The Planning Commission will participate via ZOOM. The public can participate via the following:

- Sign up to provide Public Comment at the meeting via calling in
- Submit Written Public Comment Prior to 2 pm on August 12, 2020
- Join the Zoom Meeting

Questions or Need Assistance? Please contact Planning Commission Clerk Kelsey Wright at kwright@libertylakewa.gov

1. Call to Order

2. Roll Call

3. **GENERAL BUSINESS:**
   - Review of Agenda
   - Approval of Minutes from August 12, 2020

4. **WORKSHOPS/PRESENTATIONS:** 2020 Annual Comprehensive Plan and Code Amendments
   - CPA 2020-001: Food Trucks as a Limited Use in C-1, C-2, RD-C Zone & Mixed Use Zones
   - CPA 2020-005: Eliminate Lot Sizes in R-1 & R-3 Zones
   - CPA 2020-006: Lighting Standards
   - CPA 2020-007: Changes to Residential Building Permit Requirements

5. **REPORTS:**
   - Secretary’s Report
   - Planning Commissioner Reports

6. Citizens Comments

7. Adjournment

Next Meeting: October 14, 2020
PUBLIC COMMENT

If you wish to provide oral public comments or testimony during the Planning Commission meeting, please register through this link:
https://us02web.zoom.us/j/89430941941?pwd=R09GSGVxM3M3Z3hSSWw5R2lXLytGZz09
WRITTEN PUBLIC COMMENTS

If you wish to provide written public comments for the upcoming council meeting, please email your comments to kwright@libertylakewa.gov by 2:00 p.m. the day of the Planning Commission meeting and include all of the following information with your comments:

1. The Meeting Date
2. Your First and Last Name
3. If you are a Liberty Lake resident
4. The Agenda Item(s) which you are speaking about
JOIN ZOOM MEETING

To view the meeting live via Zoom Meeting, join the Zoom web meeting:

Meeting Instructions:

To join the Zoom web meeting:

https://us02web.zoom.us/j/89430941941?pwd=R09GSGVxM3M3Z3hSSWw5R2tXLytGZz09

Dial In Phone Numbers:
- +1 253 215 8782 US (Tacoma)
- +1 669 900 6833 US (San Jose)

Meeting ID: 894 3094 1941

Password: 755069
Planning Commission Members Present: Jesse Fox, Joe Mann, Charles Matthews, Richard Siler, Jamie Baird

Adjunct Member(s) Present: Kate Laven, Shelli Dickinson

Absent: Paul Brown, Joshua McKee

Staff Present: Lisa Key, Kelsey Wright, Megan Abhold

Call to Order: Meeting was called to order at 4:00 p.m.

Roll Call: A quorum of members was present.

Review of Agenda & Approval of Minutes:
Commissioner Fox moved that the July 8th minutes be approved, seconded by Commissioner Baird, which carried unanimously.

Ratifications of Findings, Conclusions & Recommendations re: RV Sales & Service in the C-1 Zone:
Commissioner Fox moved that the Draft Findings, Conclusions & Recommendations regarding RV Sales and Service in the C-1 Zone be approved, seconded by Commissioner Matthews. A roll call vote followed which carried unanimously.

Workshops/Presentations: 2020 Annual Comprehensive Plan and Code Amendments

CPA2020-001: Food Trucks as a Limited Use in C-1, C-2 & RD-C Zone.
Lisa Key presented on the proposed amendments allowing for Food Trucks as a Limited use in the C-1, C-2 & RD-C Zone. Discussion followed related to expanding the Limited Use to the M-1, M-2, and M-3 Zones as well. Questions asked and answered.

CPA2020-002: Junk Car Definition
Lisa Key presented on the proposed amendments to the Junk Car Definition to align with the definition in the RCW. Questions asked and answered.

CPA2020-003: Land Division Process Improvements
Lisa Key presented on the proposed amendments to processes defined in Code related to Land Division – for example, removing language relating to Mylar, adjusting for preference for electronic submittals where applicable, and requiring the applicant to record documents with the County. Questions asked and answered.
CPA2020-004: Increasing Maximum Lot Coverage in R-2 Zone
Lisa Key presented on the proposed amendments to increase the maximum allowable lot coverage in the R-2 Zone. Questions asked and answered.

Secretary’s Report:
Lisa Key reported on the below listed items:
  o Introduced Megan Abhold – Planning & Engineering Tech
  o Upcoming Interviews for Building Inspector
  o Design Review Committee Updates

Planning Commissioner Reports:
No reports at this time.

City Council Reporter of the Month:
Commissioner Siler volunteered to report at the next City Council meeting.

Citizens Comments:
No comments at this time.

Adjournment:
Commissioner Mann moved to adjourn the meeting, seconded by Commissioner Baird, which carried unanimously. The meeting adjourned at 5:20 p.m.
CPA 2020-005
Eliminating Minimum & Maximum Lot Sizes in R-1 & R-3 Zones

Amendment to City Development Code §10-2B-7(C) as follow:

C. Restrictions. Structures shall not be placed over an easement that prohibits such placement or encroach into the public right-of-way.

<table>
<thead>
<tr>
<th>R-1 Land Use</th>
<th>Lot Area</th>
<th>Lot Width / Depth</th>
<th>Lot Coverage</th>
<th>Residential Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detached Single Family Housing; Manufactured Homes on Lots</td>
<td>Minimum area: 5000 square feet None</td>
<td>Minimum Width: None</td>
<td>Maximum: 60 percent</td>
<td>Minimum Net Density: 4 dwelling units per acre</td>
</tr>
<tr>
<td></td>
<td>Maximum area: 4 acres (excluding parks and recreation uses)</td>
<td>Maximum Depth: None</td>
<td></td>
<td>Maximum Net Density: 6 dwelling units per acre</td>
</tr>
<tr>
<td>Attached (townhome) Single Family Housing; Clustered Housing</td>
<td>Minimum area: 2000 square feet None</td>
<td>Minimum Width: 20 feet at front property line</td>
<td>Maximum: 60 percent *</td>
<td>Minimum Net Density: 4 dwelling units per acre</td>
</tr>
<tr>
<td></td>
<td>Maximum area: 7500 square feet None</td>
<td>Maximum Depth: None</td>
<td></td>
<td>Maximum Net Density: 8 dwelling units per acre</td>
</tr>
<tr>
<td>Other Uses</td>
<td>Minimum area: None</td>
<td>Minimum Width: 60 feet at front property line</td>
<td>Maximum: 70 percent</td>
<td>None</td>
</tr>
</tbody>
</table>

* Attached Clustered Housing shall be based on the individual project boundary
Amendment to City Development Code §10-2D-7(C) as follow:

C. Restrictions. Structures shall not be placed over an easement that prohibits such placement or encroach into the public right-of-way.

<table>
<thead>
<tr>
<th>R-3 Land Use</th>
<th>Lot Area</th>
<th>Lot Width / Depth</th>
<th>Lot Coverage</th>
<th>Residential Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detached Single Family Housing; Manufactured Homes on Lots</td>
<td>Minimum area: 4000 square feet None</td>
<td>Minimum Width: 40 feet at front property line</td>
<td>Maximum: 60 percent</td>
<td>Minimum Net Density: 12 dwelling units per acre</td>
</tr>
<tr>
<td></td>
<td>Maximum area: 8000 square feet None</td>
<td>Maximum Depth: None</td>
<td></td>
<td>Maximum Net Density: None</td>
</tr>
<tr>
<td>Two-Family Housing (duplex)</td>
<td>Minimum area: 5000 square feet None</td>
<td>Minimum Width: 40 feet at front property line</td>
<td>Maximum: 70 percent</td>
<td>Minimum Net Density: 12 dwelling units per acre</td>
</tr>
<tr>
<td></td>
<td>Maximum area: 10,000 square feet None</td>
<td>Maximum Depth: None</td>
<td></td>
<td>Maximum Net Density: None</td>
</tr>
<tr>
<td>Attached (townhome) Single Family Housing</td>
<td>Minimum area: 2000 square feet None</td>
<td>Minimum Width: 20 feet at front property line</td>
<td>Maximum: 70 percent</td>
<td>Minimum Net Density: 12 dwelling units per acre</td>
</tr>
<tr>
<td></td>
<td>Maximum area: 5000 square feet None</td>
<td>Maximum Depth: None</td>
<td></td>
<td>Maximum Net Density: None</td>
</tr>
<tr>
<td>Manufactured Home Parks</td>
<td>See Section 10-2D-3 for Manufactured Home Park standards.</td>
<td></td>
<td></td>
<td>Minimum Net Density: 12 dwelling units per acre</td>
</tr>
<tr>
<td>Multi-Family Housing</td>
<td>Minimum area for three-family (triplex): 7000 square feet None</td>
<td>Minimum Width: 40 feet at front property line</td>
<td>Maximum: 70 percent</td>
<td>Minimum Net Density: 12 dwelling units per acre</td>
</tr>
<tr>
<td>Maximum area for three-family (triplex):</td>
<td>Maximum Depth: None</td>
<td>Maximum Net Density: None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------</td>
<td>--------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12,000 square feet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minimum area for multi-family (4 or more units):</th>
<th>Maximum area: None</th>
</tr>
</thead>
<tbody>
<tr>
<td>7000 square feet</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Uses</th>
<th>Minimum area: None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum area: None</td>
<td>Minimum Width: 50 feet at front property line</td>
</tr>
<tr>
<td>Maximum Depth: None</td>
<td>Maximum: 70 percent</td>
</tr>
<tr>
<td></td>
<td>None</td>
</tr>
</tbody>
</table>

| Maximum area: None                              | Maximum Depth: None |
|                                                  |                     |
|                                                  |                     |
Amendment to City Development Code §10-2E-3(C), Requirements for Specific M-1 Limited Uses, as follows:

3. Mobile sales / concessions
   a. Requires application for and approval of a Temporary Use Permit as outlined in Section 10-4I-1.
   b. Mobile food service establishments may be located on private property or adjacent parking in the public right-of-way as an accessory use, where a principal use has already been established on the subject property.
   c. Mobile sales/ concessions may be located in public right-of-way when associated with a special community event, such as Liberty Lake Yard Sale Weekend, with the approval of the adjacent property owner or business.
   d. Hours of operation for the mobile concession shall be limited to the hours of operation of the principal use associated with the subject property, except when associated with a community event, in which case the hours of operation for the mobile concession shall be limited to the hours of operation of that community event.

Amendment to City Development Code §10-2F-3(C), Requirements for Specific M-2 Limited Uses, as follows:

5. Mobile sales / concessions
   a. Requires application for and approval of a Temporary Use Permit as outlined in Section 10-4I-1.
   b. Mobile food service establishments may be located on private property or adjacent parking in the public right-of-way as an accessory use, where a principal use has already been established on the subject property.
   c. Mobile sales/ concessions may be located in public right-of-way when associated with a special community event, such as Liberty Lake Yard Sale Weekend, with the approval of the adjacent property owner or business.
   d. Hours of operation for the mobile concession shall be limited to the hours of operation of the principal use associated with the subject property, except when associated with a
Amendment to City Development Code §10G-3(C), Requirements for Specific M-3 Limited Uses, as follows:

4. Mobile sales / concessions

a. Requires application for and approval of a Temporary Use Permit as outlined in Section 10-4I-1.

b. Mobile food service establishments may be located on private property or adjacent parking in the public right-of-way as an accessory use, where a principal use has already been established on the subject property.

c. Mobile sales/ concessions may be located in public right-of-way when associated with a special community event, such as Liberty Lake Yard Sale Weekend, with the approval of the adjacent property owner or business.

d. Hours of operation for the mobile concession shall be limited to the hours of operation of the principal use associated with the subject property, except when associated with a community event, in which case the hours of operation for the mobile concession shall be limited to the hours of operation of that community event.

Amendment to City Development Code §10H-3(C), Requirements for Specific C-1 Limited Uses, as follows:

2. Mobile sales / concessions

a. Requires application for and approval of a Temporary Use Permit as outlined in Section 10-4I-1.

b. Mobile food service establishments may be located on private property or adjacent parking in the public right-of-way as an accessory use, where a principal use has already been established on the subject property.

c. Mobile sales/ concessions may be located in public right-of-way when associated with a special community event, such as Liberty Lake Yard Sale Weekend, with the approval of the adjacent property owner or business.

d. Hours of operation for the mobile concession shall be limited to the hours of operation of the principal use associated with the subject property, except when associated with a community event, in which case the hours of operation for the mobile concession shall be limited to the hours of operation of that community event.
Amendment to City Development Code §10-2I-3(C), Requirements for Specific C-2 Limited Uses, as follows:

3. Mobile sales / concessions
   a. Requires application for and approval of a Temporary Use Permit as outlined in Section 10-4I-1.
   b. Mobile food service establishments may be located on private property or adjacent parking in the public right-of-way as an accessory use, where a principal use has already been established on the subject property.
   c. Mobile sales/ concessions may be located in public right-of-way when associated with a special community event, such as Liberty Lake Yard Sale Weekend, with the approval of the adjacent property owner or business.
   d. Hours of operation for the mobile concession shall be limited to the hours of operation of the principal use associated with the subject property, except when associated with a community event, in which case the hours of operation for the mobile concession shall be limited to the hours of operation of that community event.

Amendment to City Development Code §10-2H-3(C), Requirements for Specific RD-C Limited Uses, as follows:

2. Mobile sales / concessions
   a. Requires application for and approval of a Temporary Use Permit as outlined in Section 10-4I-1.
   b. Mobile food service establishments may be located on private property or adjacent parking in the public right-of-way as an accessory use, where a principal use has already been established on the subject property.
   c. Mobile sales/ concessions may be located in public right-of-way when associated with a special community event, such as Liberty Lake Yard Sale Weekend, with the approval of the adjacent property owner or business.
   d. Hours of operation for the mobile concession shall be limited to the hours of operation of the principal use associated with the subject property, except when associated with a community event, in which case the hours of operation for the mobile concession shall be limited to the hours of operation of that community event.
Amendment to City Development Code §10-3F-2 as follows:

10-3F-2 Lighting

A. **Purpose.** The purpose of this Section is to provide regulations that preserve and enhance the view of the dark sky; promote health, safety, security, and productivity; and help protect natural resources. The provisions of this Section are intended to control **skyglow**, glare and light trespass. It is the intent of this Section to provide standards for appropriate lighting practices and systems that will enable people to see essential detail in order that they may undertake their activities at night, facilitate safety and security of persons and property, and curtail the degradation of the nighttime visual environment.

B. **Applicability.**

1. All outdoor lighting fixtures installed on private and public property shall comply with this Section. This Section does not apply to interior lighting; provided, that if it is determined by the Zoning Administrator that any interior lighting emitting light outside of the building or structure in which it is located creates a light trespass, the interior lighting shall be subject to the requirements of this Section. Lighting shall also comply with the Non-Residential Energy Code (NREC), as applicable.

2. In the event of a conflict between the requirements of this Section and any other requirement of the City of Liberty Lake Municipal Code the more specific requirement shall apply.

3. Exterior lighting plans, **photometric calculations and photometry plan as noted** and fixture specification sheets (cut sheets) must be supplied to the City to review for compliance with this Section.

C. **Exemptions.** The following are exempt from the provisions of this Section provided that they have no glare or other detrimental effects on adjoining streets or property owners:

1. Traffic control signals and devices;

2. Temporary emergency lighting (i.e., fire, police, repair workers) or warning lights;

3. Moving vehicle lights;

4. Navigation lights (i.e., radio/television towers, docks, piers, buoys) or any other lights where state or federal statute or other provision of the City of Liberty Lake Municipal Code requires lighting that cannot comply with this Section. In such situations, lighting shall be shielded to the maximum extent possible, and lumens shall be minimized to the maximum extent possible, while still complying with state or federal statute;

5. Outdoor lighting approved by the Zoning Administrator for temporary or periodic events (e.g., fairs, nighttime construction);
6. Internally illuminated signs and searchlights permitted under the City Signage Standards (Article 10-3E);
7. Private swimming pools;
8. Seasonal holiday decorations;
9. Window displays;
10. Pedestrian walkway lighting;
11. Residential lighting (excluding luminaires for the sidewalks and roadways);
12. Streetlights shall be designed and installed per Section 10-3G-2, subsection W of this Code;
13. Low light output (under 750 delivered lumens) decorative luminaires; and
14. Accent lighting on the municipal, state, or national flags that is properly shielded to limit direct glare.

D. General Standards. The following general standards shall apply to all nonexempt outdoor lighting fixtures and accent lighting:

1. All outdoor lighting fixtures and accent lighting shall be designed, installed, located and maintained such that there is no light trespass onto adjacent properties under separate ownership (see Figure 2 in subsection F of this section);
2. Outdoor lighting fixtures and accent lighting must be shielded and aimed downward (except as noted). Examples of acceptable and unacceptable light pollution control shielding are shown in Figures 1 and 2 in subsection F of this section. The shield must mask the direct horizontal surface of the light source. The light must be aimed to ensure that the illumination is only pointing downward onto the ground surface, with no escaping direct light permitted to contribute to light pollution by shining upward into the sky;
3. Outdoor lighting fixtures and accent lighting shall not directly illuminate public waterways such as the Spokane River, unless it is a navigational light subject to state or federal regulations;
4. Accent/architectural lighting shall be directed onto the illuminated object or area and not toward the sky or onto adjacent properties under separate ownership. Colored lighting is allowed for accent as long as it meets this standard. Direct light emissions of such accent lighting shall not be visible above the roof line or beyond the building, structure, or object edge. All accent lighting must be included in trespass calculations noted. Uplight accent lighting is allowed as long as it does not exceed 750 delivered lumens;
5. Spotlighting on landscaping and foliage may be directed upward and shall be limited to 150 watts incandescent luminaires with no more than 750 delivered lumens and comply with other standards in this section;
6. Accent lighting on statues/monuments shall be limited to luminaires with no more than 750 delivered lumens and comply with other standards in this section; and
7. Accent lighting on flags (except as noted above) shall be limited to luminaires with no more than 750 delivered lumens and comply with other standards in this section.
8. All outdoor lighting fixtures must have an IDA Fixture Seal of Approval or equivalent certification, as applicable.

E. Prohibited.

1. The following fixtures (luminaires) are prohibited:
   a. searchlights for any other purpose other than temporary emergency lighting or as allowed under the City Signage Standards (Article 10-3E);
   b. laser lights or any similar high-intensity light for outdoor use or entertainment
   c. quartz lamps; and
   d. mercury vapor lamps.

2. The city reserves the right to further restrict outdoor lighting including, but not limited to, pole height and level of illumination, when it is deemed to be in the best public interest consistent with the purpose of this Section.

F. Figures of Acceptable Shielding and Direction of Outdoor Light Fixtures. The following figures illustrate acceptable and unacceptable outdoor lighting fixtures in the City:

Figure 1: Freestanding Outdoor Lighting Fixtures
F. Temporary Outdoor Lighting. Any temporary outdoor lighting that conforms to the requirements of this code shall be allowed. Nonconforming temporary outdoor lighting may be permitted by the zoning administrator for a limited duration, provided that the applicant can demonstrate that such temporary lighting is in the public interest, and any potential annoyance or safety concerns that may result from the non-conforming
temporary outdoor lighting can be mitigated through conditions of approval.

G. Recreational Facilities. Any light source permitted by this code may be used for lighting of outdoor recreational facilities (public or private). Including but not limited to football fields, soccer fields, baseball fields, tennis courts, or show areas, provided all of the following conditions are met:

1. All fixtures used for event lighting shall be fully shielded or provided with sharp cut-off capability, so as to minimize up-light, spill-light and glare.
2. All events shall be scheduled so as to complete all activity before or as near to 10:30 p.m. as practical, but under no circumstance shall any illumination of the playing field, court, or track be permitted after 11:00 p.m. except to conclude a scheduled event that was in progress before 11 p.m., and circumstances prevented its conclusion before 11 p.m.

H. Lamp or Fixture Substitution. Should any light fixture regulated under this Section, or the type of light source therein, be changed after the permit has been issued, a change request must be submitted to the Zoning Administrator for his/her approval, together with adequate information to assure compliance with this code, which must be received prior to substitution.

I. Administration. Outdoor lighting plans shall be reviewed by the Department. Approval of the plan shall be based on conformance with this Section. The Zoning Administrator has the discretion to require the re-direction of existing light fixtures when it is determined that the fixture is creating off-site glare.

J. Plan Review. Lighting plans shall address the following criteria:

1. Back-light and light trespass to adjacent properties. Applicant must provide a site plan with photometric calculations at the property line. The maintained foot-candle levels can be no more 0.1 at the property line and 0.0 10’ beyond the property line.
2. Up-light and skyglow. Using the Back-light, Up-light and Glare (BUG) rating system, applicants must provide the luminaire specification sheets for all exterior fixtures showing no higher than a U0 for up-light. Exception: Luminaires with higher than U0 can be used if they are installed on the underside of an opaque surface that blocks all up-light (i.e. Soffits and canopies).
3. Glare and luminaire brightness. Using the BUG rating system, applicants must provide luminaire specification sheets for all exterior fixtures showing no higher than a G1 in residential zones R1, R2 and R3; no higher than G2 in Mixed Use zones M1, M2 and M3 as well as public zones P; and G3 in Commercial and Industrial zones C1, C2 and I. Open zones, O shall not have luminaires with higher than a G0 rating.
Addendum A for IES TM-15-11: Backlight, Uplight, and Glare (BUG) Ratings

This Addendum replaces Addendum A in IESNA TM-15-07. The following Backlight, Uplight, and Glare ratings may be used to evaluate luminaire optical performance related to light trespass, sky glow, and high angle brightness control. These ratings are based on a zonal lumen calculations for secondary solid angles defined in TM-15-11. The zonal lumen thresholds listed in the following three tables are based on data from photometric testing procedures approved by the Illuminating Engineering Society for outdoor luminaries (LM-31 or LM-35).

### Table A-1: Backlight Ratings (maximum zonal lumens)

<table>
<thead>
<tr>
<th>Secondary Solid Angle</th>
<th>BH</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backlight/Trespass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BH</td>
<td>110</td>
<td>500</td>
<td>1000</td>
<td>2500</td>
<td>5000</td>
<td>&gt;5000</td>
</tr>
<tr>
<td>BM</td>
<td>220</td>
<td>1000</td>
<td>2500</td>
<td>5000</td>
<td>8500</td>
<td>&gt;8500</td>
</tr>
<tr>
<td>BL</td>
<td>110</td>
<td>500</td>
<td>1000</td>
<td>2500</td>
<td>5000</td>
<td>&gt;5000</td>
</tr>
</tbody>
</table>

### Table A-2: Uplight Ratings (maximum zonal lumens)

<table>
<thead>
<tr>
<th>Secondary Solid Angle</th>
<th>U0</th>
<th>U1</th>
<th>U2</th>
<th>U3</th>
<th>U4</th>
<th>U5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uplight/Skyglow</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U1</td>
<td>0</td>
<td>10</td>
<td>50</td>
<td>500</td>
<td>1000</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>UL</td>
<td>0</td>
<td>10</td>
<td>50</td>
<td>500</td>
<td>1000</td>
<td>&gt;1000</td>
</tr>
</tbody>
</table>
Notes to Tables A-1, A-2, and A-3:

(1) Any one rating is determined by the maximum rating obtained for that table. For example, if the BH zone is rated B1, the BM zone is rated B2, and the BL zone is rated B1, then the backlight rating for the luminaire is B2.

(2) To determine BUG ratings, the photometric test data must include data in the upper hemisphere unless no light is emitted above 90 degrees vertical (for example, if the luminaire has a flat lens and opaque sides), per the IES Testing Procedures Committee recommendations.

(3) It is recommended that the photometric test density include values at least every 2.5 degrees vertically. If a photometric test does not include data points every 2.5 degrees vertically, the BUG ratings shall be determined based on appropriate interpolation.

(4) A “quadrilateral symmetric” luminaire shall meet one of the following definitions:
   a. A Type V luminaire is one with a distribution that has circular symmetry, defined by the IESNA as being essentially the same at all lateral angles around the luminaire.
   b. A Type VS luminaire is one where the zonal lumens for each of the eight horizontal octants (0-45, 45-90, 90-135, 135-180, 180-225, 225-270, 270-315, 315-360) are within ±10 percent of the average zonal lumens of all octants.
Table A-3: Glare Ratings (maximum zonal lumens)

Glare Rating for
Asymmetrical Luminaire Types (Type I, Type II, Type III, Type IV)

<table>
<thead>
<tr>
<th>Secondary Solid Angle</th>
<th>G0</th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>G4</th>
<th>G5</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVH</td>
<td>10</td>
<td>100</td>
<td>225</td>
<td>500</td>
<td>750</td>
<td>&gt;750</td>
</tr>
<tr>
<td>BVH</td>
<td>10</td>
<td>100</td>
<td>225</td>
<td>500</td>
<td>750</td>
<td>&gt;750</td>
</tr>
<tr>
<td>FH</td>
<td>660</td>
<td>1800</td>
<td>5000</td>
<td>7500</td>
<td>12000</td>
<td>&gt;12000</td>
</tr>
<tr>
<td>BH</td>
<td>110</td>
<td>500</td>
<td>1000</td>
<td>2500</td>
<td>5000</td>
<td>&gt;5000</td>
</tr>
</tbody>
</table>

Glare Rating for
Quadrilateral Symmetrical Luminaire Types (Type V, Type V Square)

<table>
<thead>
<tr>
<th>Secondary Solid Angle</th>
<th>G0</th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>G4</th>
<th>G5</th>
</tr>
</thead>
<tbody>
<tr>
<td>FVH</td>
<td>10</td>
<td>100</td>
<td>225</td>
<td>500</td>
<td>750</td>
<td>&gt;750</td>
</tr>
<tr>
<td>BVH</td>
<td>10</td>
<td>100</td>
<td>225</td>
<td>500</td>
<td>750</td>
<td>&gt;750</td>
</tr>
<tr>
<td>FH</td>
<td>660</td>
<td>1800</td>
<td>5000</td>
<td>7500</td>
<td>12000</td>
<td>&gt;12000</td>
</tr>
<tr>
<td>BH</td>
<td>660</td>
<td>1800</td>
<td>5000</td>
<td>7500</td>
<td>12000</td>
<td>&gt;12000</td>
</tr>
</tbody>
</table>
“BUG” RATING EXAMPLE:

A 250-watt MH area luminaire, Type IV forward throw optical distribution.

Based on the photometric test data, the luminaire has the following zonal lumen distribution:

<table>
<thead>
<tr>
<th>Forward Light</th>
<th>Lumens</th>
<th>% Lamp Lumens</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL (0 - 30 degrees)</td>
<td>1618</td>
<td>5.9%</td>
</tr>
<tr>
<td>FM (30 - 60 degrees)</td>
<td>6093</td>
<td>22.2%</td>
</tr>
<tr>
<td>FH (60 - 80 degrees)</td>
<td>3748</td>
<td>13.6%</td>
</tr>
<tr>
<td>FVH (80 - 90 degrees)</td>
<td>27</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Back Light</th>
<th>Lumens</th>
<th>% Lamp Lumens</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL (0 - 30 degrees)</td>
<td>985</td>
<td>3.6%</td>
</tr>
<tr>
<td>BM (30 - 60 degrees)</td>
<td>930</td>
<td>3.4%</td>
</tr>
<tr>
<td>BH (60 - 80 degrees)</td>
<td>136</td>
<td>0.5%</td>
</tr>
<tr>
<td>BVH (80 - 90 degrees)</td>
<td>16</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Uplight</th>
<th>Lumens</th>
<th>% Lamp Lumens</th>
</tr>
</thead>
<tbody>
<tr>
<td>UL (90 - 100 degrees)</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>UH (100 - 180 degrees)</td>
<td>0</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**Backlight Rating:**
Determine the lowest rating where the lumens for all of the secondary solid angles do not exceed the threshold lumens from Table A-1. In this example the backlight rating would be B2 based on the BL lumen limit.

**Uplight Rating:**
Determine the lowest rating where the lumens for all of the secondary solid angles do not exceed the threshold lumens from Table A-2. In this example the uplight rating would be U0 based on the BL, UL and BH lumen limits.

**Glare Rating:**
Determine the lowest rating where the lumens for all of the secondary solid angles do not exceed the threshold lumens from Table A-3 for a Type IV distribution. In this example, the glare rating would be G2 based on the FH lumen limit.

Therefore, the BUG rating for this luminaire would be: B2 U0 G2
Incorporate River District Development Regulations in City Development Code

Amendments to City Development Code §10-4C-4(A)(2), as follow:

2. Residential Building Plan Submittal Requirements: Building permit packets for residential permits shall include electronic copies of the following:
   a. Applications for Building, Mechanical, and Plumbing Permits, as applicable;
   b. Residential energy code compliance worksheets;
   c. For point load footings, prescriptive footing calculator worksheets, or engineered/stamped foundation plans;
   d. Confirmation of Type of radon mitigation system proposed installation;
   e. Truss drawings;
   f. Floor joist layout and accompanying beam calculations, as applicable;
   g. Full Plan Set:
      i. Site Plan, to include:
         aa. Building footprints;
         bb. Location of driveway;
         cc. Setback requirements dimensioned;
         dd. Existing and proposed final site contours, in 2 foot intervals; and,
         ee. Location, height and general design of any proposed retaining walls.
      ii. Construction drawings, with code compliance references, as applicable.