient and safe lighting of sites while reducing negative impacts on people, plants and animals.
2. The proposed text amendment establishes standards which address light pollution, an issue of growing international, national and regional concern.
3. The text amendment would ensure that both public lighting and private, nonresidential lighting would meet standards that minimize light pollution.

For Recommending Denial:

I move City Council **deny** an ordinance amending the official City of Hendersonville Zoning Ordinance, Article VI. – General Provisions adding Section 6-19, revising Section 6-2. Nonconformities and Section 6-13. Nuisances and Article VII. Development Review and Article XII. Definition of Terms based on the following:

1. The petition is found to be consistent with the City of Hendersonville 2030 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition aligns with Goal LU-10 of the Land Use and Development Chapter which calls for maintaining a highly urban, pedestrian-focused environment through building and streetscape design.

2. We [do not find] this petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because:

1. The text amendment would place an undue burden on new commercial and multi-family residential developments.
2. The text amendment would place an undue burden on existing commercial and multi-family residential uses at the end of the amortization period.

[DISCUSS & VOTE]

[DISCUSS & VOTE]	
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This item will also require a second motion to adopt the Code of Ordinance Amendment to Chapter 46. The suggested motion for that action is:

SUGGESTED MOTION (CODE OF ORDINANCES):

I move that City Council adopt *An Ordinance of the City of Hendersonville City Council to Amend Chapter 46 – Streets, Sidewalks, and Other Public Places* adding Article VI – *Street Lights* to the Code of Ordinances as presented for the first reading.

***SUMMARY:** The City of Hendersonville initiated efforts related to this text amendment at the behest of City Council and the Planning Board in early 2021. Initial request revolved around the concept of “Dark Sky compliance”. Initial drafts of the ordinance were based on the Model Light Ordinance (MLO) provided by the International Dark Sky Association in conjunction with the Illuminating Engineering Society (IES). A local “Lighting Ordinance Subcommittee” as well as the Business Advisory Council reviewed these initial drafts in 2021. Ultimately it was determined that a simplified Lighting Ordinance would be preferred. The current draft is based on the efforts to create a simple but effective set of standards for exterior, commercial and multi-family lighting.*

The proposed standards apply to non-residential and multi-family uses while single-family and two-family residential uses are exempt. The draft ordinance primarily addresses uplight on these properties and protects the stream buffer from light trespass. The proposal also addresses streetlighting with a provision in the City Code of Ordinances restricting lighting on local streets to ensure there is limited uplight.

Many of the basic standards of the proposed text amendment were provided by representatives of the Business Advisory Council / PEP. The proposed draft combines this input with the input from staff and elected and appointed officials. A version of the current draft was reviewed and supported by the Legislative Committee of the Planning Board in October 2022. At least one member of this committee also participated in the Lighting Ordinance Subcommittee which convened across 2021. The draft was also reviewed by the Business Advisory Council on December 5, 2022. The BAC was not in favor of the ordinance and provided specific feedback on proposed revisions outlined in the staff report. The Planning Board considered this item on December 12, 2022 and voted 4-3 in favor of the draft ordinance.

PROJECT/PETITIONER NUMBER:	P22-100-ZTA
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PETITIONER NAME:	City of Hendersonville
ATTACHMENTS:	<ol style="list-style-type: none">1. Staff Report2. Planning Board Summary3. Draft Zoning Ordinance – Lighting Standards4. Draft Code of Ordinances – Street Light Standards5. Collaboration Exhibit of Draft Ordinance6. Draft Lighting Ordinance w/Clarifications7. Lighting Inventory and Estimated Replacement Cost

ZONING TEXT AMENDMENT: LIGHTING STANDARDS &
CITY CODE OF ORDINANCES AMENDMENT: STREET LIGHTING
(P22-100-ZTA)

CITY OF HENDERSONVILLE - COMMUNITY DEVELOPMENT STAFF REPORT

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PROJECT SUMMARY

- Project Name & Case #:
 - Lighting Ordinance
 - P22-100-ZTA
- Applicant:
 - City of Hendersonville
- Zoning Code Articles Amended:
 - Article VI. General Provisions
 - Addition of Sec. 6-19
 - Amendment to Sec. 6-2
 - Amendment to Sec. 6-13
 - Article VII. Development Review
 - Amendment to 7-3-4.3 Contents of Final Site Plan
 - Article XII. Definition of Terms
- City Code of Ordinances Amended:
 - Chapter 46 – Streets, Sidewalks, and Other Public
 - Article VI – Street Lights
- Planning Board - Legislative Committee Meeting
 - October 18, 2022
- Business Advisory Board
 - December 5, 2022
- Summary Basics:
 - The petition proposes to set lighting standards for Non-residential and Multi-Family uses
 - Standards do not apply to Single & Two-Family Residential uses.
 - Proposes: Zero Uplight; IES standards; CCT limit 4,000K; CRI limit 70; prohibition of unshielded floodlights and wall packs; max footcandles at property lines; protection of stream buffer

*Summary of Amendment Petition:*

The City of Hendersonville initiated efforts related to this text amendment at the behest of City Council and the Planning Board in early 2021. Initial request revolved around the concept of “Dark Sky compliance”. Initial drafts of the ordinance were based on the Model Light Ordinance (MLO) provided by the International Dark Sky Association in conjunction with the Illuminating Engineering Society (IES). A local “Lighting Ordinance Subcommittee” as well as the Business Advisory Council reviewed these initial drafts in 2021. Ultimately it was determined that a simplified Lighting Ordinance would be preferred. The current draft is based on the efforts to create a simple but effective set of standards for exterior, commercial and multi-family lighting.

Many of the basic standards of the proposed text amendment were provided by representatives of the Business Advisory Council. The proposed draft combines this input with the input from staff and elected and appointed officials. A version of the current draft was reviewed by the Legislative Committee of the Planning Board in October 2022. At least one member of this committee also participated in the Lighting Ordinance Subcommittee which convened across 2021.

The proposed standards apply to non-residential and multi-family uses while single-family and two-family residential uses are exempt. The proposal also addresses streetlighting with a provision in the City Code of Ordinances restricting lighting on local streets to ensure there is limited uplight.

AMMENDMENT ANALYSIS – AMENDMENT OVERVIEW

The effort to establish a Lighting Ordinance for the City of Hendersonville has been underway for over two years. Advocacy efforts to address local light pollution were initiated by the concept of becoming “dark sky compliant”. Over the course of many conversations with elected and appointed officials, stakeholders and local advocates, the details of how to address concerns related to light pollution were illuminated.

Over the two years that this topic has been researched and discussed, numerous rounds of meetings have been held and many of hours of staff time have been devoted to it. Initial efforts to draft the ordinance were done by staff in conjunction with an appointed Lighting Ordinance / Dark Sky Committee. This committee was comprised by members of the Planning Board, the Historic Preservation Commission, Dark Sky advocates and local lighting experts. The initial “Model Light Ordinance” based draft was supported by this committee. The Business Advisory Committee also reviewed the MLO-based draft and expressed concerns with some of the proposed standards. After multiple meetings with the BAC, Planning staff put the ordinance on hiatus while efforts were made to collaborate with local lighting experts from GE, representatives appointed by the BAC and Duke Energy. This collaboration led to the restructured ordinance that is presented in this staff report.

Current language in the Zoning Code regarding exterior lighting is found in one sentence in Section 6-13. Nuisances. This nuisance standard lacks measurable outcomes and does not set clear goals for development/redevelopment nor does it reflect the desired outcomes of the community when it comes to the cumulative effect of exterior lighting – i.e. light trespass, sky glow, impact on natural environment, and energy consumption.

The current language in the Zoning Code reads as follows:

Section 6-13-4 - Lighting.

Lighting facilities, if provided, shall be aimed, directed, shielded or arranged so the light sources for such facilities do not cause undue glare on neighboring properties or interfere with the safe use of public rights-of-way.

The proposed draft Lighting Ordinance is based on an effort to establish standards which:

- 1) Are easily understood and achievable
- 2) Can be reviewed and enforced by City staff
- 3) Addresses both publicly-owned and privately-owned lighting facilities
- 4) Meets the “intent” stated in Section 6-19 below.

The proposed Lighting Ordinance reads as follows:

ZONING TEXT AMENDMENT – OUTDOOR LIGHTING STANDARDS

Article VI. - General Provisions

Section 6-19. Lighting.

Intent. The purpose of these standards is as follows:

- a) Minimize adverse offsite impacts of lighting such as light trespass and obtrusive light.
- b) Curtail light pollution, reduce skyglow and improve the nighttime environment.
- c) Help protect the natural environment from the adverse effects of artificial lighting at night.
- d) Conserve energy and resources to the greatest extent possible.

6-19.1. General Standards of Applicability. The lighting standards of this section shall be applicable as follows:

- a) Non-residential uses shall be subject to these standards. For the purposes of these standards non-residential shall include, but not be limited to, commercial, institutional, educational, industrial, etc.
- b) Multi-family residential uses shall be subject to these standards. For the purposes of these standards multi-family residential shall include all residential uses with three or more attached dwelling units.
- c) Residential uses shall be exempted from these standards. For the purposes of these standards, residential uses shall include all single family & two-family residences.
- d) Street and roadway lighting shall be exempt from these standards. Street and roadway lighting are subject to the standards of the City of Hendersonville Code of Ordinances (Chapter 46, Article VI).
- e) For the purposes of these standards the term “stream buffer” shall refer to the term as defined in Section 17-3 of this ordinance.

6-19.2. Standards

All new exterior lighting installed, after the effective date of this Ordinance and within the zoning jurisdiction of the City of Hendersonville, shall comply with the following standards:

- a) Lighting levels and placement shall be designed in accordance with applicable Illuminating Engineering Society (IES) recommended practices.
- b) Lighting shall be designed to an Uplight ratio of zero (0) and designed to limit Backlight trespass.
 - a. Exceptions. Lighting for flagpoles, sports facilities, temporary construction sites, correctional facilities, lighting used solely for signage (see sign regulations), lighting as needed under emergency conditions, low voltage landscape lighting, temporary seasonal lighting, and ornamental and architectural lighting of bridges, public monuments, statuary and public buildings.
- c) The nominal CCT limit shall be $\leq 4,000K$

- d) The CRI limit shall be ≥ 70 .
- e) New floodlights shall be prohibited. Replacement area lighting shall be shielded to prevent uplight and to prevent front, side, and/or back light depending on the implications on surrounding properties.
- f) All wall pack lights shall be full cutoff and shielded.
- g) The maximum light level using maintained lumens shall be no more than 0.5 foot candles for a non-residential to residential/multi-family residential use interface.
- h) The maximum light level using maintained lumens shall be no more than 0.25 foot candles for a multi-family residential-to-residential interface.
- i) The maximum light level using maintained lumens shall be no more than 0.0 foot candles for a non-residential/multifamily residential to Stream Buffer interface.
- j) No lights shall be installed within a Stream Buffer except as described below. Lighting may be permitted within a Stream Buffer only where facilities exempted under Section 17-3-5 are located and shall be oriented to minimize light intrusion within the Stream Buffer.

6-19-3. Existing Exterior Lighting.

Non-compliant lighting installed prior to the effective date of this ordinance shall be considered non-conforming and may continue to be used in accordance with the non-conforming standards found in Section 6-2-5 with the following exception:

- a) Amortization. On or before [INSERT 10 YEARS FROM EFFECTIVE DATE], all exterior lighting shall comply with this Code.

Section 6-2. - Nonconformities

6-2-5 Nonconforming Exterior Lighting.

The following applies to existing non-compliant lighting installed prior to [adoption date of ordinance].

6-2-5.1 Thresholds for compliance.

Full compliance with the lighting requirements in Section 6-19 shall be required under the following circumstances:

- a) When repairing 50% or more of total existing exterior lighting fixtures on a site within any 12-month period.
- b) When expanding, moving, or altering 50% or more of an existing parking or lighted area.
- c) When structures on a site with non-conforming lighting are renovated and the total cost of renovations exceeds 50% of the assessed value of the building according to Henderson County tax records

Section 6-13. - Nuisances

6-13-4 Lighting.

Lighting facilities, if provided, shall be aimed, directed, shielded or arranged so the light sources for such facilities do not cause undue glare on neighboring properties or interfere with the safe use of public rights-of-way to mitigate off-site lighting trespass to surrounding properties.

Article VII Development Review

7-3-4.3 Contents of Final Site Plan.

r) Site Lighting Plan conforming with the standards established in Section 6-19 and Section 6-2-5. Such plan shall include proposed fixture list, location and orientation of fixtures, footcandle map, property lines and stream buffers at a minimum.

Article XII. – Definition of Terms

Uplight – For an exterior light fixture, light output emitted into the hemisphere above the horizontal plane of the light emitting light opening (i.e. above 90° from straight down) (see Figure 1)

Backlight – For an exterior light fixture, light output emitted into the lower rear quarter sphere behind the fixture and opposite the intended aiming direction of the fixture. For a light fixture with a symmetric light output pattern, the backlight is the same as the forward light. (see Figure 1)

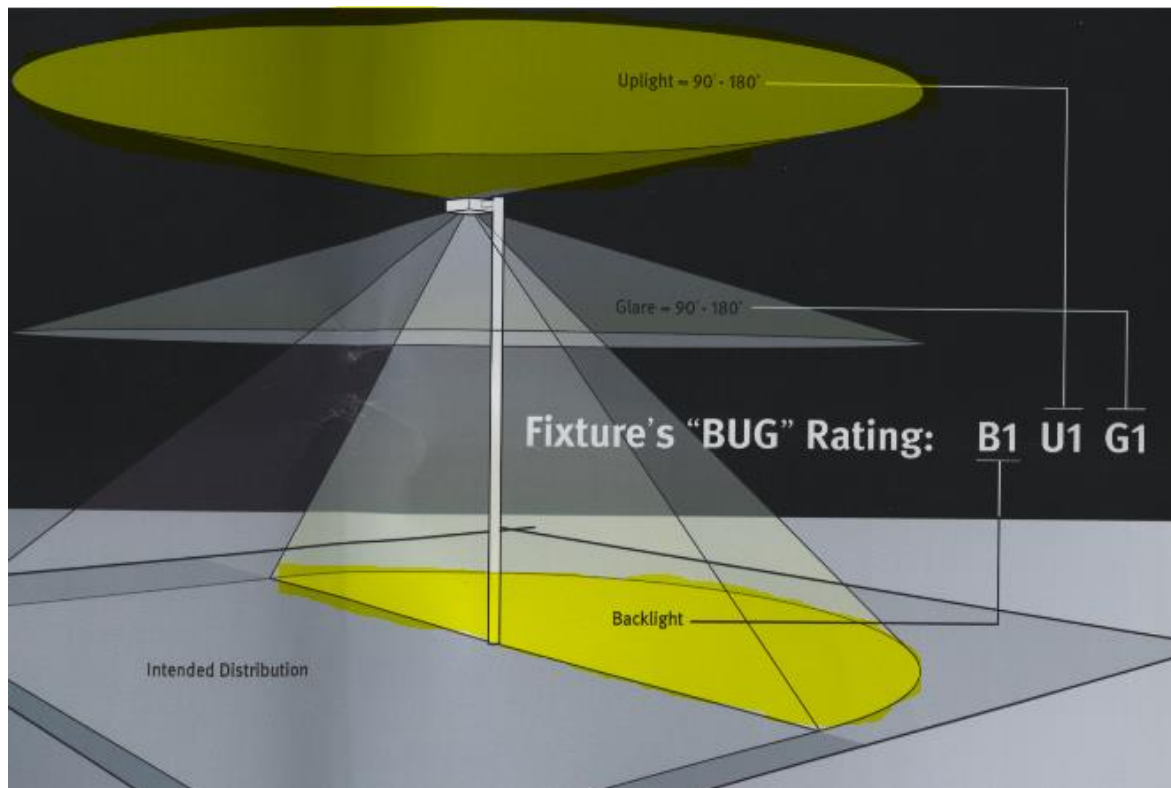


Figure 1 (provided by International Dark Sky Association & Illuminating Engineering Society)

Lumen - The unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire (as distinct from “watt,” a measure of power consumption).

Footcandle (FC) - A unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot

Correlated Color Temperature (CCT) - A description of the color appearance of a light source in terms of warmth (lower temperatures) or coolness (higher temperatures), as measured on the Kelvin (K) scale (i.e. High Pressure Sodium 2200K, Metal Halide 3000-4200K, moonlight 4100K)

Color Rendering Index (CRI) - A method to describe the effect a light source (from 0 poor to 100 best) has on the observer's ability to differentiate the true color of objects being illuminated (High Pressure Sodium 27, Metal Halide 65-80, LED 70-90, sunlight 100)

CODE OF ORDINANCES AMENDMENT – STREET LIGHT STANDARDS

Chapter 46 – Streets, Sidewalks, and Other Public Places

Article VI – Street Lights

Sec. 46-184. – Definitions

Whenever and wherever used in this article the following words and names shall have the following meanings:

Roadway or Highway Lighting shall mean lighting provided for freeways, expressways, limited access roadways, and roads on which pedestrians, cyclists, and parked vehicles are generally not present. The primary purpose of roadway or highway lighting is to help the motorist remain on the roadway and help with the detection of obstacles within and beyond the range of the vehicle's headlights.

Street Lighting shall mean lighting provided for boulevards, major & minor thoroughfares, and local roads where pedestrians and cyclists are generally present. The primary purpose of street lighting is to help the motorist identify obstacles, provide adequate visibility of pedestrians and cyclists, and assist in visual search tasks, both on and adjacent to the roadway.

Ornamental Street Lighting shall mean a luminaire intended for illuminating streets that serves a decorative function in addition to providing optics that effectively deliver street lighting. It has a historical period appearance or decorative appearance, and has the following design characteristics:

- Designed to mount on a pole using an arm, pendant, or vertical tenon;
- Opaque or translucent top and/or sides;
- An optical aperture that is either open or enclosed with a flat, sag or drop lens;
- Mounted in a fixed position.

Sec. 46-185. – Applicability

All street lighting not governed by regulations of federal, state or other superseding jurisdiction.

Sec. 46-186. - Light Shielding and Distribution

All street lighting shall have no light emitted above 90 degrees with the following exception:

- a) Ornamental street lighting for specific districts or projects shall be permitted.

PUBLIC INPUT / RECOMMENDATION

Legislative Committee of the Planning Board – October 18, 2022

The Legislative Committee reviews all text amendments prior to consideration by the Planning Board. Given the number of iterations and the level of review this topic has received over a two-year period, members of this committee were fairly familiar with the proposed standards as well as the modifications that occurred between the initial MLO-based draft and the current draft. Members of the committee preferred this simplified version and express support for its straightforward applicability for both developers and staff.

Business Advisory Committee – December 5, 2022

The Business Advisory Committee convenes quarterly to review policy decisions and to provide perspective on potential impacts on the business community. The initial MLO-based draft of the Lighting Ord was presented to the BAC in 2021 on multiple occasions. The Business Advisory Committee employed assistance from Partnership for Economic Prosperity (PEP) to advocate for many of the changes that are part of the current draft. Based on their feedback, the Ordinance was significantly simplified.

At their special-called meeting on December 5th, The BAC reviewed the current draft of the lightning ordinance and provided further criticism and reservations about the policies therein. There was a general sense that there was no need for the Lightning Ordinance, that this would create an undue burden, specifically, on the business community, that the measures would limit lighting for businesses and create safety issues. More specifically, their concerns centered on a few primary considerations, with some secondary concerns as well. Primary concerns/recommendations included:

1) Expand the Footcandle restriction at property lines where commercial uses transition to residential uses from .5 Footcandles to 1 Footcandle.

BAC Rationale: Original proposal by PEP was for 1 FC and it was reduced to .5 FC based on recommendation from Duke Energy.

2) Eliminate the Amortization date or, at a minimum, expand it to 15 years.

BAC Rationale: The use of amortization is rarely used, why use it in this case? The enforcement after the 10-year period will be very costly for the City and for taxpayers. The enforcement of footcandles at property lines is difficult to measure. And natural attrition of outdated lights will be sufficient.

3) Clarify the implications of the word “altering” under 6-2-5.1 b) - nonconformity triggers.

BAC Rationale: Altering could mean different things to different administrators. Does it include resurfacing an existing asphalt parking lot? Does it include paving a gravel parking lot? Etc.

Other secondary concerns included, the impact the measures would have on 24 hours businesses, concerns with the limitations in the stream buffer, and general concerns with the city’s ability to enforce footcandles.

AMENDMENT ANALYSIS – COMPREHENSIVE PLAN CONSISTENCY (ARTICLE 11-4)

COMPREHENSIVE PLAN CONSISTENCY	
Land Use & Development	<i>Strategy LU-3.5 Minimize negative impacts from growth and land use changes on existing land uses...</i>
	<p><i>Strategy LU-3.6. - Update the Zoning Code to ensure conformance with the Comprehensive Plan. The Zoning Code is the City's primary regulatory tool in implementing the Comprehensive Plan. Amendments to the Zoning Code and Map will be necessary to reflect Comprehensive Plan recommendations and ensure orderly growth and development. [CONSISTENT]</i></p> <p><i>Action LU-3.6.1 Conduct a comprehensive review of the Zoning Code and Map to identify and prioritize necessary changes, including but not limited to:</i></p> <ul style="list-style-type: none"> - <i>Landscaping and urban design guidelines and standards</i>
	<i>Section 8.2 Issues and Opportunities, Urban Design - There is strong support among Hendersonville citizens for green building and site development practices that maximize energy and water efficiency and respect the natural features on a site.</i>
Population & Housing	There are no Goals, Strategies, or Actions that are directly applicable to this petition.
Natural & Environmental Resources	<p><i>Chapter 3 Natural Resources provides specific support for "additional guidelines and provisions for low-impact building and site design."</i></p> <p><i>Strategy NR-1.2: Protect land adjacent to streams in order to protect water quality, reduce erosion, and protect wildlife habitat.</i></p> <p><i>Action NR-1.2.2 Continue to enforce and improve upon the City Stream Buffer Protection Standards...additional guidelines and provisions for low-impact building and site design.</i></p> <p><i>Action NR-1.2.1 Encourage protection of streams and wetlands and land adjacent to them.</i></p>
Cultural & Historic Resources	There are no Goals, Strategies, or Actions that are directly applicable to this petition.
Community Facilities	There are no Goals, Strategies, or Actions that are directly applicable to this petition.
Water Resources	There are no Goals, Strategies, or Actions that are directly applicable to this petition.
Transportation & Circulation	There are no Goals, Strategies, or Actions that are directly applicable to this petition.

GENERAL REZONING STANDARDS

Compatibility	Whether and the extent to which the proposed amendment is compatible with existing and proposed uses surrounding the subject property –
	<i>The proposed text amendment allows for the sufficient and safe lighting of sites while reducing negative impacts.</i>
Changed Conditions	Whether and the extent to which there are changed conditions, trends or facts that require an amendment –
	<i>Increases in light pollution, a regional as well as international issue, has brought greater attention to site lighting. Advancements by lighting industry leaders and improvements in lighting technology have provided solutions to mitigate the impacts of site lighting. Many solutions to light pollution are being implemented by the lighting industry without regulatory requirements.</i>
Public Interest	Whether and the extent to which the proposed amendment would result in a logical and orderly development pattern that benefits the surrounding neighborhood, is in the public interest and promotes public health, safety and general welfare –
	<i>The proposed text amendment allows for the sufficient and safe lighting of sites while reducing negative impacts of light pollution, i.e. sky glow, glare, light trespass, etc. A notable negative impact of light pollution on humans is sleep deprivation while flora and fauna are also disrupted by artificial light during hours of natural darkness.</i>
Public Facilities	Whether and the extent to which adequate public facilities and services such as water supply, wastewater treatment, fire and police protection and transportation are available to support the proposed amendment
	<i>Lighting for city-owned public facilities as well as public streetlighting were evaluated as part of this process. It is estimated that approximately \$20K would be needed to bring the City's lights into conformance with the proposed amendment.</i>
Effect on Natural Environment	Whether and the extent to which the proposed amendment would result in significantly adverse impacts on the natural environment including but not limited to water, air, noise, storm water management, streams, vegetation, wetlands and wildlife –
	<i>Studies have indicated that a range of flora and fauna are disrupted by artificial light during normal / natural dark hours. The proposed text amendment aims to protect stream buffers. Riparian corridors are locations of high levels of species richness. Additionally, reduced light pollution reduces energy waste and allows for more sustainable site development.</i>

DRAFT COMPREHENSIVE PLAN CONSISTENCY AND REZONING REASONABLENESS STATEMENT

The petition is found to be [consistent] with the City of Hendersonville 2030 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition aligns with the Comprehensive Plan's goals to minimize the negative impacts of growth (Strategy LU-3.5) and to protect wildlife habitat (Strategy NR-1.2).

We [find] this city-initiated petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because:

DRAFT [Rationale for Approval]

- *The proposed text amendment establishes standards which allow for the sufficient and safe lighting of sites while reducing negative impacts on people, plants and animals.*
- *The proposed text amendment establishes standards which address light pollution, an issue of growing international, national and regional concern.*
- *The text amendment would ensure that both public lighting and private, nonresidential lighting would meet standards that minimize light pollution.*

DRAFT [Rational for Denial]

- *The text amendment would place an undue burden on new commercial and multi-family residential developments.*
- *The text amendment would place an undue burden on existing commercial and multi-family residential uses at the end of the amortization period.*



PLANNING BOARD RECOMMENDATION

Project #: P22-100-ZTA

Meeting Date: December 12, 2022

PETITION REQUEST: Zoning Text Amendment – Lighting Ordinance

APPLICANT/PETITIONER: City of Hendersonville

PLANNING BOARD ACTION SUMMARY:

Staff gave a presentation on the proposed draft ordinance including feedback from the committee level including the recommendation from the Business Advisory Council. Staff reviewed the guidance from the Comprehensive Plan and the criteria for considering a zoning text amendment. A Planning Board member presented photos of local parking lot lighting. The Planning Board considered this item for just over two hours.

Members of the public asked questions and expressed their opinions on the matter at hand. Those opposed to aspects of the ordinance included the following:

1. Susan Frady, Partners for Economic Progress – voiced the following concerns about the ordinance: burden to limit to .5 footcandles instead of a 1 footcandle limit, City's ability to enforce the ordinance, cost to the City, using amortization vs non-conforming triggers, and the exemption for ornamental lights gives the City a pass.
2. Ken Gordon, Norm's Minit Mart - voiced the following concerns about the ordinance: amortization is burden for current businesses and not cost-effective for City to enforce, opposed to stream buffer limitations, and nuisance-based enforcement is not practical nor fair.
3. Ken Fitch, 1046 Patton St – voiced the following concerns about the ordinance: concerned about impact to churches, definition of stream buffer, and reflective light.

Those in favor of the ordinance included:

1. Lynne Williams, Chadwick Ave – supportive of Dark Sky efforts, finds the ordinance forward-thinking, and relieved that action is being taken after the issue has been discussed at the board level for years.

The Planning Board discussed and reflected varying opinions on various aspects of the draft ordinance. Some members who were opposed had the following concerns: the ordinance is too hard to understand, there needs to be a definition for 'repair', enforcement at end of amortization too difficult, there are no exceptions for certain non-residential uses such as churches and hospitals and concern over impacts to small businesses.

Those Planning Board members in support of the ordinance expressed the following: the proposed language does not restrict light levels on a site, it just requires that it be shielded; they pointed out the number of local jurisdictions in the region that have lighting ordinances with amortization dates; and enumerated the concessions that have been made between the MLO version and the current draft ordinance, and one of the members supported the amortization as a small business owner.

MOTION:

Mr. Brown made a motion to approve the petition. The motion passed 4-3 with the following language:

COMPREHENSIVE PLAN CONSISTENCY AND REASONABLENESS STATEMENT:

The petition is found to be consistent with the City of Hendersonville 2030 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition aligns with the Comprehensive Plan's goals to minimize the negative impacts of growth (Strategy LU-3.5) and to protect wildlife habitat (Strategy NR-1.2).

REASONABLENESS STATEMENT

We find this petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because:

[Rationale for Approval]

1. *The proposed text amendment establishes standards which allow for the sufficient and safe lighting of sites while reducing negative impacts on people, plants and animals.*
2. *The proposed text amendment establishes standards which address light pollution, an issue of growing international, national and regional concern.*
3. *The text amendment would ensure that both public lighting and private, nonresidential and multi-family lighting would meet standards that minimize light pollution.*

BOARD ACTION

- **Motion/Second:** Brown / Glassman
- **Yeas:** Brown, Martin, Cromar, Glassman
- **Nays:** Robertson, Blatt, Hanley
- **Absent:** Peacock, Flores
- **Recused:** N/A

Ordinance #23-05

AN ORDINANCE OF THE CITY OF HENDERSONVILLE CITY COUNCIL TO AMEND THE CITY OF HENDERSONVILLE ZONING ORDINANCE, ARTICLE VI – GENERAL PROVISIONS ADDING SECTION 6-19 AND REVISING SECTION 6-2.

NONCONFORMITIES AND SECTION 6-13. NUISANCES AND ARTICLE VII DEVELOPMENT REVIEW REVISING SECTION 7-3 AND ARTICLE XII – DEFINITION OF TERMS TO REGULATE THE INSTALLATION ON-SITE LIGHTING FOR CERTAIN LAND USES WITHIN THE CITY OF HENDERSONVILLE.

WHEREAS, the City of Hendersonville’s Planning Board has reviewed and recommended for adoption a zoning text amendment to establish Lighting Standards for non-residential and multi-family land uses within the City of Hendersonville’s zoning jurisdiction; and

WHEREAS, the proposed amendment is intended to encourage compatible redevelopment and infill development by reducing the potential negative impacts of these projects on existing development and on natural resources; and

WHEREAS, City Council desires to minimize adverse offsite impacts of lighting such as light trespass and obtrusive light, curtail light pollution, reduce skyglow, improve the nighttime environment, help protect the natural environment from the adverse effects of artificial lighting at night and conserve energy and resources to the greatest extent possible.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Hendersonville, North Carolina that Article VI. – General Provisions, Article VII. Development Review and Article XII. Definition of Terms of the Zoning Ordinance of the City of Hendersonville be amended to add the following:

Article VI. - General Provisions

Section 6-19. Lighting.

Intent. The purpose of these standards is as follows:

- a) Minimize adverse offsite impacts of lighting such as light trespass and obtrusive light.
- b) Curtail light pollution, reduce skyglow and improve the nighttime environment.
- c) Help protect the natural environment from the adverse effects of artificial lighting at night.
- d) Conserve energy and resources to the greatest extent possible.

6-19-1. General Standards of Applicability. The lighting standards of this section shall be applicable as follows:

- a) Non-residential uses shall be subject to these standards. For the purposes of these standards non-residential shall include, but not be limited to, commercial, institutional, educational, industrial, etc.
- b) Multi-family residential uses shall be subject to these standards. For the purposes of these standards multi-family residential shall include all residential uses with three or more attached dwelling units.
- c) Residential uses shall be exempted from these standards. For the purposes of these standards, residential uses shall include all single family & two-family residences.
- d) Street and roadway lighting shall be exempt from these standards. Street and roadway lighting are subject to the standards of the City of Hendersonville Code of Ordinances (Chapter 46, Article VI).
- e) For the purposes of these standards the term “stream buffer” shall refer to the term as defined in Section 17-3 of this ordinance.
- f) All new exterior lighting fixtures and site lighting installed, after the effective date of this Ordinance and within the zoning jurisdiction of the City of Hendersonville, shall comply with the standards established in Sections 6-19.2., 6-19.3. and 6-19.4. unless exempted.

6-19-2. Lighting Fixture Standards

- a) Lighting fixtures shall be designed with an uplight rating of U0 per IES TM-15 and designed to limit Backlight trespass.
- b) New floodlights shall be prohibited. Replacement area lighting shall be shielded to prevent uplight and to prevent front, side, and/or back light depending on the implications on surrounding properties.
- c) All wall pack lights shall be full cutoff and shielded.
- d) The following applications are exempted from 6-19-2 (a), (b) & (c); all other standards of Section 6-19 shall apply:
 - i. flagpoles
 - ii. sports facilities
 - iii. temporary construction sites
 - iv. correctional facilities
 - v. lighting used solely for signage (see sign regulations)
 - vi. temporary lighting as needed under emergency conditions
 - vii. low voltage landscape lighting
 - viii. temporary holiday lighting
 - ix. ornamental and architectural lighting of/for:
 - 1. bridges
 - 2. public monuments
 - 3. statuary
 - 4. church spires, belfries, cupolas and domes not intended for human occupancy
 - 5. structures individually listed or within a National Register Historic District
 - 6. public buildings
- e) The nominal CCT of lighting fixtures shall be $\leq 4,000K$

- f) The CRI of lighting fixtures shall be ≥ 70 .

6-19-3. Site Lighting Standards

- a) Lighting levels and placement shall be designed in accordance with applicable 2020 Illuminating Engineers Society (IES) Lighting Library Standards Collection recommended practices.
- b) The maximum light level using maintained lumens shall be no more than 0.5 foot candles for a non-residential to residential/multi-family residential use interface at the ground level of the property line.
- c) The maximum light level using maintained lumens shall be no more than 0.25 foot candles for a multi-family residential-to-residential use interface at the ground level of the property line.
- d) The maximum light level using maintained lumens shall be no more than 0.0 foot candles for a non-residential/multifamily residential to stream buffer interface at the ground level of the edge of the stream buffer.
- e) No lights shall be installed within a Stream Buffer except as described below. Lighting may be permitted within a Stream Buffer only where facilities exempted under Section 17-3-5 are located and shall be oriented to minimize light intrusion within the Stream Buffer.
- f) For the purposes of this section maintained lumens shall mean L80 or 80% of initial lumens.
- g) Sites with compliant lighting plans shall be deemed compliant with these standards when the fixtures are installed as shown on an approved lighting plan as to type, orientation, location, height, shielding and rating of fixtures.
- h) A lighting plan is not required to take into account lighting sources external to the site.

6-19-4. Existing Exterior Lighting.

Non-compliant lighting installed prior to the effective date of this ordinance shall be considered non-conforming and may continue to be used in accordance with the non-conforming standards found in Section 6-2-5 with the following exception:

- a) Amortization. On or before [INSERT 10 YEARS FROM EFFECTIVE DATE], all exterior lighting shall comply with this Code.

Section 6-2. - Nonconformities

6-2-5 Nonconforming Exterior Lighting.

The following applies to existing non-compliant lighting installed prior to [adoption date of ordinance].

Full compliance with the lighting requirements in Section 6-19 shall be required under the following circumstances:

- a) When repairing or replacing 50% or more of total existing exterior lighting fixtures on a site within any 12-month period; provided however any replacement of a floodlight shall be required to meet the standards of section 6-19-2(b).
- b) When expanding or improving 50% or more of an existing parking or lighted area. Examples of activities that would trigger compliance under 6-2-5(b) include; paving an unpaved parking lot,

adding 20 additional parking spaces to an existing 40 space lot or adding bio-retention facilities to 12 spaces in a 20 space lot. Examples of activities that would not trigger compliance include: repaving an existing paved lot, reorganizing spots within an existing lot or adding 10 spaces to an existing 25 space lot.

- c) When structures on a site with non-conforming lighting are renovated and the total cost of renovations exceeds 50% of the assessed value of the building according to Henderson County tax records.

Section 6-13. - Nuisances

6-13-4 Lighting.

Lighting facilities, if provided, shall be aimed, directed, shielded or arranged ~~so the light sources for such facilities do not cause undue glare on neighboring properties or interfere with the safe use of public rights-of-way~~ to mitigate off-site lighting trespass to surrounding properties.

Article VII Development Review

7-3-4.3 Contents of Final Site Plan.

- r) Site Lighting Plan conforming with the standards established in Section 6-19. Such plan shall include proposed fixture list including type, orientation, location, height, shielding and rating of fixtures, footcandle map, property lines and stream buffers at a minimum.

Article XII. – Definition of Terms

Uplight – For an exterior light fixture, light output emitted into the hemisphere above the horizontal plane of the light emitting light opening (i.e. above 90 from straight down) (see Figure 1)

Backlight – For an exterior light fixture, light output emitted into the lower rear quarter sphere behind the fixture and opposite the intended aiming direction of the fixture. For a light fixture with a symmetric light output pattern, the backlight is the same as the forward light. (see Figure 1)

Lumen - The unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire (as distinct from “watt,” a measure of power consumption).

Maintained Lumens - The lumen output remaining, at a selected operating time, expressed as a percentage of the initial lumen output of a fixture.

Footcandle (FC) - A unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot

Correlated Color Temperature (CCT) - A description of the color appearance of a light source in terms of warmth (lower temperatures) or coolness (higher temperatures), as measured on the Kelvin (K) scale (i.e. High-Pressure Sodium 2200K, Metal Halide 3000-4200K, moonlight 4100K)

Color Rendering Index (CRI) - A method to describe the effect a light source (from 0 poor to 100 best) has on the observer's ability to differentiate the true color of objects being illuminated (High Pressure Sodium 27, Metal Halide 65-80, LED 70-90, sunlight 100)

Illuminating Engineering Society (IES) – Established in 1906, the IES is the recognized technical and educational authority on illumination. Their mission is to improve the lighted environment by bringing together those with lighting knowledge and by translating that knowledge into actions that benefit the public.

Adopted by the City Council of the City of Hendersonville, North Carolina on this 5th day of January, 2023.

Attest:

Barbara G. Volk, Mayor, City of Hendersonville

Jill Murray, City Clerk

Approved as to form:

Angela S. Beeker, City Attorney

**AN ORDINANCE OF THE CITY OF HENDERSONVILLE CITY COUNCIL TO AMEND
CHAPTER 46 – STREETS, SIDEWALKS, AND OTHER PUBLIC PLACES ADDING
ARTICLE VI – STREET LIGHTS TO THE CODE OF ORDINANCES.**

WHEREAS, the City of Hendersonville’s Planning Board has reviewed and recommended for adoption an amendment establishing Lighting Standards for public streets and sidewalks within the City of Hendersonville’s zoning jurisdiction; and

WHEREAS, the proposed amendment is intended to reduce the potential negative impacts of public street lighting on city-maintained streets on existing development and on natural resources; and

WHEREAS, City Council desires to minimize adverse offsite impacts of lighting such as light trespass and obtrusive light, curtail light pollution, reduce skyglow, improve the nighttime environment, help protect the natural environment from the adverse effects of artificial lighting at night and conserve energy and resources to the greatest extent possible.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Hendersonville, North Carolina that Chapter 46 – Streets, Sidewalks, and Other Public Places be amended to add the following:

Chapter 46 – Streets, Sidewalks, and Other Public Places

Article VI – Street Lights

Sec. 46-184. – Definitions

Whenever and wherever used in this article the following words and names shall have the following meanings:

Public Roadway or Highway and Sidewalk Lighting shall mean lighting provided for freeways, expressways, limited access roadways, and roads on which pedestrians, cyclists, and parked vehicles are generally not present. The primary purpose of roadway or highway lighting is to help the motorist remain on the roadway and help with the detection of obstacles within and beyond the range of the vehicle's headlights.

Public Street and Sidewalk Lighting shall mean lighting provided for boulevards, major & minor thoroughfares, and local roads where pedestrians and cyclists are generally present. The primary purpose of street lighting is to help the motorist identify obstacles, provide adequate visibility of pedestrians and cyclists, and assist in visual search tasks, both on and adjacent to the roadway.

Public Ornamental Street and Sidewalk Lighting shall mean a luminaire intended for illuminating streets that serves a decorative function in addition to providing optics that effectively deliver street lighting. It has a historical period appearance or decorative appearance, and has the following design characteristics:

- Designed to mount on a pole using an arm, pendant, or vertical tenon;
- The top shall be capped or opaque, while the sides shall be translucent;
- An optical aperture that is either open or enclosed with a flat, sag or drop lens;
- Mounted in a fixed position.

Sec. 46-185. – Applicability

The provisions of this article shall apply to all public streets and sidewalks except where pre-empted by federal, state or other superseding jurisdiction.

Sec. 46-186. - Light Shielding and Distribution

All street lighting shall have no light emitted above 90 degrees with the following exception:

- a) Ornamental street lighting shall be permitted on all public streets and sidewalks.

Adopted by the City Council of the City of Hendersonville, North Carolina on this 5th day of January, 2023.

Attest:

Barbara G. Volk, Mayor, City of Hendersonville

Jill Murray, City Clerk

Approved as to form:

Angela S. Beeker, City Attorney

LIGHTING ORDINANCE – ZONING TEXT AMENDMENT

Collaboration Exhibit

All newly proposed language has been highlighted. Language proposed by the PEP team is highlighted in Yellow while the language added by Community Development staff is highlighted in Green. Changes proposed by Duke Energy are highlighted in Blue. Existing language is not highlighted.

Article VI. - General Provisions

Section 6-19. Lighting.

Intent. The purpose of these standards is as follows:

- a) Minimize adverse offsite impacts of lighting such as light trespass and obtrusive light.
- b) Curtail light pollution, reduce skyglow and improve the nighttime environment.
- c) Help protect the natural environment from the adverse effects of artificial lighting at night.
- d) Conserve energy and resources to the greatest extent possible.

6-19.1 General Standards of Applicability. The lighting standards of this section shall be applicable as follows:

- a) Non-residential uses shall be subject to these standards. For the purposes of these standards non-residential shall include, but not be limited to, commercial, institutional, educational, industrial, etc.
- b) Multi-family residential uses shall be subject to these standards. For the purposes of these standards multi-family residential shall include all residential uses with three or more attached dwelling units.
- c) Residential uses shall be exempted from these standards. For the purposes of these standards, residential uses shall include all single family & two-family residences.
- d) Street and roadway lighting shall be exempt from these standards. Street and roadway lighting are subject to the standards of the City of Hendersonville Code of Ordinances (Chapter 46, Article VI)
- e) For the purposes of these standards the term “stream buffer” shall refer to the term as defined in Section 17-3 of this ordinance.

6-19.2. Standards.

All new exterior lighting installed, after the effective date of this Ordinance and within the zoning jurisdiction of the City of Hendersonville, shall comply with the following standards:

- a) Lighting levels and placement shall be designed in accordance with applicable Illuminating Engineering Society (IES) recommended practices.
- b) Lighting shall be designed to an Uplight ratio of zero (0) and designed to limit Backlight trespass.
 - a. Exceptions. Lighting for flagpoles, sports facilities, temporary construction sites, correctional facilities, lighting used solely for signage (see sign regulations), lighting as needed under emergency conditions, low voltage landscape lighting, temporary seasonal lighting, and ornamental and architectural lighting of bridges, public monuments, statuary and public buildings.
- c) The CCT limit shall be 4,000K
- d) The CRI limit shall be ≥ 70 .
- e) New floodlights shall be prohibited. Replacement area lighting shall be shielded to prevent uplight and to prevent front, side, and/or back light depending on the implications on surrounding properties.
- f) All wall pack lights shall be full cutoff and shielded.
- g) The maximum light level using maintained lumens shall be no more than 0.5 foot candles for a non-residential to residential/multi-family residential use interface.
- h) The maximum light level using maintained lumens shall be no more than 0.25 foot candles for a multi-family residential-to-residential interface.
- i) The maximum light level using maintained lumens shall be no more than 0.0 foot candles for a non-residential/multifamily residential to Stream Buffer interface.
- j) No lights shall be installed within a Stream Buffer except as described below. Lighting may be permitted within a Stream Buffer only where facilities exempted under Section 17-3-5 are located and shall be oriented to minimize light intrusion within the Stream Buffer.

6-19-3. Existing Exterior Lighting. Non-compliant lighting installed prior to the effective date of this ordinance shall be considered non-conforming and may continue to be used in accordance with the non-conforming standards found in Section 6-2-5 with the following exception:

- a) Amortization. On or before [INSERT 10 YEARS FROM EFFECTIVE DATE], all exterior lighting shall comply with this Code.

Section 6-2. - Nonconformities

6-2-5 Nonconforming Exterior Lighting.

The following applies to existing non-compliant lighting installed prior to [adoption date of ordinance].

6-2-5.1 Thresholds for compliance.

Full compliance with the lighting requirements in Section 6-19 shall be required under the following circumstances:

- a) When repairing 50% or more of total existing exterior lighting fixtures on a site within any 12-month period.
- b) When expanding, moving, or altering 50% or more of an existing parking or lighted area.
- c) When structures on a site with non-conforming lighting are renovated and the total cost of renovations exceeds 50% of the assessed value of the building according to Henderson County tax records

Section 6-13. - Nuisances

6-13-4 Lighting.

Lighting facilities, if provided, shall be aimed, directed, shielded or arranged so the light sources for such facilities do not cause undue glare on neighboring properties or interfere with the safe use of public rights-of-way to mitigate off-site lighting trespass to surrounding properties.

Article VII Development Review

7-3-4.3 Contents of Final Site Plan.

- r) Site Lighting Plan conforming with the standards established in Section 6-19 and Section 6-2-5. Such plan shall include proposed fixture list, location and orientation of fixtures, footcandle map, property lines and stream buffers at a minimum.

Article XII. – Definition of Terms

Uplight – For an exterior light fixture, light output emitted into the hemisphere above the horizontal plane of the light emitting light opening (i.e. above 90 from straight down) (see Figure 1)

Backlight – For an exterior light fixture, light output emitted into the lower rear quarter sphere behind the fixture and opposite the intended aiming direction of the fixture. For a light fixture with a symmetric light output pattern, the backlight is the same as the forward light. (see Figure 1)

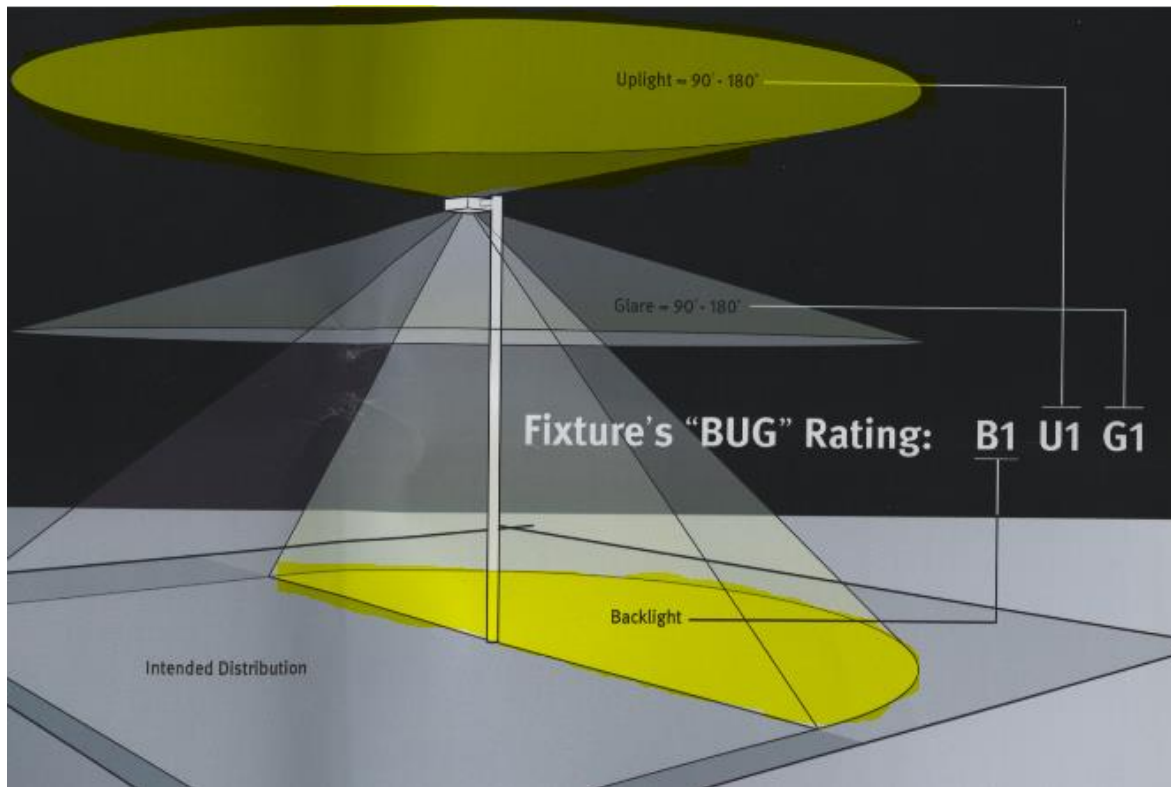


Figure 1 (provided by International Dark Sky Association & Illuminating Engineering Society)

Lumen - The unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire (as distinct from "watt," a measure of power consumption).

Footcandle (FC) - A unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot

Correlated Color Temperature (CCT) - A description of the color appearance of a light source in terms of warmth (lower temperatures) or coolness (higher temperatures), as measured on the Kelvin (K) scale (i.e. High Pressure Sodium 2200K, Metal Halide 3000-4200K, moonlight 4100K)

Color Rendering Index (CRI) - A method to describe the effect a light source (from 0 poor to 100 best) has on the observer's ability to differentiate the true color of objects being illuminated (High Pressure Sodium 27, Metal Halide 65-80, LED 70-90, sunlight 100)

PUBLIC LIGHTING

Code of Ordinances

Chapter 46 – Streets, Sidewalks, and Other Public Places

Article VI – Street Lights

Sec. 46-184. – Definitions

Whenever and wherever used in this article the following words and names shall have the following meanings:

Roadway or Highway Lighting shall mean lighting provided for freeways, expressways, limited access roadways, and roads on which pedestrians, cyclists, and parked vehicles are generally not present. The primary purpose of roadway or highway lighting is to help the motorist remain on the roadway and help with the detection of obstacles within and beyond the range of the vehicle's headlights.

Street Lighting shall mean lighting provided for boulevards, major & minor thoroughfares, and local roads where pedestrians and cyclists are generally present. The primary purpose of street lighting is to help the motorist identify obstacles, provide adequate visibility of pedestrians and cyclists, and assist in visual search tasks, both on and adjacent to the roadway.

Ornamental Street Lighting shall mean a luminaire intended for illuminating streets that serves a decorative function in addition to providing optics that effectively deliver street lighting. It has a historical period appearance or decorative appearance, and has the following design characteristics:

- Designed to mount on a pole using an arm, pendant, or vertical tenon;
- Opaque or translucent top and/or sides;
- An optical aperture that is either open or enclosed with a flat, sag or drop lens;
- Mounted in a fixed position.

Sec. 46-185. – Applicability

All street lighting not governed by regulations of federal, state or other superseding jurisdiction.

Sec. 46-186. - Light Shielding and Distribution

All street lighting shall have no light emitted above 90 degrees with the following exception:

- a) Ornamental street lighting for specific districts or projects shall be permitted.

This document has been reformatted and the technical clarifications recommended by staff and included in the final version of the proposed draft ordinances (both the Zoning Ordinance & Code of Ordinance) have been highlighted. Clarifications are intended to better align the proposed amendments with the intent as discussed during review by stakeholders and committees and do not change the standards of the amendment.

ZONING TEXT AMENDMENT – OUTDOOR LIGHTING STANDARDS

Article VI. - General Provisions

Section 6-19. Lighting.

Intent. The purpose of these standards is as follows:

- a) Minimize adverse offsite impacts of lighting such as light trespass and obtrusive light.
- b) Curtail light pollution, reduce skyglow and improve the nighttime environment.
- c) Help protect the natural environment from the adverse effects of artificial lighting at night.
- d) Conserve energy and resources to the greatest extent possible.

6-19-1. General Standards of Applicability. The lighting standards of this section shall be applicable as follows:

- a) Non-residential uses shall be subject to these standards. For the purposes of these standards non-residential shall include, but not be limited to, commercial, institutional, educational, industrial, etc.
- b) Multi-family residential uses shall be subject to these standards. For the purposes of these standards multi-family residential shall include all residential uses with three or more attached dwelling units.
- c) Residential uses shall be exempted from these standards. For the purposes of these standards, residential uses shall include all single family & two-family residences.
- d) Street and roadway lighting shall be exempt from these standards. Street and roadway lighting are subject to the standards of the City of Hendersonville Code of Ordinances (Chapter 46, Article VI).
- e) For the purposes of these standards the term “stream buffer” shall refer to the term as defined in Section 17-3 of this ordinance.
- f) All new exterior lighting fixtures and site lighting installed, after the effective date of this Ordinance and within the zoning jurisdiction of the City of Hendersonville, shall comply with the standards established in Sections 6-19.2., 6-19.3. and 6-19.4. unless exempted.

6-19-2. Lighting Fixture Standards

- a) Lighting fixtures shall be designed with an uplight rating of U0 per IES TM-15 and designed to limit Backlight trespass.
- b) New floodlights shall be prohibited. Replacement area lighting shall be shielded to prevent uplight and to prevent front, side, and/or back light depending on the implications on surrounding properties.
- c) All wall pack lights shall be full cutoff and shielded.
- d) The following applications are exempted from 6-19-2 (a), (b) & (c), all other standards of Section 6-19 shall apply:
 - i. flagpoles
 - ii. sports facilities
 - iii. temporary construction sites
 - iv. correctional facilities
 - v. lighting used solely for signage (see sign regulations)
 - vi. temporary lighting as needed under emergency conditions
 - vii. low voltage landscape lighting
 - viii. temporary holiday lighting
 - ix. ornamental and architectural lighting of/for:
 - 1. bridges
 - 2. public monuments
 - 3. statuary
 - 4. church spires, belfries, cupolas and domes not intended for human occupancy
 - 5. structures individually listed or within a National Register Historic District
 - 6. public buildings
- e) The nominal CCT of lighting fixtures shall be $\leq 4,000K$
- f) The CRI of lighting fixtures shall be ≥ 70 .

6-19-3. Site Lighting Standards

- a) Lighting levels and placement shall be designed in accordance with applicable 2020 Illuminating Engineers Society (IES) Lighting Library Standards Collection recommended practices.
- b) The maximum light level using maintained lumens shall be no more than 0.5 foot candles for a non-residential to residential/multi-family residential use interface at ground level of the property line.
- c) The maximum light level using maintained lumens shall be no more than 0.25 foot candles for a multi-family residential-to-residential use interface at ground level of the property line.

- d) The maximum light level using maintained lumens shall be no more than 0.0 foot candles for a non-residential/multifamily residential to stream buffer interface at ground level of the edge of the stream buffer.
- e) No lights shall be installed within a Stream Buffer except as described below. Lighting may be permitted within a Stream Buffer only where facilities exempted under Section 17-3-5 are located and shall be oriented to minimize light intrusion within the Stream Buffer.
- f) For the purposes of this section maintained lumens shall mean L80 or 80% of initial lumens.
- g) Sites with compliant lighting plans shall be deemed compliant with these standards when the fixtures are installed as shown on an approved lighting plan as to type, orientation, location, height, shielding and rating of fixtures.
- h) A lighting plan is not required to take into account lighting sources external to the site.

6-19-4. Existing Exterior Lighting.

Non-compliant lighting installed prior to the effective date of this ordinance shall be considered non-conforming and may continue to be used in accordance with the non-conforming standards found in Section 6-2-5 with the following exception:

- a) Amortization. On or before [INSERT 10 YEARS FROM EFFECTIVE DATE], all exterior lighting shall comply with this Code.

Section 6-2. - Nonconformities

6-2-5 Nonconforming Exterior Lighting.

The following applies to existing non-compliant lighting installed prior to [adoption date of ordinance].

Full compliance with the lighting requirements in Section 6-19 shall be required under the following circumstances:

- a) When repairing or replacing 50% or more of total existing exterior lighting fixtures on a site within any 12-month period; provided however any replacement of a floodlight shall be required to meet the standards of section 6-19-2(b).
- b) When expanding or improving 50% or more of an existing parking or lighted area. Examples of activities that would trigger compliance under 6-2-5(b) include; paving an unpaved parking lot, adding 20 additional parking spaces to an existing 40 space lot or adding bio-retention facilities to 12 spaces in a 20 space lot. Examples of activities that would not trigger compliance include; repaving an existing paved lot, reorganizing spots within an existing lot or adding 10 spaces to an existing 25 space lot.
- c) When structures on a site with non-conforming lighting are renovated and the total cost of renovations exceeds 50% of the assessed value of the building according to Henderson County tax records.

Section 6-13. - Nuisances

6-13-4 Lighting.

Lighting facilities, if provided, shall be aimed, directed, shielded or arranged ~~so the light sources for such facilities do not cause undue glare on neighboring properties or interfere with the safe use of public rights of way~~ to mitigate off-site lighting trespass to surrounding properties.

Article VII Development Review

7-3-4.3 Contents of Final Site Plan.

r) Site Lighting Plan conforming with the standards established in Section 6-19. Such plan shall include proposed fixture list including type, orientation, location, height, shielding and rating of fixtures, footcandle map, property lines and stream buffers at a minimum.

Article XII. – Definition of Terms

Uplight – For an exterior light fixture, light output emitted into the hemisphere above the horizontal plane of the light emitting light opening (i.e. above 90 from straight down) (see Figure 1)

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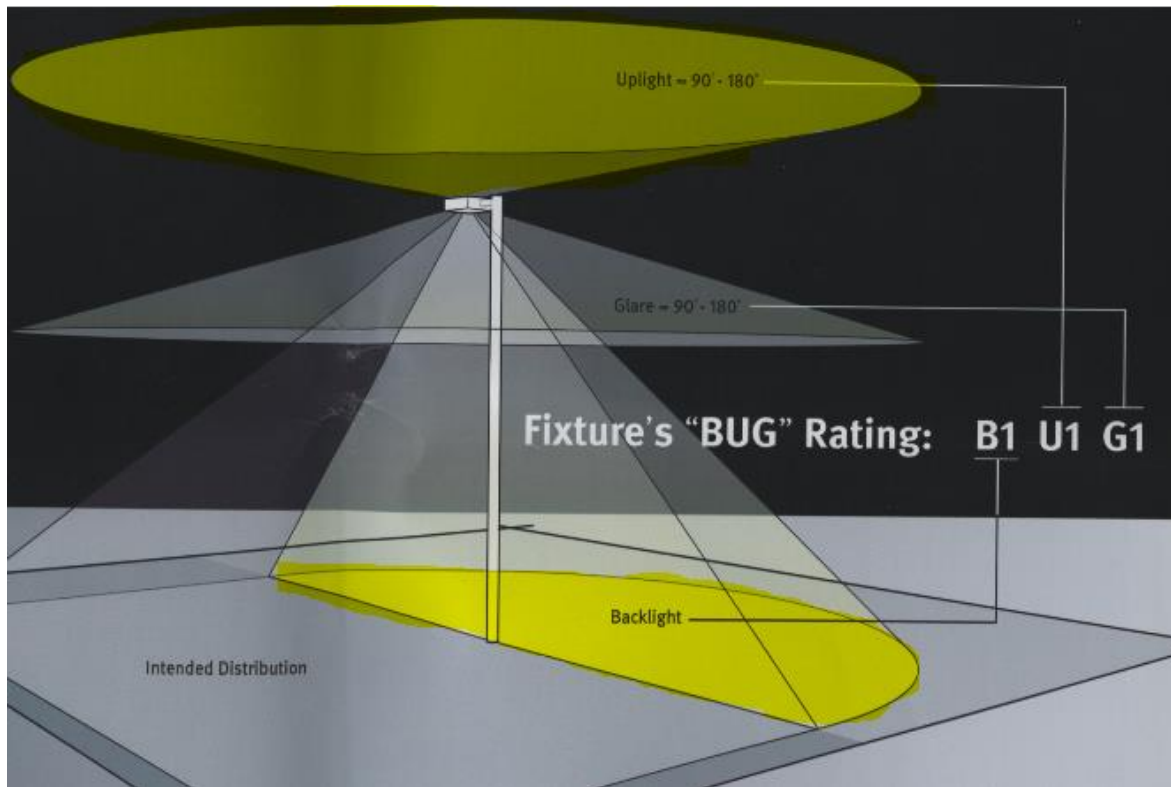


Figure 1 (provided by International Dark Sky Association & Illuminating Engineering Society)

Lumen - The unit of measure used to quantify the amount of light produced by a lamp or emitted from a luminaire (as distinct from “watt,” a measure of power consumption).

Maintained Lumens - The lumen output remaining, at a selected operating time, expressed as a percentage of the initial lumen output of a fixture.

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Chapter 46 – Streets, Sidewalks, and Other Public Places

Article VI – Street Lights

Sec. 46-184. – Definitions

Whenever and wherever used in this article the following words and names shall have the following meanings:

Public Roadway or Highway and Sidewalk Lighting shall mean lighting provided for freeways, expressways, limited access roadways, and roads on which pedestrians, cyclists, and parked vehicles are generally not present. The primary purpose of roadway or highway lighting is to help the motorist remain on the roadway and help with the detection of obstacles within and beyond the range of the vehicle's headlights.

Public Street and Sidewalk Lighting shall mean lighting provided for boulevards, major & minor thoroughfares, and local roads where pedestrians and cyclists are generally present. The primary purpose of street lighting is to help the motorist identify obstacles, provide adequate visibility of pedestrians and cyclists, and assist in visual search tasks, both on and adjacent to the roadway.

Public Ornamental Street and Sidewalk Lighting shall mean a luminaire intended for illuminating streets that serves a decorative function in addition to providing optics that effectively deliver street lighting. It has a historical period appearance or decorative appearance, and has the following design characteristics:

- Designed to mount on a pole using an arm, pendant, or vertical tenon;
- The top shall be capped or opaque, while the sides shall be translucent;
- An optical aperture that is either open or enclosed with a flat, sag or drop lens;
- Mounted in a fixed position.

Sec. 46-185. – Applicability

The provisions of this article shall apply to all public streets and sidewalks except where pre-empted by federal, state or other superseding jurisdiction.

Sec. 46-186. - Light Shielding and Distribution

All street lighting shall have no light emitted above 90 degrees with the following exception:

- a) Ornamental street lighting shall be permitted on all public streets and sidewalks.

City of Hendersonville Existing Public Lighting							
LOCATION		NOTES	LOCATION		NOTES	LOCATION	NOTES
City Hall			7th Avenue			Rotary Park	
Uncapped Blk Ornamental Ped Lights	12	Running during day light hours	Uncapped Ornamental Ped Lights	25		Floodlight	1
Other lights							
Wall Packs (full cutoff)			Maple Street			Sullivan Park	
Cobra streetlight facing building	1	King St side	Capped Ornamental Ped Lights	10		Floodlight	1 on b'ball structure
Flag Pole Light	1	Uplight - Exempt					
			4th Avenue			MLK Park	
City Operations			Capped Ornamental Ped Lights	18		Uncapped Ornamental Ped Lights	5
PW Overflow Parking Lot		Running during day light hours					
Floodlights	4		Patton Park			Oklawaha Greenway Trailhead (Berkley Rd)	
Cobra Streetlights	2		Parking Lot			Cobra Streetlights	2 Solar powered
PW Garage Lot			Cobra Streetlights	10			
Floodlights	9		Floodlights	2	In stream buffer	7th Ave Depot	
City Ops Main Parking			Picnic Shelter			Ornamental	4 Under cover
Cobra Streetlights	5		Floodlight	1		Barn light	1 small
Building illuminating lights	6	Uplight - Exempt	Tennis Courts			Exposed bulb fixture	6 Under cover
Other lights			Floodlights	14	45 degree angle	Wallpacks	2 shielded
Wall Packs (full cutoff)			Pool Area				
			Capped Ornamentals	11		Police Station	
Azalea Lot			Greenway			Capped Ornamentals	13
Capped Ornamental Ped Lights	11		Cobra Pedestrian Lights	22		Wall Packs	6 Full cutoff
Other Lights			Soccer Field			Modern Wall Packs	29 Fully shielded
Floodlight	1	Facing Partnership on King St	Floodlights	24		Flag Pole	2 Uplights - Exempt
			Softball			Sign illumination	2
Maple Lot			Floodlight	1	Facing trees / n'hboring prop		
Capped Ornamental Ped Lights	5		PW Building			Fire Station 1	
Other Lights			Wallpacks	4	Full cutoff	Cobra Streetlights	8
Old Cobra Streetlight	1	Along Edwards Alley				Wallpacks	7 shielded
			Boyd Park			Flag Pole Lights	2 Uplight - Exempt
Apple Lot			Putt Putt				
Uncapped (Black) Ornamental	12		Floodlights	12	45 degree	Fire Station 2 / Public Works Warehouse	
			Ornamental Globe Ped Light	1		Cobra Streetlights	6
Dogwood Lot			Tennis Courts			Flag Pole	4 uplight*
LED Cobrahead Streetlights	10		Floodlights	9	45 degree	Wall Packs	10 not shielded
						Sconces	5
Main Street			Toms Park/Whitemire Center			Warehouse Wall Packs	6 shielded
Capped Ornamental Ped Lights	106		Capped Ornamental Ped Lights	11		Floodlights	3
						Sign illumination	2 Uplight

* Flag Pole lights are uplight but are proposed to be exempted

Total Needing Attention (Red)	155	Includes numbers shown in orange
Total Presumed Compliant (Green)	333	
Could be exempted or retrofited	122	Some of these will be replaced as part of planned upcoming projects
Total Lights	488	
Total needing attention if those in orange are replaced / exempted / retrofited	33	

City of Hendersonville Streetlights			
Type	Count	Unit Cost	Total Cost
LEDS (at least 450 are 3000K)	1182		
Mercury Vapor (MV)	58	\$36	\$ 2,088
High Pressure Sodium (HPS)	225	\$36	\$ 8,100
Metal Halide (MH)	39	\$36	\$ 1,404
TOTAL	1612		\$ 11,592
City of Hendersonville Floodlights			
Cost by Type	Count	Unit Cost	Total Cost
Unshielded LED to Shielded LED	55	\$101	\$ 5,555
HPS Floods to Shielded LED	35	\$101	\$ 3,535
MH Floods to Shielded LED	1	\$101	\$ 101
TOTAL	91		\$ 9,191

Needing Attention (Red)

Presumed Compliant (Green)



CITY OF HENDERSONVILLE AGENDA ITEM SUMMARY

SUBMITTER: John Connet **MEETING DATE:** 1/25/2023
AGENDA SECTION: NEW BUSINESS **DEPARTMENT:** Administration
TITLE OF ITEM: Consideration of a Resolution Requesting a Local Option One-Quarter Cent City Sales and Use Tax – *John Connet, City Manager*

SUGGESTED MOTION(S):

I move that City Council adopt the resolution requesting the introduction of a local bill to authorize the establishment of an additional one-quarter cent sales and use tax for all qualified purchases in the City of Hendersonville.

SUMMARY:

The establishment of a ¼ cent sales and use tax would reduce the City's dependence on the property tax. City Council believes that the establishment of this tax would greatly benefit the citizens and visitors of Hendersonville.

BUDGET IMPACT: \$ 2.5 million in additional revenue

Is this expenditure approved in the current fiscal year budget?

If no, describe how it will be funded.

ATTACHMENTS:

Proposed Resolution

Resolution #

**RESOLUTION BY THE CITY OF HENDERSONVILLE CITY COUNCIL REQUESTING A LOCAL
OPTION ONE-QUARTER CENT (1/4) CITY SALES AND USE TAX**

WHEREAS, the City of Hendersonville is the commercial center of Henderson County and provide services to all Henderson County residents and visitors, including public safety, street maintenance and general public services; and

WHEREAS, the property tax is currently the only revenue source that is within complete control of the City Council; and

WHEREAS, the City of Hendersonville's property tax rate for fiscal year 2022-23 is \$0.52 per \$100, and the City Council is often faced with increasing this rate to fund services that are used by all county residents and visitors; and

WHEREAS, the City of Hendersonville City Council is seeking alternative revenue sources to fund city services; and

WHEREAS, it is estimated that a one-quarter cent City sales and use tax would bring an estimated \$2.5 million dollars in additional revenues per year; and

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Hendersonville, North Carolina that:

1. We request the Henderson County legislative delegation to introduce a local bill authorizing the City of Hendersonville to hold a public referendum to authorize the establishment of an additional one-quarter cent sales tax for all qualified purchases within the City of Hendersonville.
2. This tax would be collected by the North Carolina Department of Revenue and directly allocated to the City of Hendersonville as unrestricted revenue for the provision of local government services as directed by the Hendersonville City Council.

Adopted by the City Council of the City of Hendersonville, North Carolina on this 25th day of January 2023.

Attest:

Barbara G. Volk, Mayor, City of Hendersonville

Jill Murray, City Clerk

Approved as to form:

Angela S. Beeker, City Attorney



CITY OF HENDERSONVILLE AGENDA ITEM SUMMARY

SUBMITTER: John Connet **MEETING DATE:** 1/25/2023

AGENDA SECTION: Adjourn **DEPARTMENT:** Administration

TITLE OF ITEM: City Council Photo – *John Connet, City Manager*

SUGGESTED MOTION(S):

NA

SUMMARY:

At 5:45 PM the City Council will recess your meeting to move to Juls Buckman’s Studio at 300-D N. Main Street, Hendersonville, NC 28792 for a group picture. Her studio is located above Hannah Flanagan’s Irish Pub. Following the picture, the City Council will adjourn the meeting.

Attached is information that Juls Buckman provides her clients with tips on looking their best for their photo. Council will only be doing a group photo, but most of the reminders still pertain to group photography. If the Council can wear solid colors and avoid patterns and logos to their Jan. 25th meeting, that will help them photograph better as a group.

- Choose an outfit that makes you feel great; the more confident you feel in an outfit the more comfortable you will be to be photographed.
- Make clothing selections a day or two before your session (earlier if possible) to avoid last minute wardrobe stress or malfunctions (press or make alterations well in advance to look your very best)
- Go for solid colors rather than busy patterns or clothing with logos, as they draw attention from your face. Choose cream over white and grey over black as black and white can wash out your skin tone.

BUDGET IMPACT: \$

Is this expenditure approved in the current fiscal year budget?

If no, describe how it will be funded.

ATTACHMENTS: None