# **APPENDIX C**

LIGHTING PLAN



## **AURUM CONSULTING ENGINEERS MONTEREY BAY, INC.**

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Re: SUHSD HS #5 E.I.R. Information Aurum Job No. 10143.00

- I. Exterior Lighting
  - A. Code Compliance
    - 1. California T 24 Building Energy Efficiency Standards
      - a. Design will comply with all mandatory requirements.
      - b. Design will meet wattage allowances for outdoor lighting.
    - 2. City of Salinas Lighting Ordinance
      - a. Design will comply with ordinance for cut-off optics in all light fixtures.
      - b. Design will comply with light pole maximum heights.
    - 3. California Green Building Code
      - a. The mandatory requirements of the California Green Building Code references the California Energy and Commission (T-24) for required compliance standards.
    - 4. Illuminating Engineering Society of North America (IES)
      - a. IES is not a code but widely accepted as setting the standards for lighting.
      - b. Footcandle levels will follow IES recommended practices.

#### B. General

- 1. All light fixtures will all have cut—off optics which are low glare, i.e. no exposed lamps or flood lights but shielded light sources.
- 2. Lighting will be of mixed energy efficient types: Metal Halide, Fluorescent, LED, or High Pressure Sodium.
- 3. Footcandle levels at the property line near residences will be minimized by use of low level fixtures and screening.
- 4. Footcandle levels at the property line at driveways where cars and pedestrians mix will meet IES standards for safety for those areas.

### II. Football, Soccer, and Track Stadium Lighting

#### A. Codes

- 1. California T–24 code does not regulate sports lighting.
- 2. California Green Building Code does not regulate sports lighting.

#### B. Design

- 1. Football and soccer require adequate lighting from ground level to approximately 50 feet above ground to accommodate the combination of aerial and ground play.
- 2. There will be four light poles with lights approximately 85 feet in height above the final playing field level.
- 3. Stadium lights will be 1500 watt metal halide with glare shields.
- 4. Football and Soccer Fields will have an average of 50 footcandles at playing field level.
- 5. Track will average 20 footcandles on the track.
- 6. Footcandle levels created by stadium field lighting will average about 0.1 to 0.2 foot candles horizontal and 0.5 to 0.6 average vertical footcandles measured at 40 feet out from the edge of the track.

# C. General

The stadium field lighting will be very similar to the lighting installed at Everett Alverez High School in 2009. The best available cut–off glare shields available will be used.

Charles W. Denley Senior Project Manager