Ukiah High School
Athletic Field Improvement Project

Initial Study / Proposed Mitigated Negative Declaration

June 25, 2021

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Ukiah High School
Athletic Field Improvement Project

Prepared for:

Ukiah Unified School District
511 S. Orchard Avenue
Ukiah, CA
95482

Prepared by:

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2235 Mercury Way, Suite 150
Santa Rosa, California 95407

June 25, 2021

Table of Contents

Table index

Figure index

Appendix Index

1. Project Information

Project Title	Ukiah High School Athletic Field Improvement Project
Lead Agency Name & Address	Ukiah Unified School District 511 S. Orchard Ukiah, CA 95482
Contact Person	Gabriel Sherman, Ukiah Unified School District Director Maintenance, Operations, and Transportation 710 Maple Ave. Ukiah, CA 95482 Telephone: 707-472-5080
Project Location	Ukiah High School 1000 Low Gap Road, Ukiah, CA 95482 Mendocino County, California
Project Assessor's Parcel Number	001-020-074
General Plan Designation	Public (P)
Zoning	Public Facilities (PF)
Description of Project	Improvements and renovations to existing Ukiah High School athletic fields, including a new lighted all-weather synthetic turf soccer field, scoreboard, seating areas, fencing, ADA-compliant pedestrian walkways, and stormwater drainage improvements. The project also includes replacement of existing high-pressure sodium or metal halide lighting with LED lights at the existing track and field stadium.
Surrounding Land Uses and Setting	Single family residential to the north along Tokay Lane and east of Despina Drive, Russian River Cemetery to the southeast, Ukiah High School Campus facilities, Low Gap Road, Mendocino County Jail, Ukiah Municipal Golf Course, and single-family residences along Maple Avenue to the south, and open space land to the south and west.

1.1 Introduction and CEQA Requirements

The Ukiah Unified School District (District), serving as the California Environmental Quality Act (CEQA) Lead Agency, has prepared this Initial Study to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the Ukiah High School Athletic Field Improvement Project (hereafter referred to as the "project").

The District is considering improvements to existing athletic facilities at the Ukiah High School to provide improved recreation for students. The project is currently programmed for CEQA adoption in fall 2021, and Division of the State Architect (DSA) approval in summer 2021.

The purpose of this Initial Study is to provide a basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration. This Initial Study has been prepared to satisfy the requirements of CEQA (Public Resources Code, Div 13, Sec

21000-21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387). Section 15063(d) of the State CEQA Guidelines states the content requirements of an Initial Study as follows:

- A description of the project including the location of the project;
- An identification of the environmental setting;
- An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- A discussion of the ways to mitigate the significant effects identified, if any;
- An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls; and
- The name of the person or persons who prepared or participated in the Initial Study.

1.2 CEQA Lead Agency Contact Information

The CEQA lead agency for the project is the Ukiah Unified School District. The contact person for the District is:

Gabriel Sherman, Director of Maintenance, Operations, and Transportation
Ukiah Unified School District
710 Maple Ave, Ukiah, CA 95482
Email: gsherman@uusd.net
Phone: (707) 472-5080

1.3 Project Background and Objectives

Ukiah High School (UHS) is located on a 64.8-acre site at 1000 Low Gap Road in the northwest corner of the City of Ukiah (see Figure 1, Regional Location Map). The UHS campus was constructed in 1976 and has undergone extensive modernization in recent years. The campus includes an existing lighted track-and-field stadium with all-weather track and a natural turf field, as well as non-lighted large natural-turf multi-use athletic fields.

In 2017, the District Facility Needs Assessment for UHS identified the need to modernize the large natural-turf multi-use athletic fields and stated that replacement with an all-weather artificial turf field would be considered. The District's 2017 Facility Master Plan identifies the athletic fields as an area of significant maintenance and operations issues. The Plan identifies the need for repair of the north athletic fields, as they are in poor condition and cannot support sustained use during wet months, resulting in limitations to school and community athletic programs. In addition, the current field lighting for the existing UHS track and field stadium is not energy efficient and is considered outdated.

The proposed project would improve the recreational value of the north athletic fields at UHS for both students and the community. The project would also replace existing, aging inefficient lighting at the existing track and field stadium with newer, focused and energy efficient LED light arrays. The project is expected to break ground in the fall of 2021 or spring of 2022 and be completed before the start of fall classes of 2022.

For classroom related facilities, Government Code Section 53094 allows the governing board of a school district to exempt itself from a local zoning ordinance by two-thirds vote (Government Code

Section 53094(b),(c)). On March 11, 2021, the District exempted the Ukiah High School Athletic Improvements Project from the local zoning ordinance through Resolution No. 16, 2020-21. Classroom facilities include facilities used for or related to student instruction. Athletic fields, and the associated field lighting, are used for student instruction and are considered classroom facilities (*City of Santa Cruz v. Santa Cruz City Schools Bd. of Educ*.(1989) 210 Cal.App.3d 1, and *City of Saratoga v. West Valley-Mission Community College Dist.*, 2002 Cal. App. Unpub.LEXIS 1506).

1.4 Surrounding Land Uses

To the east of the UHS campus is a residential neighborhood beyond Despina Drive, as well as the Russian River Cemetery to the southeast. To the south is Low Gap Road with Mendocino County municipal offices, Mendocino County Jail, Ukiah Municipal Golf Course, and single-family residences along Maple Avenue. To the west and southwest is open space, and to the north is a residential neighborhood along Tokay Lane. Despina Drive has existing Class II bike lanes and pedestrian facilities on both sides, and a bus stop is located on Despina Drive adjacent to the campus parking lot. Class II bike lanes are also located on both sides of Low Gap Road, and continuous sidewalks are located along the north side of Low Gap Road adjacent to the campus. Orrs Creek is located approximately 225 feet south of the campus, and approximately 600 feet south of the project boundary.

1.5 Project Description

1.5.1 Site Location and Description

The project would occur within the grounds of the UHS campus. Specifically, replacement of existing sports field lights with LED lights would occur at the existing track and field stadium on the eastern portion of the campus, and athletic field improvements would occur on an approximately 3.8-acre portion of the multi-use natural-turf fields in the northern portion of the campus, referred to within this document as the ‘north field’. Repaving, minor utilities trenching, and Americans with Disabilities Act (ADA) improvements would occur along an existing fire lane within the campus (see Figure 2, Project Overview).

The project site is generally flat and located at an elevation of approximately 695 feet above mean sea level. The north field currently consists of a non-lighted baseball field, natural grass turf with irrigation, backstop fencing, and covered dugout seating. The north field is surrounded by additional softball and baseball fields and fencing to the north, fencing to the east, and is open to the upper athletic fields to the west and the UHS campus to the south. Additionally, the north field contains a portion of an existing gravel maintenance access road along the western boundary of the field.

The existing track and field stadium on the eastern portion of the campus consists of natural grass turf, track and field facilities, stadium seating, and field lighting. Specifically, the stadium includes six (6) 75-feet tall poles with sports lighting. Each pole has halide high-intensity discharge (HID) fixtures and 10-foot-wide catwalks. The existing track and field stadium is surrounded by fencing on all sides, with Despina Drive to the east, existing athletic fields to the north, campus facilities to the west, and campus tennis courts to the south.

The project site is served by a stormwater collection facility, with stormwater drains on campus that tie into city stormwater facilities off-campus. On the north field, rainwater infiltrates in-place with minor sheetflows to two stormwater inlets.

1.5.2 Existing Use

The north field and the track and field stadium are used for UHS physical education (PE) classes and athletic events, including practices and games for baseball, soccer, football, track-and-field, and other activities. Activities on the north fields occur during daylight hours as the fields are not lighted. Activities in the track and field stadium occur during both daylight and evening hours. An overview of existing events is provided in Table 1-1. In addition to school-based events, community-based events including football conditioning, and men's and women's adult soccer league games are held on the existing north field.

Structured activities, such as sports clubs, are required to be scheduled with the District. When the fields are not being used for organized sports, individuals and small groups utilize the space for picnicking, walking, jogging, and similar activities. During the summer, summer school activities are held at the school.

During normal conditions, the campus is open to the public outside of school hours. Depending on the daily schedule of activities, the athletic fields are typically used during school hours and in the evenings, and on weekends. On occasion and with special permission from the District, user groups may access campus facilities outside of normal school hours. The field also is available for special events outside the "regular" hours of operation.

1.5.3 Environmental Setting

The project site is located within the City of Ukiah in the center of Ukiah Valley in Mendocino County. Direct access to UHS is provided from Low Gap Road, which is identified as a County Rural Collector by the City of Ukiah General Plan. The Ukiah General Plan land use designation for the project site is Public (P). The zoning designation is Public Facilities (PF).

The project site is located within the North Coast Air Basin and is under the jurisdiction of the Mendocino County Air Quality Management District. Mendocino County is currently designated as attainment for all federal ambient air quality standards, and all state ambient air quality standards except particulate matter 10 microns in diameter (PM_{10}). The county is designated non-attainment of the state PM_{10} standard.

The project site is located within the Russian River watershed, with Orrs Creek located approximately 950 feet to the south of the project site. Orrs creek flows into the Russian River approximately 1.3 miles east of the project site. The area of proposed improvements is not located within a mapped 100-year or 500-year flood zone (FEMA 2020).

The project area is underlain by the Ukiah Valley Groundwater Basin, which was designated a medium priority ranking during the recent groundwater basin prioritization process (DWR 2018). The north field is underlain by a shallow layer of fill, with soils generally consisting of medium dense to dense clayey sands with varying amounts of gravel underlying the fill.

The project area is not located within an active Alquist-Priolo earthquake fault zone and no other active or potentially active faults have been mapped within the area. The closest mapped active fault to the Site is the Maacama fault zone, located approximately 2 miles east of the site (LACO 2021).

Parking is provided on the south side of the UHS campus. To date, UHS has not experienced overflow parking conditions, as the existing parking lot is sized to accommodate multiple concurrent events on campus. Curbside parking is also available along both sides of Despina Road adjacent to UHS.

Table 1-1 Existing Athletic Field(s) Usage

Existing Event	Field	Months	Day(s) of the Week	Start Time	End Time	Avg Attendance Per Event[1]
School Events						
UHS Soccer Practice	Stadium	December – March	Monday - Saturday	4:00 PM	8:00 PM	68
UHS Soccer Games	Stadium	December – March	Monday - Saturday	4:00 PM	8:00 PM	108[1]
UHS Physical Education	Stadium	August – June	Monday - Friday	8:15 AM	3:30 PM	NA
Marching Band Practice	Stadium	August – October	Monday - Friday	3:30 PM	4:30 PM	NA
Mesa Fundraiser Soccer Tourney	Stadium	March	Saturday	9:00 AM	6:00 PM	108[1]
JV Baseball Practice	South Baseball Field	February – May	Monday - Friday	3:30 PM	6:00 PM	20
Football Practice	North Field	July – November	Monday – Friday	3:30 PM	7:00 PM	40
Track and Field Practice	North	February – May	Monday - Friday	3:30 PM	6:00 PM	60

Notes:

NA = Not Applicable

1. Estimated average attendance based on similar projects

1.5.4 Project Characteristics

The proposed project would include improvements and renovations to the existing UHS athletic fields, including installation of a new lighted all-weather synthetic turf soccer field, scoreboard, players and spectator seating areas, fencing, ADA-compliant pedestrian walkways, improved emergency access, and stormwater drainage improvements. The project also includes replacement of existing lights with LED lights at the existing track and field stadium. Project components are identified in Figure 2, Project Overview, and Figure 3, North Field Improvements.

North Field Improvements

An existing baseball field in the north field would be removed and replaced with a synthetic turf soccer field (synthetic field). The synthetic field would be striped for both regulation soccer and youth soccer. The synthetic turf warm up area is to be installed south of the main soccer field between the main soccer field walkway and the southern fencing of the facility. The north field improvements would also include LED sports field lighting, a public address system, security cameras, fencing, stormwater improvements, new portable bleachers, a concessions/ticket booth, pedestrian walkways, and a 20-foot scoreboard. The project would connect to existing water utilities located within and adjacent to the project site. Elevation renderings of the north field improvements are provided in Figures 4, 5, and 6.

A concrete walkway would be installed around the west, south, and east sides of the new field, and would include connections to the existing basketball courts to the south of the site. Spectator seating would be provided by portable bleachers on the west, south, and east sides of the field. A paved players seating and scorer's area would be installed on the north side of the field.

Synthetic Turf Field

The proposed synthetic turf soccer field would be approximately 75-yards by 116-yards in size with a 15-foot boundary between the field of plan and perimeter fencing. The synthetic turf materials would consist of a permeable rock base, overlain by a Brock Powerbase Shock Pad, artificial turf carpet, and a sand and natural cork infill. While there is more heat from a turf field as compared to a grass field, the cork infill is approximately 30 degrees cooler than the alternative of granulated rubber. The synthetic turf would be a linear low-density polyethylene grass yarn. A watering system would be provided to the field and can be accessed by quick couplers to wash down the field when needed. Both the turf backing and turf carpet would be recyclable. The anticipated on-field lifespan of the turf carpet is 10 years, while the lifespan of the safety pad is 25 years. Maintenance and replacement of the turf is described in Section 1.5.6 (Operation and Maintenance).

The proposed soccer field also would include the following improvements:

- 16-foot wide by 6-foot high LED soccer scoreboard (10-foot mounted height) with two 16-foot wide by 2-foot high ID panel boards;
- Regulation and Youth Soccer goals;
- Team shelter with mobility kit;
- Three 5- row portable bleachers;
- Four 3-row bleachers; and
- Two pedestal drinking fountains with bottle filler.

Lighting

Four new 70-foot-tall sports lighting poles with focused MUSCO LED light arrays would be installed around the perimeter of the proposed soccer field. The selection of LED lighting solutions is based on their greater capacity for control, such as differential timing, when compared to other options, as well as superior energy savings. The system would have a load of 35.60 kilowatts and would be installed with circuit systems specific to the area of play (zone 1), and the bleachers (zone 2). Zone 1 would have TLC-LED-1500 luminaires and Zone 2 would have TLC LED RGBW luminaires.

Each pole would measure approximately 16-inches wide at the base and 7-inches wide at the top. Each pole would have six luminaires mounted at 70 feet. Each luminaire would be 26-inches wide by 21-inches tall. Additionally, the two of the poles located on the south side of the field would have an additional luminaire mounted at 50 feet, specific for the bleachers and egress. The illumination summary and lighting analysis are provided in Appendix A (Lighting Analysis). A nighttime campus plan view of the proposed north field lighting is provided in Figure 7 (Lighting Study Campus Plan View).

Public Address System

A public address (PA) system would be installed at the new soccer field. The system would consist of speakers mounted on the new lighting poles. The speakers would be directed towards the spectators and would be designed to focus and minimize the amount of sound that would leave the field area.

Fencing and Access

The proposed soccer field would be enclosed with 6-foot-tall black vinyl-coated fencing. Behind the soccer goals, the fencing would be up to 16-feet tall. A secondary 3.5-foot-tall internal chain link fence would be installed between the internal walkway and the field. Pedestrian and maintenance gates would be installed at the access points to the existing basketball courts. A concession building would be installed at a later date inside the fencing adjacent to the southern access gate. The concession building would be less than 200 square feet in size.

Stormwater Infrastructure

Implementation of the project would result in approximately 3.05 acres of new impervious surface, mostly associated with new pedestrian walkways. To accommodate stormwater runoff from the impervious surfaces, and to meet current standards, new stormwater Low Impact Development (LID) components would be implemented as part of the project.

The synthetic turf field has been designed to comply with the requirements of the 2021 Storm Water Low Impact Development Technical Design Manual, including the following requirements:

- Infiltrate 100 percent of the total calculated volume of storm water runoff generated by the site for a 1.0-inch rain event in a 24-hour period.
- Have a post-construction maximum discharge rate for all storm events between a 1- and 10-year range that does not exceed the pre-construction flow rate from the 10-year, 1-hour event.

(LID stormwater treatment improvements would be incorporated into the site. There are five (5) separate proposed LIDs that are designed to collect water from the site, consisting of french drain lines and subdrain lines. French drain lines would be located on the perimeter of the west field. Subdrain lines would be located within the synthetic turf sections.

For the purpose of stormwater treatment, the synthetic turf fields are considered self-treating, because they would have a gravel layer below the cork layer and subsurface drainage. The new subsurface drainage system would convey stormwater in pipes and gravel trenches from a 10-year storm event to existing stormwater infrastructure adjacent to the project site.

Emergency Access and ADA Improvements

Minor utility trenching would occur within an existing fire lane within the grounds of UHS to support the north field components, as described above. ADA improvements would include, but are not limited to, speed bump removal, pedestrian gate replacements, new curb cuts and ramps, and replacement of truncated dome surfaces at pedestrian curb cuts. Approximately 890 feet of the existing emergency access driveway would be repaved. New parking-related signs would be installed at the southern boundary of the fire lane. ADA improvements would primarily be located within the existing fire lane but would also include paving improvements for the southern egress of existing stadium (See Figure 2). New path lighting would be installed to illuminate the egress path.

Replacement of Track and Field Stadium Lighting

The existing field lighting fixtures at the track and field stadium would be replaced with new LED luminaries. The existing poles would remain. The existing sports field light breakers would be replaced, and replacement electrical lines would be installed within new and existing conduits. The new arrays would be shorter and more-narrow than the existing arrays. A nighttime campus plan view of the proposed north field and replacement stadium lighting is provided in Figure 7 (Lighting Study Campus Plan View).

1.5.5 Construction

Construction of the project is anticipated to begin in fall of 2021 or Spring 2022 and would take approximately 95 days (4.5 months) to complete. The anticipated workday hours are 7 a.m. to 7 p.m., and noise levels would be enforced consistent with the City of Ukiah Municipal Code. No work, delivery of equipment or materials would take place during non-work hours. Project construction would not include any tree trimming or tree removal. Prior to earth disturbing activities, temporary fencing would be erected to protect existing nearby trees.

Site Access and Staging

Equipment and materials staging would be located within the UHS campus immediately adjacent to the north field. Access for materials delivery is anticipated to be provided from the existing internal driveway to Low Gap Road. The construction area, including staging and materials laydown areas, would be fenced to restrict access by unauthorized persons. Construction workers would park in existing UHS campus parking lots or in the staging areas. The contractor may also secure a job site trailer and portable sanitary facilities at the staging area. A rumble plate would be installed at the southern access of the north field and would be used to reduce trackout of mud or dirt from the project site.

North Field Construction

It is assumed for this analysis that the entire site would be disturbed due to demolition, grading, utility installation, and construction activities. Prior to the start of site grading, all existing structures within the north field area would be removed. Existing hardscapes, vegetation, and certain existing utilities would be removed and disposed. It is anticipated that site stripping would extend approximately 4-6

inches below the surface and that the underlying site soils are generally suitable for reuse as select fill. Excavated soils would be balanced onsite, with little to no import of soils required.

Following site preparation, the project site would be rough graded to elevations shown on final improvement plans and in accordance with recommendations in the project's Geological Exploration Technical Memorandum (LACO 2021) and any subsequent geotechnical documentation. Drainage rock would be imported for the new synthetic field. Approximately 1,754.5 tons of rock would be imported to improve drainage, which calculates to approximately 76 haul truck loads.

Steel-reinforced concrete piers would be installed for foundation support for the light poles, scoreboards, and fencing. The diameter and length of drilled cast-in-place concrete piers for supporting field light structures would be determined by a structural engineer, and would be at least 15 inches in diameter and penetrate at least fourteen feet into suitable supporting soils.

Utility connections would be installed using open trench construction methods. Such methods would include removal of surface material; excavation and shoring of a trench; installation of pipe bedding, pipelines and conduits; backfilling of the trench; and resurfacing. Vertical construction activities would include construction of the fencing, installation of the scoreboard and ticket booth, and installation of the sports field lighting poles. The final phase of construction is anticipated to include field striping and finished hardscapes.

Emergency Access and ADA Improvements

Construction of the emergency access and ADA improvements would include minor utility trenching, minor repaving, speed bump removal, removing and replacing pedestrian gate, new curb cuts and ramps, installation of egress lighting, and replacement of truncated dome surfaces at pedestrian curb cuts.

Replacement of Track-and-Field Stadium Lighting

The existing lighting arrays would be disassembled and removed from the existing poles. New lighting arrays would be installed on the existing poles. This project component would not involve any earth disturbance.

Construction Equipment and Haul Trips

A variety of construction equipment would be used to construct the project, including excavators, backhoes, forklifts, front-end loaders, graders, rollers, and turf installation equipment. A range of trucks including cement mixers, haul trucks, and water trucks would also be required.

Most of the heavy equipment listed above would be used during the first two to three months of construction, primarily during site preparation and grading. The concrete mixer and pick-up trucks would be used throughout construction. Approximately 20 construction workers would be on site per day. In addition, approximately 76 haul trips would occur throughout the grading period. The number of construction-related vehicles traveling to and from the project site would vary on a daily basis. For the purposes of evaluation, the heaviest traffic days are anticipated to require up to 6 haul truck trips on a peak day. Therefore, on the busiest days of construction, approximately 46 vehicle trips could occur.

Demolition debris, such as pavement and sod, would be off-hauled for recycling or composting. Materials with no practical potential for reuse would be disposed of at a regional landfill.

1.5.6 Operation and Maintenance

Following construction, the proposed soccer field would accommodate PE classes, football practice, soccer practice, and soccer games. The existing track and field stadium would continue to accommodate PE classes, football practice, football games, track practice, and track meets. These events are the same as currently held at the campus. Changes in event location or timing are summarized in Table 1-2 (Proposed Athletic Field Usage). The events are described in more detail below. In addition to the general maintenance activities that currently occur, such as landscaping, general repairs, synthetic field maintenance, and trash removal, maintenance also would include replacement of light fixtures and artificial turf.

Hours of the athletic fields would remain the same, as identified in Table 1-1 (Existing Athletic Field(s) Usage) and Table 1-3 (Proposed Athletic Field(s) Usage).In addition, the north field and stadium would have after-hours use for outside groups, as scheduled through the District. The project would not increase or otherwise change the student population for UHS.

Athletic and Special Event Use

The Project would support continued use of the athletic fields by the existing UHS team sports activities and UHS special events that currently occur.

As indicated in Table 1-2 (Project-Generated Changes in Events) and Table 1-3 (Proposed Athletic Field(s) Usage), the project would change the location of existing school events, shifting events between facilities within the campus. However, the project is not anticipated to result in an increase in the number or attendance of school events.

Public and Scheduled Non-School Use

The District anticipates that the community may request use of the improved north field for youth and club soccer. The amount of that use, in number of events or attendance, is currently unknown. Youth and club soccer league events are currently held at elementary and middle school facilities in the City of Ukiah. Because community-based soccer events are currently held at existing facilities within the City, the District anticipates that the project may create a minor increase in demand for soccer within the community and that a minor portion of existing events may be relocated to the north field. Therefore, the District assumes that the north field would support an additional 15 soccer events (5 games each for adult, youth, and club soccer). Community-based games are assumed to occur during the weekend and would have an attendance comparable to attendance of UHS soccer games (109 persons for club and adult soccer, 95 persons for youth soccer).

Additionally, the facilities would remain open to the public when not closed during school hours or practice.

Table 1-2 Project-Generated Changes in Events

Event	Change from Existing Conditions
School Events	
UHS Soccer Practice	Moved to North Field from Stadium
UHS Soccer Games	Moved to North Field from Stadium
UHS Physical Education	Moved to North Field from Stadium
Marching Band Practice	Moved to North Field from Stadium
Mesa Fundraiser Soccer Tourney	Moved to North Field from Stadium
JV Baseball Practice	Moved to North Baseball Field from North Field
Football Practice	No Change
Track and Field Practice	No Change
Community-based Events	
Men's and Women's' Adult Soccer League	New Event(s)
Football Conditioning	No Change
Club Soccer	New Event(s)
Youth Soccer	New Event(s)

Table 1-3 Proposed Athletic Field(s) Usage

Event	Field	Months	Day(s) of the Week	Start Time	End Time	Avg Attendance Per Event
School Events						
UHS Soccer Practice	Improved North Field	December – March	Monday - Saturday	4:00 PM	8:00 PM	68
UHS Soccer Games	Improved North Field	December – March	Monday - Saturday	4:00 PM	8:00 PM	108[1]
UHS Physical Education	Improved North Field	August – June	Monday - Friday	8:15 AM	3:30 PM	NA
Marching Band Practice	Improved North Field	August – October	Monday - Friday	3:30 PM	4:30 PM	NA
Mesa Fundraiser Soccer Tourney	Improved North Field	March	Saturday	9:00 AM	6:00 PM	108[1]
JV Baseball Practice	North Baseball Field	February – May	Monday - Friday	3:30 PM	6:00 PM	20
Football Practice	Improved North Field	July – November	Monday – Friday	3:30 PM	7:00 PM	40
Track and Field Practice	Improved North Field	February - May	Monday - Friday	3:30 PM	6:00 PM	60
Community-Based Events						
Men's and Women's' Adult Soccer League	Improved North Field	December – March	Saturday-Sunday	Varies[2]		108[1]
Football Conditioning	Improved North Field	Spring/Summer	Varies	Varies[2]		NA
Club Soccer	Improved North Field	December – March	Saturday-Sunday	Varies[2]		108[1]
Youth Soccer	Improved North Field	August – November	Saturday-Sunday	Varies[2]		96

Notes: NA = Not Applicable

1. Estimated average attendance based on similar projects

2. Start and end times of community-based events varies by event; however, events are not anticipated to end later than 8:00 PM

Lighting

Use of field lighting, such as number of times per year or hours of use, at the existing stadium would not change as a result of the project.

For the north field, lights are anticipated to be used for less than 30 events per year. Typically, once an activity requiring lights has ended, the lights would be dimmed. This would provide sufficient lighting for attendees to safely depart and for clean-up and breakdown. It is anticipated that clean-up and breakdown would take approximately one hour, after which the lights would be turned off. For example, for a soccer game ending at 8 p.m., the lights would be dimmed at 9 p.m. and then typically be extinguished by 10:30 p.m. This would occur approximately 10 times per year in the winter for school soccer games.

In addition, during daylight savings time (November through mid-March), lights could be used for events occurring after school hours, such as practices and games for soccer. These events would end by approximately 8 p.m. and occur approximately 40 times per year.

A series of simulations were prepared to illustrate the existing and with proposed project conditions from multiple publicly-accessible viewpoints. The viewpoints, and direction of view, are identified in Figure 8. The lighting study simulations for each viewpoint are provided in Figures 9 to 13. The figures show existing conditions (no lights and existing stadium lights), and simulations of project conditions (soccer lights on, soccer and stadium lights on).

Additionally, simulated daytime views of the proposed north field sports lighting poles are provided in Figure 14 and Figure 15.

Access

Pedestrian access would continue to be provided at all existing access points surrounding the campus and would remain open during normal hours and regular events.

Turf Maintenance and Replacement

The synthetic turf would be maintained in accordance with the manufacturer's guidelines. This would include litter and debris removal, occasional grooming, watering to remove spilled liquids, and an annual maintenance. The synthetic turf would be tested annually for G-max (a field's level of shock absorbency) using the ASTM F1936 test method. With proper maintenance, a synthetic turf field should have a g-max of well below 200. The synthetic turf carpet would be replaced approximately every 8-10 years, which would occur at the end of each warranty period. Replacement activity would consist of removal and replacement of the carpet portion of the turf and would not include substantial construction activity. The cork-infill can be reused for two cycles of carpet replacement.

Energy Use

Electrical energy for the project would be provided by PG&E. Gasoline and other petroleum products used for this Project would be obtained from private retailers throughout the general area.

Energy-consuming equipment anticipated to be used during construction is listed above in Section 1.5.5. (Construction Activities). Worker vehicles travelling to and from the site during construction would utilize gasoline and other petroleum products. The precise amount of construction-related energy consumption is uncertain. However, construction would not be expected to require a large amount of fuel or energy usage because of the relatively moderate number of construction vehicles and equipment, worker trips, and truck trips that would be required for a project of this scale and duration. In addition, equipment idling times would be minimized either by shutting equipment off

when not in use or reducing the maximum idling time to five minutes or less (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations [CCR]).

Energy-consuming equipment anticipated to be used during operation of the project includes mechanical and electrical equipment associated with the sports field lighting. The new sports field lighting system at the synthetic turf field would be a new source of energy demand. However, the existing, older lights at the stadium would be replaced by newer, more energy efficient lights.

Motor vehicle trips associated with spectators to and from the athletic fields for sporting events and other activities would utilize energy in the form of petroleum products and electricity. It is noted that the project would not constitute new energy consumption that would be associated with new vehicle trips for school-sponsored events, as the project does not generate new activities or uses that would create new trips. The events proposed to occur at the new synthetic turf field currently occur within the campus at other fields. The project may result in new trips to the project site associated with community-based soccer events. Trips for community-based soccer events is an existing condition; the project may result in a redistribution of a portion of those trips if those events are moved to the project site. However, the project would not result in a net increase in trips or substantially change anticipated trip lengths.

1.6 Environmental Protection Actions Incorporated into the Proposed Project

1.6.1 Environmental Protection Action 1 – Implement Geotechnical Design Recommendations

The project will be designed and constructed in conformance with the preliminary geotechnical recommendations contained in the Geologic Exploration Technical Memorandum (LACO Associates 2021), and any subsequent design-level geotechnical reports for the project. Specifically, the design and construction shall be consistent with the geotechnical recommendations for allowable foundation bearing pressures, seismic design parameters, earthwork, and excavation. The geotechnical recommendations will be incorporated into the final plans and specifications for the project and will be implemented during construction. Professional inspection of foundation work, excavation, earthwork and other aspects of site development shall be performed during construction to ensure compliance with the recommendations.

1.6.2 Environmental Protection Action 2 – Dust Control During Construction

To limit dust, the District will include the following Mendocino County Air Quality Management District-recommended Dust Control Best Management Practices (Regulation 1, Rule 1-430) in construction contract specifications for the project:

- Blowing dust shall be reduced by timing construction activities so that paving begins as soon as possible after completion of grading and by landscaping disturbed soils as soon as possible.
- All portions of the site shall be watered as many times a day as required to ensure proper dust control seven (7) days a week for the duration of the Project.
    1. Sprinkle unpaved construction areas with water at least twice per day or as necessary to eliminate dust.
    2. Cover stockpiles of soil, sand, and other similar materials.

3. Cover trucks hauling debris, soil, sand, and other similar materials.

- All unpaved areas shall have a posted speed limit of 10 mph.
- Earth or other material tracked onto neighboring paved roads shall be removed promptly.
- Dust generating activities shall be limited during periods of high winds (over 15 mph).
- A daily log shall be kept of fugitive dust control activities.
- The Contractor shall obtain reclaimed water from the City, if available, for compliance with the above requirements.
- The Contractor shall maintain and operate construction equipment so as to minimize exhaust emissions of PM_{10} and other pollutants by means of the following:
  1. Prohibition on idling of motors of equipment that is not in use and by waiting trucks.
  2. Implementation of specific maintenance programs to reduce emissions for equipment in frequent use during construction.

1.6.3 Environmental Protection Action 3 – Implement Storm Water Control Measures During Construction

The District and/or its contractor will obtain coverage under State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, as amended by Order No. 2012-0006. This will include submittal of permit registration documents (notice of intent, risk assessment, site maps, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and certifications) to the State Water Resources Control Board. The Storm Water Pollution Prevention Plan will address pollutant sources, non-storm water discharges resulting from construction dewatering, best management practices, and other requirements specified in the above-mentioned Order. The Storm Water Pollution Prevention Plan will also include dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. A Qualified Storm Water Pollution Prevention Plan Practitioner will oversee implementation of the Plan, including visual inspections, sampling and analysis, and ensuring overall compliance.

1.6.4 Environmental Protection Action 4 – Sports Lighting Performance Standards

To limit potential for adverse light spill or glare, the District will include the following Sports Lighting Performance Standards in construction contract specifications for the project:

- Submitted spill/glare computer models shall depict the field test stations at 150 feet from the edge of the playing field. The test stations shall be shown every 30 feet along the line with the field lights on. The sports lighting performance shall be as described below:
  1. Horizontal footcandles: No single point shall exceed 1 footcandle. Models shall represent readings taken with the meter positioned horizontal 36 inches above grade.
  2. Vertical footcandles: No single point shall exceed 4 footcandles. Models shall represent readings taken with the meter positioned horizontal 36 inches above grade.
  3. Candela Readings: At 150’ from the field line at 3’ above grade, the max candela reading (by fixture) shall not exceed an average of 30,000 (candela). Readings will be taken with all fields illuminated.

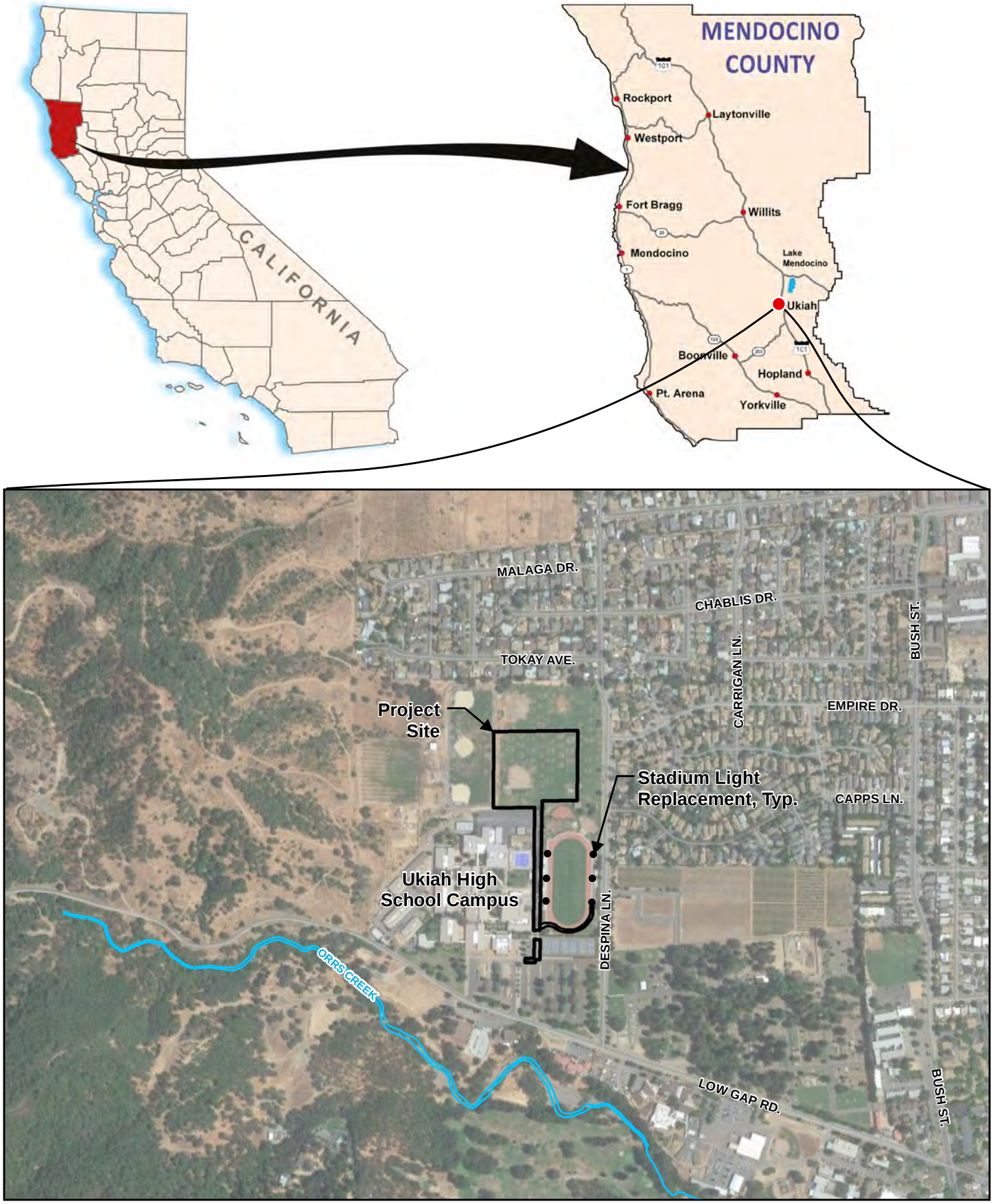
1.7 Required Agency Approvals

The proposed project may require the following permits and approvals.

- Adoption of Mitigated Negative Declaration by Ukiah Unified School District Board of Trustees;
- Construction approval from the Office of the Division of the State Architect;
- Design review approval from the City of Ukiah Utilities Department for water connections; and
- General Construction Permit approval from State Water Resources Control Board for disturbance of one or more acres of soil.

1.8 Tribal Consultation

The District has no record of receiving requests for notification of proposed projects from California Native American tribes pursuant to Public Resources Code Section 21080.3.1. The District nevertheless initiated contact with Native American tribes as part of preparing this environmental review document. Please refer to Section 3.18, Tribal Cultural Resources, for additional information.



Paper Size ANSI A

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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

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GHD

Ukiah Unified School District
Ukiah High School Field Improvement Project

Project No. 11223190
Revision No. -
Date April 2021

Regional Location Map

FIGURE 1

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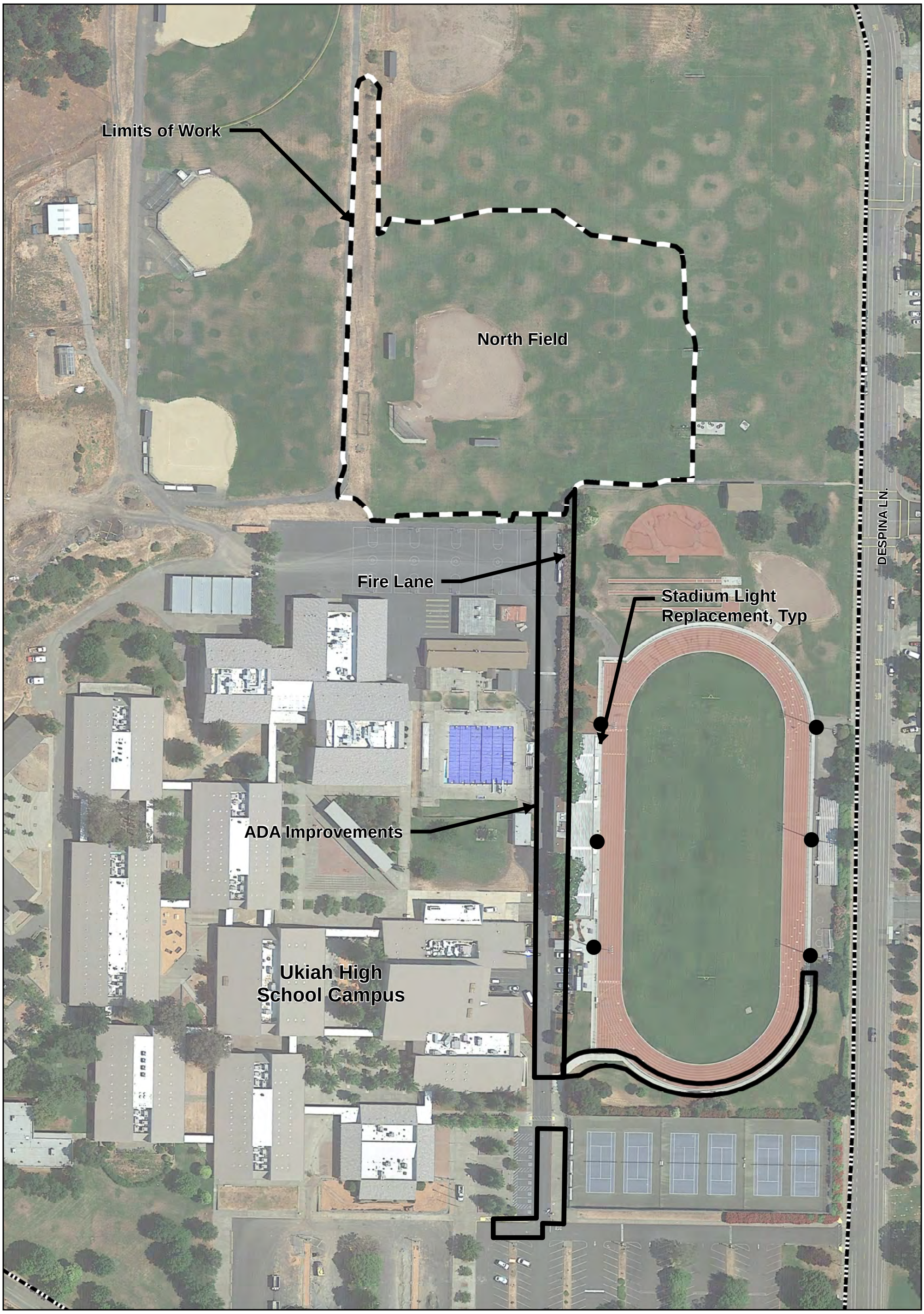

Paper Size ANSI B

0 50 100

Feet

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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN StatePlane California II FIPS 0402 Feet

GHD

Ukiah Unified School District
Ukiah High School Field Improvement Project

Project Overview

Project No. 11223190
Revision No. -
Date April 2021

FIGURE 2

\\ghdnet\ghd\US\Sacramento - 2200 21st\Projects\561\11223190\GIS\Maps\Deliverables\Project Overview_v3.mxd
Print date: 02 Apr 2021 - 15:26

Data source: . Created by: rmremillard

CONCEPT LEGEND	
SYM	DESCRIPTION
	42" TALL CHAIN LINK FENCE
	6' TALL CHAIN LINK FENCE
	16' TALL CHAIN LINK FENCE
G1	42" TALL X 4' WIDE SWING CHAIN LINK GATE
G2	42" TALL X 12' WIDE DOUBLE SWING CHAIN LINK GATE
G3	42" TALL X 26' WIDE DOUBLE SWING CHAIN LINK GATE
G4	6' TALL X 4' WIDE SWING CHAIN LINK GATE
G5	6' TALL X 12' WIDE DOUBLE SWING CHAIN LINK GATE
1	PLAYERS SEATING/ SCORER'S AREA
2	116 YD X 75 YD SOCCER FIELD STRIPING
3	75 YD X 50 YD U12 SOCCER FIELD STRIPING
4	SPECTATOR SEATING AREA WITH 3-ROW BLEACHER/ GOAL STORAGE
5	SPECTATOR SEATING AREA WITH 5-ROW BLEACHER
6	SPORTS FIELD LIGHTING
7	SOCCER SCOREBOARD
8	WARM UP AREA - SYNTHETIC TURF
9	ENTRY AREA
10	TICKET BOOTH

Source:Verde Designs, December 2020

0 50 100

Approx. Scale: 1"= 100'

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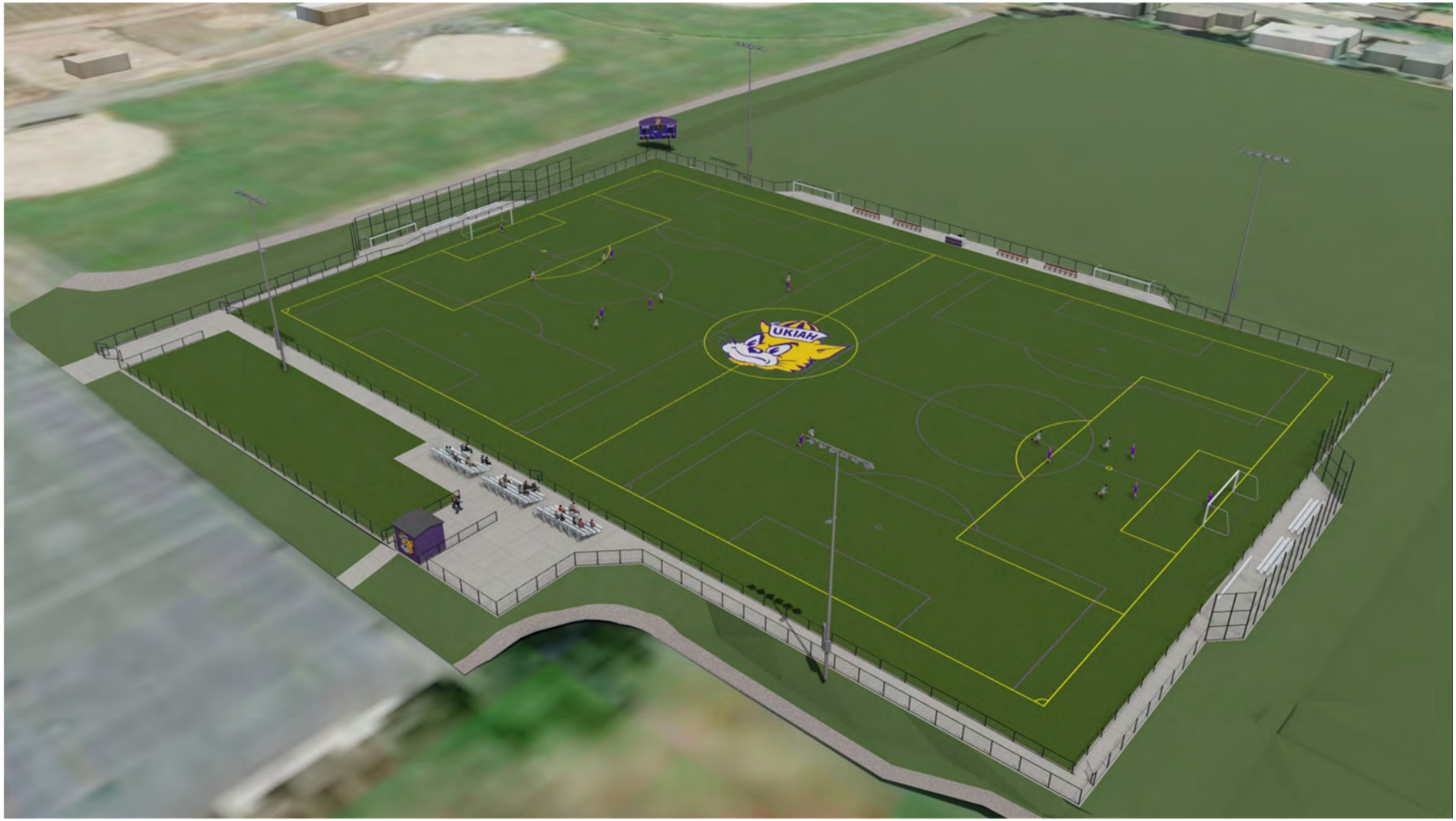
Ukiah Unified School District
Ukiah High School Field Improvement Project

North Field Improvements

Project No. 11223190
Revision No.
Date **01/22/21**

FIGURE 3

Filename: \\ghdnet\ghd\US\Sacramento - 2200 21st\Projects\561\11223190\Workshare\04 Technical Work\Figures\InDesign\North Field Improvements.indd
Print date: February 22, 2021 9:47 AM



GHD

Ukiah Unified School District
Ukiah High School Field Improvement Project

North Field Visual Simulation
Looking North West

Project No. 11223190
Revision No. -
Date **April 2021**

FIGURE 4

Filename: \\ghdnet\ghd\US\Sacramento - 2200 21st\Projects\561\11223190\Workshare\04 Technical Work\Figures\InDesign\NF_Visual Simulation – Looking North West.indd
Print date: 5 Apr 2021 - 8:42

Ukiah Unified School District
Ukiah High School Field Improvement Project

North Field Visual Simulation
Looking East

Project No. 11223190
Revision No. -
Date **April 2021**

FIGURE 5

Filename: \\ghdnet\ghd\US\Sacramento - 2200 21st\Projects\561\11223190\Workshare\04 Technical Work\Figures\InDesign\NF_Visual Simulation – Looking East.indd
Print date: 5 Apr 2021 - 8:42

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Ukiah Unified School District
Ukiah High School Field Improvement Project

North Field Visual Simulation
Looking North

Project No. 11223190
Revision No. -
Date **April 2021**

FIGURE 6

Filename: \\ghdnet\ghd\US\Sacramento - 2200 21st\Projects\561\11223190\Workshare\04 Technical Work\Figures\InDesign\NF_Visual Simulation – Looking North.indd
Print date: 5 Apr 2021 - 8:51

Ukiah Unified School District
Ukiah High School Field Improvement Project

Lighting Study
Campus Plan View

Project No. 11223190
Revision No. -
Date **April 2021**

FIGURE 7

Filename: \\ghdnet\ghd\US\Sacramento - 2200 21st\Projects\561\11223190\Workshare\04 Technical Work\Figures\InDesign\Lighting Study – Campus Plan View.indd
Print date: 5 Apr 2021 - 8:56

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Ukiah Unified School District
Ukiah High School Field Improvement Project

Project No. 11223190
Revision No. -
Date **April 2021**

Lighting Study – View Locations

FIGURE 8

Filename: \\ghdnet\ghd\US\Sacramento - 2200 21st\Projects\561\11223190\Workshare\04 Technical Work\Figures\InDesign\Lighting Study – View Locations.indd
Print date: 5 Apr 2021 - 12:18

Ukiah Unified School District
Ukiah High School Field Improvement Project

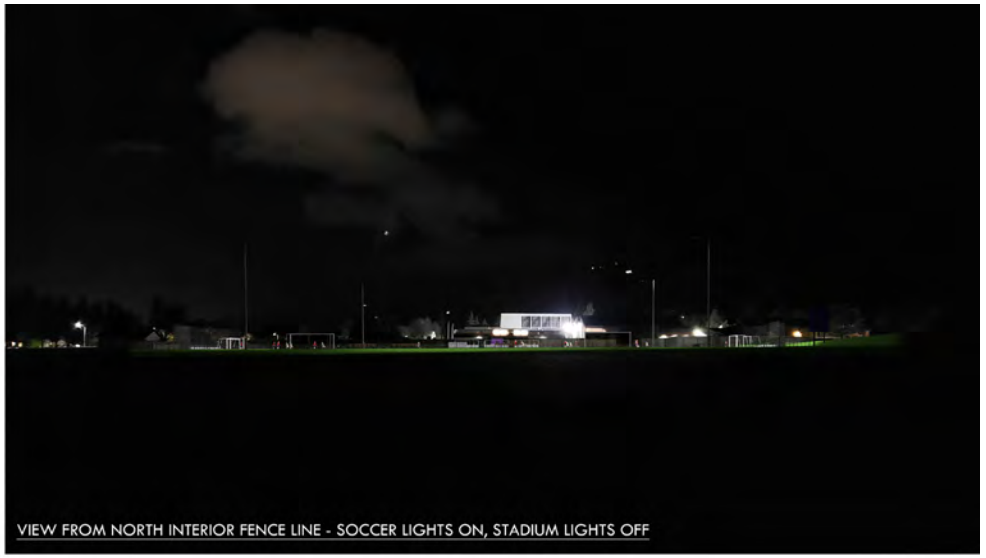
Project No. **11223190**
Revision No. -
Date **April 2021**

Lighting Study
View 1 (Tokay Lane)

FIGURE 9

Filename: \\ghdnet\ghd\US\Sacramento - 2200 21st\Projects\561\11223190\Workshare\04 Technical Work\Figures\InDesign\Lighting Study – View 1 Tokay Lane.indd
Print date: 5 Apr 2021 - 10:33

VIEW FROM NORTH INTERIOR FENCE LINE - ALL LIGHTS OFF



VIEW FROM NORTH INTERIOR FENCE LINE - SOCCER LIGHTS ON, STADIUM LIGHTS OFF

VIEW FROM NORTH INTERIOR FENCE LINE - SOCCER LIGHTS ON, STADIUM LIGHTS ON

VIEW FROM NORTH INTERIOR FENCE LINE - EXISTING STADIUM LIGHTS

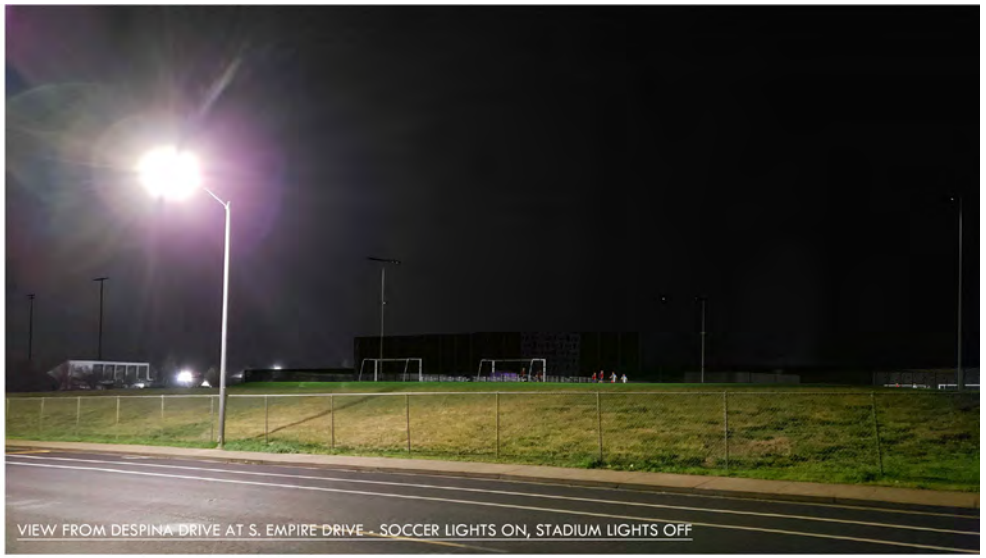
GHD

Ukiah Unified School District
Ukiah High School Field Improvement Project

Lighting Study
View 2 (North Interior Fenceline)

Project No. **11223190**
Revision No. -
Date **April 2021**

FIGURE 10



Ukiah Unified School District
Ukiah High School Field Improvement Project

Lighting Study
View 3
(Despina Drive at S. Empire Drive)

Project No. **11223190**
Revision No. -
Date **April 2021**

FIGURE 11

Filename:\\ghdnet\ghd\US\Sacramento-220021st\Projects\561\11223190\Workshare\04TechnicalWork\Figures\InDesign\LightingStudy–View3DespinaDriveatS.EmpireDrive.indd
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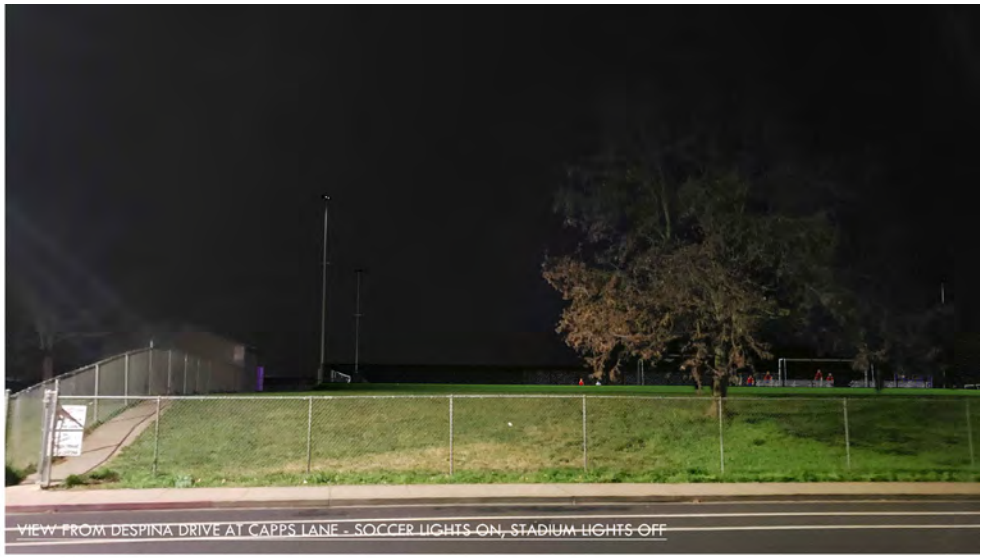

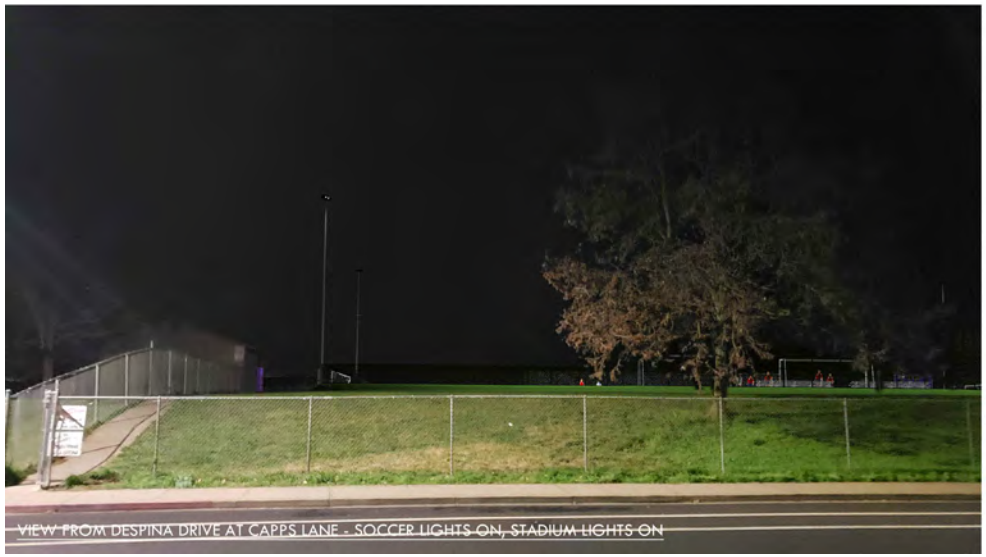

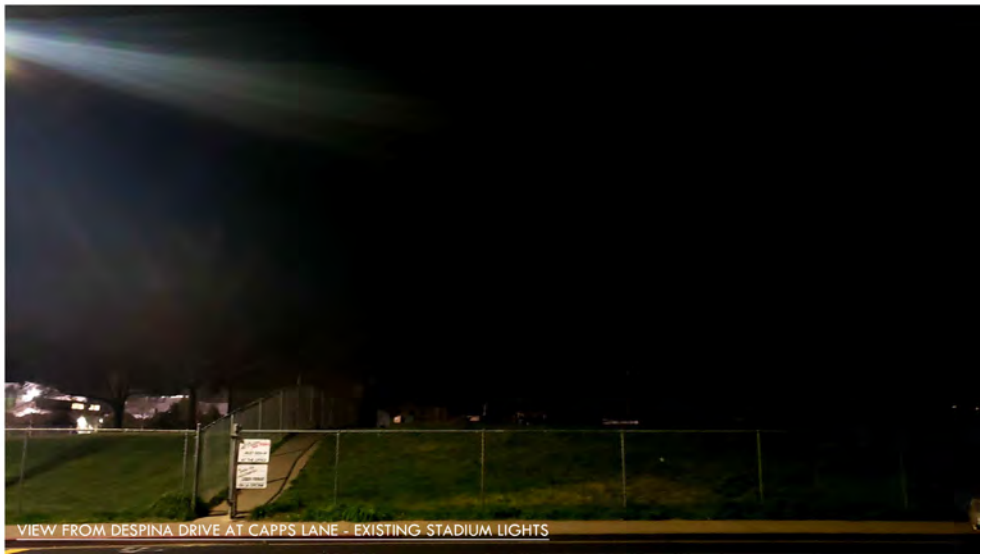

Ukiah Unified School District
Ukiah High School Field Improvement Project

Lighting Study
View 4
(Despina Drive at Capps Lane)

Project No. 11223190
Revision No. -
Date **April 2021**

FIGURE 12

Ukiah Unified School District
Ukiah High School Field Improvement Project

Lighting Study
View 5 (Despina Drive at near Southern Portion of Stadium)

Project No. 11223190
Revision No. -
Date **April 2021**

FIGURE 13

Filename:\\ghdnet\ghd\US\Sacramento-220021st\Projects\561\11223190\Workshare\04TechnicalWork\Figures\InDesign\LightingStudy--View5DespinaDrnearSouthernPortionofStadium.indd
Print date: 5 Apr 2021 - 11:13

Ukiah Unified School District
Ukiah High School Field Improvement Project

Daytime
View 3 (Despina Drive at S. Empire Drive)

Project No. 11223190
Revision No. -
Date **April 2021**

FIGURE 14

Filename:\\ghdnet\ghd\US\Sacramento-220021st\Projects\561\11223190\Workshare\04TechnicalWork\Figures\InDesign\LightingStudy--View5DespinaDrnearSouthernPortionofStadium.indd
Print date: 5 Apr 2021 - 11:13

Ukiah Unified School District
Ukiah High School Field Improvement Project

Daytime
View 4 (Despina Drive at Capps Lane)

Project No. 11223190
Revision No. -
Date **April 2021**

FIGURE 15

Filename:\\ghdnet\ghd\US\Sacramento-220021st\Projects\561\11223190\Workshare\04TechnicalWork\Figures\InDesign\LightingStudy--View5DespinaDrnearSouthernPortionofStadium.indd
Print date: 5 Apr 2021 - 11:13

2. Environmental Factors Potentially Affected

The environmental factors checked below 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. Where checked below, the topic with a potentially significant impact will be addressed in an environmental impact report:

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.

☐ I find that the proposed MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Gabriel Sherman

Digitally signed by Gabriel Sherman
Date: 2021.06.23 15:37:41 -07'00'

LEAD AGENCY Signature Date

3. Environmental Analysis

3.1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
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 non-urbanized areas, substantially degrade the existing visual character or quality of public view 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 substantial light or glare which would adversely affect day or nighttime views in the area?			✓	

a) Have a substantial adverse effect on a scenic vista? (Less than Significant)

This evaluation is applicable to project features that would be located on or disrupt access to a scenic vista, or result in significant visual changes within its viewshed.

A scenic vista can generally be defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The City of Ukiah General Plan does not identify specific scenic vistas or scenic corridors, but does identify the western hillsides of the Ukiah Valley as an aesthetic and visual resource. The County of Mendocino General Plan does not identify specific scenic vistas in the vicinity of the project.

The western hillsides of the Ukiah Valley can be seen from some areas of the project site, especially the north field. From Despina Drive near the north field, views include the western hillsides, with some trees, streetlights, and the existing 75-feet tall sports field lighting poles interspersed between the viewer and the hillsides. From Despina Drive near the stadium, views include the western hillsides, largely obscured by vegetation, existing bleachers, with street lights and the existing sports field lighting poles extending above the vegetation.

Most of the project improvements, such as synthetic turf fields and ADA improvements would be at ground level. Other improvements, such as fencing, would have minimal rise above existing facilities.

The project would replace existing sports field lighting at the stadium with new LED luminaries, utilizing the existing poles. The new LED luminaries would be mounted at the same height as the existing luminaries, but would be shorter and more narrow than the existing luminaries. The project's four new sports lighting poles would be 70 feet tall, and clustered around the proposed north field, as shown on Figure 3, Figure 14, and Figure 15. Each pole is narrow, measuring approximately 16-inches wide at the base and 7-inches wide at the top. Each pole would have six luminaires, which would be 26-inches wide by 21-inches tall. Additionally, the two of the poles located on the south side of the field would have an additional luminaire mounted at 50 feet, specific for the bleachers and egress. The poletop luminaires are horizontally oriented and narrow. The dimensions of the poles and poletop luminaries minimize obstruction of public views of the western hillsides of the Ukiah Valley, as viewed from the project site and Despina Drive. The proposed new poles and luminaries would be consistent in height and dimensions with existing sports field lighting poles and streetlight poles in the viewshed. The project would not block or substantially obscure views of the Ukiah Valley hillsides from the project site or Despina Drive.

The project facilities would not be located on a scenic vista. Public views of the western hillsides of the Ukiah Valley would not be substantially altered or disrupted by the project. The project impact would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)

The California Scenic Highway Program includes a list of officially designated and eligible State Scenic Highways. According to the California Scenic Highway Mapping System, there are no designated scenic highways in the vicinity of the project. The nearest location of a potential scenic highway are sections of SR 20 and SR 101 located more than 5 miles north of the project. Both SR 20 and SR 101 are identified as eligible for the State Scenic Highway, but neither is officially designated (Caltrans 2020). An eligible State Scenic Highway designation differs from an official designation and does not require local jurisdictions to enact a scenic corridor protection program. The project site and surrounding topography are not visible from officially designated or eligible State Scenic Highways and, as such, would result in no impact.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view 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? (Less than Significant)

The project is located within an urbanized area. The City of Ukiah General Plan land use designation for the project site is Public (P). The City zoning designation for the site is Public Facilities (PF). As discussed in Section 1.3, Project Background and Objectives, the District has exempted the project from local zoning ordinance through Resolution No. 16, 2020-21. However, the District has elected to review the City's zoning requirements for the PF zone.

The PF District provides for public and quasi-public properties or specified public utilities purposes. There are no established height limitations or setbacks associated with the PF zoning district with which the project would conflict. Neither the City of Ukiah General Plan or Mendocino General Plan identify visual gateways or scenic corridors in the vicinity of the project.

The design of the project would not conflict with applicable zoning and other regulations concerning scenic quality, including General Plan policies related to scenic corridors. The impact would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Less than Significant)

Nighttime construction work is not anticipated to be required for the project. Therefore, no exterior lighting would be required during construction, and no impact would result. Glare related to construction activity would be minimal and would be temporary in nature, therefore, the potential impact during construction would be less than significant.

The project improvements would be located adjacent to an a largely built-out area where nighttime lighting currently exists, including existing parking lot lighting, street lighting, and sports field lighting.

The proposed new and replacement sports lighting would be located within the project area and focused onto the areas of play. The luminaires would be Total Light Control (TLC) LED, which minimizes light spill from the target area and glare on the adjacent properties. The majority of field activities would occur during daylight hours. Occasionally, events would be held after daylight hours, which is estimated to occur in winter when the sun sets as early as 4:49 PM (Time and Date 2021). The sports lighting would only be used during those occasional events and would be turned off promptly after the events are concluded.

To determine the areal extent of potential light trespass, this analysis utilizes a lighting model, produced by MUSCO Lighting, Inc., to estimate light spill beyond the project site. The modeled foot-candle readings are taken at the boundary of the north field facilities and across adjacent properties (Appendix A). The sports lights would be shielded and aimed directly down and not directed toward adjacent properties or roadways.

In order to evaluate potential impacts resulting from the use of lighting, standards developed by the Institution of Lighting Engineers (ILE), the Illuminating Engineering Society of North America (IESNA), and the Electric Power Research Institute (EPRI), were used as the basis to determine if illuminance produced by the project would be significant. Light trespass varies according to surrounding environmental characteristics and, as such, the IES Lighting Handbook, 10th Edition, utilizes a concept of “Nighttime Outdoor Lighting Zones” ranging from LZ0 (most sensitive) to LZ4 (least sensitive) (IES 2011). Although Title 24 outdoor lighting requirements do not apply to sports lighting, the identified lighting limits for these lighting zones and corresponding trespass illuminance limits are consistent with California’s Building Energy Efficiency Standards (Title 24) outdoor lighting requirements for subject facilities.

Areas of rural character, which have few existing sources of light, are more susceptible to impacts resulting from new lighting sources. By contrast, urbanized areas are characterized by a large number of existing lighting sources and are, therefore, less susceptible to adverse effects associated with new lighting sources. Consequently, lighting zone designations are applied according to the amount and intensity of existing lighting sources in the area.

The project site and surrounding area is categorized as LZ3 (urban areas, as defined by the 2010 U.S. Census), which denotes areas with moderately high ambient lighting. The recommended LZ3 light trespass standard is 8 lux (a unit of illuminance equal to one lumen per square meter) during “pre-curfew hours” and 3 lux during “post-curfew hours” (IES 2011). This equates to 0.74 candle-foot during pre-curfew hours and 0.27 candle-foot during post-curfew hours. For the purposes of analysis, curfew is considered 1 hour after the end of games or other activity that would utilize the lights. For example, for a soccer game ending at 8 p.m., the lights would be dimmed at 9 p.m. and then typically be extinguished by 10:30 p.m. Therefore, “curfew” would be 9 p.m.

Based on the above, light trespass impacts may be considered significant if illuminance produced by the project would exceed 0.74 foot-candle before during pre-curfew hours and 0.27 foot-candle during post-curfew hours at residential buildings adjacent to the site.

In determining if a significant impact would occur, consideration would also be given to whether exceedance of these standards is expected to adversely affect a substantial number of people. Detailed mapping of the horizontal and vertical spill is provided in Appendix A. Pedestrian-level simulated views of the existing nighttime environment are provided in Figures 9 through 13. The simulated views show the nighttime environment under two existing conditions (no sports field lighting, and with existing sports field lighting on at the stadium), and two project conditions (new sports field lighting at the north field, and all new and replacement sports field lighting on). As shown in the figures, the proposed project would result in nighttime illumination of the north field and stadium with little to no spill or glare. Additionally, the replacement lighting at the stadium would reduce the light and glare spill from the existing conditions.

Per the MUSCO analysis, the project would result in 0.0 foot-candle horizontal spill and 0.0 foot-candle vertical spill at adjacent residences when the North Field lights are on. The project would not exceed the thresholds of 0.74 foot-candle before during pre-curfew hours and 0.27 foot-candle during post-curfew hours at residential buildings adjacent to the site. Therefore, the project impact would be less than significant.

Additionally, with the sports lights shielded and aimed directly down and not directed toward adjacent public roadways (i.e., Despina Drive) or other properties, the project would limit sky glow and would not pose a concern to drivers on adjacent roadways or overhead air traffic. While the lights would be evident to people passing-by when in use, they would constitute a less-than-significant impact for glare and light trespass.

3.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land 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 forest land to non-forest use?				✓

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? (No Impact)

According to the Farmland Mapping and Monitoring Program map for Mendocino County (County 2018), the project site is designated as urban and built-up land. Therefore, implementation of the project would not occur in areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide importance. No impact would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract? (No Impact)

The project site is not located on land designated by the California Department of Conservation as being under a Williamson Act contract (County 2021). The project site is zoned Public Facilities. Therefore, the project site is not located on land zoned for agricultural use. No impact would occur.

c-e) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? Result in the loss of forest land or conversion of forest land to non-forest use? 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 forest land to non-forest use? (No Impact)

According to the City of Ukiah zoning maps, the project is not located on land zoned for forest land or timberland. Neither construction nor operation of the project would conflict with zoning regulations for agricultural use or forest land, result in the loss of forest land, or result in the conversion of farm or forest land. No impact to agricultural or forest resources would occur.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓
b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			✓	
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?			✓	

The project site is located within the inland urban section of Mendocino County, which is within the jurisdiction of the Mendocino County Air Quality Management District (MCAQMD). Mendocino County is designated as a non-attainment area for the State particulate matter (PM_{10}) standard. The County in designated attainment for all other State standards and for all Federal criteria air pollutants (ARB 2019, U.S. EPA 2021).

The MCAQMD recommends that agencies use the Bay Area Air Quality Management District's (BAAQMD) adopted CEQA thresholds for projects located in Mendocino County, with the following clarifications:

Indirect Source Rule – The MCAQMD's Indirect Source Rule [Regulation 1, Rule 1-130(i)(1)] has established a definition of an "Indirect Source" which sets a higher standard than the BAAQMD threshold for ROG and NO_X emissions. It is more appropriate to use this local standard although it was not adopted as a CEQA threshold. These standards should be used for "indirect operational emissions" such as vehicle trips.

CO Standards – MCAQMD's indirect and permitting rules allow 125 TPY of CO. Local hot spots of CO resulting from traffic congestion must still be accounted for using a health-based screening level approach.

Greenhouse Gas – No GHG or Risk Reduction Plans have been adopted using CEQA, therefore no local projects can use those documents to support a CEQA determination.

Risk Exposure – Modeling of Risk Exposure should be conducted using EPA, ARB, or CAPCOA approved screening level modeling software. The District has no freeways or high-volume roadways which need buffer zones at this time.

Odor – The odor significance findings used by the BAAQMD do not conform to the District's enforcement policy for odor complaints. Please contact the District for an evaluation for odor significance from existing facilities.

The air quality analysis utilizes the thresholds of significance, screening criteria and levels, and impact assessment methodologies presented in the most recent version of the BAAQMD CEQA Air Quality Guidelines, with the MCAQMD's clarifications.

a) Conflict with or obstruct implementation of the applicable air quality plan? (No Impact)

The California Clean Air Act of 1988 requires that any air district that does not meet the PM_{10} standard make continuing progress to attain the standard at the earliest practicable date. In response to this requirement, the MCAQMD adopted a Particulate Matter Attainment Plan in 2005 (MCAQMD 2005), which includes a description of local air quality, the sources of local PM emissions, and recommended control measures to reduce future PM levels. Control measures recommended in the Attainment Plan include measures related to woodstoves, campgrounds, unpaved roads, construction and grading activities, new residential development, and open burning emissions.

Construction activities associated with the project would include site preparation (e.g., demolition, clearing/grubbing), grading, excavation, field installation, and minor paving. Construction activities could temporarily increase levels of PM_{10} in a region designated as non-attainment for PM_{10}. The project includes Environmental Protection Action 2 (EAP-2), which incorporates the MCAQMD's recommended Dust Control Best Management Practices for construction in accordance with Regulation 1, Rule 1-430.

With implementation of EAP-2, construction activities would not conflict with or obstruct implementation of the 2005 Particulate Matter Attainment Plan. The project would result in no impact.

b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (Less than Significant)

The project is located within Mendocino County, which is designated non-attainment for the state PM_{10} ambient air quality standard. The area is designated attainment for the remaining state standards, and all Federal ambient air quality standards.

The BAAQMD's CEQA guidelines and thresholds, which the MCAQMD uses as CEQA guidance, includes screening criteria to provide lead agencies with a conservative indication of whether a project could result in potentially significant air quality impacts. According to the guidelines, if a project's characteristics (i.e., square footage, acreage, number of dwelling units) are less than associated screening criteria, then the lead agency does not need to perform a detailed air quality assessment of the project's air pollutant emissions and a less than significant impact would occur (BAAQMD 2017).

Construction

For construction activities, several different screening criterions are recommended by the BAAQMD relative to air pollutant emissions (i.e., reactive organic gases [ROG], NO_X, $PM_{2.5}$, and PM_{10}). For example, detailed air quality assessments are not required for construction of projects such as 67 acres for a city park, or for high school projects of 277,000 square foot of facilities (buildings) or that would generate 3,012 students (BAAQMD 2017).

Construction activities are anticipated to take approximately 4.5 months to complete. The types of air pollutants generated by construction activities are typically nitrogen oxides (NO_X) and particulate matter, such as dust and exhaust. Construction activities could temporarily increase levels of $PM_{2.5}$ and PM_{10} downwind of construction activity. These are temporary emissions that vary considerably from day-to-day and by the type of equipment and weather. In addition, CO and ROG are emitted during operation of gas and diesel-powered construction equipment.

Exhaust Emissions

Project construction would result in regional air pollutant and precursor emissions from equipment exhaust and worker trips to the project site. Per the BAAQMD's screening criteria, construction of the project would result in a less than significant impact to air quality if the following screening criteria are met:

1. The project is below the applicable screening level size shown in Table 1 [of the BAAQMD 2017 CEQA Air Quality Guidelines].
2. All Basic Construction Mitigation Measures are included in the project design and implemented during construction.
3. Construction-related activities would not include any of the following:
    - Demolition activities inconsistent with BAAQMD Regulation 11, Rule 2: Asbestos Demolition, Renovation and Manufacturing;
    - Simultaneous occurrence of more than two construction phases;
    - Simultaneous construction of more than one land use type;
    - Extensive site preparation; or
    - Extensive material transport (e.g., greater than 10,000 cubic yards of soil import/export) requiring a considerable amount of haul truck activity.

Because the project would not include construction of classroom or other school buildings (such as cafeteria, etc.), the applicable construction criteria pollutant and precursor screening level is 67 acres for a city park. At an estimated construction footprint of less than 5 acres, project size would be less than the BAAQMD's construction criteria pollutant and precursor screening level.

The project does not involve demolition of any buildings or facilities that may include asbestos. The project would not involve the simultaneous occurrence of more than two construction phases and would not include more than one land-use type. The project would not involve extensive site preparation or material transport. It is anticipated that the project site would be balanced, with no net import or export of soils.

As described in Section 1.6, Environmental Protection Actions Incorporated into the Project, the project would incorporate dust control measures during construction that reflect the MCAQMD's Regulation 1, Rule 1-430, which are consistent with the BAAQMD's Basic Construction Measures. The project would not exceed any of the BAAQMD's screening criteria and would result in a less-than-significant impact.

Fugitive Dust (PM)

The BAAQMD does not recommend a numerical threshold for fugitive dust from construction activities. Instead, the BAAQMD bases the determination of significance for fugitive dust on a consideration of control measures to be implemented. If the basic construction measures recommended by the BAAQMD are implemented for a project, then fugitive dust emissions during

construction are not considered significant. As summarized in Section 1.6, Environmental Protection Actions Incorporated into the Project, implementation of Environmental Protection Action 2 is included as part of the project, requiring contractor agreements for implementing the MCAQMD's basic control best management practices, which are consistent with the BAAQMD's Basic Construction Measures. Therefore, the proposed project would meet the BAAQMD's construction-related threshold for fugitive dust (PM_{10} and $PM_{2.5}$). The construction-related impact would be less than significant.

Operation

Following construction, the project would not include any stationary sources of air emissions. Vehicle trips associated with operation and maintenance of the campus athletic facilities (existing stadium and north field) currently occur under existing conditions. The project would not result in the need for additional operation and maintenance-related vehicle trips beyond those accounted for under existing routine maintenance activities. The project would not increase the population or bring new, permanent employees to the project area. The project would not increase or otherwise modify the student population of the school. In comparison, the BAAQMD's recommended operational criteria pollutant screening level for "high school" is 2,390 students. As discussed in Section 3.17, Transportation, and Section 1.5.6, the project would change the location of existing school events by shifting the events between facilities within the campus. The project would not result in an increase in vehicle trips associated with school operation or District-sponsored athletic events, as the project would support continuation of existing school classes and sports. However, the improved north field may result in a modest increase in community-based soccer events. Community-based soccer would occur on weekends, and would be substantively comparable to existing UHS soccer events in attendance and vehicles trips. Trips for community-based soccer events is an existing condition; the project may result in a redistribution of a portion of those trips if those events are moved to the project site. However, the project would not result in a net increase in trips or substantially change anticipated trip lengths. The project would not exceed the BAAQMD's operational criteria pollutant screening level or generate a substantial increase in event-related trips. Therefore, the project's contribution to a cumulative nonattainment criteria pollutant impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations? (Less than Significant)

Sensitive receptors are defined by the BAAQMD as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. The BAAQMD's 2017 Air Quality Guidelines recommend assessing community risk and hazards within a 1,000-foot-radius 'zone of influence' from the property line of the emission source.

The Ukiah High School is, itself, a location of sensitive receptors when school is in session. In addition, the nearest location of off-site sensitive receptors are existing residences located approximately 100 feet west of the existing stadium lighting. However, the replacement of track and field stadium lighting would not involve the use of heavy construction equipment. The next-nearest location of sensitive receptors are existing residences located 230 feet north of the north field construction boundary.

Construction equipment and heavy-duty truck traffic generate diesel particulate matter (DPM) exhaust, which is a known toxic air contaminant. DPM is a human carcinogen and chronic (long-term) inhalation exposure to DPM poses a chronic health risk. As described in Section 1.6, Environmental

Protection Actions Incorporated into the Project, the project would incorporate the MCAQMD's Dust Control Best Management Practices, which are consistent with the BAAQMD's Basic Construction Measures. These measures also reduce DPM emissions.

Construction equipment and activity would be limited in scope and duration. The project would not result in construction-generated emissions occurring in close proximity to sensitive receptors for a lengthy period of time. Due to the limited footprint and construction activity, the project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Therefore, exposure of sensitive receptors during construction would be less than significant.

Project operations would not include any stationary sources of air emissions, or result in an increase of heavy-duty truck trips or other mobile sources of toxic air contaminants that would expose onsite or offsite sensitive receptors to substantial concentrations of emissions. Therefore, exposure of sensitive receptors during operation would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Less than Significant)

Implementation of the project would not result in major sources of odor. The project type is not one of the common types of facilities known to produce odors (i.e., landfill, coffee roaster, wastewater treatment facility, etc.). Minor odors from the use of equipment during construction activities would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. In addition, operation of the project would not result in locating sensitive receptors near an existing odor source. Thus, the project would not create objectionable odors affecting a substantial number of people. The impact would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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 Game or U.S. Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and 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?				✓
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or 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?				✓

Biological Resources Evaluation

A Biological Resources Evaluation was prepared for the project to identify any special-status plant and wildlife species and sensitive habitats (including wetlands) that have the potential to occur on or in the vicinity of the project site (GHD 2020, Appendix B). The assessment included literature and database searches as well as site surveys to determine what species might have potential to be present on the project site. Database searches included the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants, U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation, and the

National Oceanic and Atmospheric Administration (NOAA) Fisheries West Coast Region California Species List Tools. The database searches encompassed the U.S. Geological Survey (USGS) quadrangles (quads) centered on the project area quad (Ukiah).

A reconnaissance field survey was conducted by a GHD Biologist on January 23, 2021. The survey methods were intended to identify sensitive habitat and detect wildlife activity. The survey included a physical search of the area, including inspecting the ground, shrubs, holes, and trees for the presence of any wildlife species. Additionally, the bark of vegetation and the ground layer under vegetation were inspected for evidence of wildlife species, such as feathers, pellets, whitewash, scat, and tracks. This reconnaissance-level site visit was conducted to identify general special status resources and habitat within the project site. No protocol-level surveys for wetlands, sensitive natural communities, or special status plants and wildlife were conducted at this time. The information and data collected for the assessment have been used as the basis of this biological resources analysis.

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 Game or U.S. Fish and Wildlife Service? (Less than Significant with Mitigation)**

Overall, across the project site there is little natural habitat. There are some trees, more than 500 feet away, bordering the property, and also a small clump of trees near the southern middle edge of the boundary of the project footprint. This clump of trees (a large, glossy privet [Ligustrum lucidum] bush, and two ornamental trees) surrounds a utility box and a drain, and is part of a bigger strip of landscaping that runs south down the edge of another field. No high-quality habitat or any habitat for special status species was observed.

Special-status Plant Species

Information on special-status plant species was compiled through a review of the CNDDB and the CNPS Electronic Inventory records for the Ukiah 7.5-minute topographic quadrangle. A total of 12 special-status plants are recorded for the 1-quadrangle search of the Ukiah USGS quadrangle

Qualified botanists conducted site surveys for special-status plants on January 23, 2021. The proposed project site was walked using random transects across and around the project site. As required by the California Department of Fish & Wildlife (CDFW) guidelines, the surveys were floristic in nature, meaning that all plants identifiable at the time of the survey were recorded. None of the special-status plants recorded within the project area were observed on the project site during the surveys. The survey was however conducted during the winter, outside of the typical blooming period.

Field investigations included a general inspection to adequately characterize existing habitat with emphasis on areas having the potential to support special status species or critical habitats. Vegetation communities within the project site were identified onsite as CWHR Urban- Lawn. The proposed project site currently contains turf maintained for sports and recreation and is heavily disturbed. No federal or state listed plants were observed during the pedestrian survey. Therefore, the project would not impact a special-status plant. There would be no impact.

Special-status Wildlife Species

Information on special-status wildlife species was compiled through a review of the CNDDB Electronic Inventory records for the Ukiah 7.5-minute topographic quadrangle. A total of 9 special-status wildlife species are recorded for the 1-quadrangle search of the Ukiah USGS quadrangle. None of the special-status wildlife species are expected to occur at the project site due to lack of suitable habitat within the project area. However, there are trees within the project site that could be

utilized by nesting birds protected by the Migratory Bird Treaty Act (MBTA), California Fish and Game Code (FGC), and California Migratory Bird Protection Act (MMPA). The project has the potential to impact these species if construction activities, including removal of trees or initial grading activities, were to occur during the nesting season (February 1 through September 1). The potential impact is considered significant. Implementation of Mitigation Measure BIO-1 is included to reduce the impact to nesting birds to a less than significant level.

Mitigation

Implementation of Mitigation Measure BIO-1 would reduce impacts to raptors and migratory birds by locating any potential active nests or roosts before the start of construction and establishing buffers and avoiding nests, if found, during construction.

Mitigation Measure BIO-1: Avoid Disturbance to Nesting Birds

The District shall ensure the following avoidance measures are implemented. Ground disturbance, vegetation clearing, and tree removal shall be conducted, if possible, during the fall and/or winter months and outside of the avian nesting season (Feb 1 – Sept 1) to avoid any direct effects to special-status and protected birds. If ground disturbance cannot be confined to work outside of the nesting season, a qualified ornithologist shall conduct pre-construction surveys within the activity project site and a 100-foot buffer surrounding the site to check for nesting activity of birds and to evaluate the site for presence of raptors and special-status bird species. The ornithologist shall conduct at minimum a one-day pre-construction survey within the 7-day period prior to vegetation removal and ground-disturbing activities. If ground disturbance and vegetation removal work lapses for seven days or longer during the breeding season, a qualified ornithologist shall conduct a supplemental avian pre-construction survey before project work is reinitiated. If active nests are detected, the ornithologist shall flag a buffer around each nest (assuming property access). Construction activities shall avoid nest sites until the ornithologist determines that the young have fledged or nesting activity has ceased. Buffer sizes, ranging from 50 to 250 feet, will take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviors of the nesting birds.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (Less than Significant)

The project site is located within the existing Ukiah High School Campus and is generally confined to the existing field and recreational area. The project is not located adjacent to or in the vicinity of a stream or creek where riparian habitat exists. The nearest creek feature is located across Low Gap Road approximately 0.12 miles away from the nearest proposed improvements. The project would not impact riparian habitat, nor would it impact Orrs Creek. All necessary erosion and sediment control BMPs would be implemented to ensure that no pollutants would enter the creek during construction. During operation, installation of the synthetic turf field would not result in discharge of pollutants that would eventually enter the creek. Additionally, the reconnaissance-level site visit did

not observe any sensitive natural communities on-site. Therefore, the project would not affect exiting riparian or sensitive natural communities within the project site. No impact would occur.

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? (No Impact)

The reconnaissance level survey observed standing water on the north side of the athletic field, which could potentially have been delineated as a wetland. The project footprint would not result in impacts in this location of the project site, therefore no formal wetland delineation was conducted and no impact to wetlands would result.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Less than Significant)

No established native wildlife nursery sites are known within the project site. The riparian corridor along Orrs Creek is suitable for wildlife movement. However, because the project would be located approximately 0.12 mile beyond the riparian corridor, it would not introduce any new feature that would substantially interfere with movement within the creek corridor. The impact would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (No Impact)

The project does not include any tree removal or other improvements that may potentially conflict with local policies or ordinances protecting biological resources. No impact would occur.

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? (No Impact)

The project site is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, the project would not conflict with the provisions of an adopted habitat conservation plan. No impact would result.

3.5 Cultural Resources

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

Archaeological Resources Study

An Archaeological Resources Study was prepared for the project by the Anthropological Studies Center of Sonoma State University (ASC 2021). The study assessed the potential for surficial and/or buried archaeological and historical resources in the proposed improvement area through the completion of the following:

- Records and literature search at the Northwest Information Center (NWIC) of the California Historical Resources Information Center (CHRIS);
- Further literature review of publications, files, and maps for ethnographic, historic-era, and prehistoric resources and background information;
- Communication with the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File and contact information for the appropriate tribal communities;
- Contact with the appropriate local Native American Tribes; and
- Pedestrian archaeological survey of the project area.

Study results were used as a technical basis for evaluating potential impacts to historic and cultural resources under CEQA.

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? (Less than Significant)

CEQA Guidelines Section 15064.5(b) establishes the criteria for assessing a significant environmental impact on historic resources. That section states, *"[a] project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment."* The CEQA Guidelines define substantial adverse change in the significance of an historical resource as a "*physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired*" (Section 15064.5(b)(1)). The significance of an historic architectural resource is considered to be "materially impaired" when a project demolishes or materially alters the physical characteristics that justify the inclusion of the resource in the California Register of Historic Resources (CRHR), or that justify the inclusion of the resource in a local register, or that justify its eligibility for inclusion in the CRHR as determined by the lead agency for the purposes of CEQA (Section 15064.5(b)(2)). No facilities at the project site or the High School campus are listed

in or determined to be eligible for listing in the National Register of Historic Places or California Register of Historic Resources. Therefore, the impact is less than significant.

The potential for historic-period archaeological resources are evaluated in impact “b” below.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Less than Significant with Mitigation)

The Archaeological Resources Study conducted for the project found no previously recorded cultural resources located within the proposed improvement area. A pedestrian archaeological survey of the project site also identified no archaeological resources. Background research indicates a low sensitivity for prehistoric archaeological resources on the surface, and a moderate sensitivity for historic-era archaeological resources on the surface (ASC 2021). The sensitivity for buried prehistoric archaeological resources in the improvement area is considered low (ASC 2021). The search of the NAHC’s Sacred Lands File for Sacred Sites in the project area was positive; however, no information suggesting the presence of sacred sites or archaeological resources was received from individuals or organizations contacted as part of the study. Such coordination included letters and telephone calls to Native American contacts provided by the NAHC. Although no known archaeological resources were identified within the project area, the potential exists for encountering previously undiscovered archaeological resources during project construction. If such resources were to represent unique archaeological resources as defined by CEQA, any substantial change to or destruction of these resources would be a significant impact. Therefore, the impact is considered potentially significant.

Mitigation

Implementation of Mitigation Measure CR-1 would reduce the potential impact to previously undiscovered archaeological or cultural resources to a less-than-significant level by requiring procedures to be taken in the event of inadvertent discovery of resources consistent with appropriate laws and requirements.

Mitigation Measure CR-1: Archaeological Inadvertent Discovery Procedures

The District shall ensure the following procedures are followed. If archaeological materials are encountered during initial ground-disturbing activities, work within 25 feet of a discovery shall be halted until a qualified archaeologist assesses the find, consults with the appropriate tribes and agencies, and makes recommendations for the treatment of the discovery to protect the integrity of the resource and ensure that no additional resources are affected. Upon completion of the assessment, the archaeologist shall prepare a report to document the methods and results of the assessment. The report shall be submitted to the District, appropriate tribes, and the Northwest Information Center upon completion.

Following initial ground disturbance, in the event that any subsurface archaeological features or deposits, including locally darkened midden soil, are discovered during later construction-related earth-moving activities, all ground-disturbing activity in the vicinity of the resource shall be halted, a qualified professional archaeologist shall be retained to evaluate the find, and the appropriate tribal representative(s) shall be notified. If the find qualifies as a historical resource, unique archaeological resource, or tribal cultural resource as defined by CEQA, the archaeologist, in consultation with tribes, shall develop appropriate measures to protect the integrity of the resource and ensure that no additional resources are affected. In considering any suggested measures proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique

archaeological resources, the District, in consultation with applicable Native American tribes, shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery, reburial at another location within the site) shall be instituted. Work may proceed on other parts of the project while mitigation for unique archaeological resources is being carried out.

c) Disturb any human remains, including those interred outside of formal cemeteries? (Less than Significant with Mitigation)

Based on the archaeological field survey and records search performed for the project, no indication of human burials were identified on the project site (ASC 2021). Although no human remains have been directly observed, the possibility of encountering human remains during project construction cannot be discounted. Therefore, the impact related to the potential disturbance or damage of previously undiscovered human remains, if present, is considered significant. Mitigation Measure CR-2 would reduce the impact to a less-than-significant level by addressing discovery of unanticipated remains, associated grave goods, or items of cultural patrimony consistent with appropriate laws and requirements.

Following construction, no ground disturbing activities are anticipated to occur other than those related to routine maintenance of the project, such as landscaping or irrigation repair. Therefore, it is unlikely any human remains would be encountered during operation. The operational impact would be less than significant.

Mitigation

Mitigation Measure CR-2 would reduce the impact of construction activities on potentially unknown human remains to a less than significant level by addressing discovery of unanticipated remains, associated grave goods, or items of cultural patrimony consistent with appropriate laws and requirements.

Mitigation Measure CR-2: Protect Human Remains If Encountered during Construction

The District shall ensure the following measures are implemented to protect human remains. If human remains, associated grave goods, or items of cultural patrimony are encountered during construction, work shall halt in the vicinity of the find and the County Coroner shall be notified immediately. The following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. If the human remains are determined to be of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of the determination. The Native American Heritage Commission shall then notify the Most Likely Descendant (MLD). The MLD shall complete an inspection and make its MLD recommendation for disposition of the remains within 48 hours of receiving access to the site. The District and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. Said determination may include avoidance of the human remains, reburial on-site, or reburial on tribal or other lands that will not be subject to future. Any reburial of human remains shall be accomplished in compliance with the California Public Resources Code Sections 5097.98(a) and (b). Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed.

3.6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impacts 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?				✓

a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (Less than Significant)

Construction

Temporary energy use in connection with project construction would include consumption of diesel fuel and gasoline by construction equipment and transport of earth moving equipment, construction materials, supplies, and construction personnel to and from the project site. As summarized in Section 1.5.2 (Environmental Protection Actions Incorporated into the Project), implementation of Environmental Protection Action 4 is included as part of the project, requiring provisions in contractor agreements for minimizing idling time to 5 minutes or less during construction, requiring construction equipment to be maintained per specifications established by the manufacturer, and using electric equipment and/or equipment using alternative fuels as feasible and appropriate. With implementation of such construction measures, the wasteful, inefficient, or unnecessary use of energy resources is not anticipated during project construction. The impact would be less than significant.

Operation

Energy-consuming equipment anticipated to be used during operation of the project includes mechanical and electrical equipment associated with the concession building, the PA system, and new sports field lighting. The proposed new sports lighting would be LED, which minimizes energy consumption, and would operate for a limited number of events. The project would reduce the energy demand associated with use of the sports field lighting at the stadium by replacing the older, more energy-intensive HID lighting arrays with focused LED fixtures. The new concession building would be designed in accordance with applicable design standards, including Title 24 Building Energy Efficiency Standards for non-residential buildings.

Motor vehicle trips associated with spectators to and from the campus for sporting events and other activities would utilize energy in the form of petroleum products and electricity. It is noted that the project would not constitute new energy consumption that would be associated with new vehicle trips, as the project does not generate new activities or uses that would create new trips. The events proposed to occur at the proposed north field currently occur on the campus at the existing stadium or on other fields on the UHS campus.

The increase in energy demand resulting from the project would not be expected to require or result

in the construction of new sources of energy supplies or additional energy infrastructure capacity, and the project would not conflict with applicable energy policies or standards. Therefore, operation of the project would not use large amounts of energy nor use it in a wasteful manner. The operational impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (No Impact)

There are no local plans for renewable energy that would apply to the Project site. Implementation of the Project would not obstruct a state plan for renewable energy.

The City of Ukiah General Plan contains an Energy Element which contains measures for increasing renewable energy, energy efficiency of new projects, and energy efficiency in retrofitting of existing structures. The project includes retrofitting existing energy-inefficient HID sports field lighting with high-efficient LED lighting, and the installation of new high-efficiency LED lighting at the north field. Implementation of the project would not obstruct implementation of the City of Ukiah General Plan. No impact would result.

3.7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect 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?		✓		

A Preliminary Geotechnical Technical Memorandum was completed for the project site by LACO Associates (LACO 2021).

a, 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? (No Impact)

The Alquist-Priolo Act (Public Resources Code Sections 2621–2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The purpose of the Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The project does not include structures designed for human occupancy. The project site is not located within an active Alquist-Priolo earthquake fault zone, in which the state requires special studies for structures for human occupancy, and no other active or potentially active faults occur within the project site. The closest fault (Maacama) is located approximately 2 miles west of the project site (LACO 2021). Due to the distance from the project to the nearest recognized fault, the potential for ground surface fault rupture to occur at the project site is considered low. No impact would result.

a, ii) Strong seismic ground shaking? (Less than Significant)

The project area is located within a seismically active region where the project site would be susceptible to strong ground shaking due to seismic activities primarily along the Maacama fault, which is the nearest active fault to the project site. Earthquake engineering design as required by the Uniform Building Code would reduce the probability of damage to the facilities during a seismic event. Therefore, the potential impact related to strong seismic ground shaking would be less than significant.

a.iii, c, d) Seismic related ground failure, including liquefaction, or unstable or expansive soils? (Less than Significant)

In the area of the proposed athletic fields, six borings were advanced to total depths ranging from 5 to 10 feet below ground surface (BGS). Approximately 0.75 to 1.5 feet of fill was observed across the project site that consisted of a weak and porous clayey sand. With the exception of one of the borings, soils underlying the fill generally consist of medium dense to dense clayey sands with varying amounts of gravel. LACO selected two samples to be lab tested. Based on the lab test results on the borings, the soils are understood to have low plasticity. Plasticity of soil is its ability to undergo deformation without cracking or fracturing. Soils with high plasticity are less susceptible to liquefaction and low plasticity soils are more vulnerable to liquefaction. Although soils at the project site are believed to have low to medium plasticity, and therefore would be more vulnerable to liquefaction, implementation of the project would not exacerbate risk of liquefaction because the project would not increase the risk of fault rupture or other seismic activity, which are some of the components necessary for liquefaction to occur.

As described in Section 1.6, Environmental Protection Actions Incorporated into the Project, the project would be designed and constructed in compliance with the site-specific recommendations made in the project's geotechnical report. This would include design in accordance with recommendations for site preparation, grading, excavations, fill quality and placement, foundations, pavement sections, asphalt overlay, compactions, moisture barriers, and other factors. The geotechnical recommendations would be incorporated into the final plans and specifications for the project, and would be implemented during construction.

Implementation of the design recommendations included in the project geotechnical report would reduce the potential impact to people and structures due to liquefaction, and expansive or otherwise unstable soils to less than significant.

a, iv) Landslides? (Less than Significant)

The project site is located on relatively flat terrain. No landslides have occurred at the project site in recent history, and mapping indicates that few landslides have occurred in areas of greater topographical relief within the project vicinity (DOC 2016b). Project construction and operation would not increase the risk of landslides above existing conditions. The impact would be less than significant.

b) Result in substantial soil erosion or the loss of topsoil? (Less than Significant)

The project site is relatively flat. Construction activities would include modifying existing structures and involve only minor earthwork for the north field and ADA improvements. There would be no substantial soil erosion or loss of topsoil; therefore, this impact would be less than significant.

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? (No Impact)

The project would not involve the use of septic tanks or other alternative wastewater disposal systems. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less than Significant with Mitigation Incorporated)

Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California.

Since the project does not include substantial excavation, it is unlikely that project construction would impact potentially significant paleontological resources. Nonetheless, such an impact cannot be ruled out altogether. Therefore, the impact is potentially significant.

Mitigation Measure GEO-1 would reduce the impact of construction activities on unknown paleontological resources to a less than significant level by addressing discovery of unanticipated buried resources and preserving and/or recording those resources consistent with appropriate laws and requirements.

Mitigation Measure GEO-1: Protect Paleontological Resources during Construction Activities

In the event that fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities shall be diverted away from the discovery within 50 feet of the find, and a professional paleontologist shall be notified to document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they will be properly curated and preserved.

3.8 Greenhouse Gas Emissions

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

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Less than Significant)

Greenhouse gas (GHG) emissions would occur over the short-term from project construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. The project would also generate long-term operational emissions associated with energy and water usage, and solid waste disposal.

There is currently no applicable federal, State, or local threshold pertaining to construction-related greenhouse gas (GHG) emissions, and the BAAQMD CEQA Guidelines [used by the MCAQMD] do not include screening criteria or significance thresholds for construction. Therefore, this analysis uses a qualitative approach in accordance with Section 15064.4(a)(2) of the CEQA Guidelines.

Project construction activities are limited in scope and duration, consisting of renovations to existing athletic facilities lasting less than a year. In addition, the project does not include construction activities associated with higher greenhouse gas emissions such as use of a significant amount of heavy construction equipment, substantial earth-moving activities, or import/export of a significant amount of material. Therefore, the project's construction emissions would be less than significant.

Although the BAAQMD provides recommended operational greenhouse gas screening levels for high schools, it is understood that the screening level is for facilities such as classroom buildings. Additionally, the screening levels are for new facilities, not for facility renovations or improvement. The most-applicable BAAQMD-recommended operational greenhouse gas screening level is 600 acres for a city park (BAAQMD 2017).

The proposed emergency access and ADA improvements would not result in an increase in operational GHG emissions, nor would the replacement of the existing sports field lighting at the stadium. At an estimated footprint of approximately 3.8 acres for the north field, the project would be substantially less than the BAAQMD's operational greenhouse gas screening level for a city park. In addition, the proposed sports lighting would be LED, which minimizes energy consumption, and would operate for a limited number of events. Therefore, project operation would result in a less than significant impact on greenhouse gas emissions.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (No Impact)

According to the BAAQMD, if a project is consistent with an adopted qualified GHG Reduction Strategy, it can be presumed that the project will not have significant GHG emission impacts. However, the District does not, itself, have a qualified Climate Action Plan or other qualified GHG Reduction Strategy.

In 2008, the CARB adopted the Climate Scoping Plan, which outlined measures to attain emissions standards pursuant to AB 32. The most recent update to the Scoping Plan was completed in December 2017. Although the Scoping Plan identifies strategies to meet statewide emissions reductions targets, it does not contain recommended reduction levels or percentages for local government's municipal operations or school-based operations.

The recommended measures in the 2017 Scoping Plan are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual educational projects, such as the proposed project. Although project construction may benefit (have a reduced generation of GHG) from implementation of some of the State-level regulations and policies related to fuel and vehicle efficiencies, the project would not impede the State in meeting the AB 32 greenhouse gas reduction goals. No conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases have been identified. Therefore, no impact would result.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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 or excessive noise 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?		✓		

a, b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Less than Significant)

Construction activities would involve the use of hazardous materials, such as fuels, lubricants, paints, and solvents. These materials are commonly used during construction, are not acutely hazardous and would be used in small quantities.

Regular transport of such materials to and from the project site during construction could result in an incremental increase in the potential for accidents. However, numerous laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials. For example, Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. Worker safety regulations cover hazards related to the prevention of exposure to hazardous materials and a release to the environment from hazardous materials use. The California Division of Occupational Safety and Health (Cal-OSHA) also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees. As contractors would be required to comply with existing hazardous materials laws and regulations, the potential impact associated with transport, use, and disposal of hazardous materials is considered less than significant.

The project would disturb more than one acre of land; therefore, project construction would be required to implement storm water best management practices during construction in accordance with the State Water Resources Control Board General Construction Storm Water Permit (Environmental Protection Action 1.6.3). Best management practices addressing materials management would be required, including proper material delivery and storage, spill prevention and control, and management of concrete and other wastes.

Following construction, operation of the project would not result in the need for new hazardous materials that would need to be transported, used, or disposed of. No operational impact would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Less than Significant)

The proposed project consists of renovations to the existing Ukiah High School track and field facility located within the Ukiah High School campus. The current and proposed use is as an academic/school facility.

Construction activities would include the use of hazardous materials such as fuels, lubricants, degreasers, paints, and solvents. These materials are commonly used during construction, are not acutely hazardous, and would be used in small quantities. Furthermore, the handling, use, and disposal of such materials would be in accordance with all applicable laws and regulations, as discussed above under impact item (a) and (b).

Although construction activities could result in the inadvertent release of small quantities of hazardous construction chemicals, a spill or release within the construction area is not expected to endanger individuals at Ukiah High School given the nature of materials and the small quantities that would be used. Therefore, since Ukiah High School and its contractors would be required to comply with existing and future hazardous materials laws and regulations covering the transport, use, and disposal of hazardous materials, and due to the nature and quantity of hazardous materials to be potentially used by the project, the impact related to the use of hazardous materials within one-quarter mile of a school would be less than significant.

Following construction, it is assumed that some hazardous materials could be used in the maintenance of the project site, but not in a quantity considered hazardous to sensitive receptors. The project would not introduce any new stationary source of hazardous emissions or include

handling of acutely hazardous materials or wastes. Therefore, the operational impact is considered less than significant, and no mitigation is required.

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? (No Impact)

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." A search of the Cortese List was completed for the project to determine if any known hazardous waste sites have been recorded on or adjacent to the project site. These include:

- Department of Toxic Substances Control EnviroStor database;
- List of Leaking Underground Storage Tank Sites from the Water Board GeoTracker database;
- List of solid waste disposal sites identified by the Water Board with waste constituents above hazardous waste levels;
- List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the Water Board; and
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.

A search of the Cortese List was completed to determine if any known hazardous waste sites have been recorded on or adjacent to the project site. The project site is listed on the Cortese List due to the presence of a leaking underground storage tank, however it was classified as “completed-case closed” indicating that no additional actions are needed or immediately adjacent to any of the Cortese List database sites (State Water Resources Control Board 2018). Therefore, no impact would occur.

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 or excessive noise for people residing or working in the project area? (No Impact)

The nearest public airport to the project site is the Ukiah Municipal Airport, located approximately 2.5 miles to the south of the project site. Because the project site is not located within an airport land use plan or within two miles of a public airport, the project would not result in a related safety hazard in the project area. No impact would result.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (No Impact)

The project would result in renovations to an existing track and field and athletic facilities. Project construction would not include lane closures. The project would not physically interfere with or impair implementation of an emergency response plan. No impact would occur.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (Less than Significant with Mitigation)

The project site is not located in or contiguous to lands classified by the California Department of Forestry and Fire Protection (CalFire) as very high fire severity zones (VHFHSZ). However, the project site is located adjacent to a State Responsibility Area (SRA). The project site is located approximately 0.35 miles from the nearest designated VHFHSZ (CalFire FHSZ Viewer 2021).

Although the project site is not located within designated areas at risk of wildland fires, it is possible

that fire ignition could occur during construction (e.g., related to heavy machinery usage). Because the vegetation at the project site could be dry during construction and potentially ignited from a spark or hot equipment, the construction-related impact is considered significant. Implementation of Mitigation Measure HAZ-2 would reduce the impact to a less than significant level by requiring the use of construction techniques that would reduce the likelihood of fires during construction of the project.

Following construction, in the event of a fire or wildland fire, the District's and City's existing evacuation plan would be implemented, compliant with its standards for safety and evacuation. The project would be required to be compliant with the current version of the California Building Code for fire safety. The site includes an existing emergency vehicle access (fire lane) through the campus from Low Gap Road and Despina Drive. The project would include ADA improvements to the existing fire lane; however, such modifications would not change the turning space or ability of emergency vehicles to quickly maneuver and egress. The operational impact would be less than significant.

Mitigation

Implementation of Mitigation Measure HAZ-1 would require the use of construction techniques that would reduce the likelihood of wildland fires during construction of the project. Therefore, with implementation of Mitigation Measure HAZ-1, the impact related to wildland fires would be less than significant.

Mitigation Measure HAZ-1: Reduce Wildland Fire Hazards during Construction

Prior to construction, the District and its contractor(s) shall remove and/or clear away dry, combustible vegetation from the construction site and staging areas. Grass and other vegetation less than 18 inches in height above the ground may be maintained where necessary to stabilize the soil and prevent erosion outside the active construction zone. Vehicles shall not be parked in areas where exhaust systems contact combustible materials. Fire extinguishers shall be available on the construction site to assist in quickly extinguishing any small fires, and the contractors shall have on site the phone number for the local fire department.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			✓	
b) Substantially decrease 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 which would:				
i. Result in 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 sources of polluted runoff?			✓	
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?				✓

a) **Violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality? (Less than Significant)**

Construction

Water quality standards and objectives are achieved primarily through the establishment of NPDES permits and waste discharge requirements. Therefore, to evaluate whether construction or operation of the project would result in a violation of water quality standards or waste discharge requirements, the project is reviewed for compliance with potentially applicable NPDES permits or waste discharge requirements.

State Water Resources Control Board NPDES Order No. 2009-0009, as amended by Order No. 2012-0006, applies to public and private construction projects that include one or more acres of soil disturbance. Construction of the project would disturb more than one acre of land and has the potential to degrade water quality as a result of erosion caused by earthmoving activities during construction, discharge of groundwater from dewatering, or the accidental release of hazardous construction chemicals.

As summarized in Section 1.6 (Environmental Protection Actions Incorporated into the Project), implementation of Environmental Protection Action 3 is included as part of the project, requiring implementation of a Storm Water Pollution Prevention Plan (SWPPP) that would comply with applicable erosion and sediment control measures contained in the State Water Board's Construction General Permit. The SWPPP would address pollutant sources, non-storm water discharges resulting from construction dewatering if required, best management practices, and other requirements specified in the above-mentioned Order. Because the project would implement applicable erosion, sediment and pollution control measures during construction, the potential impact related to degrading water quality would be less than significant.

Operation

The project would include use of low impact development (LID) techniques to provide a sustainable storm water management approach. There are five (5) separate proposed LIDs that are designed to collect water from the north field site, consisting of french drain lines and subdrain lines. French drain lines would be located on the perimeter of the north field. Subdrain lines would be located within the synthetic turf sections. The improvements would be designed consistent with the Santa Rosa/Sonoma County Stormwater Low Impact Development Technical Design Manual, which the City of Ukiah utilizes and has signed on as a Co-permittee. The City of Ukiah is regulated with other co-permittees under a common NPDES MS4 Storm Water Permit issued by the North Coast Regional Water Quality Control Board.

For the purpose of stormwater treatment, the synthetic turf fields are considered self-treating because they would have a cork and sand infill layer, along with a gravel layer and subsurface drainage. The new subsurface drainage system would convey stormwater in pipes and gravel trenches from a 10-year storm event to existing stormwater infrastructure adjacent to the project site.

Therefore, operation of the project would be in compliance with the local storm water requirements. The operational impact would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Less than Significant)

A geotechnical investigation conducted for the project concluded that excavations may encounter perched shallow groundwater, within two to three feet of the ground surface, if excavations are performed during or shortly after the rainy season (October through May). Free groundwater was not encountered in the geotechnical investigation; however, mottling, which is indicative of high groundwater or perched water, was generally observed at depths ranging from 1 to 3.8 feet below ground surface. Since the existing grass field is actively irrigated, the mottling may be the result of perched water resulting from irrigation.

In the event that temporary groundwater dewatering is required to provide a dry work area during certain construction activities, such as utility trenching, dewatering methods would involve pumping water out of a trench or excavation area. Such dewatering would be temporary and prolonged lowering of the groundwater levels in any one location would not be necessary. Such temporary

dewatering would have, at most, a very small effect on localized water levels in the immediate vicinity of the excavation area. No substantial deficit in the local groundwater basin or lowering of water levels would occur. Therefore, the impact on groundwater from construction-related dewatering would be less than significant.

Following construction, the project would not utilize groundwater and would not result in an increase in population or employment that would indirectly increase groundwater demand. New impervious surfaces created by the project would direct stormwater flow into a bio-retention basin that would allow for infiltration. No operational impact would occur

c i) Would the project substantially alter the existing drainage pattern of the site or area, including through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site? (Less than Significant)

Existing drainage in the project area is dominated by Orrs Creek, which flows east to the Russian River. The existing storm water collection system in the project area conveys water from the project site via an existing stormwater drain that discharges offsite. As part of the proposed project, storm water associated with new impervious surfaces would be collected via storm water features, including LIDs that are designed to collect water from the north field site, consisting of french drain lines and subdrain lines. The improvements would be designed consistent with the Santa Rosa/Sonoma County Stormwater Low Impact Development Technical Design Manual, which the City of Ukiah utilizes and has signed on as a Co-permittee. This includes compliance with storm water design standards, including drainage management areas, numeric sizing criteria for storm water retention and treatment prior to discharge, site design measures to reduce runoff, storm water treatment measures, and hydromodification guidelines. Storm water would be released at the same rate as pre-project conditions up to a required design storm, ultimately discharging to the stormwater drainage system as under existing conditions. As a result, potential on- or off-site erosion or siltation due to increases in impervious surfaces would be less than significant.

Please refer to Impact ‘a’ for an evaluation of erosion or siltation relative to project construction activities.

c ii - iv) Substantially alter the existing drainage pattern which results in substantial flooding on- or off-site, exceed the capacity of drainage systems or substantial sources of polluted runoff, or impede or redirect flood flows? (Less than Significant)

The area of proposed improvements is not located within a mapped 100-year or 500-year flood zone or within a floodway or other special flood hazard zone (FEMA 2020).

Although the project would create new impervious surface, it is not anticipated that the additional runoff generated by the proposed improvements would result in flooding on- or off-site. Storm water generated as a result of the new impervious surfaces would be captured by the proposed LID storm water features which have been designed to comply with City of Ukiah’s standards. The storm water components would be installed in order to retain the increase in storm water runoff to mimic pre-development hydrologic conditions. The components and drainage infrastructure would work with the existing topography of the site and would not significantly alter the existing drainage pattern of the project site. Implementation of the on-site storm water infrastructure would ensure the planned storm water drainage system has adequate capacity to serve the project. Additionally, the proposed storm water LID features would provide water quality treatment prior to the storm water entering the off-site drainage system. Therefore, the project would not impede or redirect flood flows, and the impact related to on-or off-site flooding, exceeding the capacity of the storm water drainage system or providing additional sources of polluted runoff, would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (Less than Significant)

The project site is outside of the nearest mapped tsunami inundation area (CEMA et. al. 2009), and due to its location outside of any nearby enclosed water body, such as a lake, the occurrence of a seiche is unlikely. The project site is located in a relatively flat developed area and the potential for mudflows is considered unlikely. The risk of releasing pollutants due to project inundation would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (No Impact)

The North Coast Regional Water Quality Control Board Basin Plan establishes thresholds for key water resource protection objectives for both surface waters and groundwater. The project is not located near a stream or river and would not alter water quality parameters established in the Basin Plan. Erosion control BMPs would be required to be implemented during construction to prevent erosion and to protect overall water quality. The project is located within a low priority groundwater basin (No. 1-021). Therefore, the project would not obstruct implementation of a sustainable groundwater management plan. As described in impact “b” above, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge or impede sustainable groundwater management. No conflicts with a water quality control plan or sustainable groundwater management plan have been identified. Therefore, no impact would result.

3.11 Land Use and Planning

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
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?				✓

a) Physically divide an established community? (No Impact)

Division of an established community typically occurs when a new physical feature, in the form of a highway or railroad, physically transects an area, thereby removing mobility and access within an established community. The project would implement improvements at existing athletic fields at an existing school campus, as well as ADA improvements on existing pedestrian and vehicle facilities on the school campus. There are no components of the project that would reduce mobility, access, or otherwise preclude continuity of established land uses in the project area. Therefore, no impact related to division of an established community would result.

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? (No Impact)

The project would implement improvements at existing athletic facilities at an existing school. The improvements would be consistent with the allowable uses within the Public (P) land use designation of the City of Ukiah General Plan, and Public Facilities (PF) zoning.

Specific policies and regulations adopted for the purpose of avoiding or mitigating environmental effects are evaluated in this document under the corresponding issue areas. See Sections 3.13, Noise, for a full analysis of the project's noise impacts.

The project would not involve a change of land use on the affected property. Ultimately the land use of the project site would remain the same as existing conditions, as it would continue to provide recreational facilities. The proposed design of the improved athletic facilities would be consistent with all applicable land use policies and regulations. Therefore, implementation of the improved recreational facilities on the campus would not conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

3.12 Mineral Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
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?				✓

a, b) 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, or a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (No Impact)

No mineral resources have been identified within the Ukiah High School property by the City of Ukiah General Plan. Construction and operation of the project would not affect existing mining operations or result in the loss of availability of a known mineral resource. No impact would result.

3.13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Result in 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) Result in generation of excessive groundborne vibration or noise levels?			✓	
c) For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels?				✓

Potential noise impacts were evaluated based on the findings of an environmental noise assessment performed by Illingworth & Rodkin (Illingworth & Rodkin 2021, Appendix C). As stated in Section 1.3 of this Initial Study, the District has exempted the project from the local zoning ordinance in accordance with Government Code Section 53094 through Resolution No. 16, 2020-21. For the purposes of this CEQA analysis, the District has opted to utilize the City's noise-related ordinances to assess the project's potential for noise impacts.

a) Result in 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? (Less than Significant with Mitigation)

Construction

Section 7.1.6054 of the Ukiah Municipal Code prohibits construction activity between the hours of 7 p.m. and 7 a.m. of the following day. The project proposes construction within the range of allowable hours. Project construction is anticipated to begin in Spring 2022 and would take about four and a half months to complete. A list detailing the exact equipment to be used by phase was not available as of this writing; however; it is expected that a variety of equipment including excavators, backhoes, forklifts, front-end loaders, graders, rollers, and turf installation equipment would be required. Most of the heavy construction equipment would be used during the first two to three months of construction. Approximately 20 to 30 construction workers are anticipated to be on site during any

given day. The number of construction-related vehicles accessing the site would vary by day. Construction vehicles would access the site from the existing internal driveway to Low Gap Road. Construction equipment and materials would be staged adjacent to the north field, within the UHS campus.

Construction activities associated with the project would include demolition, grading, utility installation, and hardscape finishing. Typical average and maximum noise levels for various types of construction equipment at a distance of 50 feet are shown in Table 3.13-1. Based on the levels shown in the table for construction of recreation uses, average noise levels at a distance of 50 feet could range from 77 to 89 dBA Leq during heavy periods of construction with all equipment present at site, or from 71 to 83 dBA Leq during lighter periods of construction when only the minimum required equipment is present on site. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional 5 to 10 dBA noise reduction at distant receptors.

Table 3.13-1 Typical Ranges of Construction Noise Levels at 50 feet, Leq (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973; Illingworth and Rodkin 2021

Notes:
I - All pertinent equipment present at site.
II - Minimum required equipment present at site.

The threshold of significance applied to temporary noise increases from construction activity are if construction-generated hourly average noise levels would exceed 60 dBA Leq at the property lines shared with residential land uses, and the increase the ambient noise levels by at least 5 dBA Leq, for a period of more than one year.

The nearest noise-sensitive uses are single-family residences located along Despina Drive, approximately 480 feet east of the center of construction activity. At this distance, project construction could be expected to generate noise levels between 51 and 69 dBA L_{eq} depending on the intensity of construction activity taking place. Daytime hourly average noise levels measured at location LT-1 along Despina Drive ranged from 46 to 68 dBA L_{eq}. During quiet daytime hours with low vehicular traffic along Despina Drive, project construction could exceed existing ambient noise levels by up to 23 dBA. Residences located to the north along Tokay Lane would be approximately 600 feet from the center of construction activity. At this distance, construction could be expected to generate noise levels between 49 and 67 dBA L_{eq}. Daytime hourly average noise levels measured along the site's northern property line which is shared with the residences along Tokay Lane ranged from 39 to 63

dBA L_{eq}. During quiet daytime hours with low vehicular traffic along Tokay Lane and Despina Drive, project construction could exceed existing ambient noise levels by up to 28 dBA Leq. This would represent a significant impact.

Operation

Permanent Noise from On-Site Operations

Policy Implementation NZ-2.3(b) of the General Plan limits noise created by non-transportation noise sources to a level at or below 50 dBA Leq or 70 dBA Lmax during daytime hours, as measured at the property line of the noise-generating use. City of Ukiah Municipal Code Section 7.1.6057 regulates the use of sound-amplifying equipment, such as PA systems. This equipment may only be used to produce sounds of music or human speech and public use of sound-amplifying equipment is limited to use during the hours of 8 a.m. to 10 p.m. Sound levels emanating from equipment are not to exceed 15 dBA above the ambient base noise level, as defined in Municipal Code Section 7.1.6047.

The District has exempted this project from the City of Ukiah noise level limits. Currently, activities taking place at the school's athletic fields and track and field stadium generate noise levels which exceed General Plan limits. It is anticipated that the District will continue to maintain this exemption moving forward, including how it may apply to the results of this project.

With the improvements made to the north field, a number of school activities would be relocated to the fields from the track and field stadium. These activities include soccer practice, soccer games, physical education, marching band practice, and the Mesa Fundraiser Soccer Tourney. New community events currently not taking place at the campus facilities, such as club and youth soccer, may be relocated from existing facilities within the City to the improved north field soccer facilities. See Table 1-2 (Project-Generated Changes in Events) and Table 1-3 (Proposed Athletic Field(s) Usage) for event details.

The highest average attendance expected for any event occurring at the improved north field would be 108 people, anticipated for school soccer games, men's and women's adult soccer leagues, and club soccer. As identified in Table 1-3, events held at the new fields would end by 8 p.m. The lights would be dimmed at 9 p.m. and then typically be extinguished by 10:30 p.m. It is estimated that attendees would leave the site and that all equipment would be removed and secured within an hour of the end of play. Additionally, a new PA system would be installed, with speakers mounted on each of the four new lighting poles. High school football games, which typically generate the highest noise levels of school athletic field activities, would continue to occur at the existing track and field stadium.

Marching Band Practice

Marching band practices currently take place at the existing track and field stadium located on the eastern side of the campus along Despina Lane. Under the proposed project, practice would be moved to the improved north field.

For the average noise increase to be noticeable, relocation of marching band activities would have to result in an overall noise increase of 3 dBA Ldn or greater. This corresponds to a doubling of noise-generating activities. Given the relatively short duration of each marching band practice and existing use of the fields for noise-generating school activities such as football practice and physical education classes, the relocation of marching band practice is not anticipated to double the existing noise level originating from the north field and, therefore, would not result in a significant increase in noise at the nearest affected sensitive receptors. Refer to Appendix C for detailed descriptions of typical marching band practice noise generation.

Soccer Games

Noise levels generated by soccer games are generally limited to whistles and intermittent cheering and are typically not as high as those generated by other sports such as football. Based on noise monitoring conducted of soccer games at other high schools, whistles and cheering would be anticipated to generate maximum noise levels of about 51 to 56 dBA Lmax at the nearest residences to the east. Hourly average noise levels are anticipated to reach about 47 dBA Leq at the closest residences to the east, located about 225 feet from the center of the field. Noise levels would be about 1 dBA higher along the eastern campus property line than at the nearest residential property line. New soccer games would not be expected to generate noise levels exceeding the General Plan limits of 50 dBA Leq or 70 dBA Lmax at the campus property line. The impact from soccer games would be less than significant.

PA System

The new PA system would be installed on the new field lighting poles at the north field and directed at a downward angle towards spectators at the improved north field. Speaker placement and specifications would be designed to focus sound to the spectators and minimize sound leaving the field area. The proposed hours of activities at the improved north field are within the Code's limit of 8 a.m. to 10 p.m. for public use of sound amplifying equipment. Given that events taking place at the improved north field would be relatively small in scale and that the speakers' design and placement would minimize sound outside of the field area, the sound level generated by the PA system necessary to broadcast to spectators at the field is not anticipated to result in sound levels exceeding 15 dBA above the ambient base noise level of 45 dBA between the hours of 7 p.m. to 10 p.m. or 50 dBA between the hours of 7 a.m. to 7 p.m. at the nearest property line of a noise-sensitive use, and therefore would not result in an exceedance of Municipal Code Section 7.1.6057 C. The impact from PA system use would be less than significant.

JV Baseball Practice

JV baseball practices currently take place at the project's north field but would be relocated to the north baseball field after completion of the project. Judging from the center of the existing infield at the northern athletic fields to the center of the infield at the north baseball field, JV baseball practices would be relocated approximately 580 feet to the northwest. This would place the practices closer to the nearest residences to the north, with the approximate distance from the center of the practice activities to the nearest residences being reduced from 610 feet to 120 feet. Sports practices generate substantially lower noise levels than sports games since practices do not typically involve spectators and PA systems. Baseball practices would generate noise resulting from occasional elevated speech of coaches and players and from activities such as hitting the baseball and catching throws and pitches.

JV baseball practice would only occur from February through May between the hours of 3:30 p.m. and 6:30 p.m. and only on select days of the week. The north baseball field is expected to currently be under regular use by the school and community, and therefore relocation of JV baseball practice would not introduce an unexpected new noise source to the area but instead provide for an increase in the frequency of noise-generating athletic activities. For the average noise increase to be noticeable, relocation of JV baseball practice would have to result in an overall noise increase of 3 dBA Ldn or greater. This corresponds to a doubling of noise-generating activities. Given the existing use of the fields and other noise-generating activities present in the vicinity, relocation of JV baseball practice to the northern fields would not reasonably result in such an increase. The impact from JV baseball practice would be less than significant.

Permanent Noise Increases from Project Traffic

A significant permanent noise increase would occur if traffic generated by the project would substantially increase noise levels at sensitive receptors in the project vicinity. A substantial increase would occur if: a) the noise level increase is 5 dBA Ldn or greater, with a future noise level of less than 60 dBA Ldn; or b) the noise level increase is 3 dBA Ldn or greater, with a future noise level of 60 dBA Ldn or greater.

No new vehicle traffic is anticipated for activities which are to be relocated from the existing track and field stadium to the improved north field. The improved north field may result in a modest increase in community-based soccer events, and the associated traffic generated by those events. However, as the existing noise environment in the site vicinity does not exceed 60 dBA Ldn based on the measurement survey detailed in Appendix C, a significant increase in permanent traffic noise would only occur if the project resulted in a permanent noise increase of 5 dBA Ldn. For this to occur, the additional community-based events (club and youth soccer) would have to more than double the existing traffic volume. This is not expected to be a realistic outcome resulting from occasional, seasonal events with average attendance not expected to exceed 108 people. This is a less-than-significant impact.

Mitigation

Mitigation Measure NOI-1 would reduce the impact of construction activities on existing noise-sensitive receptors in the project vicinity to a less-than-significant level by following construction best practices that reduce noise.

Mitigation Measure NOI-1: Implement Noise Reducing Construction Best Management Practices

The District shall ensure the following measures are implemented to reduce construction-generated noise.

- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors. If they must be located near receptors, adequate muffling (with barriers or enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site.

b) Result in generation of excessive groundborne vibration or noise levels? (Less than Significant)

The City of Ukiah General Plan and Municipal Code do not establish a maximum vibration level for construction activities. For structural damage, the California Department of Transportation (Caltrans)

recommends a vibration limit of 0.5 in/sec Peak Particle Velocity (PPV) for new residential and modern commercial/industrial structures, 0.3 in/sec PPV for older residential structures, and a limit of 0.25 in/sec PPV for historic and some old buildings. A PPV of 0.3 in/sec would serve as a conservative threshold not to be exceeded at the buildings nearest to the project site.

Project construction would involve the use of heavy equipment including excavators, graders, and rollers which may generate substantial vibration in the immediate vicinity. Pile driving, which can generate excessive levels of vibration, is not anticipated as a method of construction. The nearest structures to the project site are a campus school building located as close as approximately 50 feet from the limits of construction work, residences to the north located approximately 240 feet from the limits of construction work, and residences to the east located approximately 300 feet from the limits of construction work. Table 3.13-2 presents typical vibration levels that could be expected from construction equipment at a reference distance of 25 feet and calculated levels at distances representative of the nearest structures. As indicated in the table, vibration levels resulting from project construction would not exceed limits recommended by Caltrans at the nearest structures. The impact would be less than significant.

Table 3.13-2 Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	PPV at 50 ft. (in/sec)	PPV at 240 ft. (in/sec)	PPV at 300 ft. (in/sec)
Clam shovel drop		0.202	0.094	0.017	0.013
Hydromill (slurry wall)	in soil	0.008	0.004	0.001	0.001
	in rock	0.017	0.008	0.001	0.001
Vibratory Roller		0.210	0.098	0.017	0.014
Hoe Ram		0.089	0.042	0.007	0.006
Large bulldozer		0.089	0.042	0.007	0.006
Caisson drilling		0.089	0.042	0.007	0.006
Loaded trucks		0.076	0.035	0.006	0.005
Jackhammer		0.035	0.016	0.003	0.002
Small bulldozer		0.003	0.001	0.000	0.000

Source: Illingworth & Rodkin, 2021

c) For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels? (No Impact)

The nearest public airport to the project site is the Ukiah Municipal Airport, located approximately 2.5 miles to the south of the project site. The project site is not located within any compatibility zones in an airport land use plan or within two miles of a public airport. Therefore, the project would not expose people to noise in the vicinity of an airport. No impact would result.

3.14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either 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?				✓

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (No Impact)

Projects are considered growth-inducing if they provide housing, new employment, or expand existing infrastructure. The project would not provide new housing, expand infrastructure, nor would it require any additional faculty or staff in order to operate the improved facilities. Therefore, the project would not induce substantial population growth directly or indirectly.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (No Impact)

No housing or people would be displaced by the project and no replacement housing would be required. No impact would result.

3.15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental 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 public services:				
Fire Protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public services? (No Impact)

As discussed in Section 3.14, Population and Housing, the project would not directly or indirectly induce substantial population growth nor create substantial new demand for services. Therefore, the project would have no impact on the service ratios, response times, or other performance objectives of schools, parks, and other public facilities that are based on population growth. The project would not require a new or physically altered government facility to serve the project site. No impact would occur.

3.16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and 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?		✓		

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Less than Significant)

The proposed project would improve existing athletic facilities and implement ADA improvements. Use of the athletic facilities (north field and existing stadium) is anticipated to be similar to existing conditions; the project may result in the addition of an estimated 15 additional onsite events per year, as identified in Table 1-2 and Table 1-3. As described in Section 1.5.6 of this Initial Study, the District assumes that the additional onsite events would consist of existing community-based soccer events that would be relocated to the north field from the facilities where they are currently held. Use of the north field is not anticipated to substantially deteriorate the facility, or other regional parks or recreation facilities. The impact would be less than significant.

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (Less than Significant with Mitigation)

The proposed project is recreational in nature, and includes improvements to Ukiah High School's existing track and field, the impacts from which are addressed throughout this Initial Study under each individual impact topic. Please refer to each topic section for a discussion of impacts from implementation of the project. Those impact topics with mitigation include biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and tribal cultural resources. All identified impacts are either less than significant or less than significant with mitigation.

Mitigation Measures BIO-1 (Avoid Disturbance to Nesting Birds), GEO-1 (Protect Paleontological Resources during Construction Activities), CR-1 (Archaeological Inadvertent Discovery Procedures), and CR-2 (Protect Human Remains If Encountered during Construction), and HAZ-1 (Reduce Wildland Fire Hazards during Construction) would be required for the project. For a full description of these mitigation measures, please see Sections 3.4, Biological Resources, 3.5, Cultural Resources, 3.7, Geology and Soils, 3.9, Hazards and Hazardous Materials, and 3.13, Noise.

3.17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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?			✓	

Existing Transportation Setting

Despina Drive has existing Class II bike lanes and pedestrian facilities on both sides of the roadway, along with a bus stop located adjacent to the campus parking lot. Class II bike lanes are also located on both sides of Low Gap Road, and continuous sidewalks are located along the north side of Low Gap Road adjacent to the campus.

Mendocino Transit Authority provides transit service on two local routes within Ukiah and three regional routes that offer connections to nearby destinations. The Ukiah Unified School District also operates eleven school bus routes within the community.

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? (No Impact)

Construction of the project would result in a short-term increase in vehicle trips on local roadways, including Low Gap Road. As discussed in the Project Description of this Initial Study, the District estimates that soil hauling would generate 76 haul truck trips over the course of grading, with an estimated 6 haul truck trips on a peak day. In addition, the District anticipates that up to approximately 20-30 construction workers would be onsite during the peak of construction.

The addition of construction-related traffic would occur during daytime hours between 7 a.m. and 7 p.m. and would not substantially affect congestion on local roadway segments because trips would occur at differing periods of the day and would represent a small percentage of the capacity of the roadways. Construction would not require installation of water distribution lines or other utility improvements within Low Gap Road or other public rights of way that could affect traffic access or flow.

Following construction, the project would not result in an increase in vehicle trips associated with school operation or District-sponsored athletic events, as the project would support continuation of existing school classes and sports, as detailed in Table 1-2 and Table 1-3. However, the improved north field may result in a modest increase in community-based soccer events, with an estimated 15 additional community-based soccer events held on the north field. Community-based soccer would

occur on weekends, and would be substantively comparable to existing UHS soccer events in attendance and vehicles trips. Additionally, community-based soccer events would not occur at the same time as UHS soccer events. Because the proposed project would not represent an increase in the intensity of the use taking place on site, and would not require additional staffing or maintenance visits, no conflicts with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, have been identified. Therefore, no impact would result.

See impact "c" below for a discussion of potential impacts relative to traffic hazards during construction.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (Less than Significant)

CEQA Guidelines § 15064.3, Subdivision (b) indicates that land use projects would have a significant impact if the project resulted in vehicle miles traveled (VMT) exceeding an applicable threshold of significance. It further notes that if existing models or methods are not available to estimate the VMT for the project being considered, a lead agency may analyze the project's VMT qualitatively. The City of Ukiah currently has no thresholds of significance related to VMT, and as of the date of the analysis, a regional travel demand model for Mendocino County is under development but not yet available for VMT analysis. As a result, the project-related VMT impacts were assessed based on the available quantitative and qualitative data as presented below.

The *Technical Advisory on Evaluating Transportation Impacts in CEQA*, published by the Governor's Office of Planning and Research (OPR) in 2018 (referred to as the "OPR Technical Advisory"), includes recommended thresholds of significance for environmental impacts based on VMT. The OPR Technical Advisory specifically references approaches for quantifying project-related VMT of residential, office, and retail land uses, and notes that lead agencies may develop thresholds for other land use types. A threshold of 15% below baseline conditions is recommended for these other types of land uses. Additionally, the advisory provides screening thresholds for small projects to indicate when detailed analysis is needed. Per the advisory:

> *Absent substantial evidence indicating that a project would generate a potential significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day[19] generally may be assumed to cause a less-than-significant transportation impact.*

The project is different from typical land use development, in that it consists of improvements to existing school athletic fields and ADA improvements. As detailed in Section 1.5.6, the project would change the location of existing school events by shifting the events between facilities within the campus. However, the project is not anticipated to result in an increase in the number or attendance of school events. The District anticipates that the community may request use of the improved north field for youth and club soccer. The amount of that use, in number of events or attendance, is currently unknown but expected to be modest. Youth and club soccer league events are currently held at elementary and middle school facilities in the City of Ukiah. Because community-based soccer events are currently held at existing facilities within the City, the District anticipates that the project would not create substantive new demand for soccer within the community and that a minor portion of existing events may be relocated to the north field. Therefore, the District assumes that the north field would support an additional 15 soccer events (5 games each for adult, youth, and club soccer). Trips for community-based soccer events is an existing condition; the project may result in a redistribution of a portion of those trips if those events are moved to the project site. However, the project would not result in a net increase in trips or substantially change anticipated trip lengths. Therefore, the project

does not exceed the OPR's screening threshold for small projects and would result in a less than significant impact.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Less than Significant)

Construction

Construction of the project is proposed to begin in fall of 2021 or the spring of 2022 and would be completed over an approximately 4.5-month period. The number of construction-related vehicles traveling to and from the project site would vary on a daily basis. The heaviest traffic days are anticipated to require up to 6 haul truck trips on a peak construction day. In addition to haul trucks, it is anticipated that construction crew trips could require up to 60 trips per day (30 workers). Therefore, on the busiest days of construction, approximately 66 vehicle trips could occur. No construction activities would occur within roads or the public right of way. Therefore, the project would not modify, even temporarily, driveway or roadway configurations, turning radii, or lane widths. The temporary construction-related impact would be less than significant.

Operation

Access to the project facilities would be accomplished through the existing campus drives and internal paved facilities. The existing driveways on Despina Drive and Low Gap Road would continue to provide the primary access to the campus from the regional street network and would retain their current configuration with no proposed modifications. The project's impact related to creating potential hazards due to geometric design features or incompatible uses would be less than significant.

d) Result in inadequate emergency access? (Less than Significant)

The campus includes an existing fire lane adjacent to the existing stadium. Minor utility trenching would occur within an existing fire lane within the grounds of the campus to support the north field components. ADA improvements would include, but are not limited to, speed bump removal, pedestrian gate replacements, new curb cuts and ramps, and replacement of truncated dome surfaces at pedestrian curb cuts. Approximately 890 feet of the existing emergency access driveway would be repaved. ADA improvements would primarily be located within the existing fire lane but would also include ADA paving improvements for the southern egress of existing stadium (See Figure 2).

Emergency access to the campus would continue to be accomplished through the existing campus drives and internal paved facilities; these drives and facilities would remain open and unaltered during project construction. As noted above, the existing driveways on Despina Drive and Low Gap Road would continue to provide the primary access to the campus from the regional street network and would retain their current configuration with no proposed modifications. Therefore, emergency access is expected to be acceptable. The impact would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 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,				
i. Listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k)?		✓		
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.		✓		

a,i, a.ii) Cause a substantial adverse change in the significance of a tribal cultural resource? (Less than Significant with Mitigation)

CEQA requires lead agencies to determine whether a project would have a significant effect on tribal cultural resources. The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American tribe.

The District has no record of receiving requests for notification of proposed projects from California Native American tribes pursuant to Public Resources Code Section 21080.3.1. The College nevertheless initiated contact with Native American tribes as part of preparing this CEQA Initial Study and as part of the Archaeological Resources Study prepared for the project (ASC 2021). Efforts to identify tribal cultural resources that could be affected by the project included a search of records at the Northwest Information Center, literature review, consultation with the Native American Heritage Commission (NAHC), contact with appropriate local Native American Tribes, and a pedestrian archaeological survey of the project site.

On March 11, 2021, the NAHC was contacted to request a review of the Sacred Lands File for information on Native American cultural resources in the project area. On March 24, 2021, the NAHC responded with positive results of a search of list of tribal groups and individuals who may be able to provide information on potential cultural resources. On March 24, 2021, letters were mailed to the individuals listed by the NAHC requesting additional information.

The NAHC also responded that the search of the Sacred Lands File indicated the potential presence of a Sacred Site in the project vicinity. Pinoleville Pomo Nation Tribal Chairperson Leona Williams was identified by the NAHC as a contact person who may have knowledge of the resource. Chairperson Williams referred ASC to Tribal Vice Chairperson Angela James. Efforts to contact Ms. James have been unsuccessful.

As described in Section 3.5, Cultural Resources, the potential does exist to encounter as-of-yet unknown archaeological materials during project-related construction activities. If such resources were to represent “tribal cultural resources” as defined by CEQA, any substantial change to or destruction of these resources would be a potentially significant impact; therefore, the following mitigation is included.

Mitigation

Implementation of Mitigation Measures CR-1 (Archaeological Inadvertent Discovery Procedures), and CR-2 (Protect Human Remains If Encountered during Construction) would be required for the project (please see Section 3.5, Cultural Resources for a full description of these mitigation measures). Implementation of Mitigation Measures CR-1 through CR-2 would reduce the potential impact to previously undiscovered tribal cultural resources to a less-than-significant level by requiring procedures to be taken in the event of inadvertent discovery of resources consistent with appropriate laws and requirements.

3.19 Utilities and Service Systems

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

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (Less than Significant)

Water

The project would temporarily utilize water for dust suppression and other activities during construction. Construction-related water demands would be short-term and minimal in volume. It is anticipated the construction water demand would be sufficiently served by existing entitlements. Following construction, the project would utilize water to maintain the new turf fields and for potable water the students and sport spectators would demand. The field maintenance would require less water than under existing conditions, and the potable water demands are anticipated to be marginal. The existing entitlements would be sufficient to serve the operational phase of the project. Therefore, no new expanded water entitlements or facilities would be required. No impact would occur

Wastewater

No wastewater would be generated during construction. Following construction, the project would not result in an increase of students at UHS. The project may allow for additional spectators and recreational users on-site which could result in an increase in use of the existing on-site restrooms. However, this is not anticipated to generate a significant amount of wastewater. The currently wastewater treatment plant is anticipated to have sufficient capacity to serve the project. Therefore, the project would not require construction of a new or expanded wastewater treatment facility. A less than significant impact would occur.

Storm Water

Storm water associated with new impervious surfaces would be collected via proposed on-site storm water features, including storm water bioretention areas which would be designed to comply with the 2020 Storm Water Low Impact Technical Design Manual. Storm water generated by project hardscapes would be released at the same rate as pre-project conditions during an applicable design storm, and would discharge to the existing stormwater infrastructure adjacent to the project site. With implementation of the proposed on-site storm water infrastructure, the capacity of the existing storm water drainage system would have adequate capacity to serve the project. Therefore, no additional off-site storm water improvements are anticipated to be required to accommodate runoff from the project. The impact would be less than significant.

Other Utilities

Electrical energy for the project would be provided by PG&E. Gasoline and other petroleum products used for this project would be obtained from private retailers throughout the general area. Energy-consuming equipment anticipated to be used during operation of the project includes mechanical and electrical equipment associated with the sports field lighting. The new sports field lighting system at the synthetic turf field would be a new source of energy demand. However, the existing, older lights at the stadium would be replaced by newer, more energy efficient lights. Overall, the addition of the new sports lighting is not anticipated to demand a significant amount of energy. The potential environmental impacts associated with the utility improvements are evaluated as part of this Initial Study. No additional electrical, natural gas, or telecommunication facilities or expansion of existing facilities would be required to serve the project. The impact would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (Less than Significant)

As discussed in Impact “a”, the project would require minimal water to serve the proposed project. The impact on available water supplies during normal, dry, and multiple dry years would be less than significant.

c) Result in a 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? (Less than Significant)

As discussed in Impact “a”, the project may require a marginal increase in wastewater treatment. The project would not induce the growth of the student population, but could marginally increase the number of spectators and recreational users on-site. Based on the marginal increase of users it is anticipated that the local wastewater provider would have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments. The impact would be less than significant.

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? (Less than Significant)

Construction of the project would result in a temporary increase in solid waste disposal needs associated with demolition and construction wastes. Following construction, the proposed project would be expected to produce additional solid waste. Demolition debris, such as pavement and sod, would be off-hauled for recycling or composting. Materials with no practical potential for reuse would be disposed of at a regional landfill.

Solid waste from the project site would be delivered to the Ukiah Transfer Station, which is owned by the City of Ukiah and operated by Ukiah Waste Solutions. Any materials not recycled would be hauled to Potrero Hills Landfill located at 3675 Potrero Hill Lane in Suisun City, Solano County. The Potrero Hills Landfill is an active solid waste landfill with an allowable daily capacity of 4,330 tons per day and approximately 13.9 million cubic yards remaining capacity, and is permitted to remain in operation through 2048 (CalRecycle 2021). In addition, there are several other active permitted regional landfills in the project vicinity, including the Redwood Sanitary Landfill (26 million cubic yards remaining capacity), Vasco Road Landfill (7.4 million cubic yards remaining capacity), and Keller Canyon Landfill (63.4 million cubic yards remaining capacity) (CalRecycle 2021).

The solid waste generated during construction and operation of the project would represent a small fraction of the daily permitted tonnage of these facilities. Solid waste from the project would not be expected to exceed the capacity of or otherwise adversely affect the Ukiah Transfer Station or Potrero Hills Landfill. Therefore, the impact related to increased demand for solid waste and landfill space would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (Less than Significant)

No applicable federal solid waste regulations would apply to the project. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. Demolition debris, such as pavement and sod, would be off-hauled for recycling or composting. Materials with no practical potential for reuse would be disposed of at a regional landfill. The State of California requires that large construction and demolition projects reuse or recycle at least 65% of the debris generated. Project construction and demolition activities would be required to comply with applicable solid waste regulations, and solid waste generated on-site would be required to be disposed of in accordance with all applicable federal and state regulations related to solid waste. The impact would be less than significant.

3.20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
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 a wildfire or the uncontrolled spread of a 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 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 slop instability, or drainage changes?				✓

The Project Site is located adjacent to a State Responsibility Area that is designated as a High Fire Hazard Severity Zone and approximately 0.25 miles north of another State Responsibility Area designated as a Very High Fire Severity Zone (CalFire 2021).

a) **Substantially impair an adopted emergency response plan or emergency evacuation plan? (No Impact)**

The project would improve existing facilities within the UHS campus. No construction of off-site roadways or use of detour routes are anticipated to be needed for the proposed improvements. Construction worker trips and equipment transport would utilize existing roadways during project construction.

Following construction, the project would not result in an increase in vehicle trips associated with school operation or District-sponsored athletic events, as the project would support continuation of existing school classes and sports. However, the District assumes that the north field would support an additional 15 community-based soccer events. Trips for community-based soccer events is an existing condition; the project may result in a redistribution of a portion of those trips if those events are moved to the project site. The number of trips to and from the project site during project operation is anticipated to be marginal.

Therefore, based on the minimal amount of trips associated with the construction and operation of the project, it is not anticipated that the project would impact emergency response plans or evacuation plans should one need to be implemented. No impact would occur.

b) Expose Project Occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (No Impact)

Wildfire risk is dependent upon existing environmental conditions, including but not limited to the amount of vegetation present, topography, and climate. The project site is located along the outskirts of the City of Ukiah, adjacent to open grassland areas. The project would improve the track and field facility as well as create additional recreational facilities. The project would not house residents or other occupants, nor would the project increase the existing student population of UHS. Therefore, the project would result in no impact.

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 temporary or ongoing impacts to the environment? (Less than Significant)

The project would improve the existing emergency access route, by removing speed bumps, replacing pedestrian gates, installing new curb cuts and ramps, and replacing truncated dome surfaces at pedestrian curb cuts. Other ADA improvements would also be constructed for the southern egress of the existing stadium. Maintenance of these new emergency access routes would be similar to existing conditions. Additionally, these components of the project would improve access to the site for emergency vehicles and provide additional exit routes for users should a wildfire occur. Therefore, fire risk would not be exacerbated and a less than significant impact would occur.

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? (No Impact)

The project would not construct new structures or residences that would create new risks for potential inhabitants. Additionally, the project site is in a relatively flat area, sloping slightly from west to east. The relatively flat terrain would make the project site unlikely to result in landslides. The project site is not located within a floodplain hazard area that could exacerbate flooding risks if a fire does occur in the immediate vicinity of the site. Therefore, the project would have no impact related to exposing people or structures to significant risks include flooding or landslides as a result of runoff, post-fire instability, or drainage changes.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant 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 that 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 would cause substantial adverse effects on human beings, either directly or indirectly?		✓		

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? (Less than Significant with Mitigation)

Potential project impacts to biological and cultural resources are addressed in Section 3.4, Biological Resources, Section 3.5, Cultural Resources, and Section 3.18, Tribal Cultural Resources, respectively. With implementation of the recommended mitigation measures identified in this Initial Study, the potential for project-related activities to degrade the quality of the environment, including wildlife species or their habitat, plant or animal communities, or important examples of California history or prehistory would be reduced to less than significant levels.

Mitigation Measures BIO-1 (Avoid Disturbance to Nesting Birds), CR-1 (Archaeological Inadvertent Discovery Procedures), and CR-2 (Protect Human Remains If Encountered during Construction) would be required for the project. For a full description of these mitigation measures, please see Sections 3.4, Biological Resources, and 3.5, Cultural Resources.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that 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)? (Less than Significant)

Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. This cumulative impact analysis uses the list approach. A search was undertaken to identify other reasonably foreseeable projects that may have overlapping or cumulative impacts with the project. Efforts to identify cumulative projects included review for ongoing and planned projects within the District and the City of Ukiah. No cumulative projects were identified. While the District has planned construction activities at other schools, such as the Yokayo Elementary School Paving Project and the Eagle Peak Middle School Paving Project, those projects are located more than 1.5 miles from the proposed project and are of sufficient distance from the project site as to not be considered cumulative projects. Similarly, City projects, such as the Downtown Streetscape and Riverside Park Regeneration Project are of sufficient distance and difference to be not considered cumulative projects.

As summarized in Section 3 of this IS/MND, the project would not result in impacts on agriculture and forestry resources, mineral resources, or wildfire. Therefore, implementation of the project would not contribute to any related cumulative impact on those resources.

The project impacts summarized in this Initial Study would not add appreciably to any existing or foreseeable future significant cumulative impact, such as visual quality, cultural resources, biological, traffic impacts, or air quality degradation. The impacts of the proposed project would be mitigated to a less than significant. Incremental impacts, if any, would be very small, and the cumulative impact would be less than significant.

c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? (Less than Significant with Mitigation)

With implementation of the recommended mitigation measures identified in this Initial Study, the potential for project-related activities to cause substantial adverse effects on human beings would be reduced to less than significant.

Mitigation Measures BIO-1 (Avoid Disturbance to Nesting Birds), GEO-1 (Protect Paleontological Resources during Construction Activities), CR-1 (Archaeological Inadvertent Discovery Procedures), and CR-2 (Protect Human Remains If Encountered during Construction), and HAZ-1 (Reduce Wildland Fire Hazards during Construction) would be required for the project. For a full description of these mitigation measures, please see Sections 3.4, Biological Resources, 3.5, Cultural Resources, 3.7, Geology and Soils, 3.9, Hazards and Hazardous Materials, and 3.13, Noise.

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Illingworth & Rodkin, Noise

Anthropological Studies Center of Sonoma State University, Cultural Resources

Appendices

Appendix A Lighting Analysis

Ukiah High School Soccer

Ukiah, CA

Lighting System

Pole / Fixture Summary

Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
S1, S3	70'	70'	6	TLC-LED-1500	8.58 kW	A
S2, S4	70'	70'	6	TLC-LED-1500	8.58 kW	A
		50'	1	TLC-RGBW	0.64 kW	B
4			***26***		***35.60 kW***	

Circuit Summary

Circuit	Description	Load	Fixture Qty
A	Soccer	34.32 kW	24
B	Bleachers	1.28 kW	2

Fixture Type Summary

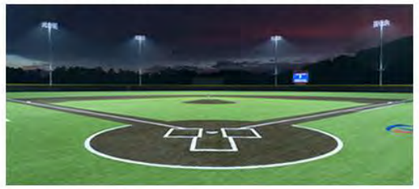
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	24
TLC-RGBW	LED 5700K - 75 CRI	640W	28,500	>120,000	>120,000	>120,000	2

Light Level Summary

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Blanket Grid	Horizontal	11.8	0	52	11673.04		A,B	26
Bleachers	Horizontal	1.66	1	3	2.96	1.66	B	2
Dispersal Area	Horizontal	2.52	1	6	6.07	2.52	B	2
Property Spill	Horizontal	0	0	0	0.00		A	24
Property Spill	Max Candela (by Fixture)	2.65	0	31.4	0.00		A	24
Property Spill	Max Vertical Illuminance Metric	0	0	0	0.00		A	24
Soccer	Horizontal Illuminance	34	29	43	1.49	1.17	A	24

From Hometown to Professional



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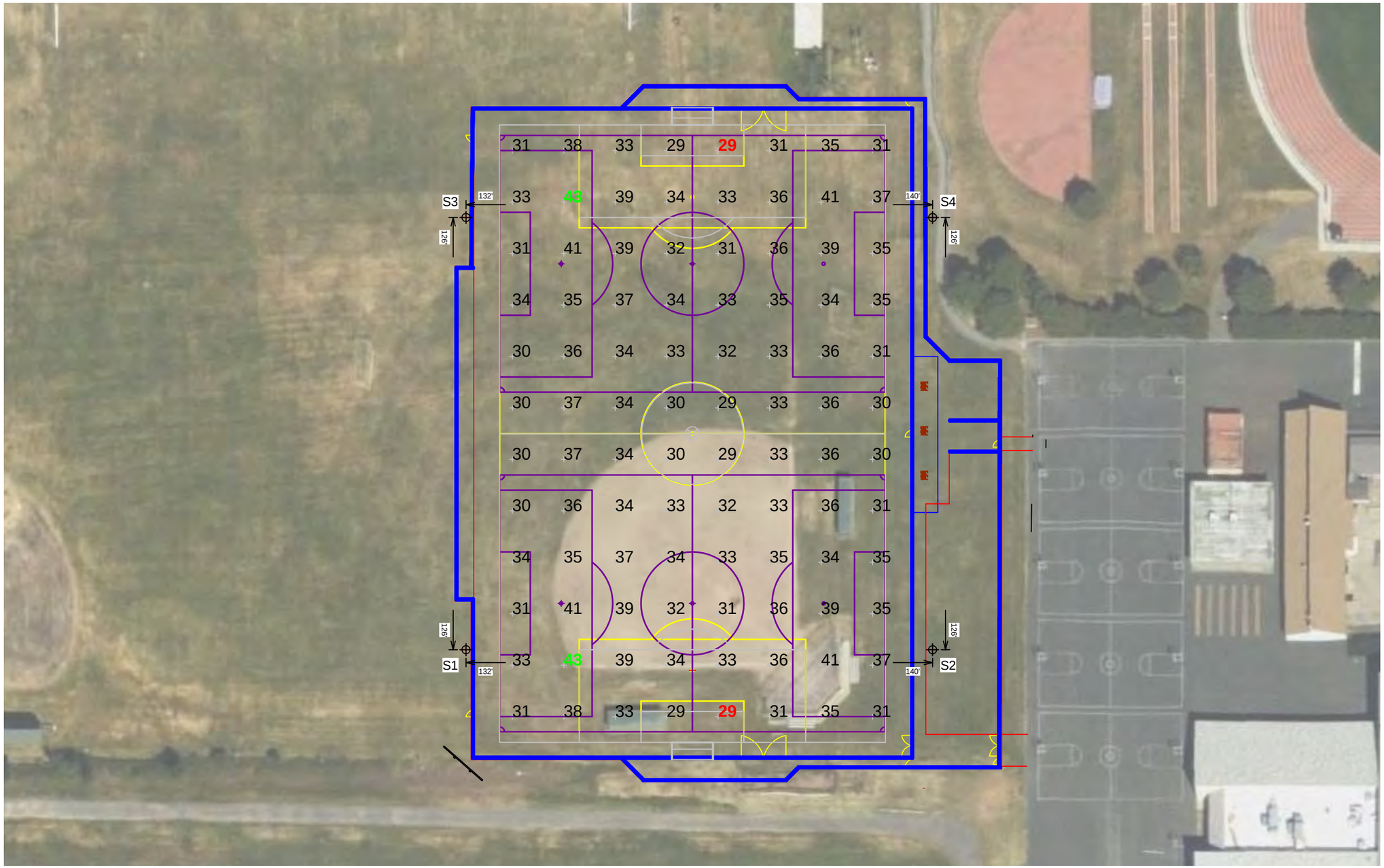
EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	S1, S3	70'	-	70'	TLC-LED-1500	6	6	0
2	S2, S4	70'	-	50'	TLC-RGBW	1	0	1
				70'	TLC-LED-1500	6	6	0
4	TOTALS					26	24	2



SCALE IN FEET 1 : 60

0' 60' 120'

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Ukiah High School Soccer

Ukiah, CA

GRID SUMMARY

Name:	**Soccer**
Size:	360' x 225'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**30**
Scan Average:	34.02
Maximum:	43
Minimum:	29
Avg / Min:	1.19
Guaranteed Max / Min:	**2.5**
Max / Min:	1.49
UG (adjacent pts):	1.32
CU:	0.79
No. of Points:	96

LUMINAIRE INFORMATION

Applied Circuits:	A
No. of Luminaires:	**24**
Total Load:	34.32 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) ⊗

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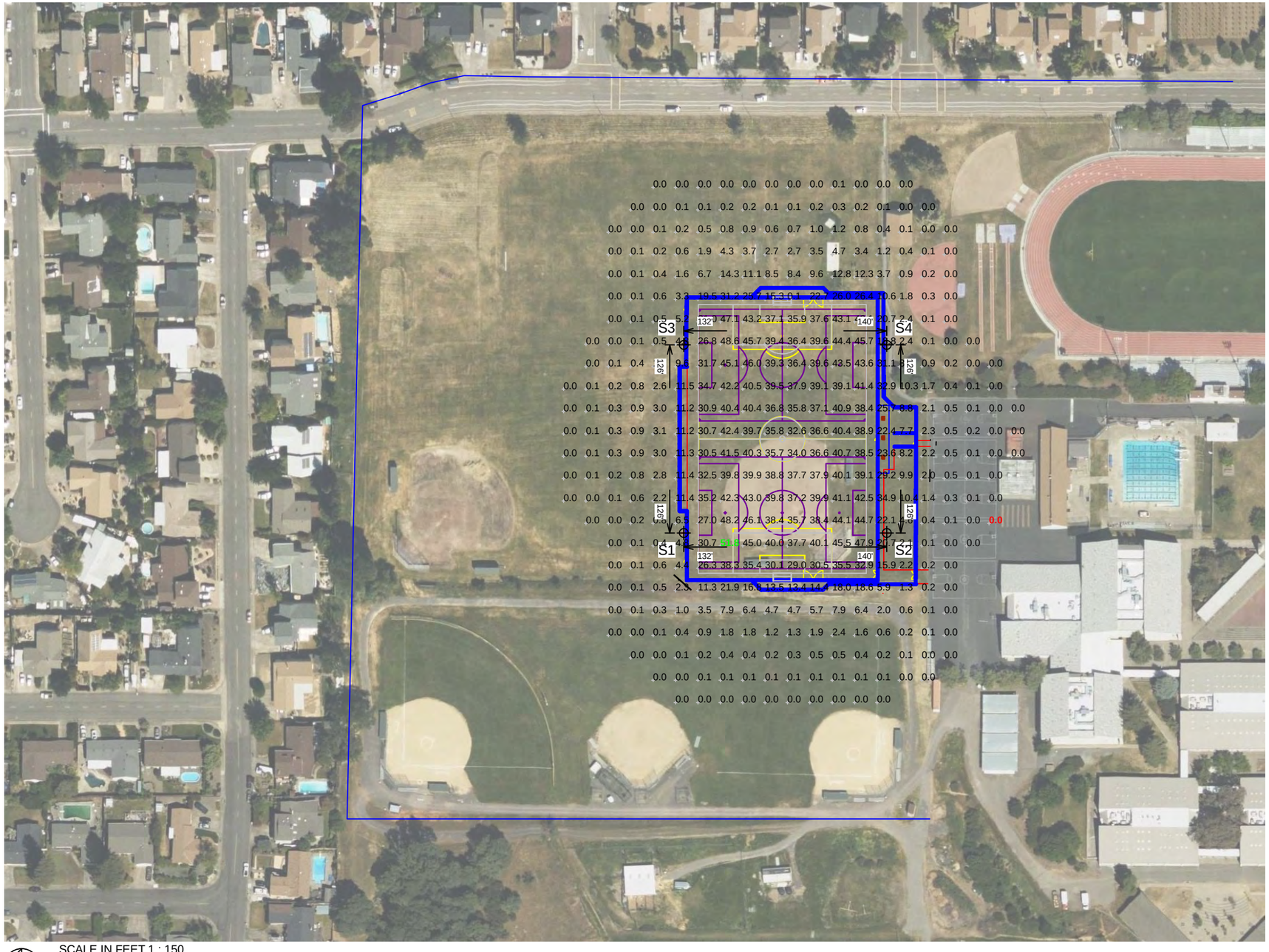
EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	S1, S3	70'	-	70'	TLC-LED-1500	6	6	0
2	S2, S4	70'	-	50'	TLC-RGBW	1	1	0
				70'	TLC-LED-1500	6	6	0
4	TOTALS					26	26	0



SCALE IN FEET 1 : 150

0' 150' 300'

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Ukiah High School Soccer

Ukiah, CA

GRID SUMMARY

Name:	**Blanket Grid**
Size:	360' x 225'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**11.81**
Maximum:	52
Minimum:	0
Avg / Min:	2664.76
Max / Min:	**11673.04**
UG (adjacent pts):	463.04
CU:	0.99
No. of Points:	404

LUMINAIRE INFORMATION

Applied Circuits:	A, B
No. of Luminaires:	**26**
Total Load:	35.6 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) ⊗

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EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	S2, S4	70'	-	50'	TLC-RGBW	1	1	0
				70'	TLC-LED-1500	6	0	6
2	TOTALS					14	2	12

SCALE IN FEET 1 : 40

0' 40' 80'

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

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Ukiah High School Soccer

Ukiah, CA

GRID SUMMARY

Name:	**Dispersal Area**
Size:	360' x 225'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**2.52**
Maximum:	6
Minimum:	1
Avg / Min:	2.58
Max / Min:	**6.07**
UG (adjacent pts):	2.92
CU:	0.87
No. of Points:	165

LUMINAIRE INFORMATION

Applied Circuits:	B
No. of Luminaires:	**2**
Total Load:	1.28 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.

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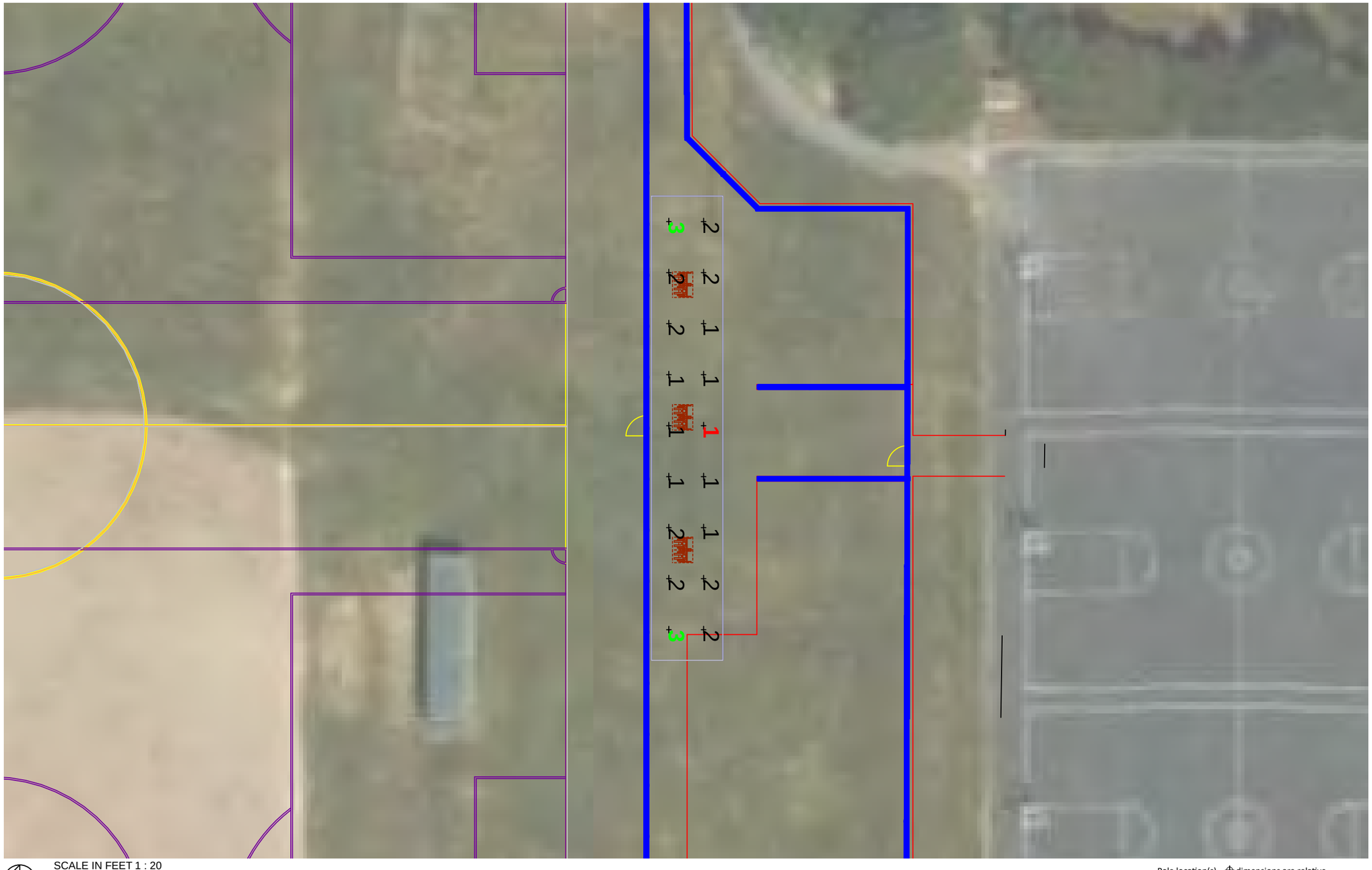
EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	S2, S4	70'	-	50'	TLC-RGBW	1	1	0
				70'	TLC-LED-1500	6	0	6
2	TOTALS					14	2	12



SCALE IN FEET 1 : 20

0' 20' 40'

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

ENGINEERED DESIGN By: H.Sabers · File #207697D_C2 · 19-Jan-21

Ukiah High School Soccer

Ukiah, CA

GRID SUMMARY

Name:	**Bleachers**
Spacing:	10.0' x 10.0'

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**1.66**
Maximum:	3
Minimum:	1
Avg / Min:	1.90
Max / Min:	**2.96**
UG (adjacent pts):	1.54
CU:	0.04
No. of Points:	18

LUMINAIRE INFORMATION

Applied Circuits:	B
No. of Luminaires:	**2**
Total Load:	1.28 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.

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EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	S1, S3	70'	-	70'	TLC-LED-1500	6	6	0
2	S2, S4	70'	-	50'	TLC-RGBW	1	0	1
				70'	TLC-LED-1500	6	6	0
4	TOTALS					26	24	2

SCALE IN FEET 1 : 200

0' 200' 400'

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Ukiah High School Soccer

Ukiah, CA

GRID SUMMARY

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

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	0.0000
Maximum:	0.00
Minimum:	0.00
No. of Points:	97

LUMINAIRE INFORMATION

Applied Circuits:	A
No. of Luminaires:	**24**
Total Load:	34.32 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) ⊗

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Ukiah High School Soccer

Ukiah, CA

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	S1, S3	70'	-	70'	TLC-LED-1500	6	6	0
2	S2, S4	70'	-	50'	TLC-RGBW	1	0	1
				70'	TLC-LED-1500	6	6	0
4	TOTALS					26	24	2

SCALE IN FEET 1 : 200

0' 200' 400'

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GRID SUMMARY

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

ILLUMINATION SUMMARY

MAX VERTICAL FOOTCANDLES

	Entire Grid
Scan Average:	0.0000
Maximum:	0.00
Minimum:	0.00
No. of Points:	97

LUMINAIRE INFORMATION

Applied Circuits:	A
No. of Luminaires:	**24**
Total Load:	34.32 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) ⊗

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EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	S1, S3	70'	-	70'	TLC-LED-1500	6	6	0
2	S2, S4	70'	-	50'	TLC-RGBW	1	0	1
				70'	TLC-LED-1500	6	6	0
4	TOTALS					26	24	2

SCALE IN FEET 1 : 200

0' 200' 400'

ENGINEERED DESIGN By: H.Sabers · File #207697D_C2 · 19-Jan-21

Ukiah High School Soccer

Ukiah, CA

GRID SUMMARY

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

ILLUMINATION SUMMARY

CANDELA (PER FIXTURE)

	Entire Grid
Scan Average:	2.6512
Maximum:	31.42
Minimum:	0.00
No. of Points:	97

LUMINAIRE INFORMATION

Applied Circuits:	A
No. of Luminaires:	**24**
Total Load:	34.32 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) ⊗

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Ukiah High School Soccer

Ukiah, CA

EQUIPMENT LAYOUT

INCLUDES:
· Soccer

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.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	S1, S3	70'	-	70'	TLC-LED-1500	6
2	S2, S4	70'	-	50'	TLC-RGBW	1
				70'	TLC-LED-1500	6
4	TOTALS					26

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)	380 (60)	480 (60)
TLC-LED-1500	8.5	8.1	7.4	6.4	5.1	4.7	3.7
TLC-RGBW	-	-	-	-	-	-	-

SCALE IN FEET 1 : 200

0' 200' 400'

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

ENGINEERED DESIGN By: H.Sabers · File #207697D_C2 · 19-Jan-21

Ukiah High School Soccer

Ukiah, CA

GLARE IMPACT

Summary

Map indicates the maximum candela an observer would see when facing the brightest light source from any direction.

A well-designed lighting system controls light to provide maximum useful on-field illumination with minimal destructive off-site glare.

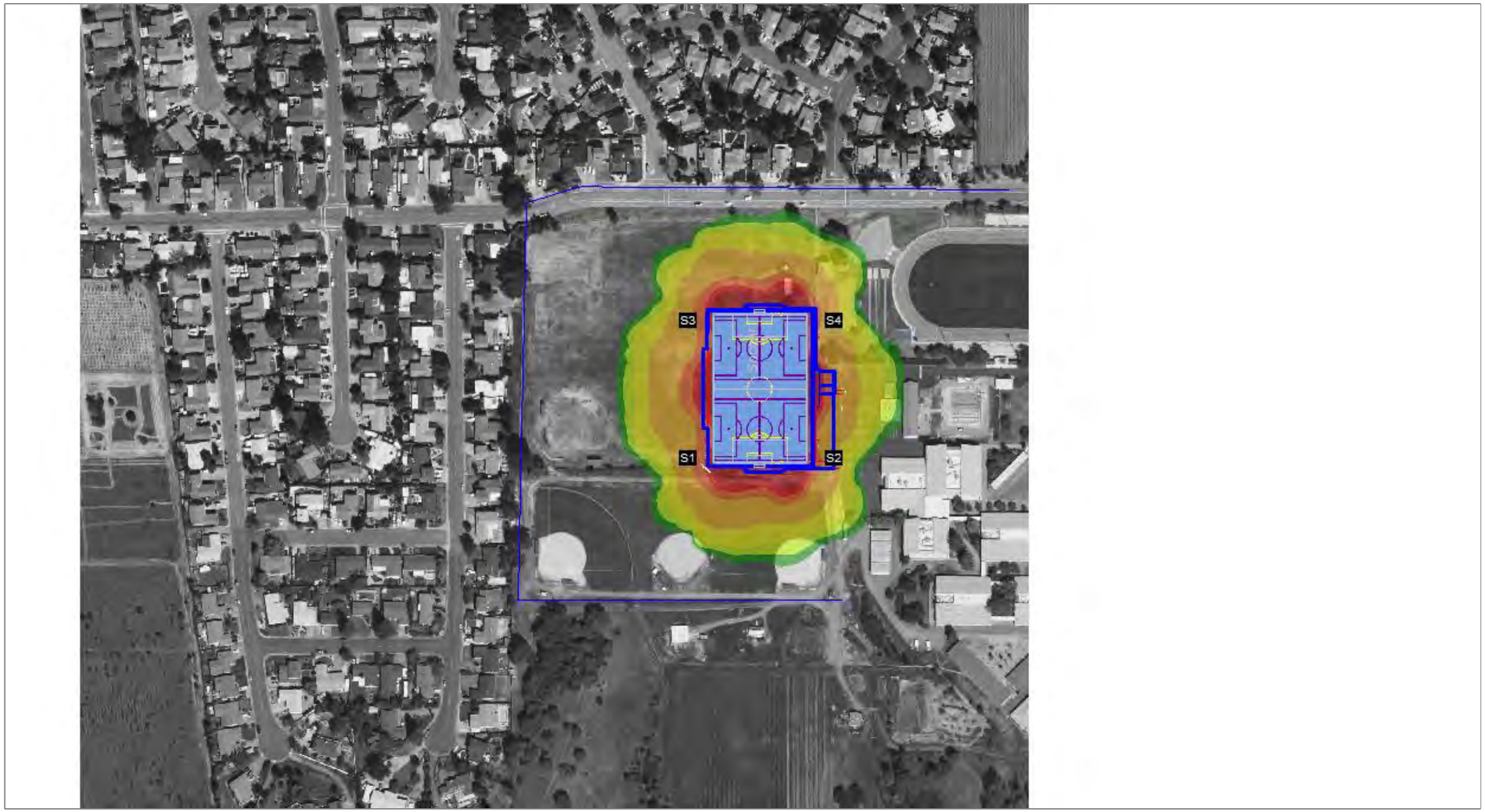
GLARE

Candela Levels

High Glare: 150,000 or more candela
Should only occur on or very near the lit area where the light source is in direct view. Care must be taken to minimize high glare zones.

Significant Glare: 25,000 to 75,000 candela
Equivalent to high beam headlights of a car.

Minimal to No Glare: 500 or less candela
Equivalent to 100W incandescent light bulb.



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Appendix B Biological Resources Evaluation

Technical Memorandum

May 17, 2021

To:	Gabe Sherman, Director Maintenance, Operations, and Grounds	Ref. No.:	11223190 (30)
From:	Joslyn Curtis, Botanist	Tel:	916-200-6240
	Elizabeth Meisman, Wildlife Biologist	Tel:	707-267-2217
cc:		Tel:	707-267-2298
	Genevieve Rozhon, Wildlife Biologist	Tel:	707-443-8326
	Ken Mierzwa, Senior Biologist	Tel:	916-865-5306
	Chryss Meier, Environmental Planner		
Subject:	**Ukiah High School Biological Reconnaissance Site Visit to Support IS/MND**		

1. Introduction

Ukiah Unified School District proposes to complete athletic improvements field to their existing soccer field at the Ukiah High School (hereafter "Project"). The Project is located at 1000 Low Gap Road, Ukiah, California (**Section 7, Figure 1**). Project activities include improvements and renovations to existing Ukiah High School athletic fields, including a new lighted all-weather synthetic turf soccer field, scoreboard, seating areas, fencing, ADA-compliant pedestrian walkways, and stormwater drainage improvements. The project also includes replacement of existing pressure sodium or metal halide lighting with LED lights at the existing track and field stadium. The project does not include removal of trees. Special status species and resources are the primary focus of this evaluation. Common species or resources without special protections are not considered. The purpose of this biological reconnaissance technical memo is to document the results of a January 23, 2021 site visit and provide information to support the Project's Initial Study/Mitigated Negative Declaration.

2. Survey Methods

2.1 Database Searches (CNDDB, CNPS, IPaC, and NMFS)

A database search for sensitive plant and wildlife species that may occur in the Project vicinity was conducted by GHD on January 22, 2021. Database searches included the CNDDB (CDFW 2021), CNPS Inventory of Rare and Endangered Vascular Plants (CNPS 2021), USFWS Information for Planning and Conservation (IPaC; USFWS 2021), and the NOAA Fisheries West Coast Region California Species List Tools (NMFS 2021). The search encompassed the Ukiah U.S. Geological Survey 7.5-minute quadrangle.

2.2 Field Survey

A reconnaissance site visit was conducted by Joslyn Curtis, GHD Botanist (hereafter surveyor), on January 23, 2021 from 0740 to 0950. Weather began as clear with fog on the horizons, about 38 degrees Fahrenheit, with no winds (Beaufort scale 0) and frost on the ground. At 0840 conditions became foggy but cleared up again by 9:40. The survey concluded with a temperature of 40 degrees Fahrenheit and clear to partly cloudy skies with little to no wind (Beaufort scale 0-1).

The survey included the athletic field to be improved and a 75-foot buffer of the adjacent area (**Section 7, Figure 1**). The surveyor walked the perimeter and conducted a meandering transect throughout the athletic field.

The survey methods were intended to identify potential jurisdictional wetlands, sensitive natural communities (SNCs), and special status plant or wildlife habitat. The survey included a physical search of the area, including inspecting the ground, shrubs, holes, and trees for the presence of any wildlife species. Additionally, the bark of vegetation and the ground layer under vegetation were inspected for evidence of wildlife species, such as feathers, pellets, whitewash, scat, tracks, etc. This reconnaissance-level site visit was conducted to identify general special status resources and habitat within the project site. No protocol-level surveys for wetlands, SNCs, or special status plants and wildlife were conducted at this time.

3. Results

3.1 Summary of General Biological Resources

The project would occur within existing athletic fields and a portion of an existing fire lane within the Ukiah High School campus. Athletic field improvements would occur on an approximately 3.8-acre portion of the natural-turf fields in the northern portion of the campus (north field). The project components that would occur in the existing stadium would not include any vegetation removal or earth disturbance. The existing fire lane is paved. The north field site is currently a baseball field for the Ukiah High School with maintained turf and a sandy, baseball diamond). The north field is surrounded by other athletic fields and walking paths. The turf lawn of the north field is composed of Kentucky bluegrass (*Poa pratensis*) and perennial ryegrass (*Festuca perennis*) with some weedy clover (*Trifolium repens*) growing with it.

Overall, across the project site there was little natural habitat structure. There are some trees, more than 500 feet away, bordering the property, and also a small clump trees near the southern middle edge of the area of potential impact of the north field. This clump of trees (a large, glossy privet [*Ligustrum lucidum*] bush, and two ornamental trees) surrounds what look to be utility boxes and a drain. This clump of trees is part of a bigger strip of landscaping that runs south down the edge of another field. No high-quality habitat or any habitat for special status species was observed (full species lists observed on-site is provided in **Section 8, Tables 1 and 2**). Several representative photographs are included in **Section 9** to document the site condition at the time of the site visit.

3.1.1 Wetlands and Waters

There were areas of standing water on north of the athletic field during the site visit on January 23, 2021(see photo 15-17 in **Section 9**). However, the areas of standing water were outside of boundary of project activities.

3.1.2 Sensitive Natural Communities (SNCs)

No SNCs were observed at the project site or in areas to be impacted by proposed Project activities.

3.1.3 Special Status Plants

No special status plants species were observed on-site. A list of all plant species detected during the reconnaissance-level site visit are presented in **Section 8, Table 1.** However, the site visit occurred during the winter outside of the typical blooming period for plants.

3.1.4 Special Status Wildlife

No special status wildlife species were observed on-site. A list of all bird species detected during the reconnaissance-level site visit is presented in **Section 8, Table 2**. As many neotropical avian migrants do not arrive until later in the spring, **Table 2** is not a comprehensive list of all species that could occur throughout the breeding season (in addition, the survey was not protocol-level). No other wildlife species were observed.

4. Discussion

No nest structures were observed during the January 23, 2021 reconnaissance-level site visit. Several avian species were observed on-site during the site visit that are protected by the federal Migratory Bird Treaty Act (MBTA), California Fish and Game Code (FGC), and California Migratory Bird Protection Act (MMPA) (see **Section 8, Table 2**). Trees adjacent to the project site could provide suitable nesting habitat for migratory bird species.

5. Conclusion

Based on occurrence records, habitat availability, and the reconnaissance-level site visit, no special status plant or wildlife species, or SNCs are expected to occur at the project site, with the exception of potential seasonal nesting by protected migratory birds. No potential wetlands or waters were observed on-site. . A dedicated aquatic resource delineation is needed to determine if any of these areas are state or federal jurisdictional wetlands.

6. References

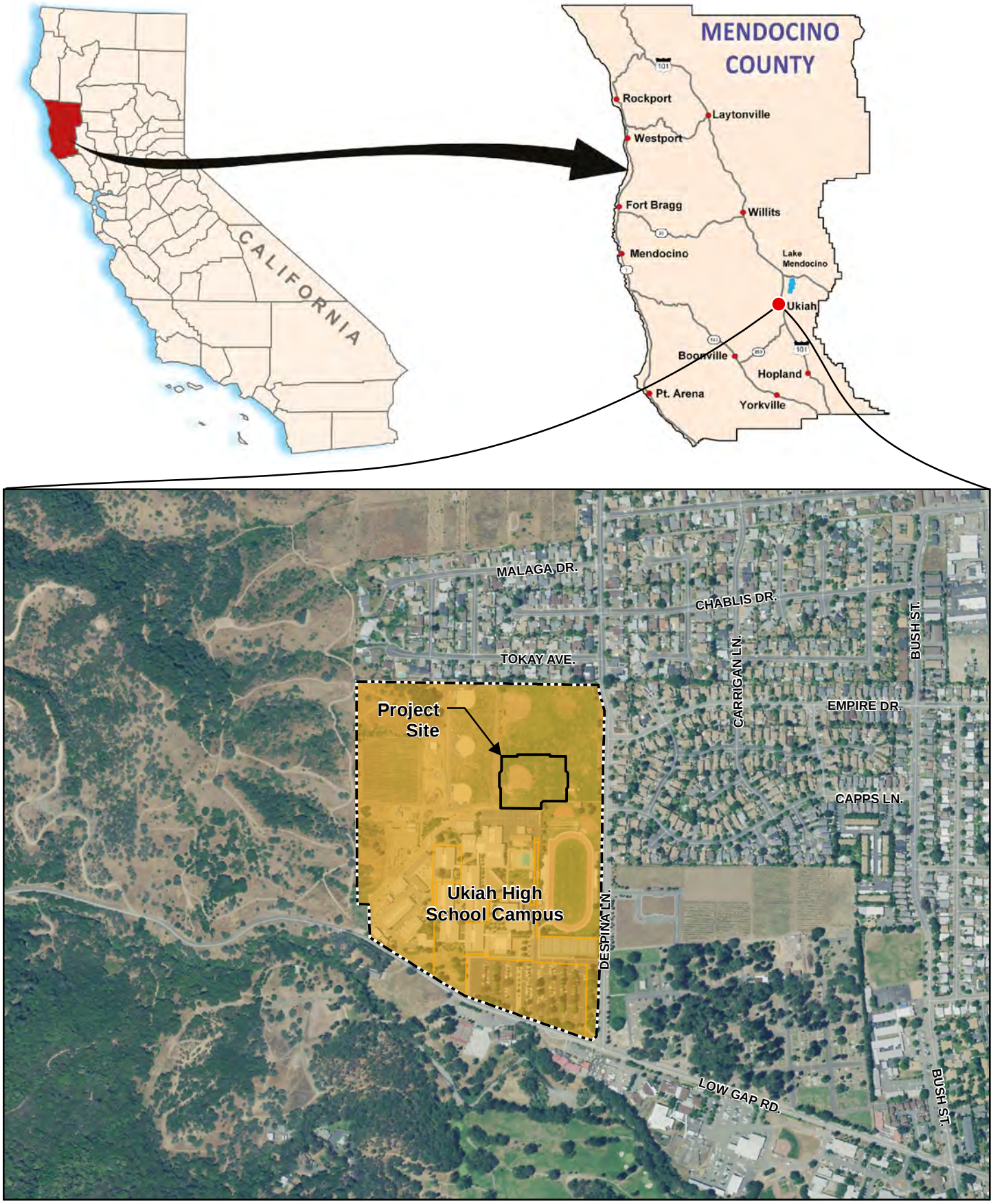
California Department of Fish and Wildlife (CDFW). 2021. *California Natural Diversity Database (CNDDB).* USGS 7.5 Minute Quadrangles. State of California, Natural Resources Agency, Department of Fish and Wildlife, Biogeographic Data Branch, Sacramento, California, USA. https://www.wildlife.ca.gov/Data/CNDDB (01/22/2021)

California Native Plant Society (CNPS). 2021. CNPS Inventory of Rare Plants. California Native Plant Society, Sacramento, California, USA. https://www.cnps.org/rare-plants/cnps-inventory-of-rare-plants (01/22/2021)

National Marine Fisheries Service (NFMS). 2021. *NOAA Fisheries West Coast Region California Species List Tool.* U.S. Department of Commerce, National Oceanic and Atmospheric Administration Fisheries, NMFS, Portland, Oregon, USA. https://archive.fisheries.noaa.gov/wcr/maps_data/california_species_list_tools.html (01/22/2021)

U.S. Fish and Wildlife Service (USFWS). 2021. *IPaC - Information for Planning and Consultation.* Department of the Interior, U.S. Fish and Wildlife Service, Arcata Fish and Wildlife Office, Arcata, CA, USA. https://ecos.fws.gov/ipac/ (01/22/2021)

7. Figures



Paper Size ANSI A

0 800

Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

N

GHD

Ukiah Unified School District
Ukiah High School Field Improvement Project

Project No. 11220699
Revision No. -
Date 01/21/2021

Regional Location Map

FIGURE 1

C:\Users\RMREMI~1\AppData\Local\Temp\arc6720\Regional Location Map.mxd
Print date: 20 Jan 2021 - 13:30

Data source: . Created by: rmremillard

CONCEPT LEGEND

SYM	DESCRIPTION
	42" TALL CHAIN LINK FENCE
	6' TALL CHAIN LINK FENCE
	16' TALL CHAIN LINK FENCE
G1	42" TALL X 4' WIDE SWING CHAIN LINK GATE
G2	42" TALL X 12' WIDE DOUBLE SWING CHAIN LINK GATE
G3	42" TALL X 26' WIDE DOUBLE SWING CHAIN LINK GATE
G4	6' TALL X 4' WIDE SWING CHAIN LINK GATE
G5	6' TALL X 12' WIDE DOUBLE SWING CHAIN LINK GATE
1	PLAYERS SEATING/ SCORER'S AREA
2	116 YD X 75 YD SOCCER FIELD STRIPING
3	75 YD X 50 YD U12 SOCCER FIELD STRIPING
4	SPECTATOR SEATING AREA WITH 3-ROW BLEACHER/ GOAL STORAGE
5	SPECTATOR SEATING AREA WITH 5-ROW BLEACHER
6	SPORTS FIELD LIGHTING
7	SOCCER SCOREBOARD
8	WARM UP AREA - SYNTHETIC TURF
9	ENTRY AREA
10	TICKET BOOTH

NORTH

0 10' 20' 40' 60'

Source:Verde Designs, December 2020

GHD

Ukiah Unified School District
Ukiah High School Field Improvement Project

Project Site Plan

Project No. 11220699
Revision No.
Date 01/21/21

FIGURE 3

Filename: \\ghdnet\ghd\US\Santa Rosa\Projects\561\11220699\Workshare\04 Technical Work\Figures\InDesign\Site Plan.indd
Print date: January 20, 2021 3:35 PM

Paper Size ANSI A

0 200 400 600 800

Yards

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California III FIPS 0403 Feet

N

GHD

Ukiah High School
Athletic Improvements Project

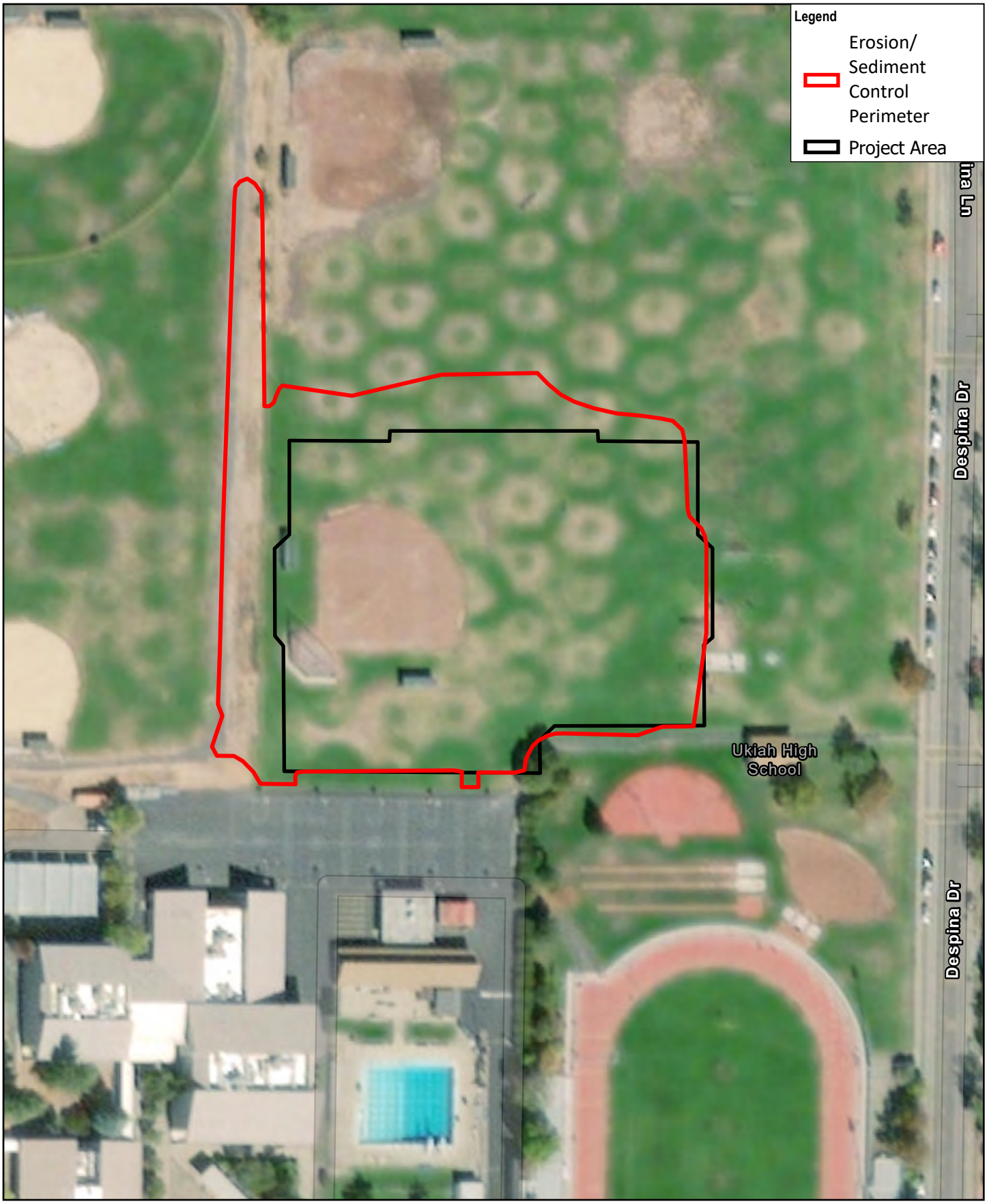
CNDDB
1 Mile Radius

Project No. **11220699**
Revision No. **-**
Date **01/27/2021**

FIGURE 3

\\ghdnet\ghd\US\Santa Rosa\Projects\561\11220699\GIS\Maps\Working\1122069_Working\1122069_Working.aprx
Print date: 15 Feb 2021 - 09:45

Data source: Light Gray Reference - Edit: Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA
World Imagery: USDA FSA, GeoEye, Maxar.Created by: ethompson3
CNDDB Data from 2021/01/27



Paper Size ANSI A

0 30 60 90 120

Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983 HARN
Grid: NAD 1983 HARN StatePlane California II FIPS 0402 Feet

N

GHD

Ukiah High School
Athletic Improvements Project

Erosion and Sediment Control Perimeter

Project No. **11220699**
Revision No. **-**
Date **02/15/2021**

FIGURE 4

\\ghdnet\ghd\US\Santa Rosa\Projects\561\11220699\GIS\Maps\Working\1122069_Working\1122069_Working.aprx
Print date: 15 Feb 2021 - 09:43

Data source: World Imagery: GeoEye, Maxar, Microsoft
Hybrid Reference Layer: Esri Community Maps Contributors, BuildingFootprintUSA, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA. Created by: ethompson3

8. Tables

Table 1 Plant Species Detected On-site

Common Name	Scientific Name	Nativity	USACE Wetland Status	Special Status
Wildoats	*Avena fatua*	invasive non-native	UPL	None
Coyote brush	*Baccharis pilularis*	native	UPL	None
Black mustard	*Brassica nigra*	invasive non-native	UPL	None
Soft chess	*Bromus hordeaceus*	invasive non-native	FACU	None
Reedgrass	*Calamagrostis sp.*	not determined	UNK	not determined
Shepherd's purse	*Capsella bursa-pastoris*	non-native	FACU	None
Idaho bittercress	*Cardamine oligosperma*	native	FAC	None
Yellow starthistle	*Centaurea solstitialis*	invasive non-native	UPL	None
Skeleton weed	*Chondrilla juncea*	invasive non-native	UPL	None
Brass buttons	Cotula australis	non-native	FAC	None
Tall cyperus	*Cyperus eragrostis*	native	FACW	None
Stinkwort	*Dittrichia graveolens*	invasive non-native	UPL	None
Minute willowherb	*Epilobium minutum*	native	FACU	None
Big heron bill	*Erodium botrys*	non-native	FACU	None
Coastal heron's bill	*Erodium cicutarium*	invasive non-native	UPL	None
Whitestem filaree	*Erodium moschatum*	invasive non-native	UPL	None
Italian rye grass	*Festuca perennis*	invasive non-native	FAC	None
Bristly ox-tongue	*Helminthotheca echioides*	invasive non-native	FAC	None
Toyon	*Heteromeles arbutifolia*	native	UPL	None
Prickly lettuce	*Lactuca serriola*	invasive non-native	FACU	None
Glossy privet	*Ligustrum lucidum*	invasive non-native	UPL	None
Bird's foot trefoil	*Lotus corniculatus*	invasive non-native	FAC	None
Lupine	*Lupinus bicolor*	native	UPL	None
Hyssop loosestrife	*Lythrum hyssopifolia*	invasive non-native	OBL	None
Cheeseweed	*Malva parviflora*	non-native	UPL	None
California burclover	*Medicago polymorpha*	invasive non-native	FACU	None
Pennyroyal	*Mentha pulegium*	invasive non-native	OBL	None
Water montia	*Montia fontana*	native	OBL	None
Cut leaf plantain	*Plantago coronopus*	invasive non-native	FAC	None
Ribwort	*Plantago lanceolata*	invasive non-native	FAC	None
Common plantain	*Plantago major*	non-native	FAC	None
Coastal plantain	*Plantago subnuda*	native	FACW	None
Kentucky blue grass	*Poa pratensis*	invasive non-native	FAC	None
California blackberry	*Rubus ursinus*	native	FAC	None
Green dock	*Rumex conglomeratus*	non-native	FACW	None

Common Name	Scientific Name	Nativity	USACE Wetland Status	Special Status
Milk thistle	*Silybum marianum*	invasive non-native	UPL	None
Boccone's sand spurry	*Spergularia bocconi*	non-native	FACW	None
South american soliva	*Soliva sessilis*	non-native	FACU	None
Spiny sowthistle	*Sonchus asper*	invasive non-native	FAC	None
Red seeded dandelion	*Taraxacum officinale*	invasive non-native	FACU	None
White clover	*Trifolium repens*	non-native	FACU	None
Spring vetch	*Vicia sativa*	non-native	FACU	None

Key:
OBL: obligate wetland plant; FACW: facultative plant; FAC: facultative plant; FACU: facultative upland plant; UPL: upland plant

Table 2 Avian Species Detected On-site

Common Name	Scientific Name	Protected/Special Status
Canada Goose	*Branta canadensis*	MBTA/FGC/MBPA
Mourning Dove	*Zenaida macroura*	MBTA/FGC/MBPA
Turkey Vulture	*Cathartes aura*	MBTA/FGC/MBPA
Northern Flicker	*Colaptes auratus*	MBTA/FGC/MBPA
Black Phoebe	*Sayornis nigricans*	MBTA/FGC/MBPA
Say's Phoebe	*Sayornis saya*	MBTA/FGC/MBPA
American Crow	*Corvus brachyrhynchos*	MBTA/FGC/MBPA
Common Raven	*Corvus corax*	MBTA/FGC/MBPA
Western Bluebird	*Sialia mexicana*	None; non-native
American Robin	*Turdus migratorius*	MBTA/FGC/MBPA
Audubon's Warbler	*Setophaga coronata auduboni*	MBTA/FGC/MBPA
Audubon’s Warbler	*Setophaga coronata auduboni*	MBTA/FGC/MBPA

Key:
MBTA: federal Migratory Bird Treaty Act
FGC: California Fish and Game Code
MBPA: California Migratory Bird Protection Act

9. Site Visit Photographs

Figure 1: West Side Looking North

Figure 2: West Side Looking Northeast

Figure 3: West Side Looking Northeast, Further East

Figure 4: Midsouth Looking East

Figure 5: Midsouth Looking West

Figure 6: Midsouth Looking Northeast

Figure 7: Midsouth Looking South

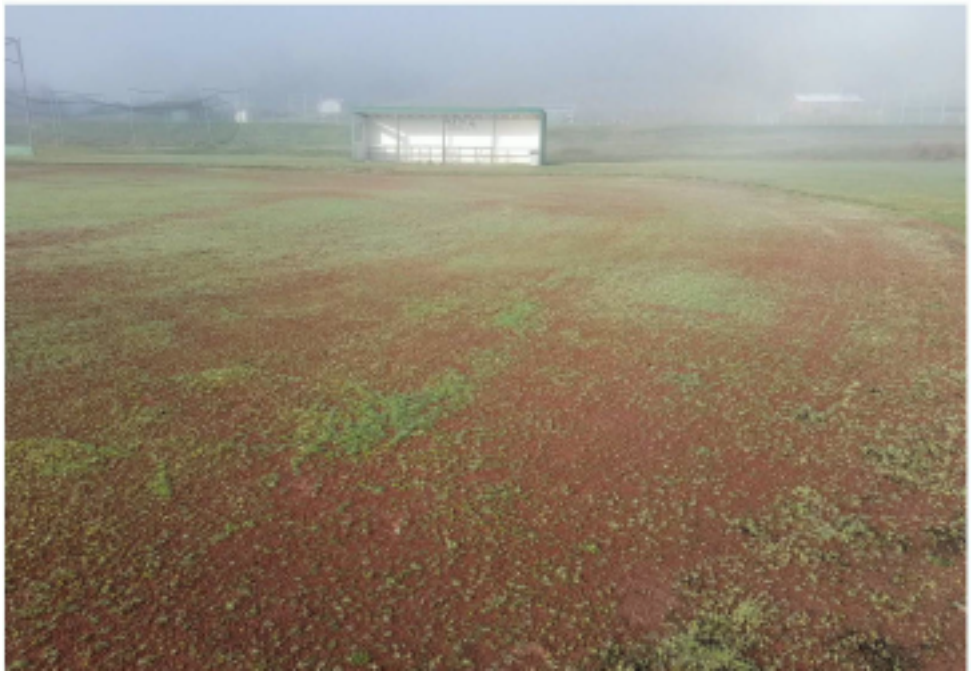


Figure 8: Midnorth Looking West

Figure 9: Midnorth Looking Northwest

Figure 10: Midnorth Looking North

Figure 11: Southwest Looking Northeast

Figure 12: Southwest Looking Southeast

Figure 13: Southwest Looking East

Figure 14: Southwest Looking Northeast

Figure 15: West Looking East

Figure 16: East Looking East

Appendix C Noise Assessment

UKIAH HIGH SCHOOL ATHLETIC FIELD IMPROVEMENT PROJECT

Ukiah, California

May 11, 2021

Prepared for:

Chryss Meier
Environmental Planner
GHD
2200 21st Street
Sacramento, CA 95818

Prepared by:

Steve J. Deines

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429 East Cotati Avenue
Cotati, CA 94931
(707) 794-0400

I&R Job No.: 21-039

INTRODUCTION

The project proposes to improve the recreational value of the upper north athletic field at Ukiah High School (UHS) in Ukiah, California. The existing baseball field located north of the school buildings would be replaced with a synthetic turf soccer field, scoreboard, seating areas, fencing, and ADA-compliant pedestrian walkways. The project would provide for improved emergency access and stormwater drainage improvements, and would replace existing lights with LED lights at the existing track and field stadium. A public address (PA) system would be installed at the new soccer field, with speakers mounted on newly constructed lighting poles. Speakers would be directed towards spectators seated around the field and designed to minimize the amount of sound that would leave the field area. Events currently occurring at the track and field stadium including soccer practice, soccer games, physical education, and band practice would be relocated to the new athletic field. New community events including club and youth soccer would take place at the new athletic field. The highest average attendance anticipated for events proposed to take place at the new field would be 108 attendees for UHS soccer games, adult soccer league games, and club soccer games. No events would be scheduled to end later than 8:00 p.m.

This report evaluates the project's potential to result in significant environmental noise or vibration impacts with respect to applicable California Environmental Quality Act (CEQA) guidelines. The report is divided into two sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise and groundborne vibration, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions; and, 2) the Impacts and Mitigation Measures Section describes the significance criteria and evaluation of each project impact.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (*frequency*) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level (dBA).* This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This *energy-equivalent sound/noise descriptor* is called L_{eq}. The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level* (*CNEL*) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 p.m. - 10:00 p.m.) and a 10 dB addition to nocturnal (10:00 p.m. - 7:00 a.m.) noise levels. The *Day/Night Average Sound Level* (*DNL* or L_{dn}) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA L_{dn}. Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} and nighttime levels are 10 dB lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12 to 17 dB with open windows. With standard construction and closed windows in good condition, the noise attenuation factor is around 20 dB for an older structure and 25 dB for a newer dwelling. Sleep and speech interference is therefore of concern when exterior noise levels are about 57 to 62 dBA L_{dn} with open windows and 65 to 70 dBA L_{dn} if the windows are closed. Levels of 55 to 60 dBA are common along collector streets and secondary arterials, while 65 to 70 dBA is a typical value for a primary/major arterial. Levels of 75 to 80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need to be able to have their windows closed, those facing major roadways and freeways typically need special glass windows.

TABLE 1 Definition of Acoustical Terms Used in this Report

Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sounds are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, DNL or L_{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 p.m. and 7:00 a.m.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 p.m. to 10:00 p.m. and after addition of 10 decibels to sound levels measured in the night between 10:00 p.m. and 7:00 a.m.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime	40 dBA	Theater, large conference room
Quiet suburban nighttime		
	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	
		Broadcast/recording studio
	10 dBA	
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous or frequent intermittent vibration levels produce. The guidelines in Table 3 represent syntheses of vibration criteria for human response and potential damage to buildings resulting from construction vibration.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to cause damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as paint flaking or minimal extension of cracks in building surfaces; minor, including limited surface cracking; or major, that may threaten the structural integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher. The damage criteria presented in Table 3 include several categories for ancient, fragile, and historic structures, the types of structures most at risk to damage. Most buildings are included within the categories ranging from “Historic and some old buildings” to “Modern industrial/commercial buildings”. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020.

Regulatory Background

The State of California and the City of Ukiah have established regulatory criteria that are applicable in this assessment. The State CEQA Guidelines, Appendix G, are used to assess the potential significance of impacts pursuant to local General Plan policies, Municipal Code standards, or the applicable standards of other agencies. A summary of the applicable regulatory criteria is provided below.

State CEQA Guidelines. The CEQA guidelines are used in this analysis to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

(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; or

(c) For a project located within the vicinity of a private airstrip or 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, if the project would expose people residing or working in the project area to excessive noise levels.

The project site is located approximately 2.5 miles northwest of the Ukiah Municipal Airport and lies well outside of the 2015 Busy Day 55 dBA CNEL contour identified in

the Ukiah Municipal Airport Master Plan Report. The project would not expose people residing or working in the project area to excessive noise levels and therefore impact (c) is not carried forward in this analysis.

City of Ukiah General Plan.

The City of Ukiah General Plan sets forth noise performance standards for non-transportation noise sources (General Plan, Table IV.2-9: Noise Level Performance Standards for Projects Affected by or Including Non-transportation Sources). The following policies would be applicable to the project:

NZ-1.2(b): New development of noise-sensitive uses shall not be permitted in areas exposed to existing or projected noise which exceed the levels specified in Table IV.2-4[1] unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to the levels specific in Table IV.2-4.

NZ-2.3(a): New development of noise-sensitive uses shall not be allowed where the noise level from non-transportation noise sources exceeds the noise level standards of Table IV.2-3 as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in the table.

NZ-2.3(b): Noise created by proposed non-transportation noise sources shall be mitigated to a level at or below the standards of Table IV.2-3[2], as measured immediately within the property line. This measure does not apply to noise sources associated with agricultural operations on lands zoned for agricultural use.

Table IV.2-8: Maximum Allowable Noise Exposure Transportation Noise Sources (dB)

Land Use	Outdoor Activity Areas[1] L_{dn}/CNEL	Interior Spaces	
		L_{dn}/CNEL	L_{eq}[2]
Residential	60[3]	45	-
Transient Lodging	60[3]	45	-
Hospitals, Nursing Homes	60[3]	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	60[3]	-	40
Office Buildings	-	-	45
Schools, Libraries	-	-	45
Playgrounds, Neighborhood Parks	70	-	-

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving use.
[2] As determined for a typical worst-case hour during periods of use.

1 Policy implementation measure NZ-1.2(b) incorrectly references Table IV.2-4. Outdoor noise exposure limits are specified in Table IV.2-8.

2 Policy implementation measures NZ-2.3(a) and NZ-2.3(b) incorrectly reference Table IV.2-3. Noise level performance standards for projects affected by or including non-transportation sources are specified in Table IV.2-9.

Table IV.2-9: Noise Level Performance Standards for Projects Affected by or Including Non-transportation Sources (dB)

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}	50	45
Maximum Level	70	65

Each of the noise levels specified above shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noise sources.

City of Ukiah Municipal Code. The City of Ukiah Municipal Code, Division 7, Chapter 1, Article 6 'NOISE REGULATION' establishes policies to prohibit unnecessary, excessive, and annoying noises from all sources subject to its police power. The following policies are applicable to this project:

7.1.6047 Ambient Base Noise Level

Where the ambient noise level is less than designated in this Section the respective noise level in this Section shall govern.

Zone	Ambient Base Noise Level (dBA)		
	10 p.m. to 7 a.m.	7 p.m. to 10 p.m.	7 a.m. to 7 p.m.
R1 & R2	40	45	50
R3	45	50	50
Commercial	60	65	65
Industrial (M)	70	70	70

7.1.6054 Construction of Buildings and Projects

It shall be unlawful for any person within a residential zone, or within a radius of five hundred feet (500') therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist or any other construction type device (between the hours of 7:00 P.M. of one day and 7:00 A.M. of the next day) in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless beforehand a permit therefor has been duly obtained from the Director of Public works.

7.1.6057 Regulations

The commercial and noncommercial use of sound amplifying equipment shall be subject to the following regulations:

A. The only sounds permitted shall be either music or human speech, or both.

B. The operation of sound amplifying equipment for commercial purposes shall only occur between the hours of eight o'clock (8:00) a.m. and six o'clock (6:00) p.m. each day except on Sundays and legal holidays. The operation of sound amplifying equipment for noncommercial purposes shall only occur between the hours of eight o'clock (8:00) a.m. and ten o'clock (10:00) p.m.
C. Sound level emanating from sound amplifying equipment shall not exceed fifteen (15) decibels above the ambient base noise level. Nor shall it be audible at any distance in excess of two hundred feet (200') from the amplifying equipment.
D. Notwithstanding the provisions of subsection C of this section, sound amplifying equipment shall not be operated within two hundred feet (200') of churches, school, and hospitals.
E. In any event, the volume of sound shall be so controlled that it will not be unreasonably loud, raucous, jarring, disturbing or a nuisance to reasonable persons of normal sensitiveness within the area of audibility.

7.1.6058 General Noise Regulations

Notwithstanding any other provisions of this chapter, and in addition thereto, it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary, or unusual noise which disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

Standards which may be considered in determining whether a violation of the provisions of this section exists include, but are not limited to, the following:

A. The level of the noise;
B. The intensity of the noise;
C. Whether the nature of the noise in unusual;
D. Whether the noise stands out against the level and intensity of the background noise, if any;
E. The proximity of the noise to residential sleeping facilities;
F. The nature and zoning of the area within which the noise emanates;
G. The density of the inhabitation of the area within which the noise emanates;
H. Whether the noise occurs at a time of day when most people expect relative quiet;
I. Whether the noise occurred only once for a short period of time or occurs more than once and for longer periods of time, and;

J. Whether the noise in produced by a reasonable commercial activity during normal business hours.

Existing Noise Environment

The UHS campus is located west of Despina Drive and north of Low Gap Road at 1000 Low Gap Road in Ukiah, California. The northern athletic fields are bordered to the north and east by single-family residences, to the west by agricultural or otherwise undeveloped land, and to the south by the school itself.

Illingworth & Rodkin, Inc. performed a noise monitoring survey beginning on Thursday, April 8, 2021 and concluding on Friday, April 16, 2021. This survey consisted of two long-term noise measurements (LT-1 and LT-2) and three attended short-term noise measurements (ST-1, ST-2, and ST-3). The ambient noise environment in the area results primarily from vehicular traffic along Despina Drive and other local roads, and from typical residential activities including yard maintenance and children playing.

Short-term noise measurement ST-1 was conducted on Thursday, April 8, 2021 in two ten-minute intervals starting at 12:20 p.m. and concluding at 12:40 p.m. Measurement ST-1 was located in front of 570 Tokay Lane in the residential community to the north of the site. The ten-minute average noise levels measured at this location were 52 and 50 dBA L_{eq}. Local vehicular traffic along Tokay Lane was the primary noise source at this location. Short-term measurements ST-2 and ST-3 were conducted in ten-minute intervals between 10:10 a.m. and 11:10 a.m. on Friday, April 16, 2021. Measurement ST-2 was located at the southeast corner of Despina Drive and Empire Drive, in front of the residence at 699 Empire Drive. The ten-minute average noise level of the measurement beginning at 10:10 a.m. was 61 dBA L_{eq}, and the ten-minute average noise level of the measurement beginning at 10:20 a.m. was 59 dBA L_{eq}. Vehicular traffic along Despina Drive and Empire Drive was the primary source of noise at this location. Measurement ST-3 was located at the northeastern corner of Incline Drive and Capps Lane, in front of the residence at 1109 Incline Drive. The ten-minute average noise level of the measurement beginning at 10:50 a.m. was 43 dBA L_{eq}, and the ten-minute average noise level of the measurement beginning at 11:00 a.m. was 44 dBA L_{eq}. The primary sources of noise at this location included typical residential activities such as residents speaking to each other and distant landscaping, and distant vehicular traffic along Despina Drive. Short-term measurement data is summarized in Table 4.

Long-term measurements LT-1 and LT-2 measured noise levels between Thursday, April 8, 2021 and Friday, April 16, 2021. Measurement LT-1 was located at the northeastern corner of the athletic fields, near the residences to the north and approximately 50 feet from the centerline of Despina Drive. Measurement LT-2 was located along the northern property line of the school's athletic fields, approximately 140 feet from the centerline of Tokay Lane and 715 feet from the centerline of Despina Drive. These locations were selected to quantify the existing noise environment of the noise-sensitive uses nearest to the project.

During the measurement period, one varsity football game was scheduled for Friday, April 9 at 7:00 p.m., a swimming meet was scheduled for Wednesday, April 14 at 3:30 p.m., and a girls' varsity soccer game was scheduled for Thursday, April 15 at 7:00 p.m. Small peaks above the

typical ambient noise levels were measured during the varsity football game and swimming meet at measurement location LT-1, but otherwise, sports events were not observed to have substantially affected hourly average noise levels at long-term measurement locations. At LT-1, day-night average noise levels ranged from 51 to 58 dBA L_{dn} with daytime hourly average noise levels ranging from 46 to 68 dBA L_{eq} and nighttime hourly average noise levels ranging from 35 to 56 dBA L_{eq}. At measurement location LT-2, day-night average noise levels ranged from 50 to 56 dBA L_{dn}, with daytime hourly average noise levels ranging from 39 to 63 dBA L_{eq} and nighttime hourly average noise levels ranging from 31 to 50 dBA L_{eq}. Results of long-term measurements are summarized in Table 5. Daily trends in noise levels are shown in Appendix Figures A1 through A18.

FIGURE 1 Measurement Locations

Source: Google Earth 2021

TABLE 4 Summary of Short-Term Noise Measurement Data (dBA)

Location, Date, and Time		L_{max}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	L_{eq}
ST-1: 570 Tokay Lane Thursday, 4/8/2021	12:20 – 12:30 p.m.	71	66	52	42	39	52
	12:30 – 12:40 p.m.	68	63	52	43	38	50
ST-2: 699 Empire Drive Friday, 4/16/2021	10:10 – 10:20 a.m.	81	71	62	57	51	61
	10:20 – 10:30 a.m.	71	68	63	56	48	59
ST-3: 1109 Incline Drive Friday, 4/16/2021	10:50 – 11:00 a.m.	58	55	45	40	35	43
	11:00 – 11:10 a.m.	59	55	47	40	37	44

TABLE 5 Summary of Long-Term Noise Measurement Data (dBA)

Location and Date	Hourly-Average Noise Level, L_{eq}		Day-Night Average Noise Level (L_{dn})
	Daytime	Nighttime	
LT-1: Northeast corner of northern athletic fields, ~50ft from centerline of Despina Drive (Thursday, 4/8/2021 through Friday, 4/16/2021)	46 to 68	35 to 56	51 to 58
LT-2: Northern property line of Ukiah High School, ~140ft from centerline of Tokay Lane (Thursday, 4/8/2021 through Friday, 4/16/2021)	39 to 63	31 to 50	50 to 56

NOISE IMPACTS AND MITIGATION MEASURES

This section describes the significance criteria used to evaluate project impacts under CEQA, provides a discussion of each project impact, and presents mitigation measures, where necessary, to provide a compatible project in relation to adjacent land uses.

Significance Criteria

The following criteria were used to evaluate the significance of environmental noise and vibration resulting from the project:

1. **Temporary or Permanent Noise Increases in Excess of Established Standards.** A significant impact would be identified if project construction or operations would result in a substantial temporary or permanent increase in ambient noise levels at sensitive receivers in excess of the local noise standards contained in the Ukiah General Plan or Municipal Code, as follows:

    - Temporary Noise Increase. A significant noise impact would be identified if construction-related noise would temporarily increase ambient noise levels at sensitive receptors. Hourly average noise levels exceeding 60 dBA L_{eq} at the property lines shared with residential land uses, and the ambient by at least 5 dBA L_{eq}, for a period of more than one year would constitute a significant temporary noise increase at adjacent residential land uses.

    - Permanent Noise Increase. A significant impact would be identified if traffic or school activity noise generated by the project would substantially increase noise levels at sensitive receivers in the vicinity. A substantial increase would occur if: a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.

2. **Generation of Excessive Groundborne Vibration.** A significant impact would be identified if the construction of the project would generate excessive vibration levels. Groundborne vibration levels exceeding 0.3 in/sec PPV would be considered excessive as such levels would have the potential to result in cosmetic damage to buildings.

Impact 1: **Temporary or Permanent Noise Increases in Excess of Established Standards.** Project construction, operations, and traffic would not generate noise levels that exceed the applicable noise thresholds or result in a substantial temporary or permanent noise level increase at existing noise-sensitive land uses in the project vicinity. **This is a less-than-significant impact.**

A significant noise impact would occur if construction, traffic, or activities generated by the project would substantially increase noise levels at sensitive receptors in the project vicinity.

Temporary Noise Increases from Project Construction

Section 7.1.6054 of the Ukiah Municipal Code prohibits construction activity between the hours of 7:00 p.m. and 7:00 a.m. of the following day. The project proposes construction between the hours of 8:00 a.m. and 5:00 p.m., within the range of allowable hours. Project construction is anticipated to begin in Spring 2022 and would take about four and a half months to complete. A list detailing the exact equipment to be used by phase was not available as of this writing, however it is expected that a variety of equipment including excavators, backhoes, forklifts, front-end loaders, graders, rollers, and turf installation equipment will be required. Most of the heavy construction equipment would be used during the first two to three months of construction. Approximately 5 to 20 construction workers are anticipated to be on site during any given day. The number of construction-related vehicles accessing the site would vary by day. Construction vehicles would access the site from the existing internal driveway to Low Gap Road. Construction equipment and materials would be staged adjacent to the north field, within the UHS campus.

Construction activities associated with the project would include demolition, grading, utility installation, and hardscape finishing. Typical average and maximum noise levels for different construction equipment at a distance of 50 feet are shown in Table 6. Table 7 shows average construction noise levels by phase. Based on the levels shown in Table 7 for construction of recreations, average noise levels at a distance of 50 feet could range from 77 to 89 dBA L_{eq} during heavy periods of construction with all equipment present at site, or from 71 to 83 dBA L_{eq} during lighter periods when only the minimum require equipment is present at site. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional 5 to 10 dBA noise reduction at distant receptors.

TABLE 6 Construction Equipment 50-foot Noise Emission Levels (dBA)

Equipment Category	$L_{eq}^{1,2,3}$	$L_{max}^{1,2}$	Equipment Category	$L_{eq}^{1,2,3}$	$L_{max}^{1,2}$
Air Hose	93	100	Horizontal Bore Drill	87	88
Air-Operated Post Driver	83	85	Impact Pile Driver	99	105
Asphalt Distributor Truck (Asphalt Sprayer)	-	70	Impact Wrench	68	72
Auger Drill	88	101	Jackhammer	91	95
Backhoe	76	84	Jig Saw	92	95
Bar Bender	66	75	Joint Sealer	-	74
Blasting (Abrasive)	100	103	Man Lift	72	73
Blasting (Explosive)	83	93	Movement Alarm	79	80
Chainsaw	79	83	Mud Recycler	73	74
Chip Spreader	-	77	Nail Gun	70	74
Chipping Gun	95	100	Pavement Scarifier (Milling Machine)	-	84
Circular Saw	73	76	Paving – Asphalt (Paver, Dump Truck)	-	82
Compactor (Plate)	-	75	Paving – Asphalt (Paver, MTV, Dump Truck)	-	83
Compactor (Roller)	82	83	Paving – Concrete (Placer, Slipform Paver)	87	91
Compressor	66	67	Paving – Concrete (Texturing/Curing Machine)	73	74
Concrete Batch Plant	87	90	Paving – Concrete (Triple Roller Tube Paver)	85	88
Concrete Grinder	-	97	Power Unit (Power Pack)	81	82
Concrete Mixer Truck	81	82	Pump	73	74
Concrete Pump Truck	84	88	Reciprocating Saw	64	66
Concrete Saw	85	88	Rivet Buster	100	107
Crane	74	76	Rock Drill	92	95
Directional Drill Rig	68	80	Rumble Strip Grinding	-	87
Drum Mixer	66	71	Sander	65	68
Dump Truck (Cyclical)	82	92	Scraper	-	92
Dump Truck (Passby)	-	73	Shot Crete Pump/Spray	78	87
Excavator	76	87	Street Sweeper	-	81
Flatbed Truck	-	74	Telescopic Handler (Forklift)	-	88
Front End Loader (Cyclical)	72	81	Vacuum Excavator (Vac-Truck)	86	87
Front End Loader (Passby)	-	71	Ventilation Fan	62	63
Generator	67	68	Vibratory Concrete Consolidator	78	80
Grader (Passby)	-	79	Vibratory Pile Driver	99	105
Grinder	68	71	Warning Horn (Air Horn)	94	99
Hammer Drill	72	75	Water Spray Truck	-	72
Hoe Ram	92	99	Welding Machine	71	72

Notes: [1] Measured at 50 feet from the construction equipment, with a “slow” (1 sec.) time constant.

[2] Noise levels apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

[3] Equipment without average (L_{eq}) noise levels are non-stationary and best represented only by maximum instantaneous noise level (L_{max}).

Source: Project 25-49 Data, National Cooperative Highway Research Program, https://apps.trb.org/cmsfeed/trbnetprojectdisplay.asp?projectid=3889, October 2018

TABLE 7 Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

I - All pertinent equipment present at site.
II - Minimum required equipment present at site.

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

The nearest noise-sensitive uses are single-family residences located along Despina Drive, approximately 480 feet east of the center of construction activity. At this distance, construction could be expected to generate noise levels between 51 and 69 dBA L_{eq} depending on the intensity of construction activity taking place. Daytime hourly average noise levels measured at location LT-1 along Despina Drive ranged from 46 to 68 dBA L_{eq}. During quiet daytime hours with low vehicular traffic along Despina Drive, project construction could exceed existing ambient noise levels by up to 23 dBA. Residences located to the north along Tokay Lane would be approximately 600 feet from the center of construction activity. At this distance, construction could be expected to generate noise levels between 49 and 67 dBA L_{eq}. Daytime hourly average noise levels measured at LT-2 located along the site's northern property line which is shared with the residences along Tokay Lane ranged from 39 to 63 dBA L_{eq}. During quiet daytime hours with low vehicular traffic along Tokay Lane and Despina Drive, project construction could exceed existing ambient noise levels by up to 28 dBA L_{eq}.

To reduce construction noise levels emanating from the site and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity, the following construction best practices are recommended:

- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

- Unnecessary idling of internal combustion engines should be strictly prohibited.

- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors. If they must be located near receptors, adequate muffling (with barriers or enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors.

- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.

With implementation of the above best practices and given that construction is proposed only during allowable hours, this is a **less-than-significant** impact.

Permanent Noise Increases from On-Site Operational Noise

Policy Implementation NZ-2.3(b) of the General Plan limits noise created by non-transportation noise sources to a level at or below 50 dBA L_{eq} or 70 dBA L_{max} during daytime hours, as measured at the property line of the noise-generating use. City of Ukiah Municipal Code Section 7.1.6057 regulates the use of sound-amplifying equipment, such as PA systems. This equipment may only be used to produce sounds of music or human speech and public use of sound-amplifying equipment is limited to use during the hours of 8:00 a.m. to 10:00 p.m. Sound levels emanating from equipment are not to exceed 15 dBA above the ambient base noise level, as defined in Municipal Code Section 7.1.6047.

In the past, UHS has exempted itself from the City of Ukiah noise level limits. Currently, activities taking place at the school's athletic fields and track and field stadium generate noise levels which exceed General Plan limits. It is anticipated that UHS will continue to maintain this exemption moving forward, including how it may apply to the results of this project.

With the improvements made to the northern athletic fields, a number of activities would be relocated to the fields from the track and field stadium. These activities include UHS soccer practice, UHS soccer games, UHS physical education, marching band practice, and the Mesa Fundraiser Soccer Tourney. New community events currently not taking place at UHS facilities such as club and youth soccer would occur at the new northern fields. Events currently taking place at the existing northern fields would continue to occur at the new northern fields, with the exception of JV baseball practice which will be moved to the north baseball field. Of all events planned to take place at the new fields, those with the potential to generate the most noise would be marching band practice and UHS soccer games. The highest average attendance expected for any event occurring at the new fields would be 108, anticipated for UHS soccer games, men's and women's adult soccer leagues, and club soccer. Events held at the new fields would end by 8:00 p.m. at the latest. With an hour of time estimated for attendees to leave the site and for all equipment to be removed and secured, use of the new fields would not occur beyond 9:00 p.m. for any planned activities. Additionally, a new PA system would be installed, with speakers mounted on each of the four new lighting poles. High school football games, which typically generate the highest noise levels of school athletic field activities, would continue to occur at the track and field stadium.

Marching Band Practice

Marching band practices currently take place at the track and field stadium located on the eastern side of the UHS campus along Despina Lane. The center of the track and field stadium is located approximately 280 feet from the nearest residential property line to the east. Relocation of marching band practice to the new northern athletic fields would position the practice activities approximately 480 feet from the nearest residential property line to the east. In 2012, Illingworth & Rodkin, Inc. measured marching band practice noise levels at Santa Teresa High School in San José, California.[3] At a distance of approximately 570 feet, the hourly average noise level measured was 61 dBA L_{eq} and the average maximum noise level measured throughout the practice was 74 dBA L_{max}. Applying these measured noise levels to the athletic fields at UHS, current marching band practices result in noise levels of about 67 dBA L_{eq} and 80 dBA L_{max} at the residences nearest the track and field stadium located approximately 280 feet away. Relocating marching band practice to the new northern athletic fields would result in noise levels of about 63 dBA L_{eq} and 76 dBA L_{max} at what would be the nearest residences to the east. While some residences to the north and northeast would experience higher noise from marching band practice, the overall noise exposure at the new nearest affected residences would be about 4 dBA lower than under current conditions. The distance between the center of marching band practice activities to the nearest residences to the north along Tokay Lane would decrease from approximately 1,200 feet to 600 feet, resulting in an increase in marching band practice noise of about 6 dBA over existing conditions, and reaching an hourly average noise level of about 61 dBA L_{eq} and a maximum noise level of about 74 dBA L_{max}.

Marching band practice would occur on a select few days of the week from August through October for one hour per practice. Multiple other existing and proposed uses of the northern athletic fields currently contribute to the noise environment in the vicinity, and therefore the relocation of marching band practice from the track and field stadium to the northern athletic fields would not be an introduction of a new noise-generating use but would provide for an increase in the amount of noise-generating activity currently present. For the average noise increase to be noticeable, relocation of marching band activities would have to result in an overall noise increase of 3 dBA L_{dn} or greater. This corresponds to a doubling of noise-generating activities. Given the relatively short duration of each marching band practice and existing use of the fields for noise-generating school activities such as football practice and physical education classes, relocation of marching band practice is not anticipated to double the existing noise level originating from the northern athletic fields, and therefore would not result in a significant increase in noise at the nearest affected sensitive receptors.

Soccer Games

Noise levels generated by soccer games are generally limited to whistles and some cheering and are typically not as high as those generated by other sports such as football. Based on noise monitoring Illingworth & Rodkin, Inc. has conducted of soccer games at other high schools,[4]

[3] Santa Teresa High School Sports Lighting Project Environmental Noise Assessment, Prepared by Illingworth & Rodkin, Inc., September 12, 2013.

[4] Silver Creek High School Sports Lighting Project Environmental Noise Assessment, Prepared by Illingworth & Rodkin, Inc., September 9, 2013.

whistles and cheering would be anticipated to generate maximum noise levels of about 51 to 56 dBA L_{max} at the nearest residences to the east. Hourly average noise levels are anticipated to reach about 47 dBA L_{eq} at the closest residences to the east, located about 225 feet from the center of the field. Noise levels would be about 1 dBA higher along the eastern UHS property line than at the nearest residential property line. New soccer games would not be expected to generate noise levels exceeding the General Plan limits of 50 dBA L_{eq} or 70 dBA L_{max} at the UHS property line.

PA System

The new public address system would be installed on the new field lighting poles and directed at a downward angle towards spectators at the new northern athletic fields. Speaker placement and specifications would be designed to focus sound to the spectators and minimize sound leaving the field area. The proposed hours of activities at the new northern fields are within the Code's limit of 8:00 a.m. to 10:00 p.m. for public use of sound amplifying equipment. Given that events taking place at the new northern athletic fields would be relatively small in scale and that the speakers' design and placement will minimize sound outside of the field area, the sound level generated by the PA system necessary to broadcast to spectators at the field is not anticipated to result in sound levels exceeding 15 dBA above the ambient base noise level of 45 dBA between the hours of 7:00 p.m. to 10:00 p.m. or 50 dBA between the hours of 7:00 a.m. to 7:00 p.m. at the nearest property line of a noise-sensitive use, and therefore would not result in an exceedance of Municipal Code Section 7.1.6057 C.

JV Baseball Practice

JV baseball practices currently take place at the northern athletic fields but would be relocated to the north baseball field after completion of the project. Judging from the center of the existing infield at the northern athletic fields to the center of the infield at the north baseball field, JV baseball practices would be relocated approximately 580 feet to the northwest. This would place the practices substantially closer to the nearest residences to the north, with the approximate distance from the center of the practice activities to the nearest residences being reduced from 610 feet to 120 feet. Sports practices generate substantially lower noise levels than sports games as the primary noise sources associated with games are spectators and PA systems. Baseball practices would generate noise resulting from occasional elevated speech of coaches and players and from game-related events such as hitting the baseball and catching throws and pitches.

JV baseball practice would only occur from February through May between the hours of 3:30 p.m. and 6:30 p.m. and only on select days of the week. The north baseball field is expected to currently be under regular use by the school and community, and therefore relocation of JV baseball practice would not create a new noise source to the area but instead provide for an increase in frequency of noise-generating activities. For the average noise increase to be noticeable, relocation of JV baseball practice would have to result in an overall noise increase of 3 dBA L_{dn} or greater. This corresponds to a doubling of noise-generating activities. Given the existing use of the fields and other noise-generating activities present in the vicinity, relocation of JV baseball practice to the northern fields could not reasonably result in such an increase.

As described above, the proposed project would primarily shift some existing noise-generating activities to different areas of the UHS campus. With the proposed design of the new northern athletic fields, new activities and use of the PA system at the site are not anticipated to generate significant noise at the nearest noise-sensitive uses. This is a **less-than-significant** impact.

Permanent Noise Increases from Project Traffic

A significant permanent noise increase would occur if traffic generated by the project would substantially increase noise levels at sensitive receptors in the project vicinity. A substantial increase would occur if: a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn}, or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.

No new vehicle traffic is anticipated for activities which are to be relocated from the track and field stadium to the new northern athletic fields. Potential increases in traffic generated by new events have not yet been determined. However, as the existing noise environment in the site vicinity does not exceed 60 dBA L_{dn} based on the measurement survey detailed in the Existing Noise Environment section of this report, a significant increase in permanent traffic noise would only occur if the project resulted in a permanent noise increase of 5 dBA L_{dn}. For this to occur, the new events (club and youth soccer) would have to more than double the existing traffic volume. This is not expected to be a realistic outcome resulting from occasional, seasonal events with average attendance not expected to exceed 108 people. This is a **less-than-significant** impact.

Impact 2: **Generation of Excessive Groundborne Vibration due to Construction.** Construction-related vibration levels would not exceed 0.3 in/sec PPV at the nearest structures. **This is a less-than-significant impact.**

The City of Ukiah General Plan and Municipal Code do not establish a maximum vibration level for construction activities. Table 3 of the Setting section of the report includes peak particle velocity (PPV) levels and their effect on buildings as specified by the California Department of Transportation. A PPV of 0.3 in/sec poses a risk of damage to older residential structures and would serve as a conservative threshold not to be exceeded at the buildings nearest to the project site.

Project construction would involve use of heavy equipment including excavators, graders, and rollers which may generate substantial vibration in the immediate vicinity. Pile driving, which can cause excessive levels of vibration, is not anticipated as a method of construction. The closest structures to the project site are a UHS school building located as close as approximately 50 feet from the limits of construction work, residences to the north located approximately 240 feet from the limits of construction work, and residences to the east located approximately 300 feet from the limits of construction work. Table 8 presents typical vibration levels that could be expected from construction equipment at a reference distance of 25 feet and calculated levels at distances representative of the nearest structures.

TABLE 8 Vibration Source Levels for Construction Equipment (in/sec PPV)

Equipment		Reference Distance 25 feet	UHS Building 50 feet	Residence to North 240 feet	Residence to East 300 feet
Clam shovel drop		0.202	0.094	0.017	0.013
Hydromill (slurry wall)	in soil	0.008	0.004	0.001	0.001
	in rock	0.017	0.008	0.001	0.001
Vibratory Roller		0.210	0.098	0.017	0.014
Hoe Ram		0.089	0.042	0.007	0.006
Large bulldozer		0.089	0.042	0.007	0.006
Caisson drilling		0.089	0.042	0.007	0.006
Loaded trucks		0.076	0.035	0.006	0.005
Jackhammer		0.035	0.016	0.003	0.002
Small bulldozer		0.003	0.001	0.000	0.000

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, October 2018 as modified by Illingworth & Rodkin, Inc., May 2021.

As seen above in Table 8, project construction would not generate excessive vibration at any buildings in the site vicinity and would not result in vibration levels exceeding 0.3 in/sec PPV at any structures. This is a **less-than-significant impact**.

APPENDIX

FIGURE A1 Daily Trend in Noise Levels at Measurement Location LT-1 on Thursday, April 8, 2021

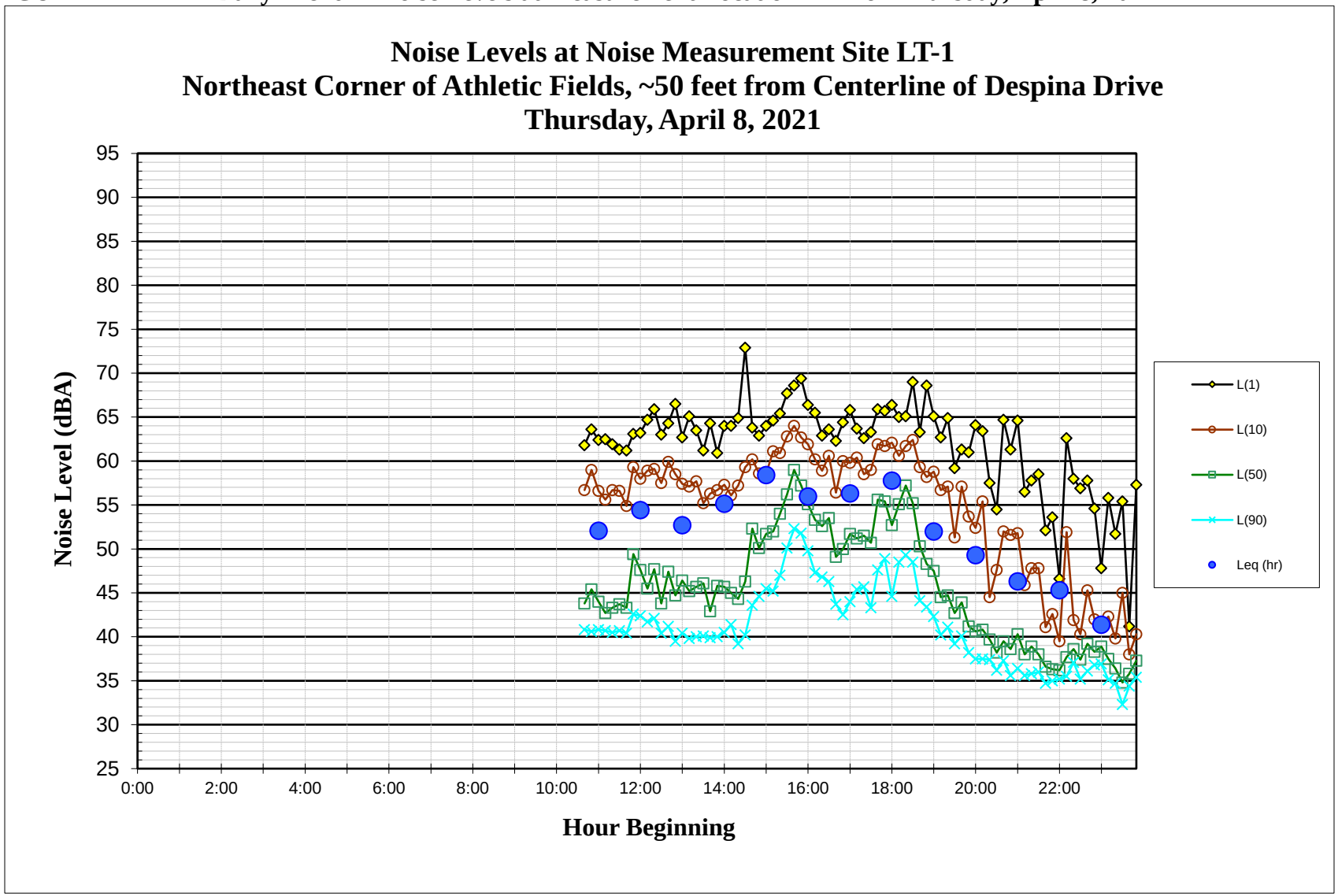

FIGURE A2 Daily Trend in Noise Levels at Measurement Location LT-1 on Friday, April 9, 2021

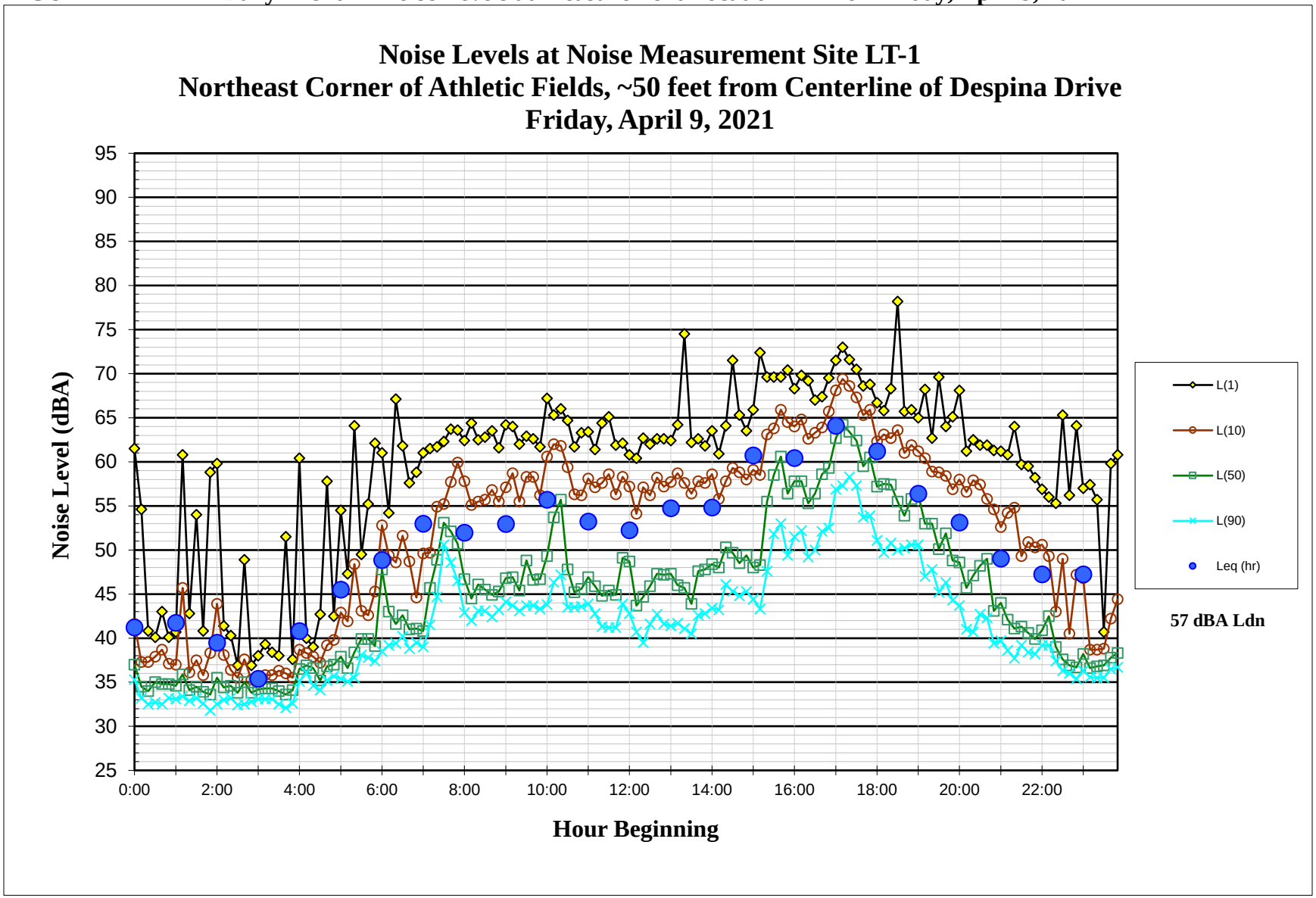

FIGURE A3 Daily Trend in Noise Levels at Measurement Location LT-1 on Saturday, April 10, 2021

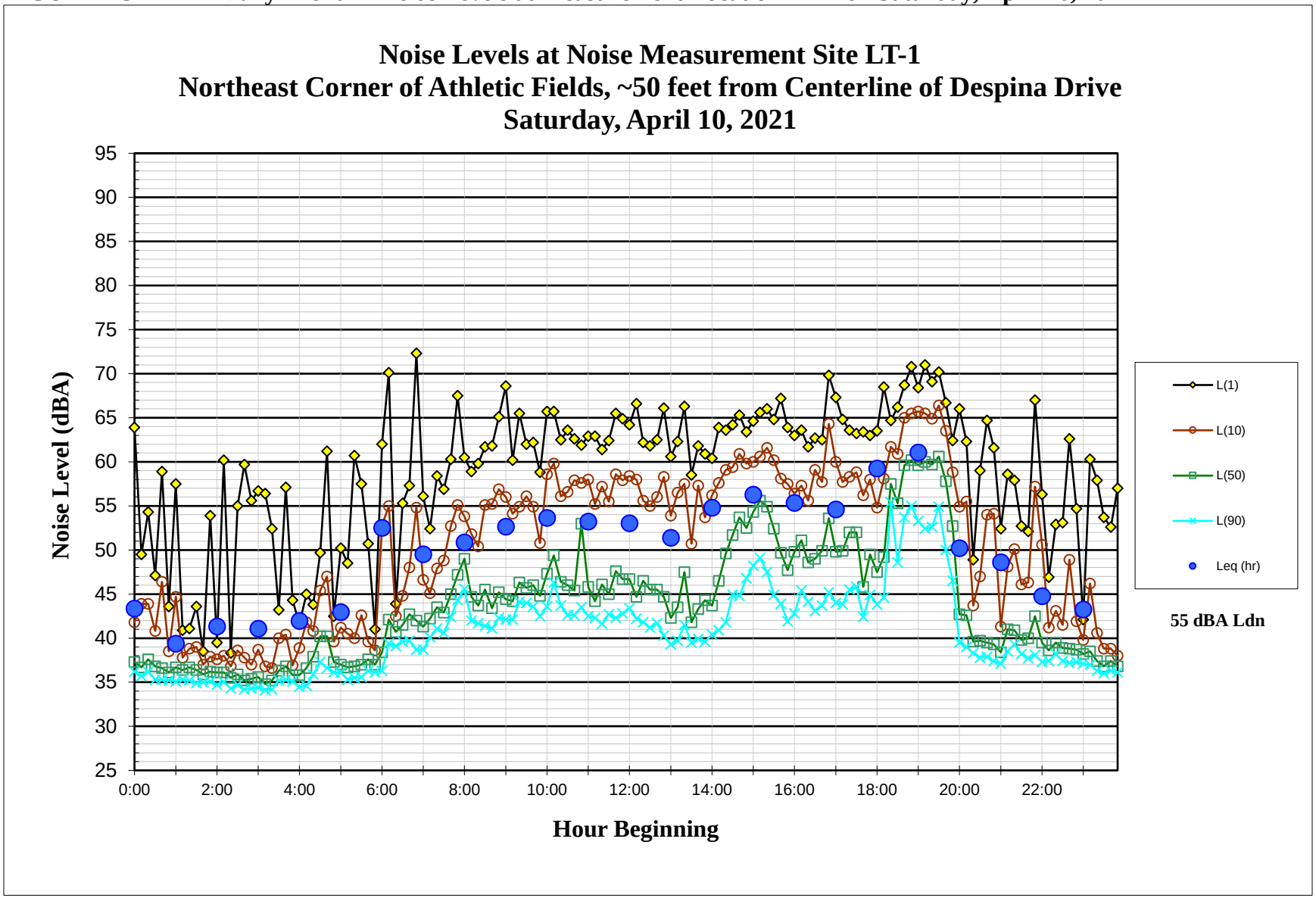

FIGURE A4 Daily Trend in Noise Levels at Measurement Location LT-1 on Sunday, April 11, 2021

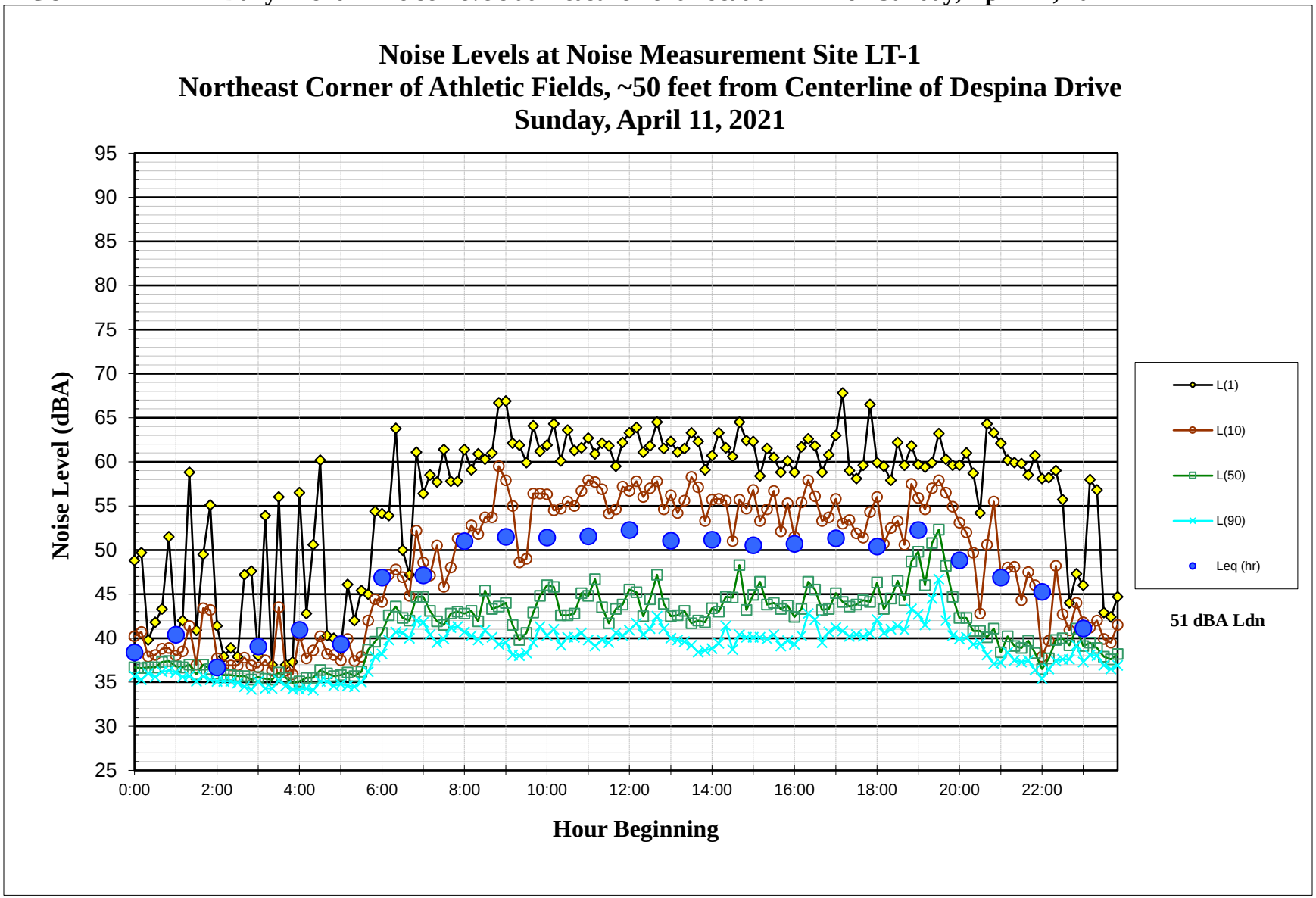

FIGURE A5 Daily Trend in Noise Levels at Measurement Location LT-1 on Monday, April 12, 2021

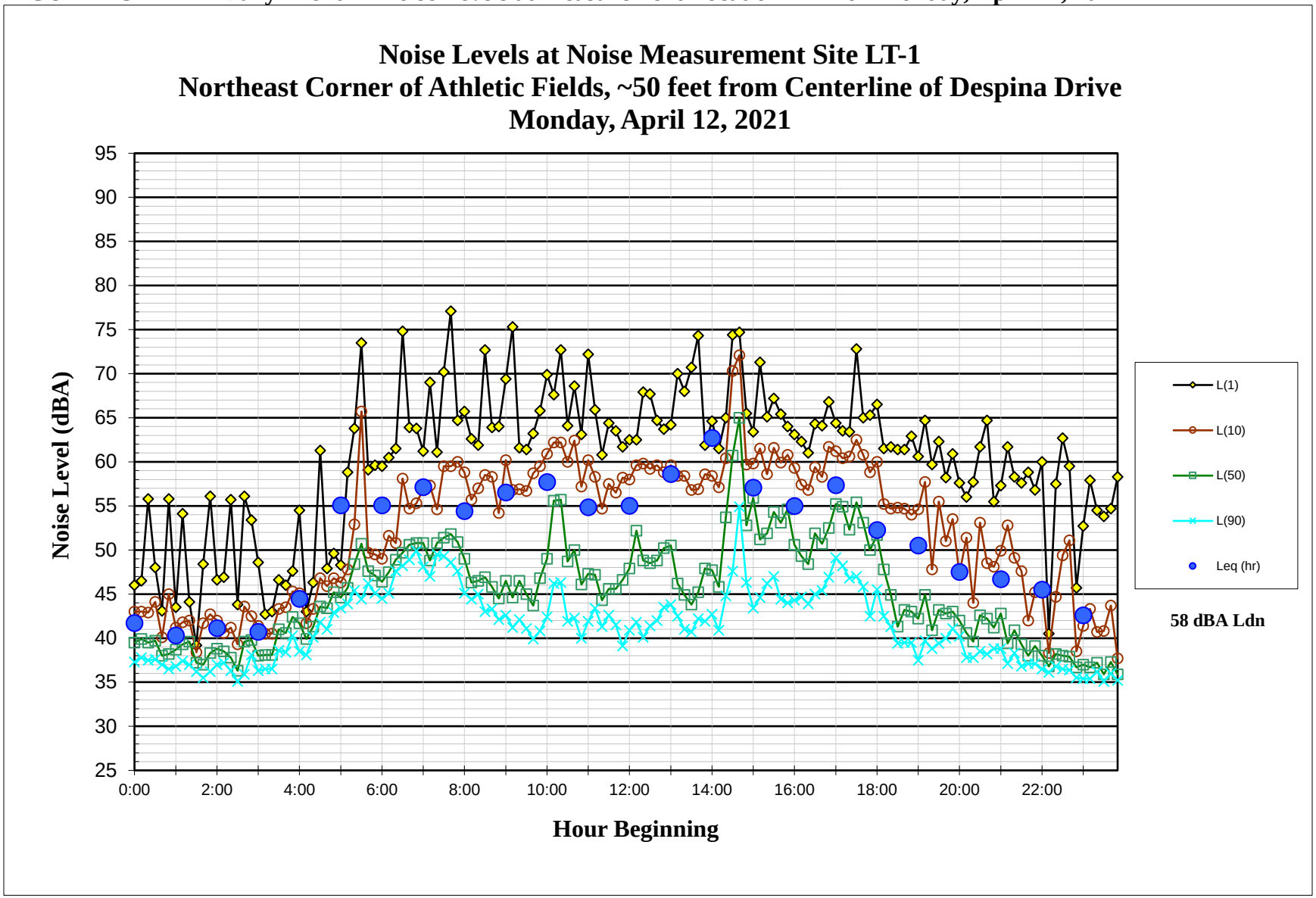

FIGURE A6 Daily Trend in Noise Levels at Measurement Location LT-1 on Tuesday, April 13, 2021

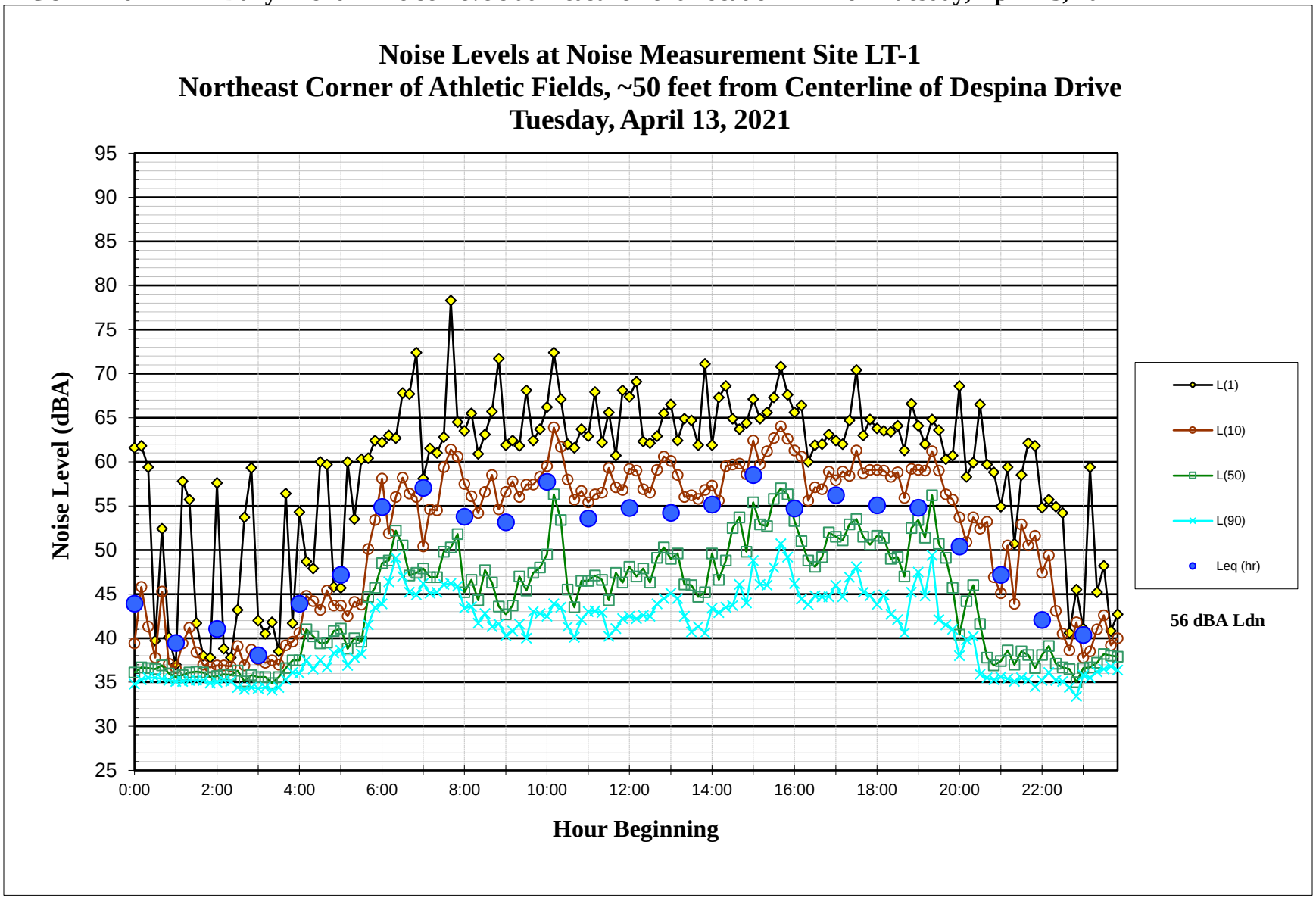

FIGURE A7 Daily Trend in Noise Levels at Measurement Location LT-1 on Wednesday, April 14, 2021

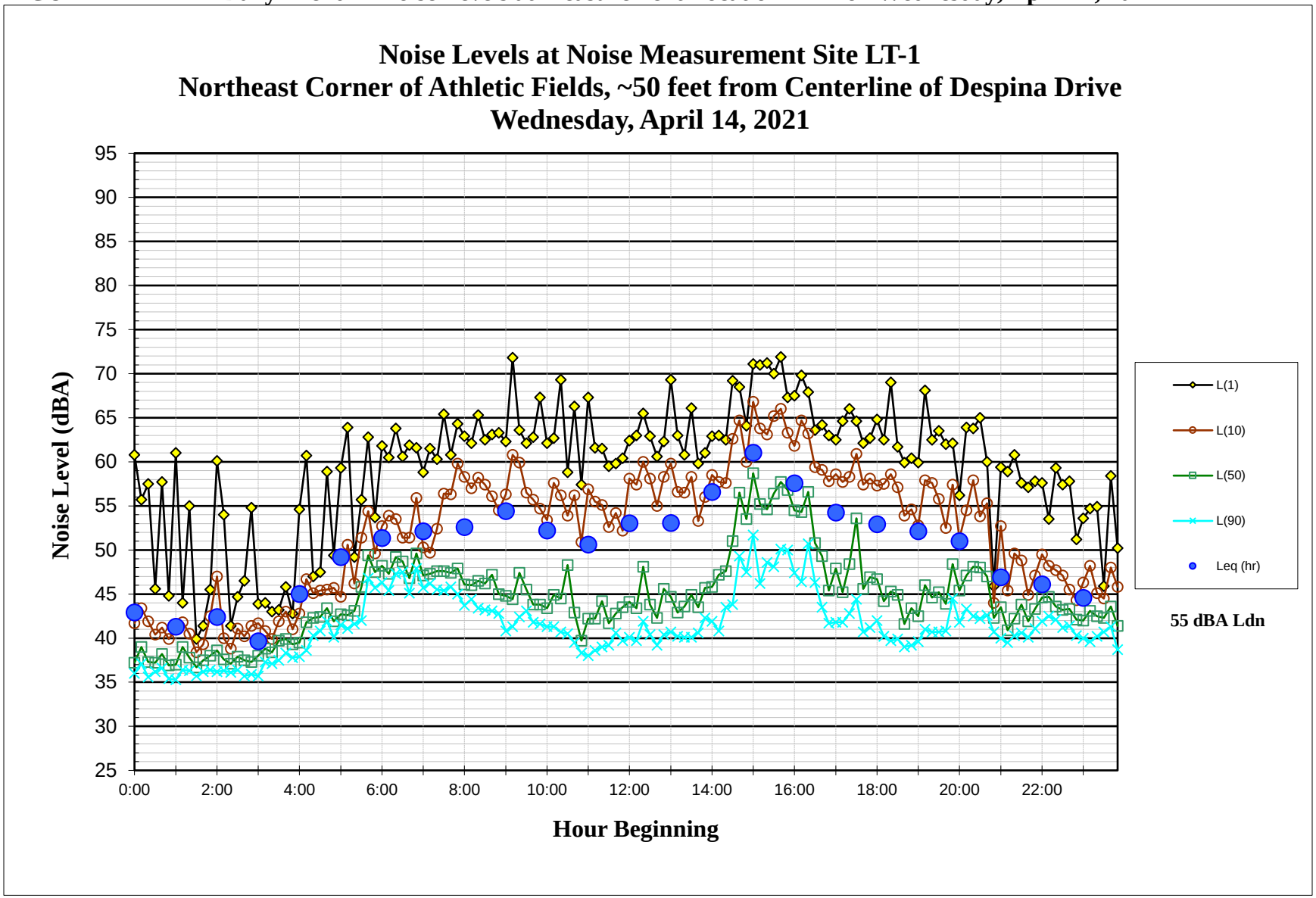

FIGURE A8 **Daily Trend in Noise Levels at Measurement Location LT-1 on Thursday, April 15, 2021**

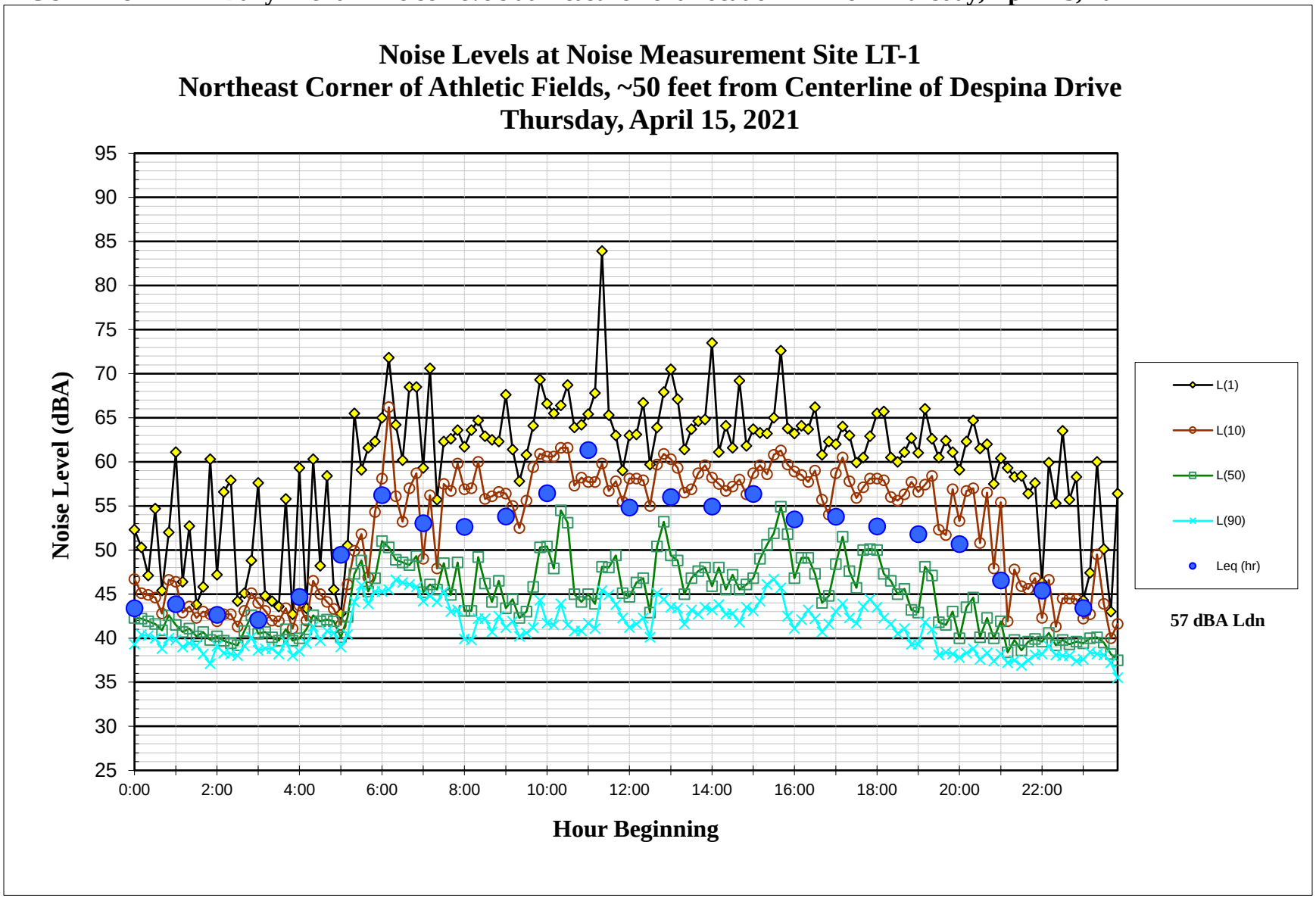

FIGURE A9 Daily Trend in Noise Levels at Measurement Location LT-1 on Friday, April 16, 2021

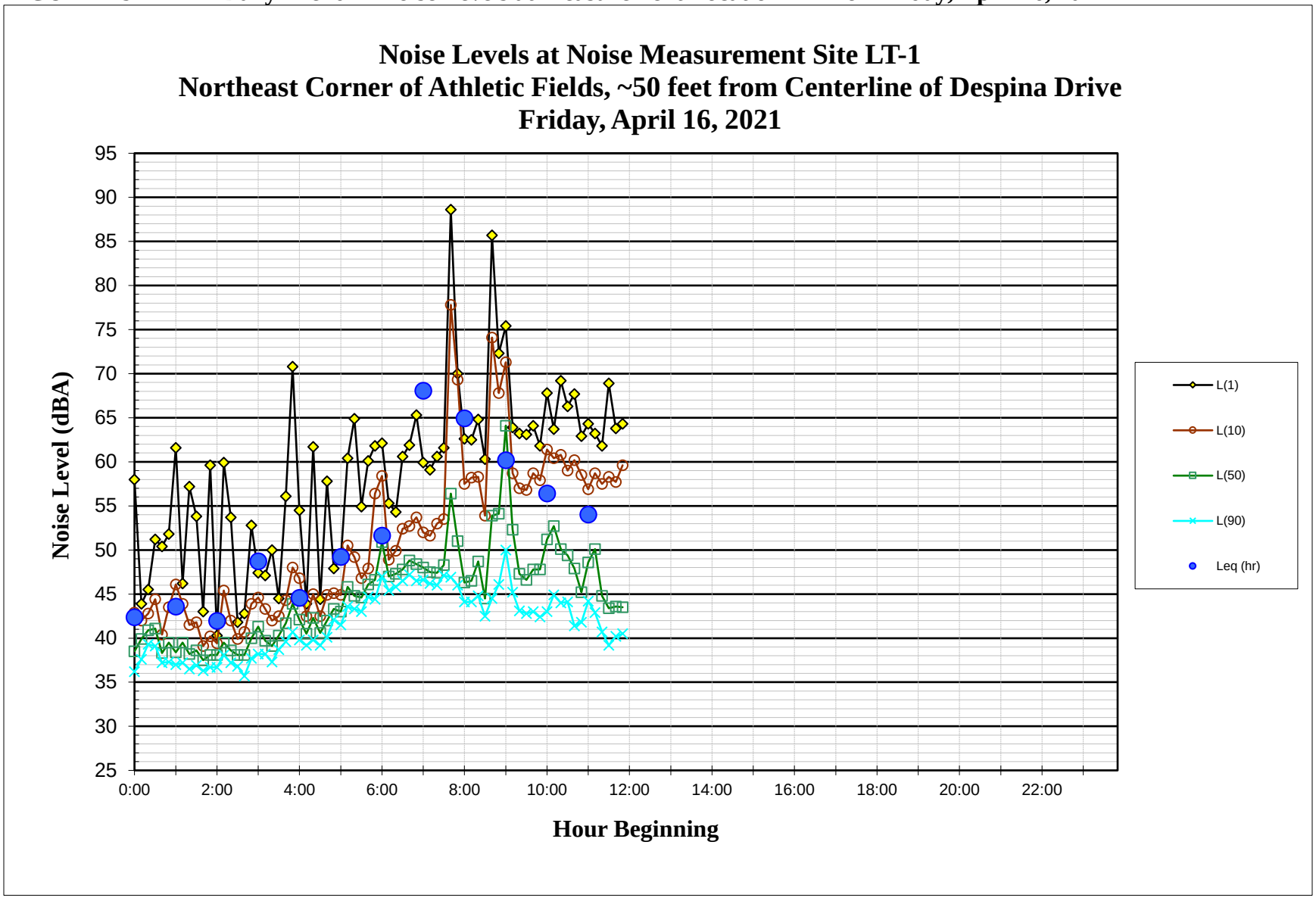

FIGURE A10 Daily Trend in Noise Levels at Measurement Location LT-2 on Thursday, April 8, 2021

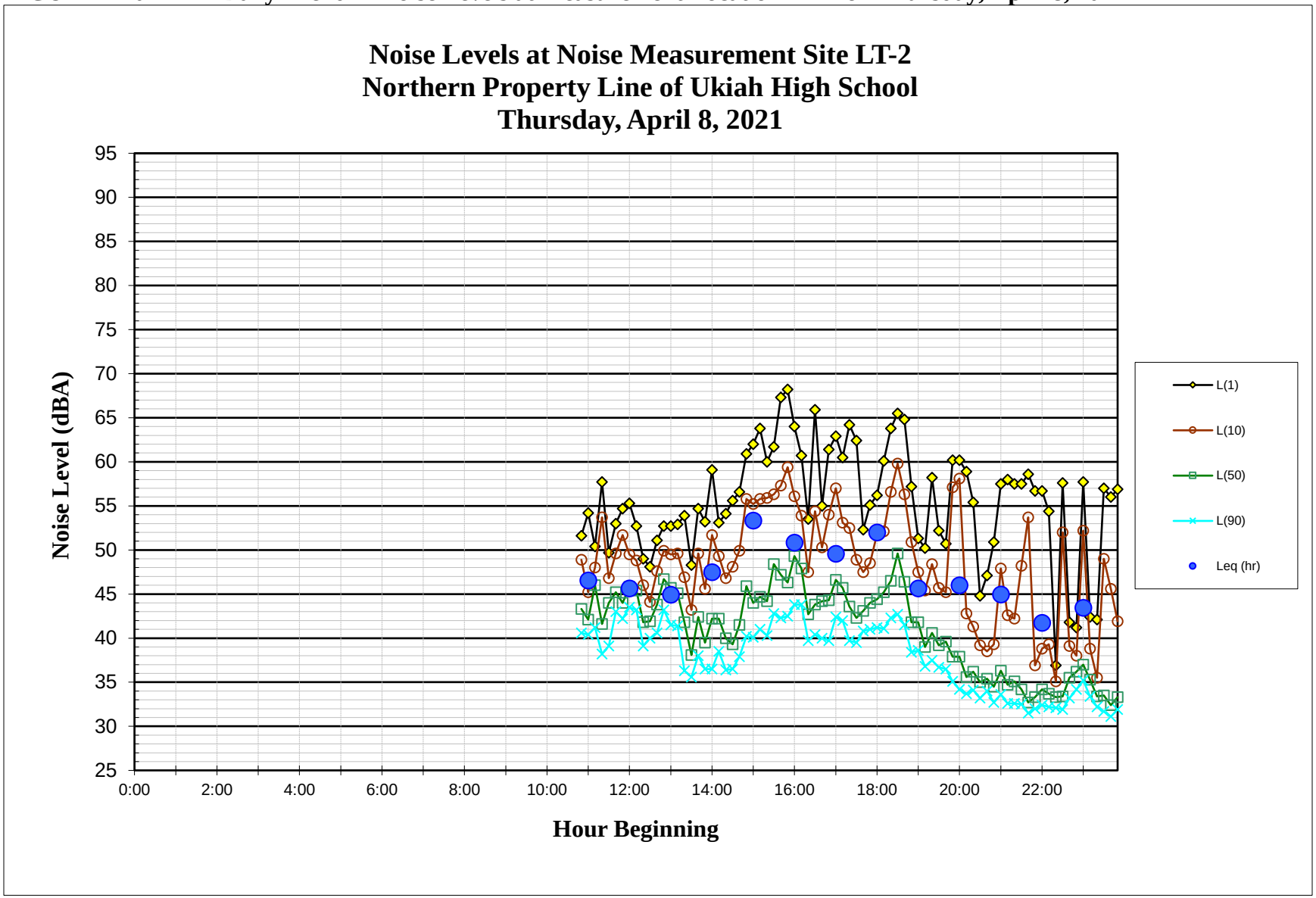

FIGURE A11 Daily Trend in Noise Levels at Measurement Location LT-2 on Friday, April 9, 2021

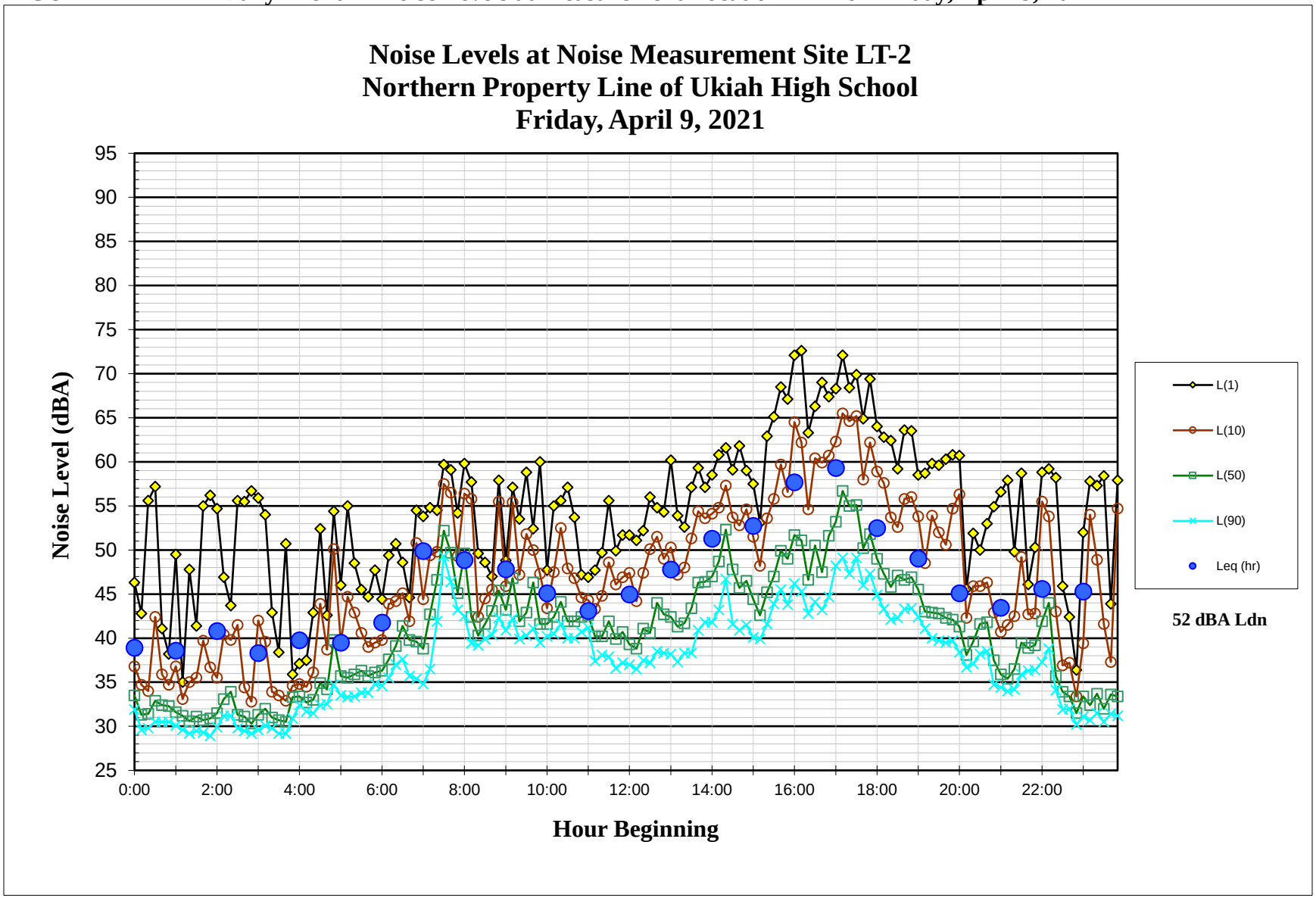

FIGURE A12 Daily Trend in Noise Levels at Measurement Location LT-2 on Saturday, April 10, 2021

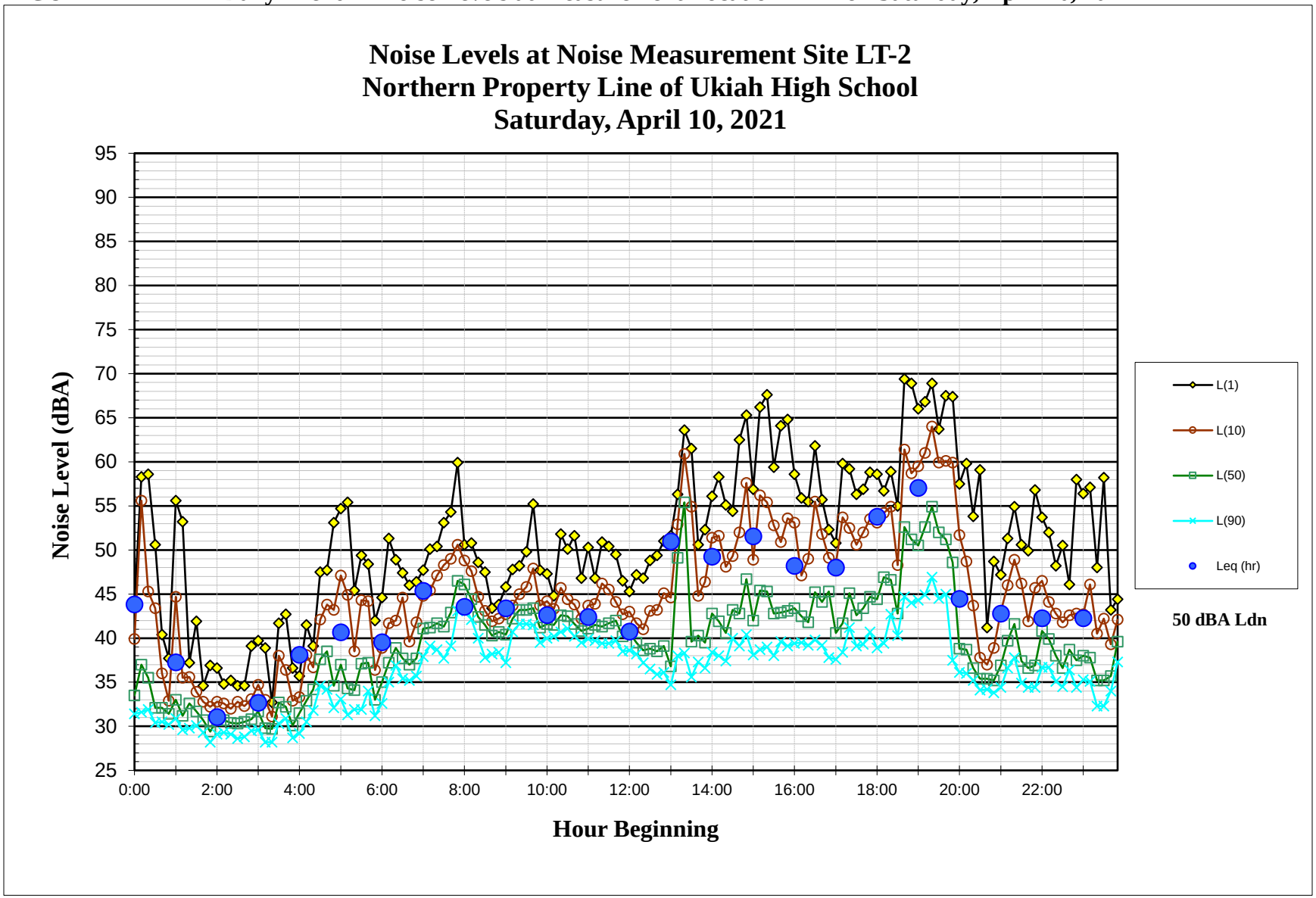

FIGURE A13 Daily Trend in Noise Levels at Measurement Location LT-2 on Sunday, April 11, 2021

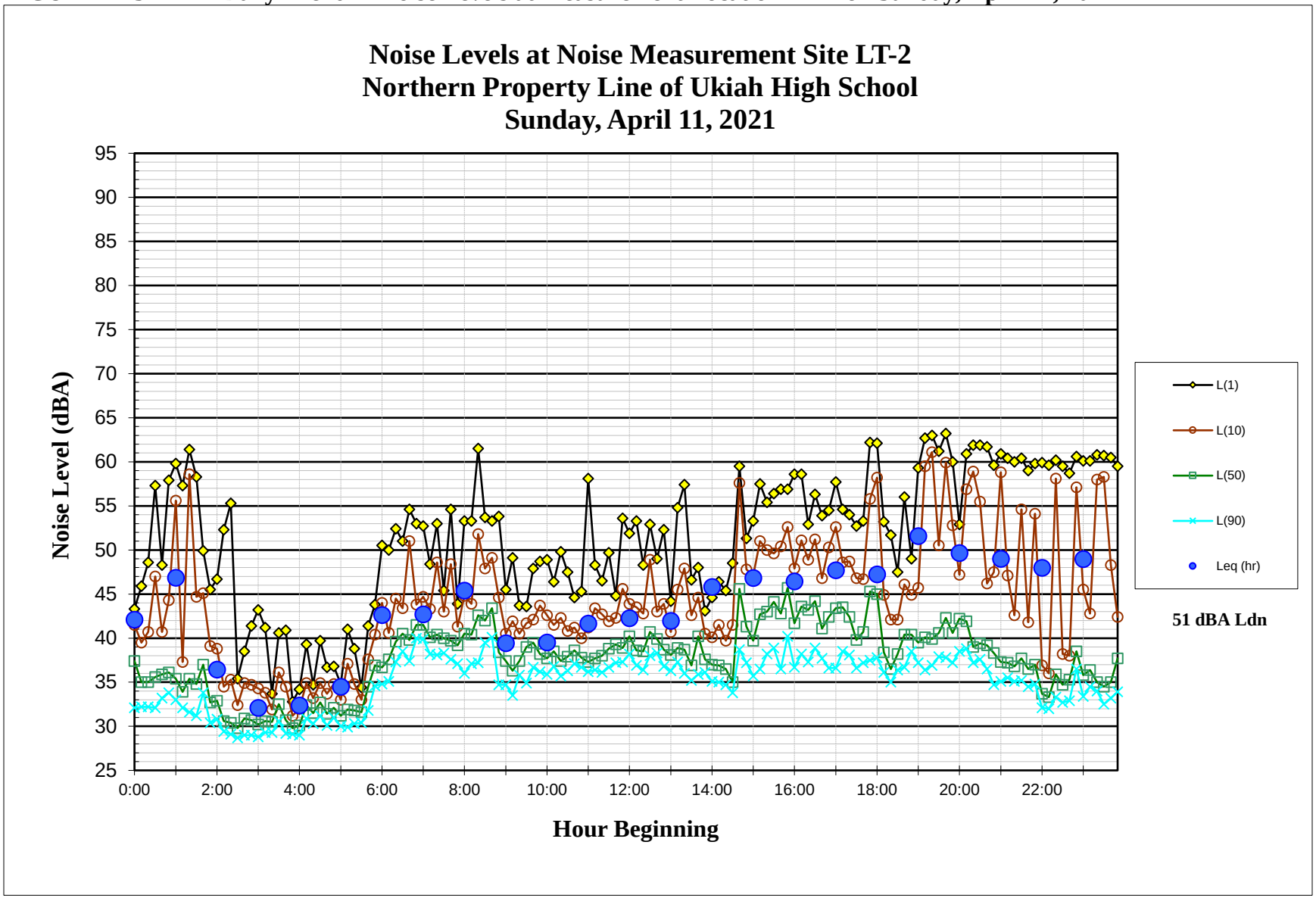

FIGURE A14 Daily Trend in Noise Levels at Measurement Location LT-2 on Monday, April 12, 2021

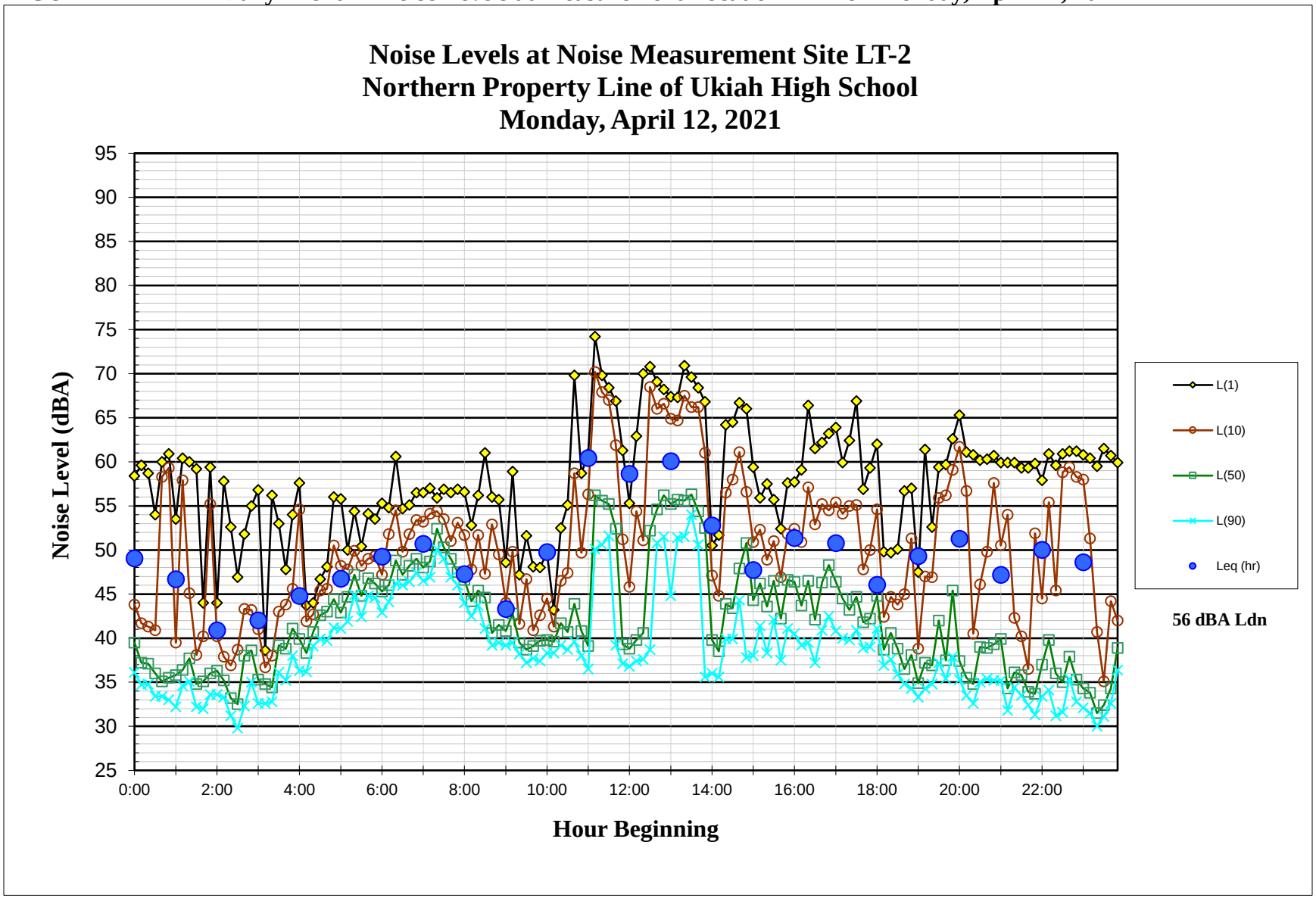

FIGURE A15 Daily Trend in Noise Levels at Measurement Location LT-2 on Tuesday, April 13, 2021

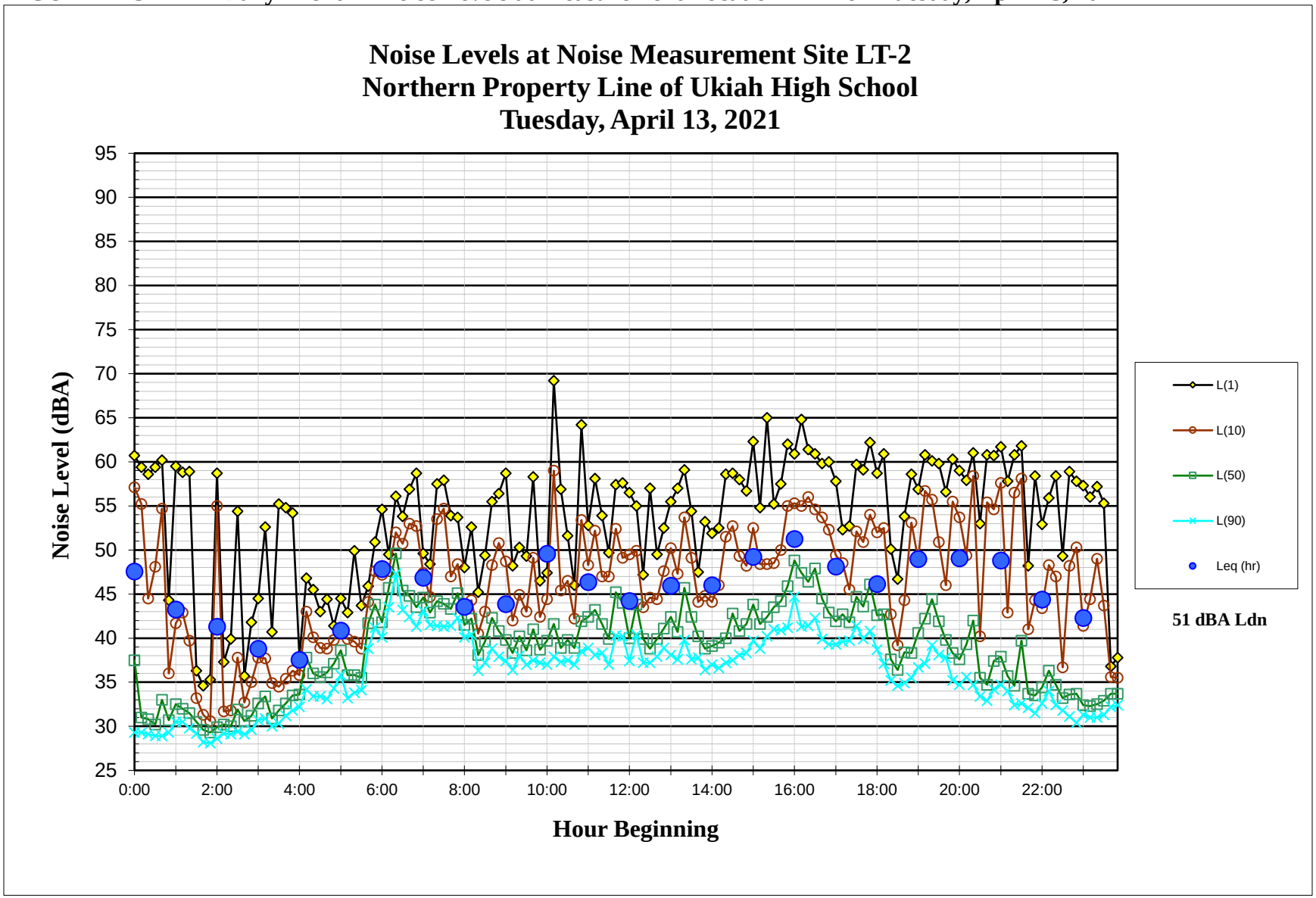

FIGURE A16 Daily Trend in Noise Levels at Measurement Location LT-2 on Wednesday, April 14, 2021

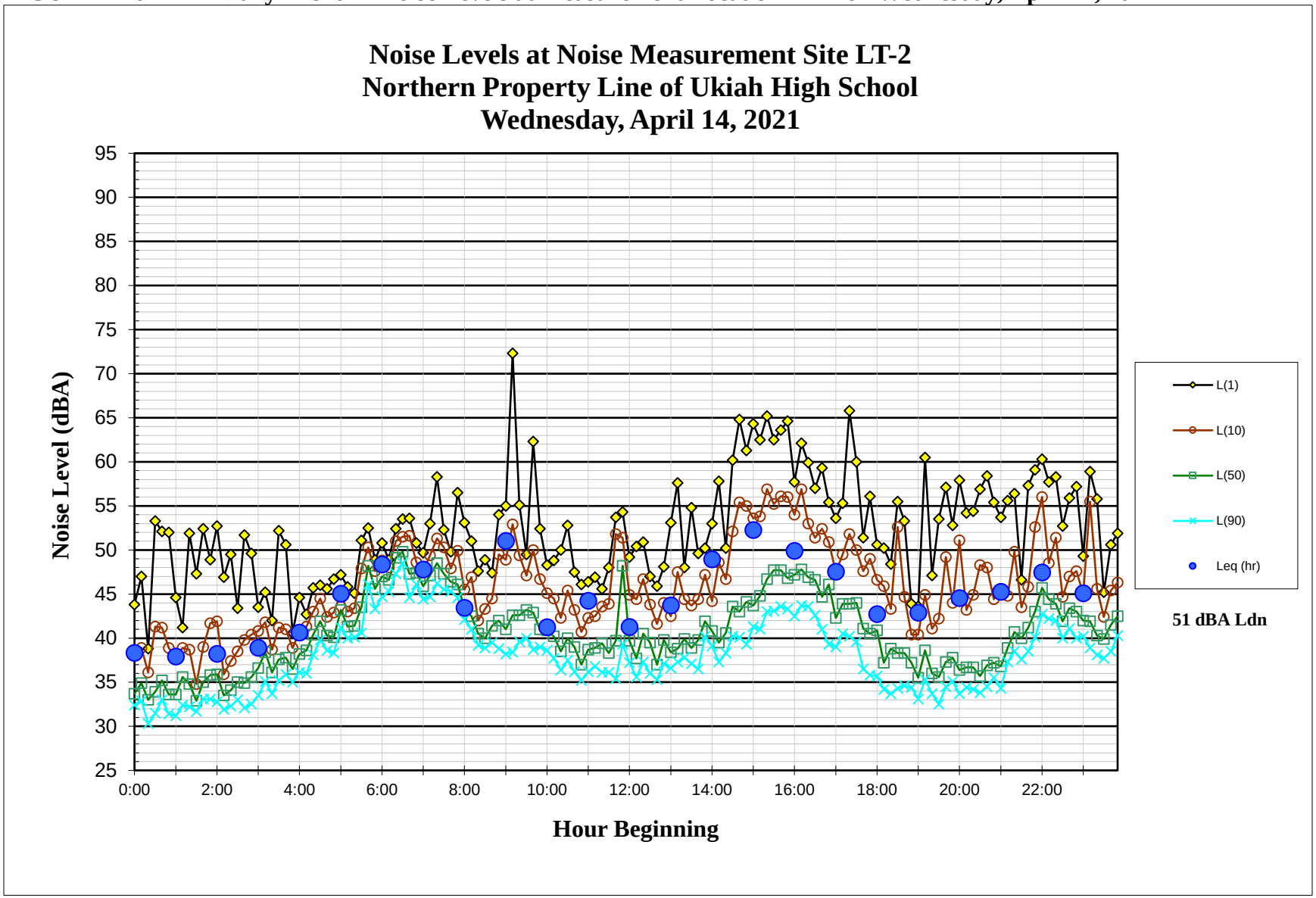

FIGURE A17 Daily Trend in Noise Levels at Measurement Location LT-2 on Thursday, April 15, 2021

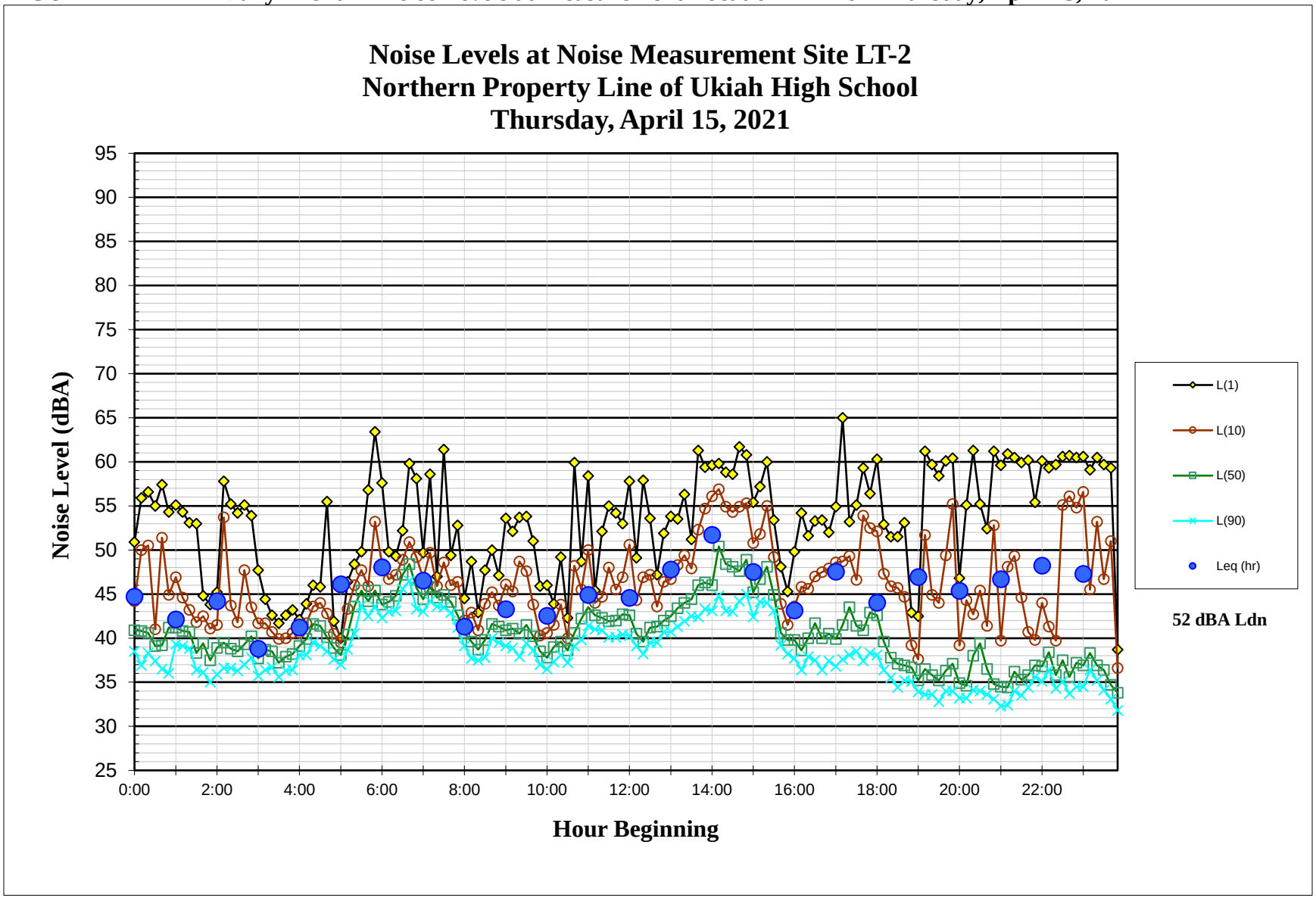

FIGURE A18 Daily Trend in Noise Levels at Measurement Location LT-2 on Friday, April 16, 2021