

California Environmental Quality Act
Initial Study
(State Clearinghouse No. 2022080550)

Kastner Athletic Field Lighting Project

Fresno, California

Lead Agency and Project Sponsor:
Clovis Unified School District



OCTOBER 2022

TABLE OF CONTENTS

	Executive Summary	1
1.	Introduction	2
1.1	Purpose and Scope of Environmental Review	2
1.2	Public Review Process	2
2.	Project Information	3
2.1	Project Title, Lead Agency, and Lead Agency Contact Information	3
2.2	Project Location	3
2.3	Project Setting	6
2.4	Project Description	7
2.5	Request for Preliminary Comment	8
2.6	Actions Required to Implement Project	8
3.	Environmental Factors Potentially Affected	9
4.	Determination	9
5.	Approach to Analyzing Environmental Impacts	10
5.1	State CEQA Guidelines Appendix G and Thresholds of Significance	10
5.2	Existing Laws, Regulations, Policies, and Mitigation Measures	10
6.	Evaluation of Environmental Impacts	12
6.1	Aesthetics	12
6.2	Agricultural and Forestry Resources	15
6.3	Air Quality	16
6.4	Biological Resources	17
6.5	Cultural Resources	19
6.6	Energy	20
6.7	Geology and Soils	21
6.8	Greenhouse Gas Emissions	24
6.9	Hazards and Hazardous Materials	25
6.10	Hydrology and Water Quality	27
6.11	Land Use and Planning	28
6.12	Mineral Resources	29
6.13	Noise	29
6.14	Population and Housing	31
6.15	Public Services	31
6.16	Recreation	32
6.17	Transportation	33
6.18	Tribal Cultural Resources	34
6.19	Utilities and Service Systems	35
6.20	Wildfire	37
6.21	Mandatory Findings of Significance	38

7.	Names of Persons Who Prepared or Participated in Preparation of the Initial Study	41
7.1	Lead Agency	41
7.2	Environmental Review Consultant	41
8.	Sources Consulted	42

List of Figures

Figure 1:	Project Location	4
Figure 2:	Project Site	5

Appendices

Appendix A:	Photometric Analysis
-------------	----------------------

Executive Summary

This Initial Study has been prepared on behalf of Clovis Unified School District (“CUSD” or “the District”) for its proposed Kastner Athletic Field Lighting Project (“project”). The Initial Study has prepared in compliance with the requirements of the California Environmental Quality Act (“CEQA”) and the State CEQA Guidelines (“CEQA Guidelines”). The purpose of preparing this report is to inform CUSD and the public of significant environmental effects of the project and identify possible ways to avoid the significant effects or reduce the impacts to a less than significant level.

The project is planned for development at the Kastner Intermediate School campus, located at 7676 N. First Street, near the northeast corner of First Street and Alluvial Avenue in the City of Fresno. The project site is located at the southwest corner of the Kastner campus, encompassing an area of approximately 5.0 acres. The site currently includes a grass-turfed athletic field used for football and other field sports, a rubberized running track plus other track-and-field facilities, aluminum bleacher seating areas, and areas landscaped with grass and trees. The facilities are currently utilized for physical education as well as extracurricular athletic activities and events, which occur on weekdays and Saturdays.

The District is proposing to undertake the project in order to provide improved utilization and programming opportunities for the existing athletic facilities at the Kastner campus. The need for the proposed project is also driven by Senate Bill (SB) 328, which beginning in 2022 mandates later school-day start times for most middle schools and high schools, and consequently requires scheduling of after-school programs and extracurricular activities to occur later in the day. The proposed lighting facilities would allow for existing activities to take place at later hours and improve visibility during low-light conditions.

Facilities included as part of the project consist of four 80-foot-tall poles with LED lighting equipment, which would be installed at four different points around the perimeter of the existing field (two on the east side of the field, and two on the west side of the field). Each pole would be equipped with ten total pieces of lighting equipment (two mounted at 15.5 feet, one mounted at 60 feet, and seven mounted at 80 feet). The project’s state-of-the-art lighting equipment is designed to be very focused and directional such that there is little or no light trespass beyond the school property.

The District will operate the lights as needed to accommodate activities occurring on the site and will cease lighting operations as soon as possible. The use of the lighting will in no event extend past 10:00 pm, and in most instances, the activities will cease substantially before 10:00 pm. If approved, project construction and equipment installation activities are anticipated to occur in Fall 2022 for a period of two-to-three weeks, and operation of the lights would begin in late 2022.

Based on this Initial Study, there are no potential impacts of the Kastner Athletic Field Lighting Project which could result in a significant effect on the environment. Therefore, the District should adopt a Negative Declaration for the project.

1. Introduction

1.1 Purpose and Scope of Environmental Review

This Initial Study has been prepared on behalf of Clovis Unified School District (“CUSD” or “the District”) for its proposed Kastner Athletic Field Lighting Project (“project”). The Initial Study is an informational document that will inform CUSD and the public generally of the significant environmental effects of the project and identify possible ways to minimize the significant effects. It focuses primarily on the changes in the environment that would result from the project and examines all phases of the project including planning, construction, and operation. Under CEQA and the CEQA Guidelines, “significant effect or impact” means “a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including but not limited to land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”

To promote efficiency and reduce redundancy, this Initial Study incorporates by reference information from other documents and sources that is germane to the proposed project and is available for public review. Most of the information incorporated by reference is from the City of Fresno’s General Plan and Development Code Update Master Environmental Impact Report (“City of Fresno General Plan MEIR”), which provides a comprehensive evaluation of impacts associated with implementation of the City of Fresno’s General Plan.

1.2 Public Review Process

The public review process for this Initial Study includes the following:

- The District distributed a Request for Preliminary Comment (“RFC”) for the project to interested agencies and nearby property owners and residents. The RFC included a summary description of the project’s proposed facilities and operational characteristics. The purpose of the RFC was to solicit guidance from the agencies as to the scope and content of the environmental information that should be included in the project’s evaluation of environmental impacts, and to allow nearby property owners and residents to provide environmental comments on the project for the District’s consideration.
- The District has distributed a Notice of Intent to Adopt a Negative Declaration (NOI) for the project. The notice states that the District has prepared an Initial Study and proposed Negative Declaration for the project, includes a brief description of the project and its location, an address where copies of the Initial Study are available for public review, and the beginning and end dates for a 20-day review period during which the District will receive public comments on the Initial Study. The District sent the NOI to the California Office of Planning and Research’s State Clearinghouse and interested agencies; posted the notice at the Fresno County Clerk’s Office and in a newspaper of general circulation in the area affected by the project; mailed the notice to all individuals and organizations who previously requested the notice in writing; and mailed the notice to nearby owners and residents.
- Following completion of the 20-day public review period for the Negative Declaration, the District’s Governing Board will meet to consider adoption of a Negative Declaration and approval of the project. Comments and recommendations received on the Initial Study will be provided to the Board. Additionally, individuals and agency representatives may appear in person to present testimony to the District on the Negative Declaration and the project when the Board of Trustees meets to consider adopting the Negative Declaration and approving the project.

2. Project Information

2.1 Project Title, Lead Agency, and Lead Agency Contact Information

Project Title: Kastner Athletic Field Lighting Project

Lead Agency and Project Sponsor:

Clovis Unified School District
1450 Herndon Avenue
Clovis, CA 93611

Lead Agency Contact Person:

Denver Stairs
Assistant Superintendent, Facility Services
Telephone: (559) 327-9260
Email: denverstairs@cusd.com

Clovis Unified School District is a public school system with boundaries that encompass nearly all of the city of Clovis as well as portions of the city of Fresno and unincorporated areas of Fresno County. The District's total enrollment for 2021-22 was over 42,000 students. The District has 34 elementary schools, five intermediate schools, and five high schools as well as an adult school, continuation school, community day schools, and an online charter school. The District is governed by a seven-member board of trustees who represent seven trustee areas.

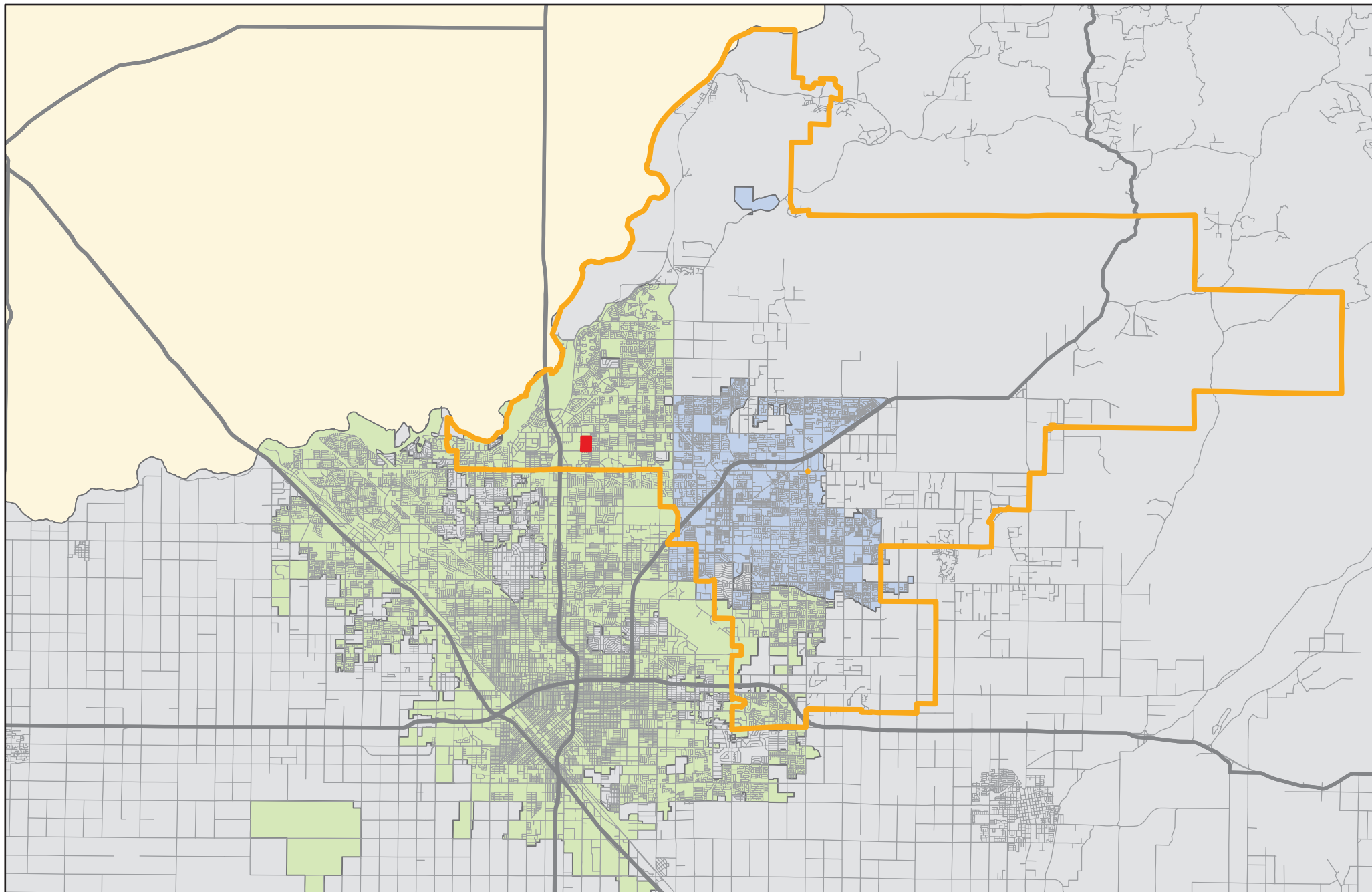
In addition to being the project proponent, Clovis Unified will serve as the Lead Agency for the project. The Lead Agency, as defined by CEQA, is the public agency that has the primary responsibility for carrying out or approving a project (State CEQA Guidelines Section 15367). The Lead Agency also has the primary responsibility for determining what level of CEQA review is required for a project and for preparing and approving the appropriate type of CEQA document. CUSD has the primary responsibility for considering whether to grant its discretionary approval of the project.

2.2 Project Location

The Kastner Intermediate School campus where the project is proposed is located at 7676 N. First Street, near the northeast corner of First Street and Alluvial Avenue in the City of Fresno. The project site encompasses approximately 5.0 acres of the southwestern portion of the existing campus. Table A-1 presents additional project location information. The location of the project site is displayed on Figures 1 and 2.

Table 2.5-A: Project Location Information

City, County, and State	Fresno, Fresno County, California
Cross Streets	First Street and Alluvial Avenue
Site Area	± 5.0 acres
USGS Map	Fresno North, California Quadrangle, 7.5 Minute Series
Latitude & Longitude	36°50'46"N; 119°46'26"W
Section, Township, and Range	Section 34, Township 12 South, Range 20 East, MDB&M
Elevation	356 feet above mean sea level

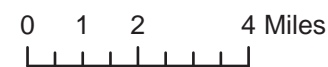
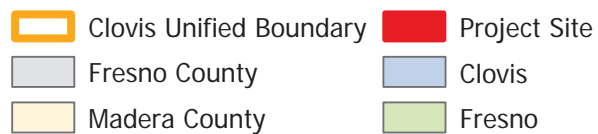


Regional Location

Figure 1

Kastner Field Lighting Project
Clovis Unified School District

ODELL Planning Research, Inc.





Project Site

Figure 2

Kastner Field Lighting Project
Clovis Unified School District

ODELL Planning & Research, Inc.

Project Site

Light Pole Location

0 100 200 400 Feet

N

2.3 Project Setting

Existing Land Uses

The proposed project is located at the campus of Kastner Intermediate School, a public school within Clovis Unified School District that serves students in grades 7-8. Immediately adjacent to the Kastner campus is the Lincoln Elementary School campus, an elementary school that serves students in grades TK-6. School facilities have been in operation at the site continuously since 1979.

The Kastner campus is located within an established urbanized area in the northern part of the City of Fresno. The campus is situated among a mixture of development types. The areas to the south and east of the campus are developed with single-family residences. The area north of the campus is developed with a variety of commercial uses, including a supermarket, restaurants, a car wash, and a post office. The area west of the campus is developed with several multifamily residential complexes and single-story office buildings located near the intersection of First Street and Alluvial Avenue.

Public Land Use Policy

City of Fresno General Plan

The *City of Fresno 2014 Fresno General Plan* provides the adopted public land use policy for the City of Fresno. The General Plan's Urban Form, Land Use, and Design Element sets forth goals focused on "establishing a structural framework for the city, enhancing the character of neighborhoods and districts, creating vibrant centers of activity and a public realm that is engaging and livable, crafting a tapestry of distinctive, connected communities, and strengthening Fresno's identity and sense of place." Land use designations for areas within the City's planning area are identified in the City's Land Use and Circulation Map. According to the Land Use and Circulation Map, the entirety of the Kastner campus is designated "Public Facility - Elementary & Middle School".

City of Fresno Citywide Development Code (Zoning)

The City of Fresno's Citywide Development Code implements the City's General Plan (plus other operative plans) to protect and promote the public health, safety, peace, comfort, convenience, prosperity, and general welfare of the City of Fresno. The Development Code sets forth a broad range of land use regulations, including defining and identifying zoning districts within the City of Fresno. The City of Fresno's zoning designation for the project site is "PI" (Public and Institutional). The PI district is used for public or quasi-public facilities, including City facilities, utilities, schools, health services, corporation yards, utility stations, and similar uses. Accessory retail uses and services, including food facilities and childcare, are also permitted in the PI district.

School District Land Use Powers and Authority

Public school districts are afforded unique discretion when developing educational facilities. In addition to being able to act as its own lead agency, a school district may take action pursuant to provisions of the California Government Code when developing a project to act independently from land use regulations of the City or County in which the project is located. Government Code Section 65402(c) allows a school district to overrule findings of a City or County regarding the General Plan conformity of a proposed project. Government Code Section 53094 allows a school district to exempt a proposed project from the zoning ordinances of the City or County. However, subdivision (b) of Section 53094 limits the availability of the zoning override as follows: "The governing board of the school district may not take this action when the proposed use of the property by the school district is for nonclassroom facilities, including, but not limited to, warehouses, administrative buildings, and automotive storage and repair buildings." It is important to note in this regard that athletic activities and facilities are considered an integral part of the educational program and are thus allowed to be exempted from City or County zoning ordinances per Government Code Section 53094¹.

¹ See for reference *City of Santa Cruz vs. Santa Cruz City School Bd. of Education* (1989) 210 Cal.App.3d 1; and *Taxpayers for Accountable School Bond Spending v. San Diego Unified School Dist.* (2013) 215 Cal.App.4th 1013.

Transportation Network

Streets and Highways: First Street (a four-lane divided roadway classified as a Scenic Arterial) is located adjacent to the west side of the project site. Alluvial Avenue (a four-lane undivided roadway classified as a Collector) is located adjacent to the south side of the project site. Nees Avenue (a four-lane divided roadway classified as an Arterial) is located approximately 600 feet north of the Kastner campus. State Route 41, the nearest highway to the project site, is located approximately 3,000 feet west of the project site.

Bikeways: In the vicinity of the project site, Class II Bikeways exist along First Street, Alluvial Avenue, and Nees Avenue.

Walkways: Pedestrian sidewalks exist to the west and south of the campus along both sides of First Street and Alluvial Avenue. There are pedestrian trail segments located on the north side of the campus and immediately east of the campus along the west side of Bond Avenue.

Transit: Fresno Area Express (FAX) is the transit operator in the City of Fresno. FAX Route 34 operates along Alluvial Avenue on the south side of the Kastner campus. In the nearby vicinity, Routes 38 and 58 operate along Nees Avenue north of the project site, and Route 32 operates along Fresno Street approximately one-half mile west of the project.

(Please see Part E, Section 17 for additional information on streets and highways.)

Public Utilities and Services

Water and Sewer: The project site is served by the City of Fresno's water and sewer system. Existing water and sewer infrastructure exist to the north and west of the site in areas within the City of Fresno city limits where urban development has occurred.

Storm Water Drainage: The Fresno Metropolitan Flood Control District (FMFCD) is responsible for managing urban stormwater runoff within the Fresno-Clovis area. The site is within FMFCD Drainage Area "CN", which drains to a basin located approximately 1,600 feet southwest of the Kastner campus. There is existing curb and gutter infrastructure in place along First Street and Alluvial Avenue.

Solid Waste: The District contracts for solid waste services with Industrial Waste and Salvage (IWS). IWS uses a materials recovery facility, the Cedar Avenue Recycling and Transfer Station (CARTS), to divert recyclable material before transporting the remaining material to the Fairmead Landfill in Madera County.

Police and Fire Services: The Fresno Police Department provides law enforcement services, and the Fresno Fire Department provides fire protection services within the City of Fresno. Additionally, Clovis Unified has a Police Services department, comprised of sworn officers, which is responsible for the personal safety of students, employees and the many guests who visit the schools or attend any of the events the District sponsors.

(Please see Part E, Sections 15 and 19 for additional information on Public Services and Utilities.)

2.4 Project Description

The District is proposing to undertake the project in order to provide improved utilization and programming opportunities for the existing athletic facilities at the Kastner campus. The need for the proposed project is also driven by Senate Bill (SB) 328, which beginning in 2022 mandates later school-day start times for most middle schools and high schools, and consequently requires scheduling of after-school programs and extracurricular activities to occur later in the day. The proposed lighting facilities would allow for existing activities to take place at later hours and improve visibility during low-light conditions.

Facilities included as part of the project consist of four 80-foot-tall poles with LED lighting equipment, which would be installed at four different points around the perimeter of the existing field (two on the east side of the field, and two on the west side of the field). Each pole would be equipped with ten total pieces of lighting equipment (two mounted at 15.5 feet, one mounted at 60 feet, and seven mounted at 80 feet). The project's state-of-the-art lighting equipment is designed to be very focused and directional such that there is little or no light trespass beyond the

school property. (Refer to the Photometric Analysis, included as Appendix A, for additional information regarding the lighting equipment.) The project also includes onsite electrical infrastructure necessary for the project's operation.

Operationally, with the installation of lighting equipment, the project would allow for activities at the field to occur later in the evening. Games and practices are currently held (and would continue to be held) on weekdays and weekends. If the project is developed, some activities at the field may continue to be held during daytime hours; however, the overall number and variety of activities at the field would not be increased from existing conditions. The District will operate the lights as needed to accommodate activities occurring on the site and will cease lighting operations as soon as possible. The use of the lighting will in no event extend past 10:00 pm, and in most instances, the activities will cease substantially before 10:00 pm.

If approved, project construction and equipment installation activities are anticipated to occur in Fall 2022 for a period of two-to-three weeks, and operation of the lights would begin in late 2022.

2.5 Request for Preliminary Comment

The District distributed a Request for Preliminary Comment ("RFC") for the proposed school project to interested agencies that might have an interest in the project. The Request provided an opportunity for the agencies to comment on the potential environmental effects of the project, including whether an Environmental Impact Report, Mitigated Negative Declaration, or Negative Declaration should be prepared for the project. The District also sent the RFC to residents and property owners in the project vicinity. Responses from reviewing agencies have been taken into consideration in the analysis presented in this Initial Study. There were no comments from property owners or residents.

2.6 Actions Required to Implement the Project

CUSD must undertake the following actions in order to implement the project:

- Complete the California Environmental Quality Act process for the project. This would involve either the adoption of a negative declaration (or mitigated negative declaration) for the project or the preparation of an environmental impact report. Based on the results of this Initial Study, the District should consider the adoption of a negative declaration for the project.
- Approve the project.
- Secure approvals, permits, and agreements, as necessary, from agencies and utilities that are responsible for public facilities the project would construct, modify, or otherwise affect within or near the site.

(This space is intentionally left blank)

3. Environmental Factors Potentially Affected

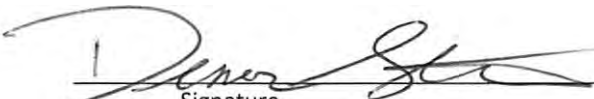
The checklist of environmental factors listed in Table 3-A below is intended to provide an at-a-glance summary of factors which would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages. Based on the evaluations in Section 6, the project would have a less than significant impact on the environmental factors listed in the following table, thus no items have been marked.

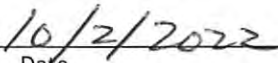
TABLE 3-A
Environmental Factors Potentially Affected

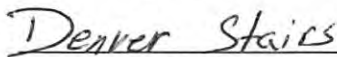
Aesthetics		Agricultural and Forestry Resources		Air Quality	
Biological Resources		Cultural Resources		Energy	
Geology and Soils		Greenhouse Gas Emissions		Hazards and Hazardous Materials	
Hydrology and Water Quality		Land Use and Planning		Mineral Resources	
Noise		Population and Housing		Public Services	
Recreation		Transportation		Tribal Cultural Resources	
Utilities and Service Systems		Wildfire		Mandatory Findings of Significance	

4. Determination

Based on this Initial Study, Clovis Unified School District hereby determines that the Kastner Athletic Field Lighting Project could not have a significant effect on the environment. Therefore, a Negative Declaration will be prepared.


Signature


Date


Printed Name


Title

5. Approach to Analyzing Environmental Impacts

5.1 State CEQA Guidelines Appendix G and Thresholds of Significance

This Initial Study identifies and analyzes the potential impacts of the project on the environmental resources and conditions listed in Appendix G in the State CEQA Guidelines², describes feasible mitigation measures that could be incorporated in the project to avoid the impacts or reduce them to an insignificant level, and determines the significance of the impacts without or with mitigation. The environmental resources and conditions listed in Appendix G are categorized as follows: Aesthetics, Agricultural and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

Under the State CEQA Guidelines, the impacts of a project on an environmental resource or condition may be considered “significant”, “less than significant impact with project level mitigation”, “less than significant”, or “no impact”.

The “significant” determination is applied if there is substantial evidence that an effect may be significant. Under the State CEQA Guidelines, a significant effect, or impact, on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (see Guidelines Section 15382).

The “less than significant impact with mitigation incorporated” determination applies when the incorporation of mitigation measures in the project would reduce an impact from potentially significant to less than significant. This Initial Study describes each mitigation measure the District has incorporated in the project to reduce potentially significant impacts to a less than significant level.

The “less than significant” determination applies when the project would not result in a significant effect on a resource or condition. The less than significant determination used only in cases where no mitigation measures are required to reduce an impact to a less than significant level.

The “no impact” determination applies when the project would have no impact on a resource or condition or the resource or condition does not apply to the project or its location. The no impact determination is used only in cases where no mitigation measures are required to avoid or eliminate an impact.

5.2 Existing Laws, Regulations, Policies, and Mitigation Measures

In some cases, an impact that that might appear to be significant will be within the regulatory scope of federal, state, regional, or local laws, regulations, or policies – the application of which will reduce the impact to a less than significant level. Preparation of this Initial Study included a review of applicable laws, regulations, and policies to determine if they would prevent or reduce the potentially significant impacts of the proposed project. Such laws, regulations, and policies are not identified as mitigation measures in the Initial Study because they would apply to the project regardless of the outcome of the Initial Study. Applicable laws, regulations, and policies include but are not limited to the following:

City of Fresno

- City of Fresno General Plan
- City of Fresno Citywide Development Code
- Standard Construction Drawings

² The Appendix G Checklist can be viewed at: http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf

Fresno County Health Department, Environmental Health Division

- Permitting and inspection requirements for retail food facilities, including mobile food vendors and special event food booths
- HazMat Compliance Program

Fresno Metropolitan Flood Control District

- National Pollutant Discharge Elimination System (NPDES) Construction General Permit
- 2016 District Services Plan

San Joaquin Valley Air Pollution Control District

- SJVAPCD District Rules and Regulations

(This space is intentionally left blank)

6. Evaluation of Environmental Impacts

The following evaluation of environmental impacts is based on questions presented in the State CEQA Guidelines, Appendix G: Environmental Checklist Form, Evaluation of Environmental Impacts.

For each environmental resource category, there a summary checklist provided which indicates the project's degree of impact for each question from the Appendix G Checklist, followed by an impact discussion which explains the basis for the significance determination for each category. In the impact discussion, some questions are addressed collectively, while other questions are addressed individually.

6.1 Aesthetics

Except as provided in Public Resources Code § 21099, would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?			✓	
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d. Create a new source of light and glare that would adversely affect day or nighttime views in the area?			✓	

Impact Discussion

a. Less Than Significant Impact:

There are no designated scenic vistas located at the project site or its vicinity. Major scenic vistas within the greater Fresno area include the Sierra Nevada foothills and mountains, the San Joaquin River, and the downtown Fresno skyline. The project would not substantially adversely affect views of these or other local scenic features due to its distance from these features, and because the slim structural features of the proposed project facilities (i.e., light poles) would not substantially interfere with or block any view. The impact of the project on scenic vistas would therefore be less than significant.

b. No Impact:

The project site is not within a state scenic highway and does not contain scenic resources such as trees and rock outcroppings.

c. Less Than Significant Impact:

The project is located within an established urbanized area in the northern part of the City of Fresno. Development projects within the City of Fresno are generally subject to regulations and guidelines governing visual character, urban form, and scenic quality found in the Citywide Development Code and the City's long-range planning documents (i.e., the City's General Plan and various Specific Plans). The applicable scenic regulations act as a means of regulating land development to achieve the desired urban form for an area.

While noting that the provisions of Government Code sections 65402(c) and 53094 may allow a school district to exempt facilities from adherence to General Plan policies and/or zoning regulations, the facilities proposed as part of the project would be compatible with all applicable regulations governing scenic quality as well as the overall aesthetic environment and urban form sought for the area in the City's long-range planning policies. Field lighting at public school facilities is a relatively common occurrence in urbanized areas. The proposed lighting facilities will be located within the existing campus boundaries, and the physical form and character of these facilities (i.e., the size, height, massing and arrangement) would be consistent with that of other facilities present in the area, including cell towers and electrical utility structures.

d. Less Than Significant Impact:

In urbanized environments, adverse environmental impacts associated with lighting are focused on two key conditions: light trespass and glare. The term "light trespass" refers to light emitted from lighting equipment which shines beyond the boundaries of the property on which the installation is sited. Light trespass is of particular concern when it impacts adjacent uses such as residences and hotels, which are considered light-sensitive since they are typically occupied by persons who have an expectation of darkness and privacy during evening hours and who can be disturbed by bright light sources. Light trespass is measured in terms of illuminance (footcandles or metric units lux) and can be measured at any point and in any direction.

Glare refers to brightness of a light source that causes annoyance, discomfort, or loss in visual performance and visibility to the eye. It can be disabling or simply uncomfortable. It is subjective, and sensitivity to glare can vary widely. The sensation of glare is based on a combination of factors, such as light source luminance, the luminance of the background, the size of the light source, the area of the background, the position of the light source in the field of view, as well as the unique sensitivities of the viewer. Glare can be a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use. Activities, such as driving, and land uses, such as parks and residences, are considered glare sensitive as the presence of glare could interfere with vision and/or result in an irritant to these activities/uses. As noted above, the perception of glare is subjective and there is no practical standard that allows for field measurements. However, the potential for glare can be evaluated by predicting the intensity of a light source in candelas at various locations in relation to the light source.

The project site is located in an urbanized environment within the City of Fresno that experiences a mixture of night-time intensity correlated with the mixture of land uses in the vicinity. Existing evening lighting features at the project site and its vicinity include the following:

- Within the interior of the Kastner campus: numerous stationary light sources which provide lighting for safety and security purposes at the campus during evening and early-morning hours.
- Along First Street west of the Kastner campus: Several LED streetlights, traffic signal lighting, and lighting from residential uses.
- Along Alluvial Avenue south of the Kastner campus: Several LED streetlights, traffic signal lighting, and lighting from residential and office commercial uses.
- Near the intersection of First Street and Nees Avenue north of the Kastner campus: several LED streetlights, traffic signal lighting, parking lot lighting for commercial areas, and lighting from commercial buildings.

A fundamental and purposeful aspect of the project is that it would create a new source of light at the project site to allow for utilization of the Kastner athletic field during low-light conditions. The project could also result in other minor incidental increases in light and glare (e.g., from headlights of vehicles arriving and departing the campus for activities occurring during evening hours). However, since the project vicinity is exposed to light and glare generated by existing land uses in the vicinity and transportation trips occurring along the arterial and collector roadways that border the campus, such minor incidental increases are considered insubstantial.

While noting that both the City of Fresno Development Code and the California Energy Code exempt lighting utilized for public athletic facilities from regulation, as a practical matter there is the potential for the project to generate unwanted light that could adversely impact the surrounding environment. For determining amounts of light and glare that would be considered potentially significant, this analysis utilizes the thresholds associated with Lighting Zone 3 (“LZ3”) as identified in the California Energy Code. Per the California Energy Code, urban areas (as defined by the U.S. Census) are generally classified as LZ3. The project is located within the City of Fresno, which is defined as an urban area, and the site-specific characteristics are consistent with that of a typical urban setting. The light trespass illuminance limits on adjacent properties in LZ3 is 8 lux (equivalent to approximately 0.74 footcandles (“fc”)).

As part of the project’s planning and design, a Photometric Analysis (see Appendix A) was prepared for the project by Musco Lighting (the vendor of the project’s lighting equipment) which models the predicted lighting conditions that would result from the project. The Photometric Analysis displays predicted lighting levels for areas which are intended to be lighted (in this case, the athletic field area) and adjacent areas where additional lighting is sought to be avoided. The Photometric Analysis is based on the location and positioning of the proposed lighting facilities and does not account for features such as landscaping or screening that may reduce the amount of light and glare cast upon adjacent areas.

The project’s state-of-the-art LED lighting is very focused and directional, which minimizes light spill on nearby areas not intended to be lighted and minimizes any uplighting that can contribute to sky glow. The horizontal footcandles to be provided at the athletic field will range from 31 to 46 fc on the grass-turfed field area, 1 to 30 fc on the running track surrounding the field, and 4.3 to 11.1 fc on the bleacher areas. In contrast, the footcandles at the edge of the adjacent residential areas on the west side of First Avenue and the south side of Alluvial Avenue are projected to be 0.02 fc and 0.00 fc, respectively, well below the 0.74 footcandle criterion.

As previously indicated in this section, because the perception of glare is subjective, there is no practical standard that allows for field measurements. However, the potential for glare can be evaluated by predicting the intensity of a light source in candela (cd) at various locations in relation to the light source. A criterion that has been used with respect to being predictive for glare is 10,000 cd in zone E3 (Benya 2019), which is equivalent to Lighting Zone 3 per the California Energy Code. Per the Photometric Analysis, the candela values at all residential locations are all substantially below 10,000 cd. In fact, predicted candela values predicted range from 0 to 848 cd at the west side of First Avenue and from 0 to 12 cd at the south side of Alluvial Avenue.

With respect to the timing of lighting activity, sensitivity to light sources increases substantially during the nighttime hours, which sources such as the Illuminating Engineering Society of North America indicate is 11:00 pm to 7:00 am (referred to as “curfew” hours). The project will avoid generating light during sensitive nighttime hours since it includes an operational requirement for lighting to be shut down no later than 10:00 pm. As a practical matter, to save energy and minimize neighborhood impacts, the District’s will endeavor to shut off the lights as soon as practicable after an activity at the field.

Based on the foregoing information, impacts related to lighting and glare will be less than significant.

6.2 Agricultural and Forestry Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?				✓
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c. Conflict with existing zoning for, or cause rezoning of, forestland, timberland, or timberland zoned Timberland Production?				✓
d. Result in the loss of forestland or conversion of forestland to non-forest use?				✓
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?				✓

Impact Discussion

a.-e. No Impact:

The project site is located in a completely urbanized area that does not include any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No agricultural-zoned areas or properties under Williamson Act contract are located at the project site or in its vicinity. Additionally, there are no forestland or timberland areas within the City of Fresno city limits. No impacts on agricultural or forestry resources would occur.

(This space is intentionally left blank)

6.3 Air Quality

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality?			✓	
c. Expose sensitive receptors to substantial pollutant concentrations?			✓	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

Impact Discussion

a.-d. Less Than Significant Impact:

The project site is located within the San Joaquin Valley Air Basin (SJVAB). The SJVAB is within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). Air quality in the SJVAB is influenced by a variety of factors, including topography, meteorology, climate, and atmospheric stability and inversions.

The SJVAPCD is the agency primarily responsible for ensuring that National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are not exceeded and that air quality conditions are maintained in the SJVAB. Responsibilities of the SJVAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the Federal Clean Air Act and the California Clean Air Act. The SJVAB is designated as a nonattainment area with respect to the state O₃, PM₁₀, and PM_{2.5} standards; and the national 8-hour O₃ and PM_{2.5} standards.

A major consideration for assessing air quality impacts is the protection of those members of the population who are most sensitive to the adverse health effects of air pollution, termed "sensitive receptors." The term refers to specific population groups, as well as the land uses where individuals would reside for long periods. Commonly identified sensitive population groups are children, the elderly, the acutely ill, and the chronically ill. Commonly identified sensitive land uses would include facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Residential dwellings, schools, parks, playgrounds, day care centers, convalescent homes, and hospitals are examples of sensitive land uses.

The project entails the construction and installation of new lighting facilities at the existing Kastner athletic field plus shifting the time of activities to later hours while maintaining the same variety and intensity of activities that currently exist at the field. The number of users and operational intensity of the athletic field and the campus as a whole would remain substantially unchanged from existing conditions. As such, implementation of the proposed

project would not result in the long-term operation of any major onsite stationary sources of emissions, nor would project implementation be anticipated to result in substantial changes in emissions associated with vehicle trips.

Short-term increases in emissions would occur during the construction and installation of lighting facilities. For this project, such emissions would be limited and not in excess of any applicable thresholds due to the relatively small footprint of development and the relatively short amount of time it would take to install electrical and lighting equipment. The project's long-term operational emissions would be largely associated with LED lighting equipment operations and maintenance, including energy use and area sources, such as the occasional use of cleaning products and architectural coating. Such emissions would not exceed the SJVAPCD's recommended localized ambient air quality significance thresholds of 100 lbs/day for each of the criteria air pollutants. Additionally, review of the SJVAPCD's Small Project Analysis Levels ("SPAL," which provides screening criteria for projects based on characteristics of project type, size, and number of vehicle trips)³ suggests it is reasonable to conclude that the proposed field lighting project would not exceed applicable thresholds of significance for criteria pollutants.

Based on these factors, potential air quality impacts of the proposed project would be less than significant.

6.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Fish and Wildlife Service?			✓	
b. Have a substantially adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U. S. Wildlife Service?				✓
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓

³ Using the project type, size, and number of vehicle trips, SJVAPCD has pre-quantified emissions and determined values below which it is reasonable to conclude that a project would not exceed applicable thresholds of significance for criteria pollutants. As examples, the SPAL thresholds for a junior high school project are 1,440 students; 168,800 square feet of size; 1,000 average daily one-way vehicle trips (except HHDT); and 15 average daily one-way HHDT Trips only (50-mile trip length), and the SPAL thresholds for a city park are 256 acres; 1,100 average daily one-way vehicle trips (except HHDT); and 20 average daily one-way HHDT trips. (Source: <https://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI-SPAL.PDF>)

d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			✓	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

Impact Discussion

a. Less Than Significant Impact:

The City of Fresno General Plan MEIR identifies and discusses different types of vegetation communities that are present within the City's Planning Area. The project site is located in a highly developed area and is identified as "Urban" land in the Biological Resources section of the City of Fresno General Plan MEIR. As discussed in the MEIR, urban land provides poor quality habitat for any special status species, and special status species are not expected to occur within urban areas:

Urban: Urban (or developed) lands have been constructed upon or otherwise covered with a permanent, unnatural surface (e.g., concrete, asphalt, buildings, homes, etc.) or large amount of debris or other materials. The Planning Area consists predominately of urban areas, which are concentrated in the central portion of the Planning Area, within the Fresno city limits. Urban land is less common within the rural and agricultural portions of the Planning Area. Urban land provides poor quality habitat for any special-status species. No special-status species is expected to occur within this vegetation community.

(Source: City of Fresno General Plan MEIR, p. 5-4-4 through 5-4-11)

The project site and its immediate vicinity were screened for the presence of species and habitat using the California Natural Diversity Database ("CNDDDB", an inventory of the status and locations of rare plants and animals in California,) accessed through CDFW's Biogeographic Information and Observation System (BIOS) Viewer website. CNDDDB queries did not indicate that any sensitive, special status, or candidate species are present or have previously been observed at the project site.

The project site is located on the existing Kastner Intermediate School campus, which is a highly developed area that has been occupied with public school facilities for over 40 years. As mentioned in the City of Fresno General Plan MEIR and elsewhere, such land is of limited habitat value for sensitive plant and wildlife species due to the amount of disturbance from humans, vehicles, and domestic animals on a regular basis.

b. No Impact:

There are no riparian or sensitive natural communities located at the project site or in its immediate vicinity.

c. No Impact:

There are no state or federally protected wetlands within the project site boundary or in the nearby vicinity.

d. Less Than Significant Impact:

The project will not result in impacts that substantially interfere with wildlife movements. The site does not appear to constitute a “movement corridor” for native wildlife (USFWS 1998) that would attract wildlife to move through the site. As discussed above, the project is located on a heavily disturbed site in an urbanized area. The presence of existing urban development and busy arterial streets restricts access for wildlife. Smaller wildlife species and birds are not expected to be further inhibited by the project as compared with existing development and uses.

e.-f. No Impact:

The project site is not located within the boundaries of any Habitat Conservation Plan or Natural Conservation Community Plan. Additionally, no areas of conflict with local policies or ordinances protecting biological resources have been identified as part of the project’s environmental review process.

6.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines § 15064.5?			✓	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines § 15064.5?			✓	
c. Disturb any human remains, including those interred outside of formal cemeteries?			✓	

Impact Discussion

a.-c. Less Than Significant Impact:

Cultural resources can include prehistoric-era archaeological sites, historic-era archaeological sites, Native American traditional cultural properties, sites of religious and cultural significance, and historical buildings, structures, objects, and sites. The importance of any single cultural resource is defined by the context in which it was first created, current public opinion and modern yet evolving analysis. Cultural resources are generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include prehistoric resources, historic-era resources, and “tribal cultural resources” (as defined in Public Resources Code Section 21074).

Archaeological resources are locations where human activity has measurably altered the earth or left deposits of prehistoric or historic-era physical remains (e.g., stone tools, bottles, former roads, house foundations). Historical (or architectural) resources include standing buildings (e.g., houses, barns, outbuildings, cabins) and intact structures (e.g., dams, bridges, roads, districts), or landscapes. A cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. Tribal cultural resources include site features, places, cultural landscapes, sacred places or objects, which are of cultural value to a Native American tribe. (Note: Tribal Cultural Resources are specifically addressed in Section 6.18 of this Initial Study.)

The City of Fresno General Plan MEIR's Cultural Resources section provides comprehensive background information for the greater Fresno area in which the project site is encompassed. Information provided there includes a summary of the area's prehistoric era background (ranging in time from about 14,000 years before present to European contact), an ethnographic overview, and summary of the modern historic era background (ranging from initial European exploration of the Central Valley in the early 1800s to recent modern history). This Initial Study hereby incorporates the background information regarding cultural resources presented in the Cultural Resources section of the General Plan MEIR.

For the proposed field lighting project, potential impacts to cultural resources are considered minimal due to the limited amount of site disruption required to install the lighting equipment and the relatively new age of development at the site and in the vicinity. Ground disturbance would be limited to four small areas to allow for placement of precast concrete bases for each of the light poles; not only are the excavation areas small in size, each of the areas is located on land that has been subject to previous disturbance. Additionally, the Kastner campus (which was constructed in 1979) is less than 45 years old, as is the immediately adjacent Lincoln Elementary School campus (constructed in 1983) and the surrounding residential and commercial development in the area. As such, there are no structures or other features potentially eligible for designation as historical resources known to exist at the site or in the vicinity which could be affected by the project. Therefore, potential impacts to cultural resources are determined to be less than significant.

6.6 Energy

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✓	
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			✓	

Impact Discussion

a.-b. Less Than Significant Impact:

Energy use is typically associated with transportation, construction, and the operation of land uses. Transportation energy use is generally categorized by direct and indirect energy. Direct energy relates to energy consumption by vehicle propulsion. Indirect energy relates to the long-term indirect energy consumption of equipment, such as maintenance activities. Energy is also consumed by construction and routine operation and maintenance of land uses. Construction energy relates to a direct one-time energy expenditure primarily associated with the consumption of fuel used to operate construction equipment. Energy related to land use is normally associated with direct energy consumption entailed in operating buildings, including lighting, heating, ventilation, and air conditioning.

As mentioned elsewhere in this report, the project entails the construction and installation of new lighting facilities at the existing Kastner athletic field plus shifting the time of activities to later hours while maintaining the same variety and intensity of activities that currently exist at the field. The number of users and operational intensity of the athletic field and the campus as a whole would remain substantially unchanged from existing conditions. As such,

the amount of project-specific energy consumption that is not already part of the existing conditions at the Kastner campus would be relatively minimal.

Energy use associated with the project's construction and equipment installation activities would be temporary and would not result in the need for additional capacity or increased peak-period demands for electricity or other energy sources. Construction equipment use and associated energy consumption would be typical of that commonly associated with the construction of new development. The project's construction would not be anticipated to require the use of construction equipment that would be less energy efficient than those commonly used for the construction of similar facilities.

Long-term operation of the project would entail electricity consumption to power the proposed lighting equipment. The project's lighting equipment will be designed meet applicable energy efficiency standards set forth in the California Energy Code and the California Green Building Standards (Title 24, Part 11) for energy efficiency, which include the use of energy-efficient lighting. Compliance with these energy efficiency standards would result in increased energy efficiency and energy conservation. Operation of the proposed lighting equipment would not result in the need for additional capacity or increased peak-period demands for electricity.

Based on the foregoing discussion, implementation of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, this impact is considered less than significant.

6.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
(i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			✓	
(ii) strong seismic ground shaking?			✓	
(iii) seismic-related ground failure, including liquefaction?			✓	
(iv) landslides?			✓	
b. Result in substantial soil erosion or the loss of topsoil?			✓	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	

d. Be located on expansive soil, as defined in Table 18-a-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			✓	

Impact Discussion

a. Less Than Significant Impact:

The project site is located within the San Joaquin Valley, which is a topographic and structural basin that is bounded on the east by the Sierra Nevada geomorphic province and on the west by the Coast Ranges geomorphic province. The San Joaquin (Great Valley Geomorphic Province) is an alluvial plain about 50 miles wide and 400 miles long in the central part of California (California Geologic Survey (CGS Note 36). The Great Valley is an elongated trough in which sediments have been deposited almost continuously for the last approximately 160 million years (Jurassic). The Great Valley reaches depths of about 30,000 feet at its southern end and is filled with a large volume of sediments of Mesozoic through Recent age. Recent alluvium covers nearly the entire valley floor and has largely been derived from the adjacent Sierra Nevada except in the westernmost portions of the valley floor.

The topography of the project site parcel is essentially flat, with an elevation of approximately 307 feet above mean sea level (amsl). As indicated by the Natural Resource Conservation (NRCS) Web Soil Survey tool, the project is sited on an area underlain by sandy loam soils (Ramona sandy loam).

Geologic and soils conditions at the project site were evaluated based on review of the Geology and Soils section of the City of Fresno General Plan MEIR and the NRCS Web Soil Survey. Based on review of those sources, impacts involving geologic and soils conditions would be less than significant. Specific determinations are presented as follows:

- The project site is not located within the boundaries of an Alquist-Priolo Earthquake Fault Zone, and no active faults are known to traverse the project site. The nearest zoned fault to the project site is a portion of the Nunez Fault, which is located more than 50 miles southwest of the site.
- Moderate ground shaking caused by events on distant and nearby active faults is considered a possible seismic hazard at the project site; however, this would be true for any potential site within the greater Fresno area and is thus not considered substantially adverse.
- The USDA Natural Resources Conservation Service's Web Soil Survey tool shows the soils underlying the site as types of loamy sand. The site is not located within an area of soils known to have moderately high-to-high expansion potential, thus the risk of expansive soils at the site is considered negligible to low.
- The risk of seismic settlement is considered negligible based on the soil type mapped at the site.
- The risk of lateral spreading (i.e., the horizontal movement or spreading of soil toward an open face, such as a stream bank, the open side of fill embankments, or the sides of levees) is considered negligible based on the site's topography, soil types, and depth to groundwater.
- Liquefaction is a seismic phenomenon in which loose, saturated, fine-grained granular soils behave similarly to a fluid when subjected to high-intensity ground shaking. Liquefaction occurs when shallow groundwater; low density, fine, clean sandy soils; and high intensity motion occurs. With depth to groundwater greater

than 50 feet and the moderate ground shaking potential at the project site, the risk of liquefaction is considered negligible.

- The project site is located in an area with little or no subsidence. As discussed in the City of Fresno MEIR, although subsidence or collapse is a significant concern in western Fresno County and other portions of the San Joaquin Valley, the City of Fresno's Planning Area (which includes the project site) is not known to be subject to such subsidence or collapse hazards.
- The project site and surrounding area is generally flat and not a landslide prone area.

In addition, the structures included in the project would be constructed in conformance with California Building Code (CBC) Title 24, which identifies specific design requirements to reduce damage from strong seismic ground shaking, ground failure, landslides, soil erosion, and expansive soils.

b. Less Than Significant Impact:

Soil erosion occurs primarily when dirt is left exposed to strong winds, hard rains, and flowing water. In some cases, human activities, especially farming and land clearing, leave soil vulnerable to erosion. Unmitigated, severe soil erosion can result in the loss of food crops, negatively impact community resiliency and livelihoods, and even alter ecosystems by reducing biodiversity above, within, and below the topsoil.

Development of the proposed project, which would involve very limited ground disturbance, would entail relatively little risk of erosion or loss of topsoil since the project site has a flat topography, is not subject to notable amounts of wind or water erosion, and is already developed with athletic field facilities. Therefore, impacts regarding soil erosion and/or loss of topsoil would be less than significant.

c. Less Than Significant Impact:

Based on information presented in Section 6.7(a), impacts related to landslide, lateral spreading, subsidence, liquefaction or collapse are considered less than significant.

d. Less Than Significant Impact:

As discussed in Section 6.7(a), the site is not located within an area of soils known to have moderately high-to-high expansion potential, and the soil type mapped at the site does not appear likely to present an expansive soil hazard. Therefore, the impact is considered less than significant.

e. No Impact:

The Kastner Intermediate School campus is already connected to the City of Fresno's public wastewater infrastructure. No aspects of the project involve the use of septic tanks or alternative wastewater disposal systems.

f. Less Than Significant Impact:

The project site contains no known surface-level paleontological resources or unique geological features. As mentioned in Section 6.5 (Cultural Resources), the project entails relatively little ground disturbing activity due to the small footprint of the proposed light poles and the fact that it is an existing site. Therefore, this impact is considered less than significant.

(This space is intentionally left blank)

6.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b. Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Impact Discussion

a.-b. Less Than Significant Impact:

On a global scale, greenhouse gas (“GHG”) emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. Worldwide, energy production including the burning of coal, natural gas, and oil for electricity and heat is typically considered the largest single source of global GHG emissions.

The State CEQA Guidelines do not provide numeric or qualitative thresholds of significance for evaluating GHG emissions associated with development projects. Instead, CEQA leaves the determination of the significance of GHG emissions up to the lead agency and authorizes the lead agency to consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts.

For the proposed field lighting project, potential GHG impacts can be evaluated based on screening criteria derived from State CEQA Guidelines Section 15300 *et seq.*, which identifies types of projects that are categorically exempt from CEQA. Among the types of categorically exempt projects listed in the Guidelines are Class 1 – Existing Facilities; Class 3 – New Construction or Conversion of Small Structures; Class 11 – Accessory Structures; and Class 32 – In-Fill Development Projects. While it was determined that other aspects of the proposed project required analysis in the form of an Initial Study, with regard to GHG emissions the project’s physical and operational characteristics are consistent with types of projects that have been determined not to have a significant impact.

The lighting equipment to be installed as part of the project will occupy a small physical footprint at an already-developed site, requiring relatively minimal amounts of construction and installation activity. Once installed and in operation, the LED lighting equipment will generate only minimal amounts of GHGs. Operationally, the project entails shifting the time of activities to later hours while maintaining the same variety and intensity of activities that currently exist at the field. The number of users and operational characteristics of the athletic field and the campus as a whole (including but not limited to the number of vehicle trips) would remain substantially unchanged from existing conditions. As such, the operational changes entailed as part of the project would not result in a significant increase in GHG emissions over baseline conditions, nor would the project conflict with any applicable plan, policy, or regulation concerning GHG emission reductions.

Based on the foregoing information, the project’s potential impacts involving GHG emissions would be less than significant.

6.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				✓

Impact Discussion

a.-b. Less Than Significant Impact:

The Kastner Intermediate School is located in an urbanized area that includes residential, commercial, and public institutional uses. Hazardous waste handlers and generators in Fresno County include industries, businesses, public and private institutions, and residences. Commercial and industrial facilities that utilize or store fuels, solvents, chemicals, or other hazardous materials represent other potential sources of hazardous materials. The presence of

these potential sources of hazardous materials, if encountered, can cause exposures that may result in adverse environmental and health effects depend

The project site and its immediate vicinity were reviewed using web-based mapping tools, including the SWRCB GeoTracker database, DTSC EnviroStor database, and the EPA Enviromapper website. Review of this data did not identify any hazardous materials sites within the project site's boundaries. Approximately 2,000 feet north of the project site at the southwest corner of First and Nees, there is the site of a former dry cleaning business which is identified on EnviroStor as an "Active" cleanup site. However, it is noted that the proposed project would not shorten the distance between campus facilities and the cleanup site, and given the distance from the school and the nature of the project (i.e., installation of lighting equipment) this is not considered a significant concern.

During both construction and operational activities, the project would be subject to federal, state, and local regulations governing the routine transport, use, and disposal of hazardous materials and the release of hazardous materials into the environment. For instance, the project would be required to prepare a spill prevention and treatment plan for safe and effective clean-up and disposal of any spills or releases that may occur during construction at the project site. As required under state and federal law, notification and evacuation procedures for site workers and local residents would be included as part of the plan in the event of a hazardous materials release during on-site construction. Additionally, the use and storage of hazardous materials plus disposal of hazardous wastes are subject to numerous laws and regulations at all levels of government, including but not limited to submittal of a Hazardous Materials Business Plan to the Fresno County Health Department's Environmental Health Division. These regulations function to provide safe accommodations and prevent accidental release to the environment. These regulations also function to avoid or reduce upset and accident conditions. Clovis Unified currently operates its campuses and facilities in compliance with such requirements and would continue to do so for operation of the proposed athletic field lighting project. For these reasons, impacts pertaining to hazards and hazardous materials are considered less than significant.

c. Less Than Significant Impact:

The project itself is located at the campus of Kastner Intermediate School, an existing public school campus. The potential for the project to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste is addressed above and has been determined to be less than significant.

d. No Impact:

Based on review of DTSC's Hazardous Waste and Substances Site List, the project site is not located on a Cortese List hazardous materials site. No impact would occur.

e. No Impact:

The project site is not located within the boundaries of an airport land use plan or within two miles of a public airport or public use airport.

f. No Impact:

Research conducted for this report did not identify any adopted emergency response plans or emergency evacuation plans the project could impair.

g. No Impact:

The project site is in an urban area and not within or near an area subject to wildland fires, thus no impact would occur.

6.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			✓	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✓	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
(i) result in a substantial erosion or siltation on-or off-site;			✓	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site;			✓	
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or			✓	
(iv) impede or redirect flood flows			✓	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			✓	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

Impact Discussion

a.-e. Less Than Significant Impact:

The Kastner Intermediate School campus is connected to the City of Fresno's municipal water and wastewater systems. These systems are subject to, and operate in compliance with, applicable water quality standards and waste discharge requirements. The design and operational characteristics of the project related to water and wastewater would not directly or incrementally cause these systems to violate the applicable requirements. In particular, the

number of users and the variety and intensity of activities the athletic field and the campus as a whole is expected to remain essentially unchanged from existing conditions.

Due to the limited amount of surface area that would be impacted by installation of the proposed field lights, the project would not substantially alter the existing drainage pattern at the site; the project would maintain the same general development footprint and topography as what currently exists at the site. Similarly, groundwater recharge conditions at the site would remain essentially unchanged from existing conditions since the turfed play field and landscape areas at the site. For this same reason, the demand for water at the Kastner campus would not substantially change as a result of the project.

There are no natural or man-made water courses which would be affected by the project. The project site is not located in a FEMA flood zone, tsunami zone, seiche zone, or mapped dam inundation area.

Relevant water resource plans for the project area include the City of Fresno's 2020 Urban Water Management Plan (which includes projections of future water supply and demand levels while laying out policies for the management of the City's urban water resources) and North Kings Groundwater Sustainability Plan (which identifies groundwater supply conditions within the Kings Subbasin and establishes a framework for attaining groundwater sustainability in the subbasin). No project-related conflicts with either of these plans or any other plan involving hydrology and water quality considerations have been identified in this report.

Based on the above information, potential project impacts related to hydrology and water quality would be less than significant.

6.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				✓
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

Impact Discussion

a.-b. No Impact:

The project would not cause a physical division of an established community. The proposed lighting facilities would be located at the site of the existing Kastner athletic field. The project's development will not require expanding Kastner's existing campus boundaries or result in any other changes that would create a physical division of an established community. Additionally, development of the project would not result in a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect. As identified in the Project Description (Section 2.4 of this Initial Study), the project site is designated and zoned by the City of Fresno for public facilities/public institutional use. Development of the proposed athletic field lighting and other aspects of the project are compatible with all applicable use regulations and development standards.

6.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				✓

Impact Discussion

a.-b. No Impact:

The project would have no impacts on known mineral resources. The project site is located in a highly urbanized area and would not result in the loss of availability of a known mineral resource because no known resources exist on or near the proposed site. Likewise, the project would not result in the loss of availability of a locally important mineral resource recovery site because none exists on or near the site (City of Fresno General Plan DEIR, 2014).

6.13 Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	
b. Generation of excessive groundborne vibration or groundborne noise levels?			✓	
c. For a project located within a private airstrip or airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			✓	

Impact Discussion

a. Less Than Significant Impact:

The City of Fresno has also adopted a noise ordinance that contains limitations intended to prevent noise which may create dangerous, injurious, noxious, or otherwise objectionable conditions. The City's noise ordinance is primarily used for the regulation of existing uses and activities, including construction activities, and are not typically used as a basis for land use planning. Construction activities occurring during the daytime hours of 7:00 a.m. to 10:00 p.m., Monday through Saturday, are typically considered exempt from the City's noise ordinance requirements (City of Fresno 2016). In accordance with Section 15-2506(H) of the City's noise ordinance, the sounding of school bells and school-sanctioned outdoor activities such as pep rallies, sports games, and band practices are exempt from the City's noise ordinance standards.

The project has the potential to generate both short-term noise during the construction and installation of lighting equipment and long-term operational noise. Potential short-term noise during construction and equipment installation would be temporary in nature and consistent with the ambient noise environment present in the vicinity of the project. Regarding operational noise, as mentioned elsewhere in this report, the project entails shifting the time of activities at the Kastner campus to later hours while maintaining the same variety and intensity of activities that currently exist at the field. Since the project would not expand capacity at the athletic field, change the types of events occurring at the field or the frequency with which events occur, or result in the placement of new noise sources closer to neighboring sensitive receptors, the resulting noise levels during the evening hours are predicted to be essentially identical to noise levels associated with existing events at the field. The proposed lighting equipment would generate little if any noise while operating. Additionally, the project would not include any activities occurring during the noise-sensitive hours of 10:00 p.m. to 7:00 a.m. Further, neither construction nor operational noise generated by the project would conflict with the City of Fresno's noise ordinance.

b. Less Than Significant Impact:

The project's potential for generating groundborne vibration and/or noise beyond existing conditions would be limited to activities associated with installation of the light poles (e.g., digging holes, placement of precast concrete foundations, and connecting and mounting components of the pole system). The installation of the poles affects a relatively small area, does not require use of heavy construction equipment, and would occur over a relatively short period of time. Therefore, this impact would be less than significant.

c. Less Than Significant Impact:

The nearest airports in the project vicinity include the Fresno Yosemite International Airport, Sierra Sky Park, and the Fresno Chandler Downtown Airport, which are located approximately 4.5, 5.2, and 8.0 miles to the southeast, west, and southwest, respectively. The proposed project is not located within the projected 60 dBA CNEL/Ldn noise contours of these airports (City of Fresno 2014). No private airstrips were identified within two miles of the project site. Implementation of the proposed project would not result in the exposure of sensitive receptors to aircraft noise levels, nor would the proposed project affect airport operations.

(This space is intentionally left blank)

6.14 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth either in an area, directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

Impact Discussion

a.-b. No Impact:

The project site is located at the site of the existing football/track field on the Kastner Intermediate School campus. The campus has existed in its current location for more than 40 years, and the proposed project would entail a continuation of the use and operation of the campus in a manner similar to that of the existing campus. The project would not result in a substantial increase in enrollment or users present at the campus, nor would it involve construction of new housing or entail extensions of infrastructure or utility services into a previously unserved area. As such, no substantial unplanned growth would occur directly or indirectly from the project. Additionally, as there is no housing at the project site, no people or housing would be displaced as a result of the project.

6.15 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				

(i) Fire Protection?			✓	
(ii) Police Protection?			✓	
(iii) Schools?			✓	
(iv) Parks?			✓	
(v) Other public facilities?			✓	

Impact Discussion

a. Less Than Significant Impact:

The project would not result in the need for new or physically altered fire protection, police protection, schools, parks, or other public facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The project is located at the Kastner Intermediate School campus, which is within an area of existing urban development where public facilities and services are already available and provided, so the project would not require expansion of service areas. The proposed facility improvements and operational characteristics of the project are relatively limited and would result in substantially similar conditions to those of existing athletic facilities at the campus, such that public service performance measures would not be substantially adversely affected. Based on these factors, impacts to public services would be considered less than significant.

6.16 Recreation

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			✓	

Impact Discussion

a.-b. Less Than Significant Impact:

The project is sited at the Kastner Intermediate School campus, which includes several recreational facilities (including the project site itself) that serve students and athletic programs at the school. Within a one-mile radius of the campus, there are three public parks (Kaiser Permanente Park, Keith Tice Park, and Woodward Park) and one trail (the Fresno-Clovis Rail Trail).

The proposed project would not result in substantial physical deterioration of existing parks and/or recreational facilities in the area. The project entails improvements to athletic facilities at the Kastner campus and would accommodate the existing population of Kastner students and spectators that attend competitions. It is not expected to substantially increase the demand for or use of existing park and recreation facilities.

The project includes the installation of field lighting at the campus's existing athletic field, which is utilized by the school for sports team practices and games as well as for the physical education program. Potential impacts from the project's facilities have been considered as part of this report, and no substantial adverse effects specifically attributable to the physical components which would be constructed as part of the project have been identified.

6.17 Transportation

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			✓	
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			✓	
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
d. Result in inadequate emergency access?			✓	

Impact Discussion

a.-d. Less Than Significant Impact:

The Kastner Intermediate School campus is located at the northeast corner of First Street and Alluvial Avenue. Existing transportation access to the campus is provided via vehicle driveways and pedestrian access points located along First Street. The project site is located in an area of northeast Fresno that is served by a well-established existing network of roadways. Notable roadways near the project site include First Street, Alluvial Avenue, Nees Avenue – each of which includes two vehicle through-lanes in each direction as well as sidewalks and Class II bike lanes. There are traffic signals located at the intersections of First Street and Alluvial Avenue, First Street and Nees Avenue, and First Street and El Paso Avenue (which in this vicinity exists as a stub street that provides access to an area of multifamily residential development on the west side of First Street). The network accommodates existing transportation demands associated with the Kastner campus as well as demand associated with commercial and residential uses in the vicinity.

In accordance with SB 743, as of July 1, 2020, agencies considering the transportation impacts of new projects in the context of CEQA must analyze Vehicle Miles Traveled (VMT). Automobile delay, as described solely by Level of Service (LOS) or similar measure of traffic congestion, is no longer considered a significant environmental impact under CEQA. Impacts regarding VMT are addressed in detail in Section 6.17(b), and as discussed there, the project meets the screening criteria set forth in the Fresno County SB 743 Implementation Regional VMT Guidelines. It is noted, however, that the City of Fresno's General Plan (the adoption of which predated the implementation of SB 743) still includes policies and details based on the LOS metric, thus the long-range transportation planning for the greater Fresno remains informed by LOS-related considerations.

For purposes of evaluating the project's VMT impacts, Clovis Unified has opted to utilize the methodology established by Fresno COG in the Fresno County SB 743 Implementation Regional VMT Guidelines ("Regional VMT

Guidelines”). The Regional VMT Guidelines include screening criteria for certain projects that are either low VMT generators or by virtue of their location would have a less than significant impact. While meeting any one of the screening criteria would be sufficient to support a presumption of a less than significant impact, the proposed lighting project meets two types of VMT screening criteria identified in the Regional VMT Guidelines: 1) development of institutional/government and public service uses that support community health, safety, and welfare; and 2) projects which generate less than 500 ADT. Therefore, it can be presumed that the project will have a less than significant impact regarding VMT, thus making the project consistent with CEQA Guidelines Section 15064.3(b).

While the project will allow for athletic activities to take place during the evening hours, any project-specific changes related to transportation activity would not conflict with a program, plan, ordinance, or policy addressing the circulation system. There are existing activities occurring at the campus and in its vicinity (including classroom instruction) which generate higher levels of transportation activity and at comparable or later times of day than would occur from activities taking place at the athletic fields. Additionally, the project will not result in conflicts related to bicycle, pedestrian, or transit facilities. The project site is located within the existing boundaries of the Kastner Intermediate School campus, and its development would not cause disruption of or impediments to existing or planned bicycle, pedestrian, or transit facilities in the public street network.

Development of the project would utilize the existing vehicular circulation system in the vicinity and would not entail lane modifications or the addition of traffic controls (e.g., stop signs, traffic signalization). The project does not propose any changes to the existing vehicular access conditions at the project site. The proposed lighting equipment will be located at the interior of the existing campus near the existing and not result in any changes to transportation-related geometric design features. As such, the project would not substantially contribute to any hazardous transportation conditions involving geometric design features or incompatible uses. Additionally, there is existing emergency access in place at the Kastner campus, and no aspects of the project would require either permanent or temporary changes affecting emergency access at the project site or its vicinity.

Based on the information presented above, overall transportation activity in the area of the project site is expected to remain substantially similar to existing conditions, and impacts related to transportation will be less than significant.

6.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in the Public Resource Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				

(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in the Public Resources Code § 5020.1(k)?			✓	
(ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?			✓	

Impact Discussion

a. Less Than Significant Impact:

According to the City of Fresno General Plan, as of 2014 there have been sixteen Native American archeological sites recorded within the Planning Area by the Southern San Joaquin Valley Information Center (SSJVIC). According to the SSJVIC, the probability of finding subsurface cultural resources is considered low to moderate in most areas, with the exception of the waterways. Current and past waterways and their surrounding regions are considered especially sensitive for cultural resources, as indigenous people utilized these areas as permanent villages, temporary camps, and task specific sites.

As discussed in Section 6.5 (Cultural Resources), the project is located on a site that has been highly disturbed from its current and prior urbanized uses, and it is not located in or near an area known or expected to be a sensitive area for Tribal Cultural Resources. Further, the potential for disturbance to undiscovered resources is considered to be low because the project is limited to the installation of lighting equipment at the athletic field located within the existing boundaries of the Kastner campus with minimal ground disturbance.⁴

6.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?			✓	

⁴ The District has no standing requests for AB 52 notification from any Native American tribes, thus providing notification to tribes is not required.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			✓	
c. Result in determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓	

Impact Discussion

a.-c. Less Than Significant Impact:

The Kastner Intermediate School campus is served by existing water, wastewater, stormwater, electric, gas, and telecommunications facilities. As discussed elsewhere in this report, the number of users and the variety and intensity of operational activities at the athletic field and the campus as a whole would remain substantially unchanged from existing conditions. Except for electrical service needed to power the proposed lighting equipment, the project would not directly or indirectly generate any new demand for utilities or services.

Regarding storm drainage, the Fresno Metropolitan Flood Control District (FMFCD) is responsible for managing urban stormwater runoff within the Fresno-Clovis area. Stormwater runoff is conveyed through a system of street gutters, underground storm drains, retention/detention basins, pumping stations, and open channels that are maintained by FMFCD. The addition of new impervious surfaces associated with development (e.g., hardscape, building pads, parking lots, streets, driveways) can result in increased stormwater runoff in comparison to existing conditions. In this instance, however, the project is located in a highly urbanized area with existing drainage infrastructure in place, and the overall footprint of land affected by the installation of light poles would be very minimal. If applicable, Clovis Unified will submit plans and pay fees to FMFCD to ensure compatibility with the FMFCD system and ensure adequate stormwater drainage is provided. Overall, the project would not result in a significant unplanned change in conditions related to management of stormwater runoff.

The project would entail connecting the proposed lighting equipment to existing electrical utility facilities at the campus. The project site is located in an area with existing electrical utilities that are operated and maintained by Pacific Gas & Electric (PG&E). In response to the District's mailing of a Request for Preliminary Comment, PG&E responded with a letter that indicated it had no concerns regarding the project. It is noted that development of the project will be subject to compliance with applicable rules, regulations, and policies regarding connections to these utilities.

There are also telecommunications facilities such as cellular towers and broadband internet connections in place at the campus and its vicinity. Development and operation of the project would not require any relocation or removal of any such facilities.

Based on the foregoing information, these impacts are considered less than significant.

d.-e. Less Than Significant Impact:

Clovis Unified operates its existing facilities in compliance with applicable statutes and regulations related to solid waste and would continue to do so upon operation of the proposed project. The project – which is limited to installation and operation of athletic field lighting equipment, and does not include an increase in the number of users or changes to the variety or intensity of uses at the field – would not appreciably increase the amount of solid waste generated,

6.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from wildfire or the uncontrolled spread of wildfire?				✓
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in the temporary or ongoing impacts to the environment?				✓
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✓

Impact Discussion

a.-d. No Impact:

No impacts involving wildfire would occur as a result of the project. The proposed project site is located not located in a State Responsibility Area or classified as a Very High Fire Hazard Severity Zone.

(This space is intentionally left blank)

6.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			✓	
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)			✓	
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?			✓	

Impact Discussion

a. Less Than Significant Impact:

Based on the analysis in Sections 6.1 through 6.21, the project does not have the potential to substantially degrade the quality of the environment. Based on the analysis in Sections 6.4 and 6.5, the project would not result in any substantially adverse impacts to either biological resources or cultural resources.

b. Less Than Significant Impact:

The term "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Individual effects may be changes resulting from a single project or a number of separate projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. By looking outside of a particular project site or action, a cumulative impact analysis allows decisionmakers to look at the impacts of a project within the greater context.

Per CEQA Guidelines Section 15130(b), discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone, and should be guided by the standards of practicality and reasonableness. Where a project's incremental effect is not cumulatively considerable, a lead agency need not consider that effect

significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. Additionally, impacts which do not result in part from the project being evaluated should not be discussed.

The CEQA Guidelines identify two basic methods for establishing the cumulative environment in which the project is to be considered: 1) the use of a list of past, present, and probable future projects; or 2) the use of adopted projections from a general plan, other regional planning document, or certified EIR for such a planning document. For this report, the cumulative environment is based on the summary of projections included in the MEIR prepared for the 2014 City of Fresno General Plan and Development Code Update. This approach is being utilized because the project is located within the Plan Area and is consistent with the site's land use designation in the General Plan, thus the potential cumulative impacts would remain consistent with those which were considered in the MEIR.

In the City of Fresno General Plan MEIR, the following environmental effects were determined to be less than significant, or capable of being reduced to less than significant with the incorporation of mitigation measures: Biological Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Population and Housing, and Public Services, and Recreation.

The following environmental effects were determined to be significant and unavoidable in General Plan MEIR:

- Aesthetics – visual character and illumination of the dark sky.
- Agricultural Resources – loss of farmland and removal of Williamson Act Contract land.
- Air Quality – criteria pollutant emissions and toxic air contaminants pollutant concentrations.
- Cultural Resources – potential removal of historic resources.
- Greenhouse Gases – increase in greenhouse gas emissions beyond the year 2020.
- Noise – exceed noise standards and substantial permanent increases in noise levels.
- Transportation and Traffic – potentially exceed thresholds of levels of service on roadways under the jurisdictions of the County of Fresno, City of Clovis, and Caltrans.
- Utilities and Service Systems – construction of water, wastewater, and drainage facilities that could cause substantial impacts associated with loss of agriculture and increases in air emissions.

The project's contribution to the General Plan's significant and unavoidable effects are evaluated below:

- Aesthetics – The project's physical form and operational character are consistent with the types of development that currently exist in the vicinity of the project site and have been planned for in the area as part of the General Plan plus evaluated as part of the General Plan MEIR. Regarding illumination of the dark sky, lighting and glare associated with the project would not be unusual in the context of the urbanized development and land uses that exist in the area.
- Agricultural Resources – There is no farmland or Williamson Act-contracted land at the project site or in its vicinity.
- Air Quality – Based on the analysis in Section 6.3 of this Initial Study, neither short-term construction nor long-term operational emissions would exceed applicable SJVAPCD significance thresholds.
- Cultural Resources – Based on the analysis in Section 6.4 of this Initial Study, due to the limited amount of disturbance entailed by the project plus the relatively new age of development at and around the project site, the project would not considerably contribute to potential removal of historic resources.
- Greenhouse Gases – Based on the analysis presented in Section 6.8 of this Initial Study, the project would not generate GHG emissions in a manner that would be considered significant on its own or cumulatively considerable.

- Noise – Based on the analysis in Section 6.13 of this Initial Study, neither short-term construction noise levels nor long-term operational noise levels are projected to exceed the City of Fresno’s noise ordinance exterior and interior standards at the nearby residential land uses.
- Transportation and Traffic – As discussed in Section 6.17 (Transportation), overall transportation activity in the area is expected to remain substantially similar to existing conditions. LOS is no longer considered an environmental impact under CEQA, and the project meets VMT screening criteria for Fresno County and would not result in VMT above the Fresno County regional threshold.
- Utilities and Service Systems – The project is located at an existing public school campus in an established urbanized area that does not require the extension of, or substantial modifications to, utilities or service systems.

Based on this information and analysis, implementation of the project would not result in cumulatively considerable environmental impacts.

c. Less Than Significant Impact:

Based on the information presented in Sections 6.1 through 6.21, the potential environmental effects of the proposed project would not result in substantial adverse effects on human beings, either directly or indirectly.

(This space is intentionally left blank)

7. Names of Persons Who Prepared or Participated in Preparation of the Initial Study

7.1 Lead Agency

Clovis Unified School District

1450 Herndon Avenue
Clovis, CA 93611

Denver Stairs, Assistant Superintendent, Facility Services

Phone: (559) 327-9260

E-mail: denverstairs@cusd.com

Nick Mele, Administrator, Facility Services

Phone: (559) 327-9262

E-mail: nickmele@cusd.com

7.2 Environmental Review Consultant

Odell Planning & Research, Inc.

49346 Road 426, Suite 2
Oakhurst, California 93644

Telephone: (559) 472-7167

www.odellplanning.com

Scott B. Odell, AICP, Principal Planner/President

E-mail: scott@odellplanning.com

Daniel Brannick, AICP, Senior Planner

E-mail: daniel@odellplanning.com

8. Sources Consulted

Following are the sources consulted in preparing this Initial Study:

- Benya, James R. Benya Burnett Consultancy. *Sports Lighting CEQA Report, New Football Field Lighting at San Marin High School, Novato, CA*. June 15, 2019.
- California Building Standards Commission (BSC). April 2016. CalGreen. Website URL: <http://www.bsc.ca.gov>.
- California Department of Conservation (DOC). Division of Land Resource Protection. "California Important Farmland Finder" (web mapping tool). Accessed September 2022. <https://maps.conservation.ca.gov/DLRP/CIFF/>
- California Department of Education (CDE). "District Profile: Clovis Unified." Accessed September 2022. <https://www.cde.ca.gov/sdprofile/details.aspx?cds=10621170000000>
- California Department of Fish and Wildlife (CDFW). *California Natural Diversity Database (CNDDB)*. Accessed September 2022. <https://apps.wildlife.ca.gov/bios/?bookmark=327>
- California Department of Toxic Substance Control (DTSC). EnviroStor. Accessed September 2022. <http://www.envirostor.dtsc.ca.gov/public/>
- California Department of Water Resources (DWR). Dam Breach Inundation Map Web Publisher. Accessed September 2022. https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2
- California Energy Commission (CEC). "Building Energy Efficiency Standards – Title 24." Accessed September 2022. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards>
- City of Fresno. "City of Fresno GIS Data Viewing Application." Accessed October 2021 through July 2022. Website URL: <https://www.arcgis.com/apps/webappviewer/index.html?id=dbd9813b2fa74382b3096b9613e7470d>
- . *Fresno General Plan*. December 2014.
- . *Fresno Active Transportation Plan*. December 2016.
- . *Municipal Code of the City of Fresno, Chapter 10, Regulations Regarding Public Nuisances and Real Property Conduct and Use*. (Accessed September 2022 via https://library.municode.com/ca/fresno/codes/code_of_ordinances?nodeId=MUCOFR_CH10REREPUNUREPRCOUS)
- . *Municipal Code of the City of Fresno, Chapter 15, Citywide Development Code*. (Accessed August 2022 through September 2022 via https://library.municode.com/ca/fresno/codes/code_of_ordinances?nodeId=MUCOFR_CH15CIDECOINRE)
- City of Fresno. Development and Resource Management Department. *Draft Master Environmental Impact Report, General Plan and Development Code Update, City of Fresno, Fresno County, California*. July 2014.
- . *Response to Comments on the Draft Master Environmental Impact Report, General Plan and Development Code Update, City of Fresno, Fresno County, California*. December 2014.
- Fresno Council of Governments. *Fresno County SB 743 Implementation Regional Guidelines*. January 2021. Accessed via: https://2ave3l244ex63mgdyc1u2mfp-wpengine.netdna-ssl.com/wp-content/uploads/2021/01/Fresno-COG-VMT-Report_01-08-2021.pdf

- Fresno Metropolitan Flood Control District. *Fresno Metropolitan Flood Control District Storm Drainage and Flood Control Master Plan*. Accessed May 2022.
<https://fmfcd.maps.arcgis.com/apps/webappviewer/index.html?id=5ac65186b1794949a1fda62ca7734986>
- . "Urban Basins, Sandbags, Dams & Streams." Accessed May 2022. <http://www.fresnofloodcontrol.org/urban-basins-sandbags-dams-streams/>
- Lighting Research Center, Rensselaer Polytechnic Institute. National Lighting Product Information Program. "Light Pollution." Website URL: <https://www.lrc.rpi.edu/programs/nlpip/lightinganswers/lightpollution/lightPollution.asp>
- Mulvihill, Keith. Natural Resource Defense Council, Inc. "Soil Erosion 101". June 1, 2021. Website URL: <https://www.nrdc.org/stories/soil-erosion-101>
- Musco Sports Lighting, LLC. Project Design Documents and Illumination Summary for Clovis Unified School District Multi Fields. March 28, 2022.
- Provost & Pritchard Consulting Group. *North Kings Groundwater Sustainability Agency, Groundwater Sustainability Plan*. November 21, 2019.
- San Joaquin Valley Air Pollution Control District (SJVAPCD). *Guidance for Assessing and Mitigating Air Quality Impacts*. 2015. Accessed via: <http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf>
- . "Small Project Analysis Levels (SPAL)." November 2020. Accessed via:
<http://www.valleyair.org/transportation/CEQA%20Rules/GAMAQI-SPAL.PDF>
- State of California. *California Environmental Quality Act*, California Public Resources Code, Division 13. Environmental Quality
- State of California. Title 14, California Code of Regulations, Chapter 3: *Guidelines for Implementation of the California Environmental Quality Act*
- State of California, State Water Resources Control Board (SWRCB). GeoTracker. Accessed September 2022.
<https://geotracker.waterboards.ca.gov/>
- U.S.D.A., Natural Resources Conservation Service (NRCS). Web Soil Survey. Accessed September 2022.
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>
- U.S. Department of the Interior Geological Survey. "Fresno North Quadrangle", California, 7.5 Series Topographic Map.
- Water Systems Consulting, Inc. *City of Fresno 2020 Urban Water Management Plan*. June 2021.

Appendix A

Photometric Analysis

Clovis Unified School District Multi Fields

Clovis,CA

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
F1-F4	80'	80'	7	TLC-LED-1500	10.01 kW	F
		16'	2	TLC-BT-575	1.15 kW	F
		60'	1	TLC-LED-400	0.40 kW	G
4			40		46.24 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
F	Kastner Football	44.64 kW	36
G	Kastner Egress	1.6 kW	4

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	28
TLC-LED-400	LED 5700K - 75 CRI	400W	46,500	>120,000	>120,000	>120,000	4
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Kastner East Bleachers	Horizontal Illuminance	7.20	4	11	2.61	1.80	G	4
Kastner Football	Horizontal Illuminance	41.4	31	46	1.46	1.34	F	36
Kastner Property Spill	Horizontal	0	0	0.01	0.00		A,F,G	40
Kastner Property Spill	Max Candela (by Fixture)	113	0.05	848	15762.45	2267.63	A,F,G	40
Kastner Property Spill	Max Vertical Illuminance Metric	0	0	0.02	0.00		A,F,G	40
Kastner Track	Horizontal Illuminance	12.3	1	30	28.01	12.33	F	36
Kastner West Bleachers	Horizontal Illuminance	7.49	5	10	2.00	1.50	G	4

From Hometown to Professional



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	F1-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				60'	TLC-LED-400	1	0	1
				80'	TLC-LED-1500	7	7	0
				TOTALS				

Clovis Unified School District Multi Fields
Clovis,CA

GRID SUMMARY	
Name:	Kastner Football
Size:	360' x 160'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

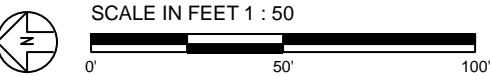
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Guaranteed Average:	40
Scan Average:	41.42
Maximum:	46
Minimum:	31
Avg / Min:	1.32
Guaranteed Max / Min:	2
Max / Min:	1.46
UG (adjacent pts):	1.20
CU:	0.57
No. of Points:	72
LUMINAIRE INFORMATION	
Applied Circuits:	F
No. of Luminaires:	36
Total Load:	44.64 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) ⚓ dimensions are relative to 0,0 reference point(s) ⊗



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	F1-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				60'	TLC-LED-400	1	0	1
				80'	TLC-LED-1500	7	7	0
				TOTALS				

Clovis Unified School District Multi Fields
Clovis, CA

GRID SUMMARY	
Name:	Kastner Track
Size:	Irregular
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

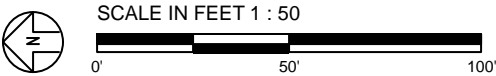
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	12.33
Maximum:	30
Minimum:	1
Avg / Min:	11.59
Max / Min:	28.01
UG (adjacent pts):	0.00
CU:	0.11
No. of Points:	46
LUMINAIRE INFORMATION	
Applied Circuits:	F
No. of Luminaires:	36
Total Load:	44.64 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) \oplus dimensions are relative to 0,0 reference point(s) \otimes



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	F1-F4	80'	-	15.5'	TLC-BT-575	2	0	2
				60'	TLC-LED-400	1	1	0
				80'	TLC-LED-1500	7	0	7
				TOTALS				

Clovis Unified School District Multi Fields
Clovis,CA

GRID SUMMARY	
Name:	Kastner West Bleachers
Size:	Irregular
Spacing:	10.0' x 10.0'
Height:	8.2' above grade

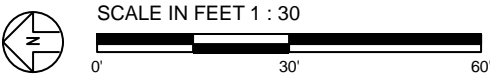
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	7.49
Maximum:	10
Minimum:	5
Avg / Min:	1.44
Max / Min:	2.00
UG (adjacent pts):	0.00
CU:	0.09
No. of Points:	22
LUMINAIRE INFORMATION	
Applied Circuits:	G
No. of Luminaires:	4
Total Load:	1.6 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) ⚓ dimensions are relative to 0,0 reference point(s) ⊗



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	F1-F4	80'	-	15.5'	TLC-BT-575	2	0	2
				60'	TLC-LED-400	1	1	0
				80'	TLC-LED-1500	7	0	7
				TOTALS				

Clovis Unified School District Multi Fields
Clovis,CA

GRID SUMMARY	
Name:	Kastner East Bleachers
Size:	Irregular
Spacing:	10.0' x 10.0'
Height:	11.2' above grade

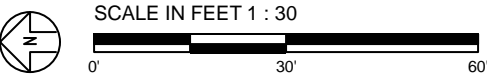
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	7.20
Maximum:	11
Minimum:	4
Avg / Min:	1.69
Max / Min:	2.61
UG (adjacent pts):	0.00
CU:	0.09
No. of Points:	22
LUMINAIRE INFORMATION	
Applied Circuits:	G
No. of Luminaires:	4
Total Load:	1.6 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	F1-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				60'	TLC-LED-400	1	1	0
				80'	TLC-LED-1500	7	7	0
				TOTALS				



Clovis Unified School District Multi Fields
Clovis, CA

GRID SUMMARY	
Name:	Kastner Property Spill
Spacing:	30.0'
Height:	3.0' above grade

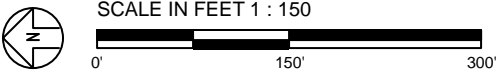
ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0006
Maximum:	0.01
Minimum:	0.00
No. of Points:	72
LUMINAIRE INFORMATION	
Applied Circuits:	A, F, G
No. of Luminaires:	40
Total Load:	46.24 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) ⚓ dimensions are relative to 0,0 reference point(s) ⊗



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2022 Musco Sports Lighting, LLC.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	F1-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				60'	TLC-LED-400	1	1	0
				80'	TLC-LED-1500	7	7	0
4	TOTALS					40	40	0

Clovis Unified School District Multi Fields
Clovis,CA

GRID SUMMARY

Name: Kastner Property Spill
Spacing: 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

MAX VERTICAL FOOTCANDLES

Entire Grid
Scan Average: 0.0020
Maximum: 0.02
Minimum: 0.00
No. of Points: 72

LUMINAIRE INFORMATION

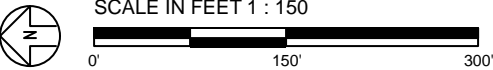
Applied Circuits: A, F, G
No. of Luminaires: 40
Total Load: 46.24 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) ⚓ dimensions are relative to 0,0 reference point(s) ⊗



EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	F1-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				60'	TLC-LED-400	1	1	0
				80'	TLC-LED-1500	7	7	0
4	TOTALS					40	40	0



Clovis Unified School District Multi Fields
Clovis,CA

GRID SUMMARY

Name: Kastner Property Spill
Spacing: 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

CANDELA (PER FIXTURE)

Entire Grid
Scan Average: 113.3816
Maximum: 848.04
Minimum: 0.05
No. of Points: 72

LUMINAIRE INFORMATION

Applied Circuits: A, F, G
No. of Luminaires: 40
Total Load: 46.24 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

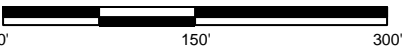


Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2022 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY



SCALE IN FEET 1 : 150



Pole location(s) ⚓ dimensions are relative to 0,0 reference point(s) ⊗



Clovis Unified School District Multi Fields
Clovis, CA

EQUIPMENT LAYOUT

INCLUDES:

- Kastner Football
- Kastner Track

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

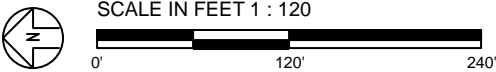
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
4	F1-F4	80'	-	15.5' 60' 80'	TLC-BT-575 TLC-LED-400 TLC-LED-1500	2 1 7
4	TOTALS					40

SINGLE LUMINAIRE AMPERAGE DRAW CHART							
Ballast Specifications (.90 min power factor)		Line Amperage Per Luminaire (max draw)					
Single Phase Voltage		208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	480 (60)
TLC-LED-1500		8.5	8.1	7.4	6.4	5.1	4.7
TLC-LED-400		2.3	2.2	2.0	1.7	1.4	1.3
TLC-BT-575		3.4	3.2	2.9	2.5	2.0	1.5



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2022 Musco Sports Lighting, LLC.



Pole location(s) ⚡ dimensions are relative to 0,0 reference point(s) ⊗