Planning Commission Staff Report Addendum

October 15, 2018



Case No: 18ZONE1014

Project Name: TopGolf at Oxmoor Center **Location:** 7900 Shelbyville Road

Owner(s): WMB 2, LLC & TWB Oxmoor 2, LLC

Applicant: TopGolf USA Louisville, LLC

Representative(s): Dinsmore & Shohl, LLP – Clifford Ashburner

Jurisdiction: Louisville Metro
Council District: 18 – Marilyn Parker

Case Manager: Joel P. Dock, AICP, Planner II

ADDITIONAL REQUEST

• Waiver of LDC, section 4.1.3 to not provide fully shielded lighting for golf driving range

STAFF FINDING

The additional waiver request appears to be adequately justified and meets the standard of review.

TECHNICAL REVIEW

- Lighting: Land Development Code, section 4.1.3 regulates outdoor lighting, including lighting
 for parking lots, business signs, drive-through facilities and canopies, and recreational facilities.
 A golf driving range is a recreational use and provides outdoor lighting. Significant matters of
 compliance with this section are summarized below:
 - Part B.2.a requires lighting to be aimed, directed, or focused away from sensitive uses and that glare should not be created for those operating an automobile on public streets.
 - Part B.2.b.i provides that light fixtures emitting more than 1,800 lumens shall be mounted at a height less than 30', unless approval is received from the Planning Commission.
 - Part B.2.c requires all fixtures emitting greater than 3,500 lumens be fully shielded.
 - Part B.6.a.i states that fixtures for recreational facilities within 500 feet of any residential use shall be fully shielded or provide sharp cut-off capability.
 - Part B.6.a.ii provides that the illumination of any facility within 500 feet of a residential use shall conclude at 11 PM.
 - Part B.6.b requires the submittal of a lighting plan. The lighting plan requires approval by the Planning Commission and conditions may be imposed on the lighting plan as a result of any such approval.
 - Part B.11 provides that light trespass should be minimized when abutting residential zoning districts or uses.

Land Development Code definitions:

- o Luminaire a complete lighting system, and includes a lamp or lamps and a fixture
- Lumen A unit of luminous flux. One foot candle is one lumen per square foot. For the purposes of this Ordinance, the lumen-output values shall be the INITIAL lumen output ratings of a lamp.
- Fully-Shielded Light Fixture (also known as Full-cutoff) a lighting fixture constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal and meets IESNA criteria for fully-shielded (or full-cutoff) fixtures. Any structural part of the light fixture controlling light emissions must be permanently affixed.
- Shielded (also known as cutoff) Light Fixture A lighting fixture constructed in such a manner that no more than 2.5 percent of the lamp lumens, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, are not emitted above the horizontal plane through the lowest direct-light-emitting part of the luminaire.
- Glare light emitting from a luminaire with an intensity great enough to reduce a viewer's ability to see, and in extreme cases causing momentary blindness.
- Light Trespass the shining of light produced by a luminaire beyond the boundaries of the property on which it is located.

The applicant has provided the following information regarding the lighting:

- The proposed outfield of the golf driving range will be illuminated by fixtures that emit 58,000 lumens each. Details on the proposed fixture are provided in the Public Hearing materials titled, "Light Fixture Technical Guide." The proposed lighting fixture will be used for the purpose of lighting the outfield of the driving range.
- The fixtures will be installed under the ceiling of the golf driving range bays at a height of 28' and 40'.
- A lighting plan was provided as part of this application and can be found in the Public Hearing materials titled, "Lighting Report: Analysis of Existing Lighting versus Proposed Lighting." The Lighting Report states on page 4, "The fixtures used in the Topgolf area are specialty LED fixtures designed for the purpose used to light the field. The fixtures have tightly controlled optical patterns that are designed specially to light the field with a high degree of accuracy and virtually no light trespass beyond the field perimeter. After analysis of the model and calculations, it is evident that these fixtures are capable of producing the lighting necessary on the field, while maintaining a high degree of cutoff. They have built in glare control utilizing TIR (Total Internal Reflection) lens technology which allows precise lighting projection. It further summarizes, "The new system results in virtually zero FC [foot-candle] past the property boundaries and the FC at any residential area is absolutely zero for illuminance generated by the newly designed subject property."

- A waiver to not provide fully shielded field lighting was requested. Justification for this request has been included in the Public Hearing material titled, "Lighting Waiver Justification."
- The applicant has indicated that fixtures will contain a visor to limit uplight and the fixtures will be angled downward 5 degrees from a horizontal facing position to light the field.

Using the revised detailed district development plan and the intersection of the northernmost outfield pole and the side netting, it does not appear that any residential uses are present within 500' of the outfield of the golf driving range. There are two residential zoning districts present on the east side of Christian way; one containing an access easement/dedicated roadway and the other is a recreational use. Residential and commercial zoning districts are located to the south of the golf driving range. No residential uses in the form of a dwelling unit are present on these properties within 500' of the golf driving range and they appear to be used agriculturally. It is evident from the information provided that the proposed light fixtures are aimed and focused on the outfield of the golf driving range and light trespass beyond the field perimeter is minimized. Evidence within the Lighting Report also indicates that glare from these fixtures beyond the field perimeter can be highly controlled. An independent opinion issued from the Lighting Research Center at Rensselaer Polytechnic Institute stated that a light fixture must be "pointed downward" to be considered fully shielded and that "it doesn't seem practical for outdoor athletic complexes to be lit with fully shielded lights." A competitor of the proposed light fixture has also indicated that once a light is aimed or directed as is required for recreational field lighting, it can no longer be fully shielded and that while the fixture may contain a shield or visor it cannot meet the strict definition of 'fully shielded'. Based on the provided information and testimony at the Public Hearing, the Planning Commission must decide to approve or deny the height of the proposed field lighting, the lighting plan, and waiver. The Planning Commission may require modification of the lighting plan or impose conditions on its approval as necessary to mitigate the impacts of the lighting. A binding element requiring field lighting to be shut off during non-operating hours has been added.

- A landscape exhibit was provided at the Public Hearing on October 1, 2018. The exhibit proposed a
 landscape screen at the east end of the field perimeter. The applicant has indicated that the
 landscaping will include arborvitae having a mature height of 40'-60'. A binding element requiring
 landscaping to be substantial similar to that proposed in the provided exhibit has been added.
- A binding element requested by TARC and agreed upon by the applicant has been added.

INTERESTED PARTY COMMENTS

Material received after the Public Hearing on October 1, 2018 has been included in the record and provided to the Planning Commission prior to the hearing.

STANDARD OF REVIEW AND STAFF ANALYSIS FOR WAIVER

Waiver to not provide fully shielded field lighting

(a) The waiver will not adversely affect adjacent property owners; and

STAFF: The waiver will not adversely affect adjacent property owners as the lighting report indicates that the proposed lighting fixtures are aimed and focused on the outfield of the golf driving range for the purpose of lighting the field and light trespass and glare beyond the field

perimeter will be highly controlled and minimized. There are no residential uses or other sensitive uses such as churches or schools within 500' and the nearest residential dwelling is over 1,200' from the proposed fixtures.

(b) The waiver will not violate specific guidelines of Cornerstone 2020; and

STAFF: Guideline 3, Policy 8 of Cornerstone 2020 calls for mitigation of adverse impacts of lighting from proposed development on nearby properties, and on the night sky. The lighting report indicates that the field lighting will have virtually no light trespass beyond the field perimeter and the golf driving range is encompassed by a parking lot. The distance from the golf driving range bays housing the proposed fixtures to the pavement of the nearest public road is roughly 900' and the nearest dwelling unit is over 1,200 feet from these fixtures. The lighting plan indicates that the fixtures can be highly controlled and landscaping is proposed at the east end of the field perimeter to further mitigate any potential adverse impacts of glare. The applicant has indicated that fixtures will contain a visor to limit uplight.

(c) The extent of the waiver of the regulation is the minimum necessary to afford relief to the applicant; and

STAFF: The extent of the waiver of the regulation is the minimum necessary to afford relief to the applicant as the existing regulation does not appear to be practical for an outdoor recreational facility to appropriately light the field.

(d) Either:

- (i) The applicant has incorporated other design measures that exceed the minimums of the district and compensate for non-compliance with the requirements to be waived (net beneficial effect); OR
- (ii) The strict application of the provisions of the regulation would deprive the applicant of the reasonable use of the land or would create an unnecessary hardship on the applicant.

STAFF: The strict application of the provisions of the regulation would create an unnecessary hardship on the applicant as the existing regulation does not appear to be practical for an outdoor recreational facility to appropriately light the field and there will be virtually no light trespass beyond the field perimeter. Other measures that exceed the minimums of the district have been included to mitigate potential adverse impacts as a landscape screen at the east end of the field has been proposed.

REQUIRED ACTION

 APPROVE or DENY the Waiver of LDC, section 4.1.3 to not provide fully shielded lighting for golf driving range

NOTIFICATION

Date	Purpose of Notice	Recipients
	Commission	1 st and 2 nd tier adjoining property owners Subscribers of Council District 18 Notification of Development Proposals

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6. Proposed Binding Elements (Development Site only – 18ZONE1014)

- 10. Landscaping containing 'arborvitae' with a mature height of 40-60 feet shall be provided at the east end of the field perimeter and shall be substantially similar to the landscape exhibit presented at the Public Hearing.
- 11. Field lighting shall be turned off during non-operating hours as determined by the Planning Commission
- 12. The applicant will construct approximately 200 linear feet of sidewalk from the proposed temporary bus stop on Christian Way to the sidewalk in front of Macys. Should other legal obligations prevent this sidewalk from being constructed; the applicant will work with TARC to determine an acceptable alternative

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