



June 10, 2015

Glen Markegard, Planning Manager
City of Bloomington
1800 W. Old Shakopee Road
Bloomington, MN 55431-3027

Subject: Request to Amend Condition #21 – Site Development Agreement
Supplemental Letter to Development Application Dated 5/18/2015

Per your request, please include this supplemental letter to the May 18th, 2015 Development Application which provides answers to questions that City staff raised in review of the application.

Questions from City staff and answers from Three Rivers:

1. Are the slides you sent with the application accurate regarding where Three Rivers plans to install the shielded luminaires?

Yes, the legend on the slides indicate that "blue dots" denote new LED fixtures with shields; there are a total of 13 new fixtures:

- ***9 at the top of the slope directed down slope and***
- ***4 at the middle of the hill directed up slope.***

2. If so, is the proposal to leave most of the down slope facing luminaires unshielded during snow making? That would run contrary to the original condition's intent of avoiding after hours glare impacts.

The proposed lighting operations plan during snow making is shown on the slide labeled "Snow Making Lighted Operating Hours". There will be about 30 fixtures directed down slope, of which 9 will have shields and 21 will not have shields.

For comparison and reference, prior to the 2013 season, all 70 existing fixtures pointing down-slope were previously turned on during snow making. During the last two seasons, following some re-circuitry and changes to our operations, the Park District was able to reduce the lighting required during snow making to about 30 fixtures directed down slope. The lighting required for snow making will be even further improved by our proposal to replace the 9 (of 21 total) fixtures at the top of the slope with new LED fixtures with shields.

3. Will the shielded luminaires block glare during normal ski hours just as they will during maintenance hours? ***Yes, for the 9 fixtures with shields at the top of slope. The 4 fixtures with shields pointed up-slope will be turned off during normal ski hours.*** Or are additional non-shielded luminaries used during ski hours? ***No.*** If the shielding blocks glare during regular ski hours, that's a major benefit of the shielding approach vs. the up-slope approach.

4. What are the estimated number of hours per week during the ski season that the slope is under normal lighting conditions? **Approximately 40 hours (4pm to 9-10pm).** Under grooming conditions? **9 or 10pm to 6-7am, 50-60 hours per week.** Under snow making conditions? **5pm to 7am - Approximately 150 hours per year, but weather dependent.** What are the typical hour ranges for each condition? **See above answers.** Could you put these answers in a supplemental letter so we can attach it to the Council's packet.

A copy of the full-size slides are attached.

Sincerely,



Amy Gurski
Director of Design – Three Rivers Park District

Attachment

4/27/15 City Council Work Study Session: Excerpts from presentation slides, including key graphics and photos (Full-Size)

CC: Randy Quale, City of Bloomington
Boe Carlson, Superintendent-Three Rivers Park District
Tom McDowell, Associate Superintendent-Three Rivers Park District
Fred Seymour, Alpine Services Manager-Three Rivers Park District