

**CITY OF NORMAN, OKLAHOMA**

**CITY COUNCIL COMMUNITY PLANNING AND  
TRANSPORTATION COMMITTEE AGENDA**

**Municipal Building Conference Room  
201 West Gray**

**Thursday, November 29, 2018**

**4:00 P.M.**

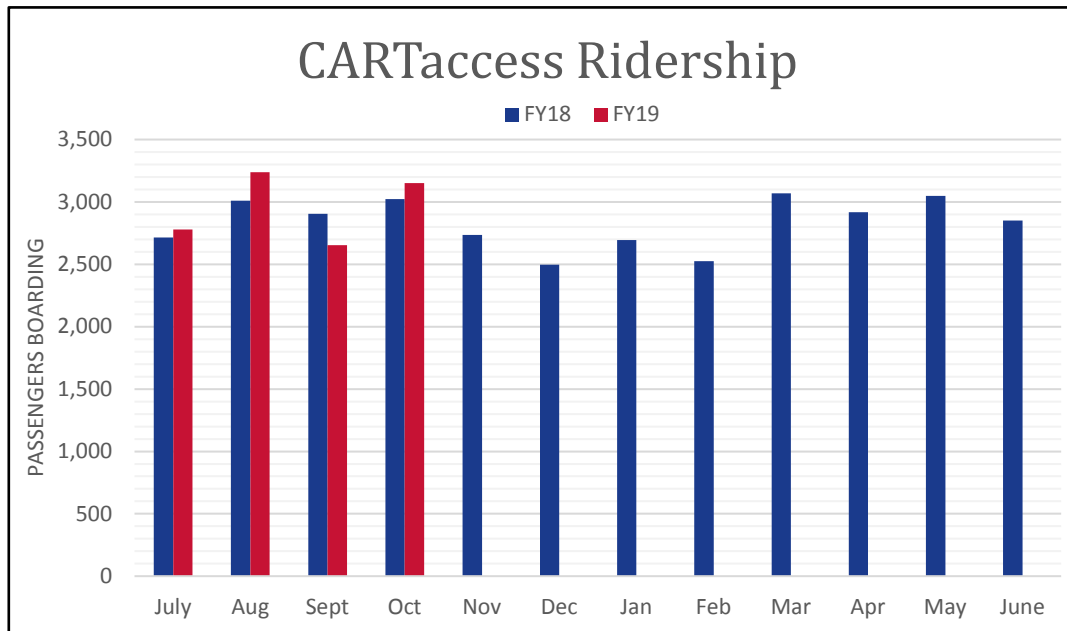
- 1. CLEVELAND AREA RAPID TRANSIT (CART) RIDERSHIP  
REPORT INCLUDING SAFERIDE AND EXTENDED SERVICE FOR  
THE MONTH OF OCTOBER, 2018**
- 2. DISCUSSION REGARDING VEGETATIVE MANAGEMENT IN  
THE CITY RIGHTS-OF-WAY.**
- 3. DISCUSSION REGARDING RESIDENTIAL LIGHTING.**
- 4. MISCELLANEOUS COMMENTS.**

**ITEM 1**

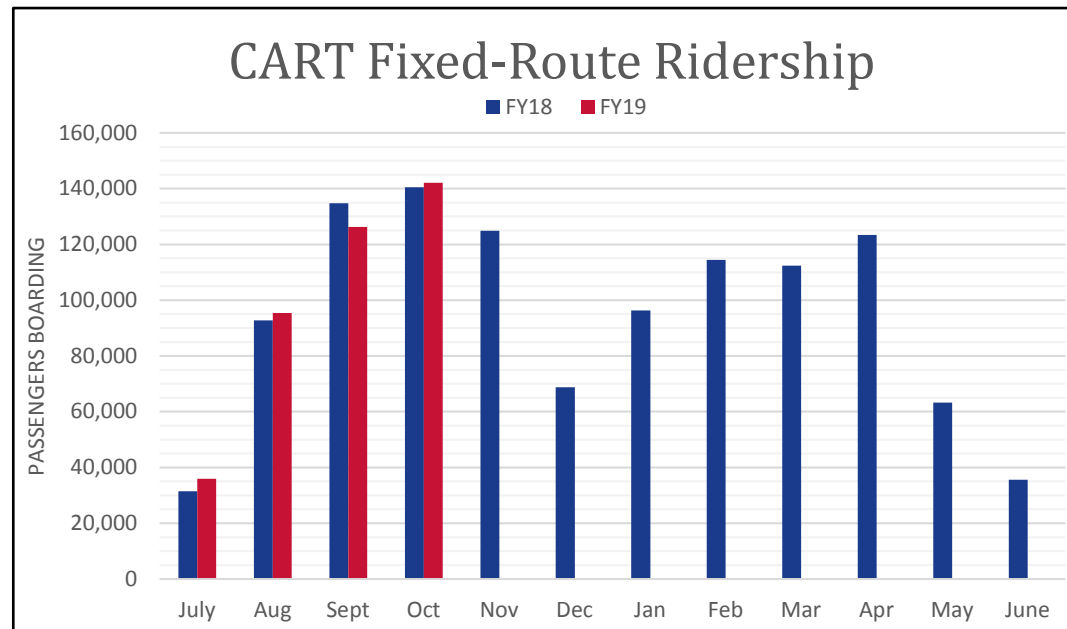
**CART REPORTS**

# CART Ridership Summary

## City of Norman Community Planning & Transportation Committee



CARTaccess Ridership by Month			
	FY18	FY19	Change
July	2,714	2,780	2%
Aug	3,011	3,239	8%
Sept	2,905	2,652	-9%
Oct	3,022	3,152	4%
Nov	2,736		
Dec	2,498		
Jan	2,695		
Feb	2,524		
Mar	3,070		
Apr	2,918		
May	3,049		
June	2,851		
July - Oct	11,652	11,823	1%
FY18 Total	33,993		



Fixed-Route Ridership by Month			
	FY18	FY19	Change
July	31,500	35,933	14%
Aug	92,808	95,358	3%
Sept	134,812	126,316	-6%
Oct	140,553	142,135	1%
Nov	124,836		
Dec	68,733		
Jan	96,358		
Feb	114,482		
Mar	112,378		
Apr	123,378		
May	63,299		
June	35,644		
July - Oct	399,673	399,742	0%
FY18 Total	1,138,781		

FY19: July 1, 2018 - June 30, 2019

FY18: July 1, 2017 - June 30, 2018

## Community Planning & Transportation Committee Meeting, November 29<sup>th</sup>, 2018

### CART Monthly Report for October 2018



#### **CART – Ridership Report Summary**

- CART transported 142,135 passengers in October – a 1% increase over October 2017. The daily average ridership was 6,151, a decrease of 4% or 245.
- Fiscal year 19 to date ridership (July – October) is 399,742– an increase of 0% over the same period last year.
- For October 2018, there were 743 riders who traveled with bicycles (0.5%) and 423 with wheelchairs (0.3%). Route 11-Lindsey East carried the most passengers with bicycles (239) and route 10-Main Street carried the most passengers with wheelchairs (160).

#### **CARTaccess – Ridership Report Summary**

- CARTaccess transported 3,152 passengers in October – an increase of 4% or 130. Average daily ridership was 121, a decrease of 4% or 5. Primary zone ridership increased by 7% or 180 in October; Secondary Zone ridership decreased by 9% or 50.
- For fiscal year 19 year to date (July – October), CARTaccess ridership is 11,823 – an increase of 1%. Primary Zone ridership has increased by 3% or 280 FYTD; Secondary Zone ridership has decreased by 6% or 109 FYTD. Secondary Zone ridership comprises 15% of all CARTaccess trips FYTD.

#### **CART Activities**

- CART staff attended the City of Norman ADA Self-Evaluation and Transition Plan open house held on October 24.
- CART staff completed the annual National Transit Database (NTD) report as required by FTA and submitted it at the beginning of November.
- CART hosted the Oklahoma Transit Association (OTA) for the 2018 Oklahoma State Driving Championships and Training Conference in October. The conference was October 16-18 and consisted of a driving competition, driver and administrative staff training, notable speakers, an awards banquet, and an evening out in Norman. CART placed third in the city bus category.
- CART offered free rides on both fixed route and CARTaccess on November 6 so that riders could reach their respective polling places.

#### **CART Detours/Construction**

- Route 52-Campus Loop is missing its stop at the Oklahoma Memorial Student Union due to construction of a new engineering building on Felgar Street. Riders are encouraged to use stop 181 at Jenkins Avenue and Felgar Street.
- Due to the construction for the OKC Streetcar, the route 24-Sooner Express is taking a few detours from its regular route. To view the latest detours, please visit [www.ridecart.com/detours-and-alerts](http://www.ridecart.com/detours-and-alerts).

#### **Attachments**

- CART Fixed-route and CARTaccess Ridership Graphs for FY18 and FY19

## **ITEM 2**

### **VEGETATIVE MANAGEMENT**



# office memorandum

DATE: November 21, 2018

TO: Members of the Council Planning and Transportation Committee

THROUGH: Jeff Bryant, City Attorney  
FROM: Kathryn L. Walker, Assistant City Attorney III

RE: Vegetation Maintenance by Utilities

## Background

In August 2018, Council was asked to consider adopting Ordinance No. O-1718-1, which would send to the voters the question of renewing the franchise that gives OG&E the right to access our rights of way to provide electricity in Norman. Council voted on several amendments to the agreement, including, a provision that would require approval by Council before OG&E sprayed chemicals for the purpose of killing trees or other vegetation, approval by a property owner prior to removal trees of a certain size, and a posted notice five days in advance of trimming, removing or mowing vegetation, shrubs and smaller trees. OG&E, by letter dated September 25, 2017 committed to work in good faith with the City to develop a vegetation management plan that would address chemical use, tree trimming and tree removal for all companies and government entities operating within the City's rights-of-way. Ordinance No. O-1718-1 was ultimately rescinded and Staff has been working with outside counsel to negotiate a new franchise agreement with OG&E and develop a vegetation management ordinance.

The Community Planning and Transportation Committee ("CPTC") met in April 2018 to discuss the regulatory framework already in place for vegetation management and to get feedback from Council on possible areas to be regulated. As noted during the April meeting, many aspects of vegetation maintenance and management are regulated by State and Federal laws related to electric grid reliability. Given recent legislative attempts to thwart local control through state preemption, CPTC discussed the need to legislate in a cooperative fashion and focus primarily on items not already addressed by State and Federal law.

CPTC discussed the draft ordinance at its October meeting. At that time, Council was advised that Staff had been working with representatives from OG&E and OEC, and that OG&E had hired a consultant from the Davey Resource Group in Texas to assist with the ordinance. The consultant, Michael Sulton, drafted an ordinance that attempted to combine a tree ordinance being developed by the City's Tree Board with the Utility Vegetation Management Ordinance while also addressing concerns that some of the City's existing zoning ordinance provisions encouraged tree placement that could potentially conflict with utility infrastructure.

This more comprehensive ordinance was discussed by the Tree Board at its November meeting. General concerns about some of its provisions were expressed by representatives of the development community during that meeting. Subsequent

conversations with Committee Chair Hickman resulted in the Tree Board's Tree Ordinance being separated out of the comprehensive ordinance so it could move forward more quickly, as it was apparent additional work would be needed on the other aspects of the comprehensive ordinance.

### Vegetation Management Ordinance

The latest draft of the Vegetation Management ordinance is attached. As previously mentioned, the Corporation Commission and the Oklahoma Department of Agriculture have broad powers related to vegetation management by utility companies. The ordinance would codify those regulations and provide for better communication with the City regarding planned vegetative maintenance. Additionally, the ordinance adopts the ANSI A300 standards and best management practices for tree maintenance. The ANSI A300 standards are the tree care industry standard of care in the United States and are developed by certified arborists. Finally, the ordinance would impose requirements for timely debris removal for vegetation maintenance efforts.

### Tree Planting Standards

Norman's Zoning Ordinance contains a number of landscaping requirements depending on the proposed use of a property. Concern has been expressed that these requirements may unintentionally encourage, and in some cases require, tree planting in an area that could conflict with utility infrastructure when fully grown. The pertinent sections of the Zoning Ordinance are attached. OG&E's consultant developed some language that addresses tree planting standards to ensure future conflict with infrastructure is avoided to the maximum extent possible. The language pertaining to tree planting has been separated from the comprehensive draft prepared by the consultant for your review. It is also attached.

Staff will be available at the next CPTC meeting for further discussion and feedback.

Attachments: Utility Vegetation Management Ordinance, 11-20-18  
Zoning Ordinance Provisions pertaining to Landscaping  
Proposed Language from Davey Consulting for Tree Planting

## **Utility Vegetation Management**

### **1. Purpose.**

As technology advances, the number of service providers utilizing the public rights-of-way increases. Utility companies provide critical infrastructure for the City and its residents, including electrical, gas, water and sewer infrastructure. The ability of the infrastructure to provide reliable, abundant, accessible and affordable services is important to the City's economy and security. To enable easy access to the infrastructure in the public rights-of-way, the rights-of-way must be maintained. This includes vegetation management. Effective vegetation management can prevent electricity outages, erosion, and water quality issues. Vegetation management can negatively impact adjacent property owners if chemicals are overused, trees are trimmed inappropriately, and communication with impacted property owners is insufficient. The purpose of this ordinance is to provide a framework for the use of appropriate, environmentally sound, and cost-effective vegetation control methods, while also providing for better communication between providers and property owners and community education.

### **2. Planned Maintenance.**

The City recognizes that each utility company plans their work based on operating within a specific regulatory framework, system conditions, and budget availability. The implementation and execution of a maintenance plan can be affected by factors beyond the utility's control, such as unexpected changes in conditions or severe weather events. Each utility company shall work with the City to identify in advance any planned maintenance that is scheduled to occur within the city limits. Information provided by the utility company shall include:

- a. General areas (e.g., substation or circuit for electric utilities) involved scheduled for maintenance;
- b. Identification of a certified arborist to serve as a contact person for any questions about vegetation management activities.
- c. Identification of any company the utility company intends to use for planned vegetation maintenance work.

If a utility's vegetation management plan changes for any of the areas identified within the City, the utility will communicate those changes to the appropriate City representative in a timely manner. The City may communicate planned maintenance information provided by a utility to the community in a format the City determines to be appropriate.

### **3. Stakeholder Communication.**

- a. Notification to Owners or Residents of Occupied Property. Prior to the performance of planned vegetation maintenance by a utility on occupied property, the utility shall make reasonable efforts to provide prior notification of such activities to the owner or resident of such property. Such prior notification may include, but is not limited to, any of the following methods: door hangers, mailed letters, posted signs on the occupied property.
  - b. Meetings with Owners or Residents of Occupied Property. If an owner or resident of an occupied property requests a meeting with a utility regarding vegetation maintenance that is to occur on said property, then the utility shall make reasonable efforts to meet with the owner or resident of said property to explain the objectives and methods used to achieve them, and to identify expected impacts to any trees.
  - c. Notifications and Communications for Emergency Vegetation Maintenance or Management. In the case of emergency reactive work, the notification provisions of this section shall be waived. The utility company shall give as much notice as is reasonable and possible under the circumstances to the owners or residents of occupied property.
  - d. Dangerous Trees. In the case of a tree, large shrub or part thereof, living or dead, which is in such condition and is located in such a place as to constitute a danger to persons or property in the vicinity of the tree, the utility company shall not be required to notify the City in advance of any maintenance of the tree. Reasonable notification to the owner or resident of occupied property on which the tree is located is still required.
4. Best Management Practices.

All tree work conducted by utility companies shall be governed by the applicable ANSI A300 standards and accompanying best management practices, and subsequent revisions.

- a. Pruning. The following subsections are general guidelines only, and it is important to recognize that site conditions, system hardware, tree species, tree size, approximate tree age, and maintenance history are all factors that influence the best approach to maintaining a tree that could impact a utility system:
  - i. Proper pruning cuts are critical to a tree's ability to compartmentalize disease;
  - ii. Smaller pruning cuts compartmentalize better, heal faster, and place less stress on the tree;
  - iii. Pruning large branches requires a 3-cut method to prevent bark from tearing;

- iv. Topping and Roundover methods are generally prohibited unless deemed appropriate for a specific tree by a certified arborist or in consultation with the property owner;
  - v. Acceptable pruning systems include: Natural, Pollarding, and Topiary;
  - vi. Structural, Directional, and Emergency pruning objectives can be met using:
    - 1.Branch removal cuts
    - 2 Heading cuts
    - 3.Reduction cuts
  - vii. When appropriate to achieve the desired pruning objectives, pruning cuts should be made to lateral or parent branches that are no less than 1/3 the diameter of the limb being removed;
  - viii. In rural areas and where access is limited by site conditions, mechanical pruning equipment may be used to achieve necessary clearance distances;
  - ix. Any obvious ‘hangers’ shall be removed while performing tree maintenance.
- b. Chemical Control Methods. The use of herbicides shall be governed by the product label and the approved application standards, as well as the regulations outlined in Title 2 of the Oklahoma Statutes and under applicable Federal law. The applicator shall consider conditions, such as temperature, winds, sensitive vegetation in the immediate area and intertwining root systems when making any herbicide application and do their utmost to avoid off target damage.
- c. Supervision and Oversight of Contractors. Any utility company desiring to engage in vegetation maintenance operations on public streets or rights-of-way, City-owned or controlled property, and private property within the City limits shall be responsible for oversight of its contractors in the performance of all work and will ensure that contractors adhere to ordinance provisions and proper vegetation maintenance practices.
- d. Vegetation Management Clean-Up. All waste (chemicals, chemical containers, etc.) generated in clearance work shall be disposed of in compliance with applicable laws. All debris from vegetation maintenance

shall be cleaned up each day, unless permission is given by the owner or resident of the impacted property to do otherwise. This includes the following:

- i. Impacted lawn areas shall be cleaned of debris;
- ii. Impacted streets and sidewalks shall be cleaned of debris;
- iii. All brush (having a diameter of 6 inches or less), branches and logs shall be chipped and removed from the site. When feasible and agreed to by the owner or resident of the property and the utility company, the brush may be blown into an area within the rights of way or adjacent to the right of way corridor. Larger wood shall be cut into manageable lengths and stacked neatly at the base of the tree, unless otherwise specified by the owner or resident.
- iv. If an owner or resident of impacted property requests information on options for grinding any stumps resulting from vegetation maintenance operations, it shall be the responsibility of the utility to provide owner or resident with such information.

## **Zoning Ordinance Provisions pertaining to Landscaping**

### **Sec. 423.2 - C-1, Local Commercial District**

Front Yard: A twenty-five (25) foot setback is required for all buildings. Across the entire front of all lots (and the street side of any corner lot) in plats filed after November 7, 2005 a minimum ten (10) foot landscape strip shall be installed, which may not be encroached upon by parking. One eight (8) foot tall shade (canopy) tree per each twenty (20) feet of lot frontage and one (1) three (3)-gallon shrub per five (5) feet of building frontage shall be installed within this landscape strip. Clustering of these required plantings may be allowed, if approved by the City Forester or his designee. Such planting should be covered by the three (3) year maintenance bond required when new landscaping is installed with the parking lot on the same tract. All species are to be approved by the City Forester. (O-0405-60)

### **Sec. 424.1 – C-2, General Commercial District**

Special Use for Mini-warehouse provided that:

- (1) A ten-foot (10') landscaped yard shall be maintained along all side or rear property boundaries. If the rear boundary abuts any residential zoning district, the landscape area must be increased to twenty feet. All such landscape areas must be installed outside of any required fencing, which must be opaque if the abutting property is zoned for any residential use
- (2) A twenty foot (20') landscape strip shall be maintained across the front of the property, which shall include a minimum six-foot (6') wall composed of masonry and/or wrought iron

Front yard: All buildings shall be set back from any abutting street right-of-way at least ten (10) feet. Across the entire front of all lots (and the street side of any corner lot) in plats filed after November 7, 2005 a minimum ten (10) foot landscape strip shall be installed, which may not be encroached upon by parking. One eight (8) foot tall shade (canopy) tree per each twenty (20) feet of lot frontage and one (1) three (3)-gallon shrub per five (5) feet of building frontage shall be installed within this landscape strip. Clustering of these required plantings may be allowed, if approved by the City Forester or his designee. Such planting should be covered by the three (3) year maintenance bond required when new landscaping is installed with the parking lot on the same tract. All species are to be approved by the City Forester. (O-9798-16; O-0405-60)

### **Sec. 426.1 – I-1, Light Industrial District**

Front Yard: Within all plats filed after November 7, 2005, a twenty-five (25) foot front building setback line shall be established. Across the entire front of all new lots (and the street side of any corner lot) a minimum ten (10) foot landscape strip shall be installed, which may not be encroached upon by parking or outdoor storage. One eight (8) foot tall shade (canopy) tree per each twenty (20) feet of lot frontage and one (1) three (3)-gallon

shrub per five (5) feet of building frontage shall be installed within this landscape strip. Clustering of these required plantings may be allowed, if approved by the City Forester or his designee. Such planting should be covered by the three (3) year maintenance bond required when new landscaping is installed with the parking lot on the same tract. All species are to be approved by the City Forester. Signs may be installed in any required landscape area. (O-0405-60)

#### Sec. 427.1 – I-2, Heavy Industrial District

Front Yard: Within all plats filed after November 7, 2005, a twenty-five (25) foot front building setback line shall be established. . Across the entire front of all new lots (and the street side of any corner lot) a minimum ten (10) foot landscape strip shall be installed, which may not be encroached upon by parking or outdoor storage. One eight (8) foot tall shade (canopy) tree per each twenty (20) feet of lot frontage and one (1) three (3)-gallon shrub per five (5) feet of building frontage shall be installed within this landscape strip. Clustering of these required plantings may be allowed, if approved by the City Forester or his designee. Such planting should be covered by the three (3) year maintenance bond required when new landscaping is installed with the parking lot on the same tract. All species are to be approved by the City Forester. Signs may be installed in any required landscape area. (O-0506-60)

#### Sec. 428.1 – M-1, Restricted Industrial District

All yards adjacent to a street which are created by the setback requirements contained herein shall be maintained as open landscaped yards bisected only by access drives, and their use for any other purpose including off-street parking, is specifically prohibited.

#### Sec. 429 – MUD, Mixed Use Development District

Within all mixed use developments, trees shall be planted along all streets, but are not required adjacent to public and private alleys. (1) In front of residential buildings, street trees shall be located within a planting strip a minimum of six feet (6') wide within the street right-of-way. (2) In front of non-residential or mixed use buildings, street trees may be planted in tree wells installed within the ten foot (10') (or wider) sidewalk. Tree wells shall be a minimum of four feet by four feet wide by three and a half feet deep (4'x4'x3.5'). Larger wells are recommended, and could be connected together as a continuous planting pit to facilitate an underground watering system. Tree wells shall be covered by tree grates, concrete unit pavers, or cobbles. (3) Within any central open space, street trees are required adjacent to the perimeter sidewalk which surrounds the open space. (4) Trees shall generally be spaced fifty feet (50') on center, but may vary to minimize conflicts with utilities such as street lights.

#### Sec. 429.6 – PCZOD, Porter Corridor Zoning Overlay District

Buffer Landscaping. (1) Intent. The buffer landscaping is intended to provide an area of landscaping to separate the commercial land use from the residential land use. (a)

Requirements for Buffer Landscaping. i. The landscape buffer shall be a minimum of ten feet. ii. The landscaping shall be planted immediately adjacent to the “buffer wall” identified in a. above and shall be landscaped on the commercial side of the buffer wall. iii. The landscaping shall consist of trees and shrubs as well as ground cover. iv. The landscaping buffer shall contain only landscaping. No structures, containers, receptacles, vehicles, etc. are allowed.

Parking lot design. (1) Intent. To decrease the negative visual impact of parking areas located adjacent to residential property by the following: (a) The layout of the parking lot shall include the requirements of a. and b. above. (b) Landscaping as required per Section 431.8 of the Zoning Ordinance except that any commercially-zoned property shall have a ten foot landscape strip between the abutting right-of-way line and the parking lot.

#### Sec. 431.85 – Landscaping Requirements for Off-Street Parking Facilities

1. Intent of Landscaping Requirements. The intent of this section is to protect and promote the public health, safety and welfare by requiring the landscaping of parking areas which will serve to reduce wind and air turbulence, heat and noise, and the glare of automobile lights; to prevent soil erosion; to reduce the level of carbon dioxide and return pure oxygen to the atmosphere; to provide shade; to visually enhance the appearance of parking areas; and to generally promote a healthful and pleasant environment. All areas used for the display, parking, or storage of any and all types of vehicles, boats, or construction equipment are subject to provisions herein. (O-1617-42)

2. Landscaping Requirements. For all off-street parking areas, in any zoning district, having at least six (6) parking spaces and/or other vehicular use areas of at least nine hundred (900) square feet of impervious area to be used as parking, the owners shall provide peripheral landscaping and street landscaping as indicated below. (O-1617-42)

(a) Peripheral Landscaping Requirements.

[1] Peripheral Landscaping shall be required along any side of a parking area that abuts adjoining property that is not a street or alley right-of-way.

[2] A landscaping strip no less than five (5) feet in width shall be located between the parking area and the abutting property lines.

[3] At least one tree for each forty (40) linear feet or fraction thereof shall be planted in each landscaping strip. The required trees may be evenly spaced or grouped. The remaining area must be covered with solid sod or live ground cover.

[4] In addition to the required trees, a wall, fence, hedge, berm, or other durable landscape barrier shall be planted or installed. The height of any such hedge or barrier shall be no less than six (6) feet. Such barrier shall not extend beyond the front setback line established on the adjoining lot, except as necessary to completely screen any parking.

[5] At least one shrub or vine for each ten (10) feet of non- living durable barrier (such as a wall or fence) shall be planted between the parking lot and the barrier.

[6] Peripheral Landscaping Requirements shall not be applicable in the following situations:

[a] To those portions of the property that are opposite a building located on the abutting property line.

[b] Where the abutting property is zoned for non-residential uses or is used for another parking area, only the tree provision and the landscape strip, planted with grass or ground cover, shall be required.

[7] Twenty (20) percent of the trees for Peripheral Landscaping Requirements can be evergreens that normally grow to an overall height of a minimum of fifteen (15) feet. 175 22:431.8

(b) Street Landscaping Requirements.

[1] Street landscaping shall be required along any side of a parking lot that abuts the right-of-way of any street, road or highway.

[2] A landscaping strip ten (10) feet in depth shall be located between the abutting right-of-way and the parking lot. For parking lots which are zoned residentially, or lie adjacent to or directly across the street from residentially zoned land, a landscaping strip twenty (20) feet in depth shall be provided. If a three (3) - four (4) foot masonry or rock wall is installed adjacent to the parking area, the required landscaping strip may be reduced to ten (10) feet in depth.

[3] At least one tree for each forty (40) linear feet or fraction thereof shall be planted in the landscaping strip. The required trees may be evenly spaced or grouped. The remaining area must be planted with solid sod or live ground cover.

[4] A hedge, landscaped berm, or other living durable plant barrier shall extend the entire length of the landscaping strip. The height of any such barrier or hedge shall be no more than three (3) feet. The first ten (10) feet on both sides of any driveway pavement is excluded from this requirement, but shall be planted with grass or ground cover.

[5] In lieu of the requirements of subparagraphs (3) and (4) of this section, at least one tree for each twenty (20) linear feet or fraction thereof shall be

planted in the landscaping strip. The required trees may be evenly spaced or grouped.

4. Plant Material. Species of plant material shall be acceptable to the Director of Planning (see Appendix F for a list of acceptable plant materials).

(a) Trees.

(1) For the purposes of this ordinance, trees are defined as any self-supporting woody plants which usually produce one main trunk and normally grow to an overall height of a minimum of fifteen (15) feet in Cleveland County. No one species may constitute more than fifty percent of the tree species that are planted, unless the number of trees to be installed is less than three.

(2) Trees having an average natural spread of crown less than fifteen (15) feet may be substituted by grouping the same so as to create the equivalent of a 15-foot crown spread. Trunks must be maintained in a clean condition over five (5) feet of clear wood.

(3) Deciduous tree species shall be a minimum of eight (8) feet overall height, with a minimum caliper of 1 ½" immediately after planting. Evergreen trees shall be a minimum of six (6) feet in height.

(4) Trees of species whose roots are known to cause damage to public roadways or other public works shall not be planted closer than twelve (12) feet to such public works, unless the tree root system is completely contained within a barrier acceptable to the Director of Planning.

## Proposed Language from Davey Consulting for Tree Planting

### TREE PLANTING

Any tree planted should meet the following requirements that are designed to promote the development of healthy root systems, allow for trees to reach their fullest potential in an urban environment, and help to address and avoid potential conflicts between green and grey infrastructure, other trees, buildings, or utilities.

#### a. **Planting Area Requirements.**

1. For each small tree installation, a minimum of 24 inches of soil depth and 25 square feet of open soil area (total of 50 cubic feet) must be provided.
2. For each medium or large tree installation, a minimum of 36 inches of soil depth and 160 square feet of open soil area (total of 480 cubic feet) must be provided.
3. Except as provided in this section, trees may share open soil areas.
4. Except as provided in this section, medium trees and large trees must be planted a minimum of four feet from pavement.
5. The planting areas must have native soils, prepared soils, or structural soil mix, and may include permeable pavement, sidewalk support, and soil cell structures.
6. Required areas for plant materials must be protected from vehicular traffic through the use of concrete curbs, wheel stops, or other permanent barriers.
7. Waiver. The Forester may waive the minimum open soil and planting area requirements if an ISA Certified Arborist or Registered Landscape Architect certifies that:
  - a. The proposed alternative soil depths and dimensions are sufficient to support the healthy and vigorous growth of the plant materials selected;
  - b. The depth to impermeable subsurface prohibits minimum soil depth requirements; or
  - c. The proposed structural soil mix or suspended paving system are sufficient to support the healthy and vigorous growth of the plant materials.

#### b. **Tree Placement.** All tree planting activities shall observe the following:

1. Replacement trees must be planted on the lot form which the Protected Tree was removed
2. Trees may not be planted within a water course, required site triangles at intersections or in an area within an existing or proposed street or alley

3. Newly planted trees shall be sufficiently spaced from other plant materials, to account for known species characteristics and relevant design criteria
4. All trees must be planted a minimum distance of:
  - a. Two feet from side yard and rear yard property boundaries;
  - b. 25 feet from any street intersection;
  - c. 20 feet ahead of the instructional face of a traffic sign in the direction of travel;
  - d. 20 feet from utility poles or light standards;
  - e. Two-and-one-half feet from pavement; and
  - f. Five feet from electrical transmission boxes, fire hydrants, in-ground or above-ground utility access, underground local utility lines, and water meters.
5. **Medium Trees.** Medium trees should be a minimum distance of:
  - a. 12 feet from buildings;
  - b. 30 feet from the closest point of an ungrounded, overhead electric line.
6. **Large Trees.** Large trees should be located a minimum distance of:
  - a. 15 feet from buildings;
  - b. 50 feet from the closest point of an ungrounded, overhead electric line.
7. **Measurement.** For purposes of this subsection, all distances are measured horizontally from the center of the tree trunk.

**Table 1 – Approved Trees for the City of Norman ...to be completed**

Recommended List of Native + Adapted, Non-Invasive Trees for Use in Central Oklahoma									
Common Name	Key Code								Scientific Name
	N	E	D	P	S	B	L	L+	
Small Trees									
Possumhaw	x			x	x		x		<i>Ilex decidua</i>
Medium Trees									
Western Soapberry	x		x		x				<i>Sapindus drummondii</i>
Large Trees									
Bur Oak	x			x					<i>Quercus macrocarpa</i>
Key Code Description									

- **N** – Native
- **E** – Evergreen
- **D** – Drought resistant in full sun with reflected heat
- **P** – Tolerates poor drainage
- **S** – Shade tolerant
- **B** – Attracts birds or pollinators
- **L** – Ornamental landscape quality like Fall foliage, or attractive flowers or fruit
- **L+** – Multiple ornamental landscape qualities

## **ITEM 3**

### **RESIDENTIAL LIGHTING**



# office memorandum

**TO:** Community Planning and Transportation Committee

**FROM:** Jane Hudson, Planning and Community Development

**DATE:** November 27, 2018

**RE:** Residential Security Lighting

**BACKGROUND** Staff received a request to review and propose outdoor lighting standards/requirements for residential areas where installation of security lights/flood lights occurs and how those lights may be impacting adjacent residential properties with glare or spillover.

Currently, there is an Ordinance on the books, in the Zoning Ordinance, for installation controls on Commercial Outdoor Lighting Standards, but not for controls on residential outdoor lighting. The Commercial Outdoor Lighting Standards were adopted in June of 2011 and amended in March of 2013. As stated the Commercial Outdoor Lighting Standards do not regulate the installation of residential lighting; see attached copy of the Commercial Outdoor Lighting Standards Ordinance, Section 22:431.6. During the initial research of the possible outdoor lighting standards back in 2011, the discussion of including the residential protections in the proposed ordinance was included; it was later decided the proposed ordinance should only address commercial developments, leaving residential out of the adopted Ordinance.

Attached is the proposed version of the Residential Outdoor Lighting Standards, which is still under review and certainly not finalized. The purpose of this memorandum is to get the Committee to direct staff on which direction they want to move forward with a possible ordinance to regulate installation of outdoor security lighting for residential purposes and to highlight some potential issues that still need to be addressed.

**DISCUSSION** The current draft ordinance for residential lighting states all new residential security lighting be installed in conformance with the provisions of the ordinance. The proposed ordinance by direction is designed to be relatively simple in its approach, to deal with residential security lighting that may be a nuisance. General standards included are: full cut-off/fully shielded lights or shielding existing lights if complaints are received.

In previous discussions regarding regulations of outdoor lighting for residential areas, one of the issues was the service providers for Norman did not carry or install a cut-off or shielded security light fixture to be utilized in the residential areas. Since the time of the initial discussions and review of the commercial outdoor lighting standards new technology is in place to allow full cut-off/shielded security lights, specifically OG&E; now carries and is installing a full cut-off security light fixture and a shielded security light fixture.

It is noted that individuals can install residential security lights/flood lights that are not leased from any service provider. City staff was requested to evaluate a requirement

that outdoor lighting in residential areas be directed or shielded so as to minimize stray light passing across property boundaries. Such a requirement could implicate various forms of residential lighting, thus City Staff would benefit from additional direction on the parameters of any proposed requirements for residential lighting that is not security lighting installed by the service/electric provider.

Within the proposed ordinance there are penalty fees for non-compliant lights or nuisance lights. When a complaint is received it will be investigated to determine if corrective action is warranted. Corrective action is warranted when a Code Enforcement or Police Officer finds evidence of glare or light spillover onto property zoned or used for single or two-family dwellings located either adjacent to or across the street from the subject property. As currently written there is an appeal process; do you want to keep this allowance? (This appeal process is mirrored from the existing Commercial Outdoor Lighting Ordinance.)

Staff is presenting this information for your review and is available for discussion.

The following attachments are included in this packet:

- Commercial Outdoor Lighting (Exhibit A)
- Proposed Residential Outdoor Lighting Standards (Exhibit B)

Reviewed by: Mary Rupp, Interim City Manager

# Exhibit A

## SEC. 431.6 -- COMMERCIAL OUTDOOR LIGHTING STANDARDS

(Established by Ord. No. O-1011-44 – June 21, 2011. Amended by: O-1213-38 – March 26, 2013)

1. Purpose and Intent. It is the intent of this Section to define practical and effective measures by which the obtrusive aspects of commercial outdoor light usage can be minimized, while preserving safety, security, and the nighttime use and enjoyment of property. These measures are intended to reduce light spillover, minimize glare, and decrease resource waste.
2. Conformance with Applicable Codes. All new commercial outdoor lighting shall be installed in conformance with the provisions of this Ordinance, as well as the currently adopted versions of the Building Code, the Electrical Code, and the Sign Code of the City of Norman as applicable and under appropriate permit and inspection, whichever is the more restrictive.
3. Applicability.
  - (a) Building Construction. For all public or private commercial, industrial, institutional, and multi-family land uses, developments, buildings, and structures that require a permit subsequent to the effective date of this Section (July 22, 2011), all new outdoor lighting fixtures shall meet the requirements of this Section of the Code.
  - (b) These lighting regulations do not apply to properties zoned or used for single-family or two-family dwellings.
  - (c) Exempt Lighting. The following luminaires and lighting systems are exempt from these requirements:
    - (1) Internally illuminated signs.
    - (2) Temporary lighting for theatrical, television, and performance areas.
    - (3) Lighting for non-commercial public or private athletic fields and recreational facilities, although any such lighting should be mounted, aimed, and shielded so that lighting primarily falls within the boundaries of such athletic fields and recreational facilities and lights are extinguished when not in use.
    - (4) Lighting in swimming pools and other water features governed by the most recently adopted National Electrical Code.
    - (5) Lighting for police, fire, and other emergency services, or required by any state or federal agency, such as the FAA.
    - (6) Interior lighting.
    - (7) Temporary holiday lighting.
    - (8) Low-voltage landscape lighting.
    - (9) Exterior lights that are mounted within interior courtyards or other areas of the building that are not visible from any abutting residential property.
    - (10) Decorative and architectural lighting of bridges, public monuments, or public art, although all luminaires should be installed to minimize glare and be shielded such that no glare is visible from any abutting property.
    - (11) New street lights installed within public rights-of-way.
    - (12) New lighting to be placed on historic properties such that it is important that the new lighting be in harmony with the period lighting of the property.
    - (13) Luminaires that are used exclusively to provide emergency power illumination at exit discharge locations that operate only from an emergency power source in the event of a normal power failure. (O-1213-38)

(d) Prohibited Lighting. The following luminaires and lighting systems may not be used or installed within the City of Norman:

- (1) The use of laser source light or any similar high-intensity light for outdoor advertising or entertainment.
- (2) The operation of searchlights for advertising purposes.

4. Compliance.

- (a) Whenever a complaint about lighting is received, it shall be investigated to determine if corrective action is warranted. Corrective action is warranted when a Code Enforcement or Police Officer finds evidence of glare; light spillover onto property zoned or used for single or two-family dwellings located either adjacent to or across the street from the subject property; or a visible bulb from an adjacent single or two-family property. Corrective action includes: shielding, re-aiming, or replacement of a fixture with a full cut-off fixture. (O-1213-38)
- (b) A one-time hardship extension may be administratively granted for up to 180 days, but the applicant must agree in writing to comply with this section of the Code and submit a plan for compliance.
- (c) If the administrative exception is denied, that decision may be appealed to the Board of Adjustment, who may grant the extension as a Special Exception.
- (d) An additional one year extension above the six month administrative extension may be granted as a Special Exception by the Board of Adjustment provided (a) lights within twenty-five feet of any residential boundary have been modified to comply with this section, and (b) the extent of the renovation is large enough to require additional time based on the difficulty in finding compatible lights or the cost of the retrofit must be amortized over a longer timeframe. Property owners may re-apply to the Board for an additional one year extension, provided that a specific plan of compliance has been provided to the Board demonstrating extreme hardship.

5. General Outdoor Lighting Standards.

- (a) Fixture Standards.
  - (1) Except as otherwise provided, all new nonexempt outdoor lighting fixtures shall be full cut-off fixtures mounted horizontally to the ground that prevent excessive light from going upward; outdoor luminous tube lighting does not require shielding. (O-1213-38)
  - (2) Ordinary maintenance of existing fixtures, including replacement of lamps, is specifically allowed. If existing fixtures are removed in order to upgrade, redesign, or reconfigure the lighting design on the property, then such fixtures must conform to the requirements of this section. (O-1213-38)
- (b) Pole Mounted Lights.
  - (1) The maximum light level at any point on a property line of a parcel zoned or used for single or two-family dwellings, located either adjacent to or across the street from the subject property, shall not exceed 0.2 footcandles. (O-1213-38)
  - (2) Shielding must be permanently installed to ensure continued compliance with this requirement.
  - (3) Parking lots should be illuminated to a minimum level of 0.2 footcandles. (O-1213-38)

- (4) Light poles installed within twenty-five (25) feet of any residential property line or public right-of-way may not exceed twenty (20) feet in height. All other light poles may not exceed thirty (30) feet in height except in instances of the expansion of a development, pole height may correspond with the height of existing poles. Height is measured to the underside of the lens, and includes any concrete base. (O-1213-38)
- (c) Lights Mounted to Walls of Buildings or Structures.
- (1) All wall mounted lighting on buildings or structures shall be full cut-off fixtures.
  - (2) When such new lights are installed on a wall, the lights may not exceed a mounting height above the roof line of the building or structure.
  - (3) New lights mounted on the underside of any roof overhang shall be fully recessed so that the lens cover is flush with the bottom surface of the overhang.
- (d) Accent Lighting.
- (1) Except as allowed under 5(d)(2) below, new fixtures used for accent lighting shall be full cut-off, or directionally shielded lighting fixtures that are aimed and controlled so that the directed light is substantially confined to the object intended to be illuminated. All such lights shall be aimed and shielded to prevent excessive light from going upward.
  - (2) Fixture types may include floodlights, wall sconces, lanterns, recessed can lights, architectural or decorative lights, or any other fixture that meets the intent of this section. Decorative architectural wall mounted fixtures are not required to be cut-off, semi cut-off, or full cut-off fixtures, so long as such fixtures do not result in any glare as later defined or light spillover of greater than 0.2 footcandles onto any residential property zoned or used for single or two-family dwellings located either adjacent to or across the street from the subject property. (O-1213-38)
  - (3) Lighting required for the night-time display of the American flag may be of any type or intensity, but if directed up towards the flag, the light fixtures shall be installed to minimize glare and shielded such that the light source is not visible from any property zoned or used for single or two-family dwellings located either adjacent to or across the street from the subject property. (O-1213-38)
- (e) Canopy Lighting. New lighting under canopies shall be adequate to facilitate the activities taking place in such locations (a minimum of 0.2 footcandles). Any facility utilizing a drive-through area such as banks, service stations, convenience stores, car washes, etc., shall comply with the following requirements:
- (1) New light fixtures mounted in canopies or soffits for drive-through locations shall be installed so that the bulb is fully recessed and the lens is flush with the bottom surface of the canopy, soffit, or overhang.
  - (2) Fuel dispensing locations shall be illuminated so that the minimum lighting level is at least ten (10) lumens per square foot of the canopy area. (O-1213-38)
  - (3) Automated Teller Machines (ATMs) shall be illuminated so that the minimum lighting level is at least five (5) lumens per square foot measured within a ten foot radius of the ATM. (O-1213-38)

6. Lighting Plan Requirements.

- (a) Site Plan Required. All applications for building permits subject to this Section which involve the installation of new outdoor lighting shall include an accurate site plan of the proposed development indicating the location of property lines, and all existing and proposed land improvements, including but not limited to buildings, parking lots, aisles and driveways, streets, sidewalks and walkways, landscaped areas, and accessory structures and the location and type of all exterior lighting fixtures.
- (b) In addition to the requirements in 6 (a) above, all applications for building permits subject to this section which exceed 7,500 square feet of new construction in an Office category, or 5,000 square feet of new construction for all other categories of use within this section, and involve the installation of new outdoor lighting shall include the following information:
  - (1) A photometric plan, prepared by a professional engineer, electrical contractor, or representative of the lighting industry, at a scale no smaller than one inch equals sixty (60) feet when the subject property is adjacent to or across the street from property zoned or used for single or two-family dwellings. When such a plan is submitted, it shall be accompanied by a written opinion from a professional engineer, electrical contractor, or representative of the lighting industry that the lighting plan complies with the standards of this section. (O-1213-38)
  - (2) The estimated footcandles at ten feet beyond all property boundaries that are adjacent to or are across the street from single or two-family residential zones or uses; (O-1213-38)
  - (3) To the extent that such information is readily available from the supplier of each light source, a table indicating the type, light source, wattage, initial output in lumens, light loss ratio, height of luminaires above grade, and the maximum to minimum ratio. (O-1213-38)
  - (4) To the extent that such information is readily available from the supplier of each light source, manufacturer's catalogue specifications of all luminaires to be used, indicating the design, refractor (lens) type, cut-off angle (cut-off, semi cut-off or full cut-off), and any special features affecting the performance of the light.
  - (5) An applicant may submit a photometric plan, prepared by a professional engineer, electrical contractor, or representative of the lighting industry, at a scale no smaller than one inch equals (60) feet that demonstrates compliance with this ordinance. If such a plan is submitted, it shall create a legal presumption that the subject property is in compliance with this ordinance. (O-1213-38)
- (c) Additional Submission Requirements. The above required plans, descriptions and data shall be sufficiently complete to enable the designated official to readily determine whether compliance with the requirements of this Section will be met. If such plans, descriptions and data are not reasonably sufficient, the applicant shall submit such additional evidence as reasonably requested by the City of Norman.
- (d) Lamp or Fixture Substitution. After any permit has been issued, manufacturer's specifications showing the substitute is equivalent to the approved fixture must be submitted to the City before any new outdoor light fixture or the type of light source therein is changed, together with adequate information to assure compliance with this Section.
- (e) Certification of Installation. For projects using 200,000 lumens or more a registered professional engineer shall certify in writing to the City that all lighting was installed in accordance with the approved plans.

**SEC. 431.65 -- RESIDENTIAL OUTDOOR LIGHTING STANDARDS**  
(Established by Ord. No. O-XXXX-XX – DATE)

1. Purpose and Intent. It is the intent of this Section to define practical and effective measures by which the obtrusive aspects of residential outdoor security lighting/flood lights can be minimized, while preserving safety, security, and the nighttime use and enjoyment of property. These measures are intended to reduce light spillover and minimize glare.
2. Conformance with Applicable Codes. All new residential outdoor lighting “residential security lights/flood lights” shall be installed in conformance with the provisions of this Ordinance, as well as the currently adopted versions of the Building Code, the Electrical Code, of the City of Norman as applicable and under appropriate permit and inspection, whichever is the more restrictive.
3. Applicability.
  - (a) These lighting regulations apply to properties zoned or used for single-family or two-family dwellings (“Residential Zones”).
  - (b) All outdoor security lighting fixtures in Residential Zones shall meet the requirements of this Section of the Code.
4. Compliance. The Ordinance shall be enforced based on a complaint basis by a citizen or citizens in the general area of the fixture.
  - (a) Whenever a complaint about lighting is received, it shall be investigated to determine if corrective action is warranted. Corrective action is warranted when a Code Enforcement or Police Officer finds evidence of glare; light spillover onto property zoned or used for single or two-family dwellings located either adjacent to or across the street from the subject property; or a visible bulb from an adjacent single or two-family property. Corrective action includes: shielding, re-aiming, or replacement of a fixture with a full cut-off fixture.
  - (b) A one-time hardship extension may be administratively granted for up to 30 days, but the applicant must agree in writing to comply with this section of the Code and submit a plan for compliance.
  - (c) If the administrative exception is denied, that decision may be appealed to the Board of Adjustment, who may grant the extension as a Special Exception.
  - (d) Violations. It shall be unlawful for any person to violate any provision of this Ordinance or the Oklahoma Statutes. Each day that the violation continues after notification of non-compliance shall constitute a separate offense. The municipality may institute appropriate action or proceedings to enjoin violations of this Ordinance or applicable Oklahoma Statutes.
  - (e) Penalties. Any person who fails to comply with the provisions of this Ordinance within a reasonable amount of time such as 30 days shall, upon conviction thereof, forfeit no

less than One Hundred Dollars (\$100) nor more than Five Hundred Dollars (\$500), and also pay the costs of prosecution for each violation, including the municipality's reasonable and actual attorney fees and disbursements incurred in the prosecution of such violations.

5. General Outdoor Lighting Standards.

Fixture Standards – Existing Lights.

- (a) Require that all existing service provider and/or security type lights (those that may throw light 360 degrees) installed in Residential Zones areas; be shielded from casting light on any adjoining property, if requested by neighbors that have light from the security light cast onto their property.
- (b) Require that outdoor lighting in residential areas be directed or shielded in such a way as to most feasibly minimize spillover across property boundaries upon request of any adjoining property owner or tenant.

Fixture Standards – New Light Installation.

- (a) Require that all of these types of fixtures (residential security lights/flood lights), when they are replaced due to damage or burnout, and any future (residential security lights/flood lights) installed in residential areas in the City of Norman be either full-cut off fixtures or fully shielded fixtures, shining only on the residence/property of the owner or renter of these fixtures.