APPENDICES

January 2026| Initial Study

APPENDIX A – AIR QUALITY, ENERGY, AND GREENHOUSE GAS EMSSIONS IMPACT ANALYSIS

AIR QUALITY, ENERGY, AND GREENHOUSE GAS EMISSIONS IMPACT ANALYSIS

32ND STREET/USC MAGNET SCHOOL MAJOR MODERNIZATION PROJECT

CITY OF LOS ANGELES

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
Air Basin	South Coast Air Basin
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
BSFC	Brake Specific Fuel Consumption
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
Cf_4	tetrafluoromethane
C_2F_6	hexafluoroethane
CH_4	Methane
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
City	City of Los Angeles
DPM	Diesel particulate matter
EPA	Environmental Protection Agency
ºF	Fahrenheit
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse gas
GWP	Global warming potential
HAP	Hazardous Air Pollutants
HFCs	Hydrofluorocarbons
IPCC	International Panel on Climate Change
kWhr	kilowatt-hour
LADWP	Los Angeles Department of Water & Power

LCFS	Low Carbon Fuel Standard
LST	Localized Significant Thresholds
MATES	Multiple Air Toxics Exposure Study
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
MWh	Megawatt-hour
NAAQS	National Ambient Air Quality Standards
NO_x	Nitrogen oxides
NO_2	Nitrogen dioxide
OPR	Office of Planning and Research
Pfc	Perfluorocarbons
PM	Particle matter
PM10	Particles that are less than 10 micrometers in diameter
PM2.5	Particles that are less than 2.5 micrometers in diameter
PPM	Parts per million
PPB	Parts per billion
PPT	Parts per trillion
RTIP	Regional Transportation Improvement Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Governments
SF_6	Sulfur Hexafluoride
SIP	State Implementation Plan
SO_x	Sulfur oxides
TAC	Toxic air contaminants
UNFCCC	United Nations' Framework Convention on Climate Change
VOC	Volatile organic compounds

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Air Quality, Energy, and Greenhouse Gas (GHG) Emissions Impact Analysis has been completed to determine the air quality, energy, and GHG emissions impacts associated with the proposed 32nd Street/USC Magnet School Major Modernization project (proposed project). The following is provided in this report:

- A description of the proposed project;
- A description of the atmospheric setting;
- A description of the criteria pollutants and GHGs;
- A description of the air quality regulatory framework;
- A description of the energy conservation regulatory framework;
- A description of the GHG emissions regulatory framework;
- A description of the air quality, energy, and GHG emissions thresholds including the California Environmental Quality Act (CEQA) significance thresholds;
- An analysis of the conformity of the proposed project with the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP);
- An analysis of the short-term construction related and long-term operational air quality, energy, and GHG emissions impacts; and
- An analysis of the conformity of the proposed project with all applicable energy and GHG emissions reduction plans and policies.

1.2 Site Locations and Study Area

The existing campus (project site) is located at 822 West 32nd Street, which is in the University Park neighborhood in the City of Los Angeles (City). The 3.67-acre project site is bounded 32nd Street and USC dormitory residential uses to the north, a parking lot and the Shrine Auditorium to the east, Jefferson boulevard and the USC campus to the south, and University Avenue (pedestrian walkway), the USC Catholic Center, HIC Daycare, and the USC Jewish Center to the west. The project local study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors are the USC Catholic Center, HIC Daycare and USC Jewish Center that are as near as 65 feet west of the project site. There are also the USC dormitories that are as near as 85 feet north of the project site.

1.3 Proposed Project Description

The proposed project would consist of two phases that include but not limited to:

Phase 1 would consist of temporarily relocating the School to the former Downtown Business Magnet (DBM) campus that is currently vacant and located at 1081 West Temple Street, Los Angeles. Phase 1 may

require the reconfiguration of the demountable partitions. As such, construction-related emissions from Phase 1 would be nominal. In addition, the DBM is located approximately 3.2 miles north of the project site, which would result in only a nominal change in bus routes and worker commutes during the temporary relocation of the School. As such, operations-related emissions from Phase 1 would be nominal. No further analysis of Phase 1 is provided in this Report.

Phase 2 would consist of the demolition of 23 classrooms and restrooms in 13 relocatable buildings and a storage building that total 22,265 square feet of building space and demolition of the paved areas on the southern and eastern areas of the campus that cover approximately 82,000 square feet. Minor modernization of existing administration building, the single-story and two-story classroom buildings, and lunch shelter that total approximately 40,127 square feet and would include accessibility upgrades, utility infrastructure upgrades and exterior painting. New construction of a 3-story classroom building that would total 46,380 square feet. Outside improvements that would include landscape, hardscape and infrastructure upgrades.

Construction is planned to start on July 28, 2026 and would be completed by November 7, 2028. Construction activities will occur between the hours of 7:00 a.m. and 9:00 p.m., per Section 41.40 of the City's Municipal Code. Upon project completion, the Campus would return to the same operations as current conditions. There would be no increase in staff or student enrollment as a result of the proposed project. Implementation of the proposed project would also decrease the demand for repair and maintenance and alleviate the burden placed on school-site administration and custodial staff. The proposed site plan is shown in Figure 2.

1.4 Executive Summary

Standard Air Quality, Energy, and GHG Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the SCAQMD and State of California (State).

South Coast Air Quality Management District Rules

The following lists the SCAQMD rules that are applicable, but not limited to the proposed project.

- Rule 402 Nuisance – Controls the emissions of odors and other air contaminants;
- Rule 403 Fugitive Dust – Controls the emissions of fugitive dust;
- Rules 1108 and 1108.1 Cutback and Emulsified Asphalt – Controls the VOC content in asphalt;
- Rule 1113 Architectural Coatings – Controls the VOC content in paints and solvents;
- Rule 1143 Paint Thinners – Controls the VOC content in paint thinners; and
- Rule 1403 Asbestos Removal – Regulates asbestos emissions from demolition activities.

State of California Rules

The following lists the State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to the proposed project.

- CCR Title 13, Article 4.8, Chapter 9, Section 2449 – In use Off-Road Diesel Vehicles;

- CCR Title 13, Section 2025 – On-Road Diesel Truck Fleets;
- CCR Title 24 Part 6 – California Building Energy Standards; and
- CCR Title 24 Part 11 – California Green Building Standards.

Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines air quality, energy, and GHG emissions checklist questions.

Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact.

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

Less than significant impact.

Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact.

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

Less than significant impact.

Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;

Less than significant impact.

Conflict with or obstruct a state or local plan for renewable energy;

Less than significant impact.

Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant impact.

Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

Less than significant impact.

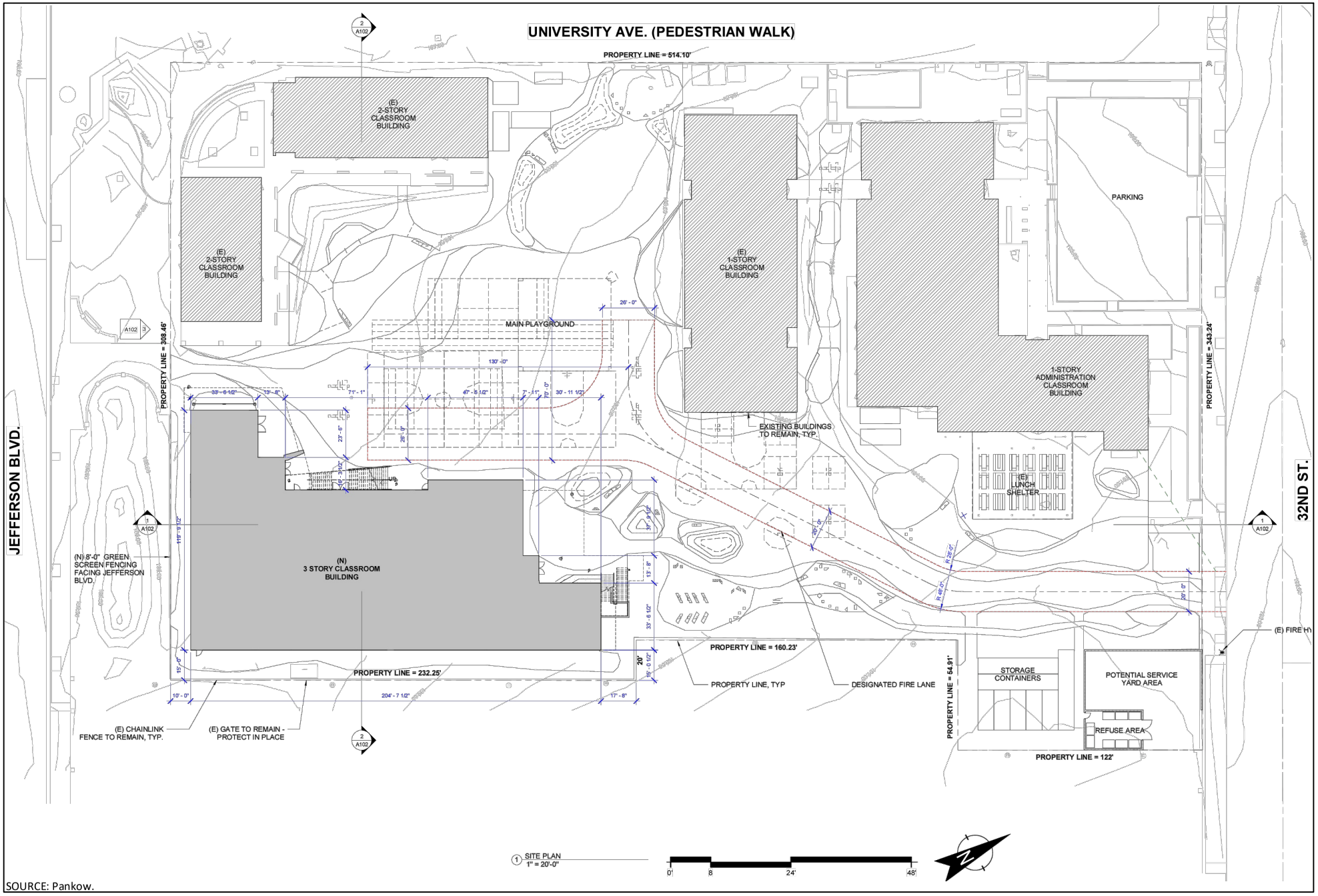
1.5 Mitigation Measures for the Proposed Project

This analysis found that implementation of the State and SCAQMD air quality, energy, and GHG emissions reductions regulations were adequate to limit criteria pollutants, toxic air contaminants, odors, and GHG emissions from the proposed project to less than significant levels. No mitigation measures are required for the proposed project with respect to air quality, energy, and GHG emissions.

SOURCE: Google Maps.

VISTA ENVIRONMENTAL

Figure 1
Project Local Study Area



SOURCE: Pankow.

VISTA ENVIRONMENTAL

Figure 2
Proposed Site Plan

2.0 AIR POLLUTANTS

Air pollutants are generally classified as either criteria pollutants or non-criteria pollutants. Federal ambient air quality standards have been established for criteria pollutants, whereas no ambient standards have been established for non-criteria pollutants. For some criteria pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). A summary of federal and state ambient air quality standards is provided in the Regulatory Framework section.

2.1 Criteria Pollutants and Ozone Precursors

The criteria pollutants consist of: ozone, nitrogen oxides (NOx), CO, sulfur oxides (SOx), lead, and particulate matter (PM). The ozone precursors consist of NO_x and VOC. These pollutants can harm your health and the environment, and cause property damage. The Environmental Protection Agency (EPA) calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria for setting permissible levels. The following provides descriptions of each of the criteria pollutants and ozone precursors.

Nitrogen Oxides

NOx is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NOx are colorless and odorless, concentrations of nitrogen dioxide (NO_2) can often be seen as a reddish-brown layer over many urban areas. NOx form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NO_x are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuel. NOx reacts with other pollutants to form, ground-level ozone, nitrate particles, acid aerosols, as well as NO_2, which cause respiratory problems. NO_x and the pollutants formed from NO_x can be transported over long distances, following the patterns of prevailing winds. Therefore, controlling NOx is often most effective if done from a regional perspective, rather than focusing on the nearest sources.

Ozone

Ozone is not usually emitted directly into the air, instead it is created by a chemical reaction between NOx and VOCs in the presence of sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents as well as natural sources emit NOx and VOC that help form ozone. Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground-level ozone to form with the greatest concentrations usually occurring downwind from urban areas. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Because NOx and VOC are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NOx and VOC emissions.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes approximately 56 percent of all CO emissions nationwide. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves,

gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are indoor sources of CO. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air. CO is described as having only a local influence because it dissipates quickly. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. The health threat from lower levels of CO is most serious for those who suffer from heart disease such as angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Sulfur Oxides

SOx gases are formed when fuel containing sulfur, such as coal and oil is burned, as well as from the refining of gasoline. SOx dissolves easily in water vapor to form acid and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and the environment. Exposure to SO_x gases can cause respiratory symptoms (bronchoconstriction, possible wheezing or shortness of breath) during exercise or physical activity in persons with asthma and cause possible allergic sensitization, airway inflammation, and asthma development.

Lead

Lead is a metal found naturally in the environment as well as manufactured products. The major sources of lead emissions have historically been motor vehicles and industrial sources. Due to the phase out of leaded gasoline, metal processing is now the primary source of lead emissions to the air. High levels of lead in the air are typically only found near lead smelters, waste incinerators, utilities, and lead-acid battery manufacturers. Exposure of fetuses, infants and children to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Particulate Matter

PM is the term for a mixture of solid particles and liquid droplets found in the air. PM is made up of a number of components including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health problems. Particles that are less than 10 micrometers in diameter (PM10) that are also known as *Respirable Particulate Matter* are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. Particles that are less than 2.5 micrometers in diameter (PM2.5) that are also known as *Fine Particulate Matter* have been designated as a subset of PM10 due to their increased negative health impacts and its ability to remain suspended in the air longer and travel further.

Volatile Organic Compounds

Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of ozone are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

VOC is not classified as a criteria pollutant, since VOCs by themselves are not a known source of adverse health effects. The primary health effects of VOCs result from the formation of ozone and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for VOCs as a group.

2.2 Other Pollutants of Concern

Toxic Air Contaminants

In addition to the above-listed criteria pollutants, TACs are another group of pollutants of concern. TACs is a term that is defined under the California Clean Air Act and consists of the same substances that are defined as Hazardous Air Pollutants (HAPs) in the Federal Clean Air Act. There are over 700 hundred different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different toxic air contaminants. The most important of these TACs, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to TACs can result from emissions from normal operations as well as from accidental releases. Health effects of TACs include cancer, birth defects, neurological damage, and death.

TACs are less pervasive in the urban atmosphere than criteria air pollutants, however they are linked to short-term (acute) or long-term (chronic or carcinogenic) adverse human health effects. There are hundreds of different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to *The California Almanac of Emissions and Air Quality 2013 Edition*, the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important of which is diesel particulate matter (DPM). DPM is a subset of PM2.5 because the size of diesel particles are typically 2.5 microns and smaller. The identification of DPM as a TAC in 1998 led the California Air Resources Board (CARB) to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles in October 2000. The plan's goals are a 75-percent reduction in DPM by 2010 and an 85-percent reduction by 2020 from the 2000 baseline. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and over 40 other cancer-causing substances. California's identification of DPM as a TAC was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to DPM is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources.

Asbestos

Asbestos is listed as a TAC by CARB and as a HAP by the EPA. Asbestos occurs naturally in mineral formations and crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma. The nearest likely locations of naturally occurring asbestos, as identified in the *General Location Guide for Ultramafic Rocks in California*, prepared by the California Division of Mines and Geology, is located in Santa Barbara County. The nearest historic asbestos mine to the project site, as identified in the *Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California,* prepared by U.S. Geological Survey, is located at Asbestos Mountain, which is approximately 105 miles east of the project site in the San Jacinto Mountains. Due to the distance to the nearest natural occurrences of asbestos, the project site is not likely to contain asbestos.

In addition to naturally occurring asbestos, asbestos was used extensively in building construction from the early 1940s through the 1970s as highly-effective and inexpensive fire-retardant material and thermal and acoustic insulator. Asbestos is most commonly found as thermal insulation on pipes, but also may be found in certain types of floor and ceiling tiles. There are two types of asbestos: “friable” and "non-friable.” Friable asbestos generally contains more than 1 percent asbestos by weight or area, and can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand, which releases fibers. Non friable asbestos generally contains more than 1 percent asbestos but cannot be pulverized under hand pressure and generally does not release asbestos fibers. The analysis of asbestos from demolition of the existing structure is provided below in Section 10.4.

Formaldehyde from Composite Wood Products

Many composite wood products used in building materials and furnishings commonly found in offices, warehouses, residences, and hotels contain formaldehyde-based glues which off-gas formaldehyde after installation. Formaldehyde is listed as a TAC by CARB and as a HAP by the EPA. The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims. All new building products sold in California are required to meet both California Phase 2 formaldehyde compliant standards and the U.S. EPA TSCA Title VI formaldehyde regulations. In addition, Title 24 regulation require all new structures built in California to install forced air HVAC systems that are equipped with high efficiency MERV 13 air filters that will reduce the formaldehyde concentrations by an additional 15 to 52 percent over traditional air filters. For these reasons, the students and employees are not anticipated to be negatively impacted by formaldehyde from composite wood products.

3.0 GREENHOUSE GASES

3.1 Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric GHGs, play a critical role in the Earth's radiation amount by trapping infrared radiation from the Earth's surface, which otherwise would have escaped to space. Prominent GHGs contributing to this process include carbon dioxide (CO_2), methane, ozone, water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these GHGs in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Emissions of CO_2 and N_2O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. The following provides a description of each of the GHGs and their global warming potential.

Water Vapor

Water vapor is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to "hold" more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there is also dynamics that put the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the Earth's surface and heat it up).

Carbon Dioxide

The natural production and absorption of CO_2 is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid 1700s, each of these activities has increased in scale and distribution. CO_2 was the first GHG demonstrated to be increasing in atmospheric concentration with the first conclusive measurements being made in the last half of the 20th century. Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm). The International Panel on Climate Change (IPCC) indicates that concentrations were 379 ppm in 2005, an increase of more than 30 percent. Left unchecked, the IPCC projects that concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. This could result in an average global temperature rise of at least two degrees Celsius or 3.6 degrees Fahrenheit.

Methane

Methane is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO_2. Its lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO_2, N_2O, and CFCs). CH_4 has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide

Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N_2O is also commonly used as an aerosol spray propellant (i.e., in whipped cream bottles, in potato chip bags to keep chips fresh, and in rocket engines and race cars).

Chlorofluorocarbons

CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons

Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). Concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride

Sulfur Hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 has the highest global warming potential of any gas evaluated; 23,900 times that of CO_2. Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Aerosols

Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. Sulfate aerosols are emitted when fuel containing sulfur is burned. Black carbon (or soot) is emitted during biomass burning due to the incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

3.2 Global Warming Potential

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to CO_2. The GHGs listed by the IPCC and the CEQA Guidelines are discussed in this section in order of abundance in the atmosphere. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic (human-made) sources. To simplify reporting and analysis, GHGs are commonly defined in terms of their GWP. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO_2 equivalent (CO_2e). As such, the GWP of CO_2 is equal to 1. The GWP values used in this analysis are based on the 2007 IPCC Fourth Assessment Report, which are used in the CalEEMod Model Version 2022.1 and are detailed in Table A. The IPCC has updated the GWP of some gases in their Sixth Assessment Report, however the new values have not yet been incorporated into the CalEEMod model that has been utilized in this analysis.

Table A – Global Warming Potentials, Atmospheric Lifetimes and Abundances of GHGs

Gas	Atmospheric Lifetime (years)[1]	Global Warming Potential (100 Year Horizon)[2]	Atmospheric Abundance
Carbon Dioxide (CO_2)	50-200	1	379 ppm
Methane (CH_4)	9-15	25	1,774 ppb
Nitrous Oxide (N_2O)	114	298	319 ppb
HFC-23	270	14,800	18 ppt
HFC-134a	14	1,430	35 ppt
HFC-152a	1.4	124	3.9 ppt
PFC: Tetrafluoromethane (CF_4)	50,000	7,390	74 ppt
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200	2.9 ppt
Sulfur Hexafluoride (SF_6)	3,200	22,800	5.6 ppt

[1] Defined as the half-life of the gas.

[2] Compared to the same quantity of CO_2 emissions and is based on the Intergovernmental Panel On Climate Change (IPCC) 2007 standard, which is utilized in CalEEMod (Version 2022.1),that is used in this report (CalEEMod user guide: Appendix A).

Definitions: ppm = parts per million; ppb = parts per billion; ppt = parts per trillion

Source: IPCC 2007, EPA 2015

3.3 Greenhouse Gas Emissions Inventory

According to the Carbon Dioxide Information Analysis Center[1], 9,855 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) emissions were created globally in the year 2014. According to the EPA, the breakdown of global GHG emissions by sector consists of: 25 percent from electricity and heat production; 21 percent from industry; 24 percent from agriculture, forestry and other land use activities; 14 percent from transportation; 6 percent from building energy use; and 10 percent from all other sources of energy use[2].

According to *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2022,* prepared by EPA, April 2024, total U.S. GHG emissions in 2022 were 6,343.2 million metric tons (MMT) of CO_2e emissions. Total U.S. emissions have decreased by 3.0 percent between 1990 and 2022, which is down from a high of 15.2 percent above 1990 levels in 2007. Emissions increased from 2021 to 2022 by 0.2 percent. The increase in total GHG emissions was driven largely in an increase in CO_2 emissions from fossil fuel combustion.

According to *California Greenhouse Gas Emissions for 2000 to 2022 Trends of Emissions and Other Indicators*, prepared by the CARB, September 20, 2024, the State of California created 371.1 $MMTCO_2e$ in 2022. The 2022 emissions were 9.3 $MMTCO_2e$ lower than in 2021. The 2022 emissions data shows the State is continuing its established long-term trend of GHG emissions declines, despite the anomalous emissions trends from 2019 through 2021, due in large part to the impacts of the COVID-19 pandemic. The transportation sector showed the largest decrease in emissions of 5.2 $MMTCO_2e$ compared to 2021.

1 Obtained from: https://cdiac.ess-dive.lbl.gov/trends/emis/tre_glob_2014.html
2 Obtained from: https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data

4.0 AIR QUALITY MANAGEMENT

The air quality at the project site is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality are discussed below.

4.1 Federal – United States Environmental Protection Agency

The Clean Air Act, first passed in 1963 with major amendments in 1970, 1977 and 1990, is the overarching legislation covering regulation of air pollution in the United States. The Clean Air Act has established the mandate for requiring regulation of both mobile and stationary sources of air pollution at the state and federal level. The EPA was created in 1970 in order to consolidate research, monitoring, standard-setting and enforcement authority into a single agency.

The EPA is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. NAAQS pollutants were identified using medical evidence and are shown below in Table B.

Table B – State and Federal Criteria Pollutant Standards

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
Ozone (O_3)	0.09 ppm / 1-hour 0.07 ppm / 8-hour	0.070 ppm, / 8-hour	a) Pulmonary function decrements and localized lung injury in humans and animals; (b) asthma exacerbation; (c) chronic obstructive pulmonary disease (COPD) exacerbation; (d) respiratory infection; (e) increased school absences, and hospital admissions and emergency department (ED) visits for combined respiratory diseases; (e) increased mortality; (f) possible metabolic effects. Vegetation damage; property damage
Carbon Monoxide (CO)	20.0 ppm / 1-hour 9.0 ppm / 8-hour	35.0 ppm / 1-hour 9.0 ppm / 8-hour	Visibility reduction (a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) possible impairment of central nervous system functions; (d) possible increased risk to fetuses; (f) possible increased risk of pulmonary disease; (g) possible emergency department visits for respiratory diseases overall and visits for asthma.
Nitrogen Dioxide (NO_2)	0.18 ppm / 1-hour 0.030 ppm / annual	100 ppb / 1-hour 0.053 ppm / annual	Short-term (a) asthma exacerbations (“asthma attacks”) Long-term (a) asthma development; (b) higher risk of all-cause, cardiovascular, and respiratory mortality. Both short and long term NO2 exposure is also associated with chronic obstructive pulmonary disease (COPD) risk. Potential impacts on cardiovascular health, mortality and cancer, aggravate chronic respiratory disease. Contribution to atmospheric discoloration

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
Sulfur Dioxide (SO_2)	0.25 ppm / 1-hour 0.04 ppm / 24-hour	75 ppb / 1-hour	Respiratory symptoms (bronchoconstriction, possible wheezing or shortness of breath) during exercise or physical activity in persons with asthma. Possible allergic sensitization, airway inflammation, asthma development.
Respirable Particulate Matter (PM_{10})	50 µg/m^3 / 24-hour 20 µg/m^3 / annual	150 µg/m^3 / 24-hour	Short -term (a) increase in mortality rates; (b) increase in respiratory infections; (c) increase in number and severity of asthma attacks; (d) COPD exacerbation; (e) increase in combined respiratory-diseases and number of hospital admissions; (f) increased mortality due to cardiovascular or respiratory diseases; (g) increase in hospital admissions for acute respiratory conditions; (h) increase in school absences; (i) increase in lost work days; (j) decrease in respiratory function in children; (k) increase medication use in children and adults with asthma. Long-term (a) reduced lung function growth in children; (b) changes in lung development; (c) development of asthma in children; (d) increased risk of cardiovascular diseases; (e) increased total mortality from lung cancer; (f) increased risk of premature death. Possible link to metabolic, nervous system, and reproductive and developmental effects for short-term and long-term exposure to PM2.5.
Suspended Particulate Matter ($PM_{2.5}$)	12 µg/m^3 / annual	35 µg/m^3 / 24-hour 12 µg/m^3 / annual	
Sulfates	25 µg/m^3 / 24-hour	No Federal Standards	(a) Decrease in lung function; (b) aggravation of asthmatic symptoms; (c) vegetation damage; (d) Degradation of visibility; (e) property damage
Lead	1.5 µg/m^3 / 30-day	0.15 µg/m^3 /3-month rolling	(a) Learning disabilities; (b) impairment of blood formation and nerve function; (c) cardiovascular effects, including coronary heart disease and hypertension Possible male reproductive system effects
Hydrogen Sulfide	0.03 ppm / 1-hour	No Federal Standards	Exposure to lower ambient concentrations above the standard may result in objectionable odor and may be accompanied by symptoms such as headaches, nausea, dizziness, nasal irritation, cough, and shortness of breath

Source: 2022 AQMP, SCAQMD, 2022.

As part of its enforcement responsibilities, the EPA requires each state with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the national standards. The SIP must integrate federal, state, and local components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. The CARB defines attainment as the category given to an area with no violations in the past three years. As indicated below in Table C, the Air Basin has been designated by EPA for the national standards as a non-attainment area for ozone and PM2.5 and partial non-attainment for lead. Currently, the Air Basin is in attainment with the national ambient air quality standards for CO, PM10, SO_2, and NO_2.

Table C – National Air Quality Standards Attainment Status – South Coast Air Basin

Criteria Pollutant	Averaging Time	Designation[a]	Attainment Date[b]
Ozone	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (revised deadline)
	2015 8-Hour (0.07 ppm)[d]	Nonattainment (Extreme)	8/3/2038
	2008 8-Hour (0.075 ppm)[d]	Nonattainment (Extreme)	7/20/2032
	1997 8-Hour (0.08 ppm)[d]	Nonattainment (Extreme)	6/15/2024
PM2.5[e]	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019
	2012 Annual (12 µg/m^3)	Nonattainment (Serious)	12/31/2021
	1997 Annual (15 µg/m^3)	Attainment (final determination pending)	4/5/2015 (attained 2013)
PM10[f]	1987 24-Hour (150 µg/m^3)	Attainment (Maintenance)	7/26/2013 (attained)
Lead[g]	2008 3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial) (Attainment determination requested)	12/31/2015
CO	1971 1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007
	1971 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007
NO_2[h]	2010 1-Hour (100 ppb)	Unclassifiable/Attainment	N/A (attained)
	1971 Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
SO_2[i]	2010 1-Hour (75 ppb)	Unclassifiable/Attainment	1/9/2018
	1971 24-Hour (0.14 ppm)	Unclassifiable/Attainment	3/19/1979

Source: SCAQMD, 2022

Notes:

a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable.

b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.

c) The 1979 1-hour ozone NAAQS (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard; original attainment date was 11/15/2010; the revised attainment date is 2/6/2023.

d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm, effective 12/28/20115 with classifications and implementation goals to be finalized by 10/1/2017; the 1997 8-hour ozone NAAQS (0.08 ppm) was revoked in the 2008 ozone implementation rule, effective 4/6/2015; there are continuing obligations under the revoked 1997 and revised 2008 ozone NAAQS until they are attained.

e) The attainment deadline for the 2006 24-Hour PM2.5 NAAQS was 12/31/15 for the former "moderate" classification; the EPA approved reclassification to "serious", effective 2/12/16 with an attainment deadline of 12/31/2019; the 2012 (proposal year) annual PM2.5 NAAQS was revised on 1/15/2013, effective 3/18/2013, from 15 to 12 µg/m^3; new annual designations were final 1/15/2015, effective 4/15/2015; on 7/25/2016 the EPA finalized a determination that the Basin attained the 1997 annual (15.0 µg/m^3) and 24-hour PM2.5 (65 µg/m^3) NAAQS, effective 8/24/2016.

f) The annual PM10 standard was revoked, effective 12/18/2006; the 24-hour PM10 NAAQS deadline was 12/31/2006; the Basin's Attainment Re-designation Request and PM10 Maintenance Plan was approved by the EPA on 6/26/2103, effective 7/26/2013.

g) Partial Nonattainment designation – Los Angeles County portion of the Basin only for near-source monitors; expect to remain in attainment based on current monitoring data; attainment re-designation request pending.

h) New 1-hour NO_2 NAAQS became effective 8/2/2010, with attainment designations 1/20/2012; annual NO_2 NAAQS retained.

i) The 1971 annual and 24-hour SO_2 NAAQS were revoked, effective 8/23/2010.

Despite substantial improvements in air quality over the past few decades, some air monitoring stations in the Air Basin still exceed the NAAQS and frequently record the highest ozone levels in the United States. In 2020, monitoring stations in the Air Basin exceeded the most current federal standards on a total of 181 days (49 percent of the year), including: 8-hour ozone (157 days over the 2015 ozone NAAQS), 24-hour PM2.5 (39 days), PM10 (3 days), and NO_2 (1 day). Nine of the top 10 stations in the nation most frequently exceeding the 2015 8-hour ozone NAAQS in 2020 were located within the Air Basin, including stations in San Bernardino, Riverside, and Los Angeles Counties (SCAQMD, 2022).

PM2.5 levels in the Air Basin have improved significantly in recent years. Since 2015, none of the monitoring stations in the Air Basin have recorded violations of the former 1997 annual PM2.5 NAAQS (15.0 µg/m^3). On July 25, 2016 the U.S. EPA finalized a determination that the Air Basin attained the 1997 annual (15.0 µg/m^3) and 24-hour PM2.5 (65 µg/m^3) NAAQS, effective August 24, 2016. However, the Air Basin does not meet the 2012 annual PM2.5 NAAQS (12.0 µg/m^3), with six monitoring stations having design values above the standard for the 2018-2020 period (SCAQMD, 2022).

4.2 State – California Air Resources Board

The CARB, which is a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. The CAAQS for criteria pollutants in the Air Basin are shown in Table D. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g. hairspray, aerosol paints, and barbeque lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

Table D – California Ambient Air Quality Standards Attainment Status – South Coast Air Basin

Criteria Pollutant	Averaging Time	Level[a]	Designation[b]
Ozone	1-Hour	0.09 ppm	Nonattainment
	8-Hour	0.070 ppm	Nonattainment
PM2.5	Annual	12 µg/m^3	Nonattainment
PM10	24-Hour	50 µg/m^3	Nonattainment
	Annual	20 µg/m^3	Nonattainment
Lead	30-Day Average	1.5 µg/m^3	Attainment
CO	1-Hour	20 ppm	Attainment
	8-Hour	9.0 ppm	Attainment
NO_2	1-Hour	0.18 ppm	Attainment
	Annual	0.030	Attainment[c]
SO_2	1-Hour	0.25 ppm	Attainment
	24-Hour	0.04 ppm	Attainment
Sulfates	24-Hour	25 µg/m^3	Attainment
Hydrogen Sulfide[c]	1-Hour	0.03 ppm	Unclassified

Source: SCAQMD, 2022

Notes:

a) CA State standards, or CAAQS, for ozone, SO_2, NO_2, PM10 and PM2.5 are values not to be exceeded; lead, sulfates and H_2S standards are values not to be equaled or exceeded; CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b) CA State designations shown were updated by CARB in 2019, based on the 2016-2018 3-year period; stated designations are based on a 3-year data period after consideration of outliers and exceptional events.

c) The CA-60 near road portion of San Bernardino, Riverside and Los Angeles Counties has recently been redesignated as an attainment area based on data collected between 2018 and 2020.

As shown in Table D, the Air Basin has been designated by the CARB as a non-attainment area for ozone, PM10 and PM2.5. Currently, the Air Basin is in attainment with the ambient air quality standards for lead, CO, NO_2, SO_2 and sulfates, and is unclassified for Hydrogen Sulfide.

The following lists the State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to school projects in the State.

Assembly Bill 2588

The Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588, 1987, Connelly) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of certain substances their facilities routinely release in California. The data is ranked by high, intermediate, and low categories, which are determined by: the potency, toxicity, quantity, volume, and proximity of the facility to nearby receptors.

CARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the CARB adopted CCR Title 13, Article 4.8, Chapter 9, Section 2449 to reduce DPM and NOx emissions from in-use off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. Performance requirements of the rule are based on a fleet's average NOx emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirement making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less). Currently, no commercial operation in California may add any equipment to their fleet that has a Tier 0, Tier 1, or Tier 2 engine. It should be noted that commercial fleets may continue to use their existing Tier 0, 1 and 2 equipment, if they can demonstrate that the average emissions from their entire fleet emissions meet the NOx emissions targets.

CARB Resolution 08-43 for On-Road Diesel Truck Fleets

On December 12, 2008 the CARB adopted Resolution 08-43, which limits NOx, PM10 and PM2.5 emissions from on-road diesel truck fleets that operate in California. On October 12, 2009 Executive Order R-09-010 was adopted that codified Resolution 08-43 into CCR Title 13, Section 2025. This regulation requires that by the year 2023 all commercial diesel trucks that operate in California shall meet model year 2010 (Tier 4 Final) or latter emission standards. This regulation also provides a few exemptions including a onetime per year 3-day pass for trucks registered outside of California. All on-road diesel trucks utilized during construction of the proposed project will be required to comply with Resolution 08-43.

4.3 Regional – Southern California

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin. To that end, as a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

South Coast Air Quality Management District

SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs. The *Final 2022 Air Quality Management Plan* (2022 AQMP) was adopted by CARB on January 26, 2023 and has been submitted to the U.S. EPA for final approval, which is anticipated to occur sometime this year. After the 2022 AQMP has been adopted by the U.S. EPA, the 2022 AQMP will be incorporated into the SIP. The

2022 AQMP establishes actions and strategies to reduce ozone levels to the U.S. EPA 2015 ozone standard of 70 ppb by 2037. The 2022 AQMP promotes extensive use of zero-emission technologies across all stationary and mobile sources coupled with rules and regulations, investment strategies, and incentives.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate air quality issues associated with plans and new development projects throughout the Air Basin. Instead, this is controlled through local jurisdictions in accordance with CEQA. In order to assist local jurisdictions with air quality compliance issues the *CEQA Air Quality Handbook* (SCAQMD CEQA Handbook), prepared by SCAQMD, 1993, with the most current updates found at http://www.aqmd.gov/ceqa/hdbk.html, was developed in accordance with the projections and programs detailed in the AQMPs. The purpose of the SCAQMD CEQA Handbook is to assist Lead Agencies, as well as consultants, project proponents, and other interested parties in evaluating a proposed project's potential air quality impacts. Specifically, the SCAQMD CEQA Handbook explains the procedures that SCAQMD recommends be followed for the environmental review process required by CEQA. The SCAQMD CEQA Handbook provides direction on how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. The SCAQMD intends that by providing this guidance, the air quality impacts of plans and development proposals will be analyzed accurately and consistently throughout the Air Basin, and adverse impacts will be minimized.

The following lists the SCAQMD rules that are applicable but not limited to school development projects in the Air Basin.

Rule 402 - Nuisance

Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Compliance with Rule 402 will reduce local air quality and odor impacts to nearby sensitive receptors.

Rule 403- Fugitive Dust

Rule 403 governs emissions of fugitive dust during construction activities and requires that no person shall cause or allow the emissions of fugitive dust such that dust remains visible in the atmosphere beyond the property line or the dust emission exceeds 20 percent opacity, if the dust is from the operation of a motorized vehicle. Compliance with this rule is achieved through application of standard Best Available Control Measures, which include but are not limited to the measures below. Compliance with these rules would reduce local air quality impacts to nearby sensitive receptors.

- Utilize either a pad of washed gravel 50 feet long, 100 feet of paved surface, a wheel shaker, or a wheel washing device to remove material from vehicle tires and undercarriages before leaving project site.
- Do not allow any track out of material to extend more than 25 feet onto a public roadway and remove all track out at the end of each workday.
- Water all exposed areas on active sites at least three times per day and pre-water all areas prior to clearing and soil moving activities.

- Apply nontoxic chemical stabilizers according to manufacturer specifications to all construction areas that will remain inactive for 10 days or longer.
- Pre-water all material to be exported prior to loading, and either cover all loads or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114.
- Replant all disturbed area as soon as practical.
- Suspend all grading activities when wind speeds (including wind gusts) exceed 25 miles per hour.
- Restrict traffic speeds on all unpaved roads to 15 miles per hour or less.

Rules 1108 and 1108.1 – Cutback and Emulsified Asphalt

Rules 1108 and 1108.1 govern the sale, use, and manufacturing of asphalt and limits the VOC content in asphalt. This rule regulates the VOC contents of asphalt used during construction as well as any on-going maintenance during operations. Therefore, all asphalt used during construction and operation of the proposed project must comply with SCAQMD Rules 1108 and 1108.1.

Rule 1113 – Architectural Coatings

Rule 1113 governs the sale, use, and manufacturing of architectural coatings and limits the VOC content in sealers, coatings, paints and solvents. This rule regulates the VOC contents of paints available during construction. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

Rule 1143 – Paint Thinners

Rule 1143 governs the sale, use, and manufacturing of paint thinners and multi-purpose solvents that are used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations. This rule regulates the VOC content of solvents used during construction. Solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1143.

Rule 1403 – Asbestos Removal

Rule 1403 governs asbestos emissions from demolition and renovation activities. The existing structures on the project site shall be surveyed for asbestos prior to demolition activities. If asbestos is found within the existing structures, the asbestos shall be removed through utilization of the removal procedures detailed in Rule 1403.

Southern California Association of Governments

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (Connect SoCal 2024), adopted by SCAG on April 4, 2024 which is based on the regional development and growth forecasts provided in the *2023 Federal Transportation Improvement* Program (2023 FTIP), adopted October 2022. In September 2024, SCAG adopted the *Final 2025 Federal Transportation Improvement Program* (2025 FTIP), that provides a comprehensive listing of projects that will receive federal funding and/or are regionally significant projects that are proposed over the Federal

Fiscal years of 2024/2025 through 2027/2028 as well as years 2028/2029 and 2029/2030 that have been included for informational purposes. The projects included in the 2025 FTIP are consistent with programs and projects and subsequent amendments contained in Connect SoCal 2024.

Although the Connect SoCal 2024 and 2025 FTIP are primarily planning documents for future transportation projects, a key component of these plans are to integrate land use planning with transportation planning that promotes higher density infill development in close proximity to existing transit service. These plans form the basis for the land use and transportation components of the 2022 AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the 2022 AQMP. The Connect SoCal 2024, 2025 FTIP, and 2022 AQMP are based on projections originating within the City and County General Plans.

4.4 Local – City of Los Angeles

Local jurisdictions, such as the City of Los Angeles, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures as outlined in the AQMPs. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

In accordance with the CEQA requirements, the City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the City and region will meet federal and state standards. Instead, the City relies on the expertise of the SCAQMD and utilizes the SCAQMD CEQA Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

5.0 ENERGY CONSERVATION MANAGEMENT

The regulatory setting related to energy conservation is primarily addressed through State and City regulations, which are discussed below.

5.1 State

Energy conservation management in the State was initiated by the 1974 Warren-Alquist State Energy Resources Conservation and Development Act that created the California Energy Resource Conservation and Development Commission (currently named California Energy Commission [CEC]), which was originally tasked with certifying new electric generating plants based on the need for the plant and the suitability of the site of the plant. In 1976 the Warren-Alquist Act was expanded to include new restrictions on nuclear generating plants, that effectively resulted in a moratorium of any new nuclear generating plants in the State. The following details specific regulations adopted by the State in order to reduce the consumption of energy.

California Code of Regulations Title 20

On November 3, 1976 the CEC adopted the *Regulations for Appliance Efficiency Standards Relating to Refrigerators, Refrigerator-Freezers and Freezers and Air Conditioners,* which were the first energy-efficiency standards for appliances. The appliance efficiency regulations have been updated several times by the CEC and the most current version is the *2016 Appliance Efficiency Regulations*, adopted January 2017 which includes almost all types of appliances and lamps that use electricity, natural gas as well as plumbing fixtures. The authority for the CEC to control the energy-efficiency of appliances is detailed in CCR Title 20, Division 2, Chapter 4, Article 4, Sections 1601-1609.

California Code of Regulations Title 24, Part 6

The CEC is also responsible for implementing the CCR Title 24, Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings* (Title 24 Part 6) that were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. In 2008 the State set an energy-use reduction goal of zero-net-energy use of all new homes by 2020 and the CEC was mandated to meet this goal through revisions to the Title 24, Part 6 regulations.

The Title 24 standards are updated on a three-year schedule and since 2008 the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. The 2022 Title 24 standards are the current standards that went into effect on January 1, 2023 and the 2025 Title 24 standards will go into effect on January 1, 2026.

According to the 2025 Title 24 Part 6 Fact Sheet, prepared by ACE Resources, some of the notable changes over the 2022 Title 24 standards for nonresidential buildings now include an energy budget requirement, HVAC programming requirements, new nonresidential pools will need to provide a solar thermal heating system that is a minimum 65% of the size of the pool, more efficient natural gas water heaters and HVAC systems and the HVAC systems now are required to provide variable air volume rates that is determined by occupancy and time of day, all buildings with public entrances that are greater than 10,000 sq ft are now required to include an enclosed vestibule with all doors equipped with self-closing devices (the vestibule can be created with either a second door or an air curtain), higher thermal requirements for relocatable school buildings, and laboratories are now subject to the energy code.

California Code of Regulations (CCR) Title 24, Part 11

CCR Title 24, Part 11: *California Green Building Standards* (CalGreen Code) was developed in response to continued efforts to reduce GHG emissions associated with energy consumption. The CalGreen Code is also updated every three years and the current version is the 2022 CalGreen Code that went into effect on January 1, 2023 and the 2025 CalGreen Code will go into effect on January 1, 2026.

The CalGreen Code contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CalGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others. Implementation of the CalGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2022 CalGreen Code over the prior 2019 CalGreen Code for nonresidential development mandatory requirements include the repeal of designated parking spaces for clean air vehicles and an increase in the number of electric vehicle (EV) ready parking spaces. The 2022 CalGreen Code also added new requirements for installed Level 2 or direct-current fast charger EV charging stations for autos, EV charging readiness for loading docks, enhanced thermal insulation, and acoustical ceilings.

Senate Bill 1020

Senate Bill 1020 (SB 1020) was adopted September 16, 2022 and would speed up the timeline retail electricity is supplied by renewable energy sources over the prior adoption timelines provided in SB 100, SB 350, SB 1078, SB 107, and SB X1-2. SB 1020 requires that retail sales of electricity are from renewable energy resources and zero-carbon resources supply 90 percent by December 31, 2035, 95 percent by December 31, 2040, and 100 percent by December 31, 2045.

Executive Order N-79-20

The California Governor issued Executive Order N-79-20 on September 23, 2020 that requires all new passenger cars and trucks and commercial drayage trucks sold in California to be zero-emissions by the year 2035 and all medium- heavy-duty vehicles (commercial trucks) sold in the state to be zero-emission by 2045 for all operations where feasible. Executive Order N-79-20 also requires all off-road vehicles and equipment to transition to 100 percent zero-emission equipment, where feasible by 2035.

Executive Order B-48-18 and Assembly Bill 2127

The California Governor issued Executive Order B-48-18 on January 26, 2018 that orders all state entities to work with the private sector to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 electric vehicle chargers by 2025. Currently there are approximately 350,000 electric vehicles operating in California, which represents approximately

1.5 percent of the 24 million vehicles total currently operating in California. Implementation of Executive Order B-48-18 would result in approximately 20 percent of all vehicles in California to be zero emission electric vehicles. Assembly Bill 2127 (AB 2127) was codified into statute on September 13, 2018 and requires that the CEC working with CARB prepare biannual assessments of the statewide electric vehicle charging infrastructure needed to support the levels of zero emission vehicle adoption required for the State to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030.

Assembly Bill 1109

California Assembly Bill 1109 (AB 1109) was adopted October 2007, also known as the Lighting Efficiency and Toxics Reduction Act, prohibits the manufacturing of lights after January 1, 2010 that contain levels of hazardous substances prohibited by the European Union pursuant to the Restriction of Hazardous Substances Directive. AB 1109 also requires reductions in energy usage for lighting and is structured to reduce lighting electrical consumption by: (1) At least 50 percent reduction from 2007 levels for indoor residential lighting; and (2) At least 25 percent reduction from 2007 levels for indoor commercial and all outdoor lighting by 2018. AB 1109 would reduce GHG emissions through reducing the amount of electricity required to be generated by fossil fuels in California.

Assembly Bill 1493

California Assembly Bill 1493 (also known as the Pavley Bill, in reference to its author Fran Pavley) was enacted on July 22, 2002 and required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2004, CARB approved the "Pavley I" regulations limiting the amount of GHGs that may be released from new passenger automobiles that are being phased in between model years 2009 through 2016. These regulations will reduce GHG emissions by 30 percent from 2002 levels by 2016. In June 2009, the EPA granted California the authority to implement GHG emission reduction standards for light duty vehicles, in September 2009, amendments to the Pavley I regulations were adopted by CARB and implementation of the "Pavley I" regulations started in 2009.

The second set of regulations "Pavley II" was developed in 2010, and is being phased in between model years 2017 through 2025 with the goal of reducing GHG emissions by 45 percent by the year 2020 as compared to the 2002 fleet. The Pavley II standards were developed by linking the GHG emissions and formerly separate toxic tailpipe emissions standards previously known as the "LEV III" (third stage of the Low Emission Vehicle standards) into a single regulatory framework. The new rules reduce emissions from gasoline-powered cars as well as promote zero-emissions auto technologies such as electricity and hydrogen, and through increasing the infrastructure for fueling hydrogen vehicles. In 2009, the U.S. EPA granted California the authority to implement the GHG standards for passenger cars, pickup trucks and sport utility vehicles and these GHG emissions standards are currently being implemented nationwide.

The EPA has performed a midterm evaluation of the longer-term standards for model years 2022-2025, and based on the findings of this midterm evaluation, the EPA proposed The Safer Affordable Fuel Efficient (SAFE) Vehicles Proposed Rule for Model Years 2021-2026 that amends the corporate average fuel economy (CAFE) and GHG emissions standards for light vehicles for model years 2021 through 2026. The SAFE Vehicles Rule were made effective on June 29, 2020. However, the CAFE standards are now being reevaluated on a new more lenient criteria that restricts California from setting its own standards (see Section 6.2, below for more details). As such, the ability of the State to enforce AB 1493 regulations in the future is unlikely.

5.2 Local – City of Los Angeles

Green LA and Climate LA

Green LA was released in May 2007, and sets forth a goal of reducing the City's GHG emissions to 35 percent below 1990 levels by the year 2030. Climate LA, approved in 2008 is the implementation program that provides detailed information about each action item discussed in Green LA. Climate LA includes focus areas addressing environmental issues, including, but not limited to energy, water transportation, and waste. The energy focus area includes action items with measures that aim to increase the use of renewable energy to 35 percent by 2020, reduce the use of coal-fired power plants, and present a comprehensive set of green building policies to guide and support private sector development. Such energy saving measures include use of LED lighting, increased use of renewable energy, and increased solid waste diversion.

City of Los Angeles Green Building Code

On December 11, 2019, the Los Angeles City Council approved Ordinance No. 186,488, which amended Chapter IX of the Los Angeles Municipal Code (LAMC), referred to as the "Los Angeles Green Building Code," by amending certain provisions of Article 9 to reflect local administrative changes and incorporating by reference portions of the 2019 CALGreen Code. Projects filed on or after January 1, 2020, must comply with the provisions of the Los Angeles Breen Building Code. Specific Mandatory requirements and elective measures are provided for three categories:

1. Low-Rise Residential Buildings;
2. Nonresidential and High-Rise Residential Buildings; and
3. Additions and Alternations to Nonresidential and High-Rise Residential Buildings.

Article 9, Division 5 includes mandatory measures for newly constructed nonresidential and high-rise residential buildings. Mandatory measures include installation of electrical raceways to future electric vehicle supply equipment (EVSE), reduce water use by 20 percent compared to maximum allowable water use per plumbing fixture as required by the LA Municipal Code, and use of roofing material to reduce heat island effect.

City of Los Angeles Sustainable City pLAn/ LA's Green New Deal

The *L.A.'s Green New Deal Sustainable City pLAn*, was released in April 2019 and includes a program of actions designed to create sustainability-based performance targets through 2050 designed to advance economic, environmental, and equity objectives. L.A.'s Green New Deal is the first four-year update to the City's first Sustainable City pLAn that was released in 2015. It augments, expands, and elaborates in even more detail L.A.'s vision for a sustainable future and it tackles the climate emergency with accelerated targets and new aggressive goals.

Within the Green New Deal, climate mitigation is one of eight explicit benefits that help define its strategies and goals. These include reducing GHG emissions, and the following measures would have co-benefits with respect to higher energy efficiencies, through near-term outcomes:

- Reduce potable water use per capita by 22.5 percent by 2025; 25 percent by 2035; and maintain or reduce 2035 per capita water use through 2050.
- Reduce building energy use per square feet for all building types 22 percent by 2025; 34 percent by 2035; and 44 percent by 2050 (from a baseline of 68 mBTU/sqft in 2015).

- All new buildings will be net zero carbon by 2030 and 100 percent of buildings will be net zero carbon by 2050.
- Increase cumulative new housing unit construction to 150,000 by 2025; and 275,000 units by 2035.
- Ensure 57 percent of new housing units are built within 1,500 feet of transit by 2025; and 75 percent by 2035.
- Increase the percentage of all trips made by walking, biking, micro-mobility/matched rides or transit to at least 35 percent by 2025, 50 percent by 2035, and maintain at least 50 percent by 2050.
- Reduce VMT per capita by at least 13 percent by 2025; 39 percent by 2035; and 45 percent by 2050.
- Increase the percentage of electric and zero emission vehicles in the city to 25 percent by 2025; 80 percent by 2035; and 100 percent by 2050.
- Increase landfill diversion rate to 90 percent by 2025; 95 percent by 2035 and 100 percent by 2050.
- Reduce municipal solid waste generation per capita by at least 15 percent by 2030, including phasing out single-use plastics by 2028 (from a baseline of 17.85 lbs. of waste generated per capita per day in 2011).
- Eliminate organic waste going to landfill by 2028.
- Reduce urban/rural temperature differential by at least 1.7 degrees by 2025; and 3 degrees by 2035.

Ensure proportion of Angelenos living within 1/2 mile of a park or open space is at least 65 percent by 2025; 75 percent by 2035; and 100 percent by 2050.

6.0 GLOBAL CLIMATE CHANGE MANAGEMENT

The regulatory setting related to global climate change is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to reduce GHG emissions through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for global climate change regulations are discussed below.

6.1 International

In 1988, the United Nations established the IPCC to evaluate the impacts of global climate change and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. The parties of the UNFCCC adopted the Kyoto Protocol, which set binding GHG reduction targets for 37 industrialized countries, the objective of reducing their collective GHG emissions by five percent below 1990 levels by 2012. The Kyoto Protocol has been ratified by 182 countries, but has not been ratified by the United States. It should be noted that Japan and Canada opted out of the Kyoto Protocol and the remaining developed countries that ratified the Kyoto Protocol have not met their Kyoto targets. The Kyoto Protocol expired in 2012 and the amendment for the second commitment period from 2013 to 2020 has not yet entered into legal force. The Parties to the Kyoto Protocol negotiated the Paris Agreement in December 2015, agreeing to set a goal of limiting global warming to less than 2 degrees Celsius compared with pre-industrial levels. The Paris Agreement has been adopted by 195 nations with 147 ratifying it, including the United States by President Obama, who ratified it by Executive Order on September 3, 2016. On June 1, 2017, President Trump announced that the United States is withdrawing from the Paris Agreement, on January 21, 2021 President Biden signed an executive order rejoining the Paris Agreement, and on January 20, 2025 President Trump signed an executive order withdrawing from the Paris Agreement.

Additionally, the Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol stipulates that the production and consumption of compounds that deplete ozone in the stratosphere—CFCs, halons, carbon tetrachloride, and methyl chloroform—were to be phased out, with the first three by the year 2000 and methyl chloroform by 2005.

6.2 Federal – United States Environmental Protection Agency

The EPA is responsible for implementing federal policy to address global climate change. The Federal government administers a wide array of public-private partnerships to reduce U.S. GHG intensity. These programs focus on energy efficiency, renewable energy, methane, and other non-CO_2 gases, agricultural practices and implementation of technologies to achieve GHG reductions. EPA implements several voluntary programs that substantially contribute to the reduction of GHG emissions.

In Massachusetts v. Environmental Protection Agency (Docket No. 05–1120), argued November 29, 2006 and decided April 2, 2007, the U.S. Supreme Court held that not only did the EPA have authority to regulate GHGs, but the EPA's reasons for not regulating this area did not fit the statutory requirements. As such, the U.S. Supreme Court ruled that the EPA should be required to regulate CO_2 and other GHGs as pollutants under the federal Clean Air Act (CAA).

In response to the Consolidations Appropriations Act, 2008 (H.R. 2764; Public Law 110-161), EPA proposed a rule on March 10, 2009 that requires mandatory reporting of GHG emissions from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of GHG Rule was signed and published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. This rule requires suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports to the EPA.

On December 7, 2009, the EPA Administrator signed two distinct findings under section 202(a) of the Clean Air Act. One is an endangerment finding that finds concentrations of the six GHGs in the atmosphere threaten the public health and welfare of current and future generations. The other is a cause or contribute finding, that finds emissions from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare. These actions did not impose any requirements on industry or other entities, however, since 2009 the EPA has been providing GHG emission standards for vehicles and other stationary sources of GHG emissions that are regulated by the EPA. On September 13, 2013 the EPA Administrator signed 40 CFR Part 60, that limits emissions from new sources to 1,100 pounds of CO_2 per mega-watt hour (MWh) for fossil fuel-fired utility boilers and 1,000 pounds of CO_2 per MWh for large natural gas-fired combustion units.

On August 3, 2015, the EPA announced the Clean Power Plan, emissions guidelines for U.S. states to follow in developing plans to reduce GHG emissions from existing fossil fuel-fired power plants (Federal Register Vol. 80, No. 205, October 23 2015). On October 11, 2017, the EPA issued a formal proposal to repeal the Clean Power Plan and on June 19, 2019 the EPA replaced the Clean Power Plan with the Affordable Clean Energy rule that is anticipated to lower power sector GHG emissions by 11 million tons by the year 2030.

On June 6, 2025, in accordance with President Trump's "Unleashing American Energy" Executive Order and the Secretary of Transportation's "Fixing the CAFÉ Program" Memorandum, the National Highway Traffic Safety Administration (NHTSA), published the "Resetting the Corporate Average Fuel Economy Program"[3], that requires the NHTSA to reconsider the Corporate Average Fuel Economy (CAFE) standards for passenger vehicles and non-passenger medium and heavy duty vehicles that now require several additional factors to be considered when setting fuel economy standards that include technological feasibility and economic practicability as well as considering fuel standards set by other agencies. In addition, the Memorandum prohibits consideration of trading credits between manufacturers. The Memorandum directs the NHTSA to replace the *Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks* and the Model Years 2027 and Beyond Fuel Standards at the earliest opportunity.

6.3 State

The CARB has the primary responsible for implementing state policy to address global climate change, however there are State regulations related to global climate change that affect a variety of State agencies. CARB, which is a part of the CalEPA, is responsible for the coordination and administration of both the federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets CAAQS, compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g. hairspray, aerosol paints, and

3 Obtained from: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy

barbeque lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2008, CARB approved a Climate Change Scoping Plan that proposes a "comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (CARB 2008). The Climate Change Scoping Plan has a range of GHG reduction actions which include direct regulations; alternative compliance mechanisms; monetary and non-monetary incentives; voluntary actions; market-based mechanisms such as a cap-and-trade system. In 2014, CARB approved the First Update to the Climate Change Scoping Plan (CARB, 2014) that identifies additional strategies moving beyond the 2020 targets to the year 2050. On December 14, 2017 CARB adopted the California's 2017 Climate Change Scoping Plan, November 2017 (CARB, 2017) that provides specific statewide policies and measures to achieve the 2030 GHG reduction target of 40 percent below 1990 levels by 2030 and the aspirational 2050 GHG reduction target of 80 percent below 1990 levels by 2050. On December 15, 2022, CARB adopted the *2022 Scoping Plan for Achieving Carbon Neutrality,* November 16, 2022 (CARB, 2022) that lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279.

In addition to the Scoping Plans, the State has passed the following laws directing CARB to develop actions to reduce GHG emissions, which are listed below in chronological order, with the most current first.

Executive Order B-55-18 and Assembly Bill 1279

The California Governor issued Executive Order B-55-18 in September 2018 that establishes a new statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045. This executive order directs the CARB to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal as well as ensuring future scoping plans identify and recommend measures to achieve this carbon neutrality goal. Assembly Bill 1279 was passed by the legislature in September 2022 that codifies the carbon neutrality targets provided in Executive Order B-55-18. The *2022 Scoping Plan for Achieving Carbon Neutrality,* adopted by CARB on December 16, 2022, was prepared in order to meet the carbon neutrality goal targets developed in Executive Order B-55-18 and codified in Assembly Bill 1279.

California Code of Regulations Title 24, Part 6

The Title 24 Part 6 standards have been developed by the CEC primarily for energy conservation and is described in more detail above in Section 5.1 under Energy Conservation Management. It should be noted that implementation of the Title 24 Part 6 building standards would also reduce GHG emissions, since energy use for residential and commercial buildings creates 9.7 percent of the GHG emissions in the State.

California Code of Regulations Title 24, Part 11

The CalGreen Building standards have been developed by the CEC primarily for energy conservation and is described in more detail above in Section 5.1 under Energy Conservation Management. It should be noted that implementation of the CalGreen Building standards would also reduce GHG emissions, since as detailed above under Title 23, Part 6, energy usage from buildings creates 9.7 percent of GHG emissions in the State.

Senate Bill 1020

SB 1020 requires that by December 1, 2045 that 100 percent of retail sales of electricity to be generated from renewable or zero-carbon emission sources of electricity and is described in more detail above in Section 5.1 under Energy Conservation Management.

Executive Order B-55-18 and Assembly Bill 1279

The California Governor issued Executive Order B-55-18 in September 2018 that establishes a new statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045. This executive order directs CARB to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal as well as ensuring future scoping plans identify and recommend measures to achieve this carbon neutrality goal. Assembly Bill 1279 was passed by the legislature in September 2022 that codifies the carbon neutrality targets provided in Executive Order B-55-18. The *2022 Scoping Plan for Achieving Carbon Neutrality,* adopted by CARB on December 16, 2022, was prepared in order to meet the carbon neutrality goal targets developed in Executive Order B-55-18 and codified in Assembly Bill 1279.

Executive Order N-79-20

EO N-79-20 establish targets for when all new vehicles and equipment are zero-emission and is described in more detail above in Section 5.1 under Energy Conservation Management.

Executive Order B-48-18 and Assembly Bill 2127

Executive Order B-48-18 and AB 2127 provides measures to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 electric vehicle chargers by 2025 and is described in more detail above in Section 5.1 under Energy Conservation Management.

Executive Order B-30-15, Senate Bill 32 and Assembly Bill 197

The California Governor issued Executive Order B-30-15 on April 29, 2015 that aims to reduce California's GHG emissions 40 percent below 1990 levels by 2030. This executive order aligns California's GHG reduction targets with those of other international governments, such as the European Union that set the same target for 2030 in October, 2014. This target will make it possible to reach the ultimate goal of reducing GHG emissions 80 percent under 1990 levels by 2050 that is based on scientifically established levels needed in the U.S.A to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels. Assembly Bill 197 (AB 197) (September 8, 2016) and Senate Bill 32 (SB 32) (September 8, 2016) codified into statute the GHG emissions reduction targets of at least 40 percent below 1990 levels by 2030 as detailed in Executive Order B-30-15. AB 197 also requires additional GHG emissions reporting that is broken down to sub-county levels and requires CARB to consider the social costs of emissions impacting disadvantaged communities.

Executive Order B-29-15

The California Governor issued Executive Order B-29-15 on April 1, 2015 and directed the State Water Resources Control Board to impose restrictions to achieve a statewide 25 percent reduction in urban water usage and directed the Department of Water Resources to replace 50 million square feet of lawn with drought tolerant landscaping through an update to the State's Model Water Efficient Landscape Ordinance. The Ordinance also requires installation of more efficient irrigation systems, promotion of

greywater usage and onsite stormwater capture, and limits the turf planted in new residential landscapes to 25 percent of the total area and restricts turf from being planted in median strips or in parkways unless the parkway is next to a parking strip and a flat surface is required to enter and exit vehicles. Executive Order B-29-15 would reduce GHG emissions associated with the energy used to transport and filter water.

Assembly Bill 341 and Senate Bills 939 and 1374

Senate Bill 939 (SB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills. Assembly Bill 341 (AB 341) was adopted in 2011 and builds upon the waste reduction measures of SB 939 and 1374, and sets a new target of a 75 percent reduction in solid waste generated by the year 2020.

Senate Bill 375

Senate Bill 375 (SB 375) was adopted September 2008 in order to support the State's climate action goals to reduce GHG emissions through coordinated regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires CARB to set regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established targets for 2020 and 2035 for each MPO within the State. It was up to each MPO to adopt a sustainable communities strategy (SCS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP) to meet CARB's 2020 and 2035 GHG emission reduction targets. These reduction targets are required to be updated every eight years and the most current targets are detailed at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets, which provides GHG emissions reduction targets for SCAG of 8 percent by 2020 and 19 percent by 2035.

The Connect SoCal 2024 provides a 2035 GHG emission reduction target of 19 percent reduction over the 2005 per capita emissions levels. The Connect SoCal 2024 include new initiatives of land use, transportation and technology to meet the 19 percent GHG emission reduction target for 2035. CARB is also charged with reviewing SCAG's RTP/SCS for consistency with its assigned targets.

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS. However, new provisions of CEQA incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS and categorized as "transit priority projects."

Assembly Bill 1109

AB 1109 requires reductions in energy usage for lighting and is described in more detail above in Section 5.1 under Energy Conservation Management.

Senate Bill 97

Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the State CEQA guidelines that addresses GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporated GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate Action Plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the GHG emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of GHG emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports must specifically consider a project's energy use and energy efficiency potential.

Assembly Bill 32

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide emission cap which will be phased in starting in 2012. Emission reductions shall include carbon sequestration projects that would remove carbon from the atmosphere and utilize best management practices that are technologically feasible and cost effective.

In 2007 CARB released the calculated Year 1990 GHG emissions of 431 $MMTCO_2e$. The 2020 target of 431 $MMTCO_2e$ requires the reduction of 78 $MMTCO_2e$, or approximately 16 percent from the State's projected 2020 business as usual emissions of 509 $MMTCO_2e$ (CARB, 2014). Under AB 32, CARB was required to adopt regulations by January 1, 2011 to achieve reductions in GHGs to meet the 1990 cap by 2020. Early measures CARB took to lower GHG emissions included requiring operators of the largest industrial facilities that emit 25,000 metric tons of CO_2 in a calendar year to submit verification of GHG emissions by

December 1, 2010. The CARB Board also approved nine discrete early action measures that include regulations affecting landfills, motor vehicle fuels, refrigerants in cars, port operations and other sources, all of which became enforceable on or before January 1, 2010.

Assembly Bill 1493

AB 1493 or the Pavley Bill sets tailpipe GHG emissions limits for passenger vehicles in California as well as fuel economy standards and is described in more detail above in Section 5.1 under Energy Conservation Management.

6.4 Regional – Southern California

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Air Basin. To that end, as a regional agency, the SCAQMD works directly with SCAG, county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

South Coast Air Quality Management District

SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. The SCAQMD is also responsible for GHG emissions for projects where it is the lead agency. However, for other projects in the Air Basin where it is not the lead agency, it is limited to providing resources to other lead agencies in order to assist them in determining GHG emission thresholds and GHG reduction measures. In order to assist local agencies with direction on GHG emissions, the SCAQMD organized a working group, which is described below.

<u>SCAQMD Working Group</u>

Since neither CARB nor the OPR has developed GHG emissions threshold, the SCAQMD formed a Working Group to develop significance thresholds related to GHG emissions. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that either provides a quantitative annual thresholds of 3,500 $MTCO_2e$ for residential uses, 1,400 $MTCO_2e$ for commercial uses, and 3,000 $MTCO_2e$ for mixed uses. An alternative annual threshold of 3,000 $MTCO_2e$ for all land use types is also proposed.

Southern California Association of Governments

As detailed above in Section 4.3, the current applicable RTP/SCS for the project area region is the Connect SoCal 2024 and 2025 FTIP, which have been prepared to meet the GHG emissions reduction targets set by SB 375 for the SCAG region of 19 percent reduction over the 2005 per capita emissions levels. The Connect SoCal 2024 includes new land use, transportation, and technology strategies to meet the new 19 percent GHG emission reduction target for 2035.

Although the Connect SoCal 2024 and 2025 FTIP are primarily planning documents for future transportation projects, a key component of these plans are to integrate land use planning with transportation planning that promotes higher density infill development in close proximity to existing transit service. These plans form the basis for the land use and transportation components of the 2022 AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the 2022 AQMP. The Connect SoCal 2024, 2025 FTIP, and 2022 AQMP are based on projections originating within the City and County General Plans.

6.5 Local – City of Los Angeles

Local jurisdictions, such as the City of Los Angeles have the authority and responsibility to reduce GHG emissions through their police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of GHG emissions resulting from its land use decisions. In accordance with CEQA requirements and the CEQA review process, the City assesses the global climate change potential of new development projects, requires mitigation of potentially significant global climate change impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

In 2008, the City released an implementation program for the LA Green Plan referred to as ClimateLA, which provides detailed information about each action item discussed in the LA Green Plan framework. Action items range from harnessing wind power for electricity production and energy efficiency retrofits in City buildings, to converting the City's fleet vehicles to cleaner and more efficient models, and reducing water consumption.

The *City of Los Angeles's Green New Deal Sustainable City pLAn* (pLAan), prepared in 2015 and updated in 2019, requires both short-term and long-term aspirations through the year 2035 in various topic areas, including: water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others. Specific targets include reducing vehicle miles traveled per capita by 5 percent by 2035 and increasing trips made by walking, biking or transit by at least 35 percent by 2025. In addition, building energy use per square foot for all building types will be reduced by 22 percent by 2025, 34 percent by 2035 and 44 percent by 2050. All of these measures would reduce the level of GHGs generated throughout the City.

In 2019, the first four-year update was released. Although this was introduced as a mayoral initiative, and is not a formally adopted plan or policy, the updated document, expands upon the City's vision for a sustainable future and provides accelerated targets and new goals. The goal of the 2019 update established targets such as 100-percent renewable energy by 2045, diversion of 100 percent of waste by 2050, and recycling 100 percent of wastewater by 2035.

7.0 ATMOSPHERIC SETTING

7.1 South Coast Air Basin

The project site is located within southwestern Los Angeles County, which is part of the South Coast Air Basin (Air Basin) that includes the non-desert portions of Riverside, San Bernardino, and Los Angeles Counties and all of Orange County. The Air Basin is located on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the Air Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east forming the inland perimeter.

7.2 Local Climate

The climate of southwestern Los Angeles County is characterized by hot dry summers, mild moist winters with infrequent rainfall, moderate afternoon breezes, and generally fair weather. Occasional periods of strong Santa Ana winds and winter storms interrupt the otherwise mild weather pattern. Although the Air Basin is semi-arid, the air near the surface in southwestern Los Angeles County is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into the Air Basin by offshore winds, the ocean effect is dominant. Periods of heavy fog are frequent and low stratus clouds, often referred to as "high fog" are a characteristic feature.

Winds are an important parameter in characterizing the air quality environment of a project site because they both determine the regional pattern of air pollution transport and control the rate of dispersion near a source. Daytime winds in southwestern Los Angeles County are usually light breezes from off the coast as air moves regionally onshore from the cool Pacific Ocean to the warm Mojave Desert interior of Southern California. These winds allow for good local mixing, but as discussed above, these coastal winds carry significant amounts of industrial and automobile air pollutants from the densely urbanized western portion of the Air Basin into the interior valleys which become trapped by the mountains that border the eastern and northern edges of the Air Basin.

In the summer, strong temperature inversions may occur that limit the vertical depth through which air pollution can be dispersed. Air pollutants concentrate because they cannot rise through the inversion layer and disperse. These inversions are more common and persistent during the summer months. Over time, sunlight produces photochemical reactions within this inversion layer that creates ozone, a particularly harmful air pollutant. Occasionally, strong thermal convections occur which allows the air pollutants to rise high enough to pass over the mountains and ultimately dilute the smog cloud.

In the winter, light nocturnal winds result mainly from the drainage of cool air off of the mountains toward the valley floor while the air aloft over the valley remains warm. This forms a type of inversion known as a radiation inversion. Such winds are characterized by stagnation and poor local mixing and trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the Air Basin, there is not enough traffic in inland valleys to cause any winter air pollution problems. Despite light wind conditions, especially at night and in the early morning, winter is generally a period of good air quality in the project vicinity.

The temperature and precipitation levels for the USC Monitoring Station is shown below in Table E. Table E shows that August is typically the warmest month and January is typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the

fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Table E – Monthly Climate Data

Month	Average Maximum Temperature (°F)	Average Minimum Temperature (°F)	Average Total Precipitation (inches)
January	66.4	48.3	3.20
February	67.3	49.5	3.38
March	68.8	51.1	2.40
April	71.0	53.5	1.01
May	72.9	56.5	0.25
June	76.9	59.7	0.06
July	82.3	63.2	0.01
August	83.1	63.8	0.05
September	81.9	62.6	0.27
October	77.6	58.7	0.48
November	72.8	53.3	1.25
December	67.4	49.1	2.41
Annual	**74.0**	**55.8**	**14.77**

Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115

7.3 Monitored Local Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the Air Basin. Improvements in cleaner technology and strict regulations have reduced ozone levels since its peak in the mid-twentieth century. However, ozone levels have remained unacceptably high over the past decade despite significant reductions. This trend is due to the changes in climate and other weather conditions such as the increase in hot, stagnant days that can lead to the formation of ozone that we have experienced in recent years. (SCAQMD, 2022).

SCAQMD has divided the Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located in Air Monitoring Area 1, which covers the central portion of Los Angeles. The nearest air monitoring station to the project site is the Los Angeles North Main Street Monitoring Station (Los Angles Station), which is located approximately two miles northwest of the project site at 1630 N Main Street, Los Angeles. Table F shows that ozone and particulate matter (PM10 and PM2.5) are the air pollutants of primary concern in the project area, which are detailed below:

Table F – Local Area Air Quality Monitoring Summary

Pollutant (Standard)	Year[1] 2022	2023	2024
Ozone:			
Maximum 1-Hour Concentration (ppm)	0.138	0.097	0.107
Days > CAAQS (0.09 ppm)	**1**	**1**	**2**
Maximum 8-Hour Concentration (ppm)	0.090	0.082	0.081
Days > NAAQS (0.070 ppm)	**6**	**7**	**6**
Days > CAAQs (0.070 ppm)	**6**	**7**	**6**
Nitrogen Dioxide:			
Maximum 1-Hour Concentration (ppb)	75.1	64.3	80.0
Days > NAAQS (100 ppb)	0	0	0
Days > CAAQS (180 ppb)	0	0	0
Inhalable Particulates (PM10):			
Maximum 24-Hour National Measurement (ug/m^3)	61.0	58.0	78.0
Days > NAAQS (150 ug/m^3)	0	0	0
Days > CAAQS (50 ug/m^3)	0	**1**	**2**
Annual Arithmetic Mean (AAM) (ug/m^3)	29.4	25.4	26.1
Annual > NAAQS (50 ug/m^3)	No	No	No
Annual > CAAQS (20 ug/m^3)	**Yes**	**Yes**	**Yes**
Ultra-Fine Particulates (PM2.5):			
Maximum 24-Hour National Measurement (ug/m^3)	33.7	30.6	55.7
Days > NAAQS (35 ug/m^3)	0	0	**7**
Annual Arithmetic Mean (AAM) (ug/m^3)	11.1	10.2	13.6
Annual > NAAQS and CAAQS (12 ug/m^3)	No	No	**Yes**

Notes: Exceedances are listed in **bold.** CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; ppb = parts per billion; ND = no data available.
[1] Data obtained from the Los Angeles Station.
Source: http://www.arb.ca.gov/adam/

Ozone

During the last three years, the State 1-hour concentration standard for ozone has been exceeded between one and two days each year at the Los Angeles Station. The State 8-hour ozone standard has been exceeded between six and seven days each year over the last three years at the Los Angeles Station. The Federal 8-hour ozone standard has been exceeded between six and seven days each year over the last three years at the Los Angeles Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO_2, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of Southern California contribute to the

ozone levels experienced at this monitoring station, with the more significant areas being those directly upwind.

Nitrogen Dioxide

The Los Angeles Station did not record an exceedance of either the Federal or State 1-hour NO_2 standards for the last three years.

Particulate Matter

The State 24-hour concentration standard for PM10 has been exceeded between zero and two days each year over the past three years at the Los Angeles Station. Over the past three years the Federal 24-hour standard for PM10 has not been exceeded at the Los Angeles Station. The annual PM10 concentration at the Los Angeles Station has exceeded the State standard for the past three years and has not exceeded the Federal standard for the past three years.

Over the past three years the 24-hour concentration standard for PM2.5 has been exceeded between zero and seven days each year over the past three years at the Los Angeles Station. The annual PM2.5 concentrations at the Los Angeles Station has exceeded the State and Federal standard for only one of the past three years. Particulate levels in the area are due to natural sources, grading operations, and motor vehicles.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM10 and PM2.5). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM10 and PM2.5. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

7.4 Toxic Air Contaminant Levels

In order to determine the Air Basin-wide risks associated with major airborne carcinogens, the SCAQMD conducted the Multiple Air Toxics Exposure Study (MATES) studies. According to the MATES V study (SCAQMD, 2021), the project site has an estimated cancer risk of 658 per million persons chance of cancer. In comparison, the average cancer risk for the Air Basin is 455 per million persons. The MATES V study monitored air toxins between May 1, 2018 to April 30, 2019, found that cancer risk from air toxics has declined significantly in the Air Basin with a 40 percent decrease in cancer risk since the monitoring for the MATES IV study that occurred between July 1, 2012 and June 30, 2013 and an 84 percent decrease in cancer risk since the monitoring for the MATES II study that occurred between April 1, 1998 and March 31, 1999.

The MATES V study also analyzed impacts specific to the communities experiencing environmental injustices (EJ communities) that were evaluated using the Senate Bill 535 definition of disadvantaged communities, which found that between MATES IV and MATES V, the cancer risk from air toxics decreased by 57 percent in EJ communities overall, compared to a 53 percent reduction in non-EJ communities.

In order to provide a perspective of risk, it is often estimated that the incidence in cancer over a lifetime for the U.S. population ranges between 1 in 3 to 4 and 1 in 3, or a risk of about 300,000 per million persons. The MATES-III study referenced a Harvard Report on Cancer Prevention, which estimated that of cancers

associated with known risk factors, about 30 percent were related to tobacco, about 30 percent were related to diet and obesity, and about 2 percent were associated with environmental pollution related exposures that includes hazardous air pollutants.

8.0 MODELING PARAMETERS AND ASSUMPTIONS

8.1 CalEEMod Model Input Parameters

The criteria air pollution and GHG emissions impacts created by the proposed project have been analyzed through use of the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.30 CalEEMod is a computer model published by the California Air Pollution Control Officers Association (CAPCOA) for estimating air pollutant and GHG emissions. The CalEEMod program uses the EMFAC2021 computer program to calculate the emission rates specific for South Coast Air Basin portion of Los Angeles County for employee, vendor and haul truck vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy equipment operations. EMFAC2021 and OFFROAD2011 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour.

The project characteristics in the CalEEMod model were set to a project location of South Coast Air Basin portion of Los Angeles County, utility companies of Los Angeles Department of Water & Power (LADWP) and Southern California Gas (with 2028 forecast factors) and a project opening year of 2028.

Land Use Parameters

The proposed project would consist of demolition of 22,265 square feet of building space and 82,000 square feet of pavement. Minor modernization of approximately 40,127 square feet of building space and new construction of a 3-story classroom building that would total 46,380 square feet as well as outside improvements that would include landscape, hardscape and infrastructure upgrades. In order, to provide a conservative analysis, the minor modernization was analyzed as new construction and combined with the new classroom building. The proposed project's land use parameters that were entered into the CalEEMod model are shown in Table G.

Table G – CalEEMod Land Use Parameters

Proposed Land Use	Land Use Subtype in CalEEMod	Land Use Size[1]	Lot Acreage[2]	Building[3] (sq ft)	Landscaped Area[4] (sq ft)
Modernization of Existing Structures and New Classroom Building	High School	86.507 TSF	1.00	86,507	8,734
Outside Improved Areas	Other Asphalt Surfaces	1.75 AC	1.75	--	15,246

Notes:
[1] TSF = Thousand Square Feet; AC = Acre.
[2] Lot acreage calculated based on a project site of 4.4 acres.
[3] Building square feet represent area where architectural coatings will be applied
[4] Landscaped area based on 20 percent of disturbed area landscaped.

Construction Parameters

Construction of the proposed project is anticipated to start on July 28, 2026 and would be completed by November 7, 2028. Since the CalEEMod default construction schedule for the project is approximately 13 months, the CalEEMod default construction schedule was extended by a factor of 2.2 times, to match the schedule provided by the applicant. The construction-related GHG emissions were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The phases of construction activities that have been analyzed are detailed below and include: 1) Demolition, 2) Grading, 3) Underground Utilities, 4) Building construction, 5) Paving, and 6) Application of

architectural coatings. The CalEEMod default phases includes a Site Preparation phase that was removed, since the project site is already developed and there is no need for Site Preparation that consists of removing stones and tree stumps, prior to grading. The Trenching phase was added, since the project includes replacing the majority of the School's underground utilities.

CalEEMod provides the selection of reduction measures to account for project conditions that would result in less emissions than a project without these conditions. This includes the required to adherence to SCAQMD Rule 403, which requires that the Best Available Control Measures be utilized to reduce fugitive dust emissions and was modeled in CalEEMod by selection of water demolished area two times per day, water all exposed areas three times per day, water unpaved roads twice daily, reduce vehicle speeds on dirt roads and sweep paved roads once per month.

Demolition

The demolition phase has been modeled as starting on July 28, 2026 and was modeled as occurring over 44 workdays. The demolition phase would consist of demolition of the existing structures on the project site that total 22,265 square feet of building space and 82,000 square feet of pavement. The pavement was assumed to be an average of 4-inches thick and weigh 145 pounds per square foot, which results in 1,982 tons of pavement that would be removed from the project site. For the structures to be demolished, CalEEMod utilizes a factor of 0.046 tons of debris of building material per building square foot. This results in 1,024 tons of debris that would be generated from demolition of the structures. Therefore, the combined demolition of the structures and pavement area would require the removal of 3,006 tons of debris that would be exported from the site and would generate an average 17.1 haul truck trips per day over duration of demolition phase.

The demolition activities would generate an average of 12.5 worker trips per day. The onsite equipment would consist of one concrete/industrial saw, one rubber-tired dozer, and three of either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix.

Grading

The grading phase was modeled as starting after completion of the demolition phase and was modeled as occurring over 13 workdays. During the grading phase it is anticipated that 1,000 cubic yards of dirt will be imported to the project site and 1,500 cubic yards of dirt will be exported from the project site. The movement of dirt to and from the project site would generate an average of 24.1 haul truck trips per day over the duration of the grading phase. The onsite equipment would consist of one grader, one rubber-tired dozer, and two of either tractors, loaders, or backhoes. The grading activities would generate an average of 10 automobile trips per day for the workers.

Underground Utilities

The underground utilities phase was modeled as starting after completion of the grading phase and was modeled as occurring over seven workdays. The underground utilities phase would generate an average of 10 automobile trips per day for the workers. The onsite equipment would consist of one excavator and three of either tractors, loaders, or backhoes.

Building Construction

The building construction would occur after the completion of the underground utilities phase and was modeled as occurring over 484 workdays (22 months). The building construction phase would generate

an average of 36.3 worker trips and 14.2 vendor trips per day. The onsite equipment would consist of the simultaneous operation of one crane, two forklifts, one generator, three welders, and one of either a tractor, loader, or backhoe, which is based on the CalEEMod default equipment mix.

Paving

The paving phase would consist of paving the outside hardscaped areas. The paving phase was modeled as occurring after completion of the building construction phase and occurring over 22 workdays. The paving phase would generate an average of 15 worker trips per day. The onsite equipment would consist of the simultaneous operation of one cement and mortar mixer, one paver, one paving equipment, two rollers, and one of either a tractor, loader, or backhoe, which is based on the CalEEMod default equipment.

Architectural Coating

The application of architectural coatings was modeled as occurring after completion of the paving phase and occurring over 22 workdays. The architectural coating phase was modeled based on covering 129,761 square feet of nonresidential interior area, 43,254 square feet of nonresidential exterior area, and 4,574 square feet of parking and roadway area. The architectural coating phase would generate an average of 7.27 worker trips per day. The onsite equipment would consist of one air compressor, which is based on the CalEEMod default equipment mix.

Operational Emissions Modeling

The operations-related criteria air pollutant emissions and GHG emissions created by the proposed project have been analyzed through use of the CalEEMod model. The proposed project was analyzed in the CalEEMod model based on the land use parameters provided above and the parameters entered for each operational source is described below.

Mobile Sources

Mobile sources include emissions the additional vehicle miles generated from the proposed project. Since the proposed project would not result in an increase in staff or student enrollment, the proposed project is not anticipated to generate any new vehicle trips to the School. As such, the trip generation rate in CalEEMod was set to zero and no further analysis of mobile source emissions is provided in this Report.

Area Sources

Area sources include emissions from consumer products, landscape equipment, and architectural coatings. The area source emissions were based on the on-going use of the proposed project in the CalEEMod model. No changes were made to the default area source parameters in the CalEEMod model.

Energy Usage

Energy usage includes emissions from electricity and natural gas used onsite. The energy usage was based on the ongoing use of the proposed project in the CalEEMod Model. No changes were made to the default energy usage parameters in the CalEEMod model.

Solid Waste

Waste includes the GHG emissions associated with the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. The analysis was based on the

default CalEEMod waste generation rate of 112 tons of solid waste per year from the proposed project. No changes were made to the default solid waste parameters or mitigation measures in the CalEEMod model.

Water and Wastewater

Water includes the water used for the interior of the buildings as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. The analysis was based on the default CalEEMod water usage rate of 2,872,434 gallons per year of indoor water use and 486,021 gallons per year of outdoor water use. No changes were made to the default water and wastewater parameters in the CalEEMod model.

8.2 Energy Use Calculations

The proposed project is anticipated to consume energy during both construction and operation of the proposed project and the parameters utilized to calculate energy use from construction and operation of the proposed project are detailed separately below.

Construction-Related Energy Use

Construction of the proposed project is anticipated to use energy in the forms of petroleum fuel for both off-road equipment as well as from the transport of workers and materials to and from the project site and the calculations for each source are described below.

Off-Road Construction Equipment

The off-road construction equipment fuel usage was calculated through use of the CalEEMod model's default off-road equipment assumptions detailed above in Section 8.1. For each piece of off-road equipment, the fuel usage was calculated through use of the *2017 Off-road Diesel Emission Factors* spreadsheet, prepared by CARB (https://ww3.arb.ca.gov/msei/ordiesel.htm). The Spreadsheet provides the following formula to calculate fuel usage from off-road equipment:

> Fuel Used = Load Factor x Horsepower x Total Operational Hours x BSFC / Unit Conversion
>
> Where:
>
> Load Factor - Obtained from CalEEMod default values
>
> Horsepower – Obtained from CalEEMod default values
>
> Total Operational Hours – Calculated by multiplying CalEEMod default daily hours by CalEEMod default number of working days for each phase of construction
>
> BSFC – Brake Specific Fuel Consumption (pounds per horsepower-hour) – If less than 100 Horsepower = 0.408, if greater than 100 Horsepower = 0.367
>
> Unit Conversion – Converts pounds to gallons = 7.109

Table H shows the off-road construction equipment fuel calculations based on the above formula. Table H shows that the off-road equipment utilized during construction of the proposed project would consume 57,250 gallons of diesel fuel.

Table H – Off-Road Equipment and Fuel Consumption from Construction of the Proposed Project

Equipment Type	Equipment Quantity	Horse-power	Load Factor	Operating Hours per Day	Total Operational Hours[1]	Fuel Used (gallons)
Demolition						
Concrete/Industrial Saw	1	33	0.73	8	352	487
Rubber Tired Dozer	1	367	0.40	8	352	2,668
Tractors/Loaders/Backhoes	3	84	0.37	8	1,056	1,884
Grading						
Grader	1	148	0.41	8	104	326
Rubber Tired Dozer	1	367	0.40	8	104	788
Tractors/Loaders/Backhoes	2	84	0.37	8	208	371
Underground Utilities						
Excavator	1	36	0.38	8	56	44
Tractors/Loaders/Backhoes	3	84	0.37	8	168	300
Building Construction						
Crane	1	367	0.29	8	3,872	21,274
Forklifts	2	82	0.20	7	6,776	6,378
Generator Set	1	14	0.74	8	3,872	2,302
Tractors/Loaders/Backhoes	1	84	0.37	6	2,904	5,180
Welders	3	46	0.45	8	11,616	13,800
Paving						
Cement and Mortar Mixer	1	10	0.56	8	176	57
Paver	1	81	0.42	8	176	344
Paving Equipment	1	89	0.36	8	176	324
Rollers	2	36	0.38	8	352	276
Tractors/Loaders/Backhoe	1	84	0.37	8	176	314
Architectural Coating						
Air Compressor	1	37	0.48	6	132	135
Total Off-Road Equipment Diesel Fuel Used during Construction (gallons)						**57,250**

Notes:
[1] Based on: 44 days for Demolition; 13 days for Grading; 7 days for Underground Utilities; 484 days for Building Construction; 22 days for Paving; and 22 days for Architectural Coating.
Source: CalEEMod Version 2022.1 (see Appendix A); CARB, 2017.

On-Road Construction-Related Vehicle Trips

The on-road construction-related vehicle trips fuel usage was calculated through use of the construction vehicle trip assumptions from the CalEEMod model run as detailed above in Section 8.1. The calculated total construction miles were then divided by the fleet average for South Coast Air Basin portion of Los Angeles County miles per gallon rates for the year 2026 calculated through use of the EMFAC2025 model and the EMFAC2025 model printouts are shown in Appendix B. The worker trips were based on the combined fleet average miles per gallon rates for gasoline powered automobiles, SUVs and pickup trucks and the vendor and haul truck trips were based on the combined T6 and T7 diesel trucks fleet average miles per gallon rate. Table I shows the on-road construction vehicle trips modeled in CalEEMod and the fuel usage calculations.

Table I – On-Road Vehicle Trips and Fuel Consumption from Construction of Proposed Project

Vehicle Trip Types / Fuel Type	Daily Trips	Trip Length (miles)	Total Miles per Day	Total Miles per Phase[1]	Fleet Average Miles per Gallon[2]	Fuel Used (gallons)
Demolition						
Worker (Gasoline)	12.5	18.5	231	10,175	22.5	453
Haul (Diesel)	17.1	20	342	15,048	7.7	1,962
Grading						
Worker (Gasoline)	10	18.5	185	2,405	22.5	107
Haul (Diesel)	24.1	20	482	6,266	7.7	817
Underground Utilities						
Worker (Gasoline)	10	18.5	185	1,295	22.5	58
Building Construction						
Worker (Gasoline)	36.3	18.5	672	325,030	22.5	14,466
Vendor (Diesel)	14.2	10.2	145	70,103	7.7	9,140
Paving						
Worker (Gasoline)	15	18.5	278	6,105	22.5	272
Architectural Coating						
Worker (Gasoline)	7.27	18.5	134	2,959	22.5	132
				Total Gasoline Fuel Used from On-Road Construction Vehicles (gallons)		**15,487**
				Total Diesel Fuel Used from On-Road Construction Vehicles (gallons)		**11,919**

Notes:
[1] Based on: 44 days for Demolition; 13 days for Grading; 7 days for Underground Utilities; 484 days for Building Construction; 22 days for Paving; and 22 days for Architectural Coating.
[2] From EMFAC 2025 model (see Appendix B).
Source: CalEEMod Version 2022.1; CARB, 2018.

Table I shows that the on-road construction-related vehicle trips would consume 15,487 gallons of gasoline and 11,919 gallons of diesel fuel. As detailed above, Table H shows that the off-road construction equipment would consume 57,250 gallons of diesel fuel. This would result in the total consumption of 15,487 gallons of gasoline and 69,168 gallons of diesel fuel from construction of the proposed.

Operations-Related Energy Use

The operation of the proposed project is anticipated to use energy in the forms of petroleum fuel, electricity, and natural gas, and the calculations for each source are described below.

Operational Petroleum Fuel

Operational petroleum fuel would be consumed by the additional vehicle miles generated from the proposed project. As detailed above the proposed project would not result in an increase in student enrollment and is not anticipated to generate any new vehicle trips to the School. As such, the trip generation rate in CalEEMod was set to zero and no further analysis of operational petroleum fuel usage is provided in this Report.

Operational Electricity Use

The operations-related electricity usage was calculated in the CalEEMod model run that is detailed above in Section 8.1 that found the operation of the proposed project would consume 578,416 kilowatt hours

(kWh) per year with implementation of Title 24 part 6 requirements that require the implementation of building energy efficiency standards that include the use of LED lighting.

Operational Natural Gas Use

The operations-related natural gas usage was calculated in the CalEEMod model run that is detailed above in Section 8.1 that found the proposed project will use 1,724,110 kilo British Thermal Units (kBTU) per year, which is equivalent to 17,245 Therms per year of natural gas.

9.0 THRESHOLDS OF SIGNIFICANCE

9.1 Regional Air Quality

Many air quality impacts that derive from dispersed mobile sources, which are the dominant pollution generators in the Air Basin, often occurs hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally very small and difficult to measure. Therefore, SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The SCAQMD CEQA Handbook states that any project in the Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes to this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table J.

Table J – SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance

	Pollutant Emissions (pounds/day)						
	VOC	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**	**Lead**
Construction	75	100	550	150	150	55	3
Operation	55	55	550	150	150	55	3

Source: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2

9.2 Local Air Quality

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. SCAQMD has also provided *Final Localized Significance Threshold Methodology* (LST Methodology), July 2008, which details the methodology to analyze local air emission impacts. The LST Methodology found that the primary emissions of concern are NO_2, CO, PM10, and PM2.5.

The LST Methodology provides Look-Up Tables with different thresholds based on the location and size of the project site and distance to the nearest sensitive receptors. As detailed above in Section 7.3, the project site is located in Monitoring Area 1, Central Los Angeles. The Look-Up Tables include site acreage sizes of 1-acre, 2-acres and 5-acres. Since the area disturbed as part of the project is approximately 2.75 acres, the 2-acre and 5-acre thresholds were interpolated to calculate the thresholds for a 2.75 acre project site.

The nearest sensitive receptors are the USC Catholic Center, HIC Daycare and USC Jewish Center that are as near as 65 feet (20 meters) west of the project site. There are also the USC dormitories that are as near as 85 feet (26 meters) north of the project site. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. Table K below shows the LSTs for NOx, CO, PM10 and PM2.5 for both construction and operational activities.

Table K – SCAQMD Local Air Quality Thresholds of Significance

Activity	Allowable Emissions (pounds/day)[1]			
	Nox	CO	PM10	PM2.5
Construction	121	1,251	10	6
Operation	121	1,251	3	2

Notes:

[1] The nearest sensitive receptors are the Catholic Center, Daycare and Jewish Center to the west that are located as near as 65 feet (20 meters) from the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25-meter threshold.

Source: Calculated from SCAQMD's Mass Rate Look-up Tables for 2 and 5 acres interpolated to 2.75 acres in Air Monitoring Area 1, Central Los Angeles.

9.3 Toxic Air Contaminants

According to the SCAQMD CEQA Handbook, any project that has the potential to expose the public to toxic air contaminants in excess of the following thresholds would be considered to have a significant air quality impact:

- If the Maximum Incremental Cancer Risk is 10 in one million or greater; or
- Toxic air contaminants from the proposed project would result in a Hazard Index increase of 1 or greater.

In order to determine if the proposed project may have a significant impact related to TACs, the *Health Risk Assessment Guidance for analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, (Diesel Analysis) prepared by SCAQMD, August 2003, recommends that if the proposed project is anticipated to create TACs through stationary sources or regular operations of diesel trucks on the project site, then the proximity of the nearest receptors to the source of the TAC and the toxicity of the HAP should be analyzed through a comprehensive facility-wide health risk assessment (HRA).

9.4 Odor Impacts

The SCAQMD CEQA Handbook states that an odor impact would occur if the proposed project creates an odor nuisance pursuant to SCAQMD Rule 402, which states:

> "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
>
> The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

If the proposed project results in a violation of Rule 402 with regards to odor impacts, then the proposed project would create a significant odor impact.

9.5 Energy Conservation

The *2022 CEQA California Environmental Quality Act Statutes & Guidelines* (2022 CEQA Guidelines) include an Energy Section that analyzes the proposed project's energy consumption in order to avoid or reduce

inefficient, wasteful or unnecessary consumption of energy. Appendix F of the 2022 CEQA Statute and Guidelines, states the following:

> The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:
>
> (1) Decreasing overall per capita energy consumption,
>
> (2) Decreasing reliance on fossil fuels such as coal, natural gas and oil, and
>
> (3) Increasing reliance on renewable energy sources.

Since the Energy Section was recently added, no state or local agencies have adopted specific criteria or thresholds to be utilized in an energy impact analysis. However, Appendix F, Subsection II.C of the 2022 CEQA Guidelines provides the following criteria for determining significance.

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project life cycle including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
2. The effects of the project on local and regional energy supplies and on requirement for additional capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

If the proposed project creates inefficient, wasteful or unnecessary consumption of energy during construction or operation activities or conflicts with a state or local plan for renewable energy or energy efficiency, then the proposed project would create a significant energy impact.

9.6 Greenhouse Gas Emissions

The *City of Los Angeles's Green New Deal Sustainable City pLAn,* updated in 2019, which provides Action items that range from harnessing wind power for electricity production and energy efficiency retrofits in City buildings, to converting the City's fleet vehicles to cleaner and more efficient models, and reducing water consumption. Since the pLAn does not provide any quantitative GHG emissions thresholds for new development projects nor does it provide any direction on how to analyze new development projects within the City, the SCAQMD GHG emissions reduction thresholds have been utilized in this analysis.

In order to identify significance criteria under CEQA for development projects, SCAQMD initiated a Working Group, which provided detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 $MTCO_2e$ for all land use projects. Although the SCAQMD provided substantial evidence supporting the use of the above threshold, the SCAQMD Board has not yet considered or approved the Working Group's thresholds.

It should be noted that SCAQMD's Working Group's thresholds were prepared prior to the issuance of Executive Order B-30-15 on April 29, 2015 that provided a reduction goal of 40 percent below 1990 levels

by 2030. This target was codified into statute through passage of AB 197 and SB 32 in September 2016. However, to date no air district or local agency within California has provided guidance on how to address AB 197 and SB 32 with relation to land use projects. In addition, the California Supreme Court's ruling on *Cleveland National Forest Foundation v. San Diego Association of Governments* (Cleveland v. SANDAG), Filed July 13, 2017 stated:

> SANDAG did not abuse its discretion in declining to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal. In its response to comments, the EIR said: "It is uncertain what role regional land use and transportation strategies can or should play in achieving the EO's 2050 emissions reduction target. A recent California Energy Commission report concludes, however, that the primary strategies to achieve this target should be major 'decarbonization' of electricity supplies and fuels, and major improvements in energy efficiency [citation].

Although, the above court case was referencing California's GHG emission targets for the year 2050, at this time it is also unclear what role land use strategies can or should play in achieving the AB 197 and SB 32 reduction goal of 40 percent below 1990 levels by 2030. As such this analysis has relied on the SCAQMD Working Group's recommended thresholds. Therefore, the proposed project would be considered to create a significant cumulative GHG impact if the proposed project would exceed the annual threshold of 3,000 $MTCO_2e$.

The GHG emissions analysis for both construction and operation of the proposed project can be found below in Sections 10.8 and 10.9.

10.0 IMPACT ANALYSIS

10.1 CEQA Thresholds of Significance

Consistent with CEQA and the State CEQA Guidelines, a significant impact related to air quality, energy, and GHG emissions would occur if the proposed project is determined to:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people;
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;
- Conflict with or obstruct a state or local plan for renewable energy;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

10.2 Air Quality Compliance

The proposed project would not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan (AQMP). The following section discusses the proposed project's consistency with the SCAQMD AQMP.

SCAQMD Air Quality Management Plan

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in this report, short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance discussed above in Section 9.1 or local thresholds of significance discussed above in Section 9.2. The ongoing operation of the proposed project would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance discussed above in Section 9.1. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to exceed the air quality standards. Therefore, a less than significant long-term impact would occur and no mitigation would be required.

Therefore, based on the information provided above, the proposed project would be consistent with the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the 2022 AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The 2022 AQMP was developed through use of the planning forecasts provided in the Connect SoCal and 2019 FTIP. The Connect SoCal is a major planning document for the regional transportation and land use network within Southern California. The Connect SoCal is a long-range plan that is required by federal and state requirements placed on SCAG and is updated every four years. The 2019 FTIP provides long-range planning for future transportation improvement projects that are constructed with state and/or federal funds within Southern California. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For this project, the South Los Angeles Community Plan defines the assumptions that are represented in AQMP.

The project site is currently designated as Public Facilities in the Community Plan. The proposed project consists of the modernization of an existing school. The proposed project is an allowed use within the current land use designation. As such, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur in relation to implementation of the AQMP.

Level of Significance

Less than significant impact.

10.3 Cumulative Net Increase in Non-Attainment Pollution

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard. The SCAQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf). In this report the AQMD clearly states (Page D-3):

> *"…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or Environmental Impact Report (EIR). The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility- wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts. Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. The following section calculates the potential air emissions associated with the construction and operations of the proposed project and compares the emissions to the SCAQMD standards.

Construction Emissions

The construction activities for the proposed project are anticipated to include the demolition of 23 classrooms and restrooms in 13 relocatable buildings and a storage building and associated pavement, grading of approximately 2.75 acres of the project site, installation of new underground utilities, building construction that would include the minor modernization of approximately 40,127 square feet of building space and new construction of a 3-story classroom building that would total 46,380 square feet, paving associated with the outside improvements that would include landscape and hardscape upgrades, and application of architectural coatings. The CalEEMod model has been utilized to calculate the construction-related emissions from the proposed project and the input parameters utilized in this analysis have been detailed in Section 8.1. The maximum daily regional construction-related criteria pollutant emissions from the proposed project are shown below in Table L.

Table L – Construction-Related Criteria Pollutant Emissions

Season and Year of Construction	Maximum Daily Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Daily Summer Maximum						
2026	1.49	14.9	16.0	0.03	3.02	1.60
2027	1.27	10.3	14.1	0.03	0.92	0.44
2028	1.21	9.80	13.9	0.03	0.88	0.41
Daily Winter Maximum						
2026	1.49	14.9	15.4	0.03	3.02	1.60
2027	1.27	10.3	13.8	0.03	0.92	0.44
2028	37.6	9.83	13.6	0.03	0.88	0.41
Maximum Daily Construction Emissions	**37.6**	**14.9**	**16.0**	**0.03**	**3.02**	**1.60**
SCQAMD Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
SCAQMD Local Thresholds[1]	**--**	**121**	**1,251**	**--**	**10**	**6**
Exceeds Thresholds?	No	No	No	No	No	No

Notes:
[1] The nearest offsite sensitive receptors are the Catholic Center, Daycare and Jewish Center to the west that are located as near as 65 feet (20 meters) from the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25-meter threshold. Calculated from SCAQMD's Mass Rate Look-up Tables for 2.75 acres interpolated from two and five acres in Air Monitoring Area 1, Central Los Angeles.
Source: CalEEMod Version 2022.1.

Table L shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds during construction of the proposed project. Table L also shows that the proposed project's regional construction-related criteria pollutant emissions that consist of both onsite and offsite emissions sources would not exceed the local thresholds, which provides for a worst-case analysis, since the local thresholds are for analyzing only the emissions created onsite. Therefore, a less than significant regional or local air quality impact would occur from construction of the proposed project.

Operational Emissions

The on-going operation of the proposed project would result in a long-term increase in air quality emissions. This increase would be due to emissions from onsite area sources and energy usage emissions created from the on-going use of the proposed project. The operations-related regional criteria air quality impacts created by the proposed project have been analyzed through use of the CalEEMod model and the input parameters utilized in this analysis have been detailed in Section 8.1. The worst-case summer or winter VOC, NOx, CO, SO_2, PM10, and PM2.5 daily emissions created from the proposed project's long-term operations have been calculated and are summarized below in Table M and the CalEEMod emissions printouts are shown in Appendix A.

Table M – Operational Criteria Pollutant Emissions

Emissions Source	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM10	PM2.5
Area Sources[1]	2.70	0.03	3.76	<0.01	0.01	0.01
Energy Usage[2]	0.03	0.46	0.39	<0.01	0.04	0.04
Total Emissions	**2.73**	**0.49**	**4.15**	**<0.01**	**0.05**	**0.05**
SCQAMD Regional Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
SCAQMD Local Thresholds	**--**	**121**	**1,251**	**--**	**4**	**2**
Exceeds Thresholds?	No	No	No	No	No	No

Notes:
[1] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consist of emissions from natural gas usage.
Source: Calculated from CalEEMod Version 2022.1.

The data provided in Table M shows that none of the analyzed criteria pollutants would exceed either the regional or local emissions thresholds during operation of the proposed project. Therefore, less than significant regional and local air quality impacts would occur from operation of the proposed project.

Friant Ranch Case

In *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (also referred to as "*Friant Ranch*"), the California Supreme Court held that when an EIR concluded that when a project would have significant impacts to air quality impacts, an EIR should "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." In order to determine compliance with this Case, the Court developed a multi-part test that includes the following:

1) The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter.

This Analysis details the specific health risks created from each criteria pollutant above in Section 4.1 and specifically in Table B. In addition, the specific health risks created from diesel particulate matter is detailed above in Section 2.2 of this analysis. As such, this analysis meets the part 1 requirements of the Friant Ranch Case.

2) The analysis shall identify the magnitude of the health risks created from the Project. The Ruling details how to identify the magnitude of the health risks. Specifically, on page 24 of the ruling it states "The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the Project's impact on the days of nonattainment per year."

The Friant Ranch Case found that an EIR's air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf) (Brief), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes. The SCAQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the proposed Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk, it does not necessarily mean anyone will contract cancer as a result of the Project. The Brief also cites the author of the CARB methodology, which reported that a PM2.5 methodology is not suited for small

projects and may yield unreliable results. Similarly, SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NOX or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

On the other hand, for extremely large regional projects (unlike the proposed project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NOx and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone. As shown above in Table L, project-related construction activities would generate a maximum of 37.6 pounds per day of VOC and 9.83 pounds per day of NOx and as shown above in Table M, operation of the proposed project would generate 2.73 pounds per day of VOC and 0.49 pounds per day NOx. The proposed project would not generate anywhere near these levels of 6,620 pounds per day of NOx or 89,190 pounds per day of VOC emissions. Therefore, the proposed project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

Notwithstanding, this analysis does evaluate the proposed project's localized impact to air quality for emissions of CO, NOx, PM10, and PM2.5 by comparing the proposed project's onsite emissions to the SCAQMD's applicable LST thresholds. As evaluated in this analysis, the proposed project would not result in emissions that exceeded the SCAQMD's LSTs. Therefore, the proposed project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NOx, PM10, and PM2.5.

Local CO Hotspot Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards of 20 ppm over one hour or 9 ppm over eight hours.

At the time of the 1993 Handbook, the Air Basin was designated nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Air Basin and in the state have steadily declined. In 2007, the Air Basin was designated in attainment for CO under both the CAAQS and NAAQS. SCAQMD conducted a CO hot spot analysis[4] for attainment at the busiest intersections in Los Angeles during the peak morning and afternoon periods and did not predict a violation of CO standards. Since the nearby intersections to the proposed project are much smaller with less traffic than what was analyzed by the SCAQMD, no local CO Hotspot are anticipated to be created from the proposed project and no CO Hotspot modeling was performed. Therefore, a less than significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed project.

[4] The four intersections analyzed by the SCAQMD were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning and LOS F in the evening peak hour.

Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant.

Level of Significance

Less than significant impact.

10.4 Sensitive Receptors

The proposed project would not expose sensitive receptors to substantial pollutant concentrations. The local concentrations of criteria pollutant emissions produced in the nearby vicinity of the proposed project, which may expose sensitive receptors to substantial concentrations have been calculated above in Section 10.3 for both construction and operations, which are discussed separately below. The discussion below also includes an analysis of the potential impacts from toxic air contaminant emissions. The nearest sensitive receptors are the USC Catholic Center, HIC Daycare and USC Jewish Center that are as near as 65 feet west of the project site. There are also the USC dormitories that are as near as 85 feet north of the project site.

Construction-Related Sensitive Receptor Impacts

The construction activities for the proposed project are anticipated to include demolition of 23 classrooms and restrooms in 13 relocatable buildings and a storage building and associated pavement, grading of approximately 2.75 acres of the project site, installation of new underground utilities, building construction that would include the minor modernization of approximately 40,127 square feet of building space and new construction of a 3-story classroom building that would total 46,380 square feet, paving associated with the outside improvements that would include landscape and hardscape upgrades, and application of architectural coatings. Construction activities may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from onsite construction equipment, which are described below.

Local Criteria Pollutant Impacts from Construction

The local air quality impacts from construction of the proposed project have been analyzed above in Section 10.3 and found that the construction of the proposed project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance discussed above in Section 9.2. Therefore, construction of the proposed project would create a less than significant construction-related impact to local air quality and no mitigation would be required.

Toxic Air Contaminants Impacts from Construction

Construction activities are anticipated to generate TAC emissions from diesel particulate matter (DPM) associated with the operation of trucks and off-road equipment and from possible asbestos in the structures to be remodeled and demolished.

Diesel Particulate Matter Emissions

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. It should be noted that the most current cancer risk

assessment methodology recommends analyzing a 30-year exposure period for the nearby sensitive receptors (OEHHA, 2015).

Given the relatively limited number of heavy-duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 30 or 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet's usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0, Tier 1 or Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023. By January, 2026, 75 percent or more of all contractors' equipment fleets must be Tier 2 or higher and by January, 2029 100 percent of all equipment fleets must be Tier 2 or higher. Therefore, no significant short-term DPM impacts would occur during construction of the proposed project.

Asbestos Emissions

It is possible that the existing onsite structures to be remodeled and demolished contains asbestos. According to SCAQMD Rule 1403 requirements, prior to the start of demolition activities, the existing structures located onsite shall be thoroughly surveyed for the presence of asbestos by a person that is certified by Cal/OSHA for asbestos surveys. Rule 1403 requires that the SCAQMD be notified a minimum of 10 days before any demolition activities begin with specific details of all asbestos to be removed, start and completion dates of demolition, work practices and engineering controls to be used to contain the asbestos emissions, estimates on the amount of asbestos to be removed, the name of the waste disposal site where the asbestos will be taken, and names and addresses of all contractors and transporters that will be involved in the asbestos removal process. Therefore, through adherence to the asbestos removal requirements, detailed in SCAQMD Rule 1403, a less than significant asbestos impact would occur during construction of the proposed project

Therefore, construction of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Operations-Related Sensitive Receptor Impacts

The on-going operations of the proposed project may expose sensitive receptors to substantial pollutant concentrations of local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from onsite operations. The following analyzes the vehicular CO emissions. Local criteria pollutant impacts from onsite operations, and toxic air contaminant impacts.

Local CO Hotspot Impacts from Project-Generated Vehicle Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential impacts to sensitive receptors. The analysis provided above in Section 10.3 shows that no local CO Hotspots are anticipated to be created at any nearby intersections from the vehicle traffic generated by the proposed project. Therefore, operation of

the proposed project would result in a less than significant exposure of offsite sensitive receptors to substantial pollutant concentrations.

Local Criteria Pollutant Impacts from Onsite Operations

The local air quality impacts from the operation of the proposed project would occur from onsite sources such as architectural coatings and landscaping equipment. The analysis provided above in Section 10.3 found that the operation of the proposed project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance discussed above in Section 9.2. Therefore, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to on-site emissions and no mitigation would be required.

Operations-Related Toxic Air Contaminant Impacts

Particulate matter (PM) from diesel exhaust is the predominant TAC in most areas and according to *The California Almanac of Emissions and Air Quality 2013 Edition*, prepared by CARB, about 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants program. Due to the nominal number of diesel truck trips that are anticipated to be generated by the on-going operation of the proposed school project, a less than significant TAC impact would be created from the on-going operations of the proposed project and no mitigation would be required.

Level of Significance

Less than significant impact.

10.5 Odor Emissions

The proposed project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations below.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. Standard construction requirements that limit the time of day when construction may occur as well as SCAQMD Rule 1108 that limits VOC content in asphalt and Rule 1113 that limits the VOC content in paints and solvents would minimize odor impacts from construction. As such, the objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Through compliance with the applicable regulations that reduce odors and due to the transitory nature of construction odors, a less than significant odor impact would occur and no mitigation would be required.

Operations-Related Odor Impacts

The proposed project would consist of a major modernization of an existing school. Potential sources that may emit odors during the on-going operations of the proposed project would primarily occur from the trash storage areas. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402, City trash storage regulations, a less than significant impact related to odors would occur during the on-going operations of the proposed project.

Level of Significance

Less than significant impact.

10.6 Energy Consumption

The proposed project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum based fuel supplies and distribution systems. This analysis includes a discussion of the potential energy impacts of the proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. A general definition of each of these energy resources are provided below.

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands. In 2024, Los Angeles County consumed 64,896 Gigawatt-hours per year of electricity[5].

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and, therefore, resource availability is typically not an

5 Obtained from: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0

issue. Natural gas satisfies almost one-third of the State's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet. In 2024, Los Angeles County consumed 2,830 million Therms of natural gas[6].

Petroleum-based fuels currently account for a majority of the California's transportation energy sources and primarily consist of diesel and gasoline types of fuels. However, the state has been working on developing strategies to reduce petroleum use. Over the last decade California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, petroleum-based fuel consumption in California has declined. In 2024, 2,987 million gallons of gasoline and 288 million gallons of diesel was sold in Los Angeles County[7].

The following section calculates the potential energy consumption associated with the construction and operations of the proposed project and provides a determination if any energy utilized by the proposed project is wasteful, inefficient, or unnecessary consumption of energy resources.

Construction Energy

The proposed project would consume energy resources during construction in three (3) general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, as well as delivery and haul truck trips (e.g. hauling of demolition material to off-site reuse and disposal facilities);
2. Electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction-Related Electricity

During construction the proposed project would consume electricity to modernize the campus. Electricity would be supplied to the project site by LADWP and would be obtained from the existing electrical lines in the vicinity of the project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on fuel consumption. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to

6 Obtained from: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1
7 Obtained from: https://www.energy.ca.gov/media/3874

have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

Since there are currently power lines in the vicinity of the project site, it is anticipated that only nominal improvements would be required to LADWP distribution lines and equipment with development of the proposed project. Compliance with City's guidelines and requirements would ensure that the proposed project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the project. Construction of the project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the project site and on-road automobiles transporting workers to and from the project site and on-road trucks transporting equipment and supplies to the project site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions shown above in Section 8.2, which found that construction of the proposed project would consume 15,487 gallons of gasoline and 69,168 gallons of diesel fuel. This equates to 0.0005 percent of the gasoline and 0.024 percent of the diesel used annually in Los Angeles County. As such, the construction-related petroleum use would be nominal, when compared to current county-wide petroleum usage rates.

Construction activities associated with the proposed project would be required to adhere to all State and SCAQMD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant. Development of the project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the proposed project. It is difficult to measure the energy used in the production of construction materials such as asphalt, steel, and concrete, it is reasonable to assume that the production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business.

Operational Energy

The on-going operation of the proposed project would require the use of energy resources for multiple purposes including, but not limited to, heating/ventilating/air conditioning (HVAC), refrigeration, lighting, appliances, and electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, and landscape equipment.

Operations-Related Electricity

Operation of the proposed project would result in consumption of electricity at the project site. As detailed above in Section 8.2 the proposed project would consume 578,416 kilowatt-hours per year of electricity, which does not account for existing electricity use on the project site. This equates to 0.0009 percent of the electricity consumed annually in Los Angele County. As such, the operations-related electricity use would be nominal, when compared to current electricity usage rates in the County.

It should be noted that, the proposed project would comply with all Federal, State, and City requirements related to the consumption of electricity, that includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards.* The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed structures, including enhanced insulation, use of energy efficient lighting and appliances, water and space heating systems, as well as requiring a variety of other energy-efficiency measures to be incorporated into the proposed project. Therefore, it is anticipated the proposed project will be designed and built to minimize electricity use and that existing and planned electricity capacity and electricity supplies would be sufficient to support the proposed project's electricity demand. Thus, the project would not result in the wasteful or inefficient use of electricity and no mitigation measures would be required.

Operations-Related Natural Gas

Operation of the proposed project would result in increased consumption of natural gas at the project site. As detailed above in Section 8.3 the proposed project would consume 1,724 MBTU per year of natural gas, which does not account for existing natural gas use on the project site. This equates to 0.0006 percent of the natural gas consumed annually in Los Angeles County. As such, the operations-related natural gas use would be nominal, when compared to current natural gas usage rates in the County.

It should be noted that, the proposed project would comply with all Federal, State, and City requirements related to the consumption of natural gas, that includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards.* The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed project, including enhanced insulation as well as use of efficient natural gas appliances and HVAC units. Therefore, it is anticipated the proposed project will be designed and built to minimize natural gas use and that existing and planned natural gas capacity and natural gas supplies would be sufficient to support the proposed project's natural gas demand. Thus, impacts with regard to natural gas supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

In conclusion, the proposed project would comply with regulatory compliance measures outlined by the State and City related to air quality (see section 4.0 above), energy (see section 5.0 above), and GHGs (see section 6.0 above). Additionally, the proposed project would be constructed in accordance with all applicable City Building and Fire Codes. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.7 Energy Plan Consistency

The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The applicable energy plans for the proposed project include Green LA, adopted May 2007; Climate LA, approved 2008; City pLAn, revised in 2019; and LADWP's 2017 Power Strategic Long-Term Resource Plan (SLTRP). All of these plans have city-wide strategies that promote energy conservation in new development projects. The proposed project would be required to adhere to all of the applicable energy conservation regulations that have been implemented as a result of the above plans.

Major objectives for enhancing energy efficiency and expanding the supply of renewable energy resources to LADWP customers that are identified in the SLTRP include:

- 33 percent renewable portfolio standard (RPS) by 2020, 50 percent RPS by 2025, 55 percent RPS by 2030, and 65 percent RPS by 2036;
- 900 megawatts (MW) local solar by 2025 and 1,500 MW local solar by 2035;
- Doubling of energy efficiency from 2017 through 2027;
- Early replacement of electricity derived through coal-powered plants;
- 404 MW of energy storage by 2025;
- Fuel switching/electrification of the transportation sector;
- Replace aging infrastructure components.

Climate LA targets an increase in the use of renewable energy to 35 percent by 2020, reduction in the use of coal-fired power plants and present a comprehensive set of green building policies to guide and support private sector development. These measures include use of LED lighting, increased use of renewable energy, and increased solid waste diversion.

LA's Green New Deal, the City's first update to the City pLAn, was adopted in 2019. It is a program of actions meant to create sustainability-based performance targets through 2050 that are designed to advance economic, environmental, and equity objectives. One of the key aspects to LA's Green New Deal is climate mitigation, which has co-benefits with respect to energy conservation and expanded use of clean and renewable energy sources, as follows:

- Reduce GHG emissions through near-term outcomes;
- Reduce potable water use by 22.5 percent by 2025, 25 percent by 2035, and maintain or further reduce 2035 per capita water use through 2050;
- Reduce building energy use per square feet for all building types by 22 percent by 2025, 34 percent by 2035, and 44 percent by 2050;
- All new buildings will be net zero carbon by 2030 and 100 percent of all buildings will be net zero carbon by 2050;
- Increase landfill diversion rate to 90 percent by 2025, 95 percent by 2035, and 100 percent by 2050;
- Reduce municipal solid waste generation per capita by at least 15 percent by 2030;
- Eliminate organic waste going to landfill by 2028.

Through mandatory compliance with the L.A. Green Building Code (L.A.M.C. Chapter IX, Article 9), amended in 2019 through Ordinance No. 186,488, the Project will achieve the City's objectives for building energy efficiency.

Compliance with the City's Green Building Code standards includes compliance with the 2025 update of the California Code of Regulations Title 24 Part 6, also known as the Building Energy Efficiency Standards. As detailed above in Section 5.1, the 2025 Title 24 standards will require the proposed project to now include an energy budget, HVAC programming requirements, more efficient natural gas water heaters

and HVAC systems and the HVAC systems now are required to provide variable air volume rates that is determined by occupancy and time of day, all buildings with public entrances that are greater than 10,000 sq ft are now required to include an enclosed vestibule with all doors equipped with self-closing devices (the vestibule can be created with either a second door or an air curtain), and laboratories are now subject to the energy code.

The project's compliance with the L.A. Green Building Code would be ensured through the submittal of detailed plans to the Los Angeles Department of Building and Safety, who will ensure that all energy efficiency standards are met. Building permits will not be issued and occupancy will not be allowed, unless satisfactory demonstration of compliance with these standards is provided. Adherence to the City's energy efficiency standards, as noted above, ensures that the Proposed Project would not conflict with or obstruct a plan for renewable energy resources or energy efficiency.

Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.8 Generation of Greenhouse Gas Emissions

The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The proposed project would consist of a major modernization of an existing school. The proposed project is anticipated to generate GHG emissions from area sources, energy usage, waste disposal, water usage, and construction equipment. Since the proposed project would not result in an increase in staff or student enrollment, the proposed project is not anticipated to generate any new vehicle trips to the School and no new mobile source emissions would be created from the proposed project.

The project's GHG emissions have been calculated with the CalEEMod model based on the construction and operational parameters detailed above in Section 8.1. A summary of the results is shown below in Table N and the CalEEMod model run is provided in Appendix A.

Table N – Project Related Greenhouse Gas Annual Emissions

	Greenhouse Gas Emissions (Metric Tons per Year)			
Category	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Area Sources[1]	1.75	<0.01	<0.01	1.76
Energy Usage[2]	273	0.02	<0.01	274
Water and Wastewater[3]	7.89	0.09	<0.01	10.9
Solid Waste[4]	10.0	1.00	0.00	35.1
Refrigeration[5]	--	--	--	0.06
Construction[6]	8.67	<0.01	<0.01	8.77
Total GHG Emissions	**301**	**1.11**	**<0.01**	**331**
SCAQMD Screening Threshold				**3,000**
Exceed Thresholds?				**No**

Notes:

[1] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.

[2] Energy usage consists of GHG emissions from electricity and natural gas usage.

[3] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

[4] Waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[5] Refrigeration includes GHG emissions from refrigerants in air conditioning units.
[6] Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.
Source: CalEEMod Version 2022.1 (see Appendix A)

The data provided in Table N shows that the proposed project would create 331 $MTCO_2e$ per year, which would be well below the SCAQMD's screening threshold of 3,000 $MTCO_2e$ per year. Therefore, a less than significant generation of greenhouse gas emissions would occur from development of the proposed project. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.9 Greenhouse Gas Plan Consistency

The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. In 2008, the City released an implementation program for the LA Green Plan referred to as ClimateLA, which provides detailed information about each action item discussed in the LA Green Plan framework. Action items range from harnessing wind power for electricity production and energy efficiency retrofits in City buildings, to converting the City's fleet vehicles to cleaner and more efficient models, and reducing water consumption.

The *City of Los Angeles's Green New Deal Sustainable City pLAn* (pLAn), prepared in 2015 and updated in 2019, requires both short-term and long-term aspirations through the year 2035 in various topic areas, including: water, solar power, energy-efficient buildings, carbon and climate leadership, waste and landfills, housing and development, mobility and transit, and air quality, among others. Specific targets related to GHG reduction include reducing vehicle miles traveled per capita by 5 percent by 2035 and increasing trips made by walking, biking or transit by at least 35 percent by 2025. In addition, building energy use per square foot for all building types will be reduced by 22 percent by 2025, 34 percent by 2035 and 44 percent by 2050.

In 2019, the first four-year update was released. Although not a formally, adopted plan or policy, but rather a mayoral initiative, the updated document expands upon the City's vision for a sustainable future and provides accelerated targets and new goals. The goal of the 2019 update established targets such as 100-percent renewable energy by 2045 diversion of 100 percent of waste by 2050, and recycling 100 percent of wastewater by 2035. Achieving progress toward these targets would help reduce the City's overall GHG footprint, over time.

The proposed project will be designed to meet the most current City of Los Angeles and State of California Title 24 building energy efficiency standards that have been designed to meet the building energy efficiency goals detailed in the City's pLAn. In addition, as detailed above in Section 10.8, the proposed project is anticipated to create 331 $MTCO_2e$ per year, which is well below the SCAQMD draft threshold of significance of 3,000 $MTCO_2e$ per year. The SCAQMD developed this threshold through a Working Group, which also developed detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 $MTCO_2e$ for all land use type projects, which was based on substantial evidence supporting the use of the recommended thresholds. Therefore, the proposed project would not conflict with any

applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Level of Significance

Less than significant impact.

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APPENDIX A

CalEEMod Model Printouts

32nd St/USC Magnet School Modernization Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	32nd St/USC Magnet School Modernization
Construction Start Date	7/28/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	18.4
Location	34.02418119773344, -118.28316707915235
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4224
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
High School	86.5	1000sqft	1.00	86,507	8,734	8,734	—	—

Other Asphalt Surfaces	1.75	Acre	1.75	0.00	15,246	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.49	14.9	16.0	0.03	3.02	1.60	4,228	0.20	0.29	4.13	4,323
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	37.6	14.9	15.4	0.03	3.02	1.60	4,222	0.20	0.29	0.11	4,312
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.89	7.39	9.91	0.02	0.65	0.32	2,214	0.08	0.07	0.81	2,237
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.53	1.35	1.81	< 0.005	0.12	0.06	366	0.01	0.01	0.13	370
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	150	55.0	—	—	—	—	—
Unmit.	No	No	No	No	No	No	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—
Threshold	75.0	100	550	150	150	55.0	—	—	—	—	—
Unmit.	No	No	No	No	No	No	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	1.49	14.9	16.0	0.03	3.02	1.60	4,228	0.20	0.29	4.13	4,323
2027	1.27	10.3	14.1	0.03	0.92	0.44	3,117	0.13	0.09	2.64	3,151
2028	1.21	9.80	13.9	0.03	0.88	0.41	3,099	0.11	0.09	2.42	3,132
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	1.49	14.9	15.4	0.03	3.02	1.60	4,222	0.20	0.29	0.11	4,312
2027	1.27	10.3	13.8	0.03	0.92	0.44	3,092	0.11	0.09	0.07	3,124
2028	37.6	9.83	13.6	0.03	0.88	0.41	3,075	0.11	0.09	0.06	3,106
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2026	0.41	3.77	4.45	0.01	0.47	0.21	1,041	0.05	0.05	0.39	1,058
2027	0.91	7.39	9.91	0.02	0.65	0.32	2,214	0.08	0.07	0.81	2,237
2028	2.89	5.08	7.17	0.01	0.45	0.21	1,571	0.06	0.05	0.52	1,587
Annual	—	—	—	—	—	—	—	—	—	—	—
2026	0.07	0.69	0.81	< 0.005	0.09	0.04	172	0.01	0.01	0.07	175
2027	0.17	1.35	1.81	< 0.005	0.12	0.06	366	0.01	0.01	0.13	370
2028	0.53	0.93	1.31	< 0.005	0.08	0.04	260	0.01	0.01	0.09	263

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.73	0.49	4.15	< 0.005	0.04	0.04	1,770	6.75	0.03	0.33	1,947

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.11	0.46	0.39	< 0.005	0.04	0.04	1,755	6.75	0.03	0.33	1,931
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.53	0.48	2.97	< 0.005	0.04	0.04	1,765	6.75	0.03	0.33	1,942
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	0.09	0.54	< 0.005	0.01	0.01	292	1.12	< 0.005	0.06	322
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	150	55.0	—	—	—	—	—
Unmit.	No	No	No	No	No	No	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—
Threshold	55.0	55.0	550	150	150	55.0	—	—	—	—	—
Unmit.	No	No	No	No	No	No	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	3,000
Unmit.	—	—	—	—	—	—	—	—	—	—	No

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area	2.70	0.03	3.76	< 0.005	0.01	0.01	15.5	< 0.005	< 0.005	—	15.5
Energy	0.03	0.46	0.39	< 0.005	0.04	0.04	1,647	0.13	0.01	—	1,653
Water	—	—	—	—	—	—	47.4	0.57	0.01	—	65.7

Waste	—	—	—	—	—	—	60.6	6.06	0.00	—	212
Refrig.	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	2.73	0.49	4.15	< 0.005	0.04	0.04	1,770	6.75	0.03	0.33	1,947
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area	2.08	—	—	—	—	—	—	—	—	—	—
Energy	0.03	0.46	0.39	< 0.005	0.04	0.04	1,647	0.13	0.01	—	1,653
Water	—	—	—	—	—	—	47.4	0.57	0.01	—	65.7
Waste	—	—	—	—	—	—	60.6	6.06	0.00	—	212
Refrig.	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	2.11	0.46	0.39	< 0.005	0.04	0.04	1,755	6.75	0.03	0.33	1,931
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area	2.51	0.02	2.58	< 0.005	< 0.005	< 0.005	10.6	< 0.005	< 0.005	—	10.6
Energy	0.03	0.46	0.39	< 0.005	0.04	0.04	1,647	0.13	0.01	—	1,653
Water	—	—	—	—	—	—	47.4	0.57	0.01	—	65.7
Waste	—	—	—	—	—	—	60.6	6.06	0.00	—	212
Refrig.	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	2.53	0.48	2.97	< 0.005	0.04	0.04	1,765	6.75	0.03	0.33	1,942
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.46	< 0.005	0.47	< 0.005	< 0.005	< 0.005	1.75	< 0.005	< 0.005	—	1.76
Energy	< 0.005	0.08	0.07	< 0.005	0.01	0.01	273	0.02	< 0.005	—	274
Water	—	—	—	—	—	—	7.84	0.09	< 0.005	—	10.9
Waste	—	—	—	—	—	—	10.0	1.00	0.00	—	35.1
Refrig.	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	0.46	0.09	0.54	< 0.005	0.01	0.01	292	1.12	< 0.005	0.06	322

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39	12.9	14.6	0.02	0.51	0.47	2,494	0.10	0.02	—	2,503
Demolition	—	—	—	—	0.89	0.14	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	1.56	1.76	< 0.005	0.06	0.06	301	0.01	< 0.005	—	302
Demolition	—	—	—	—	0.11	0.02	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.28	0.32	< 0.005	0.01	0.01	49.8	< 0.005	< 0.005	—	49.9
Demolition	—	—	—	—	0.02	< 0.005	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.81	0.00	0.16	0.04	169	0.01	0.01	0.57	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.40	0.55	0.01	0.33	0.10	1,163	0.06	0.19	2.61	1,222

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.02	< 0.005	19.6	< 0.005	< 0.005	0.03	19.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.18	0.07	< 0.005	0.04	0.01	140	0.01	0.02	0.14	147
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	< 0.005	< 0.005	3.25	< 0.005	< 0.005	< 0.005	3.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005	23.2	< 0.005	< 0.005	0.02	24.4

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	12.9	14.0	0.02	0.58	0.53	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	1.84	0.89	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	12.9	14.0	0.02	0.58	0.53	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	1.84	0.89	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.46	0.50	< 0.005	0.02	0.02	87.4	< 0.005	< 0.005	—	87.7
Dust From Material Movement	—	—	—	—	0.07	0.03	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.09	< 0.005	< 0.005	< 0.005	14.5	< 0.005	< 0.005	—	14.5
Dust From Material Movement	—	—	—	—	0.01	0.01	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.65	0.00	0.13	0.03	135	0.01	< 0.005	0.46	137
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	1.97	0.78	0.01	0.47	0.14	1,638	0.09	0.26	3.67	1,722
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.55	0.00	0.13	0.03	128	0.01	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	2.05	0.78	0.01	0.47	0.14	1,638	0.09	0.26	0.10	1,719
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	< 0.005	< 0.005	4.64	< 0.005	< 0.005	0.01	4.70
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	0.03	< 0.005	0.02	0.01	58.3	< 0.005	0.01	0.06	61.3
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.77	< 0.005	< 0.005	< 0.005	0.78

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	9.66	< 0.005	< 0.005	0.01	10.1

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	10.1	11.8	0.02	0.36	0.33	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.33	1.54	< 0.005	0.05	0.04	289	0.01	< 0.005	—	290
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.24	0.28	< 0.005	0.01	0.01	47.8	< 0.005	< 0.005	—	47.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.16	2.00	0.00	0.47	0.11	467	0.02	0.02	0.04	472
Vendor	0.01	0.51	0.24	< 0.005	0.13	0.04	442	0.02	0.06	0.03	462
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.27	0.00	0.06	0.01	62.1	< 0.005	< 0.005	0.09	62.9
Vendor	< 0.005	0.07	0.03	< 0.005	0.02	< 0.005	58.0	< 0.005	0.01	0.07	60.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.01	< 0.005	10.3	< 0.005	< 0.005	0.02	10.4
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	9.60	< 0.005	< 0.005	0.01	10.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.70	11.7	0.02	0.32	0.30	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.70	11.7	0.02	0.32	0.30	2,201	0.09	0.02	—	2,208
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	6.93	8.36	0.02	0.23	0.21	1,572	0.06	0.01	—	1,577
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.26	1.53	< 0.005	0.04	0.04	260	0.01	< 0.005	—	261
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	2.18	0.00	0.47	0.11	483	0.02	0.02	1.50	490
Vendor	0.01	0.47	0.22	< 0.005	0.12	0.04	433	0.02	0.06	1.13	453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.16	1.85	0.00	0.47	0.11	458	0.01	0.02	0.04	463
Vendor	0.01	0.49	0.23	< 0.005	0.12	0.04	434	0.02	0.06	0.03	452
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.39	0.00	0.34	0.08	332	< 0.005	0.01	0.46	336
Vendor	0.01	0.35	0.16	< 0.005	0.09	0.03	310	0.01	0.04	0.35	323
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.25	0.00	0.06	0.01	54.9	< 0.005	< 0.005	0.08	55.6
Vendor	< 0.005	0.06	0.03	< 0.005	0.02	< 0.005	51.3	< 0.005	0.01	0.06	53.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	9.23	11.7	0.02	0.28	0.26	2,201	0.09	0.02	—	2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	9.23	11.7	0.02	0.28	0.26	2,201	0.09	0.02	—	2,209
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	4.41	5.57	0.01	0.14	0.13	1,051	0.04	0.01	—	1,055
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.80	1.02	< 0.005	0.02	0.02	174	0.01	< 0.005	—	175
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	2.05	0.00	0.47	0.11	474	< 0.005	0.02	1.35	481
Vendor	0.01	0.45	0.21	< 0.005	0.12	0.04	423	0.02	0.06	1.07	443
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.14	1.74	0.00	0.47	0.11	450	0.01	0.02	0.03	455
Vendor	0.01	0.46	0.22	< 0.005	0.12	0.04	424	0.02	0.06	0.03	442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.87	0.00	0.22	0.05	218	< 0.005	0.01	0.28	221
Vendor	< 0.005	0.22	0.10	< 0.005	0.06	0.02	202	0.01	0.03	0.22	211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.16	0.00	0.04	0.01	36.1	< 0.005	< 0.005	0.05	36.5
Vendor	< 0.005	0.04	0.02	< 0.005	0.01	< 0.005	33.5	< 0.005	< 0.005	0.04	35.0

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	5.53	8.18	0.01	0.20	0.19	1,244	0.05	0.01	—	1,248
Paving	0.21	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	5.53	8.18	0.01	0.20	0.19	1,244	0.05	0.01	—	1,248
Paving	0.21	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.33	0.49	< 0.005	0.01	0.01	75.0	< 0.005	< 0.005	—	75.2
Paving	0.01	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.09	< 0.005	< 0.005	< 0.005	12.4	< 0.005	< 0.005	—	12.5
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.05	0.85	0.00	0.20	0.05	196	< 0.005	0.01	0.56	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.72	0.00	0.20	0.05	186	< 0.005	0.01	0.01	188
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.01	< 0.005	11.4	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	1.88	< 0.005	< 0.005	< 0.005	1.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.81	1.12	< 0.005	0.02	0.01	134	0.01	< 0.005	—	134
Architectural Coatings	37.4	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	< 0.005	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	2.26	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	0.41	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.35	0.00	0.09	0.02	89.9	< 0.005	< 0.005	0.01	91.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.01	< 0.005	5.50	< 0.005	< 0.005	0.01	5.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.91	< 0.005	< 0.005	< 0.005	0.92
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Utilities (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.92	6.74	0.01	0.13	0.12	1,013	0.04	0.01	—	1,016
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.13	< 0.005	< 0.005	< 0.005	19.4	< 0.005	< 0.005	—	19.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	3.22	< 0.005	< 0.005	—	3.23
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.55	0.00	0.13	0.03	128	0.01	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	< 0.005	< 0.005	2.50	< 0.005	< 0.005	< 0.005	2.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.41	< 0.005	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
High School	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	1,094	0.08	0.01	—	1,099
Other Asphalt Surfaces	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	1,094	0.08	0.01	—	1,099
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	1,094	0.08	0.01	—	1,099
Other Asphalt Surfaces	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	1,094	0.08	0.01	—	1,099
Annual	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	181	0.01	< 0.005	—	182
Other Asphalt Surfaces	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	181	0.01	< 0.005	—	182

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	0.03	0.46	0.39	< 0.005	0.04	0.04	553	0.05	< 0.005	—	554
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.46	0.39	< 0.005	0.04	0.04	553	0.05	< 0.005	—	554

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	0.03	0.46	0.39	< 0.005	0.04	0.04	553	0.05	< 0.005	—	554
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.46	0.39	< 0.005	0.04	0.04	553	0.05	< 0.005	—	554
Annual	—	—	—	—	—	—	—	—	—	—	—
High School	< 0.005	0.08	0.07	< 0.005	0.01	0.01	91.5	0.01	< 0.005	—	91.7
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	0.08	0.07	< 0.005	0.01	0.01	91.5	0.01	< 0.005	—	91.7

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.86	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.62	0.03	3.76	< 0.005	0.01	0.01	15.5	< 0.005	< 0.005	—	15.5
Total	2.70	0.03	3.76	< 0.005	0.01	0.01	15.5	< 0.005	< 0.005	—	15.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.86	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.23	—	—	—	—	—	—	—	—	—	—

Total	2.08	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.34	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.08	< 0.005	0.47	< 0.005	< 0.005	< 0.005	1.75	< 0.005	< 0.005	—	1.76
Total	0.46	< 0.005	0.47	< 0.005	< 0.005	< 0.005	1.75	< 0.005	< 0.005	—	1.76

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	45.2	0.57	0.01	—	63.5
Other Asphalt Surfaces	—	—	—	—	—	—	2.15	< 0.005	< 0.005	—	2.16
Total	—	—	—	—	—	—	47.4	0.57	0.01	—	65.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	45.2	0.57	0.01	—	63.5
Other Asphalt Surfaces	—	—	—	—	—	—	2.15	< 0.005	< 0.005	—	2.16
Total	—	—	—	—	—	—	47.4	0.57	0.01	—	65.7
Annual	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	7.49	0.09	< 0.005	—	10.5
Other Asphalt Surfaces	—	—	—	—	—	—	0.36	< 0.005	< 0.005	—	0.36

Total	—	—	—	—	—	—	7.84	0.09	< 0.005	—	10.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	60.6	6.06	0.00	—	212
Other Asphalt Surfaces	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	60.6	6.06	0.00	—	212
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	60.6	6.06	0.00	—	212
Other Asphalt Surfaces	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	60.6	6.06	0.00	—	212
Annual	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	10.0	1.00	0.00	—	35.1
Other Asphalt Surfaces	—	—	—	—	—	—	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	10.0	1.00	0.00	—	35.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	—	0.33	0.33
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	—	0.33	0.33
Annual	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	0.06	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10T	PM2.5T	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/28/2026	9/25/2026	5.00	44.0	—
Grading	Grading	9/26/2026	10/14/2026	5.00	13.0	—

Building Construction	Building Construction	10/26/2026	8/31/2028	5.00	484	—
Paving	Paving	9/1/2028	10/2/2028	5.00	22.0	—
Architectural Coating	Architectural Coating	10/3/2028	11/1/2028	5.00	22.0	—
Utilities	Trenching	10/15/2026	10/23/2026	5.00	7.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Utilities	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Utilities	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	17.1	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Utilities	—	—	—	—
Utilities	Worker	10.0	18.5	LDA,LDT1,LDT2
Utilities	Vendor	—	10.2	HHDT,MHDT
Utilities	Hauling	0.00	20.0	HHDT
Utilities	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	24.1	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	36.3	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	14.2	10.2	HHDT,MHDT

Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	7.27	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	129,761	43,254	4,574

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	3,006	—
Grading	1,000	1,500	13.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.75

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
High School	0.00	0%
Other Asphalt Surfaces	1.75	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	690	0.05	0.01
2027	0.00	690	0.05	0.01
2028	0.00	690	0.05	0.01

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
High School	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	129,761	43,254	4,574

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
High School	578,416	690	0.0489	0.0069	1,724,110
Other Asphalt Surfaces	0.00	690	0.0489	0.0069	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
High School	2,872,434	272,202
Other Asphalt Surfaces	0.00	213,819

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
High School	112	—
Other Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.60	annual days of extreme heat
Extreme Precipitation	5.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	45.0
AQ-PM	85.2
AQ-DPM	99.4
Drinking Water	92.5
Lead Risk Housing	25.1
Pesticides	0.00
Toxic Releases	82.3
Traffic	94.7
Effect Indicators	—
CleanUp Sites	9.80
Groundwater	0.00
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	54.1
Cardio-vascular	67.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	32.2
Housing	99.9
Linguistic	69.2
Poverty	99.8
Unemployment	99.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—

Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	99.6
Asthma ER Admissions	33.1
High Blood Pressure	99.6
Cancer (excluding skin)	99.7
Asthma	4.5
Coronary Heart Disease	99.5
Chronic Obstructive Pulmonary Disease	81.8
Diagnosed Diabetes	99.5
Life Expectancy at Birth	0.0
Cognitively Disabled	98.0
Physically Disabled	97.6
Heart Attack ER Admissions	40.9
Mental Health Not Good	7.6
Chronic Kidney Disease	99.4
Obesity	83.0
Pedestrian Injuries	0.0
Physical Health Not Good	66.1
Stroke	99.1
Health Risk Behaviors	—
Binge Drinking	15.4
Current Smoker	12.2
No Leisure Time for Physical Activity	54.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	98.8
Elderly	99.1
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	87.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	4.9
Traffic Density	0.0
Traffic Access	87.4
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	81.0
Healthy Places Index Score for Project Location (b)	—
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total area disturbed 2.75 acres (75% of School Area). 20% of disturbed area landscaped
Construction: Construction Phases	Default construction schedule extended 2.2 times to match project applicant's start and end dates. Site Preparation changed to Trenching
Construction: Off-Road Equipment	Utilities Phase - 3 Tractors/Loaders/Backhoes and 1 Excavator
Operations: Vehicle Data	No increase in school capacity - No new vehicle trips

APPENDIX B

EMFAC2025 Model Printouts

Source: EMFAC2025 (v2.0.0) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC202Y Categories
Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption, kWh/day for Energy Consumption, k

Region	Calendar	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Trips	Fuel Consumption
Los Angeles (SC)	2026	LDA	Aggregate	Aggregate	Gasoline	2821111	78616327	12258231	3062
Los Angeles (SC)	2026	LDT1	Aggregate	Aggregate	Gasoline	294235	8459233	1212757	388
Los Angeles (SC)	2026	LDT2	Aggregate	Aggregate	Gasoline	1595282	53718422	7694658	2463
Los Angeles (SC)	2026	MCY	Aggregate	Aggregate	Gasoline	147256	848036	282342	22
Los Angeles (SC)	2026	MDV	Aggregate	Aggregate	Gasoline	943491	31282546	4310329	1760
Los Angeles (SC)	2026	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	3513	104456	50130	11.9
Los Angeles (SC)	2026	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	3876	115007	55304	13.1
Los Angeles (SC)	2026	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	12828	378970	183059	43.0
Los Angeles (SC)	2026	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	2971	139885	42390	15.6
Los Angeles (SC)	2026	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	3823	136633	44188	15.9
Los Angeles (SC)	2026	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	12354	457499	142813	52.4
Los Angeles (SC)	2026	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	10522	385671	121634	44.1
Los Angeles (SC)	2026	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	4469	187576	51662	21.1
Los Angeles (SC)	2026	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	120	5872	1385	0.6
Los Angeles (SC)	2026	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	1752	103422	20254	10.4
Los Angeles (SC)	2026	T6 Utility Class 5	Aggregate	Aggregate	Diesel	579	21274	7414	2.4
Los Angeles (SC)	2026	T6 Utility Class 6	Aggregate	Aggregate	Diesel	105	3670	1345	0.4
Los Angeles (SC)	2026	T6 Utility Class 7	Aggregate	Aggregate	Diesel	97	4249	1248	0.5
Los Angeles (SC)	2026	T7 Single Concrete/Transit Mix C	Aggregate	Aggregate	Diesel	895	53708	8434	8.8
Los Angeles (SC)	2026	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	2153	111653	20278	18.7
Los Angeles (SC)	2026	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	5033	290537	47407	47.7
Los Angeles (SC)	2026	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	9236	767314	134199	119.0
Los Angeles (SC)	2026	T7 Utility Class 8	Aggregate	Aggregate	Diesel	325	13790	4157	2.2

Worker (Autos) vehicle miles per day	172,924,563	7,696	1,000 gall per day
Workers (Autos) Avg Miles per gallon	**22.5**	7,696,365	gallons per day
Diesel Truck vehicle miles per day	3,281,186	428	1,000 gall per day
Diesel Truck Fleet Avg Miles per gallon	**7.7**	427,797	gallons per day

APPENDIX B – TREE ASSESSMENT REPORT

Tree Assessment Report

For: 32nd Street USC Magnet School
Modernization Project

Prepared for:
Mr. Ammar Sarsam
Principal Operations
HPI Architecture
115 22nd Street
Newport Beach, CA 92663

Prepared by:
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Introduction

Background

Los Angeles Unified School District has engaged HPI Architecture in providing design services for the modernization of the site and facilities of the 32nd Street USC Magnet School. The following report focuses on the trees over 4-inch trunk diameter within the site. Some of the smaller trees will also be commented on, including a small California pepper memorial tree. This report also includes the street trees in front of the site.

At the time of the site inspection on June 23th, the school appears to be closed for students, except the people there for the kick-off meeting and the maintenance crew. Within our scope, the subject trees are all located in front of and among the school buildings and along 32rd Street.

Arborgate Consulting has been retained to assess the quality of the indicated forty-three trees on the two tree maps and to aid in the planning process. The future health and safety of any retained trees will depend on protecting them during and after construction, providing a suitable environment for their future growth, and providing proper training, pruning and maintenance. Unfortunately, some of the trees are unsuitable for preservation, and some may be too close to the construction.

Assignment

Arborgate Consulting was asked to examine and provide an arboricultural evaluation of about 43 trees' health and condition, professional opinions and report as appropriate for the Los Angeles Unified School District. Each tree indicated on the provided maps and within the school property lines was included. The evaluation shall include species, common name, trunk diameter, tree height and width, GPS location, health and structural condition, recommendation for preservation or removal, general recommendation for the protection and preservation of trees on-site during and after construction.

Executive Summary

Overview of Conditions and Recommendations

The 43 trees are a diverse group of species that are generally in fair to poor condition after being confined in urban hardscape. Five of the trees are jacarandas, *Jacaranda mimosifolia*. Seven trees are twisted junipers, *Juniperus chinensis 'Torulosa';* three lemons, Citrus limon; two are carrotwoods, *Cupaniopsis anacardioides;* one is a persimmon, *Diospyros kaki*; three are Shamel ash, *Fraxinus uhdei*; one is a silk oak, *Grevillea robusta*; one is a pink trumpet tree, *Handroanthus impetiginosus*; sixteen are golden rain, mostly *Koelreuteria bipinnata*, but three are *K. elegans*; one sweet gum, *Liquidambar styraciflua*; one fruitless mulberry, *Morus alba*; one evergreen pear, *Pyrus kawakamii*; one Brazil pepper, *Schinus terebinthifolius*; and two Chinese elms, *Ulmus parvifolia*. Their sizes, health, structural condition are found later in this report.

Six street trees are growing in small sidewalk cutouts 4x4-foot or 5x5-foot tree wells. These are City "controlled" trees and permits from the Urban Forestry Division are required before pruning or removing them. The two end ones are in bad shape, and the Urban Forestry Division should be contacted and made aware of their condition. The sweetgum #4, has two broken main limbs, another main limb torn out, and it is very decayed. The jacaranda #10, is very sparse and dying. It is a large old tree in a small tree well, with its base surrounded by bricks. The bricks on the east side and pushed into the root crown. Though not on your campus, these trees will affect your students or be affected by your students. The Urban Forestry Division will make their own determination, so no recommendations are included here.

Throughout the campus trees are planted in small cutouts in the asphalt, like the street trees. Most of the cutouts are only 4x4-foot square. This is not conducive to the long life of trees. Urban street trees are short-lived. Nationally, the average life span is seven years. The City of Los Angeles claims a 17-year average life span, but they do not keep constant monitoring. At one time the City street tree superintendent said he was 17 years behind in answering complaints. The point is only that trees would stay healthier longer if they had more space. However, the most common tree on campus, the golden rain tree, is better suited to this confinement than most trees.

Another necessary component for tree health and deeper roots is mulch. The present small and shallow tree wells are not well suited to confining the mulch. The design process should consider larger planting spaces for trees and the ability to confine a bed of mulch three inches deep. Mulch has many benefits for the soil and roots which will be discussed later.

Table of Trees Recommended for Removal

At least five trees should be removed, one is near dead, and the rest for the running out of space. Ash #11 is near dead and decayed, potentially hazardous. The other ash are out of space. The carrotwood is also out of space and has weak structure. The pink trumpet tree appears to be dying. The work planned may require more removals.

Tag	Species	DBH	Ht.	Wd.	Health	Structure	Comments
33	Cupaniopsis anacardioides	24	30	36	C-	C-	vine covered, cod inc FC CrS
34	Handroanthus impetiginosus	8	28	26	C-	C-	mLean cod 1sRF DLT OL Sp
11	Fraxinus uhdei	14	35	26	D-	D-	DkB cod S/W-target
42	Fraxinus uhdei	22	55	40	B	C	Cod Binj, 2" to-roof-edge
43	Fraxinus uhdei	24	55	45	B	C	Cod inc Xing Hd, paving is root damaged

Findings

General

There are no Los Angeles City or Los Angeles County protected trees (oaks) on this site, all are “exotic trees”. Of the six street trees half are in good health and half in poor to very poor health. One species dominates this campus, the golden rain trees. This species represents almost half the trees on campus, 16 of 37. Fortunately, it is fairly pest free and tolerates lower oxygen levels in the root zone. The rest of the tree pallet is more diverse. The next most common tree is the Hollywood juniper, representing 5 of the 37, but they are more like large shrubs than trees.

Good, well-trained golden rain trees are hard find in nurseries, good quality nurseries are also hard to find when it comes to proper early training. The common nursery practice of topping young seedlings at about 6 feet high results in two or more codominant primary limbs. So, most golden rain trees branch at the same height and look uniform. However, they are also all codominant. Golden rain trees almost never split out or fail due to being codominant.

There are several fruit trees along the west edge of the campus. Fruit trees are a nice idea for schools. It is good to learn how to grow your own food. However, most fruit trees need more root space and healthy soil to be successful in producing fruit.

Large shade trees are appreciated for the large asphalt areas. The two Chinese elms have done their job of shading the asphalt, even though they have so little root space. In between them is a fruitless mulberry (#21), which can be a good source of shade. The main crotch is bleeding, indicating a crack with an infection of some type, which means this tree may not last long.

There is a row of three large ash trees, #11, 42 and 43 near the north east part of the campus. The north-most one, number eleven, is just outside the gate. It is dying and the base is decayed. No testing has been done, but conks are beginning to form

on more than half the base. This is a warning sign that the tree could fall at any time. It will not recover. It cannot. It needs to be removed promptly! The other two ash are just below the fence and in relatively small spaces. Roots from one or two of them can be seen lifting the asphalt for about 30 feet out. If the roots are cut to fix the asphalt, they are likely to end up like tree number eleven.

Pests and Disease

This consultant saw few clear signs of pests or disease, other than those mentioned above. Decay is more likely in trees that have large injuries or large pruning cuts. Decay that starts in large pruning cuts can spread down the inside of the trunk, unseen until conks or fruiting bodies are seen.

The mulberry (#21) is "bleeding", but that could be a symptom of several different diseases. The tree looks healthy now and it is not likely to be decayed, but when the bleeding stops, decay can begin.

The golden rain trees have very few pest or disease issues. Any tree growing in asphalt is likely to develop shallow roots that eventually thicken to the point where they damage the paving. This damage then can become a tripping hazard.

The diversity of the other tree species helps reduce pest and disease problems.

GPS Locations

The level of accuracy is about 12 to 15 feet. GPS locations are less accurate due to proximity to building or surrounding trees. This falls short of the accuracy that can be obtained by $15,000 equipment used by professional surveyors, which I am not. However, I have seen times when even the professionals are off by 12 to 15 feet.

Common Name/Botanic Name Cross-reference

Botanic name	Common name
Citrus limon	Lemon tree
Cupaniopsis anacardioides	Carrotwood
Diospyros kaki	Japanese persimmon
Fraxinus uhdei	Shamel ash
Grevillea robusta	Silk oak
Handroanthus impetiginosus	Pink trumpet tree
Jacaranda mimosifolia	Jacaranda
Juniperus c. Torulosa	Hollywood juniper
Koelreuteria bipinnata	Golden rain tree
Koelreuteria elegans	Chinese flame tree
Liquidambar styraciflua	Sweet gum
Morus alba cv	Fruitless mulberry
Pyrus kawakamii	Evergreen pear
Schinus terebinthifolius	Brazil pepper
Ulmus parvifolia	Chinese elm

Matrix of Findings

Each indicated tree on the provided map was measured and evaluated for the matrix below. Common names for each species were presented in the previous page. The species, size, health assessment, structural condition, GPS location, and the description of defects of the trees are listed below. GPS location lists the location in degrees and minutes in a semi-decimal format. Arboricultural terms are defined in the glossary and an explanation of the abbreviations follows this matrix.

Caliper is determined according to methods described in the 10th edition of the Guide for Plant Appraisal. A Biltmore stick was used to measure trees over eight inches and tree calipers were used to measure trees less than eight inches DBH aka DSH.

Tag	Species	DBH	Ht	Wd	Health	Structure	GPS N	GPS W	Comments
1	Juniperus c. Torulosa	10	18	20	B	C	34º01'29.97"	118º16'57.85"	1sRF CrS mLean
2	Juniperus c. Torulosa	13	16	20	B	B	34º01'29.79"	118º16'57.93"	NoRF
3	Juniperus c. Torulosa	13	18	18	B	B	34º01'29.62"	118º16'58.05"	CrS
4	Schinus terebinthifolius	9"b	18	18	B	C	34º01'29.52"	118º16'58.11"	Cod @ 18" Sup 1s bushy weed
os5	Liquidambar styraciflua	16	16	12	D-	D-	34º01'29.96"	118º16'57.38"	Near dead Dk brk TO cod 5'CO
os6	Jacaranda mimosifolia	5.3	18	20	B	C-	34º01'29.70"	118º16'56.65"	Xing cod mLean 5'CO
os7	Jacaranda mimosifolia	6.2	20	18	B	C-	34º01'29.60"	118º16'56.36"	Topd CrS cod brk 5' CO
os8	Jacaranda mimosifolia	0.5	10	1	C-	C-	34º01'29.41"	118º16'55.89"	Cod 4'CO full of Bermuda
os9	Jacaranda mimosifolia	1.7	12	6	B	B	34º01'29.20"	118º16'55.44"	Cod CrS 4'CO
os10	Jacaranda mimosifolia	14	30	36	C-	C-	34º01'28.89"	118º16'54.75"	Tos cod Db Sp, gird by bricks 5'CO
11	Fraxinus uhdei	14	35	26	D-	D-	34º01'29.00"	118º16'55.48"	DkB cod S/W-target
12	Pyrus kawakamii	10	20	25	B	C	34º01'29.01"	118º16'55.83"	Cod DLS Sh MB mFB
13	Juniperus c. Torulosa	3+5	17	9	B	C	34º01'29.28"	118º16'56.60"	1s Cr-bldg

Tag	Species	DBH	Ht	Wd	Health	Structure	GPS N	GPS W	Comments
14	Juniperus c. Torulosa	4	11	6	B	C-	34º01'28.91"	118º16'56.84"	1s Cr-bldg
15	Koelreuteria elegans	22	40	40	B	C	34º01'29.21"	118º16'58.16"	Cod FC 1sRF sml-CO
16	Diospyros kaki	5" @ 3'	11	12	C	C	34º01'28.99"	118º16'58.52"	Chlor cod sml-CO
17	Citrus limon	6.5"b	13	18	C	C	34º01'28.53"	118º16'58.83"	Chlor cod mDb sml-CO
18	Citrus limon	4"b	8	6	B	C	34º01'28.50"	118º16'58.84"	Sup by#17 cod CrS sml-CO
19	Citrus limon	3+3	12	12	C	C	34º01'28.72"	118º16'59.02"	Pale cod sml-CO
20	Ulmus parvifolia	24	26	45	B	C	34º01'27.62"	118º16'59.16"	Cod Lt DL FC Tinj sml-CO
21	Morus alba cv	10	28	28	B	C	34º01'27.22"	118º16'58.34"	Bleeding crotch, cod sml-CO
22	Koelreuteria bipinnata	10	32	24	B	C	34º01'25.47"	118º16'58.71"	1s OL epi cod sml-CO
23	Koelreuteria bipinnata	12	35	30	B	C	34º01'25.57"	118º16'58.69"	1s cod DL OL sml-CO
24	Cupaniopsis anacardioides	19	32	33	B	C-	34º01'24.92"	118º16'58.82"	1s cod DL OL Tinj sml-CO
25	Koelreuteria bipinnata	10	36	25	B	C-	34º01'24.93"	118º16'58.47"	1s cod inc DL OL sml-CO
26	Koelreuteria bipinnata	9	36	20	C	C-	34º01'25.07"	118º16'58.37"	1s cod Db DL OL sml-CO
27	Koelreuteria bipinnata	10	38	20	B	C	34º01'25.20"	118º16'58.29"	1s cod DL OL sml-CO
28	Koelreuteria bipinnata	11	36	28	B	C	34º01'25.36"	118º16'58.19"	1s cod Xing CrS sml-CO
29	Koelreuteria bipinnata	10	36	28	B	C	34º01'25.00"	118º16'57.45"	1s cod 1sRF DL OL sml-CO
30	Koelreuteria bipinnata	10	34	26	B	C	34º01'24.89"	118º16'57.54"	1s cod DL sml-CO
31	Koelreuteria bipinnata	9	32	24	C	C	34º01'24.71"	118º16'57.61"	1s cod inc SS sml-CO
32	Koelreuteria bipinnata	6	30	20	C	C	34º01'24.59"	118º16'57.70"	1s cod FC 1sRF sml-CO

Tag	Species	DBH	Ht	Wd	Health	Structure	GPS N	GPS W	Comments
33	Cupaniopsis anacardioides	24	30	36	C-	C-	34º01'24.44"	118º16'57.57"	vine covered, cod inc FC CrS sml-CO
34	Handroanthus impetiginosus	8	28	26	C-	C-	34º01'26.13"	118º16'57.58"	mLean cod 1sRF DLT OL Sp
35	Ulmus parvifolia	16	38	42	B	C	34º01'26.83"	118º16'57.49"	Cod OL Xing 1sRF sml-CO
36	Koelreuteria elegans	7.2	15	18	B	D-	34º01'26.77"	118º16'57.12"	45º lean 1s Tinj sml-CO
37	Koelreuteria elegans	6.2	14	15	C	D-	34º01'26.92"	118º16'57.00"	60º lean 1sRF Xing sml-CO
38	Koelreuteria bipinnata	10	28	22	B	C	34º01'27.35"	118º16'56.76"	1s cod 1sRF sml-CO
39	Koelreuteria bipinnata	9.5	28	24	B	C	34º01'27.45"	118º16'56.71"	1s cod root-gall sml-CO
40	Koelreuteria bipinnata	7.5	20	18	B	C	34º01'27.76"	118º16'56.47"	1s cod sml-CO
41	Grevillea robusta	28	55	45	C	C-	34º01'27.81"	118º16'55.69"	RDk Hd DL sml-CO
42	Fraxinus uhdei	22	55	40	B	C	34º01'28.55"	118º16'55.73"	Cod Binj, 2" to-roof-edge, sml-CO
43	Fraxinus uhdei	24	55	45	B	C	34º01'28.82"	118º16'55.59"	Cod inc Xing Hd sml-CO

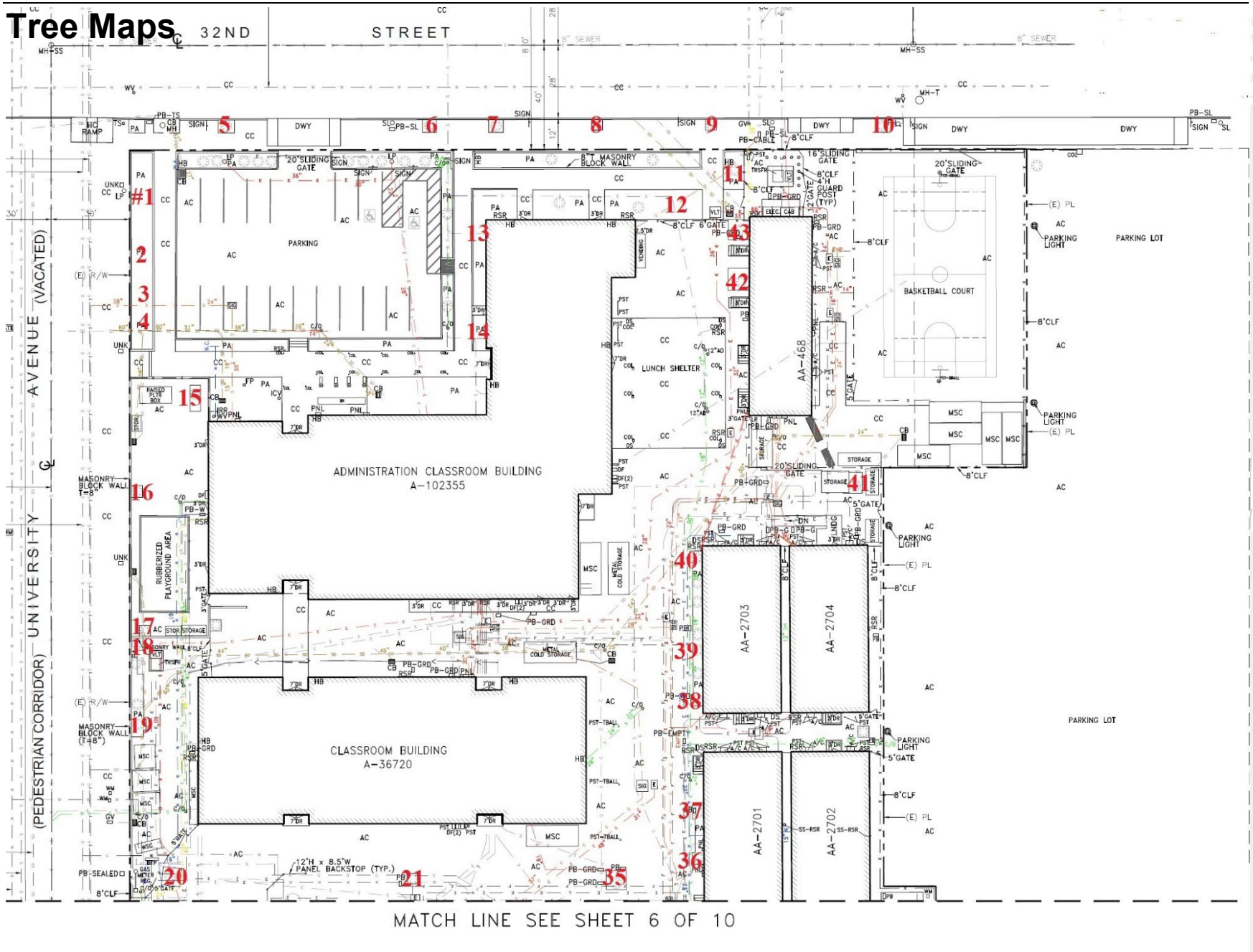
Abbreviations in the Matrix of Findings

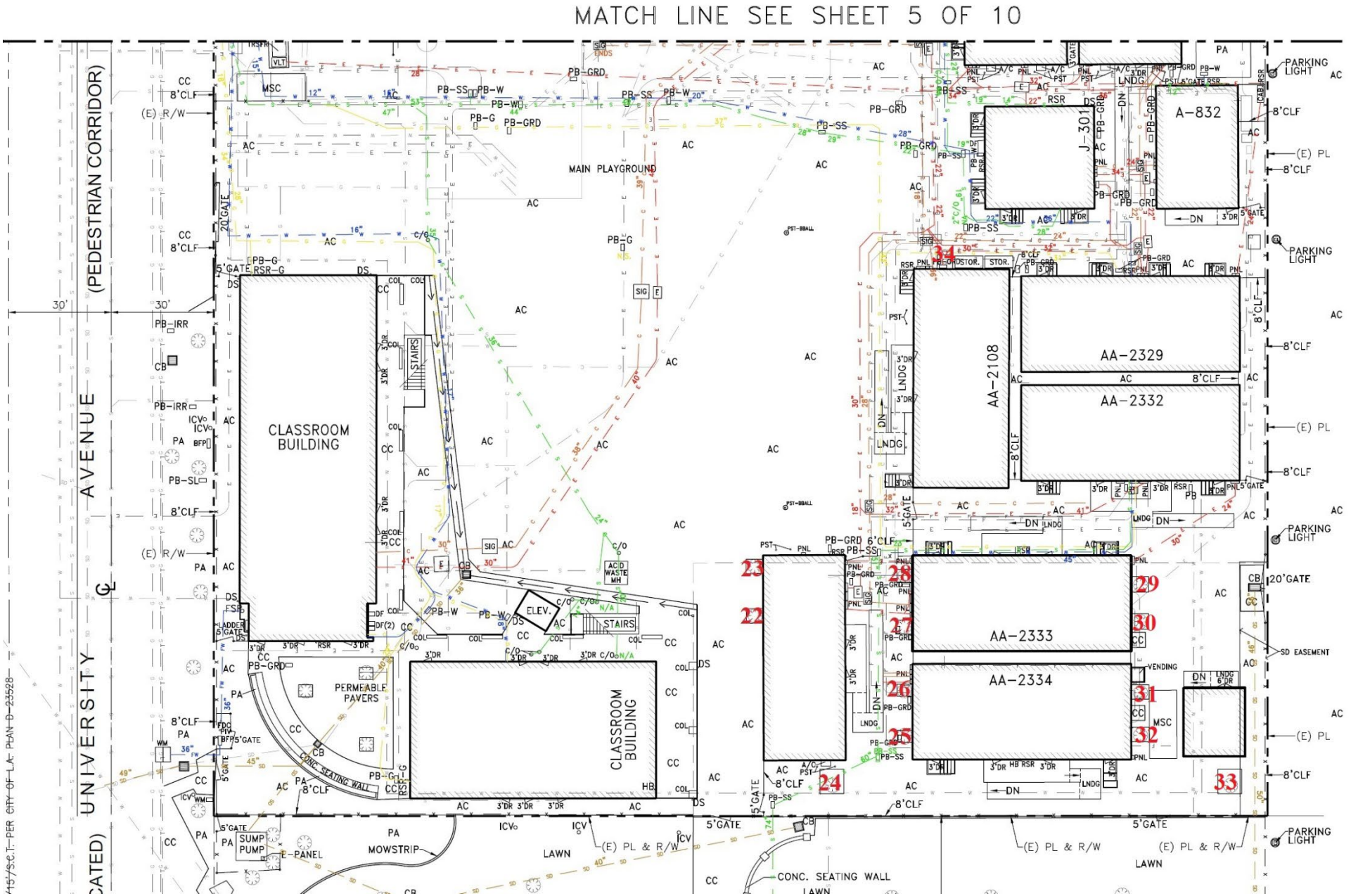
The size, species, evaluation of health, structural condition, location, and the description of defects, health and condition of the trees are listed below. An “A” to “F” scale is used to rate health and structure, i.e. “A” excellent, “B” good, “C” average, “D” poor, and “F” for dead. Arboricultural terms are defined in the glossary.

Common abbreviations in the matrix above include:

1s = one-sided
1sRF = one-sided root flare
Bldg = building
Brk = limb broke
CO = cutout
Cod=codominant
Cr=crowding or crowded
CrS = crowded scaffold limbs
Db=dieback
Dk = decay, DkB = decayed base
DL = dogleg, DLS = dogleg limb
Epi = epicormic shoots
FC = flush cut
Gird = girdled
Hd = headed
Inc=included bark
LB = low branching
Lt = lion-tailed
mLean = minor lean
NoRF = no root flare
OL = over-lifted
os = off site
SS = sun scalded bark
Sml = small
Sp = sparse
Sup = suppressed
SW = sidewalk
Tinj = trunk injury
TO = tear-out
Topd = topped
Ts = trunks
Xing = crossing branches

Tree Maps


32ND STREET
UNIVERSITY AVENUE (VACATED)
(PEDESTRIAN CORRIDOR)
ADMINISTRATION CLASSROOM BUILDING
A-102355
CLASSROOM BUILDING
A-36720
LUNCH SHELTER
BASKETBALL COURT
PARKING
PARKING LOT
AA-468
AA-2703
AA-2704
AA-2701
AA-2702
RUBBERIZED PLAYGROUND AREA
MASONRY BLOCK WALL
20'SLIDING GATE
16'SLIDING GATE
8'CLF
5'GATE
12'H x 8.5'W PANEL BACKSTOP (TYP.)
MATCH LINE SEE SHEET 6 OF 10


MATCH LINE SEE SHEET 5 OF 10
UNIVERSITY AVENUE (PEDESTRIAN CORRIDOR)
CLASSROOM BUILDING
CLASSROOM BUILDING
MAIN PLAYGROUND
AA-2108
AA-2329
AA-2332
AA-2333
AA-2334
A-832
J-301
PERMEABLE PAVERS
CONC. SEATING WALL
SUMP PUMP
E-PANEL
MOWSTRIP
LAWN
(E) PL & R/W
PARKING LIGHT
SD EASEMENT
VENDING
23
22
28
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33
34

Size Determination - Method of Measurement

For the purpose of trunk measurement, the size of trees is usually determined by the trunk diameter at 4.5 feet above grade. .

The height at which the trunk diameter is measured (or estimated) depends on its size. The American Standard for Nursery Stock (ANSI-Z60-1.1.1-1990) stipulates that trunks up to 4 inches shall be measured at 6 inches above grade. Larger trees are measured at 54 inches (4.5') above grade.

Condition

This consultant judges a tree's structural condition based on five factors: roots, trunk, scaffold limbs, smaller branches and foliage. Health is determined by leaf color, density, leaf size, and internode length.

Contingent and Limited Conditions

All condition ratings were based on visible issues. No dissection, internal or below ground testing was performed.

The condition and health of the roots, and amount of roots under the paving and into the site soil is unknown.

The *final* choice of which trees remain and which are removed is not within the scope of my assignment.

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Recommendations

Matrix of Recommendations

It is very important that all trees to remain be properly fenced and protected during construction according to the preservation specifications to follow.

Abbreviations Legend:

1s = one-sided
1sRF = one-sided root flare
Bldg = building
Brk = limb broke
CO = cutout
Cod=codominant
Cr=crowding or crowded
CrS = crowded scaffold limbs
Db=dieback
Dk = decay, DkB = decayed base
DL = dogleg, DLS = dogleg limb
Epi = epicormic shoots
FC = flush cut
Gird = girdled
Hd = headed
Inc=included bark
LB = low branching
Lt = lion-tailed
mLean = minor lean
NoRF = no root flare
OL = over-lifted
os = off site
SS = sun scalded bark
Sml = small
Sp = sparse
Sup = suppressed
SW = sidewalk
Tinj = trunk injury

Tag	Species	DBH	Ht.	Wd.	Health	Structure	CPR	Disposition	Comments
1	Juniperus c. Torulosa	10	18	20	B	C	10.0	Protect in place	1sRF CrS mLean
2	Juniperus c. Torulosa	13	16	20	B	B	11.0	Protect in place	NoRF
3	Juniperus c. Torulosa	13	18	18	B	B	11.0	Protect in place	CrS
4	Schinus terebinthifolius	9"b	18	18	B	C	N/A	Remove	Cod @ 18" Sup 1s bushy weed
os5	Liquidambar styraciflua	16	16	12	D-	D-	N/A	City's tree N/A	Near dead Dk brk TO cod 5'CO
os6	Jacaranda mimosifolia	5.3	18	20	B	C-	N/A	City's tree N/A	Xing cod mLean 5'CO
os7	Jacaranda mimosifolia	6.2	20	18	B	C-	N/A	City's tree N/A	Topd CrS cod brk 5' CO
os8	Jacaranda mimosifolia	0.5	10	1	C-	C-	N/A	City's tree N/A	Cod 4' CO full of Bermuda
os9	Jacaranda mimosifolia	1.7	12	6	B	B	N/A	City's tree N/A	Cod CrS 4'CO
os10	Jacaranda mimosifolia	14	30	36	C-	C-	N/A	City's tree N/A	TOs cod Db Sp, gird by bricks 5'CO
11	Fraxinus uhdei	14	35	26	D-	D-	N/A	Remove	DkB cod S/W-target
12	Pyrus kawakamii	10	20	25	B	C	10.0	Protect in place	Cod DLS Sh MB mFB
13	Juniperus c. Torulosa	3+5	17	9	B	C	6.0	?	1s Cr-bldg
14	Juniperus c. Torulosa	4	11	6	B	C-	4.0	?	1s Cr-bldg
15	Koelreuteria elegans	22	40	40	B	C	16.0	Protect in place	Cod FC 1sRF sml-CO
16	Diospyros kaki	5" @ 3'	11	12	C	C	4.0	Protect in place	Chlorotic cod sml-CO
17	Citrus limon	6.5"b	13	18	C	C	7.0	Protect in place	Chlorotic cod mDb sml-CO
18	Citrus limon	4"b	8	6	B	C	4.0	Protect in place	Sup by#17 cod CrS sml-CO
19	Citrus limon	3+3	12	12	C	C	5.0	Protect in place	Pale cod sml-CO
20	Ulmus parvifolia	24	26	45	B	C	24.0	Protect in place	Cod Lt DL FC Tinj sml-CO
21	Morus alba cv	10	28	28	B	C	N/A	Remove	Bleeding crotch, cod sml-CO
22	Koelreuteria bipinnata	10	32	24	B	C	9.0	Protect in place	1s OL epi cod sml-CO

Tag	Species	DBH	Ht.	Wd.	Health	Structure	CPR	Disposition	Comments
23	Koelreuteria bipinnata	12	35	30	B	C	10.0	Protect in place	1s cod DL OL sml-CO
24	Cupaniopsis anacardioides	19	32	33	B	C-	N/A	Remove	1s cod DL OL Tinj sml-CO
25	Koelreuteria bipinnata	10	36	25	B	C-	8.0	Protect in place	1s cod inc DL OL sml-CO
26	Koelreuteria bipinnata	9	36	20	C	C-	8.0	Protect in place	1s cod Db DL OL sml-CO
27	Koelreuteria bipinnata	10	38	20	B	C	8.0	Protect in place	1s cod DL OL sml-CO
28	Koelreuteria bipinnata	11	36	28	B	C	9.0	Protect in place	1s cod Xing CrS sml-CO
29	Koelreuteria bipinnata	10	36	28	B	C	8.0	Protect in place	1s cod 1sRF DL OL sml-CO
30	Koelreuteria bipinnata	10	34	26	B	C	8.0	Protect in place	1s cod DL sml-CO
31	Koelreuteria bipinnata	9	32	24	C	C	8.0	Protect in place	1s cod inc SS sml-CO
32	Koelreuteria bipinnata	6	30	20	C	C	5.0	Protect in place	1s cod FC 1sRF sml-CO
33	Cupaniopsis anacardioides	24	30	36	C-	C-	N/A	Remove	vine covered, cod inc FC CrS sml-CO
34	Handroanthus impetiginosus	8	28	26	C-	C-	N/A	Remove	mLean cod 1sRF DLT OL Sp sml-CO
35	Ulmus parvifolia	16	38	42	B	C	15.0	Protect in place	Cod OL Xing 1sRF sml-CO
36	Koelreuteria elegans	7.2	15	18	B	D-	N/A	Remove	45º lean 1s Tinj sml-CO
37	Koelreuteria elegans	6.2	14	15	C	D-	N/A	Remove	60º lean 1sRF Xing sml-CO
38	Koelreuteria bipinnata	10	28	22	B	C	9.0	Protect in place	1s cod 1sRF sml-CO
39	Koelreuteria bipinnata	9.5	28	24	B	C	9.0	Protect in place	1s cod root-gall sml-CO
40	Koelreuteria bipinnata	7.5	20	18	B	C	7.0	Protect in place	1s cod sml-CO
41	Grevillea robusta	28	55	45	C	C-	N/A	Remove	RDk Hd DL sml-CO
42	Fraxinus uhdei	22	55	40	B	C	N/A	Remove	Cod Binj, 2" to-roof-edge
43	Fraxinus uhdei	24	55	45	B	C	N/A	Remove	Cod inc Xing Hd sml-CO

Soil Improvement

The best and most reliable procedure for preventing soil compaction and providing for deep rooting is to specify compaction-resistant soils in the redesign process, together with other design and maintenance elements to minimize foot traffic and compaction. One way to increase the root space is to increase root depth. Compaction reduces root depth and thus reduces root space.

Compaction-resistant soils have a large proportion of coarse sand and little silt or clay. Soil with a large proportion of the silt or clay is susceptible to compaction. An engineered soil mix from Cornell University, referred to as "gap-graded" or "structural soil", can be used in small planting areas, even under paving, but may be too expensive to use over large areas or for many trees. Cornel Mix is also not very efficient because roots cannot grow into the aggregate particles (gravel). Amsterdam mix is more efficient because it has no gravel, but it needs good quality real peatmoss.

Adding organic matter in moderate amounts (4 to 5 percent by weight) will tend to diminish compaction. Organic matter lightens the soil, acts as a cementing agent and encourages organisms that are necessary for loosening the soil. Also, organic matter contributes some nitrogen to the soil nutrient pool. Excessive organic matter, however, will cause settling. Keep in mind that even a good grade of peat moss only lasts ten years in the soil. The organic matter in most soil mixes last a year or two.

Also useful in preparing new areas for planting to provide compaction resistance is a polymer known as PAM, by Complete Green Company (310-640-6815). Applied to the soil per directions, PAM provides a more stable soil aggregate, less prone to compaction.

Ground cover plantings, shrub plantings or low walls that prevent or discourage foot traffic will also help to reduce or prevent soil compaction.

A thick surface layer of coarse-textured mulch, especially wood chips, will reduce soil compaction. This method is very useful in heavily trafficked areas where turf is not maintained or needed. Surface mulching will also increase beneficial soil organisms, moderate fluctuations of soil moisture and temperature, improve soil structure and fertility, and increase the depth of roots. Vertical mulching, the drilling of 3-inch diameter or larger holes into the soil and backfilling with an organic mix, can also increase the depth of roots.

In addition, shallow, fine-rooted trees like crape myrtles need a good layer of mulch over their entire root zone. The mulch should be coarse-textured, green-waste based, and then dependent on their own fallen leaves swept or blown back under the

trees. Chips from pruning are also good mulch and are free. Mulching will improve root health, increase beneficial soil micro-organisms, reduce disease, moderate soil temperatures, and if applied deep enough reduce weeds.

Horticultural soils tests are needed to check for salts and primary nutrients. Sodium prevents good soil structure and aggravates soil compaction. Frequent light irrigation allows salts to accumulate in the soil. Fertilizer and other recommendations should be based on the results of lab tests rather than routine procedures. So-called "balanced" fertilizers should not be used unless and until recommended by a soil laboratory. The soil must be moist before any recommended fertilizer is applied. Surface mulching is recommended *after* fertilization.

General Discussion

Many of these planting locations are too small to last for long with large trees. Large trees, like oaks, are a good choice for a dry xerophytic landscape, but they need large open root spaces. They could live a hundred years in a more open soil setting, but not in a 4x4' cutout. Because of higher moisture levels and soil compaction under paving, the roots are shallower, which also limits soil volume and increases root damage to adjoining paving.

Because of the limited root space and competition, life expectancy of these trees will be cut short. Limited root volume is the main reason the average life expectancy of urban street trees in Los Angeles is seventeen years. As trees reach maturity, or senescence, increased risk of limb drop can be expected, especially those that have codominant main limbs with included bark, or have been lion-tailed, headed, or topped.

Now is the time period for planning future maintenance. Trees have shorter life spans in confined settings. While trees may outlive humans many times over in natural settings, they need to be replaced on a more regular basis in urban plantings. As a comparison, cities need to replace urban street trees as often as every seven to ten years in other parts of the country. A campus also needs to be replanted periodically to maintain a safe and attractive environment. During the construction period is a good time to replace such trees, but planned replacement will be needed in the future, especially for the other trees in small spaces.

Replacements

Trees in small planters like these will always have a short life span, unless small, slow-growing trees are used, but their life span could be increased by replacing and improving the soil to support more roots more deeply. Increasing the depth of rooting will increase the effective root space. There are dozens of small species more suitable for this campus, not just crape myrtles.

Periodic replacement is the best and most practical solution for trees in small spaces like these. Smaller species of trees will generally last longer than larger faster growing species, but give less shade. Also, small species of trees may not provide the scale needed near the large buildings. Many slow growing trees are not as resilient and do not recover from damage quickly. Some larger species, such as Brisbane box, have finer, less expansive and damaging root systems for their canopy size than some others, such as Shamel ash. Root barriers, properly installed around the planting areas can also reduce damage, but they may also shorten the life span.

Tree Preservation Specifications

1. Protection Barrier: A protection barrier shall be installed around the tree or trees to be preserved. The barrier shall be constructed of durable fencing material, such as chain-link fencing. The barrier shall be placed as far from the base of the tree(s) as possible, about 1-foot per inch of trunk diameter and beyond the drip-line. The fencing shall be maintained in good repair throughout the duration of the project, and shall not be removed, relocated, or encroached upon without permission of the arborist involved.

2. Storage of Materials: There shall be NO storage of materials or supplies of any kind within the area of the protection barriers. Concrete and cement materials, block, stone, sand and soil shall not be placed within the drip-line of the tree.

3. Fuel Storage: Fuel storage shall NOT be permitted within 150 feet of any tree to be preserved. Refueling, servicing and maintenance of equipment and machinery shall NOT be permitted within 150 feet of trees to remain or over landscape areas.

4. Debris and Waste Materials: Debris and waste from construction or other activities shall NOT be permitted within protected areas. Wash down of concrete or cement handling equipment, in particular, shall NOT be permitted within 150 feet of protected trees.

5. Planting near Trees Designated for Protection: Any digging within designated protection zones shall done using supersonic air directly as the digging medium, by means of a nozzle, whose nominal rated input pressure (available from manufacturer's literature) must not exceed 130 psig (pounds per square inch at gage) unless otherwise approved. Nozzles designed for input above 130 psig can damage fine roots. Air compressors rated between 100 to 125 psig recommended.

6. Grade Changes: Any grade changes proposed should be approved by a Registered Consulting Arborist before construction begins, and precautions taken to mitigate potential injuries. Grade changes can be particularly damaging to trees. Even as little as two inches of fill can cause the death of a tree. Lowering the grade can destroy major portions of a root system.

7. Damages: Any tree damages or injuries should be reported to the project arborist as soon as possible. Severed roots shall be pruned cleanly to healthy tissue, using proper pruning tools. Broken branches or limbs shall be pruned according to International Society of Arboriculture Pruning Guidelines and ANSI A-300 Pruning Standards.

Disclaimer

Professional and current information on tree evaluation, valuation and risk has been applied to this tree-by-tree inspection. However, even when every tree is inspected, inspection involves sampling, therefore some areas of decay or weakness may be missed. Weather, winds and the magnitude and direction of storms are not predictable and some failures may still occur despite the best application of high professional standards. Future tree maintenance will also affect the trees health and stability and is not under the supervision or scrutiny of this consultant. Future construction activity will also affect their health and safety, but are unknown and unsupervised by this consultant. Trees are living, dynamic organisms and their future status cannot be predicted with complete certainty by any expert.

No internal or below ground inspection was requested or performed. This consultant assumes no liability for any tree failures involved with this project.

Appendix

A. Resume

B. Photographic Documentation

C. Credentials and Qualifications

A. RESUME - GREGORY W. APPLEGATE, ASCA, ASLA emeritus

Credentials

American Society of Consulting Arborists - Registered Consulting Arborist #365
International Society of Arboriculture - Certified Arborist #WE-180a
International Society of Arboriculture - Tree Risk Assessment Qualified-
American Society of Consulting Arborists – Tree and Plant Appraisal Qualified

Experience

Mr. Applegate is an independent consulting arborist, CEO of Arborgate Consulting, Inc. He has been in the horticulture industry since 1963, providing professional arboricultural consulting since 1984 within both private and public sectors. His expertise includes appraisal, tree preservation, diagnosis of tree and palm problems, construction impact mitigation, forensic consulting and testimony, risk evaluation, pruning specifications and supervision, species selection and tree health monitoring.

Mr. Applegate consults for insurance companies, developers, theme parks, museums, homeowners, homeowners' associations, landscape architects, landscape contractors, property managers, attorneys, schools, universities and governmental bodies.

Notable projects on which he has consulted are: Disneyland, Disneyland Hotel, DisneySeas-Tokyo, Disney's Wild Animal Kingdom, the New Tomorrowland, Disney's California Adventure, Disney Hong Kong project, Universal Studios, Knott's Berry Farm, J. Paul Getty Museum, Tustin Ranch, Newport Coast, Crystal Court, Newport Fashion Island Palms, Bixby Ranch Country Club, Playa Vista, MTA Purple and Expo Lines, MWD-California Lakes, Loyola-Marymount campus, Cal Tech, Cal State Long Beach, Pierce College, The Irvine Concourse, UCI, USC, UCLA, LA City College, LA Trade Tech, Riverside City College, Crafton Hills College, and the State of California review of the Landscape Architecture License exam (re: plant materials)

Education

Bachelor of Science in Landscape Architecture, California State Polytechnic University, Pomona 1973
Arboricultural Consulting Academy (by ASCA) Arbor-Day Farm, Kansas City 1995
Continuing Education Courses in Arboriculture required to maintain Certified Arborist status and for ASCA registration

Professional Affiliations

American Society of Consulting Arborists (ASCA), Registered Member
International Society of Arboriculture (ISA), Certified Member
ASCA 2011 Nominations Committee and A3G appraisal update committee
ASCA, Industry definitions committee 2009-2010
ASCA web site, west coast tree question responder (2007-2016)
California Oak Foundation, Member (2009 and continuing)
International Palm Society (IPS), Member (1977 and continuing)
California Tree Failure Report Program, UC Davis, Participant (1995 to present)
Street Tree Seminar (STS), Member (1978 and continuing)

Community Affiliations

Horticulture Advisory Committee, Saddleback College (1988 -1995
SoCalif ASLA visibility committee 1980-82
UCLA Interior Landscape Committee 1987
Landscape Arch. License Exam prep, Instructor, Cal Poly Pomona (1986-90)
American Institute of Landscape Architects Board of Directors (1980-82)
California Landscape Architect Student Scholarship Fund-Chairman (1985)
International Society of Arboriculture-Examiner-tree worker certification (1990)
Guest lecturer at UCLA, Cal Poly, Saddleback College, & Palomar Junior College
The Tree People (2000 and continuing)

B. Photographic Documentation

#1 Hollywood juniper

#2 Hollywood juniper

#3 Hollywood juniper – note adjoining Brazil pepper

#4 Brazil pepper – note low-branching trunk at the left.

Street tree #5 Sweetgum

Street tree #6 Jacaranda

Street tree #7 Jacaranda

Street tree #8 Jacaranda

Street tree #9 Jacaranda

Street tree #10 Jacaranda – note sparse foliage.

#11 Shamel ash – is leaning decayed.

Conks are starting to form around the base.

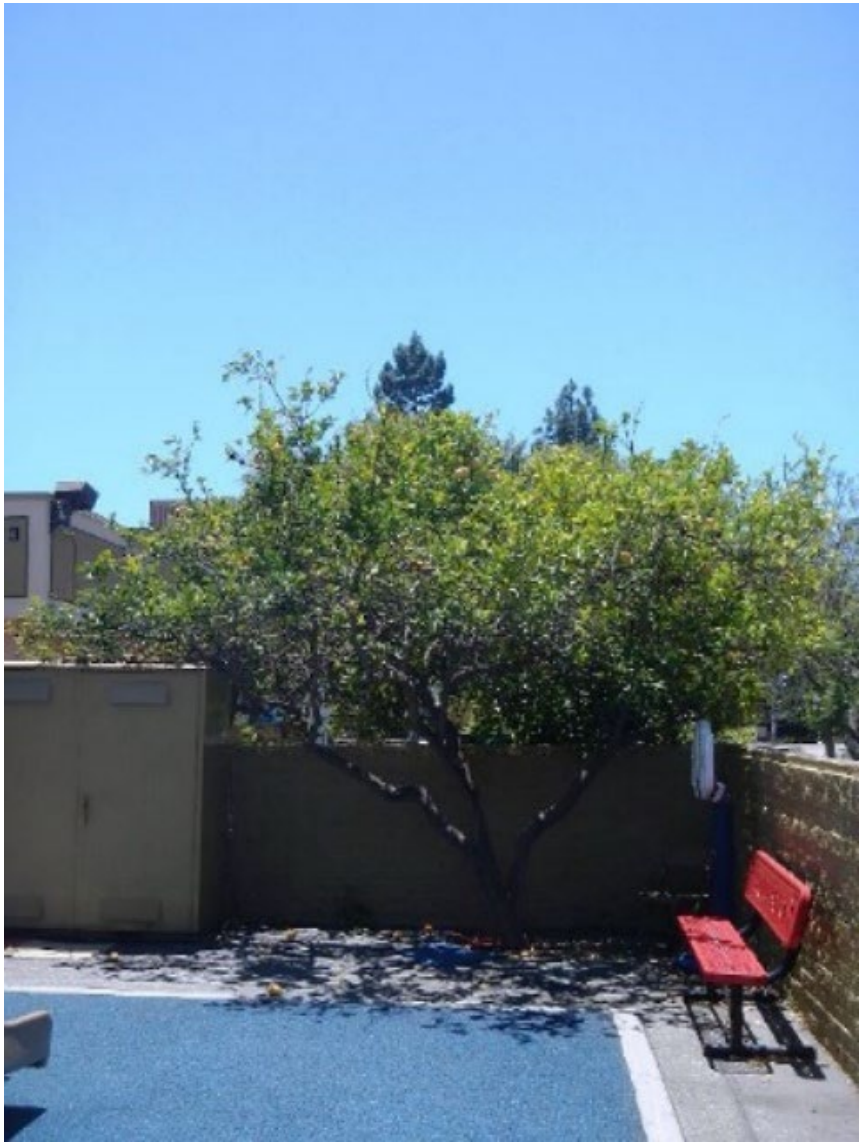
#12 Evergreen pear

Italian cypress are not tagged or included. They are less than 4" DBH

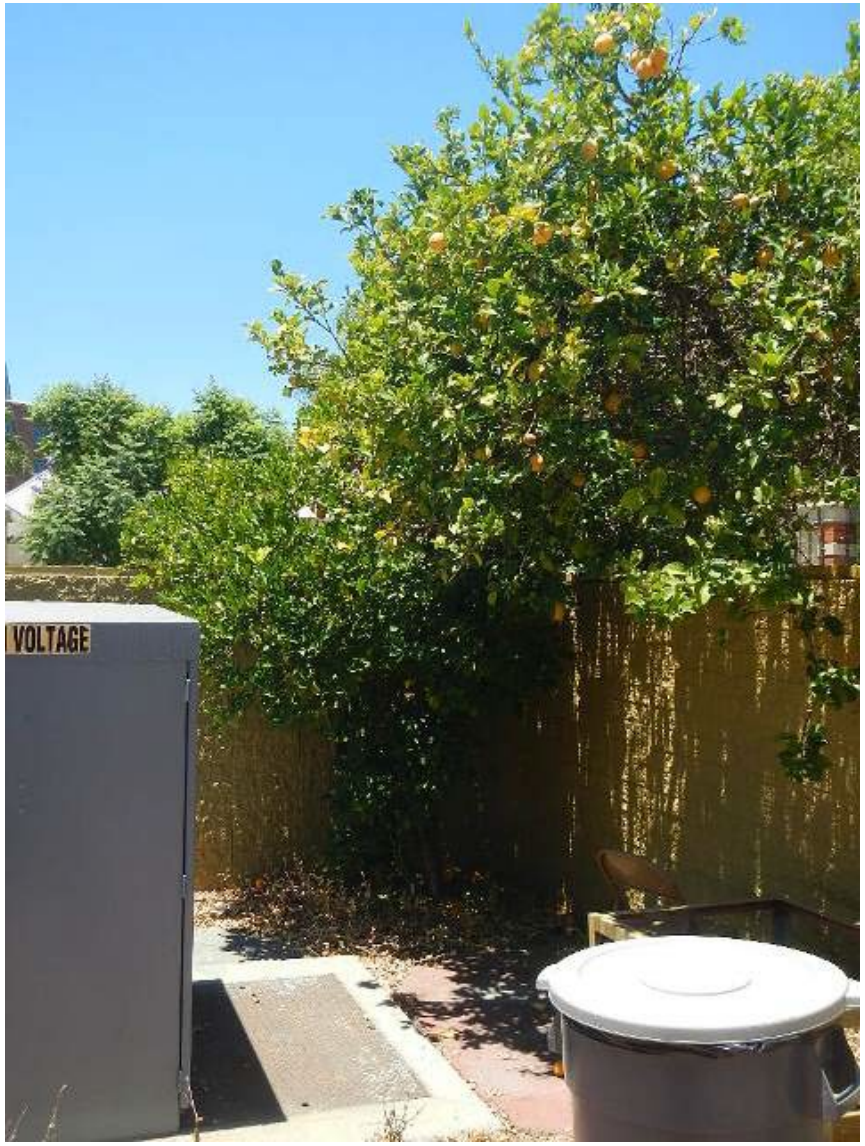
#13 Hollywood juniper (#14 not pictured)

#15 Golden rain tree

#16 Persimmon

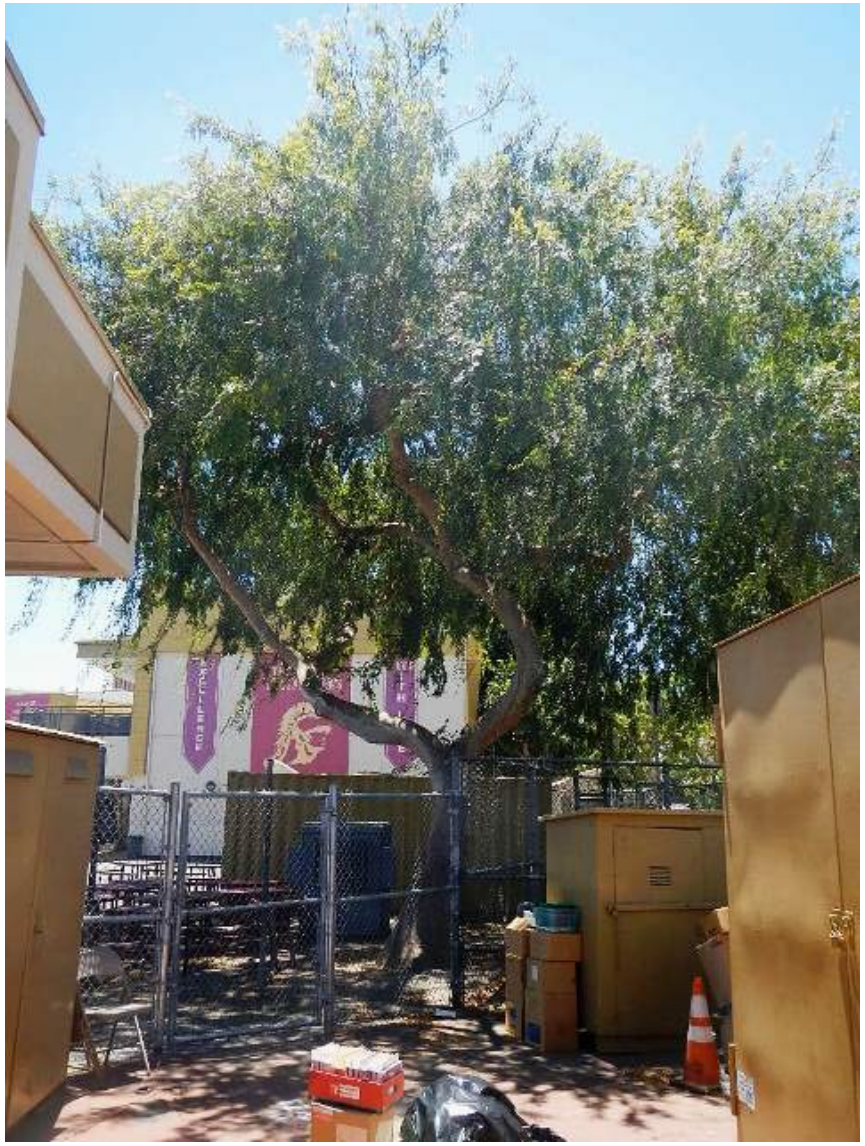


#17 Lemon



#18 Lemon

#19 Lemon



#20 Chinese elm

#21 Fruitless mulberry – note bleeding from the main crotch.

#22 Golden rain tree

#23 Golden rain tree

#24 Carrotwood tree

#24 Note trunk damage

#25 Golden rain tree

#26 Golden rain tree

#27 Golden rain tree

#28 Golden rain tree

#29 Golden rain tree

#30 Golden rain tree

#31 Golden rain tree

#32 Golden rain tree

#33 Carrotwood tree

#33 – note crowded limbs, included bark and seam in the trunk.

#34 Pink trumpet tree – note sparseness.

#35 Chinese elm

#36 Chinese flame tree

#37 Chinese flame tree

#38 Golden rain tree

#39 Golden rain tree

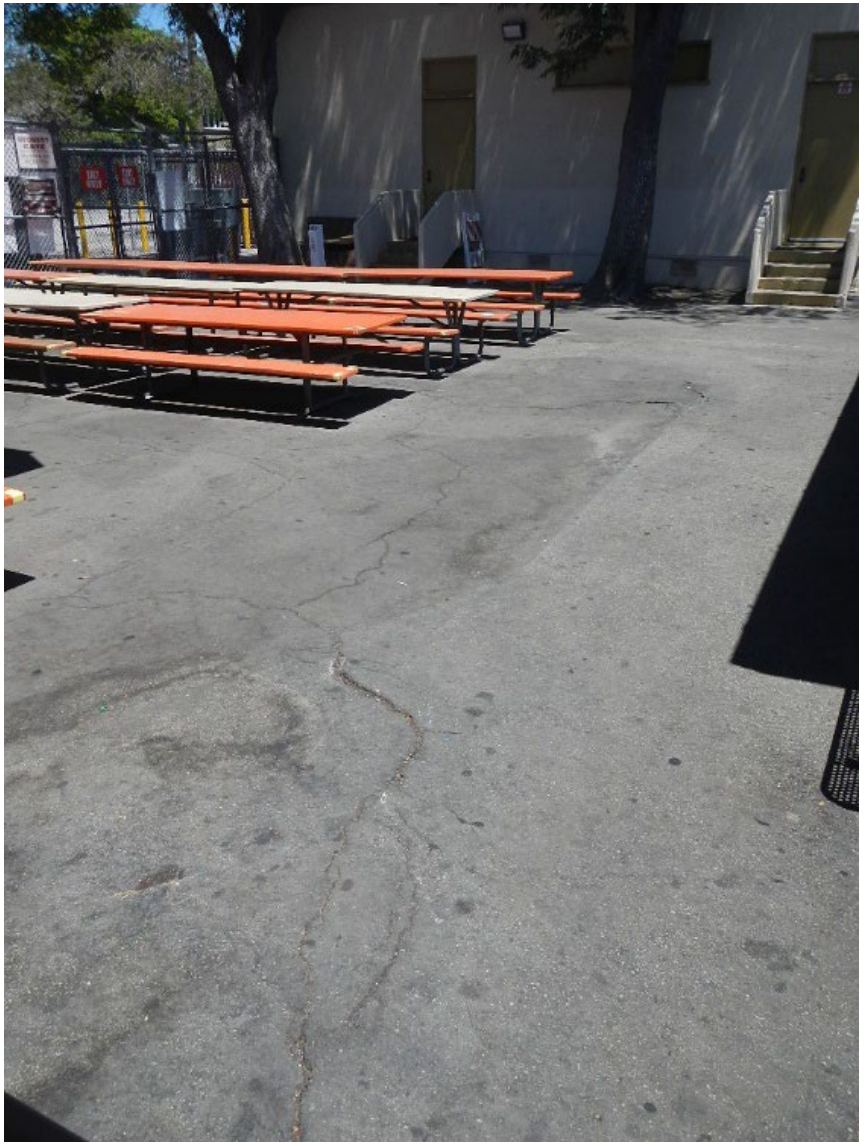
#40 Golden rain tree.

#41 Silk oak

#42 Shamel ash in front.

#43 Shamel ash, with #11 ash in front.

#42 and 43 Shamel ash



note paving damage from their roots.

Base of #42

Base of #43

Memorial tree

Untagged California pepper, a memorial tree. California peppers grow fast and can have trunks over 4 feet in diameter. A 4-foot square planter will not all this tree to live long. Each trunk is staked. Staking will reduce the growth and strength of each trunk. The low branching will need to be cut for pedestrian clearance. The roots also grow quickly. Note the paving cracks.

Current Qualifications and Certifications

The International Society of Arboriculture

Hereby Announces That

Gregory W. Applegate

Has Earned the Credential

ISA Certified Arborist ®

By successfully meeting ISA Certified Arborist certification requirements through demonstrated attainment of relevant competencies as supported by the ISA Credentialing Council

Caitlyn Pollihan
CEO & Executive Director

28 July 1997	30 June 2024	WE-0180A
Issue Date	Expiration Date	Certification Number

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17024
PERSONNEL CERTIFICATION BODY
#0847
ISA Certified Arborist

The American Society
of
Consulting Arborists

in recognition of fulfillment of the requirements for

Registered Consulting Arborist® status

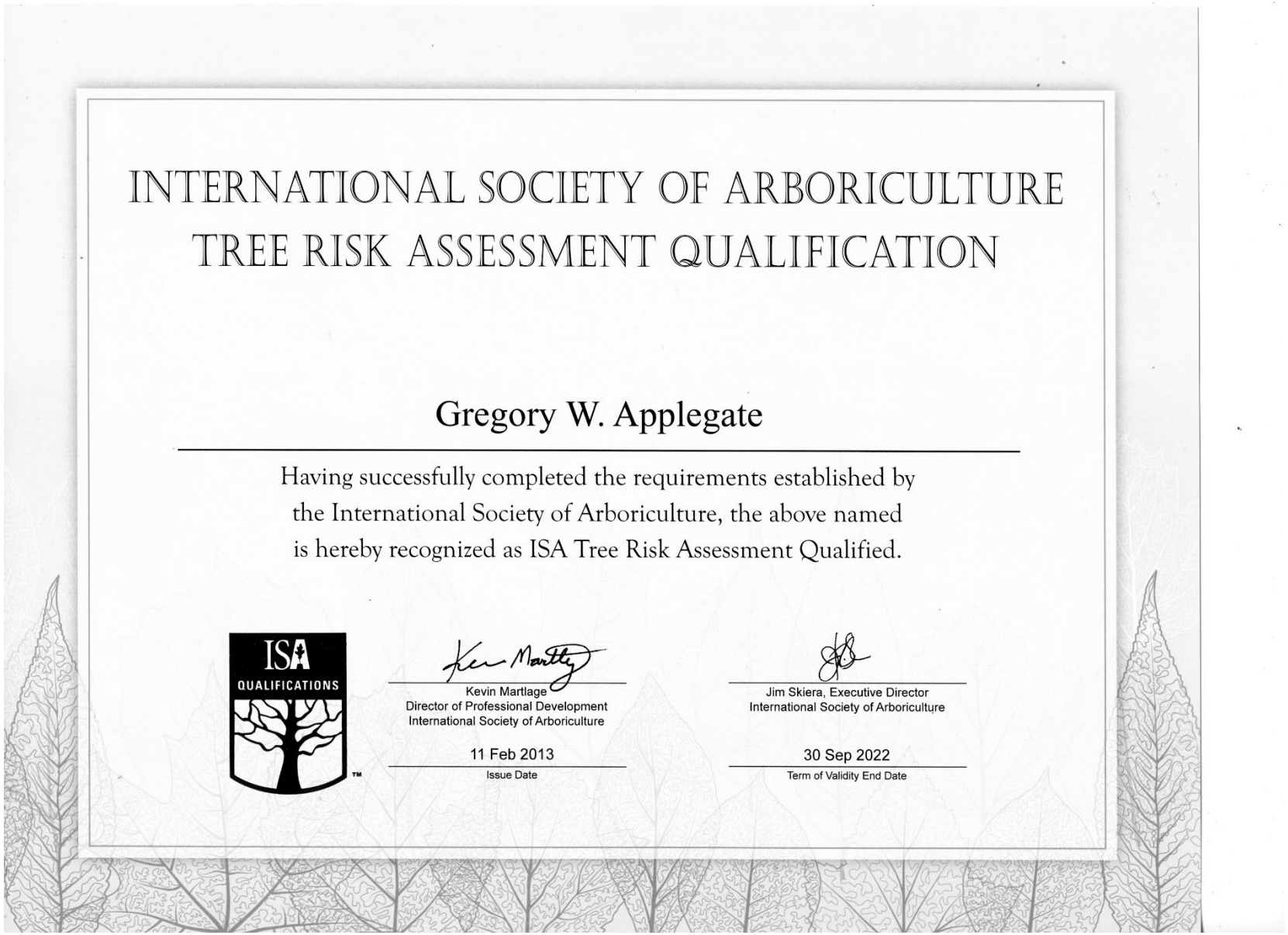
confers upon

Gregory W. Applegate, RCA #365

Registered Membership

Dr. James R. Clark, RCA #357
President

Beth W. Palys, FASAE,CAE
Executive Director



INTERNATIONAL SOCIETY OF ARBORICULTURE
TREE RISK ASSESSMENT QUALIFICATION

Gregory W. Applegate

Having successfully completed the requirements established by
the International Society of Arboriculture, the above named
is hereby recognized as ISA Tree Risk Assessment Qualified.

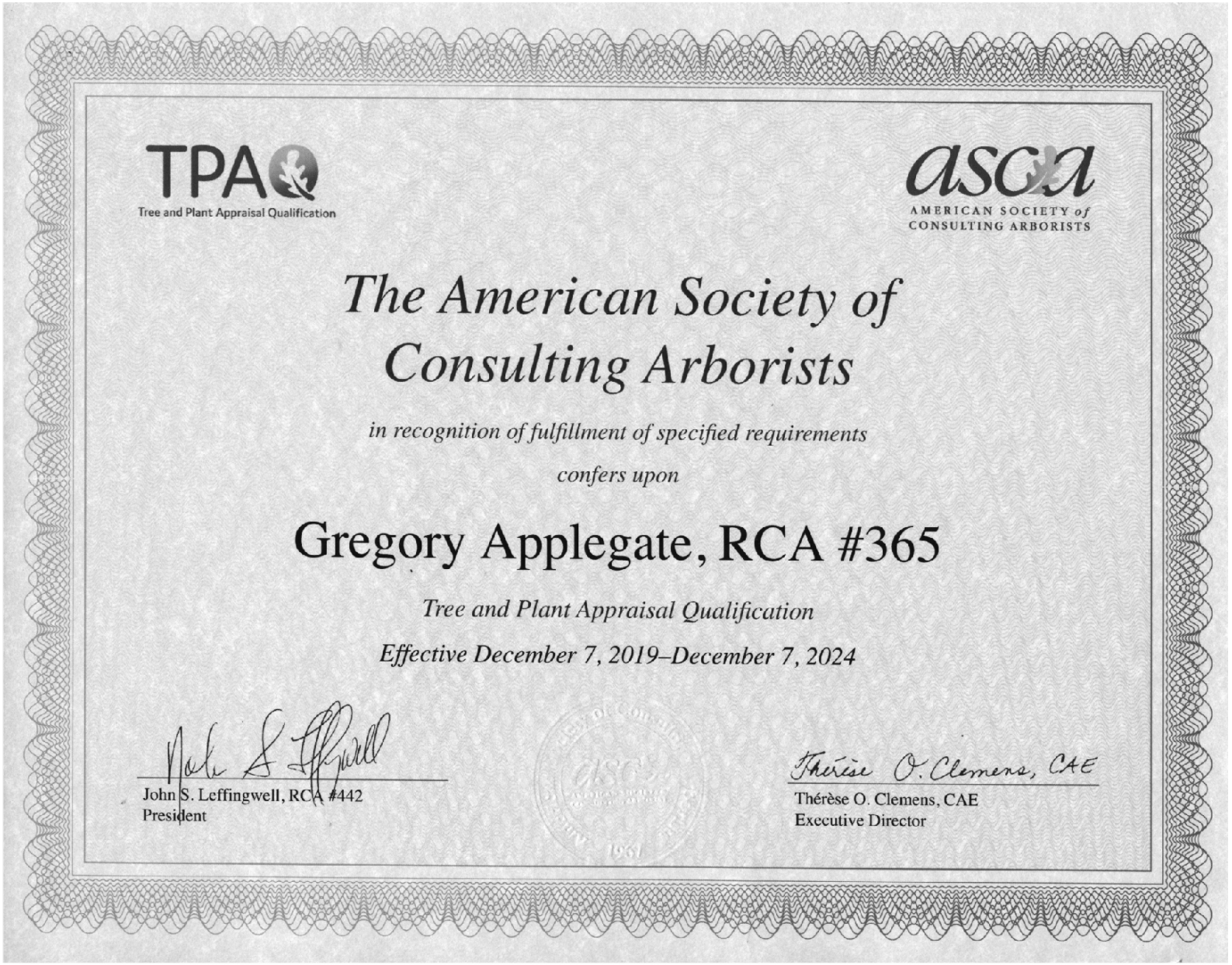
ISA QUALIFICATIONS

Kevin Martlage
Director of Professional Development
International Society of Arboriculture

11 Feb 2013
Issue Date

Jim Skiera, Executive Director
International Society of Arboriculture

30 Sep 2022
Term of Validity End Date



TPA
Tree and Plant Appraisal Qualification

asca
AMERICAN SOCIETY of CONSULTING ARBORISTS

The American Society of Consulting Arborists

in recognition of fulfillment of specified requirements

confers upon

Gregory Applegate, RCA #365

Tree and Plant Appraisal Qualification

Effective December 7, 2019–December 7, 2024

John S. Leffingwell, RCA #442
President

Thérèse O. Clemens, CAE
Executive Director

Certification

I, Gregory W. Applegate, certify to the best of my knowledge and belief:

That the statements of fact contained in this report, are true and correct. That the report analysis, opinions, and conclusions are limited only the reported assumptions and limiting conditions, and are my personal unbiased professional analysis, opinions and conclusions.

That I have no present or prospective interest in the vegetation that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

That my compensation is not contingent upon the reporting or a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, or the attainment of stipulated result.

That my analysis, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Guide for Plant Appraisal, authored by the Council of Tree & Landscape Appraisers (depreciation excepted) and the standards of arboricultural practice.

That I have made a personal inspection of the trees that are the subject of this report. No one provided significant professional assistance to the person signing this report.

I do not authorize out of context quoting from or partial reprinting of this appraisal report. Neither all or any part of this report shall be disseminated to the general public by the use of media for public communication without the prior written consent of the undersigned.

As a result of my examination, investigation, and analysis of the trees and all the data pertinent thereto, the value of the trees, as of 7/3/2021, is estimated to be $35,600.

Gregory W. Applegate_____ Date 6/30/2022

Registered Consulting Arborist #365
ASCA - Tree & Plant Appraisal Qualified

Glossary

ANSI-A300	American National Standards Institute performance standards for the care and maintenance of trees, shrubs and other woody plants.
ANSI-Z60-1	American National Standards Institute standards sizing and describing trees, shrubs and other nursery stock.
Apical dominance	Relative strength of the central leader compared to lateral branches.
Appraisal	The act or process of reaching a monetary opinion of properly defined value, which is disinterested, impartial, independent, and objective and of unambiguously reporting that opinion. Distinguished from valuation.
Arboricultural	Pertaining to the awareness, care, evaluation, identification, growing, maintenance, management, planting, selection, treatment, understanding, valuation and so forth of trees and other woody plants and their growing environments, particularly in shade and ornamental (non-crop/commodity) settings.
Arboriculture	The selection, cultivation, and care of trees, vines, and shrubs.
Arborist	A person possessing the technical competence through experience and related training to provide for or supervise the management of trees or other woody plants in a landscape setting.
ASCA	The American Society of Consulting Arborists, Inc. a professional society, as described in its by-laws.
Backfill	The soil returned to a planting hole after planting, sometimes amended, sometimes not.

Bark	Tissue on the outside of the vascular cambium. Bark is usually divided into inner bark - active phloem and aging and dead crushed phloem - and outer bark.
Biltmore stick	a Biltmore stick or cruiser stick can determine tree diameter and height along with volumes of wood on standing trees and logs.
Biotic	Pertaining to living organisms.
Branch angle	The angle of attachment between two branches.
Branch collar	Trunk tissue that forms around the base of a branch between the main stem and the branch, or between a main branch and a lateral branch. As a branch decreases in vigor or begins to die, the collar usually becomes more pronounced an more completely encircles the branch.
Caliper	Diameter of a nursery-grown or small size tree trunk. Larger trees are usually measured at 4ð feet (see DBH) Trees with calipers 4 inches and below are measured at 6 inches above grade(ANSI Z60-1-1990) Trees above 4 inches, but still transplantable are measured at 12 inches above grade.
Canker	An area of dead bark caused by certain fungal infections.
Canopy	The part of the crown composed of foliage and twigs, for an individual tree or collective group of trees.
Cavity	An open and exposed area of wood, where the bark is missing and internal wood has been decayed and dissolved.
Central leader	The main stem of the tree.
Chlorotic	Also Chlorosis. A condition of the plant marked by yellowing of normally green foliage, often indicating nutrient deficiency or plant dysfunction.
Codominant	Leaders equal in size and relative importance, developed from 2 apical buds at the top of a stem. Each codominant stem is an extension of the stem below it. There are no branch collars or trunk collars at the bases of codominant stems.
Compaction	(Soil Compaction) The compression of soil, causing a reduction of pore space and an increase in the bulk density of the soil. Tree roots cannot grow in compacted soil.
Compartmentalize	To seal off decay. The ability of the tree to restrict the spread of invasive organisms, such as decay fungi, by means of internal changes in cell structure and chemistry.

Conifer	Cone bearing shrub or tree, e.g. pines and cypress (or modified cone-like structure as in Podocarpus and Taxus)
Crotch	The union of two or more branches; the axillary zone between branches.
Crown	The upper portions of a tree or shrub, including the main limbs, branches, and twigs.
Crown reduction	Removal of large branches and/or cutting back to large laterals to reduce the height or width of the crown; frequently referred to as "drop crotch" pruning – corresponds to National Arborist Association Class IV pruning.
Cultivar	A cultivated variety. Maybe a field selection or a horticultural variety that has originated and persisted under cultivation. Usually enclosed in single quotes after the genus and species names.
DBH	Diameter of the trunk, measured at breast height or 54 inches above the average grade. See caliper.
Decay	Progressive deterioration of organic tissues, usually caused by fungal or bacterial organisms, resulting in loss of cell structure, strength, and function. In wood, the loss of structural strength.
Deciduous	Trees which shed their leaves at the end of the growing season.
Decline	Progressive reduction of health or vigor of a plant.
Decurrent	Referring to crowns which are made up of a system of codominant scaffold branches. Lacking a central leader.
Dieback	Progressive death of buds, twigs and branch tissues, on individual limbs, or throughout the canopy.
Dripline	A projected line on the ground that corresponds to the spread of branches in the canopy; the farthest spread of branches.
Evergreen	retains its leaves throughout the year.
Excurrent	Referring to crowns having a strong central leader.
Fertilization	The process of adding nutrients to a tree or plant; usually done by incorporating the nutrients into the soil, but sometimes by foliar application or injection directly into living tissues.
Foliage	The live leaves or needles of the tree; the plant part primarily responsible for photosynthesis.
Fruit	A ripened ovary, together with any other parts which may develop with it, containing one, two or more seeds.

Gall	An abnormal, disorganized growth of plant tissues, caused by parasitic or infectious organisms such as insects, fungi, bacteria, or viruses.
Genus	A more or less closely related and definable group of plants, including one or more species.
Hardscape	The sidewalk, curb, gutter, paving or other concrete permanent features.
Hazardous condition	The combination of a likely failure of a tree or tree part with the presence of a likely target.
Heading	Pruning techniques where the cut is made to a bud, weak lateral branch or stub.
Hybrid	The offspring that results from crosses between plants belonging to different species, genera or distinct forms of the same species.
Included bark	Bark or cortex tissue that is included or trapped between close-growing branches. Usually found in narrow or tight crotches.
Leader	A main stem or branch of a tree that is (usually) codominant with other main stems.
Limb	A large lateral branch growing from the main trunk.
Lion-tailing	Pruning technique where internal foliage and branches are removed, leaving the latter concentrated at branch ends.
Mower blight	in a lawn area as surface roots expand in diameter, they eventually extend up into the level of the lawn mower blades and are “planed off” during weekly lawn mowing. This opens the roots to infection and decay.
Mulch or Mulching	Substances spread on top of the ground to conserve water, protect against erosion, retain moisture, and protect the roots of trees from heat, cold or drought. The substances are typically organic, such as compost, manure or bark chips.
Mycorrhizae	A term given to the symbiotic relationship between roots and certain beneficial fungi. Mycorrhizae are the combined root / fungal growth.
Narrow crotch	Also tight crotch. A crotch with a narrow angle between branches, often having included bark.
Pathogen	A disease-causing organism, usually a fungus in plants, but may also be viral or bacterial.
Prune or Pruning	Selective removal of woody plant parts of any size, using saws, pruners, clippers, or other pruning tools.
Restructuring	Restoration of a natural and/or structurally sound form to a tree, which has been previously topped or damaged. Also known as “crown restoration”.

Root crown	Area at the base of a tree where the roots and stem merge (synonym - root collar)
Root system	The portion of the tree containing the root organs, including buttress roots, transport roots, and fine absorbing roots; all underground parts of the tree.
Root zone	The area and volume of soil around the tree in which roots are normally found. May extend to three or more times the branch spread of the tree, or several times the height of the tree.
Scaffold limb	Primary structural branch of the crown.
Soil grade	Also Grade level. The level of the soil in an area; topographic elevation.
Street tree	A tree growing adjacent to dedicated roadways and within the city's right of way.
Stress	"Stress is a potentially injurious, reversible condition, caused by energy drain, disruption, or blockage, or by life processes operating near the limits for which they were genetically programmed." Alex Shigo
Subordination	Shortening or removing one side of a pair of codominant limbs.
Suppressed	Trees which have been overtopped and whose corwn development is restricted from above.
Target	Any person or object within reach of a falling tree or part of a tree, that may be injured or damaged.
Topping	The practice of cutting large limbs back severely, without regard to form or habit of the tree. Cuts are usually made between lateral branch nodes. This practice is extremely injurious to trees, and promotes decay in the canopy.
Trees	An arborescent woody plant, with a single or few trunks near the base
Trunk Flare	The basal area of the trunk that flares or widens, and merges with the main roots. see root collar
Valuation	An analysis or study of monetary value or the methodology used in determining monetary value or the giving of advice concerning monetary value, which is not constrained by the same duties as an appraisal and which is not held out or reported as an appraisal. An assignment involving such activity.
Value	The relative worth, merit, or importance of a thing, expressed as a single point, a range, or a relationship to a benchmark.
Vertical mulching	Ventilation of soil by auguring holes in a regular pattern. Usually the holes are backfilled with amended soil, but small holes may be left open.
Vigor	Active, healthy growth of plants: ability to respond to stress factors.

APPENDIX C – FINAL HISTORIC RESOURCE EVALUATION REPORT

Final Historic Resource Evaluation Report

32nd Street/USC Magnet Schools

Prepared for

Chris Taylor
Los Angeles Unified School District
Office of Environmental Health & Safety

Prepared by

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April 2022

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Final Historic Resource Evaluation Report for 32nd Street/USC Magnet Schools, Los Angeles, California

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April 2022
PN 28120.05

This Historic Resource Evaluation Report (HRER) summarizes a historical resources study for the 32nd Street/USC Magnet Schools, located at 822 West 32nd Street in Los Angeles, California (APN 5123-008-905 and 5123-008-910). Los Angeles Unified School District (LAUSD) requested this evaluation in anticipation of Federal Emergency Management Agency (FEMA) grants to guide design teams in their preparation of seismic upgrade plans for the campus. Among the four permanent buildings on campus, only two are older than 45 years; hence, this evaluation is limited to those two buildings. This assessment was prepared by ASM to determine the historical resource/historic property status of two buildings of the 32nd Street/USC Magnet Schools campus, both individually and as potential contributors to a historic district, and to facilitate LAUSD compliance with the California Environmental Quality Act (CEQA) and National Historic Preservation Act (NHPA).

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EXECUTIVE SUMMARY

Brief Overview of Campus

The 32nd Street/USC Magnet Schools campus comprises four major permanent buildings and several temporary buildings located along the Royal Street side of the property at the southeast. The permanent buildings include two constructed in 1975, situated near the West 32nd Street side of campus, and two constructed in 2010 at the southwest corner of the property.

Summary of Findings

ASM carefully considered the eligibility of the 32nd Street/USC Magnet Schools campus and its individual components as potentially significant under National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) Criteria A/1, B/2, C/3, and D/4, City of Los Angeles Historic Cultural Monument (HCM) Criteria a–d, and as CEQA-defined historical resources and NHPA-defined historic properties. The evaluation was conducted in conformance with NRHP Bulletin *How to Apply the National Register Criteria for Evaluation* (National Park Service Bulletin No. 15 1997), the California Office of Historic Preservation's *Instructions for Recording Historical Resources* (1995), and Technical Assistance Series #7 *How to Nominate a Resource to the California Register of Historical Resources* (2001).

ASM referred to the *LAUSD Historic Context Statement, 1870 to 1969* (Sapphos 2014) for guidance in the full evaluation of the two buildings as individually eligible and the campus as a historic district within the context of LAUSD's nearly 800 campuses. To summarize the findings of this HRER, ASM prepared California Department of Parks and Recreation (DPR) forms, including A and BSO forms (Appendix A).

As a result of the research conducted for this report, ASM recommends that the 32nd Street/USC Magnet Schools campus is not an outstanding representation of the applicable contexts and themes established in the *LAUSD Historic Context Statement*. The campus is not recommended as an eligible historic district. None of the buildings are recommended individually eligible, under any NRHP and CRHR criteria, or as a City of Los Angeles HCM under any criteria. The campus therefore is not considered a historical resource pursuant to CEQA or as a historic property pursuant to the NHPA.

Key Staff

This HRER was prepared by ASM staff who meet the qualifications of the Secretary of the Interior's (SOI's) *Professional Qualification Standards* for Architectural History and History.

Marilyn Novell, M.S., was the lead author of this HRER. She has 11 years of professional and academic experience in historic preservation, cultural resources documentation, and architectural history. She meets the SOI's *Professional Qualification Standards* for both Architectural History and History. Prior to joining ASM in 2015, Ms. Novell served as assistant for the *LAUSD Historic Context and Comprehensive Survey*, which received preservation awards from the California Preservation Foundation and the L.A. Conservancy. She conducted background research, wrote summary reports, and surveyed 56 post-war LAUSD campuses. In addition to that wealth of experience working in educational settings, Ms. Novell has continued to work at LAUSD campuses while at ASM, for example evaluating Collins Street and Foshay schools, and conducting project-level reviews for proposed renovations to six LAUSD campuses in compliance with the Americans with Disabilities Act (ADA) to comport with the *Los Angeles Unified School District Design Guidelines.*

Shannon Davis, M.A., RPH, has more than 23 years of experience in the field of historic preservation, 10 of which have been spent in a senior role managing ASM's historic preservation task orders, including multiple historic preservation on-call contracts. Ms. Davis has been working in educational settings, specifically at LAUSD schools, since 2011 when she prepared a HABS documentation package for

Cienega Elementary School in the Culver City neighborhood. Since that time, Ms. Davis has completed multiple reports for schools, evaluating buildings on elementary, middle school, high school, and college campuses. Many of these projects were prepared for LAUSD schools through on-call contracts with LAUSD as both a prime and sub consultant.

Both Ms. Novell and Ms. Davis have extensive experience in developing historical and cultural resources reports and in evaluating properties throughout California under federal, state, and local criteria, including ensuring compliance with the NRHP, Section 106 of the NHPA, CRHR, and CEQA.

INTRODUCTION

For this HRER, ASM conducted archival research regarding the 32nd Street/USC Magnet Schools campus, including databases of historic newspapers, Los Angeles County Assessor's maps, Los Angeles Zoning Information and Map Access System (ZIMAS), Sanborn Fire Insurance maps, the Los Angeles Public Library, and historic aerial photographs. As-built architectural drawings and construction documents provided by the LAUSD Office of Environmental Health & Safety were reviewed prior to visiting the campus and were consulted in the process of this evaluation. A number of academic and professional sources were consulted (e.g., Pacific Coast Architecture Database and American Institute of Architects Historical Directory) for information about the architects and to determine their relevance and potential influence in the field of architecture. ASM was unable to access the LAUSD collection at the University of California, Los Angeles because it is currently closed to accommodate construction and maintenance.

This report is organized into the following sections: Executive Summary, Introduction, Campus Description and History, Neighborhood Context, Architects, Architectural Descriptions, Significance Evaluation, and Conclusion. California Department of Parks and Recreation (DPR) Series 523 forms as Appendix A, plot plans as Appendix B, and architectural drawings as Appendix C.

Location

The 32nd Street/USC Magnet Schools campus is located in the northeast portion of the South Los Angeles Community Plan Area (CPA), northeast of the University of Southern California (USC). The campus is located to the east across South Hoover Street from University Village, a large, multi-floor retail and residential complex owned by USC. The campus is bounded by West 32nd Street to the northeast, Royal Street to the southeast, West Jefferson Boulevard to the southwest, and the University Avenue pedestrian mall to the northwest. The USC campus and Exposition Park dominate the immediate area, surrounded by a dense concentration of multi- and single-family residential properties. Major traffic corridors near the Magnet Schools campus are South Hoover Street and West Jefferson Boulevard. State Highway 110 runs north-south approximately .25 mile to the east (Figures 1 and 2).

Current Historic Resource Status

The 32nd Street/USC Magnet Schools campus and its individual buildings have not been previously evaluated. Two of the four permanent buildings on campus were constructed in 2010, and thus do not meet the age requirement of 45 years for consideration as historically significant resources/properties. The other two buildings were constructed in 1975, are more than 45 years old, and are therefore evaluated in this report.

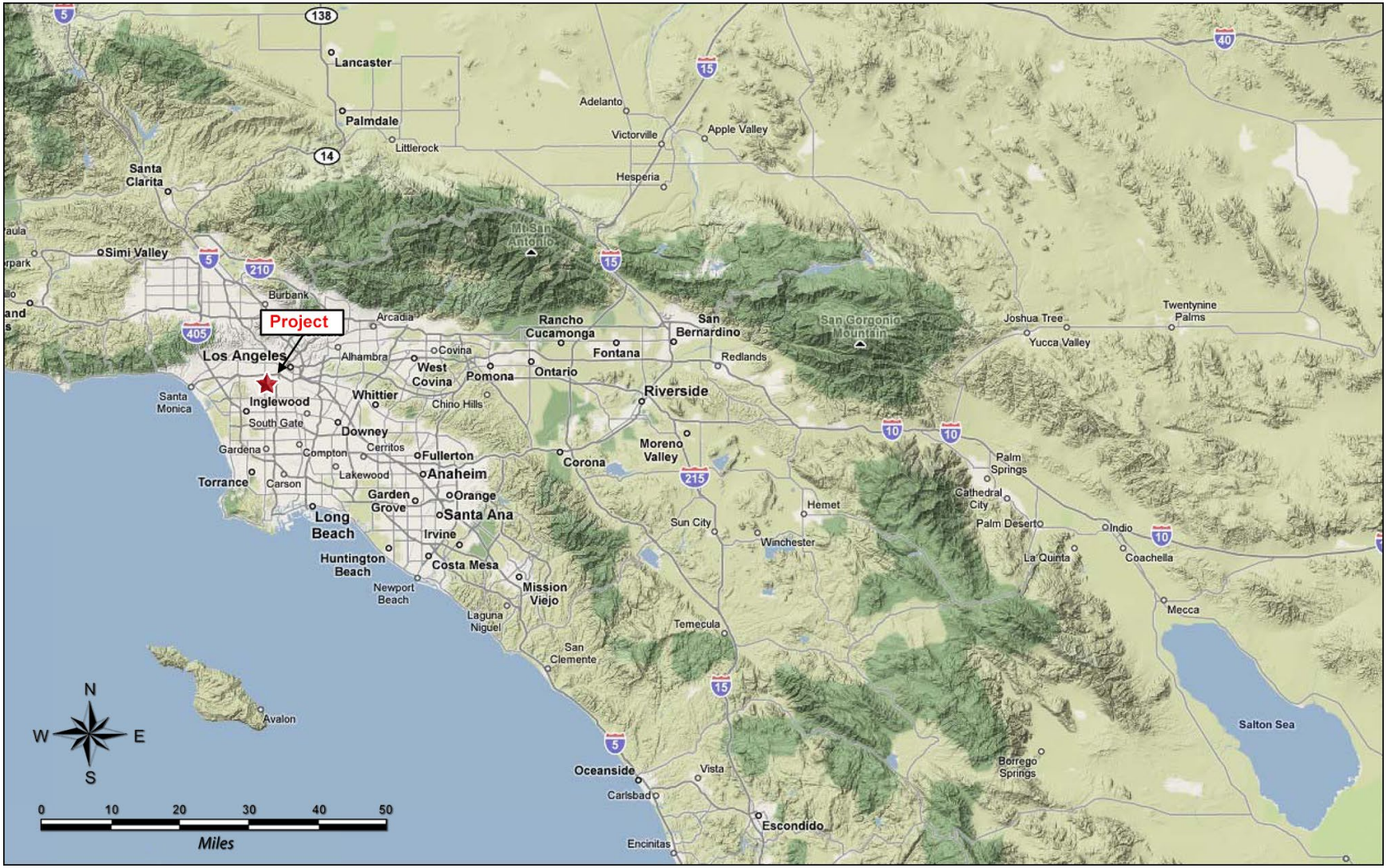

Figure 1. Regional map showing location of the campus.

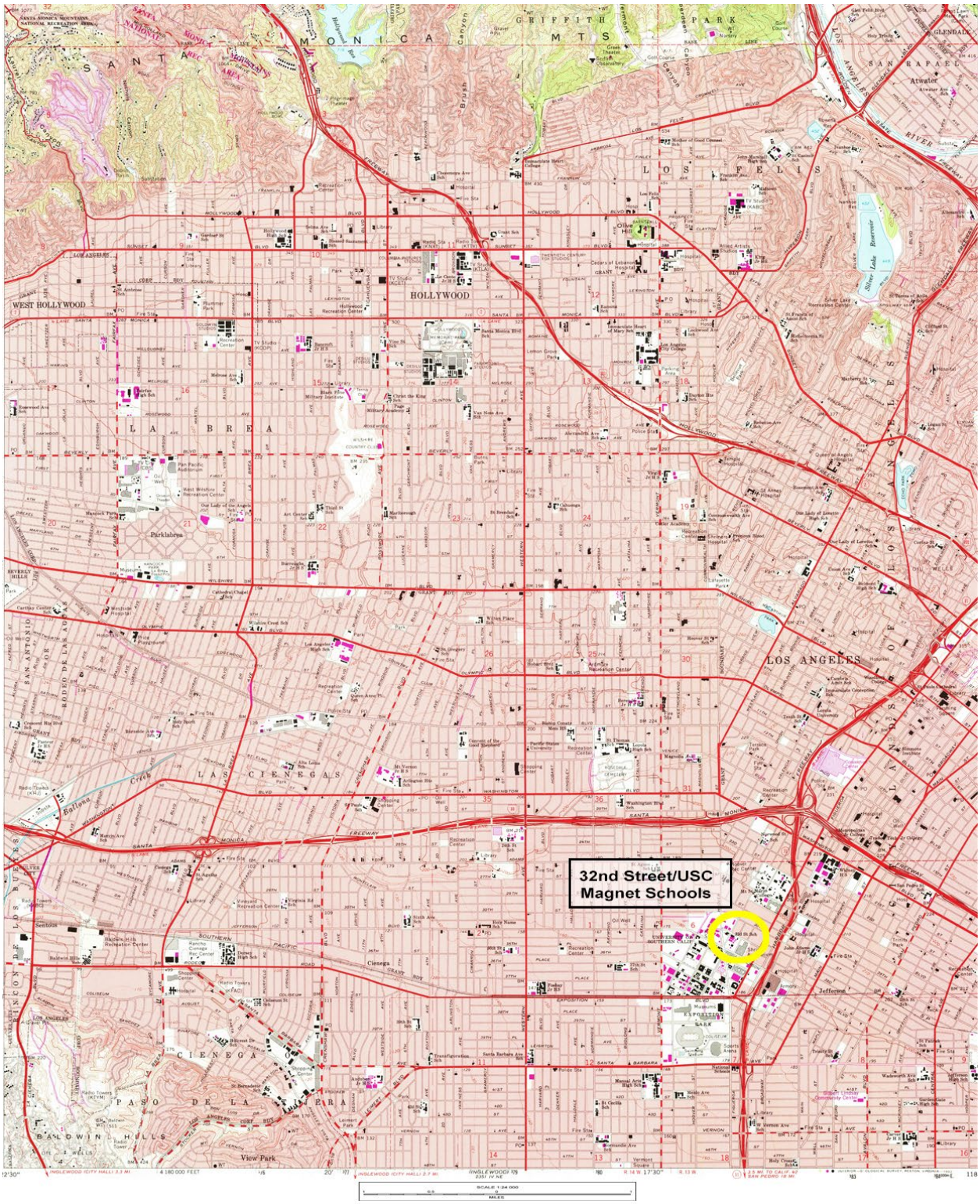

Figure 2. Vicinity map. USGS Hollywood 1966.

CAMPUS DESCRIPTION AND HISTORY

Site History and Construction Chronology

The 32nd Street School first opened its doors in September of 1904 on the corner of 32nd Street and Hoover, when it was surrounded by residential homes. (Building permits on file with the City of Los Angeles for the address are for residential alterations; none were found related to the school.) In 1931, the Los Angeles Board of Education (Board), as LAUSD was then called, developed plans to demolish the existing school buildings at the corner of Jefferson Boulevard and University Avenue. Removal of the buildings was required to accommodate an extension of Hoover Street (*Southwest Wave* 1931b). (That portion of University Avenue was replaced in the early 1970s by a pedestrian mall.) To replace the buildings, the Board issued a call for bids for construction of a new $150,000 two-story brick building. The new 65-by-250-foot building, designed by the Board's architectural division, was generally L-shaped (Appendix B. Plot Plan 1930). The building was to be Romanesque in architectural style with a red tile roof and other features "conforming to the school board's conservative policy for school buildings" (*Southwest Wave* 1931a, 1931b) (Figures 3 and 4). The following year, the Board approved the demolition of a portion of the 32nd Street School auditorium (presumably also called the Annex; see below), and reconstruction and remodeling of the remaining portion (*Southwest Wave* 1932). At that time, the school, along with Manual Arts High School, began offering courses under USC supervision (*Los Angeles Evening Post-Record* 1932).

The 1931 building with an irregular plan in the northwest corner of the campus is shown on a Sanborn map (Figure 5, Sanborn 1922-1950, Vol. 5 Sheet 541). On the same map, a small classroom with a rectangular plan is adjacent to a school garden on West 32nd Street. A very small tool house is shown within the garden. A larger building labeled Annex to 32nd St. School, also with a rectangular plan, is located farther south on the parcel. An additional building labeled 32nd St. School for Adults is in the west corner of the current property. A notation indicates the building was constructed in 1916 (Figure 5). Several scattered smaller parcels occupied the current campus grounds, fronting either on West 32nd Street or Royal Street. Most of these were occupied by houses with garages toward the backs of the parcels. Along West Jefferson Boulevard southeast of the adult school were commercial properties on West Jefferson Boulevard, including a store selling steel posts and girders and an optical products manufacturing establishment at the corner of Royal and Jefferson.

In 1971, the 32nd Street School was closed as a response to the February 9 earthquake centered in Sylmar (*Central News* 1971). The 1931 school building was determined to be unstable and was demolished. Between 1971 and 1974, a wood school building was constructed, and bungalows were built on site in support of that building. According to school records, this building was destroyed by fire (Thirty-Second Street School 2022).

Architect Roy A. Sealey began designs for two new buildings, the existing Building No. 1 and Building No. 2, in 1973 (see Appendix B for architectural drawings). Demolition to accommodate the new buildings included removal of the existing Annex and several smaller buildings. The new buildings were completed in 1975.

At the time of survey for this report, the relatively small campus comprised two single-story administration and classroom buildings toward the north side along West 32nd Street and two two-story buildings set at right angles in the southwest corner of the campus along West Jefferson Boulevard. The other buildings are portables, which are situated along the east side of campus (Figure 6). Landscaping on the campus is sparse but is relieved by the greenway called University Mall to the west and a second area of trees and lawn on the south side of campus. Otherwise, all of the area between the single-story buildings to the north and the two-story buildings to the south is paved in asphalt. An asphalt parking lot runs along nearly the entire east side of campus parallel to Royal Street A second, smaller, parking area is

located at the inside juncture of the L-shaped Administration building (Figures 6-9). The Shrine Auditorium (1925) is on the adjacent parcel southeast of the campus (Figure 10).

Figure 3. The original two-story brick schoolhouse.
Source: https://32ndstreet-uscmagnet.schoolloop.com/history.

Figure 4. Students saluting the American flag in the original schoolhouse.
Source: https://32ndstreet-uscmagnet.schoolloop.com/history.

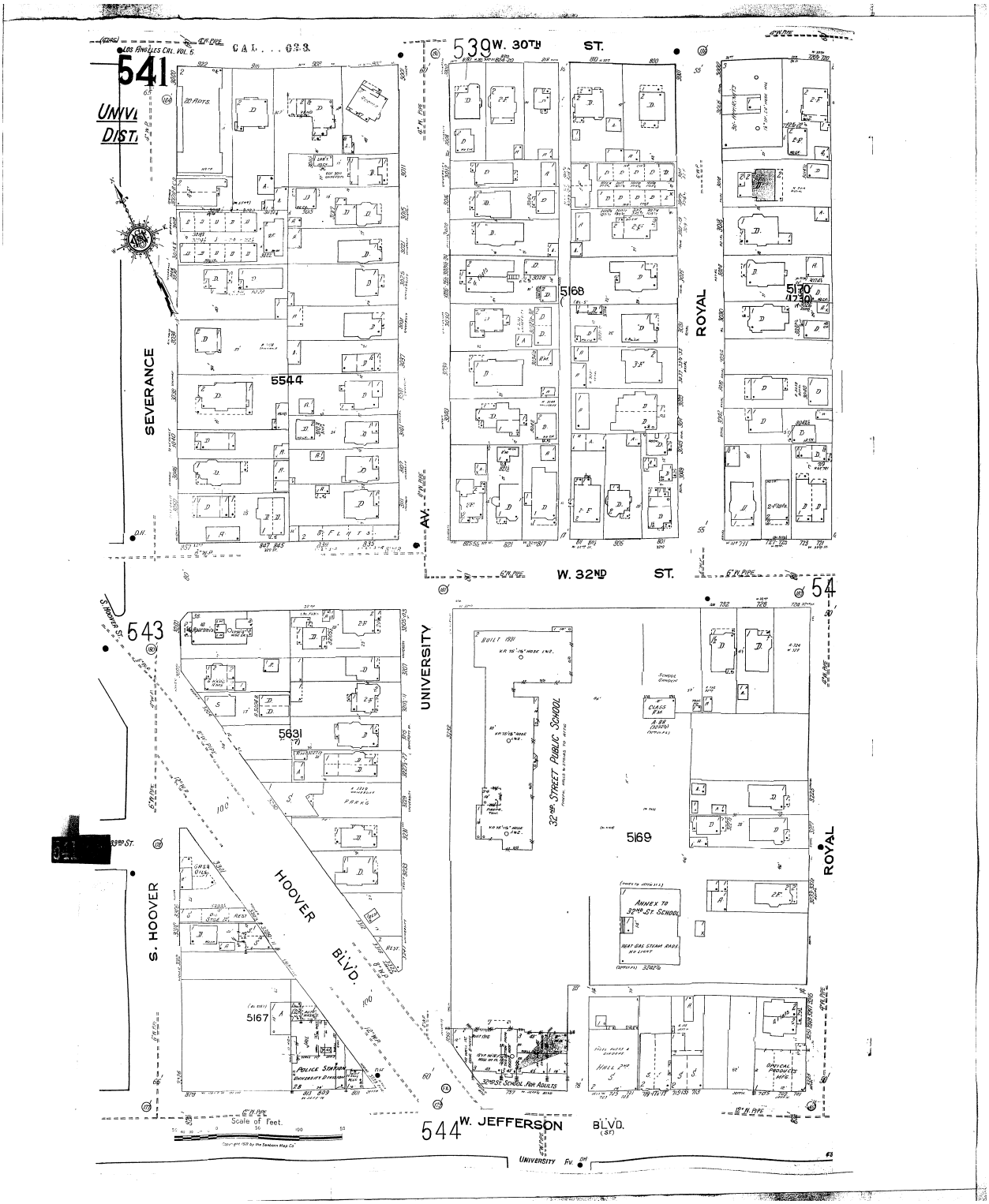

Figure 5. Sanborn Fire Insurance Map, 1922-1950 vol. 5 sheet 541.
Source: Los Angeles Public Library.

Figure 6. Typical portable building, view toward the northeast.

Figure 7. Entrance to campus from pedestrian area on West Jefferson Boulevard, view toward the north.

Figure 8. View of the high school buildings from the University Mall, view toward the south.

Figure 9. View toward the south across the school yard looking at the high school buildings.

Figure 10. Shrine Auditorium, view toward the southeast from between Building No. 1 (left) and Building No. 2 (right).

NEIGHBORHOOD CONTEXT

Except where otherwise indicated, this section is from the SurveyLA Survey Report for South Los Angeles CPA (ARG 2012:9-11).

The CPA is located in the southeast quadrant of the city, directly southwest of Downtown. It is roughly rectangular in shape with an irregularly shaped boundary along its southern edge that follows the southern boundary of the city. The northeastern section of the CPA, which includes the 32nd Street/USC Magnet Schools campus, was within the original Los Angeles city boundary (incorporated in 1850). The remainder of the CPA was annexed into the City of Los Angeles between 1859 and 1935 in seven separate annexations. The CPA includes the neighborhoods of Harvard Heights, Pico-Union, Adams-Normandie, University Park, Exposition Park, Vermont Square, Chesterfield Square, Harvard Park, Vermont-Slauson, Manchester Square, Vermont Knolls, Gramercy Park, and Vermont Vista. The social and cultural history of these neighborhoods is summarized below.

The South Los Angeles CPA developed in a southward pattern beginning in the late nineteenth century, as a growing network of streetcars and railroads enabled suburban development on land outside of the historic city center. The first subdivisions were in the northwestern quadrant of the CPA and were home to many of the city's wealthiest and most influential citizens. The land on which USC sits today was donated by three wealthy landowners who hoped that the presence of the university would not only benefit the young city but also raise the value of their surrounding residential real estate holdings. As the city expanded, the wealthiest citizens followed the westward path of the growing city into the neighborhoods of Windsor Square and Hancock Park, and many of the mansions in the University Park and Pico-Union neighborhoods were converted to multi-family use. Today's University Park neighborhood has been dramatically shaped by the influence of USC, with many residential buildings removed to accommodate post-World War II campus expansion and other early residential buildings converted to student housing and other university-related uses.

In a city wrought with restrictive covenants in many of its residential neighborhoods in the 1920s, 1930s, and 1940s, this area is notable for the diversity of its residents in the pre-war era. However, it was not without the racism that plagued much of the city's housing practices at the time. Increasing numbers of blacks moved to Los Angeles in the late 1920s and 1930s, drawn by the promise of jobs and homeownership. Racial covenants became enforced more fiercely as African Americans became a more noticeable presence in the city and Anglo Americans attempted to maintain their separation. The jurisdiction of one organization, the White Home Owners Protective Association, included the area bounded by Main Street, Manchester Boulevard, Vermont Avenue, and Santa Barbara Avenue (now Martin Luther King Jr. Boulevard) (Davis 1992:162.) This area includes the present-day neighborhoods of Vermont Square, Vermont-Slauson, Vermont Knolls, and Florence.

The South Los Angeles area was a battleground in the movement to end racial discrimination in housing across the United States. In the postwar era, as the city's black population increased, African-American homebuyers and renters were met with intimidation and, at times, violence in many of the neighborhoods within the South Los Angeles CPA (Meyer 2000:127; in ARG 2012). The residents of Sugar Hill, which is located near the intersection of Adams Boulevard and Western Avenue, played an important role in the Supreme Court case that ultimately barred racial housing discrimination. With restrictive covenants deemed unconstitutional, South Los Angeles continued to diversify with increasing numbers of African-American and Hispanic residents in the 1950s, 1960s, and 1970s.

The Los Angeles Community Redevelopment Agency (CRA) was created in 1948 to revitalize depressed areas of Los Angeles. In the 1960s, clearing of residential areas became associated with the loss of housing for Blacks in the vicinity of USC. Mayor Sam Yorty called the area "blighted and deteriorating" and sought federal funds to "rebuild" 178 acres. The 32nd Street School benefitted by gaining land (*Los*

Angeles Mirror 1961). The Hoover Redevelopment Program under the jurisdiction of the CRA included the replacement of University Avenue, which bordered the school on the northwest, with a pedestrian mall (*Southwest Wave* 1969). In the early 1970s, the 15-acre University Village development was built across Hoover Street from the 32nd Street School (*Los Angeles Times* 1973).

Types of Development

Most of the land south of Downtown Los Angeles was occupied by ranchos and public lands in its earliest period of development after European settlement. The first development took place in the northeastern part of the CPA, which was within the original boundary of the City of Los Angeles, which was incorporated in 1850. The earliest extant resource in the CPA is the small section of *zanja* irrigation channel that remains along Figueroa Street in front of the Stimson House (City of Los Angeles Historic Cultural Monument [HCM] #212). The *zanja* dates to the 1860s and was channelized in concrete in the 1880s.

The earliest residential subdivisions were developed in the northeastern neighborhoods near Downtown during the real estate boom of the 1880s that followed the connection of Los Angeles to the transcontinental railroad network. Development extended outward from the city center along streetcar lines in the late nineteenth and early twentieth centuries. The University Park neighborhood, just north of the 32nd Street/USC Magnet Schools, contains several urban mansions dating to this era, when the neighborhoods between Downtown and USC were home to many of the city's wealthiest inhabitants.

As the city grew after the turn of the twentieth century, early suburbanization in the area followed a typical development pattern with commercial corridors along larger thoroughfares and single-family residential development along smaller, gridded streets. Apartment buildings are scattered throughout these early subdivisions. Development continued south of Jefferson Boulevard to Manchester Boulevard in the 1910s and 1920s. The earliest tracts in this area were typically filled with single-family Craftsman bungalows. Extant commercial development along the former streetcar corridors typically includes historic theaters, restaurants, one-to-three story mixed-use commercial and residential buildings, and banks.

In addition to several LAUSD campuses, there are a number of private educational institutions in the area, including Mt. St. Mary's College, Loyola High School, USC, and the former Pepperdine College (now University) campus. Additional institutions adjacent to USC include Exposition Park (formerly Agricultural Park), the Los Angeles Museum of Natural History, Los Angeles Memorial Coliseum, and the Memorial Sports Arena. Events relating to both the 1932 and 1984 Olympic Games were held in the Los Angeles Memorial Coliseum.

The construction of a large network of freeways throughout Los Angeles during the 1950s and 60s enabled widespread development in distant stretches of the greater Los Angeles region and relieved automobile congestion on surface streets. However, their construction also had deleterious impacts on the urban environment, such as bisecting neighborhoods and displacing residents who lived in their paths. The Interstate 10 (Santa Monica) Freeway, Interstate 110 (Harbor) Freeway, and Interstate 105 (Century) Freeway all traverse the neighborhoods of the South Los Angeles CPA, generally above grade. The freeways have a visual and physical impact on existing building stock, altering the logical cohesion of historic subdivisions and creating boundaries where boundaries did not historically exist. The freeways in and of themselves are significant feats of modern civil engineering and urban planning; however, their impacts on historic neighborhoods in Los Angeles cannot be ignored.

ARCHITECT

Roy Anthony Sealey, Jr.

The two 1975 buildings were designed by architect Roy Anthony Sealey, Jr., according to architectural plans on file at LAUSD (Appendix B). Sealey was born in Kingston, Jamaica, on July 3, 1918, and died March 11, 2008 (Gane 1970). During the 1940s, he was employed by a fellow black architect, Paul R. Williams (National Archives at St. Louis n.d.). Sealey filed a Petition for Naturalization (No. 275992, dated February 18, 1966) stating that he had lived in the United States since June 26, 1924. As Jamaica was a colony at the time of his birth, Sealey was a citizen of Great Britain. He married Lois Emmerson on March 22, 1952, in Tijuana, Mexico (National Archives at Riverside n.d.). City Directories show Sealey lived in Los Angeles. in 1948 (Ancestry.com 2011).

In August 1950, Sealey was profiled by *Ebony* magazine in an article called "Architect for the Wealthy: Roy Sealey Blueprints $3,000,000 Worth of Homes for Film Stars, Businessmen" (*Ebony* 1950) (Figure 11). Sealey designed the popular Cockatoo Inn Hotel and Restaurant in Hawthorne (1960). The property was a 50-room hotel on Hawthorne Boulevard near Los Angeles International Airport. The associated restaurant was described as "Old English type" and featured used brick, birch paneling, a pool, air conditioning, and tropical landscaping (*Los Angeles Times* 1960). The complex has been demolished (Figure 12).

The Los Angeles Conservancy describes Sealey as a prominent and prolific African American architect and features him in an online article titled "Five Black Architects Who Helped Shape L.A.'s Mid-Century Style!" (LA Conservancy 2022a, 2022b). According to the article, by the time he designed elements of the Long Beach Marina, Sealey had been a successful, respected architect for many years.[1] While studying architecture at USC in 1939, he went to work for Paul R. Williams. Sealey left Williams's practice in 1945 to open his own office, where he specialized in Mid-Century Modern and Googie-style buildings (LA Conservancy 2022a).

Working primarily with modernist idioms, Sealey designed a broad range of buildings including residential, commercial, and institutional. In addition to the 1975 buildings at the 32nd Street/USC Magnet Schools campus, his many projects include Larry Potter's Supper Club (1948; Ventura Boulevard), Brierwood Terrace Valley Convalescent Hospital and Home for Retired (ca. 1958; Ventura Boulevard, Los Angeles; demolished); Golden Sails Hotel (ca. 1962; Long Beach), Pittman Dog and Cat Hospital (1964; Exposition Boulevard, Los Angeles), Belvedere Department of Social Services (1967; Whittier Boulevard, East Los Angeles) (GPA Consulting 2014:20). Other large projects included a parking garage and expansions for Los Angeles County-USC Medical Center (*Los Angeles Evening Citizen News* 1967; *Los Angeles Times* 1968). In 1977, he designed the Baldwin Hills branch of the Bank of America on South La Brea Avenue (*Los Angeles Times* 1977).

In 1978, Sealey served as the architect for the $7 million marina project in Long Beach, which included a 200-room hotel, boat slips, a trailer park with 324 sites, and 110-unit motel (*Independent* 1961). One element of the development, the Seaport Marina Hotel, originally called the Edgewater Inn (demolished), is noted by the Los Angeles Conservancy for its Googie-style architecture. The Conservancy website describes the hotel as having classic Googie features, including a folded-plate roofline on a circular office wing, decorative concrete block screens, and zigzag designs on the guest wings (LA Conservancy 2022a) (Figure 12).

[1] The LA Conservancy article says Sealey was born in Guam; research of public records finds this to be incorrect.

Figure 11. Architect Roy Sealey, *Ebony* magazine, Vol. 5, No 10 (1950), p. 32.
The caption reads:
Architect Roy Sealey works on his newest commission in office. Jamaica-born draftsman started at $4.50 a week office boy for noted Paul Williams, today earns $50,000 a year.

Figure 12. Seaport Inn, designed by Roy Sealey.
Photo: Louise Ivers.

ARCHITECTURAL DESCRIPTIONS

On February 24, 2022, ASM conducted an on-site survey of the campus to document it with detailed field notes and photographs of the exteriors and interiors (where available) of the two buildings at the 32nd Street/USC Magnet Schools that were constructed more than 45 years ago (Figure 13). Two additional permanent buildings house the high school at the southwest corner of the campus. The two buildings are set at right angles to one another and are connected by a sky bridge at the second floor. Because they were constructed in 2010, they were not fully surveyed or documented for this project (Figure 14).

Table 1. Buildings Surveyed

Building Name	Year Constructed	Architect	Facility ID No.	CA SHPO Status
Administration (Building No. 1)	1975	Roy A. Sealey	23107	6Z
Classrooms (Building No. 2)	1975	Roy A. Sealey	17273	6Z

Building No. 1 (Administration and Classrooms)

Exterior

Building No. 1 is a single-story building with a flat roof sitting on a poured-concrete foundation. The building is situated toward the north end of the campus on West 32nd Street and represents the main entrance to campus (Figure 15). It is essentially L-shaped in plan, with the main section set back from the street and a north wing extending nearly to the sidewalk. The building is formed of rectangular geometric segments with a horizontal orientation, and materials are limited to moderately textured stucco and flat, simple metal doors. Building No. 1 lacks ornamentation and has minimal fenestration. One of the most obvious character-defining features is the very deep stucco fascia or broad roofline that extends away from the main body of the building and continues around all façades. The bottom of this extended roof is covered in stucco. A rectangular stucco panel outlined with narrow channels is centered within each fascia, displaying an even boundary on all sides. These panels are set off by the darker color of the paint. At the top of the fascia is a narrow coping that extends slightly over the edge of the fascia (Figures 16-18).

At the center of each façade, the fascia extends beyond the main face and is framed by a vertical beam at each end that extends below the fascia and stops at approximately the tops of the doors. Between these beams are horizontal rows of windows set high on the walls. The windows are not operable and are covered with metal grilles on the exterior. This pattern is generally consistent on each façade.

At the north façade, a lower single-story canopy (Arcade No. 1) shelters a concrete walkway and connects to the north façade of the main part of the building over the primary entrance, which is a recessed set of plain metal double doors. To the west of the entrance, the façade is slightly set back. A row of the high narrow fixed-pane windows spans nearly the entire section of the façade. To the east of the entrance, the façade displays the typical pattern of a centered extension of the fascia with a continuous long horizontal row of windows.

The arcade continues to the east, paralleling the north façade of the main section and connecting to the west façade of the north wing (Figures 19-22). Here, the secondary entrance is sightly recessed and consists of a set of simple metal double doors.

A portion of the area where the main body of the building attaches to the north wing projects vertically above the other sections of roof, marking the location of the lounge in the interior. This higher section has an even deeper stucco fascia that lacks the rectangular panels shown on the lower sections. The east façade of this higher section has a row of evenly spaced rectangular pilasters, with a high fixed-pane windows in metal frames between each two (Figure 23). Farther to the north on the east façade are an entrance and two metal roll-up windows that open to the kitchen (Figure 24).

Figure 13. Campus map showing buildings.

Figure 14. The west high school building, view toward the southeast.

Figure 15. The east and north façades of the north wing of Building No. 1, view to the southwest.

Figure 16. The north façade of Building No. 1, with the north wing to the right, view toward the south.

Figure 17. Detail of the north façade of Building No. 1, view to the southwest.

Figure 18. Detail of north façade of Building No. 1 at main entrance, view to the southwest.

Figure 19. Arcade No. 1 at north façade of Building No. 1, view toward the east.

Figure 20. Arcade No. 1, view toward the northeast from main entrance to Building No. 1.

Figure 21. Main entrance to Building No. 1, view from Arcade No. 1 toward the southwest.

Figure 22. North façade of main section of Building No. 1, view from Arcade No. 1 toward the southeast.

Figure 23. South and east façades of Building No. 1, view toward the northwest.

Figure 24. Detail of east façade of Building No. 1, view toward the northwest.

The higher section of the east façade projects a few feet away from the main wall of the building. To the south of the higher section, the wall is recessed, and an entrance, again a set of double doors, is located to the north of a set of high horizontal windows in the pattern typical of the other facades of the building.

At the south façade are entrances to boys' and girls' restrooms and various other small rooms. All of these doors are single. At the location of the library in the interior is a set of windows. Farther to the west is a secondary entrance of double doors recessed into the façade. The kindergarten wing is located to the west of this entrance.

The west façade is occupied by kindergarten rooms and a fenced-in play yard. The façade displays the same extended fascia but lacks the typical window configuration. Instead, there are three single doors and two sets of three windows (Figure 25).

Interior

The main corridor of the interior is double loaded and runs east-west. Off the corridor are the library and the dining room, or lounge. The lounge is located in the higher section of the building where the two wings join. To the east of the dining room/lounge are a kitchen and a faculty dining room. The lounge has a slightly pitched ceiling with recessed fluorescent lighting in acoustical tile and tables that fold into the side walls. Restrooms and classrooms of various sizes are accessed from this main corridor as well. Single metal doors provide access to all of the rooms. The corridor forms a T with a north-south corridor, which separates the kindergarten rooms to the west from the rest of the building. The ceilings are acoustical tiles, and lighting is recessed fluorescent fixtures. Floors are asphalt tile. (Figures 26-29).

Figure 25. Play yard for kindergarten rooms at west end of Building No. 1, view toward the northeast.

Figure 26. Lounge in interior of Building No. 1, view toward the northeast.

Figure 27. Kitchen in interior of Building No. 1, view toward the southeast.

Figure 28. Central east-west corridor in Building No. 1, view toward the east.

Figure 29. North-south corridor in Building No. 1, view toward the south.

Building No. 2 (Classrooms)

Exterior

Building No. 2 exhibits the same stylistic elements as Building No. 1. Like Building No. 1, it is a single-story building with a flat roof sitting on a poured-concrete foundation. Building No. 2 is rectangular in plan and is situated directly south of Building No. 1. Its north façade parallels the south façade of Building No. 1 and is separated by a few yards of paving. Like Building No. 1, the massing of Building No. 2 consists of rectangular geometric segments with a horizontal orientation. Materials are moderately textured plaster cladding and flat, simple metal doors. Building No. 2 exhibits the very deep stucco fascia or broad roofline that extends away from the main body of the building and continues around all façades.

At the center of each façade, the fascia extends beyond the main face and is framed by a vertical beam at each end that extends below the fascia and stops at approximately the tops of the doors. Between these beams are horizontal rows of windows set high on the walls. The windows are not operable and are covered with metal grilles on the exterior. This pattern is generally consistent on each façade (Figures 30-34).

Interior

At the interior of Building No. 2 are two corridors that pass east-west through the building. The plan is symmetrical, with the corridors evenly spaced from the ends of the building. The west corridor is aligned with the west corridor of Building No. 1 and has similar entrances of recessed double metal doors at each end. The corridors are double-loaded, with classrooms opening off each side. Classroom entrances have single flat metal doors. The ceilings of the classrooms and corridors are composed of acoustical tile, and lighting is recessed fluorescent fixtures. Floors are asphalt tile (Figures 35 and 36).

Figure 30. East façade of Building No. 2 with Building No. 1 in the background, view toward the northwest.

Figure 31. West end of the south façade of Building No. 2, view toward the northwest.

Figure 32. South and east façades of Building No. 2, view toward the northwest.

Figure 33. Detail of west façade of Building No. 2, view toward the southeast.

Figure 34. West façade of Building No. 2, view toward the northeast.

Figure 35. Interior of east corridor of Building No. 2, view toward the south.

Figure 36. Typical classroom off east corridor in Building No. 2, view toward the northwest.

SIGNIFICANCE EVALUATION

Evaluation Framework

National Register of Historic Places

Authorized by the NHPA of 1966, the National Park Service's NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources. The NRHP is the official list of the nation's historic places worthy of preservation. The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity and:

A. are associated with events that have made a significant contribution to the broad patterns of our history; or

B. are associated with the lives of persons significant in our past; or

C. embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or have yielded, or

D. may be likely to yield, information important in prehistory or history.

Integrity

In order to be eligible for listing in the NRHP and CRHR, a property must retain sufficient integrity to convey its significance. The NRHP publication *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, establishes how to evaluate the integrity of a property: "Integrity is the ability of a property to convey its significance" (National Park Service 1997). The evaluation of integrity must be grounded in an understanding of a property's physical features and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

1. *Location* is the place where the historic property was constructed or the place where the historic event occurred.

2. *Design* is the combination of elements that create the form, plan, space, structure, and style of a property.

3. *Setting* is the physical environment of a historic property, and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or manmade, including vegetation, paths, fences, and relationships between other features or open space.

4. *Materials* are the physical elements that were combined or deposited during a particular period or time, and in a particular pattern or configuration to form a historic property.

5. *Workmanship* is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory, and can be applied to the property as a whole, or to individual components.

6. *Feeling* is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's historic character.

7. *Association* is the direct link between an important historic event or person and a historic property.

California Register of Historical Resources

The CRHR program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA. The criteria established for eligibility for the CRHR are directly comparable to the national criteria established for the NRHP.

In order to be eligible for listing in the CRHR, a building, object, or structure must satisfy at least one of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Historical resources eligible for listing in the CRHR must also retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. For the purposes of eligibility for the CRHR, integrity is defined as "the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance" (California Office of Historic Preservation 2001). This general definition is generally strengthened by the more specific definition offered by the NRHP—the criteria and guidelines on which the CRHR criteria and guidelines are based upon.

California Environmental Quality Act

CEQA Section 15064.5 *Determining the Significance of Impacts to Archeological and Historical Resources* requires that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. It defines historical resources as "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

Lead agencies have a responsibility to evaluate historical resources against the CRHR criteria prior to making a finding as to a proposed Project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed Project will cause substantial adverse change to a historical resource. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a Project that demolishes or alters those physical characteristics of an historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance. The CRHR is used in the consideration of historical resources relative to significance for purposes of CEQA. The CRHR includes resources listed in, or formally determined eligible for listing in, the NRHP, as well as some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the CRHR and

are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Generally, a resource shall be considered by the lead agency to be a "historical resource" if it:

1. Is listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (PRC Section 5024.1, Title 14 CCR, Section 4850 et seq.).
2. Is included in a local register of historical resources, or is identified as significant in an historical resource survey meeting the requirements of PRC Section 5024.1(g).
3. Is a building or structure determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

City of Los Angeles Historic-Cultural Monument

According to the City of Los Angeles Cultural Heritage Ordinance Chapter 9, Division 22 (Cultural Heritage Ordinance) of the Los Angeles Administrative Code, Historic-Cultural Monument designation is reserved for those resources that have a special aesthetic, architectural, or engineering interest or value of a historic nature. Any site (including significant trees or other plant life located on a site), building or structure of particular historic or cultural significance to the City of Los Angeles, can be designated as long as it is a historic structure or site:

a. in which the broad cultural, economic or social history of the nation, State, or community is reflected or exemplified; or
b. that is identified with historic personages or with important events in the main currents of national, State or local history; or
c. that embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a study of a period, style or method of construction; or
d. that is a notable work of a master builder, designer, or architect whose individual genius influenced his or her age.

A proposed resource may be eligible for local designation as a Historic-Cultural Monument if it meets at least one of the criteria above.

Los Angeles Unified School District

The *LAUSD Historic Context Statement, 1870 to 1969* (Sapphos 2014) establishes guidelines for evaluating the significance of LAUSD campuses, including historic contexts and themes, with eligibility standards, character-defining features, and integrity considerations for each. As the buildings at the 32nd Street/USC Magnet Schools campus were constructed after the end of the period covered by the context, the evaluation could not be fully informed by the context statement. Additionally, the school is atypical in most ways from the physical plants of other LAUSD schools, including the smaller size of the campus and its association with a major university. Given these limitations, and the exceptional nature of the 32nd Street/USC Magnet School campus, the evaluation of the school was considered beginning with the guidelines defined for the context ending in 1969, which predates the construction dates of the two oldest buildings by six years. With certain caveats, the context and theme that most closely apply to 32nd Street/USC Magnet Schools are as follows:

Area of Significance: A/1

Context: Public and Private Institutional Development | Education
Theme: LAUSD | Educating the Baby Boom: The Postwar Modern, Functionalist School Plant, 1945–1969

Property Type: Institutional/Educational
Property Subtypes: Elementary Schools, Junior High Schools, and High Schools
Period of Significance: 1945 to 1969
Area of Significance: Education
Geographic Location: Citywide; with concentrations in the San Fernando Valley and west Los Angeles
Area of Significance: A/1

Eligibility Standards:

- Clearly embodies the characteristics of a postwar modern functionalist school campus
- Displays a unified, functional site design, with buildings extending across the site and oriented in relation to outdoor spaces (courtyards, patios, outdoor play areas)
- One-story massing for elementary schools; up to two-stories for junior/high schools
- Classrooms, in detailing and plans, clearly express their function, with axial, fingerlike wings, plentiful fenestration, and connections to the outdoors
- Retains most of the associative and character-defining features from the period of significance

Character-defining Features | Buildings/Structures

- Building plans and site design clearly express their function; classroom wings often exhibit one-story "finger-like" wings, arranged on an axis
- Easily identifiable indoor-outdoor spaces, connections to classrooms through the incorporation of patios, courtyards, and outdoor canopied corridors
- One-story massing, particularly for elementary schools; up to two to three stories for junior and high schools
- Building types and plans expressive of postwar ideals in school design; these can include (1) finger-plan schools (usually in 1940s through 1950s); (2) cluster-plan schools (beginning in 1950s); and (3) variations and combinations of these typologies clearly expressive of the ideals for informality, indoor-outdoor connections, and zoned planning for the site
- Varying elevations might display differentiated window sizes and configurations, in order to tailor interior light to sun patterns and create cross-lit classrooms

Character-defining Features | Campus/District

- Unified campus design includes most or all of the following attributes: lack of formality and monumentality; low massing (usually one stories for classrooms and up to two stories for auditoriums/multipurpose rooms); strong geometric ordering of buildings and outdoor spaces; decentralized, pavilion-like layout; rational, function-driven site design; buildings extend across the site; buildings are oriented to outdoor spaces (courtyards, patios, outdoor areas), purposeful indoor-outdoor integration
- Automobile traffic/drop-off areas separated from campus; linked to interior via extended canopied corridors
- Buildings often turn inward, toward green spaces and courtyards, lawns
- Outdoor corridors, sheltered beneath simple canopies, forming links between the buildings of the campus
- Classrooms often consist of a series of axial, modular units
- An informal, domestic scale for the buildings and campus might be especially evident in elementary schools
- Swaths of patios, terraces, and plantings adjacent to and alternating with buildings
- Generous expanses of windows, including steel- and wood-framed multilight windows, in awning and hopper casements, clerestories, and fixed panes
- Flat roof or broken-plane roof often used for lighting and acoustical issues

- Modular design, with a rhythmic, asymmetrical but balanced composition
- Usually displays a modern design idiom, usually either regional modernist (with use of native materials such as stone, brick, and wood siding and/or framing),
- International Style modernist, or, by the early 1960s, Late Modern (more expressive and sculptural)
- Some examples might include some degree of historicist detailing or styles popular in the postwar period (such as American Colonial Revival); these are less common than modernist examples
- May have been designed by a prominent architect of the period
- Often associated with post–World War II suburbanization and growth near major employment centers beyond the city periphery (such as the San Fernando Valley and southwest Los Angeles)
- Often built in residential neighborhoods on large expanses of land, with swaths of land devoted to landscape design and playing fields (in particular for high school campuses)

Area of Significance: C/3

According to the LAUSD Historic Context Statement**,** buildings exhibiting distinctive design features might also qualify under Criteria C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values.

Architectural Style

Because the LAUSD Historic Context Statement does not address architectural styles prevalent later than 1969, this report considered the definitions of Mid-Century Modernism and Late Modernism, as outlined by SurveyLA (City of Los Angeles 2020). The two 1975 buildings fall out of the period of significance of Mid-Century Modernism and exhibit few of the definitive characteristics of the style, including a close connection between interiors and exteriors achieved through wide openings and plentiful glazing. Although the buildings fall within the period of significance of Late Modernism, the buildings at the 32nd Street/USC Magnet Schools campus do not display the characteristics of any of the sub-categories of Late Modernism. According to SurveyLA definitions of styles, the two buildings could be considered "no style."

Evaluation of Eligibility

ASM considered the campus and the four permanent buildings for significance under the broad themes of Education and Architecture and the eligibility criteria described in the preceding section. The campus was evaluated as a potential historic district, and the two permanent buildings were evaluated for individual significance (Building No. 1 and Building No. 2). The period of significance is 1975, the year of construction of the two buildings that are older than 45 years.

NRHP/CRHR Evaluation

Historic District Eligibility

The two 1975 buildings were considered as a potential historic district. The buildings were constructed after the period of significance covered by the LAUSD Historic Context Statement. Lacking any definition of eligibility standards for a historic district that more closely apply to the 32nd Street/USC Magnet Schools campus, this evaluation considers the eligibility standards for the period of significance ending in 1969, as listed above. Although the two buildings are similar and display the low, single-story massing common to postwar schools, the campus does not have a strong unified design that interrelates the buildings, the buildings do not open to outdoor spaces or show any attempt to integrate indoor and outdoor spaces. Despite the covered corridor that partially spans the primary façade, corridors do not connect the two buildings. The architectural style is not regional, and the campus is not associated with post-World War II suburbanization, as were the multitude of new schools constructed in Los Angeles and

throughout the United States during the postwar period. The most obvious feature differentiating the 32st Street/USC Magnet Schools from postwar LAUSD campuses as described in the Historic Context is the lack of generous swaths of windows to admit natural air and light. Instead, the windows are minimal and shaded beneath heavy roof overhangs that wrap around the ends of the groups of windows. This approach to school design developed during the 1960s and 1970s, arguably as a result of an increasing reliance on technology, in part guided by ever more stringent environmental comfort standards such as those developed by the National Council for School Construction (NCSC). Following the energy crisis of 1973, building codes and regulations began to radically change the priorities of school facilities even more, toward the need to reduce energy consumption above all other priorities. It was during this time that school designs "capitulated to the relative simplicity of relying on mechanical systems to provide requisite lighting and thermal conditions" (Baker 2012:18). In these ways, the 32nd Street/USC Magnet Schools campus is associated with events that have made a significant contribution to the broad patterns of our history. It is not a good example of the theme of Educating the Baby Boom but might be considered an example of a later campus type, which has yet to be defined. Additionally, whereas federal code states only that there should be a "significant concentration" of contributing buildings in an eligible historic district (36 CFR § 67.2), it is commonly understood that "*most* of the buildings in a potential historic district must be considered contributing" (e.g., LA Conservancy 2022b). As the two buildings on the 32nd Street/USC Magnet Schools campus comprise only 50 percent of the total of four permanent buildings that currently comprise the campus, the campus is recommended not eligible as a historic district for listing in the NRHP/CRHR under Criterion A/1.

Research revealed no evidence that any important person was directly associated with the school. Therefore, the 32nd Street/USC Magnet Schools campus is recommended not eligible for listing as a historic district in the NRHP/CRHR under Criterion A/1.

The two potential contributors to a potential historic district were designed by noted architect Roy A. Sealey. A previous evaluation of one of his most visible projects, the Googie-style Edgewater Inn Marina Hotel in Long Beach, claims that Sealey could not be considered a master architect. The evaluation describes him as "a talented designer who worked within the styles that were popular during the period and do not reflect a unique design philosophy or approach" (GPA Consulting 2014:20). ASM concurs with this assessment of Sealey. The two buildings are not outstanding examples of any type, period, or method of construction, do not represent the work of a master, and do not possess high artistic values. Therefore, the 32nd Street/USC Magnet Schools campus is recommended not eligible as a historic district under Criterion C/3 for listing in the NRHP/CRHR.

There is no reason to believe that the campus will yield important information about the prehistory or history of the local area, California, or the nation. Therefore, the campus is recommended not eligible as a historic district under Criterion D/4 for listing in the NRHP/CRHR.

Individual Eligibility

Building No. 1 (Administration and Classrooms)

Criterion A/1. Building No. 1 does not meet any of the eligibility standards and does not exhibit any of the character-defining features outlined in the *LAUSD Historic Context Statement* under Criterion A/1. The campus of the 32nd Street/USC Magnet Schools does not embody the characteristics of a postwar modern functionalist school campus; does not display a unified, functional site design; is not a single-story; and does not have classrooms that express their function with axial, fingerlike wings, plentiful fenestration, and connections to the outdoors. Although the building is potentially eligible under as-yet-undefined characteristics of later campus buildings, it is not one of the building types or plans expressive of postwar ideals in school design. Therefore, Building No. 1 is recommended not individually eligible under Criterion A/1 for listing in the NRHP/CRHR.

Criterion B/2. Research revealed no evidence that any important person was directly associated with Building No. 1. Therefore, the building is recommended not individually eligible under Criterion B/2 for listing in the NRHP/CRHR.

Criterion C/3. According to the *LAUSD Historic Context Statement*, buildings exhibiting distinctive design features might also qualify under Criterion C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values. Building No. 1 was designed by noted architect Roy A. Sealey. A previous evaluation of one of his most visible projects, the Googie-style Edgewater Inn Marina Hotel in Long Beach, claims that Sealey could not be considered a master architect. The evaluation describes him as "a talented designer who worked within the styles that were popular during the period and do not reflect a unique design philosophy or approach" (GPA Consulting 2014:20). ASM concurs with this assessment of Sealey. Constructed later than the period of significance for postwar LAUSD schools, Building No. 1 is not an outstanding example of any type, period, or method of construction, does not represent the work of a master, and does not possess high artistic values. Therefore, Building No. 1 is recommended not individually eligible under Criterion C/3 for listing in the NRHP/CRHR.

Criterion D/4. Criterion D/4 was not considered in this report, as it generally applies to archaeological resources. Previous archaeological studies of the area have not yielded any important information, and there is no reason to believe that the campus will yield important information about the prehistory or history of the local area, California, or the nation.

Building No. 2 (Classrooms)

Criterion A/1. Similar to Building No. 1, Building No. 2 does not meet any of the eligibility standards and does not exhibit any of the character-defining features outlined in the *LAUSD Historic Context Statement* under Criterion A/1. The campus of the 32nd Street/USC Magnet Schools does not embody the characteristics of a postwar modern functionalist school campus; does not display a unified, functional site design; is not a single-story; and does not have classrooms that express their function with axial, fingerlike wings, plentiful fenestration, and connections to the outdoors. Although the building is potentially eligible under as-yet-undefined characteristics of later campus buildings, it is not one of the building types or plans expressive of postwar ideals in school design. Therefore, Building No. 2 is recommended not individually eligible under Criterion A/1 for listing in the NRHP/CRHR.

Criterion B/2. Research revealed no evidence that any important person was directly associated with Building No. 2. Therefore, the building is recommended not individually eligible under Criterion B/2 for listing in the NRHP/CRHR.

Criterion C/3. According to the *LAUSD Historic Context Statement*, buildings exhibiting distinctive design features might also qualify under Criterion C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values. Building No. 2 was designed by noted architect Roy A. Sealey. A previous evaluation of one of his most visible projects, the Googie-style Edgewater Inn Marina Hotel in Long Beach, claims that Sealey could not be considered a master architect. The evaluation describes him as "a talented designer who worked within the styles that were popular during the period and do not reflect a unique design philosophy or approach" (GPA Consulting 2014:20). ASM concurs with this assessment of Sealey. Constructed later than the period of significance for postwar LAUSD schools, Building No. 2 is not an outstanding example of any type, period, or method of construction, does not represent the work of a master, and does not possess high artistic values. Therefore, Building No. 2 is recommended not individually eligible under Criterion C/3 for listing in the NRHP/CRHR.

Criterion D/4. Criterion D/4 was not considered in this report, as it generally applies to archaeological resources. Previous archaeological studies of the area have not yielded any important information, and there is no reason to believe that the campus will yield important information about the prehistory or history of the local area, California, or the nation.

City of Los Angeles Eligibility

The 32nd Street/USC Magnet Schools campus, as well as the two 1975 individual buildings, cannot be considered potentially eligible because they do not meet any of the four criteria, which parallel those defined for NRHP/CRHR eligibility.

Integrity

Because no eligible historic resources were identified, an assessment of integrity is not necessary.

CONCLUSION

ASM carefully considered the potential significance of the 32nd Street/USC Magnet Schools under the criteria described in this report. ASM recommends the campus not eligible as a historic district for listing in the NRHP, CRHR, or Los Angeles HCM, under criteria A/1/a and C/3/c and d. In addition, Building No. 1 and Building No. 2 are recommended not individually eligible under NRHP and CRHR criteria A/1 and C/3. As such, ASM recommends that the 32nd Street/USC Magnet Schools campus and its individual buildings are not historical resources in accordance with CEQA nor historic properties in accordance with NHPA.

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APPENDICES

Appendix A

California Department of Parks and Recreation Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 of 11 ***Resource Name or #:** Building No. 1 at 32nd Street/USC Magnet Schools
P1. Other Identifier: Administration and Classrooms, LAUSD Facilities ID No. 23107
***P2. Location:** ☐ **Not for Publication** ☐ **Unrestricted**
***a. County:** Los Angeles **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2018 **T** 1S **R** 13W **¼ of** ¼ **of Sec** S.B. **B.M.**
c. Address 822 West 32nd Street City Los Angeles Zip 90007
d. UTM: (give more than one for large and/or linear resources) Zone 11S, 381590.61 mE/ 3765623.79 mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.)
APN 5123-008-905 and 5123-008-910

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Exterior: Building No. 1 is a single-story building with a flat roof sitting on a poured-concrete foundation. The building is situated toward the north end of the campus on West 32nd Street and represents the main entrance to campus. It is essentially L-shaped in plan, with the main section set back from the street and a north wing extending nearly to the sidewalk. The building is formed of rectangular geometric segments with a horizontal orientation, and materials are limited to moderately textured stucco and flat, simple metal doors. Building No. 1 lacks ornamentation and has minimal fenestration. One of the most obvious character-defining features is the very deep stucco fascia or broad roofline that extends away from the main body of the building and continues around all façades. The bottom of
(continued on page 3)

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession#)
View looking southwest at the north façade
Photo taken on February 24, 2022

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1975
LAUSD facilities records

***P7. Owner and Address:**
Los Angeles Unified School District
333 South Beaudry Avenue
Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Avenue
Pasadena, CA 91103

***P9. Date Recorded:** February 2022

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.")
ASM Affiliates. 2021. *ASM Affiliates. 2021. Draft Historic Resource Evaluation Report for 32nd Street/USC Magnet Schools, Los Angeles, California.* Prepared for Los Angeles Unified School District Office of Environmental Health & Safety.

***Attachments:** ☐ NONE ☐ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

***NRHP Status Code** 6Z
***Resource Name or #** (Assigned by recorder) Building No. 1 at 32nd Street/USC Magnet Schools

B1. Historic Name: Building No 1
B2. Common Name: Administration building
B3. Original Use: Same
B4. Present Use: Administrative offices and classrooms
***B5. Architectural Style:** Undetermined
***B6. Construction History:** **(Construction date, alterations, and date of alterations)**

Architect Roy A. Sealey began designs for two new buildings at the current 32nd Street/USC Magnet Schools campus, the existing Building No. 1 and Building No. 2, in 1973. Demolition to accommodate the new buildings included removal of the existing Annex and several smaller buildings. The new buildings were completed in 1975.

***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
*B8. Related Features:
B9a. Architect: Roy A. Sealey b. Builder:
***B10. Significance: Theme** N/A **Area:**
Period of Significance: N/A **Property Type:** Educational building **Applicable Criteria:** N/A

Criterion A/1. Building No. 1 does not meet any of the eligibility standards and does not exhibit any of the character-defining features outlined in the *LAUSD Historic Context Statement* under Criterion A/1. The campus of the 32nd Street/USC Magnet Schools does not embody the characteristics of a postwar modern functionalist school campus; does not display a unified, functional site design; is not single-story; and does not have classrooms that express their function with axial, fingerlike wings, plentiful fenestration, and connections to the outdoors. Although the building is potentially eligible under as-yet-undefined characteristics of later campus buildings, it is not one of the building types or plans expressive of postwar ideals in school design. Therefore, Building No. 1 is recommended not individually eligible under Criterion A/1 for listing in the NRHP/CRHR.

(continued on page 3)

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:
Sapphos Environmental, Inc. (Sapphos). 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969.* Prepared for the LAUSD Office of Environmental Health and Safety.

B13. Remarks:
***B14. Evaluator:** ASM Affiliates, Inc. (Marilyn Novell)
***Date of Evaluation:** February 2022

(This space is reserved for official comments)

Sketch Map with north arrow required.

***P3a. Description:** (continued from page 1)

this extended roof is covered in stucco. A rectangular stucco panel outlined with narrow channels is centered within each fascia, displaying an even boundary on all sides. These panels are set off by the darker color of the paint. At the top of the fascia is a narrow coping that extends slightly over the edge of the fascia.

At the center of each façade, the fascia extends beyond the main face and is framed by a vertical beam at each end that extends below the fascia and stops at approximately the tops of the doors. Between these beams are horizontal rows of windows set high on the walls. The windows are not operable and are covered with metal grilles on the exterior. This pattern is generally consistent on each façade.

At the north façade, a lower single-story canopy (Arcade No. 1) shelters a concrete walkway and connects to the north façade of the main part of the building over the primary entrance, which is a recessed set of plain metal double doors. To the west of the entrance, the façade is slightly set back. A row of the high narrow fixed-pane windows spans nearly the entire section of the façade. To the east of the entrance, the façade displays the typical pattern of a centered extension of the fascia with a continuous long horizontal row of windows.

The arcade continues to the east, paralleling the north façade of the main section and connecting to the west façade of the north wing. Here, the secondary entrance is sightly recessed and consists of a set of simple metal double doors.
A portion of the area where the main body of the building attaches to the north wing projects vertically above the other sections of roof, marking the location of the lounge in the interior. This higher section has an even deeper stucco fascia that lacks the rectangular panels shown on the lower sections. The east façade of this higher section has a row of evenly spaced rectangular pilasters, with a high fixed-pane windows in metal frames between each two. Farther to the north on the east façade are an entrance and two metal roll-up windows that open to the kitchen.

The higher section of the east façade projects a few feet away from the main wall of the building. To the south of the higher section, the wall is recessed, and an entrance, again a set of double doors, is located to the north of a set of high horizontal windows in the pattern typical of the other facades of the building.

At the south façade are entrances to boys' and girls' restrooms and various other small rooms. All of these doors are single. At the location of the library in the interior is a set of windows. Farther to the west is a secondary entrance of double doors recessed into the façade. The kindergarten wing is located to the west of this entrance.

The west façade is occupied by kindergarten rooms and a fenced-in play yard. The façade displays the same extended fascia but lacks the typical window configuration. Instead, there are three single doors and two sets of three windows.

Interior: The main corridor of the interior is double loaded and runs east-west. Off the corridor are the library and the dining room, or lounge. The lounge is located in the higher section of the building where the two wings join. To the east of the dining room/lounge are a kitchen and a faculty dining room. The lounge has a slightly pitched ceiling with recessed fluorescent lighting in acoustical tile and tables that fold into the side walls. Restrooms and classrooms of various sizes are accessed from this main corridor as well. Single metal doors provide access to all of the rooms. The corridor forms a T with a north-south corridor, which separates the kindergarten rooms to the west from the rest of the building. The ceilings are acoustical tiles, and lighting is recessed fluorescent fixtures. Floors are asphalt tile.

***B10. Significance:** (continued from page 2)

Criterion A/1. The Administration building is a good example of a Post–1933 Long Beach Earthquake building funded through the WPA. It displays the response by the District and the State of requiring new school buildings to be constructed of strong materials such as concrete, with minimal ornamentation to avoid the hazards created by applied details in pre-1933 school buildings and thus is a good representation of events in history. Therefore, the Administration building is recommended individually eligible under Criterion A/1 for listing in the NRHP/CRHR.

Criterion B/2. Research revealed no evidence that any important person was directly associated with Building No. 1. Therefore, the building is recommended not individually eligible under Criterion B/2 for listing in the NRHP/CRHR.

Criterion C/3. According to the *LAUSD Historic Context Statement*, buildings exhibiting distinctive design features might also qualify under Criterion C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values. Building No. 1 was designed by noted architect Roy A. Sealey. A previous evaluation of one of his most visible projects, the Googie-style Edgewater Inn Marina Hotel in Long Beach, claims that Sealey could not be considered a master architect. The evaluation describes him as "a talented designer who worked within the styles that were popular

during the period and do not reflect a unique design philosophy or approach" (GPA Consulting 2014:20). ASM concurs with this assessment of Sealey. Constructed later than the period of significance for postwar LAUSD schools, Building No. 1 is not an outstanding example of any type, period, or method of construction, does not represent the work of a master, and does not possess high artistic values. Therefore, Building No. 1 is recommended not individually eligible under Criterion C/3 for listing in the NRHP/CRHR.

Criterion D/4. Criterion D/4 was not considered in this report, as it generally applies to archaeological resources. Previous archaeological studies of the area have not yielded any important information, and there is no reason to believe that the campus will yield important information about the prehistory or history of the local area, California, or the nation.

City of Los Angeles Eligibility

The 32nd Street/USC Magnet Schools campus, as well as the two 1975 individual buildings, cannot be considered potentially eligible because they do not meet any of the four criteria, which parallel those defined for NRHP/CRHR eligibility.

Integrity

Because no eligible historic resources were identified, an assessment of integrity is not necessary.

Image 1. The north façade of Building No. 1, with the north wing to the right, view toward the south.

Image 2. Detail of north façade of Building No. 1 at main entrance, view to the southwest.

Image 3. Arcade No. 1 at north façade of Building No. 1, view toward the east.

Image 4. Arcade No. 1, view toward the northeast from main entrance to Building No. 1.

Image 5. North façade of main section of Building No. 1, view from Arcade No. 1 toward the southeast.

Image 6. South and east façades of Building No. 1, view toward the northwest.

Image 5. North façade of main section of Building No. 1, view from Arcade No. 1 toward the southeast.

Image 6. South and east façades of Building No. 1, view toward the northwest.

Image 7. Detail of east façade of Building No. 1, view toward the northwest.

Image 8. Play yard for kindergarten rooms at west end of Building No. 1, view toward the northeast.

Image 9. Lounge in interior of Building No. 1, view toward the northeast.

Image 10. Kitchen in interior of Building No. 1, view toward the southeast.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPH SHEET

Primary # _____
HRI # _____
Trinomial _____

11 of 11 ***Resource Name or # (Assigned by recorder)** Building No. 1 at 32nd Street/USC Magnet Schools
Recorded by: Marilyn Novell **Date:** February 2022
☒ Continuation ☐ Update

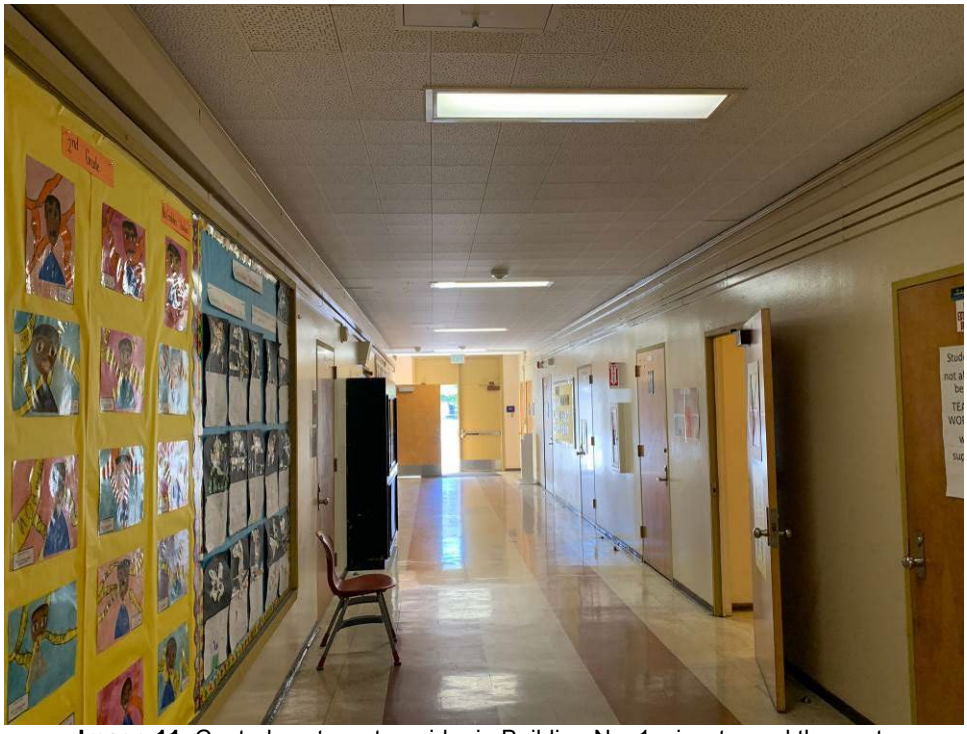


Image 11. Central east-west corridor in Building No. 1, view toward the east.

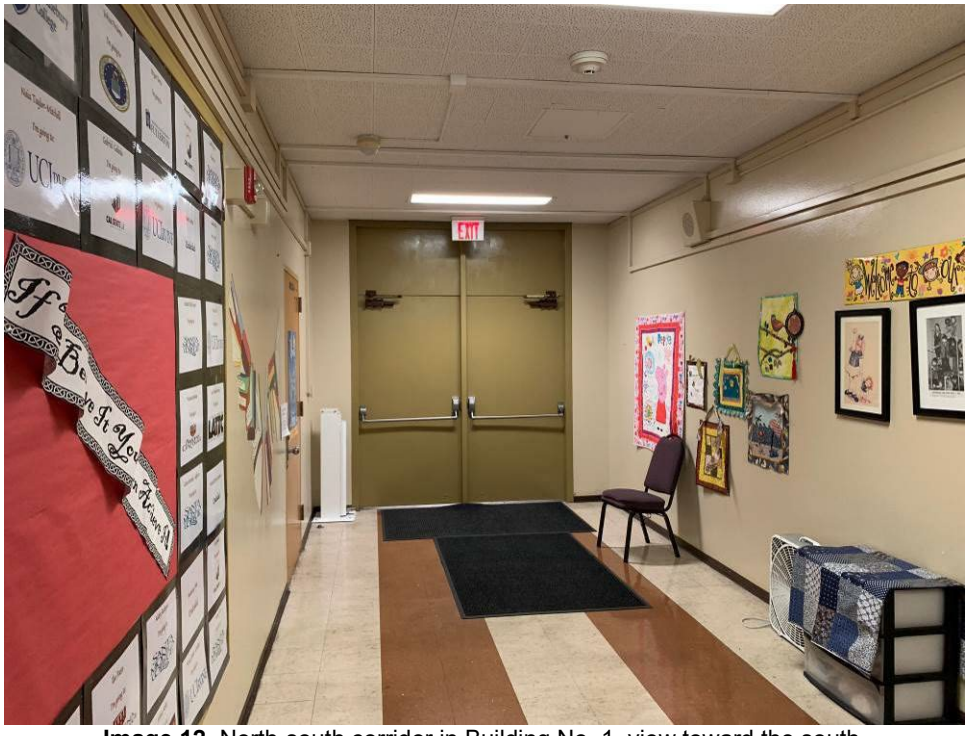


Image 12. North-south corridor in Building No. 1, view toward the south.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 of 6 ***Resource Name or #:** Building No. 2 at 32nd Street/USC Magnet Schools
P1. Other Identifier: Classroom Building, LAUSD Facility ID No. 17273
***P2. Location:** ☐ **Not for Publication** ☐ **Unrestricted**
***a. County:** Los Angeles **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad** Los Angeles **Date** 2018 **T** 1S **R** 13W ¼ **of** ¼ **of Sec** S.B. **B.M.**
c. Address 822 West 32nd Street City Los Angeles Zip 90007
d. UTM: (give more than one for large and/or linear resources) Zone 11S, 381567.37 mE/ 37655998.85 mN;
e. Other Locational Data: (e.g. parcel#, directions to resource, elevation, etc.)
APN 5123-008-905 and 5123-008-910

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

Exterior: Building No. 2 exhibits the same stylistic elements as Building No. 1. Like Building No. 1, it is a single-story building with a flat roof sitting on a poured-concrete foundation. Building No. 2 is rectangular in plan and is situated directly south of Building No. 1. Its north façade parallels the south façade of Building No. 1 and is separated by a few yards of paving. Like Building No. 1, the massing of Building No. 2 consists of rectangular geometric segments with a horizontal orientation. Materials are moderately textured plaster cladding and flat, simple metal doors. Building No. 2 exhibits the very deep stucco fascia or broad roofline that extends away from the main body of the building and continues around all façades.

(continued on page 3)

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☒ Element of District ☐ Other (Isolates, etc.)
P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession#)
South and east façades of Building No. 2, view toward the northwest
Photo taken on February 24, 2022

***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1975
LAUSD facilities records

***P7. Owner and Address:**
Los Angeles Unified School District
333 South Beaudry Avenue
Los Angeles, CA 90017

***P8. Recorded by:** (Name, affiliation, and address)
Marilyn Novell
ASM Affiliates, Inc.
20 N. Raymond Avenue
Pasadena, CA 91103

***P9. Date Recorded:** February 2022

***P10. Survey Type:** (Describe) Pedestrian Intensive

***P11. Report Citation:** (cite survey report and sources, or enter "none.")
ASM Affiliates. 2021. *ASM Affiliates. 2021. Draft Historic Resource Evaluation Report for 32nd Street/USC Magnet Schools, Los Angeles, California.* Prepared for Los Angeles Unified School District Office of Environmental Health & Safety.

***Attachments:** ☐ NONE ☐ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record ☐ Other (List):

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

***NRHP Status Code** 6Z
***Resource Name or #** (Assigned by recorder) Building No. 2 at 32nd Street/USC Magnet Schools

B1. Historic Name: Building No 1
B2. Common Name: Administration building
B3. Original Use: Same
B4. Present Use: Administrative offices and classrooms
***B5. Architectural Style:** Undetermined
***B6. Construction History:** **(Construction date, alterations, and date of alterations)**

Architect Roy A. Sealey began designs for two new buildings at the current 32nd Street/USC Magnet Schools campus, the existing Building No. 2 and Building No. 2, in 1973. Demolition to accommodate the new buildings included removal of the existing Annex and several smaller buildings. The new buildings were completed in 1975.

***B7. Moved?** ☒ **No** ☐ **Yes** ☐ **Unknown** **Date:** N/A **Original Location:** N/A
*B8. Related Features:
B9a. Architect: Roy A. Sealey b. Builder:
***B10. Significance: Theme** N/A **Area:**
Period of Significance: N/A **Property Type:** Educational building **Applicable Criteria:** N/A

Criterion A/1. Similar to Building No. 1, Building No. 2 does not meet any of the eligibility standards and does not exhibit any of the character-defining features outlined in the *LAUSD Historic Context Statement* under Criterion A/1. The campus of the 32nd Street/USC Magnet Schools does not embody the characteristics of a postwar modern functionalist school campus; does not display a unified, functional site design; is not a single-story; and does not have classrooms that express their function with axial, fingerlike wings, plentiful fenestration, and connections to the outdoors. Although the building is potentially eligible under as-yet-undefined characteristics of later campus buildings, it is not one of the building types or plans expressive of postwar ideals in school design. Therefore, Building No. 2 is recommended not individually eligible under Criterion A/1 for listing in the NRHP/CRHR.

(continued on page 3)

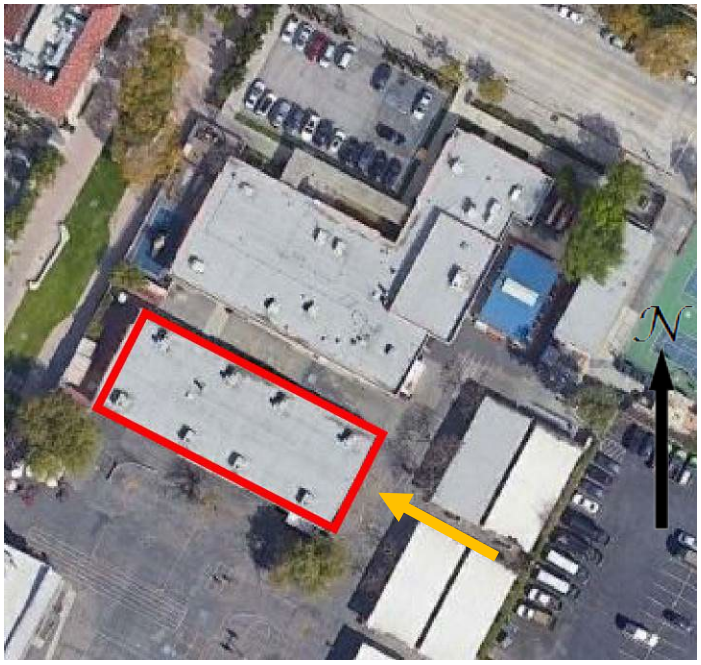
B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:
Sapphos Environmental, Inc. (Sapphos). 2014. *Los Angeles Unified School District Historic Context Statement, 1870 to 1969.* Prepared for the LAUSD Office of Environmental Health and Safety.

B13. Remarks:
***B14. Evaluator:** ASM Affiliates, Inc. (Marilyn Novell)
***Date of Evaluation:** February 2022

(This space is reserved for official comments)

Sketch Map with north arrow required.



***P3a. Description:** (continued from page 1)

At the center of each façade, the fascia extends beyond the main face and is framed by a vertical beam at each end that extends below the fascia and stops at approximately the tops of the doors. Between these beams are horizontal rows of windows set high on the walls.

Interior: At the interior of Building No. 2 are two corridors that pass east-west through the building. The plan is symmetrical, with the corridors evenly spaced from the ends of the building. The west corridor is aligned with the west corridor of Building No. 1 and has similar entrances of recessed double metal doors at each end. The corridors are double-loaded, with classrooms opening off each side. Classroom entrances have single flat metal doors. The ceilings of the classrooms and corridors are composed of acoustical tile, and lighting is recessed fluorescent fixtures. Floors are asphalt tile.

***B10. Significance:** (continued from page 2)

Criterion B/2. Research revealed no evidence that any important person was directly associated with Building No. 2. Therefore, the building is recommended not individually eligible under Criterion B/2 for listing in the NRHP/CRHR.

Criterion C/3. According to the *LAUSD Historic Context Statement*, buildings exhibiting distinctive design features might also qualify under Criterion C/3, as the embodiment of the distinctive characteristics of a type/period or method of construction, as an example of the work of a master architect, or for high artistic values. Building No. 2 was designed by noted architect Roy A. Sealey. A previous evaluation of one of his most visible projects, the Googie-style Edgewater Inn Marina Hotel in Long Beach, claims that Sealey could not be considered a master architect. The evaluation describes him as "a talented designer who worked within the styles that were popular during the period and do not reflect a unique design philosophy or approach" (GPA Consulting 2014:20). ASM concurs with this assessment of Sealey. Constructed later than the period of significance for postwar LAUSD schools, Building No. 2 is not an outstanding example of any type, period, or method of construction, does not represent the work of a master, and does not possess high artistic values. Therefore, Building No. 2 is recommended not individually eligible under Criterion C/3 for listing in the NRHP/CRHR.

Criterion D/4. Criterion D/4 was not considered in this report, as it generally applies to archaeological resources. Previous archaeological studies of the area have not yielded any important information, and there is no reason to believe that the campus will yield important information about the prehistory or history of the local area, California, or the nation.

City of Los Angeles Eligibility

The 32nd Street/USC Magnet Schools campus, as well as the two 1975 individual buildings, cannot be considered potentially eligible because they do not meet any of the four criteria, which parallel those defined for NRHP/CRHR eligibility.

Integrity

Because no eligible historic resources were identified, an assessment of integrity is not necessary.

Image 1. The north façade of Building No. 2, with the north wing to the right, view toward the south.

Image 2. Detail of north façade of Building No. 2 at main entrance, view to the southwest.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPH SHEET

Primary # _____
HRI # _____
Trinomial _____

5 of 6 ***Resource Name or # (Assigned by recorder)** Building No. 2 at 32nd Street/USC Magnet Schools
Recorded by: Marilyn Novell **Date:** February 2022
☒ Continuation ☐ Update

Image 3. Detail of west façade of Building No. 2, view toward the southeast.

Image 4. West façade of Building No. 2, view toward the northeast.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPH SHEET

Primary # _____
HRI # _____
Trinomial _____

6 of 6 ***Resource Name or # (Assigned by recorder)** Building No. 2 at 32nd Street/USC Magnet Schools
Recorded by: Marilyn Novell **Date:** February 2022
☒ Continuation ☐ Update

Image 5. Interior of east corridor of Building No. 2, view toward the south.

Image 6. Typical classroom off east corridor in Building No. 2, view toward the northwest.

Appendix B

Plot Plans 1930 and 1957

ROYAL STREET

ALLEY

ROYAL STREET

THIRTY-SECOND STREET

ALLEY

UNIVERSITY AVENUE

JEFFERSON BOULEVARD

AVENUE

FRAME BLDG. 1 STORY ALTERATIONS 1921

NEW BUILDING 1930
FIN. FIRST FLOOR ELEV. 191'

FRAME BLDG. 2 STORY

BRICK BLDG. 2 STORY

GARDEN AREA

6' C.L. Fence

10' Ht. Fence

CONCRETE

ALLEY

DRIVE

Tone Connection

Row of 9 Pepper Trees

3 Acacia

Oil Trash Manhole

Power Pole

Conc. Lamp Post

Concrete Post

Concrete Base

M.H.

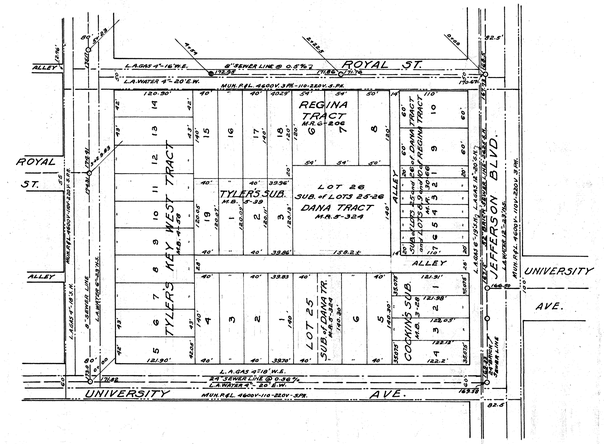
24" Sewer

SEWER

7/9/32 (E)

VICINITY MAP

1 INCH = 100 FEET



7137.00

SCALE - 1" = 30'
BENCH MARK - Spk. N. curb Jefferson Blvd. about W. line Royal St. Elev. 186.55 U.S.C.S.
C.F. Kelman - Surveyor

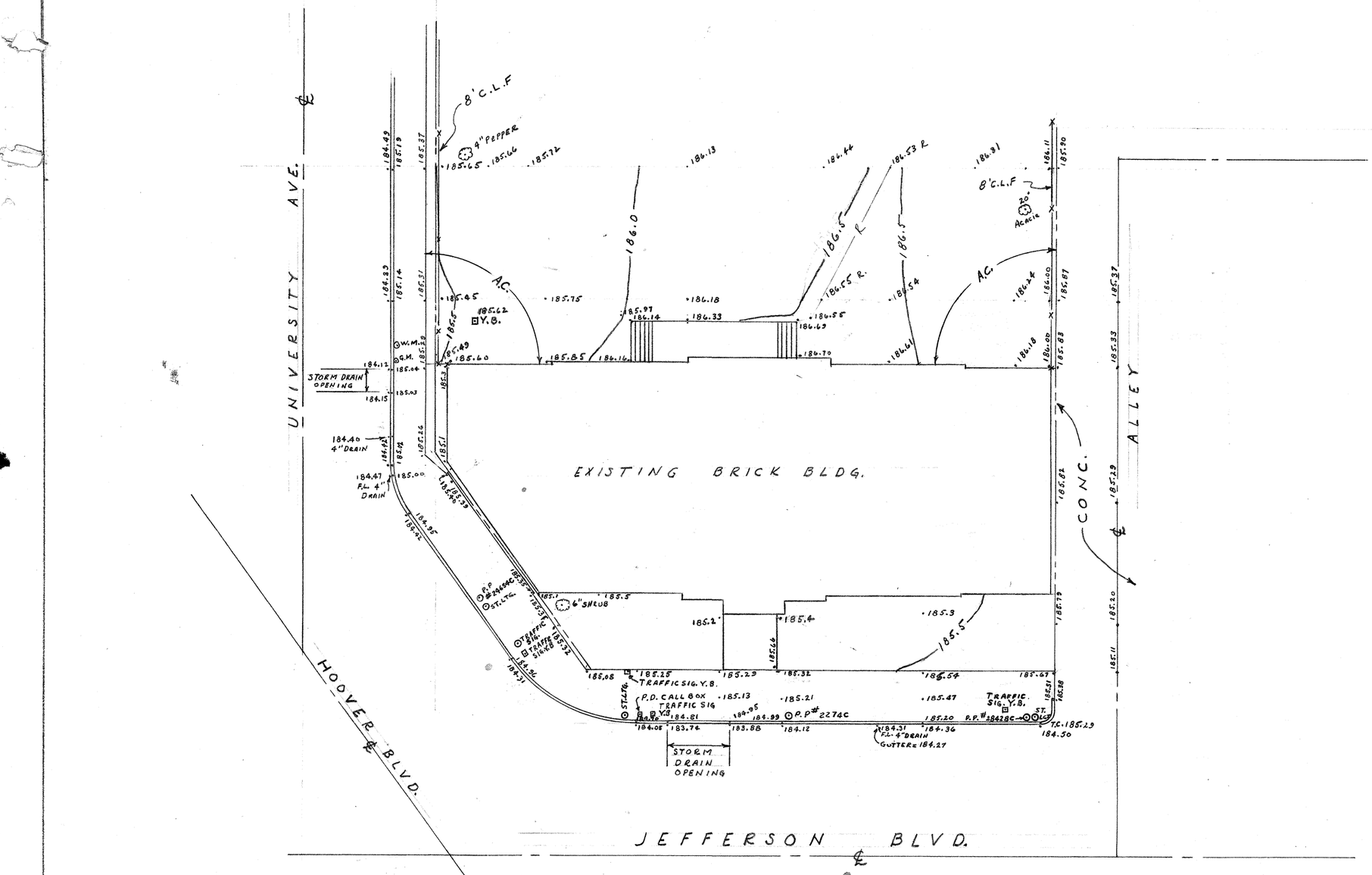
REVISED			
DATE	REVISIONS	REV'D	CK'D

DRAWING NO.

PLOT PLAN
THIRTY-SECOND ST. SCHOOL
737 W. JEFFERSON STREET
DRAWING MADE BY BUSINESS DEPARTMENT
BOARD OF EDUCATION
L. A. CITY DISTRICT
W. E. RECORD-BUSINESS MANAGER
SURVEYOR
1445 S. SAN PEDRO ST. :: LOS ANGELES, CAL.

DATE JULY 1930
DRAWN GDC
TRACED GDC
CHECKED
JOB NO.
SHEET NO.

BB-6



7137.00

2357.01

REVISED			
DATE	REVISIONS	BY	CK'D

DRAWING NO.

PART PLOT PLAN
32nd STREET SCHOOL
3232 UNIVERSITY AVE.
L. A. 7, CALIF.

DRAWING MADE BY
Architectural & Building Branch
BOARD OF EDUCATION
L. A. CITY SCHOOL DISTRICT
BUSINESS MANAGER

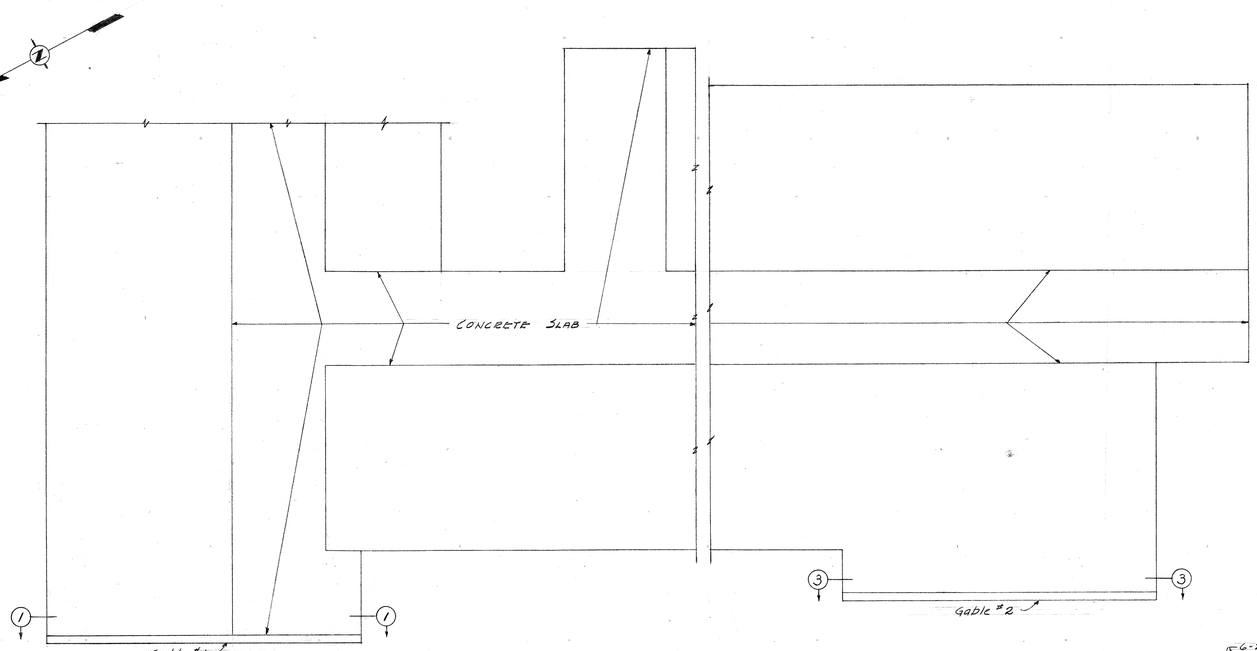
1425 S. San Pedro St. - Los Angeles 54, Cal.

DATE OCT 1957
DRAWN C.T.
TRACED
CHECKED
JOB NO.
SHEET NO.

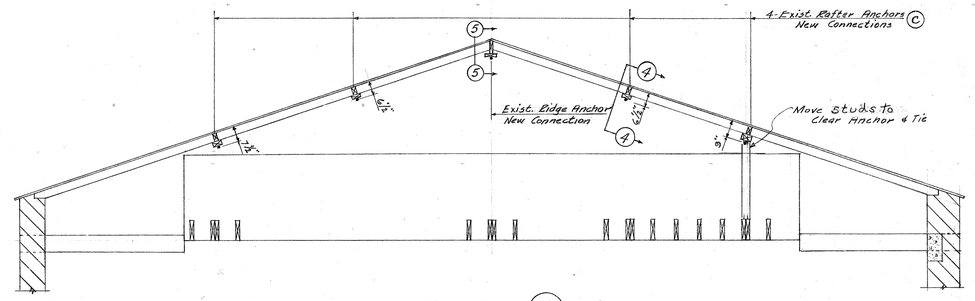
7137.00 GF-8

Appendix C

Architectural Drawings



ROOF PLAN
Scale: 1/8"=1'-0"



SECTION 3
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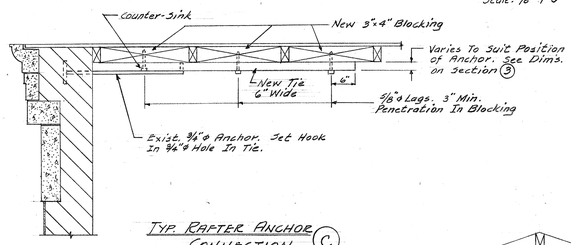

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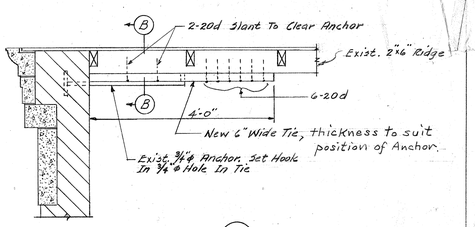

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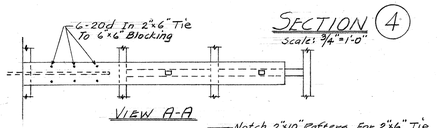
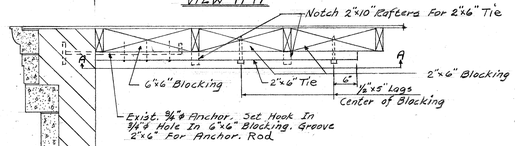


SECTION 4
Scale: 3/4"=1'-0"

VIEW A-A



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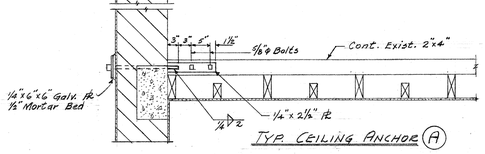

TYP. CEILING ANCHOR (A)

SECTION 2
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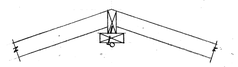

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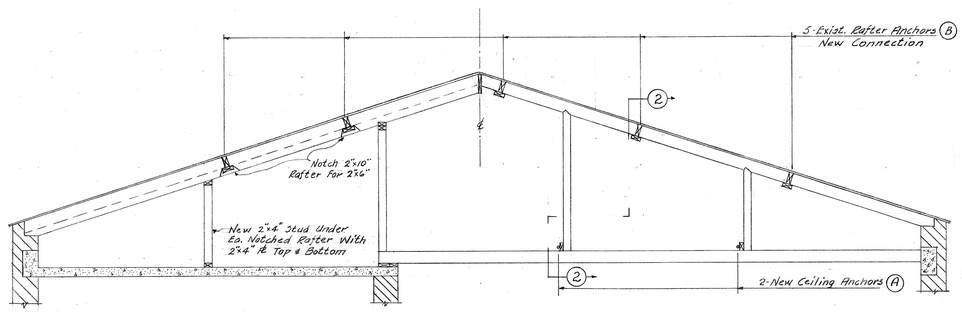

SECTION 1
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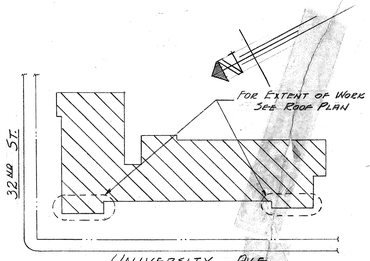


PLOT PLAN
Scale: 1"=60'

GENERAL NOTES

1. Provide a hole the same diameter and depth as shank of lag screws, then continued the diam. of the root of the thread to the end of the screw. Screw all lags into place.
2. Rods for 2 new ceiling anchors shall be set in 1⅛" dia. holes drilled by hand or rotary drill, care being exercised not to crack or break out the brick. Cement mortar dry-pack, 1:3 mix, shall be tamped solidly around the rod. Provide ½ min. thickness of dry-pack to provide full bearing between outside anchor plates and masonry.
3. Blocking between rafters at anchors shall fit tight and shall be nailed with 1-10d Toe Nail each side each end to rafter.
4. Reset hooks of existing anchors in new tie members. Hooks shall have full bearing in ¾"ø holes.
5. Holes for bolts shall be ⅝" dia. in wood and 1⅛" dia. in steel. Provide 2½" dia. M.I. washers under heads and nuts that bear on wood.
6. Paint:- On two outside anchor plates, apply a solution of copper sulphate, then 2 coats of lead and oil, color as selected. Paint after installation.

ALTERATIONS TO TOWER - BUILDING NO. 1

32ND STREET SCHOOL
3232 UNIVERSITY AVE.
LOS ANGELES 7, CALIF.

PLAN, SECTIONS AND DETAILS

DATE: JAN. 1962
DRAWN: A.A.
CHECKED: W.A.L.
L.A.S.D. DWG. NO.

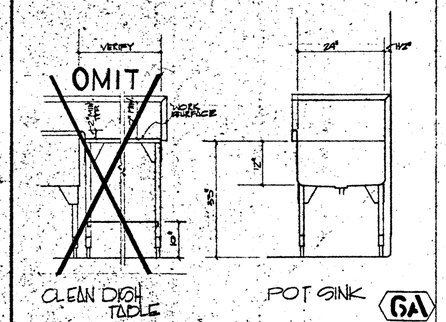
PREPARED BY
BUSINESS DIVISION
BOARD OF EDUCATION
L.A. UNIFIED SCHOOL DISTRICT
1425 SOUTH SAN PEDRO STREET
LOS ANGELES CALIFORNIA

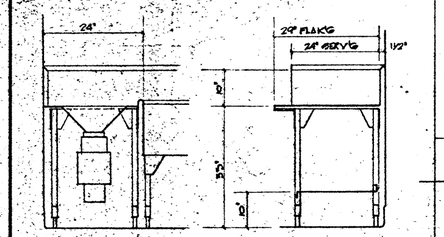
Edward H. Clark ARCHITECT
STRUCTURAL ENGINEER
MECHANICAL ENGINEER
ELECTRICAL ENGINEER

INDEX NUMBER
S-2
SHEET 2

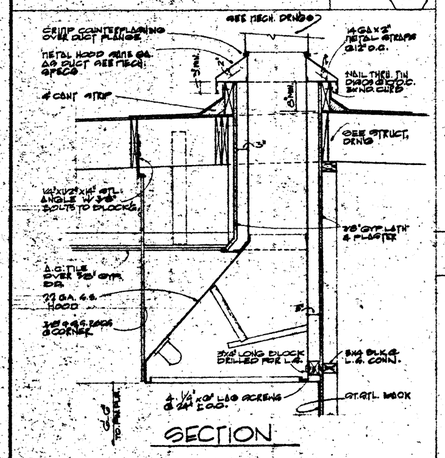
[redacted]

7137.02.001

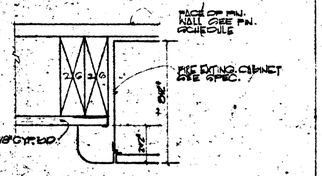


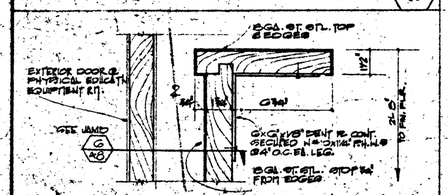


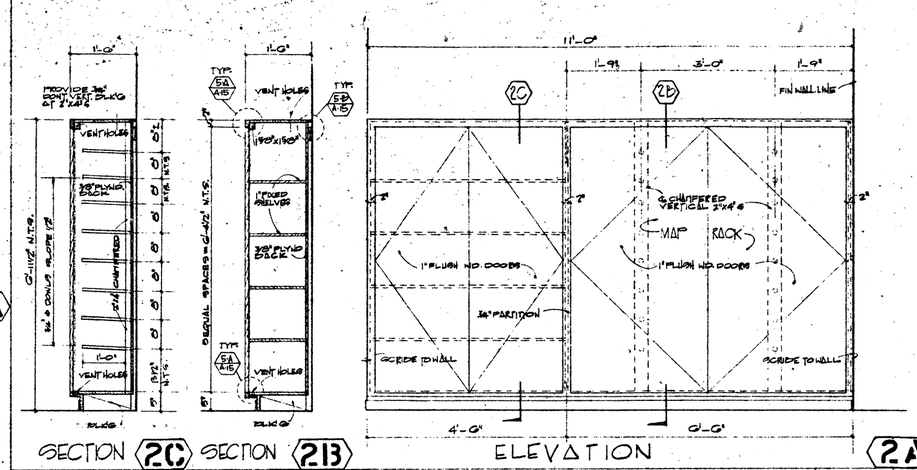
KITCHEN DETAIL 3/4"=1'-0" 6

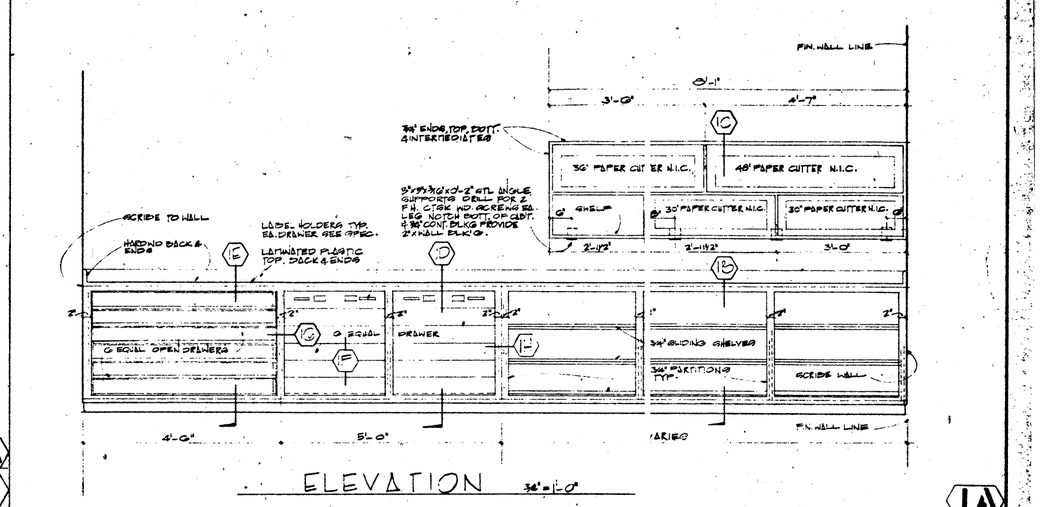


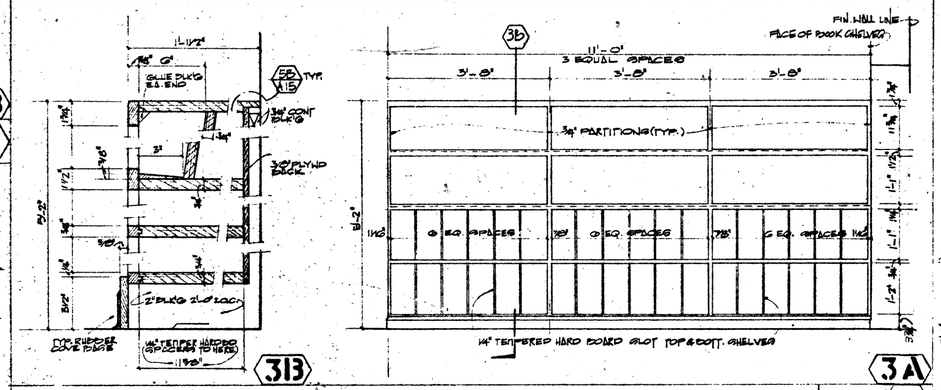
HOOD DET. 3/4"=1'-0" 7

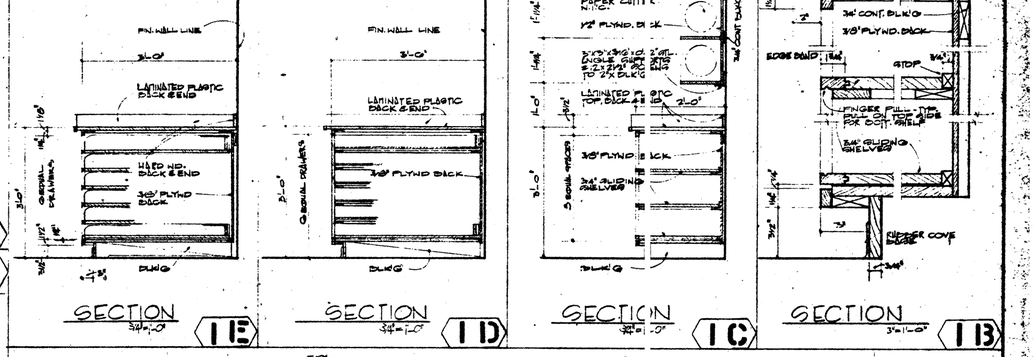


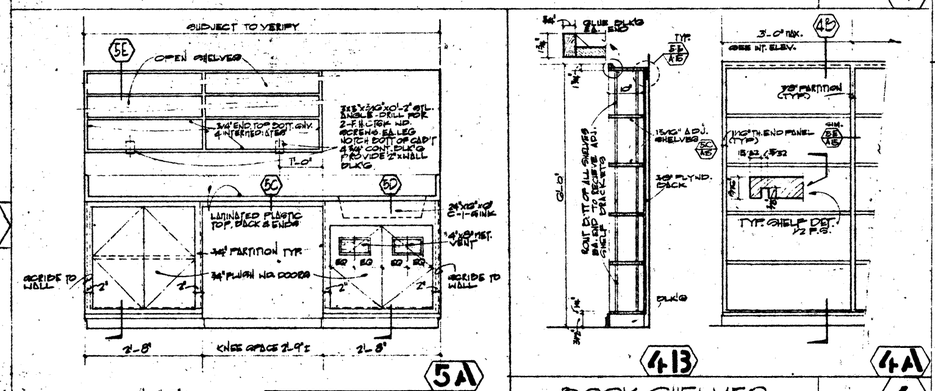


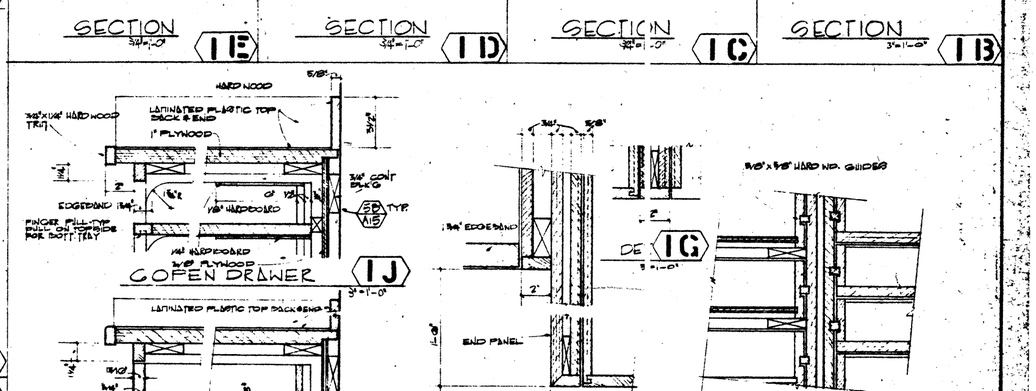


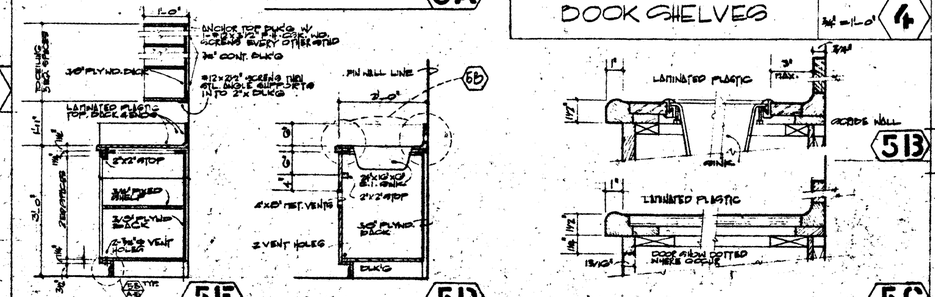












TEACHER'S WORK RM. COUNTER SCALE AS NOTED 1

B - L ENGINEERING INC. CIVIL ENGINEER

SAMUEL L. KAYE & ASSOC. CONSULTING MECH. ENGINEER

JOHN SNYDER & ASSOC. CONSULTING ELEC. ENGINEERS

SOCOLOSKI, ZELNER & ASSOC. STRUCTURAL ENGINEERS

ROY A. SEALEY, ARCHITECT, INC.
Member of The American Institute of Architects
7906 BEVERLY BLVD. • TEL. 651-1689 • LOS ANGELES, CA 90048

PREPARED FOR
THE BOARD OF EDUCATION
LOS ANGELES CITY UNIFIED SCHOOL DISTRICT

O.A.E. BY

APPROVED
STATE FIRE MARSHAL
STATE OF CALIFORNIA
BY DATE

SHEET TITLE
CABINET DETAILS AND MISCELLANEOUS DETAILS

DATE 12-3-75
SCALE AS NOTED
DRAWN BY
CHK.

REPLACEMENT OF BUILDING NO. 1 AND ANNEX
THIRTY-SECOND STREET SCHOOL
822 WEST 32nd STREET
LOS ANGELES, CALIFORNIA 90007

SHEET NO. A-16
OF SHEETS

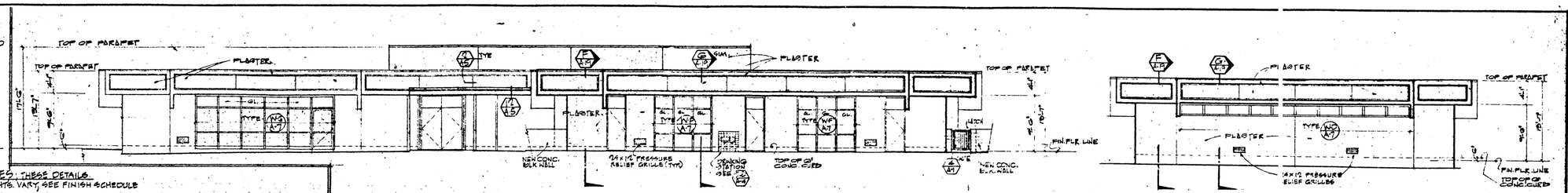
APPROVED APR 11 1978

7137.07

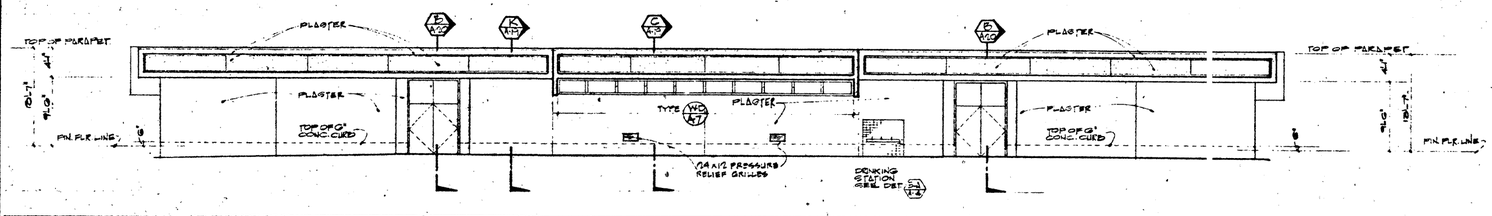
NOTE:
CLOSE OFF ALL ATTIC SPACE AT EXTERIOR WALLS NOT SHEATHED WITH PLYWD WITH 5/8" TYPE 'X' GYP BD, WHERE A.T. LAY-IN CLGS. OCCUR.

NOTES: THESE DETAILS
1. CLG. HTS. VARY, SEE FINISH SCHEDULE
2. ROOF FRAMING DETAIL CONDITIONS VARY, SEE STRUCT. DRAWINGS
3. SEE STRUCT. DRWGS FOR BRACING & NON-BEARING PARTITIONS. DETS
4. TERMINATE 5/8 GYP BD. OR PLAST. 6" ABOVE CLG. & PROVIDE 1/2" GYP BD TO RAFTERS ABOVE & ALL ATTIC SEPARATIONS WHERE PLYWD SHEATHING DOES NOT OCCUR (UNLESS OTHERWISE NOTED).
5. AT ALL ATTIC SEPARATIONS WHERE SHEAR WALLS OCCUR PROVIDE 5/8" TYPE 'X' GYP BD. BOTH SIDES OF STUDS FROM TOP OF CEILING TO UNDERSIDE OF ROOF RAFTERS.

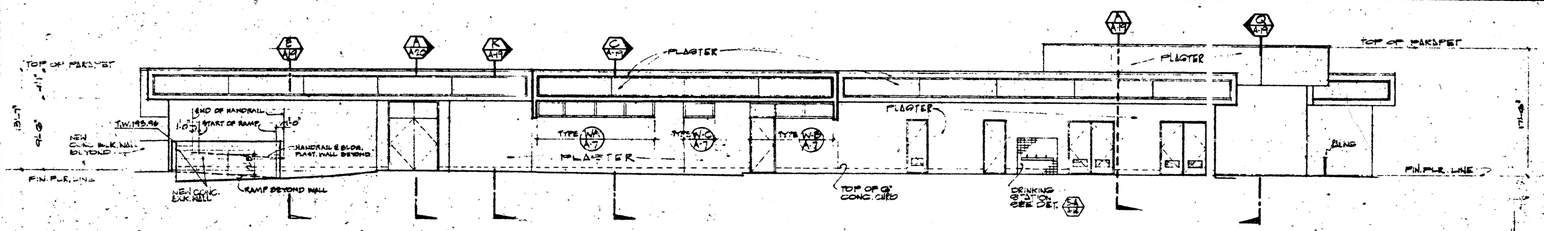
WALL SECTIONS & SHEAR-BEARING WALLS-ATTIC SEPARATIONS ETC — 1"=1'-0"



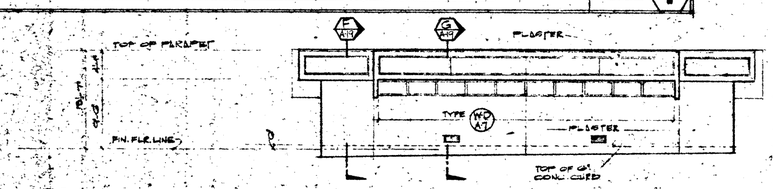
WEST ELEVATION (BUILDING NO.1 & NO.2)

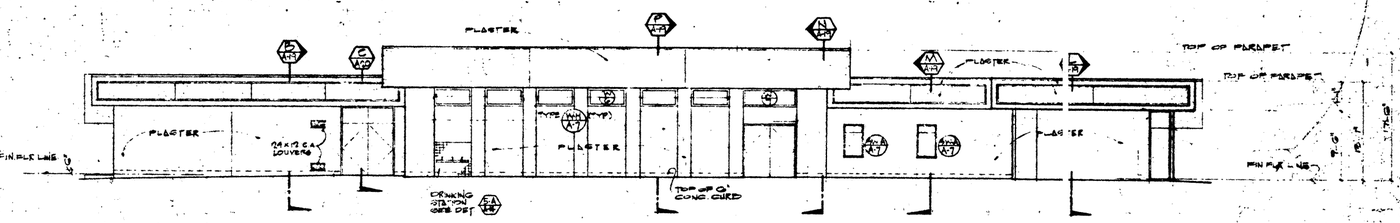


SOUTH ELEVATION (BUILDING NO.2)

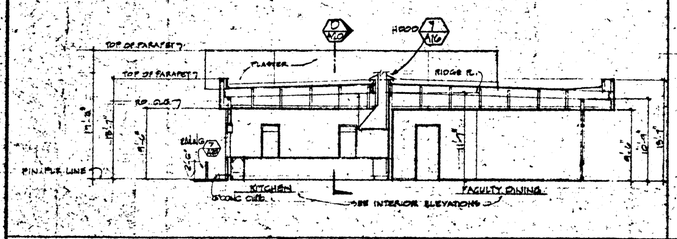


SOUTH ELEVATION (BUILDING NO.1)

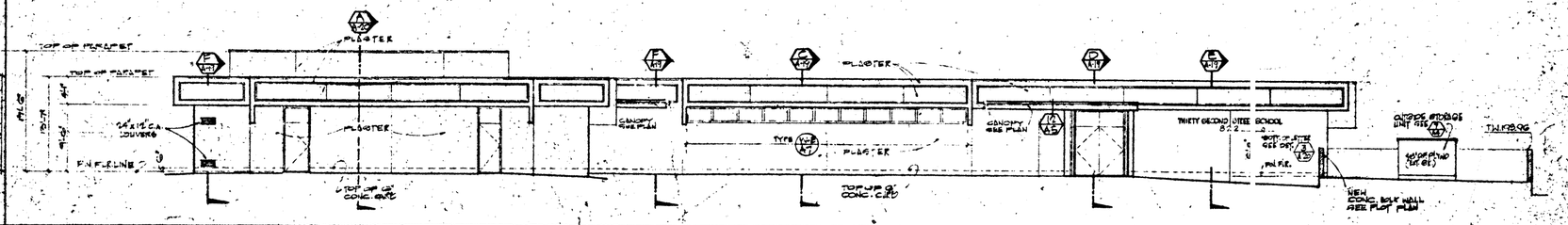




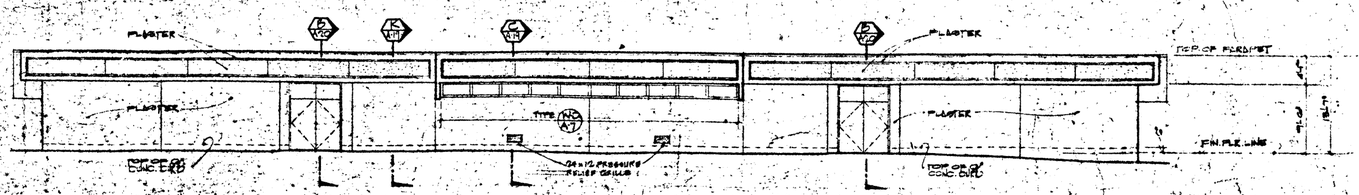
EAST ELEVATION (BUILDING NO.2 & NO.1)



SECTION (A) LOOKING SOUTH



NORTH ELEVATION (BUILDING NO.1)



NORTH ELEVATION (BUILDING NO.2)

7137.07

APPROVED
STATE DEPARTMENT OF EDUCATION
3672 D APPROVED APR 10 1974

S-C ENGINEERING INC. CIVIL ENGINEER	ROY A. SEALEY, ARCHITECT, INC. Member of The American Institute of Architects 7966 BEVERLY BLVD. • TEL. 651-1680 • LOS ANGELES, CA 90048	SHEET TITLE: EXTERIOR ELEVATIONS & SECTIONS
SAMUEL L. KAYE & ASSOC. CONSULTING MECH. ENGINEER	PREPARED FOR THE BOARD OF EDUCATION LOS ANGELES CITY UNIFIED SCHOOL DISTRICT	DATE: 12-5-73 SCALE: 1/8"=1'-0" DRAWN BY: CHECKED BY:
JOHN SNYDER & ASSOC. CONSULTING ELEC. ENGINEERS	D.A.C.	REPLACEMENT OF BUILDING NO. 1 AND ANNEX THIRTY-SECOND STREET SCHOOL 822 WEST 32nd STREET LOS ANGELES, CALIFORNIA 90007
SOCOLOSKI, ZELNER & ASSOC. STRUCTURAL ENGINEERS	APPROVED STATE FIRE MARSHAL STATE OF CALIFORNIA BY DATE	SHEET NO. A-6 OF 26 SHEETS

NOTES :

1. ▬▬▬ DENOTES PLYWD SHEAR WALL WITH 2" STRUCT. I PLYWOOD, BLOCKED, WITH 10d @ 6" BOUNDARIES, @ 6" EDGES, @ 12" INT. AND 4x4 POST WITH ANCH BLT PER 4 POST BASE EA. END OF WALL. BOLD LINE INDICATES THE SIDE 4" WALL WITH PLYWOOD
2. ⊠ DENOTES 4x4 POST. UNLESS NOTED OTHERWISE.
3. FOR NON-BEARING WALLS, SEE ARCH. DWG. FOR LOCATION. AND 12/S-1, 8/S-1 FOR DETAILS.
4. PROVIDE DOUBLE STUDS UNDER EACH END OF HEADER WHERE NO POST IS SHOWN.
5. SEE ARCH. DWG. FOR DIMENSIONS NOT SHOWN.
6. 186.00 = ELEV. BOTTOM OF FTG.

5" CONC. SLAB ON GRADE W/ #4 @ 24" E.W. THE SLAB SHALL BE PROTECTED BY A POLYETHELENE PLASTIC VAPOR BARRIER, WHICH SHALL BE COVERED WITH ONE INCH OF SAND, AND OVER ONE INCH OF SAND ON GRADE. TYP.

FIN. FL. ELEV. 189.25'

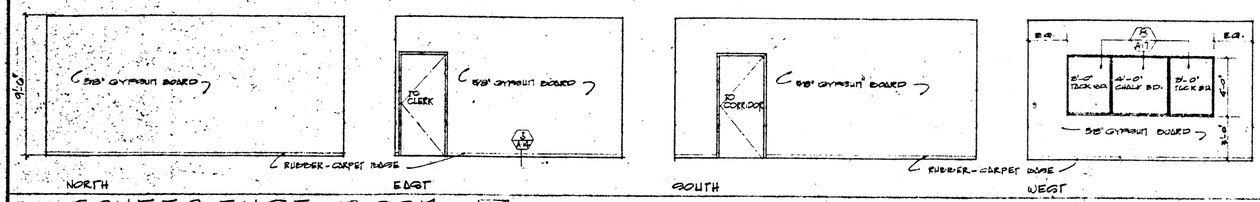
FIN. FL. ELEV. = 190.00'

NON-BEARING WALL

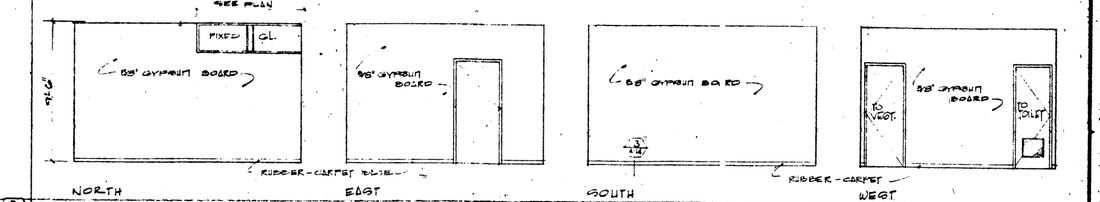
SEE ANT 'A' FOR CONTINUATION OF WALK

7137.07

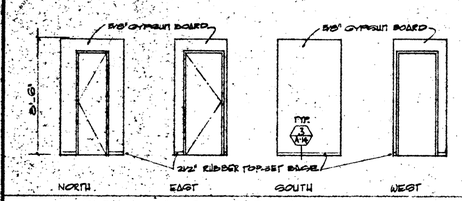
B - L ENGINEERING INC. CIVIL ENGINEER	ROY A. SEALEY, ARCHITECT, INC. Member of The American Institute of Architects 7966 BEVERLY BLVD. • TEL. 651-1680 • LOS ANGELES, CA 90048	SHEET TITLE FOUNDATION PLAN	DATE 12-3-75
SAMUEL L. KAYE & ASSOC. CONSULTING MECH. ENGINEER	PREPARED FOR THE BOARD OF EDUCATION LOS ANGELES CITY UNIFIED SCHOOL DISTRICT		SCALE 1/4"=1'-0"
JOHN SNYDER & ASSOC. CONSULTING ELEC. ENGINEERS	36 7 20 APPROVED DSA 1976 D.S.A.	REPLACEMENT OF BUILDING NO. 1 AND ANNEX THIRTY-SECOND STREET SCHOOL 822 WEST 32nd STREET LOS ANGELES, CALIFORNIA 90007	DRAWN BY
SOCOLOSKI, ZELNER & ASSOC. STRUCTURAL ENGINEERS	APPROVED STATE FIRE MARSHAL STATE OF CALIFORNIA BY DATE		SHEET NO. S-2



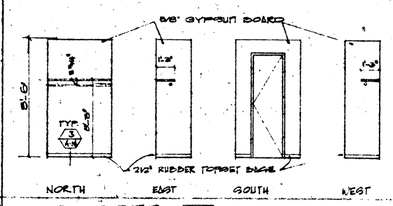
CONFERENCE ROOM 125



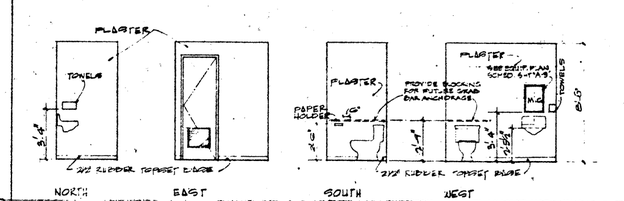
PRINCIPAL 126



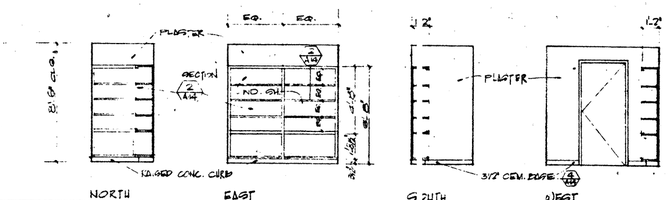
VESTIBULE 127



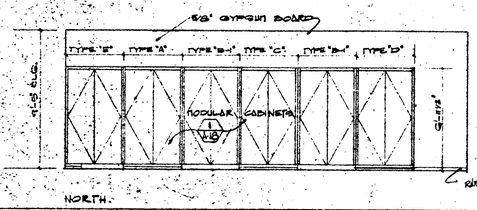
CLOSET 128

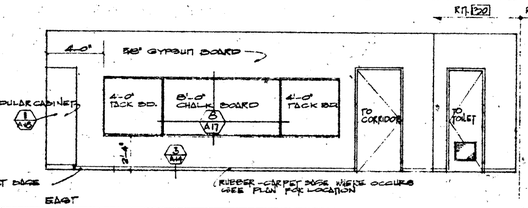


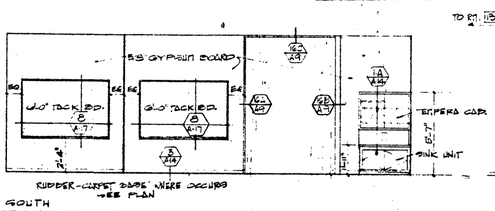
TOILET 129

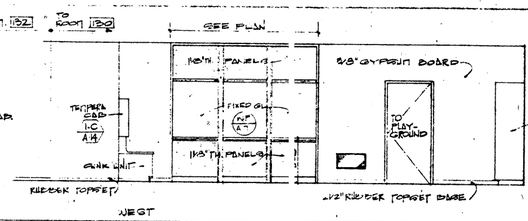


STORAGE 131

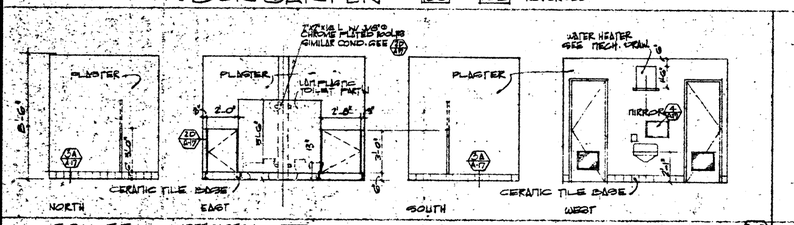




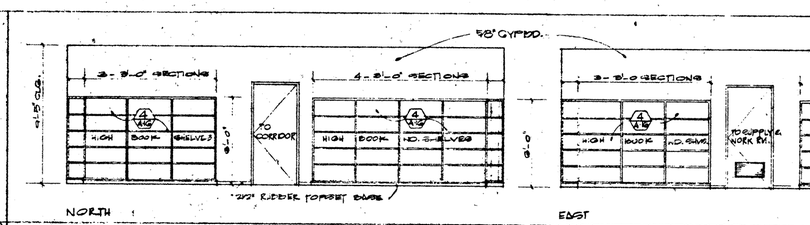




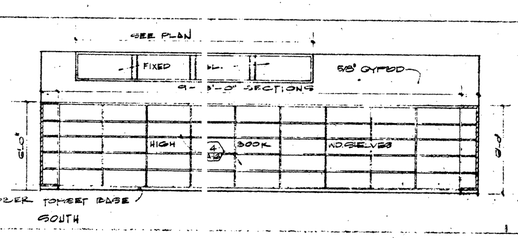
KINDERGARTEN 130 132 REVERSED

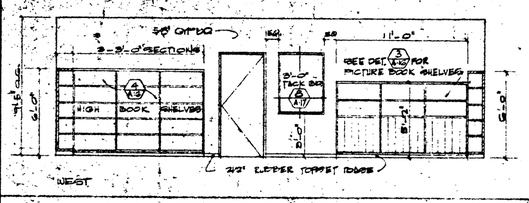


TOILET @KINDERGARTEN 133

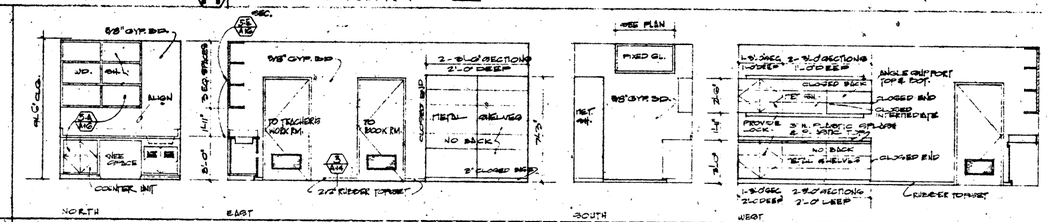


LIBRARY 135

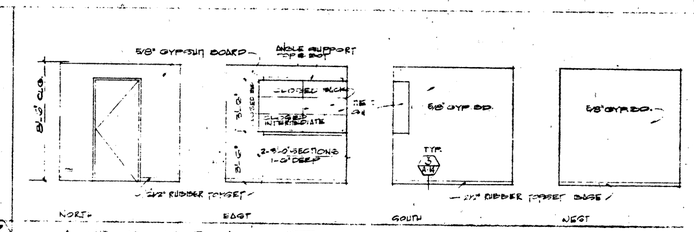




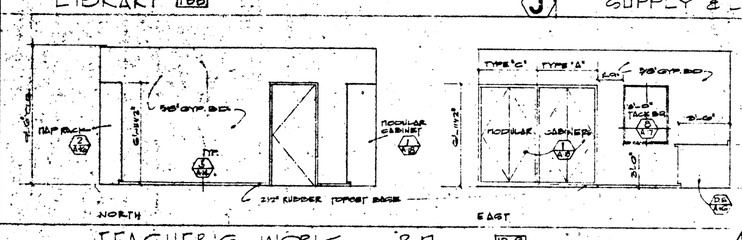
LIBRARY 136

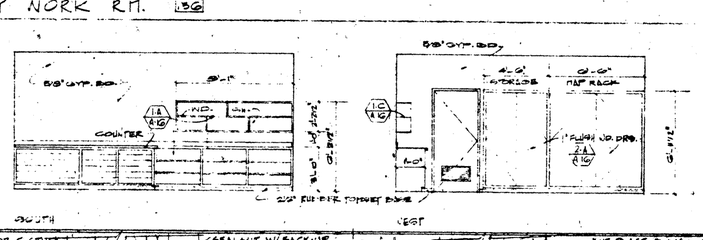


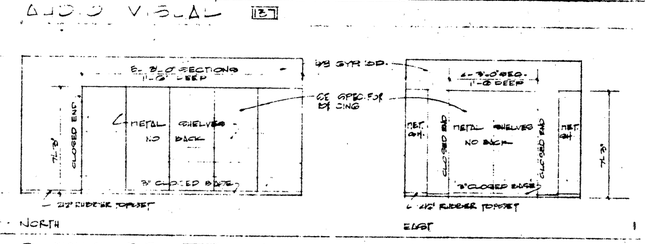
SUPPLY & LIBRARY WORK RM. 136



ADJ. V. SEAL 137

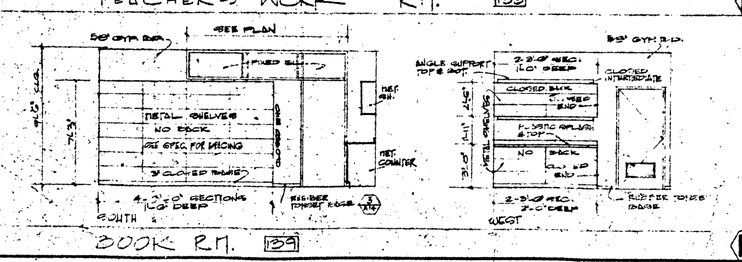




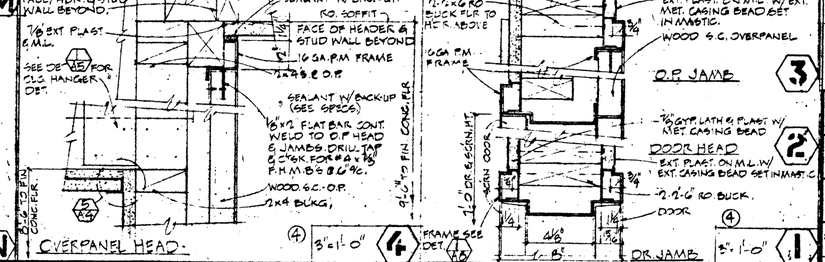


BOOK RM. 139

TEACHER'S WORK RM. 138



BOOK RM. 139



300K RM. 139

7137.07

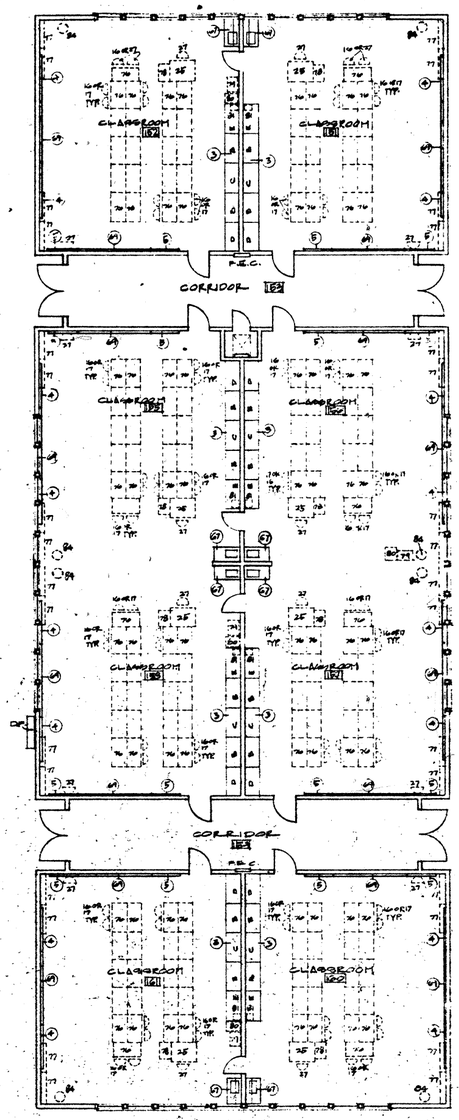
7137.07

B - L ENGINEERING INC. CIVIL ENGINEER	ROY A. SEALEY, ARCHITECT, INC. Member of The American Institute of Architects 7966 BEVERLY BLVD. • TEL. 651-1680 • LOS ANGELES, CA 90048	SHEET TITLE: INTERIOR ELEVATIONS	DATE: 12-3-73
SAMUEL L. KAYE & ASSOC. CONSULTING MECH. ENGINEER	PREPARED FOR THE BOARD OF EDUCATION LOS ANGELES CITY UNIFIED SCHOOL DISTRICT		SCALE: 1/4"
JOHN SNYDER & ASSOC. CONSULTING ELEC. ENGINEERS	BY: G.A.C.	REPLACEMENT OF BUILDING NO. 1 AND ANNEX THIRTY-SECOND STREET SCHOOL 822 WEST 32nd STREET LOS ANGELES, CALIFORNIA 90007	DRAWN BY:
SOCOLOSKI, ZELNER & ASSOC STRUCTURAL ENGINEERS	APPROVED: STATE FIRE MARSHAL STATE OF CALIFORNIA BY: DATE:		SHEET NO. A-12 OF SHEETS

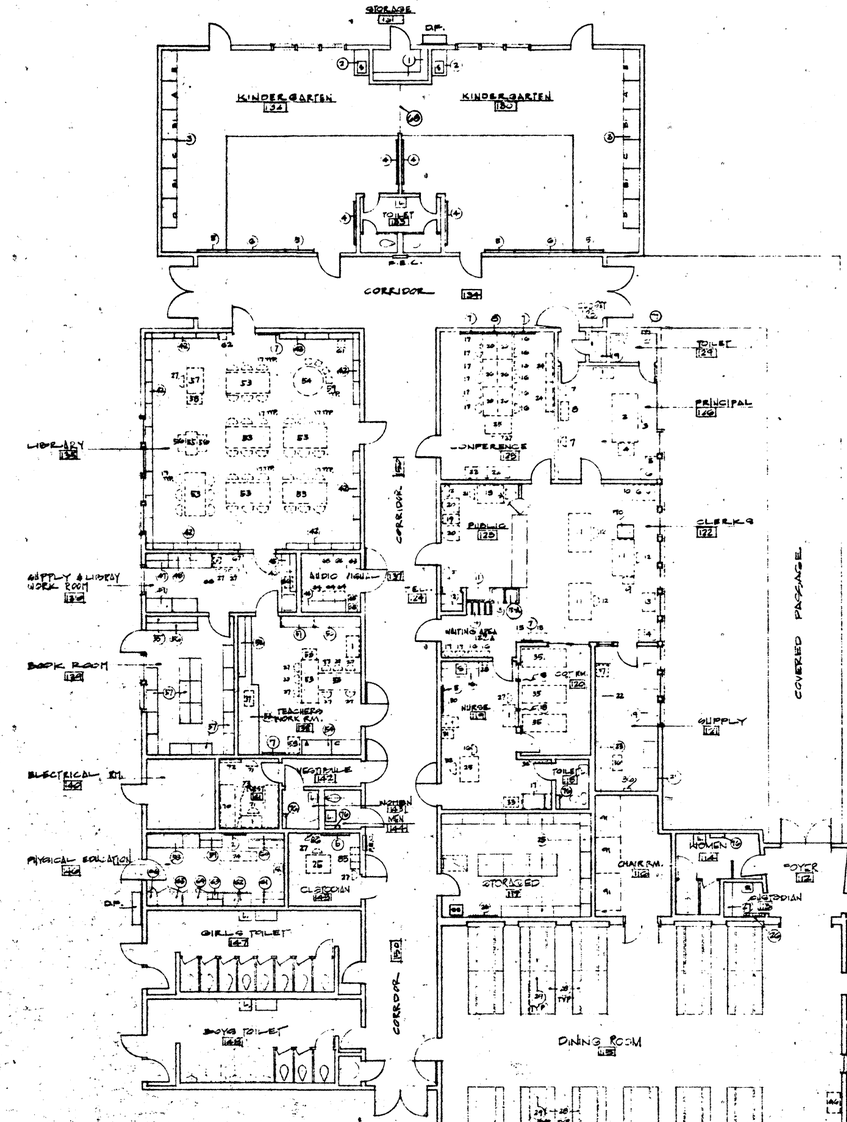
EQUIPMENT & FURNITURE N.I.C.

ROOM	RM.NO.	ITEM NO.	DESCRIPTION	AMT.
FREEZER	103	39	BUN PAN	1
REFRIG.RM.	104	42	BUS CART	1
DEFROST RM.	106	87	LOCKERS	7
FOOD SUPPLIES	108	42	BUS CART	1
		52	OVEN	1
		36	COFFEE MAKER	1
		34	BUN PAN	1
		40	RANGE	1 ✻
KITCHEN	109	41	CONVECTION OVENS	1 ✻
		42	REFRIGERATOR 21 C.F.	1
		45	COOKS TABLE	1
		44	20 QT MIXER ✻	1 ✻
		48	BEVERAGE COOLERS ✻	2
		40	BUS CART	2
		47	CHAIR	24
FACILITY DINING RM.	110	48	TABLE, ROUND	8
		49	CHAIR	4
		50	TABLE, ROUND	1
		81	CORNER TABLE	1
		78	BUSSER UNIT	1
DINING RM.	115	40	BUS CART	1
CHAIR RM.	116	91	CHAIR RACK	3
		1	TABLE 20"x36"	1
		16	CHAIR 14"	1
		17	CHAIR 16"	1
		28	DESK, TEACHERS	1
		28	EYE CHART ILLUMINATOR	1
NURSE	119	29	FILING CABINET	1
		30	BOOKCASE SHELF	1
		91	SCALE	1
		92	CHAIR ROTARY POSTURE TYPE	1
		93	CHAIR WHEEL	1
		94	STRETCHER	1
COT RACK	120	95	COT FOLDING	9
SUPPLY	121	96	KEY CABINET	1
		97	CART LABORATORY	1
		37	DUPLICATING MACHINE	1
		6	FILING CABINET LEGAL 4 DWR.	2
		10	FILING CABINET SPECIAL	1
		1	DESK TYPEWRITER	2
		2	CHAIR POSTURE TYPE	2
		13	TABLE TYPEWRITER	1
CLERK'S & WAITING AREA	122	4	FILING CABINET STENCIL	1
	122A	15	CHAIR 12	2
		16	CHAIR 14	2
		17	CHAIR 16	2
		9	FILING CABINET 2 DWR. LEGAL	1
		18	TABLE WRITING 30"x42"	1
		19	TABLE SIDE/SIDE	1
PUBLIC	129	20	CHAIR LOUNGE ARM	2
		21	CHAIR UPHOLSTERED	4
		22	CABINET STORAGE WARDROBE	1
		23	CABINET STORAGE STEEL	1
		24	BOOK CASE	2
		28	DESK TEACHERS	1
CONFERENCE	125	26	TABLE PUPIL 24"x48"	6
		27	CHAIR 18"	6
		15	CHAIR 14"	6
		17	CHAIR 16"	6
		1	TABLE 30"x96"	1
		2	DESK ADMINISTRATIVE COMP. TOP	1
		3	CHAIR ROTARY ARM UPHOLSTERED	1
PRINCIPAL	126	4	FILING CABINET 2 DWR LEGAL	1
		6	STAND TELEPHONE	1
		5	FILING CABINET 4 DWR LEGAL	1
		7	CHAIR SIDE ARM WALNUT	2
		8	BOOK CASE	1
		17	CHAIR 16"	30
		27	CHAIR 18"	6
		83	TABLE WORK 30"x72"	1
		84	TABLE ROUND 36"DIA	2
		86	CABINET CARD CATALOGUE	1
LIBRARY	135	86	TRUCK BOOK	1
		87	DESK CHARGING	1
		88	FILING CABINET	2
		89	CHAIR 14" STACKING	12
		90	GLOBE 12"	1
		91	STOOL 14"	1
		92	STAND ATLAS 16"x28"	1
		93	OVERHD PROJECTOR	1
AUDIO VISUAL	137	64	CABINET	2
		65	SCREEN PICTURE 60"x50"	2
		27	CHAIR 18"	2
SUPPLY & LIBRARY WORK ROOM	136	66	TABLE TYPEWRITER PORT	1
		67	TABLE 24"x52"	1
		68	CABINET CARD CTRAY	1
			TABLE 22"x30"	1
		27	CHAIR 18"	1
TEACHERS WORK ROOM	138	83	TABLE WORK 30"x72"	2
		87	DUPLICATING MACHINE	1
		88	FILING CABINET	2
ELECTRICAL	140			

✻ = FURNISHED BY DISTRICT TO BE INSTALLED BY CONTRACTOR



BUILDING Nº 2

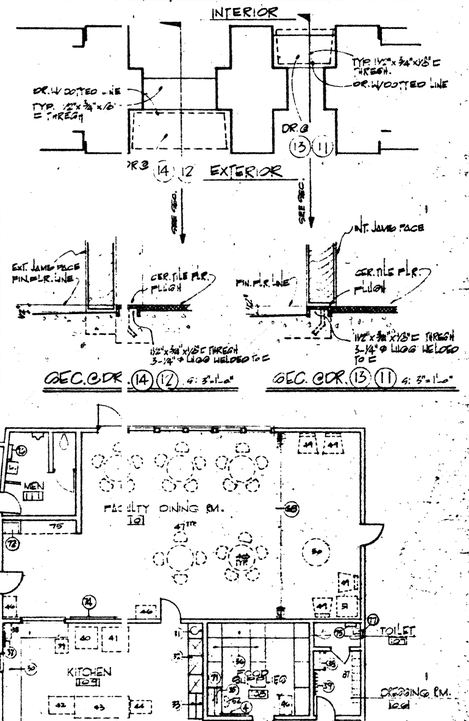


BUILDING Nº 1

EQUIPMENT & FURNITURE N.I.C.

ROOM	RM.NO.	ITEM NO.	DESCRIPTION	AMT.
		1	TABLE 20"x36"	1
		10	COT FOLDING	2
REST R.M.	41	11	CHAIR ART	2
		12	RACK MAGAZINE	1
		79	SCREEN 3 FOLD	1
		7	B CHAIR	2
		25	DESK TEACHERS	1
CUSTODIAN	45	25	LOCKERS 12"x18"x36" TWO TIER	6
		26	KEY CABINET	1
PHYSICAL ED.	40	14	TABLE TENNIS	1
		16	CHAIR 12"	48
		17	CHAIR 16"	42
		28	DESK TEACHERS	1
CLASSROOMS	51		CHAIR 18"	2
	52	26	TABLE PUPIL 24"x48	21
	53	29	FILING CABINET 2 DWR.	1
	54	29	CART LUMBER	1 PER 2 RMS.
	56	82	CART TOOL	1 PER 2 RMS.
	57	81	EASEL DRAWING	1
	58	85	DOLLY	1
	60	77	BOOK CASE OPEN	4
	61			

INTERIOR



DET. CDR. (14)(12) 1/4" = 1'-0" DET. CDR. (13)(11) 1/4" = 1'-0"

IN CONTRACT ITEMS

ROOM	RM.NO.	ITEM NO.	DESCRIPTION
CUSTODIAN	102	40	MOP RACK
	41	41	MOP SHELF
FREEZER	103	73	SHELVES (METAL)
REFRIG. RM.	104	73	SHELVES (METAL)
VESTIBULE	105	5	4'-0" TACK BD.
DEFROSTING RM.	106	88	WARDROBE
		34	HOOK STRIP
FOOD SUPPLIES	108	35	WOOD SHELF
		36	METAL ADJ. SHELVES
		4	4'-0" TACK BOARD
		71	DESK
KITCHEN	109	30	BROILING COUNTER
		31	RINSE & DISPOSE
		32	POT SINK UNITS (3)
		33	STEAM & CLEAN EQUIPMENT
		37	2'-10" TACK BOARD
		30-A	SERVING COUNTER
FACULTY DINING	110	72	WATER COOLER
		68	FOLDING FABRIC PARTITION
CUSTODIAN	113	74	4'-0" x 3'-0" TACK BD.
		27	SHELF
DINING RM.	115	20	MOP RACK
		28	BENCH
		29	TABLE
CHAIR ROOM	116		

ROOM	RM.NO.	ITEM NO.	DESCRIPTION
STORAGE	117	23	METAL SHELVES
		20	MOP RACK
		21	
NURSE	119	17	WARDROBE & FOR. CAB.
		16	KITCHEN UNIT W CABINET
		8	4'-0 TACKBOARD
COT R.M.	120	18	FOLDING SCREEN
		19	METAL SHELVING
SUPPLY	121	21	METAL SHELVING W/DOORS
		22	METAL BOOK CABINET
		23	METAL WALL SHELVES
CLERK'S	122	12	FILE CONSOLE (4 DRAWER)
		13-A	STORAGE
WAITING RM.	122A	13	WARDROBE
		14	MAIL BOXES
		1	3'-0" TACKBOARD
PUBLIC	129	11	COUNTER
			TELEPHONE CABINET
TELEPHONE BOOTH	124	12	SHELF
CONFERENCE	125	7	3'-0" TACK BOARD
		8	4'-0" CHALK BOARD
CLOSET	125	9	SHELF & POLE
KINDERGARTEN	180	2	SINK UNIT
	182	24	MODULAR CABINETS
		5	6'-0" TACKBOARD
		8	4'-0" TACKBOARD
		9	8'-0" CHALKBOARD
		6	SINK UNIT
		65	FOLDING FABRIC PARTITION

ROOM	RM.NO.	ITEM NO.	DESCRIPTION
STORAGE	191	1	SHELF (WOOD)
LIBRARY	135	42	HIGH BOOK SHELVES
		45	PICTURE BOOK SHELVING
		7	8'-0" TACKBOARD
SUPPLY & LIBRARY WORK ROOM	136	46	COUNTER/SINK
		46	SHELVING
		47	METAL COUNTER
		48	METAL SHELVING
		49	METAL SHELVING
AUDIO VISUAL	137	44	METAL SHELVING
TEACHERS WORK RM.	138	80	MAP RACKS
		81	STORAGE CABINET
		82	PAPER STORAGE
		83	COUNTER W/SHELVES
		84	MODULAR CABINET
		1	8'-0" TACKBD.
BOOK ROOM	139	85	METAL SHELVING
		86	METAL COUNTER
		87	METAL SHELVING
PHYSICAL EDUCATION	140	58	OPEN SHELVING
		59	TABLE GAME STORAGE
		60	BENCH
		61	COUNTER & SHELF
		62	SLOPED SHELVING
		63	MAT STORAGE
		64	PHYSICAL ED STORAGE
		66	RECREATION STORAGE
		66	LOST & FOUND
		7	8'-0" TACK BOARD

ROOM	RM.NO.	ITEM NO.	DESCRIPTION
CUSTODIAN	145	B	4'-0" TACK BD.
CLASSROOM	151	3	MODULAR CABINETS
	152	4	2'-0" TACK BOARD
	155	5	4'-0" TACK BOARD
	156	8	10'-0" CHALK BOARD
	157	69	SINK UNIT & TEMPERA CABINET
	158	67	SINK UNIT
	159		
	160		
TOILETS	107	75	HALLMARK #2460-18 6 S SHELF
	112	77	W.B.D. CAB. 16"x12"-3660A-MIAMI-CAREY
	114	76	6'x24"6 S SHELF
	118	76	" " " "
	121	77	W.B.D. CAB. 16"x12"-3660-A-MIAMI CAREY
	148	76	6'x24"6 S SHELF
	144	76	" " " "

LEGEND

⑭ EQUIPMENT IN CONTRACT

⑮ EQUIPMENT NOT IN CONTRACT

7137.07

DATED APPROVED APR 19 1974

APPROVED
OFFICE OF SCHOOL BUILDING CONSTRUCTION

B. L. ENGINEERING INC. CIVIL ENGINEER	ROY A. SEALEY, ARCHITECT, INC. Member of The American Institute of Architects 7908 BEVERLY BLVD. • TEL. 651-1699 • LOS ANGELES, CA 90048	SHEET TITLE EQUIPMENT & FURNITURE PLAN & SCHEDULES
SAMUEL L. KAYE & ASSOC. CONSULTING MECH. ENGINEER	PREPARED FOR THE BOARD OF EDUCATION LOS ANGELES CITY UNIFIED SCHOOL DISTRICT	DATE 12-3-73
JOHN SNYDER & ASSOC. CONSULTING ELEC. ENGINEERS	O.A.C.	SCALE 1/8"=1'-0"
SOCOLOSKI, ZELNER & ASSOC. STRUCTURAL ENGINEERS	APPROVED STATE FIRE MARSHAL STATE OF CALIFORNIA BY DATE	DRAWN BY T.G.
	REPLACEMENT OF BUILDING NO 1 AND ANNEX THIRTY-SECOND STREET SCHOOL 822 WEST 32nd STREET LOS ANGELES, CALIFORNIA 90007	SHEET NO. A-3 OF SHEETS

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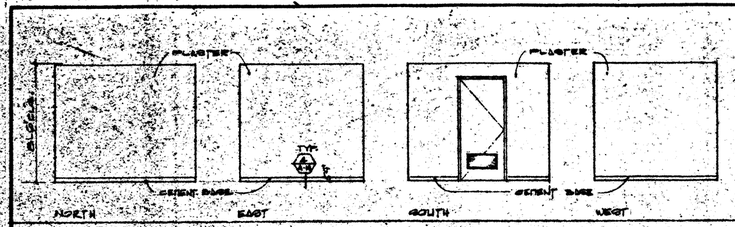

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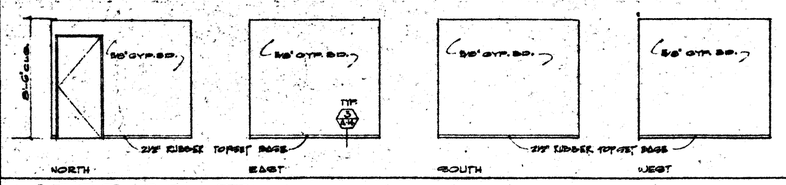

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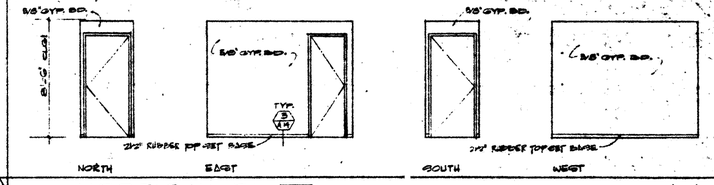

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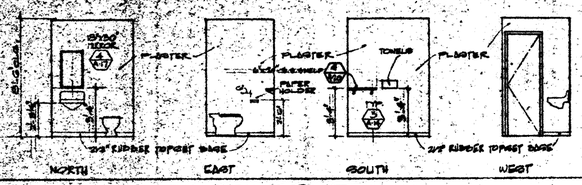

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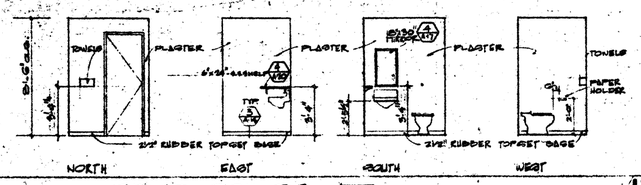

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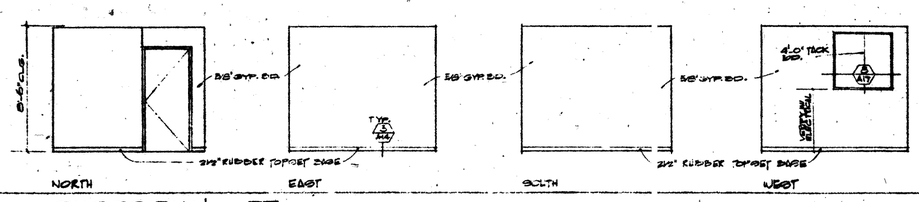

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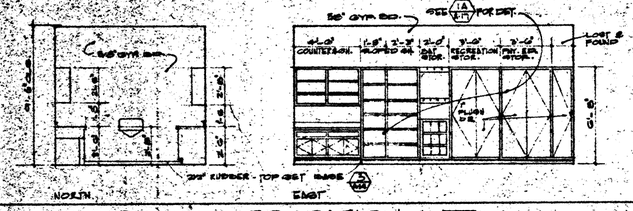

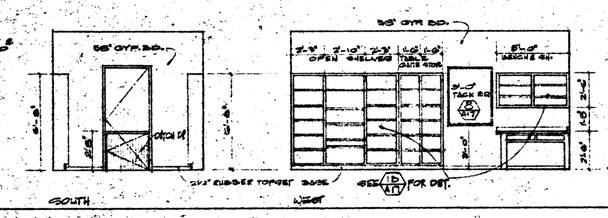

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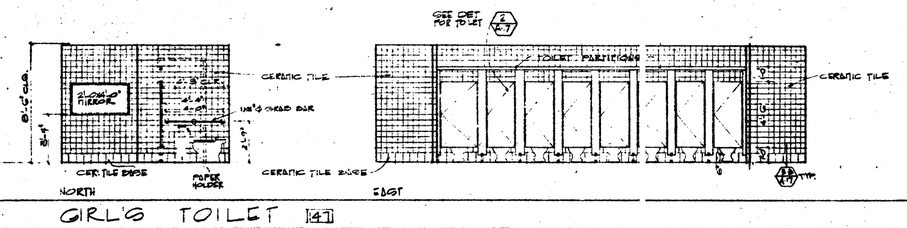

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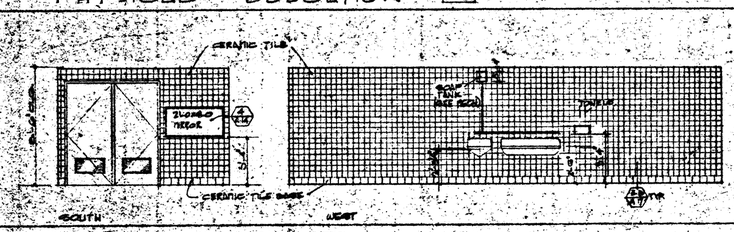

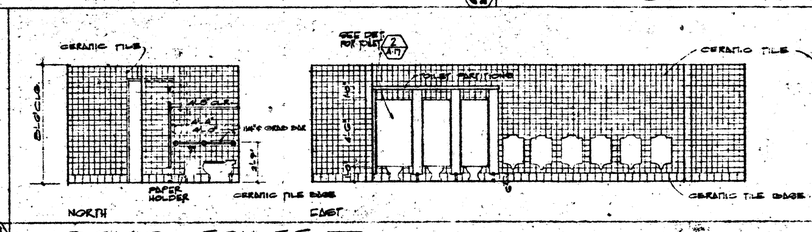

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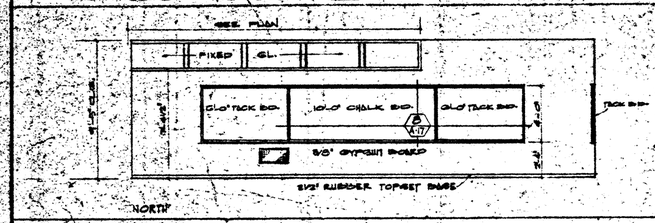

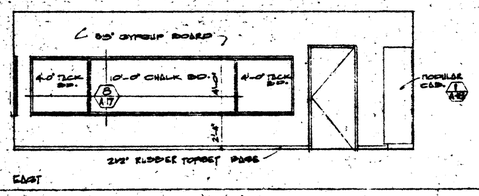

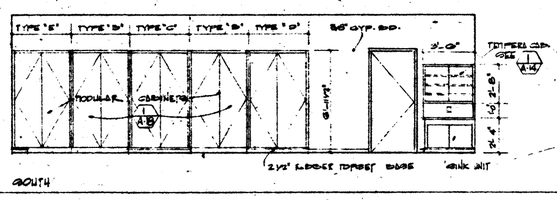

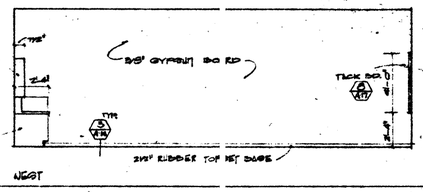

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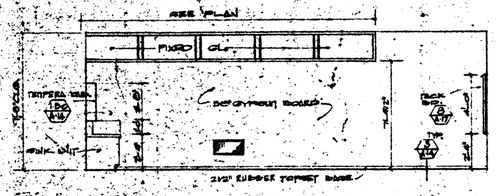

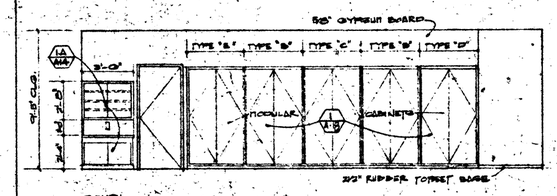

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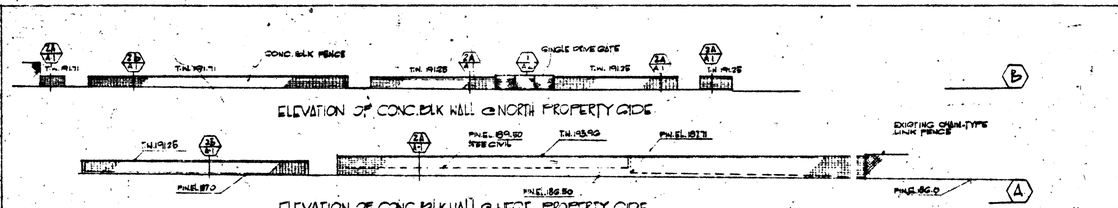

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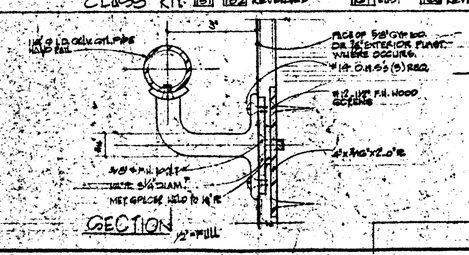

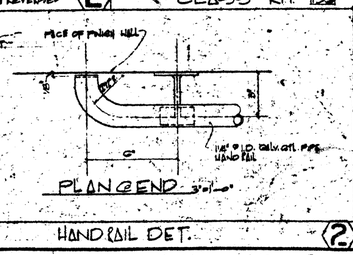

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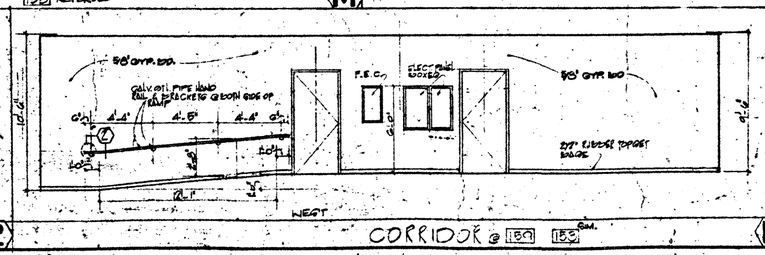

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B-2 ENGINEERING INC. CIVIL ENGINEER	ROY A. SEALEY, ARCHITECT, INC. Member of The American Institute of Architects 7966 BEVERLY BLVD. • TEL. 651-1880 • LOS ANGELES, CA 90048	SHEET TITLE INTERIOR ELEVATIONS
SAMUEL L. KAYE & ASSOC. CONSULTING MECH. ENGINEER	PREPARED FOR THE BOARD OF EDUCATION LOS ANGELES CITY UNIFIED SCHOOL DISTRICT	DATE 12-3-73
JOHN SNYDER & ASSOC. CONSULTING ELEC. ENGINEERS	By O.A.C.	SCALE 1/4"=1'-0"
SOCOLOSKI, ZELNER & ASSOC. STRUCTURAL ENGINEERS	APPROVED DEC 7 20 ACTING STATE FIRE MARSHAL 1974 STATE OF CALIFORNIA By	DRAWN BY T.C.
	REPLACEMENT OF BUILDING NO. 1 AND ANNEX THIRTY-SECOND STREET SCHOOL 822 WEST 32nd STREET LOS ANGELES, CALIFORNIA 90007	SHEET NO. A-13 OF 42 SHEETS

HOOVER BLVD.

EXIST. BLDG. AA-2701

EXIST. BLDG. AA-2700

EXIST. BLDG. AA-2699

EXIST. BLDG. AA-2705

EXIST. BLDG. AA-2704

EXIST. BLDG. AA-2703

EXIST. BLDG. AA-2702

EXIST. BLDG J-301

(E) TREES TO REMAIN

REMOVE (E) FLAG POLE

REMOVE (E) C.L.F.

(E) BUILDINGS TO BE REMOVED BY OTHERS

REMOVE (E) TREE

(E) TREE TO REMAIN

EXIST. LUNCH SHELTER

(E) LUNCH SHELTER TO BE REMOVED BY OTHERS

REMOVE EXISTING BLDG. (PHASE 2)

(B.E.P. 183.50)

(B.E.P. 184.60)

(B.E.P. 184.00)

(B.E.P. 184.90)

EXIST. L-177

REMOVE (E) C.L.F.

REMOVE NECESSARY PORTION OF (E) SIDEWALK TO CONSTRUCT NEW DRIVEWAY (SEE SHEET C-3)

REMOVE NECESSARY PORTION OF (E) CURB WALK & CURB TO CONSTRUCT NEW CULVERT (E 24)

(E) P.P. # 782-20H

(E) F.H.

THIRTY SECOND STREET

NOTE:
1- FOR NOTES AND LEGEND SEE SHEET C-4

NORTH

DEMOLITION PLAN

SCALE: 1"=20'

10 5 0 10 20 30 40 60
GRAPHIC SCALE

7137.00

APPROVED
STATE FIRE MARSHAL
STATE OF CALIFORNIA
APR 24 1974
BY

"AS BUILT"

B L ENGINEERING, INC.
CONSULTING CIVIL ENGINEER
2301 Hyperion Avenue
Los Angeles, California 90027
Tel: (213) 662-2173
By Thomas S. Buczek
Date 11/30/73 R.E. C-14094

B - L ENGINEERING INC. CIVIL ENGINEER	ROY A. SEALEY, ARCHITECT, INC. Member of The American Institute of Architects 7908 BEVERLY BLVD. • TEL: 651-1689 • LOS ANGELES, CA 90048	SHEET TITLE: DEMOLITION PLAN	DATE
SAMUEL L. KAYE & ASSOC. CONSULTING MECH. ENGINEER	PREPARED FOR: THE BOARD OF EDUCATION LOS ANGELES CITY UNIFIED SCHOOL DISTRICT STATE OF CALIFORNIA - DEPARTMENT OF GENERAL SERVICES OFFICE OF ARCHITECTURE AND CONSTRUCTION		SCALE 1"=20'
JOHN SNYDER & ASSOC. CONSULTING ELEC. ENGINEERS	36720 APPROVED APR 19 1974 D.A.C. DIVISION OF ARCHITECTURE		DRAWN BY J.A.C.
SOCOLOSKI, ZELNER & ASSOC. STRUCTURAL ENGINEERS	APPROVED STATE FIRE MARSHAL STATE OF CALIFORNIA BY DATE	REPLACEMENT OF BUILDING NO. 1 AND ANNEX THIRTY-SECOND STREET SCHOOL 822 WEST 32nd STREET LOS ANGELES, CALIFORNIA 90007	SHEET NO. C-1 OF 5 SHEETS

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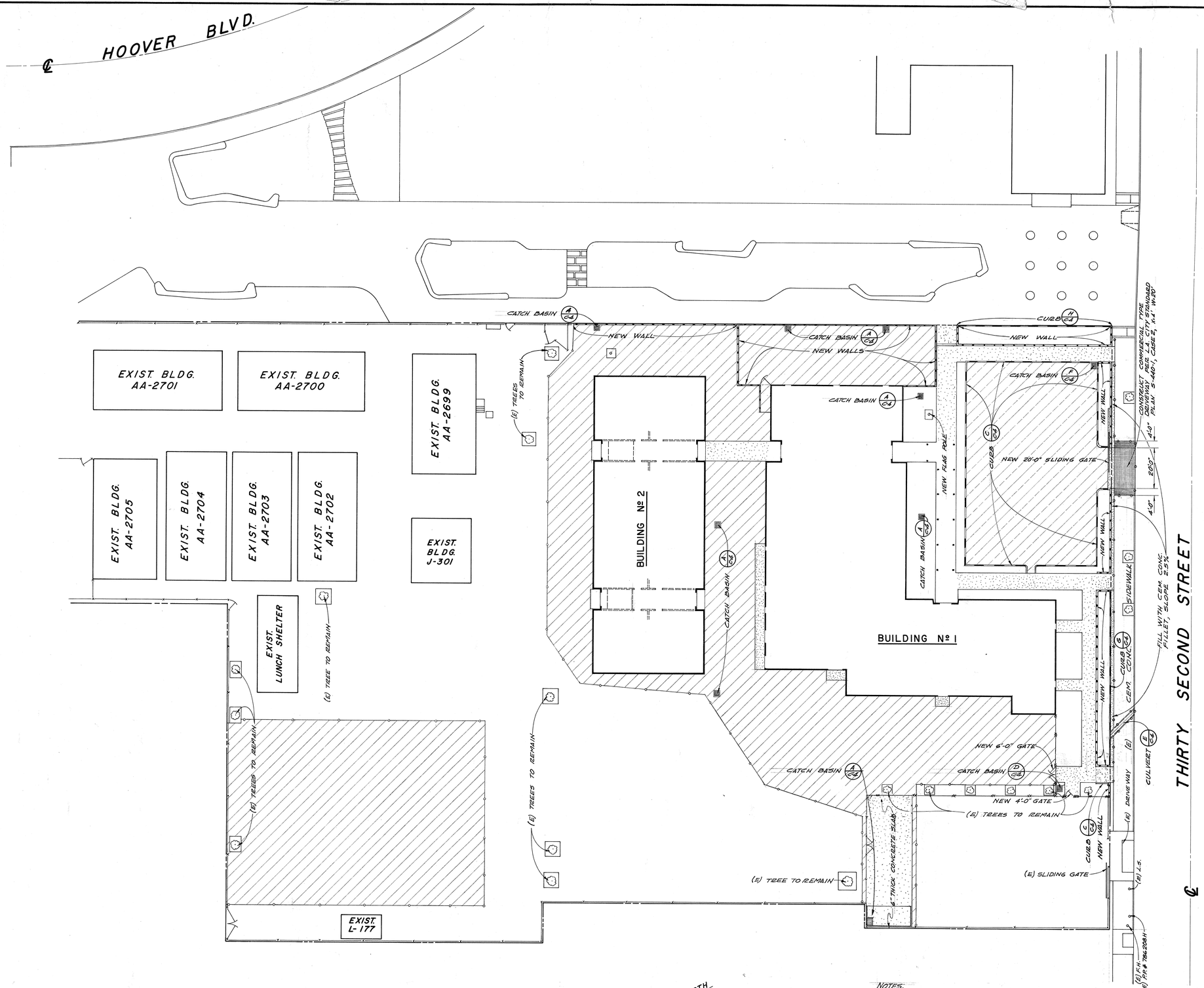

NORTH

NOTES:
1- FOR NOTES AND LEGEND SEE SHEET C-4.
2- FOR DRAINAGE LINE INFORMATION SEE SHEET C-2.

"AS BUILT"

7137.00.013

STATE OF CALIFORNIA — DEPARTMENT OF GENERAL SERVICES
OFFICE OF ARCHITECTURE AND CONSTRUCTION
APPLICATION NO. 36720 APPROVED APR 19 1974
Per DK Schmidt
PRINCIPAL STRUCTURAL ENGINEER

APPROVED
STATE FIRE MARSHAL
STATE OF CALIFORNIA
APR 19 1974
BY

PAVING PLAN

SCALE: 1"=20'

10 5 0 10 20 30 40 60
GRAPHIC SCALE

B L ENGINEERING, INC.
CONSULTING CIVIL ENGINEER
2301 Hyperion Avenue
Los Angeles, California 90027
Tel: (213) 662-2173
By Thomas S. Buenger
Date 11/30/73 R.E. C-14094

B - L ENGINEERING INC. CIVIL ENGINEER	ROY A SEALEY, ARCHITECT, INC. Member of The American Institute of Architects 7966 BEVERLY BLVD. • TEL. 651-1689 • LOS ANGELES, CA 90048	SHEET TITLE: PAVING PLAN
SAMUEL L. KAYE & ASSOC. CONSULTING MECH. ENGINEER	PREPARED FOR THE BOARD OF EDUCATION LOS ANGELES CITY UNIFIED SCHOOL DISTRICT	
JOHN SNYDER & ASSOC. CONSULTING ELEC. ENGINEERS	O.A.C.	REPLACEMENT OF BUILDING NO. 1 AND ANNEX THIRTY-SECOND STREET SCHOOL 822 WEST 32nd STREET LOS ANGELES, CALIFORNIA 90007
SOCOLOSKI, ZELNER & ASSOC. STRUCTURAL ENGINEERS	APPROVED STATE FIRE MARSHAL STATE OF CALIFORNIA BY ____ DATE ____	

DATE
SCALE 1"=20'
DRAWN W.A.C.
SHEET NO. C-3
OF 5 SHEETS

APPENDIX D – PRELIMINARY GEOTECHNICAL REPORT

PRELIMINARY GEOTECHNICAL REPORT
CAMPUS MODERNIZATION PROJECT

32nd St./USC Performing Arts Magnet Elementary School
822 W. 32nd Street
Los Angeles, California

Prepared for:

LOS ANGELES UNIFIED SCHOOL DISTRICT
333 South Beaudry Avenue, 22nd Floor
Los Angeles, CA 90017

Prepared by:

GROUP DELTA CONSULTANTS, INC.
370 Amapola Avenue, Suite 212
Torrance, California 90501

GDC Project No. LA-1548

January 28, 2022

GROUP DELTA

Los Angeles Unified School District
333 South Beaudry Avenue, 22nd Floor
Los Angeles, CA 90017

January 28, 2022
GDC Project No. LA-1548

Attention: Mr. Peyman Soroosh Moghadam
Supervising Structural Engineer

Subject: Preliminary Geotechnical Report
Campus Modernization Project
32nd St./USC Performing Arts Magnet Elementary School
822 W. 32nd St, Los Angeles, California

Dear Mr. Moghadam:

Group Delta Consultants, Inc. (Group Delta) is pleased to submit this preliminary geotechnical report for the campus modernization project planned for the 32nd St./USC Performing Arts Magnet Elementary School at 822 W. 32nd St, Los Angeles, California. Our scope of work was conducted in general accordance with our proposal dated October 15, 2021 and the LAUSD Task Order #046 which was issued on October 19, 2021.

We appreciate this opportunity to provide geotechnical and geologic services for your project. If you have any questions pertaining to this report, or if we can be of further service, please do not hesitate to contact us.

Sincerely,

GROUP DELTA CONSULTANTS, INC.

REGISTERED PROFESSIONAL ENGINEER
ETHAN TSAI
GE 3004
Exp 12/31/21
GEOTECHNICAL
STATE OF CALIFORNIA

Ethan Tsai
Associate Engineer

PROFESSIONAL GEOLOGIST
MICHELLE ALLISON SUTHERLAND
No. EG2577
Exp. 2/29/2022
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STATE OF CALIFORNIA

Michelle A. Sutherland
Senior Engineering Geologist

REGISTERED PROFESSIONAL ENGINEER
PIROOZ KASHIGHANDI
GE 3104
GEOTECHNICAL
STATE OF CALIFORNIA

Pirooz Kashighandi, Ph.D., G.E.
Senior Engineer

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PRELIMINARY GEOTECHNICAL REPORT
CAMPUS MODERNIZATION PROJECT
32ND ST./USC PERFORMING ARTS MAGNET ELEMENTARY SCHOOL
822 W. 32ND ST, LOS ANGELES, CALIFORNIA

1.0 INTRODUCTION

1.1 General

This Preliminary Geotechnical Report has been prepared for the proposed campus modernization project at 32nd St./USC Performing Arts Magnet Elementary School, in Los Angeles, California. We present the findings of our geotechnical investigation as well as our preliminary recommendations for the project.

The general location of the school campus is shown on the Site Vicinity Map in Figure 1. The campus, existing structures, and the locations of our recent exploratory borings/CPTs are shown in Figure 2.

1.2 Project Description

The project is currently in a preliminary planning stage. Conceptually, the project will include modernization and retrofit of the campus buildings and/or construction of new buildings.

The purpose of the Preliminary Geotechnical Investigation is to identify the geotechnical conditions within the campus and provide preliminary recommendations for planning the overall project. At a later date, a final comprehensive geotechnical report will be required based on the approved final schematic design.

1.3 Scope of Work

Our scope of work included the following:

- Review available published geologic and geotechnical reports, and geologic publications and maps pertaining to the site and surrounding area.
- Permitting
- Conduct a geotechnical field investigation to investigate the subsurface conditions at the site, which consisted of drilling four (4) hollow stem auger (HSA) borings to a depth of 30 to 50 feet, and advancing five (5) Cone Penetration Test (CPT) soundings a depth of 60 feet, or refusal.
- Perform laboratory tests on selected soil samples from the geotechnical field investigation to define the subsurface profile and to evaluate the physical properties and engineering characteristics of the soils encountered.
- Corrosion testing, and preparation of a corrosion protection report, by HDR, Corrosion Engineers.

- A geologic-seismic hazards evaluation to satisfy the requirements of Title 24 of the California Code of Regulations and guidelines outlined by the California Geological Survey.
- Perform site-specific response spectra in accordance with the requirement for ASCE 41-17 for voluntary seismic retrofit of the existing structures, and with the requirement for ASCE 7-16 for seismic design for new structures.
- Use the geotechnical data to develop preliminary geotechnical design recommendations.
- Prepare a preliminary geotechnical report presenting the data collected, our findings, and preliminary design recommendations including design of multiple new foundations (spread footings, mat foundations, piles, pole foundations, etc.), preliminary recommendations for evaluating the existing foundations, including ultimate bearing capacities and preliminary estimated foundation stiffness, preliminary recommendations for the design of retaining walls, pavement, floor slab support, and hardscapes, preliminary recommendations for shoring, utility trenching and backfilling, and a discussion on the feasibility of infiltration within the campus based on soil characteristics.

2.0 GEOLOGY AND SEISMIC SETTING

2.1 Regional Geology

The site is located within the seismically active Los Angeles Basin area of southern California. The basin formed over 7 million years ago during transtensional tectonism between northwest and east-west trending fault systems (Wright, 1991). Today, the basin is undergoing transpressional stress, bound by surrounding uplifting thrust blocks including the Puente Hills and Elysian Park faults locally. Internally, the basin is filled with sedimentation thousands of feet thick. Strike slip faults including the Elsinore and Newport-Inglewood faults locally, divide the basin into northwest trending valleys and ridges (Dolan, et al., 1995). The location to the site with respect to regional geology is presented in Figure 4 Regional Geologic Map.

2.2 Local Geology

The site is centrally located within the Los Angeles Basin, underlain by young alluvial fan deposits (Qyf). Structurally, the fan is bound by the Santa Monica-Hollywood-Raymond fault system to the north, the Newport-Inglewood fault zone to the west and the Elsinore fault zone to the east. The alluvial fan deposits are derived from erosional debris transported southward from the Santa Monica Mountains and Los Angeles River. The Puente Hills Blind Thrust Fault dips gently to the northeast below the site at depth.

The current trend of the Los Angeles River is located about 3.3 miles East of the site and confined within a concrete lined channel. Paleo meandering and flooding of the river also contributed to the alluvial deposits underlying the site.

2.3 Seismic Setting

2.3.1 Seismic Faults

Within Los Angeles Basin there are hundreds to thousands of faults. Faults displaying displacement within the Holocene time (11,700 years) are considered to have a higher potential for future seismic events and are categorized as active faults. Active strike slip, normal, and thrust faults, which are typically well defined at the surface, are considered a source of future surface fault rupture. Active blind thrust faults do not extend to the ground surface and are not considered a source of surface fault rupture hazard.

The closest seismic source to the site is the Lower Elysian Park Thrust Fault, located about 0.7 miles to the northeast of the site. Puente Hills Blind Thrust Fault is also located about 1.2 miles to the southwest of the project site. The Puente Hills Blind Thrust fault is comprised of a series of stepping thrust belts, trending northwest. The thrust belt dips about 27 degrees to the northeast shallowly below the site (Shaw, 2002). The site may have hanging wall effect impacts during a significant seismic event on the Puente Hills Fault. Hanging wall effects can include surface deflection or folding. During the Northridge earthquake in 1994, displacement cracks opened up and fractured surficially within the hanging wall of the Northridge Hills Fault near the surface projection of the quake epicenter (Stein & Lin, 2006). The surface cracks and faulting was due to the ground conditions within alluvial type regimes and liquefaction susceptibility. A potential M6.7 is estimated for the Puente Hills Blind Thrust.

The Newport Inglewood Fault Zone is located about 4.7 miles west of the site, trending northwest over 45 miles in length. It is an estimated right lateral normal fault with a M7.2 earthquake potential (Dawson & Weldon, 2012). The Whittier segment of the Elsinore fault zone is located about 12 miles east of the site, trending northwest over 100 miles in length. It is a right lateral strike slip fault estimated to have a M6.9 earthquake potential. The Hollywood Fault is located about 5.5 miles north of the site, trending east-west. It is estimated to be a left lateral fault segment of the Santa Monica-Hollywood-Raymond fault system and is estimated to have a M6.7 earthquake potential.

The San Andreas Fault is the most significant seismically active fault in the region. It stretches over 800 miles across the state of California and represents the boundary of the North American Tectonic Plate and the Pacific Tectonic Plate. It is over 30 miles east of the site, and considered capable of M7.9 earthquakes with an estimated slip-rate of 12.8 mm/yr in the southern Mojave section. Historical earthquakes of M7.0 and greater have been recorded on the San Andreas Fault, including the estimated M7.9 Fort Tejon Earthquake in 1857.

2.3.2 Seismic History

Local historical earthquakes recorded within a 100 km radius of the site from 1922 to present include 134 recorded events with magnitude (M) 4.5 or greater. Of the 134 events, three were M6.0 and greater and include the 1971 M6.6 San Fernando Earthquake and the 1994 M6.7 Northridge Earthquake. Thirty-five recorded events were M5.0 to M6.0 earthquakes. While not within the search radius, earthquakes of M7.0 and greater have been recorded in southern California. A M7.5 earthquake occurred in 1952 located about 77 miles north of the site and a M7.3 earthquake in 1992 was located about 100 miles east of the site. Following the Newport-Inglewood Fault M6.7 Earthquake in 1933, the campus was rebuilt. No other earthquake related damage or impacts to the campus are known. Construction in this area should be designed with accepted engineering practices and in compliance with current building codes that accommodate strong seismic ground motion.

3.0 SITE CONDITIONS

3.1 Surface Conditions

The campus is bordered to the north by 32nd Street, to the south by Jefferson Blvd, to the west by the University Avenue paved walkway, and by a surface parking lot to the east, as shown in Figure 2. The campus is approximately 3.7 acres and is currently comprised of classroom and administration buildings, portable buildings, parking lots paved in asphalt concrete, tennis courts, and a surface parking lot. The campus topography is relatively level, with elevations typically ranging between El. 186 and 192.

3.2 Subsurface Conditions

3.2.1 Geotechnical Field Investigation

Group Delta conducted a geotechnical field investigation to assess the subsurface conditions at the project site on December 4, 2021, and December 11, 2021. The field investigation consisted of drilling two (2) hollow-stem auger borings (B-2, and B-3) to depths of 51.5 feet, two (2) hollow-stem auger borings (B-1 and B-4) to depths of 31.5 feet, and advancing five (5) cone penetrations test (CPT) soundings (CPT-01, CPT-02, CPT-03, CPT-04, and CPT-05) to refusal depths of about 10 to 18 feet below grade. Our exploration locations are shown in Figure 2.

The explorations were performed under the continuous technical supervision of our field engineer, who maintained detailed logs of the soils encountered, classified the materials, and assisted in obtaining soil samples. Relatively undisturbed samples were taken in the borings at about 5-foot depth intervals. Standard Penetration Tests (SPT) and representative bulk samples were also taken. Additional details of the field exploration program, including copies of the boring and CPT logs, are presented in Appendix A.

3.2.2 Laboratory Testing Program

Laboratory tests were performed on selected soil samples collected during our field investigation. The purpose of the laboratory tests was to classify soil samples and evaluate their physical properties and engineering characteristics. Laboratory testing included the following:

- Moisture Content and Dry Unit Weight;
- Atterberg Limits
- Consolidation
- Direct Shear
- Percent Passing No. 200 Sieve;
- Corrosion (pH, Sulfate, Chloride, Minimum Resistivity);
- Expansion Index;
- R-Value.

All testing was done in general accordance with applicable ASTM specifications. Details of the laboratory testing program and test results are presented in Appendix B.

3.3 Subsurface Soil Conditions

Generalized geologic cross-sections showing the subsurface conditions encountered in the field explorations are shown in Figures 3.1 and 3.2.

Uncertified fill was encountered overlying native alluvium to a depth of generally about 3 feet below grade. The fill soils was encountered to deeper depths, about 10 feet thick, in B-4 in the south side of the campus. Deeper fills may be encountered between borings. The fill generally consisted of loose to medium dense silty sand, clayey sand and poorly graded sand with varying amounts of fine gravel. Some brick fragments and debris were found in the fill. Any old fill present should be considered uncertified fill and should be removed and replaced with properly compacted engineered fill.

Native soils consisted of medium dense to very dense sands, and silty sands with gravel to the maximum depth of 51.5 feet explored. The sandy soils in the upper 15 feet are moderately dense to dense, having Standard Penetration N-values of about 15 to 50, and CPT tip resistances between about 100 to 800 tsf. At depths greater than 15 feet, the sandy soils are dense to very dense with varying amounts of fine to coarse gravel. The Standard Penetration N-values are greater than 50, or refusal due to large size particles encountered.

3.4 Groundwater

During the field exploration program, groundwater was not encountered to the maximum depth explored of 51.5 feet below existing grade. The Seismic Hazard Zone Report for the Hollywood

7.5-Minute Quadrangle (CGS, 2001) indicates the highest groundwater level at the site is deeper than 50 feet below ground surface.

4.0 GEOLOGICAL HAZARD EVALUATION AND SEISMIC DESIGN

The geologic hazards evaluation for this project addresses requirements of Title 24 of the California Code of Regulations and California Geological Survey Checklist for Review of Geologic/Seismic Reports for California Public Schools, Hospitals, and Essential Services Building (CGS Note 48). A ground motion hazard analysis for the site was also performed in accordance with the 2019 California Building Code/ASCE 7-16 for new buildings, and per ASCE 41-17 for existing buildings, as presented in Section 5.

4.1 Surface Fault Ground Rupture

Ground surface rupture potential at the site was evaluated with review of current CGS Fault Activity Map of California (2010), USGS online Fault and Fold database, and Alquist-Priolo (AP) Earthquake Fault Zone Maps in the area. An active fault is defined as a fault with evidence for movement within the Holocene (last 11,700 years). The State regulations considers active faults to have a high potential for future earthquakes capable of ground surface rupture. No known active faults are mapped crossing the site or projecting towards the site. Therefore, the possibility of ground surface fault rupture at the site is considered low.

4.2 Liquefaction and Seismic Settlement

Liquefaction involves sudden loss in strength of a saturated, cohesionless soil caused by the build-up of pore water pressure during cyclic loading, such as that produced by an earthquake. This increase in pore water pressure can temporarily transform the soil into a fluid mass, resulting in differential settlements and ground deformations. Typically, liquefaction occurs in areas where there are loose soils and the depth to groundwater is less than 50 feet from the surface. Seismic shaking can also cause soil compaction and ground settlement without liquefaction occurring, including settlement of dry sands above the water table.

The site is not located within the State Earthquake Induced Liquefaction Seismic Hazard Zone for the Hollywood Quadrangle, (shown in Figure 6). The field explorations did not encounter ground water to the maximum depth of 51.5 feet explored. The historical high groundwater level at the site is deeper than 50 feet below ground surface. Therefore, the potential of liquefaction-induced seismic settlement is low.

4.3 Lateral Spreading

Lateral spreading is characterized primarily by lateral movement of surficial soil layers of gently to steeply sloping saturated soil deposits as a consequence of liquefaction of a subsurface granular deposit. The site is situated within a relatively level alluvial plain. The closest significant

body of water is the Los Angeles River, located about 3 miles east of the site. Here the river is directed through a concrete lined channel. Groundwater level at the site is generally below the channel floor, and the channel slopes are unsaturated. The potential hazard for lateral spreading at the site is considered low.

4.4 Landslides and Slope Stability

The project site is situated within a broad alluvial plain. Surrounding lots are relatively level. There are no significant slopes that can present a landslide hazard at or near the site. Elevation ranges about a foot across the site. Therefore, the potential hazard for landslides and slope instability is not an issue at the campus.

4.5 Flooding and Inundation

The site is situated within alluvial fan/valley deposits at approximate Elevation 188 feet, about 11 miles east of the Pacific Ocean. The area is highly developed with residential homes, university buildings, and pavements. Storm water drainage management has been developed through drains and gutter systems. The site area is outside the 0.2% annual chance of floodplain according to FEMA Nation Flood Hazard Maps and the City of Los Angeles Safety Element. The Los Angeles River is the closest significant body of water to the site. It flows south through a concreted lined channel about 3 miles east of the site. The potential for seiche and tsunami hazard at the site is considered low.

The City of Los Angeles Safety Element indicates a potential hazard at the site for inundation in the event of catastrophic failure of the Hansen Dam. The Hansen Dam is located about 17 miles upstream, north of the site. According to the Hansen Dam Master Plan (ACOE, 2011), the dam is for a flood control basin to allow inflow capacity for storm events

According to the City's Safety Element and the Los Angeles Citywide General Plan Framework EIR (City of Los Angeles, 1995), the Dam Failure Inundation Areas are based on the assumption that the water level contained by each dam is at peak storage capacity, and the failure of the dam is assumed to be catastrophic, i.e., instantaneous. The Hansen Dam Master Plan (ACOE, 2011) indicates the peak storage capacity is at spillway Elevation 1060 feet and reports a 0.2 percent chance of exceedance of Basin Storage 1066.3 feet and a 0.5 percent chance of exceedance of Basin Storage 1054.2 feet. Basin Storage since 1941 to 2007 indicates water levels have not exceeded 1,100 feet and it typically below 1,000 feet.

Dams are routinely inspected and continually evaluated for safety in compliance with the Federal Guidelines for Dam Safety issued in 1979 and Engineering Regulation ER 1110-2-1156, Safety of Dams – Policy and Procedures. The Hansen Dam is under the jurisdiction of the U.S. Army Corps (Corps) and has a Dam Safety Action Class III (DSAC III) rating as of March 2009 based on a Screening Portfolio Risk Analysis (SPRA) completed in May 2008. A DSAC III rating is given to dams

that have issues which are "conditionally unsafe" and where the dam is "significantly inadequate, or the combination of life, economic or environmental consequences with probability of failure is moderate to high". However, the Hansen Dam is not under emergency status. It is presently under regular observation, maintenance, and local emergency management.

The City of Los Angeles Hazard Mitigation Plan (2011) indicates dam failure is a moderate risk hazard. The site is not located within an inundation zone defined within the Plan Figure 7 M-1 Dam Inundation Hazard Areas. While dam failure has the potential to be a significant hazard to the site, through continued observation and regular maintenance of the Hansen Dam, the potential for inundation hazard to occur at the site is considered low.

4.6 Tsunami and Seiche

Low-lying areas along California's coast are subject to potentially dangerous tsunamis. The site is located about 11 miles east from the Pacific Ocean/Los Angeles coast. The Elevation of the site is about 188 feet. Therefore, the potential for a Tsunami is not considered an issue for the site. Since there are no large bodies of water near the site, the potential for a seiche event is also not considered an issue.

4.7 Soil Expansion and Collapse

Boring and CPT data indicates the soil is not susceptible to potential collapse. Soil expansion potential was tested at B-1 at 0.5-5 feet depth and the expansion index was found to be 28 corresponding to a low expansion potential.

The results of the lab tests are presented in Appendix B.

4.8 Soil Corrosivity

Corrosivity testing was evaluated in two representative samples from our field investigation in borings B-1, and B-3 at 0.5-5 feet depth. The results of corrosion testing, and recommendations for corrosion protection are provided in a Soil Corrosivity Study report by our hired corrosion consultant, HDR. Based on the Soil Corrosivity Study report, the tested soils were classified as corrosive to ferrous metals, and negligible for sulfate attack on concrete. The soil corrosivity study report is presented in Appendix E.

4.9 Ground Lurching

Ground lurching usually develops during seismic events along cliffs, ridges, stream banks and/or along the ridge of artificial embankments. The regional topography is flat with no nearby significant slopes. The potential for ground lurching is considered low.

4.10 Methane and Natural Oil and Gas

According to the City of Los Angeles NavigateLA website, the campus is located about 100 feet south of the Las Cienegas Oil/Gas Field. According to NavigateLA, the nearest Oil well (API #03706320) operated by Chevron is located within the surface parking lot to the east of the school campus. There is a potential hazard for methane, hydrogen sulfide and other natural gas at the site and the site should be evaluated by a methane engineer. *Group Delta environmental consulting can provide this evaluation under a separate scope of work and a proposal can be prepared upon your request.*

4.11 Other Potential Geologic Hazard Considerations

According to the Radon Potential Zone Map for Southern Los Angeles County (CGS, 2005) the site is within an area identified as a low potential for indoor Radon levels above 4.0 picocuries per liter (the lower limit of required action). No known naturally occurring asbestos occurrence has been mapped at the site or within the site area, (USGS, 2011). Therefore, the potential hazard for naturally occurring radon and/or asbestos at the is considered low.

5.0 SEISMIC GROUND MOTION VALUES

Seismic ground motion values for potential design of new buildings were evaluated at the project site in accordance with CBC2019, and ASCE 7-16. Both code-based values, and site-specific design ground motion parameters were developed at the site, as presented in Section 5.1.

Seismic ground motion values for evaluation and voluntary seismic retrofit of existing buildings were analyzed in accordance with ASCE 41-17. Both code-based values, and site-specific design ground motion parameters were developed at the site, as presented in Section 5.2.

5.1 Ground Motion Seismic Parameters per CBC 2019/ASCE 7-16

Design ground motion parameters were developed in accordance with CBC 2019 / ASCE7-16 for the proposed project. The site coordinates used in our seismic hazard analysis are: -118.2827 (Longitude) and 34.0243 (Latitude). Site-specific shear wave velocity measurements were performed in seismic CPTs in our investigation for estimation of average shear wave velocities in the upper 100 feet or approximately 30 meters ($V_{s,30}$). However, due to presence of a gravelly sandy layer within a depth range of 10 to 18, all performed CPTs hit refusal in this depth range. Below a depth of 15 feet, shear wave velocity at the site was estimated using correlations of Shear Wave Velocity with SPT blowcounts (Wair and Shantz, 2012) down to the explored depth of 51.5 feet. The empirical correlation based on Boore (2004) was used to extrapolate the shear wave velocity to 100 feet (30 meters). The $V_{s,30}$ value at the project site was estimated to be 338 m/s (1,109 ft/s). Therefore, the site may be classified as Site Class D, corresponding to a “stiff soil” profile based on the estimated shear wave velocity.

Code-based ground motion design parameters are discussed in Section 5.1.1, and site-specific ground motion design parameters are discussed in Section 5.1.2.

5.1.1 Code-based Ground Motion Design Parameter per ASCE 7-16

The seismic design parameters were calculated using the OSHPD Seismic Design Maps Web Tool (https://seismicmaps.org/) are summarized in Table 1.

Table 1: Seismic Ground Motion Values per ASCE 7-16 (Code-Based)

Latitude: 34.0243 Longitude: -118.2827	
Site Class	D
Seismic Design Category	D
Mapped MCE Spectral Response Acceleration at Short Period (S_s)	1.899g
Mapped MCE Spectral Response Acceleration at Period of 1 Second (S_1)	0.673g
Site Coefficient, F_a	1.0
Site Coefficient, F_v	1.7
Adjusted MCE Spectral Response Acceleration at Short Period (S_{MS})	1.899g(1)
Adjusted MCE Spectral Response Acceleration at Period of 1 Second (S_{M1})	1.144g(2)
Design Earthquake Spectral Response Acceleration at Short Period (S_{DS})	1.266g(1)
Design Earthquake Spectral Response Acceleration at Period of 1 Second (S_{D1})	0.763g(2)
Peak Ground Acceleration Adjusted for Site Class (PGA_M)	0.891g

Per Section 11.4.8 of ASCE 7-16, a site-specific ground motion hazard analysis is required for "structures on Site Class D with S_1 greater than or equal to 0.2", unless certain exceptions are met. Based on the site subsurface conditions and the mapped seismic demand ($S_1 > 0.2$), the mapped design acceleration parameters (presented in Table 1) can only be used if Exception 2 of ASCE 7-16 Section 11.4.8 is met, as follows:

- If $T \leq 1.5\ T_S$: The value of the seismic response coefficient C_S is determined by Eq. (12.8-2), i.e., S_{DS} is used to obtain C_S, or
- If $T_L \geq T > 1.5\ T_S$: The value of seismic response coefficient C_S is taken as *1.5 times* the value computed in Eq. (12.8-3), i.e., *1.5*S_{D1} is used to obtain C_S, or
- If $T > T_L$: The value of seismic response coefficient C_S is taken as *1.5 times* the value computed in Eq. (12.8-4), i.e., *1.5*S_{D1} is used to obtain C_S.

5.1.2 Site-Specific Ground Motion Seismic Parameters per ASCE 7-16

A site-specific acceleration response spectrum was constructed in accordance with ASCE 7-16 Chapter 21, as described in Appendix C. The summary of the Design Acceleration Parameters is the following:

Table 2: Summery of Code-Based and Site-Specific Design Parameters per ASCE 7-16

Design Parameters	General Seismic Design Parameter (ASCE 7-16 Section 11.4)	Site-Specific Seismic Design Parameters (ASCE 7-16 Section 21.4)
S_s (g)	1.899	-
S_1 (g)	0.673	-
Site Class	D	D
F_a	1.0	-
F_v	n/a	-
S_{MS} (g)	1.899	2.014
S_{M1} (g)	n/a	1.449
S_{DS} (g)	1.266	1.343
S_{D1} (g)	n/a	0.966

The site-specific design spectrum is summarized in the Table 3 and details of site-specific ground motions parameters development are discussed in Appendix C. The site-specific PGA_M was calculated equal to **0.897**(g).

Table 3: Site-Specific Design Spectrum per ASCE 7-16

ASCE 7-16 MCE_R and Design Earthquake		
Period	Design	MCE_R
(sec)	Sa (g)	Sa (g)
0.01	0.596	0.894
0.02	0.599	0.899
0.03	0.625	0.938
0.05	0.733	1.100
0.075	0.926	1.389
0.1	1.087	1.631
0.15	1.269	1.904
0.2	1.375	2.063
0.25	1.448	2.172
0.3	1.492	2.238
0.4	1.460	2.190
0.5	1.392	2.088
0.75	1.144	1.716
1	0.955	1.433
1.5	0.644	0.966
2	0.472	0.708
3	0.303	0.455
4	0.224	0.337
5	0.180	0.270
7.5	0.120	0.180
10	0.072	0.108

5.2 Ground Motion Seismic Parameters per ASCE 41

Seismic evaluation and design for voluntary seismic retrofit of existing LAUSD buildings are subject to the provisions of ASCE 41. Seismic ground motions values per ASCE 41 are selected based on Target Building Performance Levels, ranging from Collapse Prevention to Life Safety anticipating a higher level of damage to Immediate Occupancy or Operation anticipating a lower threshold for damage.

ASCE 41 defines two sets of seismic hazard levels: one for Basic Performance Objective for Existing Buildings (BPOE) and another for Basic Performance Objective Equivalent to New

Building Standards (BPON). The hazards used for BPOE are Basic Safety Earthquake 1 (BSE-1E) and Basic Safety Earthquake 2 (BSE-2E). The hazards used for BPON are Basic Safety Earthquake 1 (BSE-1N) and Basic Safety Earthquake 2 (BSE-2N). BSE-2N is the same as the Maximum Considered Earthquake (MCE_R) in ASCE 7, and BSE-1N is 2/3 of BSE-2N.

Code-based ground motion design parameters are discussed in Section 5.2.1, and site-specific ground motion design parameters are discussed in Section 5.2.2.

5.2.1 Code-based Ground Motion Design Parameter per ASCE 41-17

Site Class D corresponding to a "Stiff Soil" profile was used for the site. Ground Motion Values were calculated using the OSHPD Seismic Design Maps Web Tool (https://seismicmaps.org/) for the following four hazard levels, per the provisions of ASCE 41-17, for Site Class D.

Table 4: Code-Based Seismic Ground Motion Values per ASCE 41-17

Earthquake Hazard Level	Short Period Spectral Acceleration, S_{XS} (g)	Spectral Acceleration at 1 Second, S_{X1} (g)	Peak Ground Acceleration, PGA (g)
BSE-2E, 5% in 50 years	1.449	0.901	0.580
BSE-1E, 20% in 50 years	0.868	0.493	0.347
BSE-2N, MCE_R	1.899	1.144	0.760
BSE-1N, 2/3 x MCE_R	1.266	0.763	0.506

5.2.2 Site-Specific Ground Motion Seismic Parameters per ASCE 41-17

A site-specific acceleration response spectrum was constructed in accordance with ASCE 41-17, as described in Appendix D. The site-specific seismic design parameters for BSE-2E, BSE-1E, BSE-2N, and BSE-1N hazard levels are presented in the table below. The Structural Engineer should evaluate the appropriate seismic criteria for building design.

Table 5: Site-Specific Seismic Design Parameters per ASCE 41-17

Hazard Level	Parameter	Site-Specific Design Value
BSE-1E	S_{XS}	0.935
	S_{X1}	0.537
BSE-2E	S_{XS}	1.655
	S_{X1}	1.094
BSE-1N	S_{XS}	1.343
	S_{X1}	0.966
BSE-2N	S_{XS}	2.014
	S_{X1}	1.449

6.0 DISCUSSION AND RECOMMENDATIONS

6.1 General

At this time improvement plans are conceptual and the proposed architectural and structural details are not available. As noted, prior to the development of final plans, additional geotechnical investigation and a design level comprehensive geotechnical report will be required for the proposed development.

Based on the current findings of our field explorations and engineering analyses, it is our opinion that the site is suitable for the proposed improvements from a geotechnical standpoint. Following demolition of existing improvements as required, site grading should include the removal and replacement of any existing uncertified/unsuitable fill and loose native soils with properly compacted engineered fill.

Following grading, the proposed new buildings can be supported on conventional shallow foundations founded in the new structural fill. Geotechnical recommendations for site grading and foundation design are provided in the following sections.

6.2 Demolition

Demolition will be required to remove the existing structures and hardscapes prior to constructing any new buildings. Any void created from the demolition should be properly backfilled to the limits determined by the project geotechnical engineer. Any soils loosened or disturbed during the demolition should also be removed.

6.3 Removals

Up to about 3 feet of possible fill was encountered in the most areas of the campus, however, deeper fills of up to 10 feet were also encountered in the south side of the campus (boring B-4). The buried remnants of previous construction may also be encountered anywhere on the site, including foundations, slabs and utilities.

The existing fill soils are not suitable to support new foundations, pavement, or slab on grade. It should be anticipated that existing fill may be present anywhere on the site and could be locally deep. Existing fill soils should be removed and replaced with properly compacted fill soils for proper support of proposed structures.

In pavement areas, the removal and recompaction should extend to a minimum depth of 2 feet below pavement level. All removals should extend a minimum of 5 feet outside building and pavement areas, or a distance equal to the depth of excavation, whichever is greater. The actual limits for removals should be determined by the project geotechnical engineer during grading, based on the actual conditions encountered.

The civil engineer should identify the presence and location of all existing utilities in and near the work area. Precautions should be taken to remove, relocate or protect existing utilities, as appropriate.

6.4 Earthwork

All grading should conform to the requirements of the 2019 California Building Code and the general grading recommendations outlined below.

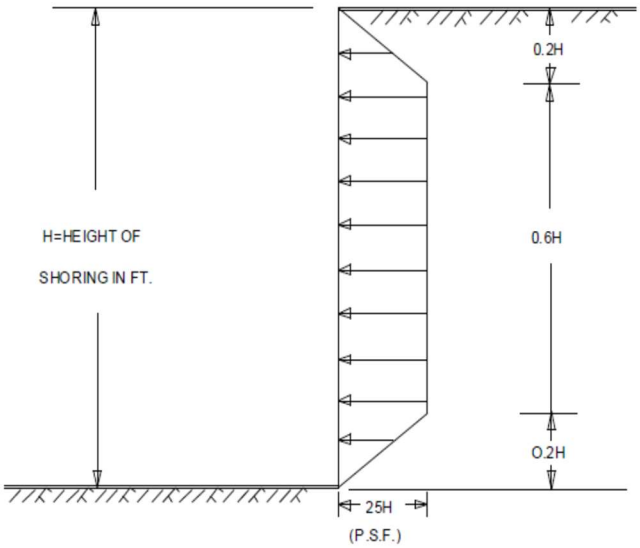
- The contractor is responsible for notifying the project geotechnical engineer of a pre-grading meeting prior to the start of construction and grading operations and anytime that the operations are resumed after an interruption.
- The geotechnical engineer should determine the limits for the removal and recompaction, based on the actual conditions encountered.
- Temporary excavations should be sloped at 1H:1V or flatter, or shoring should be used.
- The bottom of the excavation for removals should be observed and approved by the project geotechnical engineer. Any loose or yielding soils should be overexcavated and recompacted to the limits determined by the project geotechnical engineer.
- All structural fill should consist of generally sandy soils, and should be free of expansive clay, rock greater than 3 inches in maximum size, debris and other deleterious materials. All structural fill should be compacted to at least 95 percent of the maximum dry density determined by ASTM D 1557. Fill placed in non-structural and landscape areas should be compacted to at least 90 percent.
- In general, the near surface soils encountered in our explorations were found to consist of silty sand, clayey sand, and sand, and should be acceptable for use in new compacted fill.
- If imported soils are used as structural fill, the soils shall be free of vegetation organic materials, expansive clay, debris, or rocks greater than 3 inches in any dimension, and shall be approved by the project Geotechnical Engineer. Imported soils shall have an expansion index of less than 30 and plasticity index of less than 15. All fill soils shall be approved by the project geotechnical engineer before use.
- All earthwork and grading should be performed under the observation of the project geotechnical engineer. Compaction testing of the fill soils shall be performed at the discretion of the project geotechnical engineer. At a minimum, testing should be performed for approximately every 2 feet in fill thickness or 500 cubic yards of fill placed, whichever is more restrictive. If specified compaction is not achieved, additional compactive effort, moisture conditioning, and/or removal and recompaction of the fill soils will be required.

- All materials used for asphalt, concrete and base shall conform to the current "Green Book," and shall be compacted to at least 95 percent relative compaction.
- If, in the opinion of the geotechnical engineer, contractor, or owner, an unsafe condition is created or encountered during grading, all work in the area shall be stopped until measures can be taken to mitigate the unsafe condition. An unsafe condition shall be considered any condition that creates a danger to workers, on-site structures, on-site construction, or any off-site properties or persons.

6.5 Shoring

If required, cantilevered shoring can generally be used for excavations up to about 12 to 18 feet deep. For excavations deeper than about 18 feet, tied-back anchors or rakers may be required. Selection of the shoring system will depend on the area to be protected and the acceptance criteria for deflection of the retained excavation and for settlement of the ground adjacent to the shoring.

Cantilevered shoring should be designed for an active earth pressure equivalent to a fluid weighing 35 pcf for level ground. Braced shoring should be designed according to the diagram below, with a lateral earth pressure equal to 25H psf, where H is the height of the excavation.



Surcharge loads from the equipment or stockpiled material should be kept behind the top of the shoring a horizontal distance of at least twice the depth of the excavation, or the shoring should be designed for the additional pressure. Foundation and traffic loads from adjacent areas should also be added to the lateral earth pressures. If traffic loading can occur near the top of the shoring, the design height of the shoring should be increased by 2 feet to account for the traffic surcharge. Surface drainage should be controlled and prevented from running down the

temporary excavations or down the face of the shoring. Ponding water should not be allowed within the excavation.

Resistance to lateral loading of the shoring piles may be provided by passive pressure of the native soils below the bottom of the excavation. The allowable passive pressure of the native soils may be taken as the pressure developed from an equivalent fluid weight of 300 pcf.

Once shoring system is selected, the detailed recommendations for design shoring will be provided in the design level comprehensive geotechnical report.

6.6 New Shallow Foundation Recommendations

Following proper site grading, the new structures can be supported on conventional shallow footings and a slab on grade. Foundation recommendations are provided below.

6.6.1 Bearing Capacity

Following proper site grading, the proposed structure may be supported on conventional spread footings. Spread footings carried at least 1 foot into the undisturbed natural soils or properly compacted fill soils and at least 2 feet below the lowest adjacent grade or floor level may be designed to impose a net dead-plus-live load pressure of 3,500 pounds per square foot. The excavations should be deepened as necessary to extend into satisfactory soils.

Mat foundation underlain by at least 2 feet thick of properly compacted fill soils and extending at least 2 feet below the floor slab or lowest adjacent grade may be designed to impose a net dead-plus-live load pressure of 2,000 pounds per square foot.

The allowable bearing pressure can be increased by one-third for temporary loads associated with wind and seismic loading. The recommended bearing value is a net value, and the weight of concrete in the footings can be taken as 50 pounds per cubic foot; the weight of soil backfill can be neglected when determining the downward loads.

The project geotechnical engineer should perform compaction tests, probing, or use other methods, to verify that the foundations are supported in competent soils. If disturbed, wet, or otherwise unsuitable soils are encountered, or if water saturates the soils, the soils shall be excavated or stabilized as recommended by the project geotechnical engineer.

All foundation excavations should be checked by the project geotechnical engineer before the placement of reinforcing steel. Any loose or soft soils should be excavated and recompacted with structural fill. The limits for the excavation should be determined by the geotechnical engineer.

6.6.2 Settlement

The anticipated structural loads are not currently known. The total settlement of properly designed foundations is estimated to be less than 1 inch, with a differential settlement less than 0.5 inch, between adjacent similarly loaded footings, or between adjacent columns supported by a mat foundation. Settlement will occur due to elastic compression sandy soils or structural fill; and the majority of settlement is expected to occur shortly after construction.

6.6.3 Lateral Capacity

Resistance to lateral loads can be provided by friction developed between the bottom of footings and the supporting soil, and by the passive soil pressure developed on the face of the footing. For design purposes, an allowable passive fluid pressure of 300 pcf and a coefficient of friction of 0.4 may be used for lateral sliding resistance of footings.

6.6.4 Modulus of Subgrade Reaction

For structural analyses of the long-term behavior of foundations established in the supporting material, a unit vertical modulus of subgrade reaction of 150 pounds per cubic inch may be used. The unit modulus provided herein is for a 1' by 1' footing size. For a larger size of foundation, the modulus of subgrade reaction should be reduced using the following equation.

$$K_s = K_1 \left(\frac{B+1}{2B}\right)^2$$

Where K_s: Foundation Sized Adjusted Modulus of Subgrade Reaction in pci
K_1: Modulus of Subgrade Reaction for 1' by 1' footing size
B: Footing Size in feet

6.6.5 Ultimate Values

The recommended bearing and lateral load design values stated above are for use with loadings determined by a conventional working stress design. When considering an ultimate design approach, the recommended design values shall be multiplied by the following factors:

Design Item	Ultimate Design Factor
Bearing Value	3.0
Modulus of Subgrade Reaction	1.0
Passive Pressure	1.5
Coefficient of Friction	1.5

6.7 Design of New Retaining Walls

6.7.1 Lateral Earth Pressure

Cantilever retaining walls, which are free to move laterally at least ½ inch for each 10-feet in height, may be designed for an equivalent fluid pressure of 35 pcf with level backfill. These pressures assume that proper drainage is provided behind the walls to prevent the build-up of hydrostatic pressures. The finish ground surface behind the top of the wall should be graded to drain away from the back of the wall.

In addition to the recommended earth pressure, the walls should be designed to resist any applicable surcharges due to foundation, storage, or traffic loads. Normal traffic loads (if applicable) can be modeled as 2 ft of soil surcharge or 240 psf vertical pressures. This lateral pressure should be applied from ground level to a depth of 10 feet. This does not consider cranes or other heavy equipment.

Retaining wall footings on level ground should have a minimum embedment of 18 inches below finish grade. The footing should be sized so the resultant of the foundation load is applied within the center one-third of the footing width.

6.7.2 Seismic Earth Pressure

Retaining wall where wall height is greater than 6 feet should be designed to resist an active pressure combined with a seismic increment of lateral active earth pressure. The combined active static and seismic lateral earth pressure were computed based on an k_{eq} of 0.45g (one-half of PGA_M). The combined active static and seismic lateral earth pressure is equivalent to a fluid with a density of 60 pounds per cubic foot. The active static lateral earth pressure is equivalent to a fluid with a density of 35 pounds per cubic foot. Therefore, a seismic increment of 25 pounds per cubic foot may be used for design of seismic earth pressure.

6.7.3 Wall Backfill

We recommend that retaining walls be backfilled with non-expansive granular soils with a (Plasticity Index) PI less than 15 and percent passing No. 200 sieve of less than 15 percent. A 2-ft thick cap consisting of less pervious onsite materials should be used to minimize infiltration of surface water. The finished surface should be graded to drain away from the proposed structures. Heavy compaction equipment operating adjacent to retaining walls can cause excessively high lateral soil pressures to be exerted on the wall. Therefore, soils within 5 feet of the wall should either be compacted with hand operated equipment or designed to withstand compaction pressure from heavy equipment.

6.7.4 Drainage

Retaining walls should be constructed with a properly designed drainage system to prevent buildup of hydrostatic pressures behind the wall. This may consist of geocomposite drain board or 12 inches of clean crushed rock encapsulated in filter fabric, discharging to weep holes or drain pipes. Basement walls or walls with architectural facades or coverings should be properly waterproofed to minimize moisture transmission through the walls.

6.8 Pile Foundations Recommendations

Pile foundations are not anticipated to be required for support of new buildings. However, cast-in-drilled hole (CIDH) pile foundations may be needed for support of light poles, and other similar structures. The sections that follow provided recommendations for CIDH pile foundations.

6.8.1 Axial Pile Capacity

The downward and upward allowable axial capacities of CIDH concrete piles with a diameter of 24 and 30 inches as a function of penetration below bottom of pile cap are presented on Figure 7.1 and 7.2 for 24- and 30-inch diameter CIDH, respectively. The pile capacities shown on Figure 7.1 and 7.2 are for dead-plus-live load capacities; a one-third increase may be used for wind or seismic loads. For ultimate design, the capacities shown on Figures 7.1 and 7.2 may be multiplied by a factor of safety of 2.0.

6.8.2 Settlement

We estimate the settlement of pile foundation to be less than ½ inch. The differential settlement between adjacent columns is expected to be ¼ inch or less.

6.8.3 Lateral Capacities

We have computed the lateral capacities of the piles using the computer program LPILE by ENSOFT, Inc. Resistance of the soils adjacent to 24- and 30-inch-diameter CIDH piles are shown in the following tables. These resistances have been calculated for both free- and fixed-head pile condition.

Table 6: Lateral Load Design Data for 24-inch Drilled Concrete Pile

	Pile Head Deflection (inches)			
	¼		½	
Pile Head Condition	Free	Fixed	Free	Fixed
Lateral Load (kips)	15	40	25	65
Maximum Moment (in-kips)	800	2,300	1,400	3,900
Depth to Maximum Moment (feet)	6	0	6	0
Depth to Negligible Moment (feet)	25	25	25	25

Table 7: Lateral Load Design Data for 30-inch Drilled Concrete Pile

	Pile Head Deflection (inches)			
	¼		½	
Pile Head Condition	Free	Fixed	Free	Fixed
Lateral Load (kips)	25	65	45	100
Maximum Moment (in-kips)	1,400	4,200	2,600	7,000
Depth to Maximum Moment (feet)	7	0	7	0
Depth to Negligible Moment (feet)	30	30	30	30

For piles in groups spaced as shown below and at least 3 pile diameters on centers, no reduction in the lateral capacities need be considered for the first (leading) row of piles in the direction perpendicular to loading. For subsequent rows in the direction of loading, piles in groups spaced closer than 8 pile diameters on centers will have a reduction in lateral capacity due to group effects. Therefore, the lateral capacity of piles in groups, except for the first row of piles, spaced at 3 pile diameters on centers, may be assumed to be reduced by half. The reduction of lateral capacity in the direction of loading for other pile spacing may be interpolated.

6.8.4 Drilled CIDH Pile Installation

Based on the soil types encountered in the field investigations, caving is anticipated during drilling. Special techniques, such as casing or drilling fluid, should be used to prevent caving.

The pile installation should be completed the same day that the drilling is performed. A collar should be placed around the mouth of the shaft after drilling to prevent soils from entering the excavation, and the pile shafts should be covered until concrete is placed.

Concrete should be pumped from the bottom up through a rigid pipe extending to the bottom of the drilled excavation, with the pipe being slowly withdrawn as the concrete level rises. The discharge end of the pipe should be at least 5 feet below the surface of the concrete at all times during placement. The discharge pipe should be kept full of concrete during the entire placing operation and should not be removed from the concrete until all of the concrete is placed and fresh concrete appears at the top of the pile. The volume of concrete pumped into the hole should be recorded and compared to design volume.

The drilling of the pile excavations and the placing of the concrete should be observed continuously by personnel of our firm to verify that the desired diameter and depth of piles are achieved.

6.9 Pole Foundations

Pole-type footings may be designed in accordance with Section 1807A.3, Embedded Posts and Poles, of the California Building Code (CBC) 2019. The following recommendations should be used in design of pole foundations:

- Bottom of pole foundations should bear on native site soils.
- Lateral support may be derived from the native soils and/or new compacted structural fill. Uncertified fill soils should not be used to provide lateral support.
- For pole foundations installed as noted above, the following may be used for design:
  - Use an allowable bearing capacity of 2,000 pounds per square foot (psf).
  - For resistance of lateral loads use a passive earth pressure of 500 psf per foot of depth up to a maximum of 5,000 psf for lateral bearing pressure for pole foundations.

6.10 Recommendation for Evaluations of Existing Foundations and Retaining Walls

Based on the review of the plans for two of the existing buildings within the campus provided to us by LAUSD, it appears that the buildings are supported on conventional column footings, and continuous wall footings.

The 1973 plans for the existing Admin/Classroom building indicate that the building is supported on the following:

- Square column footings typically ranging from 2'x2' to 3'x3' embedded a minimum of 18" below adjacent grade
- Continuous wall footings ranging from 1' to 2'-6" wide, embedded between 1' and 3'-6" below adjacent grade

The 2008 plans for the existing 2-story Classroom building indicate that the building is supported on the following:

- Square column footings typically ranging from 3'x3' to 8'x8' embedded a minimum of 12" to 18" below adjacent grade
- Continuous wall footings ranging from 2' to 3' wide, embedded a minimum of 18" below adjacent grade

6.10.1 Bearing Capacity Values for Existing Foundations

For evaluation of existing column foundations, an allowable bearing capacity of **3,500 psf** may be used for square footings with minimum width of 2 feet, and a minimum embedment of 12" below adjacent grade.

For evaluation of existing continuous wall foundations, an allowable bearing capacity of **2,500 psf** may be used with minimum width of 1 foot, and a minimum embedment of 12" below

adjacent grade. The allowable bearing capacity can be increased by 300 psf for each foot of increase in width and/or depth of embedment, up to a maximum allowable bearing capacity of 3,500 psf.

The bearing capacities obtained from the above equations can be varied by 50 percent for upper and lower bounds.

6.10.2 Settlement of Existing Foundations

We don't expect significant increase in loads as a result of the voluntary retrofit. Therefore, the anticipated settlements resulting from the additional load of the retrofit are expected to be negligible for existing footings.

6.10.3 Lateral Resistance of Existing Foundations

Lateral loads against the structure may be resisted by friction between the bottoms of footings and the soil, and passive pressure from the portion of vertical foundation members embedded into the native alluvial deposits. A coefficient of friction of 0.4 and a passive pressure of 250 psf per foot of embedment may be used.

6.10.4 Ultimate Resistance of Existing Foundations

The recommended bearing and lateral resistance values provided above are allowable pressures used in Working Stress Design. For Ultimate Resistance, these allowable values may be multiplied by the following factors:

Design Item	Ultimate Design Factor
Bearing Value	3.0
Passive Pressure	1.5
Coefficient of Friction	1.5

6.10.5 Dynamic Modulus of Subgrade Reaction of Existing Foundations

For evaluation of transient loading, such as seismic loading, the load-deformation characteristics for existing foundations supported on alluvial deposits may be evaluated following Section 8.4.2 of ASCE 41-17. The initial (small-strain) shear modulus (G_0) may be calculated using Equation 8-4, and the effective shear modulus ratio (G/G_0) may be evaluated using Table 8-2 of ASCE 41-17. The parameters given in the following tables are recommended to be used for evaluation of the dynamic modulus of subgrade reaction for the existing footings:

Existing Foundations	Unit Weight (pcf)	Average Shear Wave Velocity, *Vs* (ft/s)	Poisson's Ratio	Average Initial Shear Modulus, G_0 (ksf)
Campus-wide	**120**	**850**	**0.25**	**2,680**

Per Section 8.4.2, a coefficient of variation (C_V) of 0.5 may be used in the analyses for determining the upper and lower bounds of the dynamic stiffnesses.

Hazard Level	Effective Peak Acceleration $S_{XS}/2.5$	Effective Shear Modulus Ratio (G/G_0)
BSE-2N	**0.806**	**0.100**
BSE-2E	**0.662**	**0.238**
BSE-1N	**0.537**	**0.363**
BSE-1E	**0.374**	**0.535**

These values may be used with either Methods 1, 2, or 3 described in Sections 8.4.2.3, 8.4.2.4, or 8.4.2.5 of ASCE 41-17, depending on the rigidity of the foundation relative to the younger alluvial fan deposits.

6.10.6 Lateral Earth Pressures for Existing Retaining Walls

Existing cantilevered retaining walls that are may be evaluated using an active equivalent fluid pressure for static conditions, and an active-plus-seismic equivalent fluid pressure under seismic loading as shown in the table below.

Load Case	Equivalent Fluid Pressure (pcf)
Static Active	**35**
BSE-2N	**35 (active) + 25 (seismic increment)**
BSE-2E	**35 (active) + 6 (seismic increment)**
BSE-1N	**35 (active) + 0* (seismic increment)**
BSE-1E	**35 (active) + 0* (seismic increment)**

*Note: Conservatively ignoring the effect of soil cohesion for static active condition but considering the effect of soil cohesion for seismic conditions results in a negative seismic increment for BSE-1N, and BSE-1E seismic levels. Thus, the seismic increment may be ignored for BSE-1N, and BSE-1E levels.

Any surcharge loads, as a result of traffic, live loads, adjacent foundations, or others should be included in the evaluation as appropriate. Surcharge loading may be taken as a uniform lateral earth pressure of 0.35q, where 'q' is the surcharge in pounds per square foot (psf). Surcharges at least a distance of the wall height, H, away from the wall may be neglected. Other loading may be provided as needed upon request.

6.11 Slab on Grade

For the proposed structures being supported on shallow foundations established on at least 2 feet thick of properly compacted fill soils, may be supported on grade if recommendations for earthwork provided in Section 5.4 is followed.

On-grade building slabs should be supported by compacted fill having an EI of 20 or less. Slabs should be designed for the anticipated loading. If an elastic design is used, a modulus of subgrade reaction of 150 pci may be used. Slab thickness, control joints and reinforcement should be designed by the project structural engineer and should conform to the requirements of the 2019 CBC and with the recommendations of the American Concrete Institute. Building slabs should be at least 5½ inches thick and reinforced with at least No. 4 bars on 18 inches centers, each way. Reinforcement should be placed near the top of the slab with at least 1½ inches of cover.

Concrete slabs constructed on grade ultimately cause the moisture content to rise in the underlying soil. This results from continued capillary rise and the termination of normal evapotranspiration. Because normal concrete is permeable, the moisture will eventually penetrate the slab. Excessive moisture may cause mildewed carpets, lifting or discoloration of floor tiles, swelling or doming of wood flooring, or similar problems. To decrease the likelihood of problems related to damp slabs, suitable moisture protection measures should be used where moisture sensitive floor coverings, moisture sensitive equipment, or other factors warrant.

American Concrete Institute (2004) provides detailed recommendations regarding moisture protection systems. The project architect should review ACI 302.1R-04 along with the moisture requirements of the proposed flooring system and specify an appropriate moisture protection system based on the allowable moisture transmission rate of the flooring to be used. The vapor membrane should conform to ASTM E 1745 guidelines. According to ACI 302-1R-04, moisture protection may consist of 10 to 15 mil polyethylene plastic sheeting over the compacted subgrade. If necessary, 2 inches of a granular base material may be placed beneath the polyethylene plastic sheeting to provide a level surface. The granular base material should be a clean, fine graded material with at least 10 to 30 percent passing the No. 100 sieve but not contaminated with clay, silt, or organic material. The granular material should be compacted prior to placement of the vapor membrane. The vapor membrane should be protected from puncture and if damaged be repaired in accordance with the manufacturer's recommendations.

Studies have shown that using a sand layer between the concrete and moisture barrier/retarder may increase the likelihood of moisture transmission through the slab. Concrete may be placed directly on the vapor membrane; however, placing concrete directly on the membrane may result in finishing delays. To speed finishing and reduce the potential for slab curl, we recommend that the concrete mix be designed using a water-cement ratio of between 0.45 and 0.48. The vapor barrier should be installed in accordance with ASTM E 1643 and the manufacturer's recommended installation procedures. The vapor barrier should extend beneath shallow foundation elements and grade beams, and sealed around penetrations. It has been shown the lateral migration of water from foundation edges contributes significantly to moisture problems. The membrane should extend above the soil grade around the structure's perimeter, and the exposed foundation face should be painted with a latex sealer prior to color coat. All joints should be lapped and sealed as recommended by the manufacturer.

6.12 Concrete Walkway and Hardscape

Exterior slabs should be supported by compacted fill prepared as recommended in this report and having an EI of 20 or less. Slabs should be designed for the anticipated loading. We recommend that exterior slabs be at least 4 inches thick and reinforced with at least 6-inch by 6-inch, W2.9 by W2.9 welded wire fabric placed at slab mid-height. Crack control joints should be used on all exterior slabs, with a maximum spacing of 5-foot centers each way for sidewalks and 10-foot centers each way for slabs. Actual crack control joint spacing should be designed by the project structural engineer or architect in conformance with the requirements of the 2019 CBC and the PCA Engineering Bulletin for Concrete Floors on Ground.

6.13 Site Drainage

The site should be graded to maintain positive drainage, so all runoff is properly collected and conveyed to proper disposal in approved storm drains or drainage devices. The area around foundations should be sloped at 2 percent to drain runoff away and prevent ponding of water.

6.14 Utility Installations

If new buried service lines will be installed, the bedding should be a minimum of 4 inches thick and should consist of clean sand, No. 4 concrete aggregate or gravel, and should have a sand equivalent of not less than 30. Concrete encasement is anticipated for electrical conduits. The pipe zone material, which extends to a level 12 inches above the pipe should consist of sand and should have a sand equivalent of no less than 30, and a maximum rock size of 1 inch. All imported materials should be approved by the project geotechnical engineer before being brought onsite.

Trench zone backfill extends from a level 12 inches above the pipe to finished subgrade. Trench zone material should have a maximum size of 2 inches and should contain no organics or other deleterious materials. Most of the near surface soils at the site can be used for trench zone

backfill. All fill soils should be approved by the project geotechnical engineer. Soils proposed to be imported should be approved before being brought on site.

All bedding and backfill materials should be mechanically compacted to at least 90 percent relative compaction. Jetting or flooding of backfill should not be permitted.

To prevent water from draining under building slabs through bedding on trench backfill, it is recommended that a concrete "dam" be installed outside the point of entry. The dam should be about 12 inches in thickness and extend at least 1 foot outside the width of the trench.

6.15 Environmental Issues

Evaluation of environmental issues for this project and their impact on site development are outside our scope of our work and are the responsibility of the project environmental consultant.

6.16 Pavement Design

To provide support for paving, the subgrade soils should be prepared as recommended in Section 6.4 on Earthwork. Compaction of the subgrade, including trench backfills, to at least 90%, and achieving a firm, hard, and unyielding surface will be important for paving support. The preparation of the paving area subgrade should be done immediately prior to placement of the base course. Proper drainage of the paved areas should be provided since this will reduce moisture infiltration into the subgrade and increase the life of the paving.

To provide data for design of paving, an R-value test was performed on a sample of the upper soils. The test results, which indicate an R-value of 17 at 90% compaction, are presented in Appendix B.

Table 8: Traffic Index and Section Thickness

Traffic Index (TI)	Section Thickness (inch) AC over AB
4	3" AC/4" AB
5	4" AC/5" AB
6	5" AC/7" AB
7	6"AC/9" AB

A concrete pavement consisting of 6 inches of concrete over 6 inches of aggregate base is recommended to be used for trash enclosures and other areas that will be subjected to high wheel loads or abrasive wheel forces, i.e., where there is a tight turning radius. For concrete pavement supporting fire trucks, we assume a TI of 7 may be used. Accordingly, we recommend that a concrete pavement consisting of 7 inches of concrete over 4 inches of aggregate base is

recommended to be used for firelanes. The TI for firelane should be confirmed during design phase of the project.

The upper 12 inches of subgrade supporting pavements should be compacted to at least 95 percent relative compaction (ASTM D1557).

6.17 Discussion on Feasibility of Infiltration

Based on the County of Los Angeles Department of Public Works, Geotechnical and Materials Engineering Division, Guidelines for Geotechnical Investigation and Reporting Low Impact Development Stormwater Infiltration, the required minimum design infiltration rate is 0.3 inches per hour.

Based on the results of laboratory grain-size analyses (minus #200 sieve), poorly-graded sands (SP soils) with varying amounts of gravel, and poorly-graded sands with silts (SP-SM) with varying amounts of gravel were generally encountered at depths greater than about 10 feet below grade throughout the campus. These soils have fines contents (percent passing #200 sieve) less than 12 percent and are considered to have “good” permeability with coefficients of permeability typically 10^{-3} cm/s to 1 cm/s, corresponding to infiltration rates greater than 0.3 inches per hour. On this basis infiltration appears to be feasible below a depth of about 10 to 15 feet, throughout the campus.

Near surface soils included clayey sands in borings B-1, and B-3 (with 36% passing #200 sieve at B-1 between 0.5-5 feet), and silty sands in borings B-2, and B-4. Based on materials encountered, the feasibility of shallow infiltration (within the upper 10 feet) appears less likely but can be evaluated during final design once the potential locations of on-site infiltration are known.

7.0 LIMITATIONS

This investigation was performed in accordance with generally accepted Geotechnical Engineering principles and practice. The professional engineering work and judgments presented in this report meet the standard of care of our profession at this time. No other warranty, expressed or implied, is made. This report has been prepared for LAUSD, and their design consultants. It may not contain enough information for other parties or other purposes and should not be used for other projects or other purposes without review and approval by Group Delta.

The recommendations for this project, to a high degree, are dependent upon proper quality control of site grading, fill and backfill placement. The recommendations are made contingent on the opportunity for Group Delta to observe the earthwork operations. This firm should be notified of any pertinent changes in the project, or if conditions are encountered in the field, which differ from those described herein. If parties other than Group Delta are engaged to provide such services, they must be notified that they will be required to assume complete responsibility for the geotechnical phase of the project and must either concur with the recommendations in this report or provide alternate recommendations.

8.0 REFERENCES

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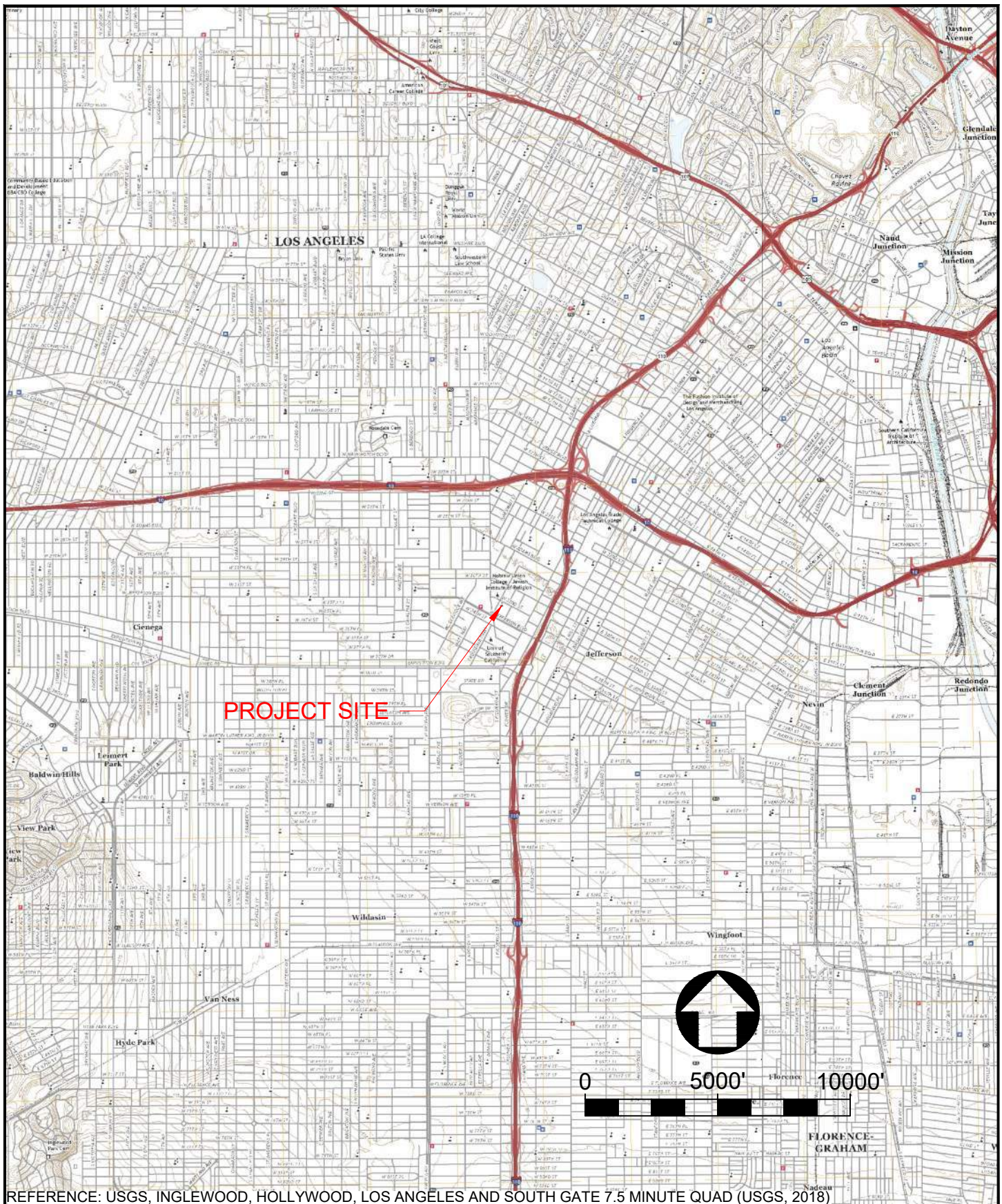
FIGURES



REFERENCE: USGS, INGLEWOOD, HOLLYWOOD, LOS ANGELES AND SOUTH GATE 7.5 MINUTE QUAD (USGS, 2018)

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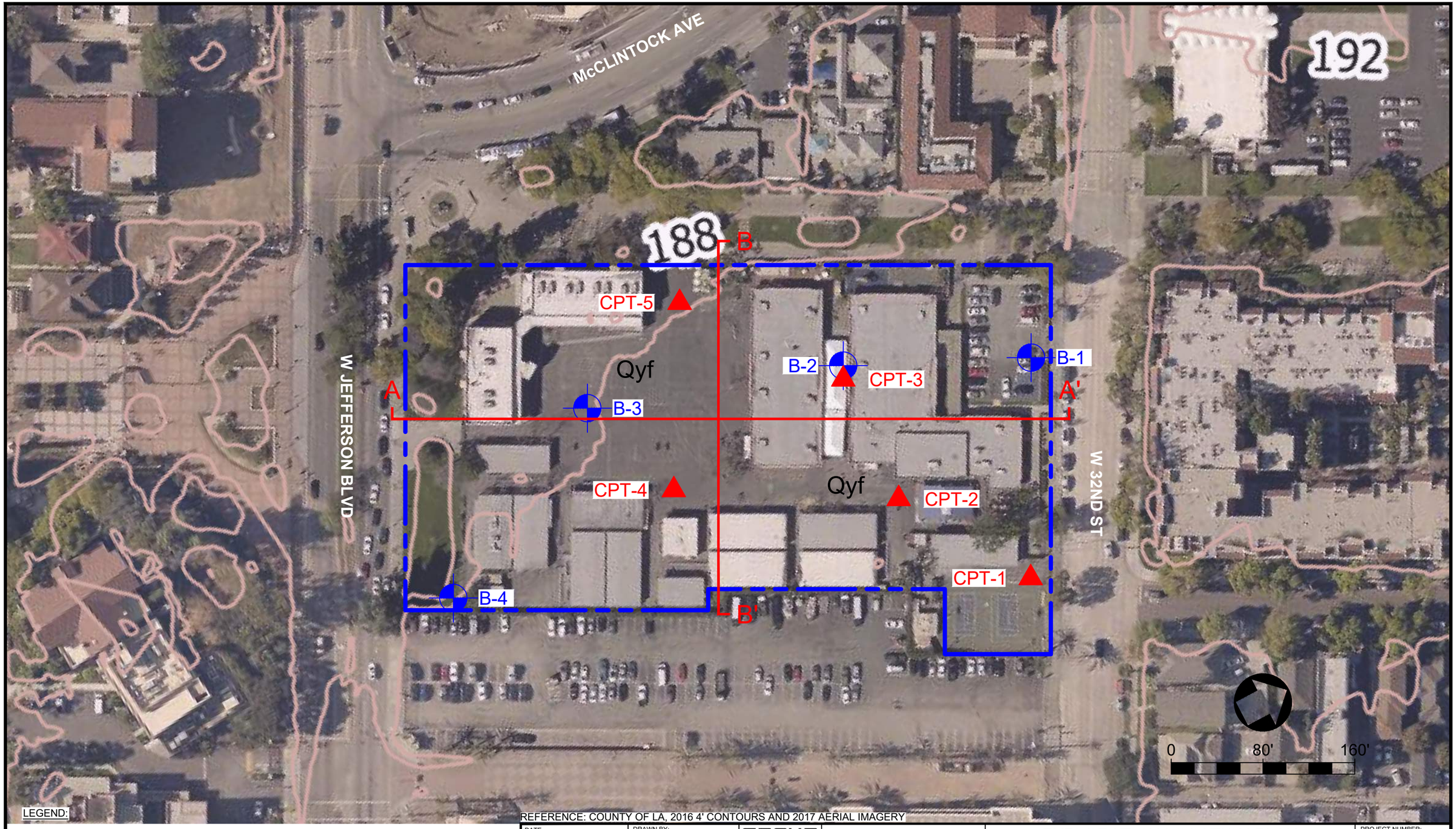

LEGEND:

Qyf	ALLUVIAL FAN DEPOSITS,ISOLATED FILLS ENCOUNTERED 5-10' DEEP	A — A'	CROSS SECTION LOCATION
B-1	APPROXIMATE BORING LOCATION		PROJECT SITE
CPT-1	APPROXIMATE CPT LOCATION		

REFERENCE: COUNTY OF LA, 2016 4' CONTOURS AND 2017 AERIAL IMAGERY

DATE: 12/30/2021	DRAWN BY: JMT	GROUP DELTA CONSULTANTS, INC 370 Amapola Ave. Suite 212 Torrance, CA. 90501	EXPLORATION LOCATION PLAN AND SITE GEOLOGY MAP 32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA
REVIEWED BY: MAS	APPROVED BY: AP		PROJECT NUMBER: LA1548 SCALE: AS SHOWN FIGURE NUMBER: 2
REVISED: -			

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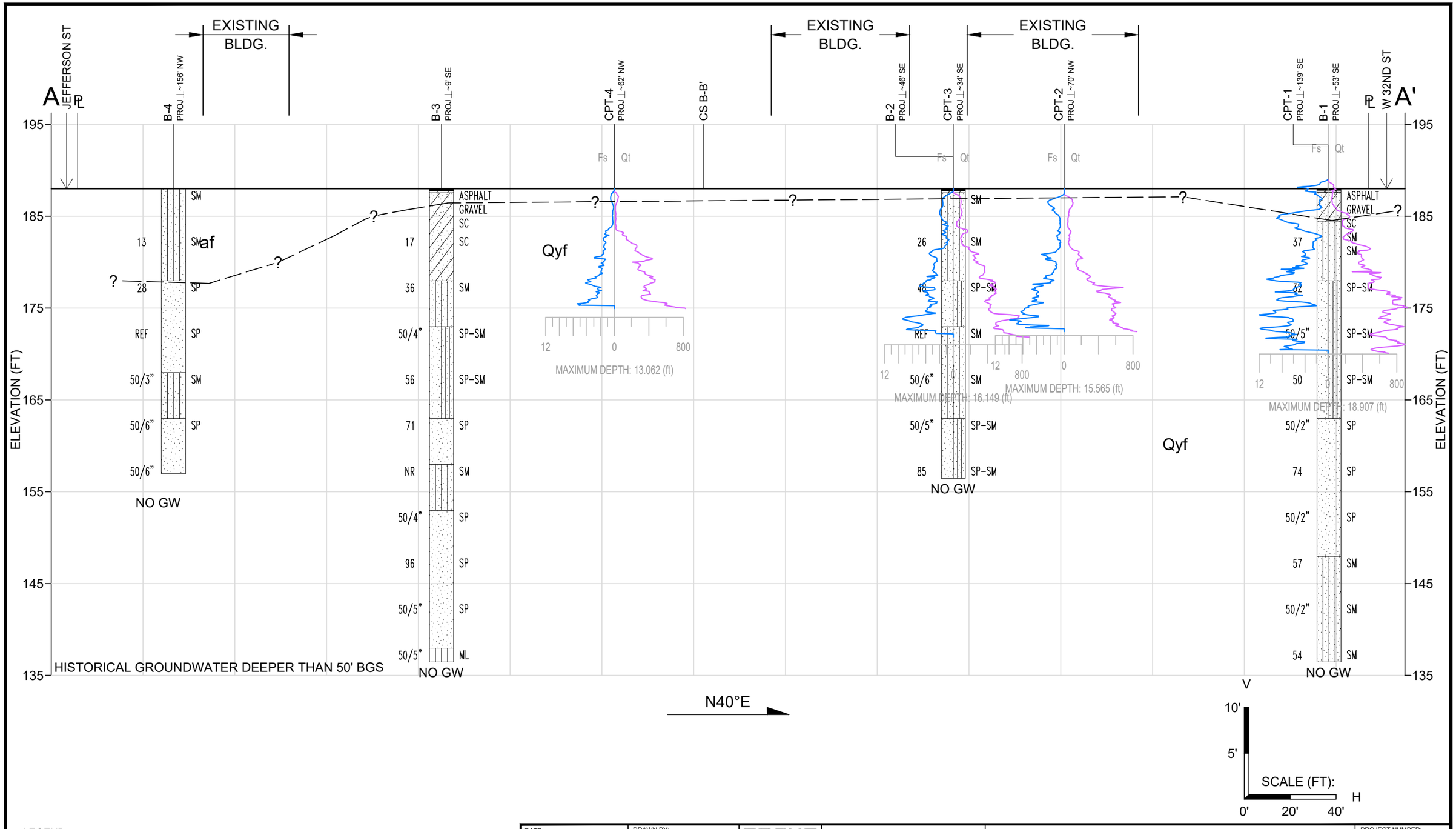

LEGEND:

af	ARTIFICIAL FILL, QUERIED WHERE POORLY CONFINED
Qyf	YOUNG ALLUVIAL FAN DEPOSITS, SANDS WITH VARIABLE GRAVEL AND SILT
NO GW	NO GROUNDWATER ENCOUNTERED DURING DRILLING AND SAMPLING

DATE: 12/30/2021	DRAWN BY: JMT	GROUP DELTA CONSULTANTS, INC 370 Amapola Ave. Suite 212 Torrance, CA. 90501	CROSS SECTION A-A'
REVIEWED BY: MAS	APPROVED BY: AP		32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA
REVISED: -			PROJECT NUMBER: LA1548 SCALE: AS SHOWN FIGURE NUMBER: 3.1

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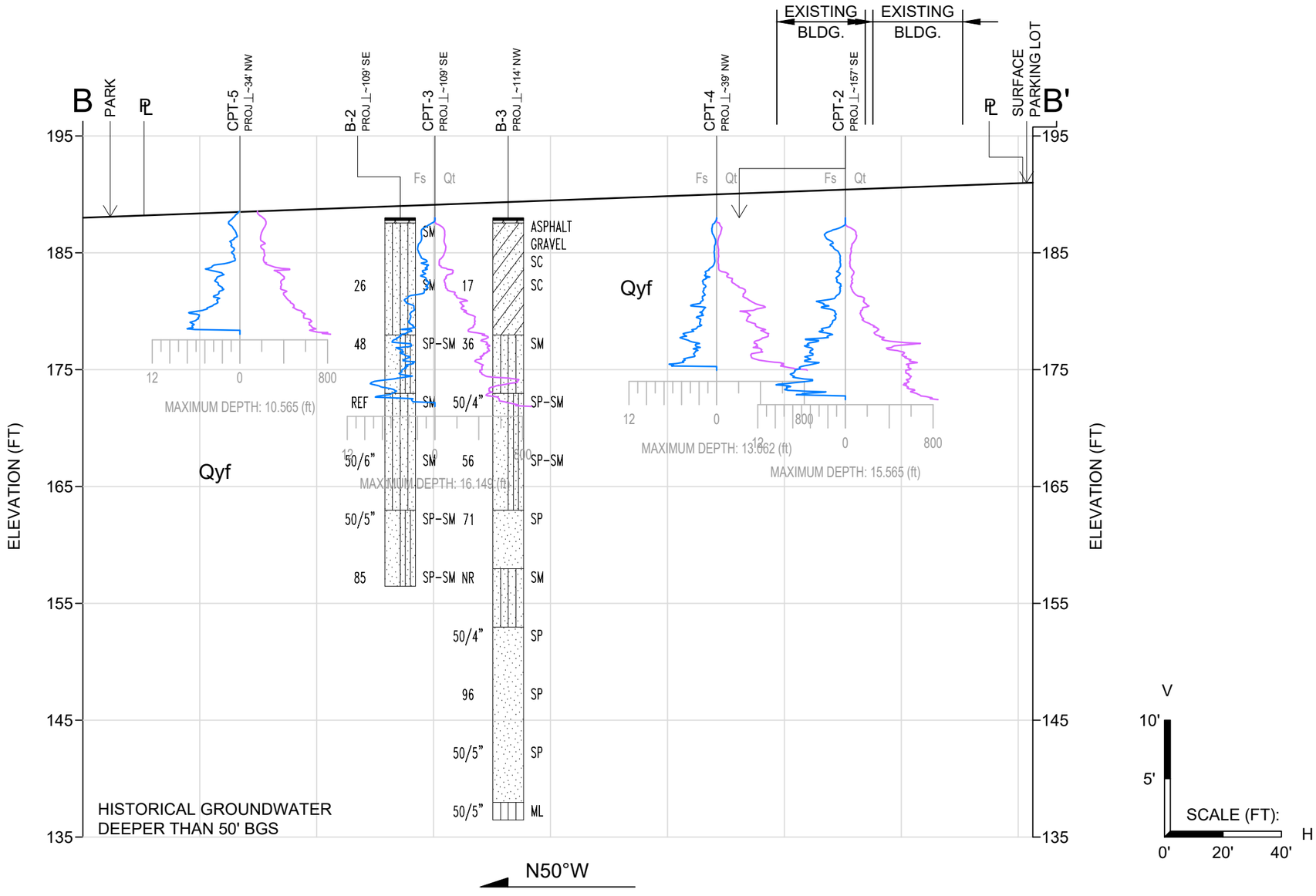

LEGEND:

af	ARTIFICIAL FILL, POORLY CONFINED
Qyf	YOUNG ALLUVIAL FAN DEPOSITS, SANDS WITH VARIABLE GRAVEL AND SILT
NO GW	GROUNDWATER NOT ENCOUNTERED DURING DRILLING AND SAMPLING

DATE: 12/30/2021	DRAWN BY: JMT	GROUP DELTA CONSULTANTS, INC 370 Amapola Ave. Suite 212 Torrance, CA. 90501	CROSS SECTION B-B'
REVIEWED BY: MAS	APPROVED BY: AP		32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA
REVISED: -			PROJECT NUMBER: LA1548 SCALE: AS SHOWN FIGURE NUMBER: 3.2

FILE PATH: N:\Projects\1500-1599\LA1548 LAUSD 32nd St-USC Performing Arts Magnet ES Campus Modernization\600 Drafting\LA1548 Figs 1_2_3.dwg
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MAP UNITS AND SYMBOL EXPLORATION

Late Holocene (Surficial Deposits)

- af — **Artificial Fill** - deposits of fill resulting from human construction, mining, or quarrying activities; includes engineered fill for buildings, roads, dams, airport runways, harbor facilities, and waste landfills
- Qsu — **Undifferentiated Surficial Deposits** - includes colluvium, slope wash, talus deposits, and other surface deposits of all ages; generally unconsolidated but locally may contain consolidated layers
- Qls — **Landslide Deposits** - may include debris flows and older landslides of various earth material and movement types; unconsolidated to moderately well-consolidated
- Qb — **Beach Deposits** - unconsolidated marine beach sediments consisting mostly of fine- and medium-grained, well-sorted sand
- Qw — **Alluvial Wash Deposits** - unconsolidated sandy and gravelly sediment deposited in recently active channels of streams and rivers; may contain loose to moderately loose sand and silty sand
- Qf — **Alluvial Fan Deposits** - unconsolidated boulders, cobbles, gravel, sand, and silt recently deposited where a river or stream issues from a confined valley or canyon; sediment typically deposited in a fan-shaped cone; gravelly sediment generally more dominant than sandy sediment
- Qa — **Alluvial Valley Deposits** - unconsolidated clay, silt, sand, and gravel recently deposited parallel to localized stream valleys and/or spread more regionally onto alluvial flats of larger river valleys; sandy sediment generally more dominant than gravelly sediment
- Qt — **Terrace Deposits** - includes marine and stream terrace deposits; marine deposits include slightly to moderately consolidated and bedded gravel and conglomerate, sand and sandstone, and silt and siltstone; river terrace deposits consist of unconsolidated thin- to thick-bedded gravel
- Ql — **Lacustrine, Playa, and Estuarine (Paralic) Deposits** - mostly unconsolidated fine-grained sand, silt, mud, and clay from fresh water (lacustrine) lakes, saline (playa) dry lakes that are periodically flooded, and estuaries; deposits may contain salt and other evaporites
- Qe — **Eolian and Dune Deposits** - unconsolidated, generally well-sorted wind-blown sand; may occur as dune forms or sheet sand

Holocene to Late Pleistocene (Surficial Deposits)

- Qyf — **Young Alluvial Fan Deposits** - unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined valley or canyon
- Qya — **Young Alluvial Valley Deposits** - unconsolidated to slightly consolidated, undissected to slightly dissected clay, silt, sand, and gravel along stream valleys and alluvial flats of larger rivers

Late to Middle Pleistocene (Surficial Deposits)

- Qof — **Old Alluvial Fan Deposits** - slightly to moderately consolidated, moderately dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined valley or canyon
- Qoa — **Old Alluvial Valley Deposits** - slightly to moderately consolidated, moderately dissected clay, silt, sand, and gravel along stream valleys and alluvial flats of larger rivers
- Qot — **Old Terrace Deposits** - slightly to moderately consolidated, moderately dissected marine and stream terrace deposits
- Qol — **Old Lacustrine, Playa, and Estuarine (Paralic) Deposits** - slightly to moderately consolidated, moderately dissected fine-grained sand, silt, mud, and clay from lake, playa, and estuarine deposits of various types

Middle to Early Pleistocene (Surficial Deposits)

- Qvof — **Very Old Alluvial Fan Deposits** - moderately to well-consolidated, highly dissected boulder, cobble, gravel, sand, and silt deposits issued from a confined valley or canyon
- Qvoa — **Very Old Alluvial Valley Deposits** - moderately to well-consolidated, highly dissected clay, silt, sand, and gravel along stream valleys and alluvial flats of larger rivers; generally uplifted and deformed

Quaternary (Bedrock)

- Qss — **Coarse-grained formations of Pleistocene age and younger** - primarily sandstone and conglomerate
- Qsh — **Fine-grained formations of Pleistocene age and younger** - includes fine-grained sandstone, siltstone, mudstone, shale, siliceous and calcareous sediments

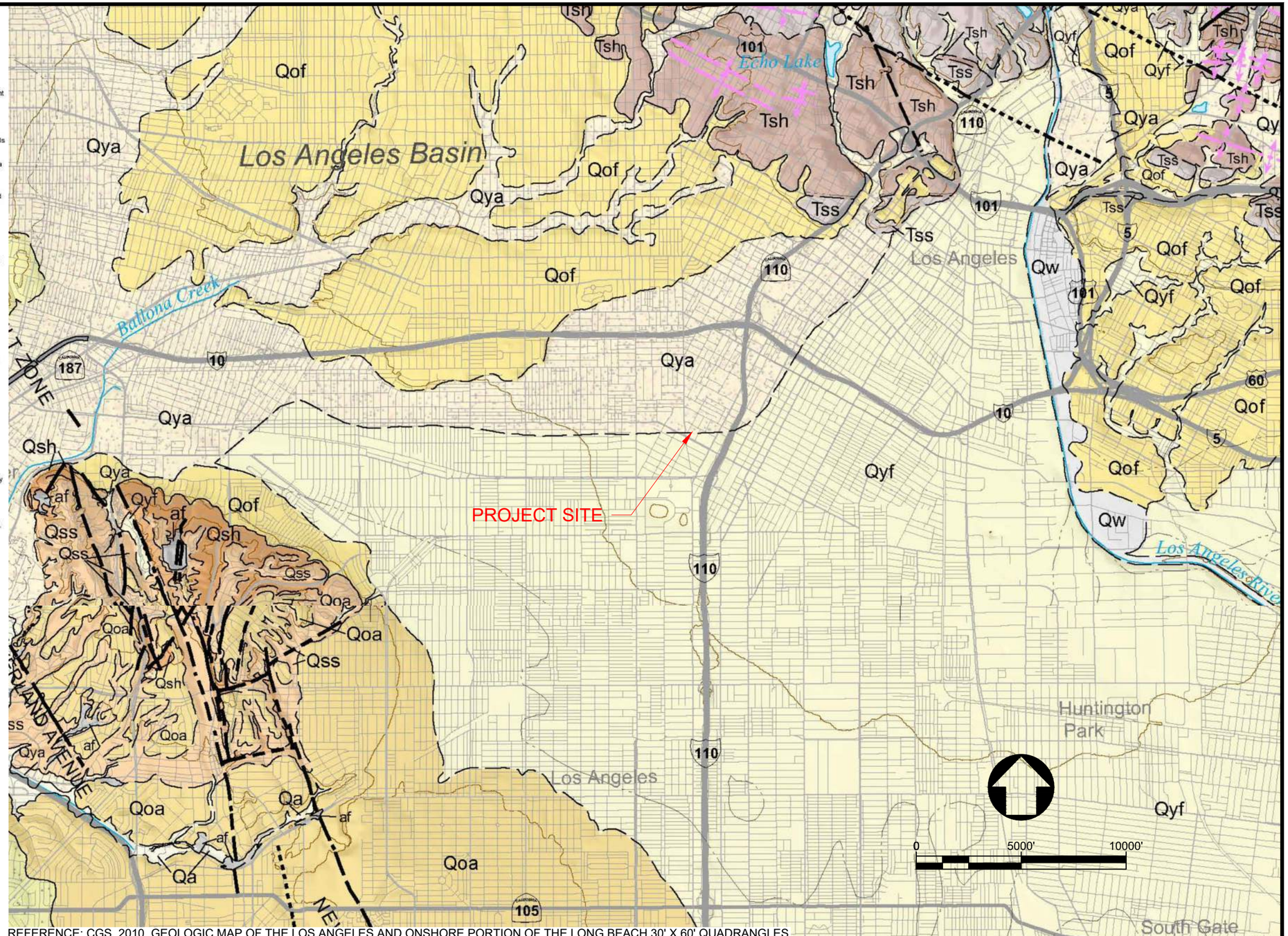
Tertiary (Bedrock)

- Tss — **Coarse-grained Tertiary age formations** - primarily sandstone and conglomerate
- Tsh — **Fine-grained Tertiary age formations** - includes fine-grained sandstone, siltstone, mudstone, shale, siliceous and calcareous sediments
- Tv — **Tertiary age formations of volcanic origin**

Mesozoic and Older (Bedrock)

- Ksa — **Coarse-grained Cretaceous age formations of sedimentary origin**
- Ksh — **Fine-grained Cretaceous age formations of sedimentary origin**
- pKm — **Cretaceous and pre-Cretaceous metamorphic formations of sedimentary and volcanic origin**
- sp — **Serpentinite of all ages**
- gr — **Granitic and other intrusive crystalline rocks of all ages**

- Contact
- Gradational contact
- Reference contact -- Used to delineate geologic units that were mapped as separate units on the original source map, but are consolidated on this map.
- Fault -- Includes strike-slip, normal, reverse, oblique, and unspecified slip
- Lineament
- Folds -- Showing direction of plunge where appropriate
- Anticline
- Overturned anticline
- Syncline
- Dike
- Stream
- Spring
- Road



REFERENCE: CGS, 2010, GEOLOGIC MAP OF THE LOS ANGELES AND ONSHORE PORTION OF THE LONG BEACH 30' X 60' QUADRANGLES

DATE: 12/01/2021	DRAWN BY: JMT	GROUP DELTA CONSULTANTS, INC 370 Amapola Ave. Suite 212 Torrance, CA. 90501	REGIONAL GEOLOGY MAP
REVIEWED BY: -	APPROVED BY: AP		32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA
REVISED: -			PROJECT NUMBER: LA1548 SCALE: AS SHOWN FIGURE NUMBER: 4

FILE PATH: N:\Projects\1500-1599\LA1548 LAUSD 32nd St-USC Performing Arts Magnet ES Campus Modernization\600 Drafting\LA1548 Figs 4_5_6.dwg
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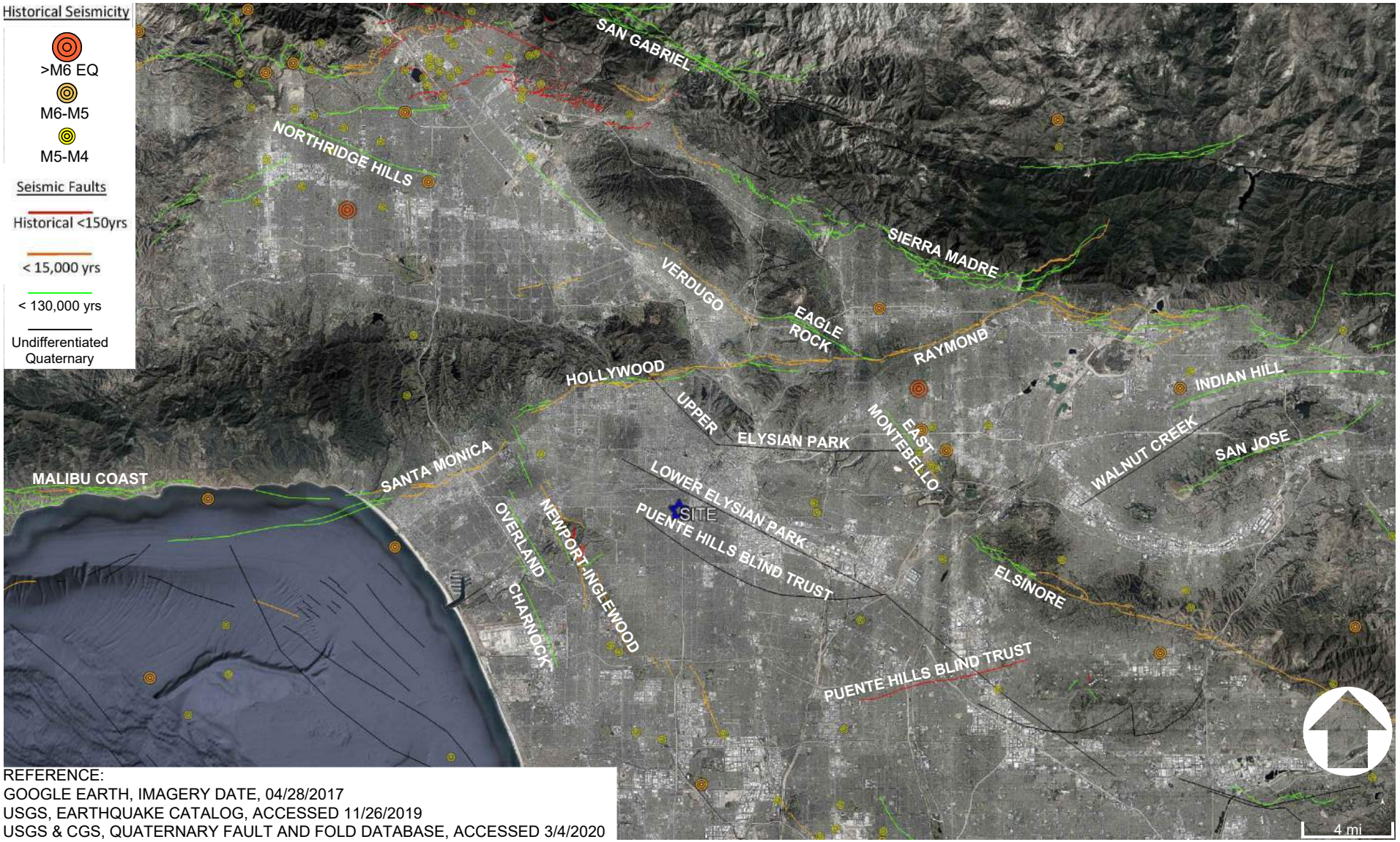

REFERENCE:
GOOGLE EARTH, IMAGERY DATE, 04/28/2017
USGS, EARTHQUAKE CATALOG, ACCESSED 11/26/2019
USGS & CGS, QUATERNARY FAULT AND FOLD DATABASE, ACCESSED 3/4/2020

DATE: 11/18/2021	DRAWN BY: JMT	GROUP DELTA	GROUP DELTA CONSULTANTS, INC 370 Amapola Ave. Suite 212 Torrance, CA. 90501	REGIONAL FAULT AND SEISMICITY MAP 32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA	PROJECT NUMBER: LA1548
REVIEWED BY: -	APPROVED BY: AP				SCALE: AS SHOWN
PREPARED BY: -					FIGURE NUMBER: 5

FILE PATH: N:\Projects\1500-1599\LA1548 LAUSD 32nd St-USC Performing Arts Magnet ES Campus Modernization\600 Drafting\LA1548 Figs 4_5_6.dwg
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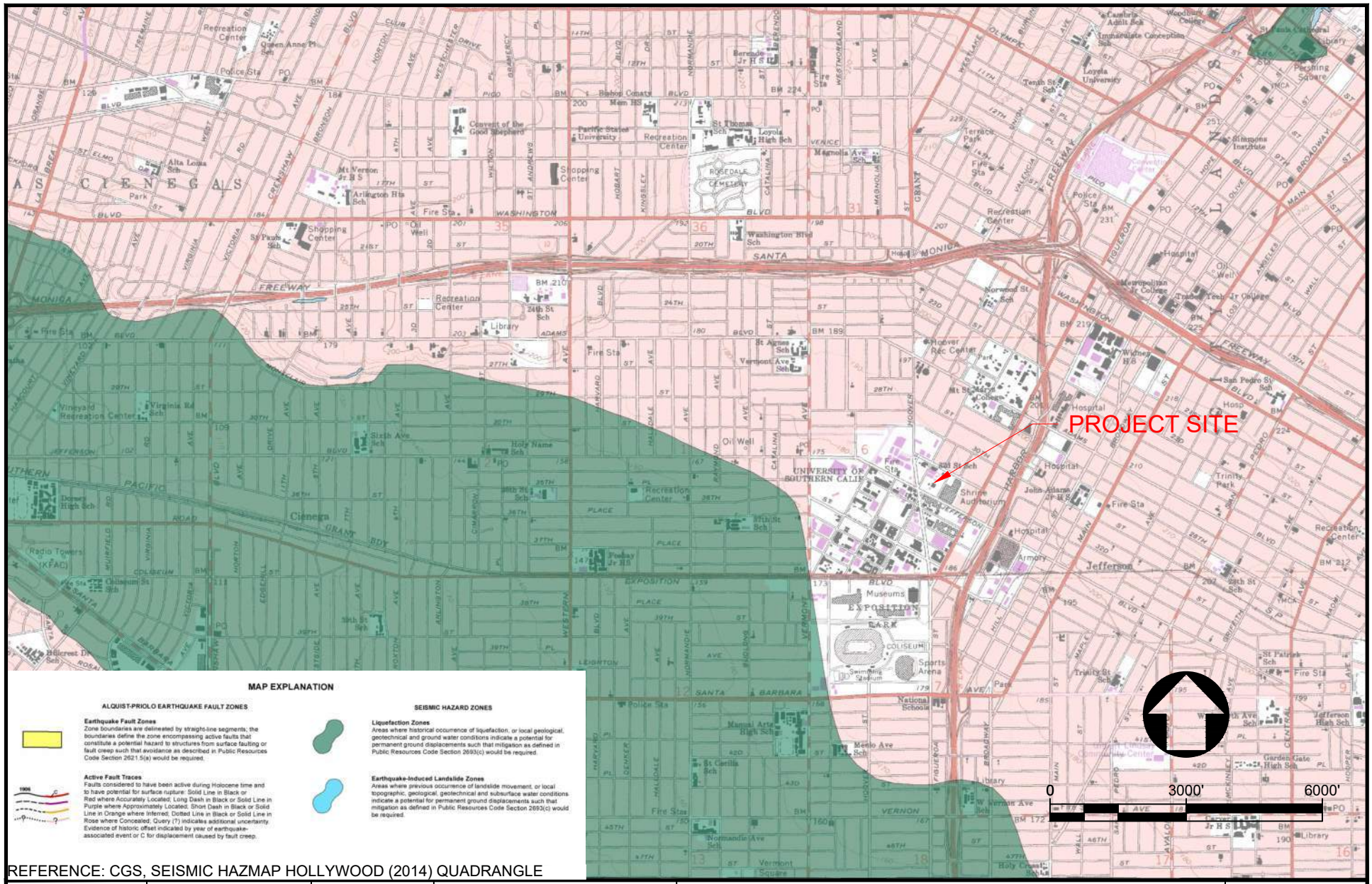
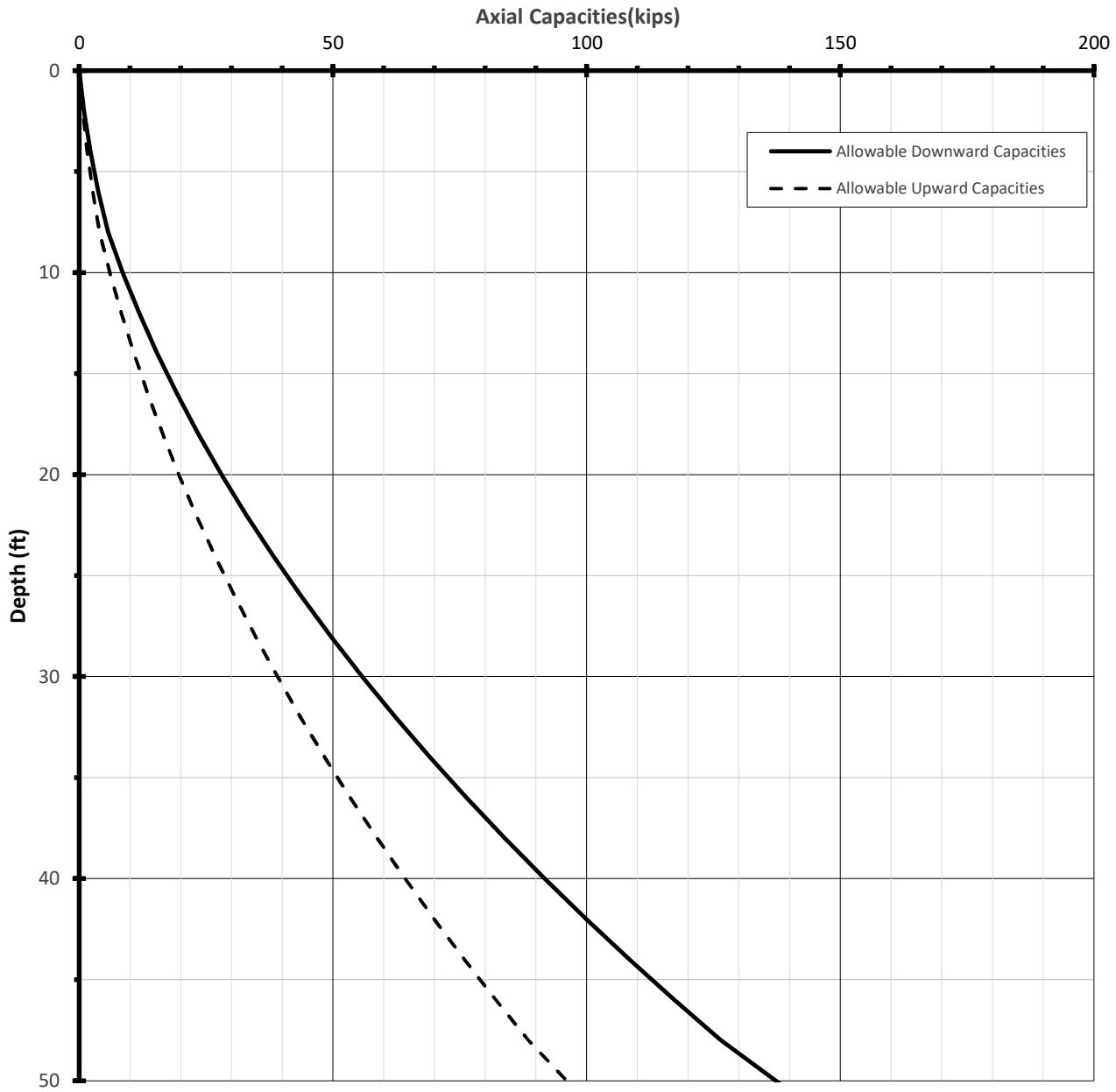


REFERENCE: CGS, SEISMIC HAZMAP HOLLYWOOD (2014) QUADRANGLE

DATE: 12/01/2021	DRAWN BY: JMT	GROUP DELTA	GROUP DELTA CONSULTANTS, INC 370 Amapola Ave. Suite 212 Torrance, CA. 90501	EARTHQUAKE ZONES OF REQUIRED INVESTIGATION MAP 32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA	PROJECT NUMBER: LA1548
REVIEWED BY: -	APPROVED BY: AP				SCALE: AS SHOWN
PREPARED BY: -					FIGURE NUMBER: 6

FILE PATH: N:\Projects\1500-1599\LA1548 LAUSD 32nd St-USC Performing Arts Magnet ES Campus Modernization\600 Drafting\LA1548 Figs 4_5_6.dwg
PLOTTED DATE: 12/1/2021 6:21:15 AM SAVED BY: josemiguelt

24-INCH-DIAMETER CIDH PILE
ALLOWABLE AXIAL CAPACITIES



NOTE:

(1) The indicated values refer to the total of dead plus live loads; a one-third increase may be used when considering wind or seismic loads.

(2) Piles in groups should be spaced a minimum of 3 pile diameters on centers.

(3) The indicated values are based on the strength of the soils; the actual pile capacities may be limited to lesser values by the strength of the piles.

(4) For ultimate design, the indicated values may be multiplied by a Factor of Safety (FS) of 2.0.

GROUP DELTA

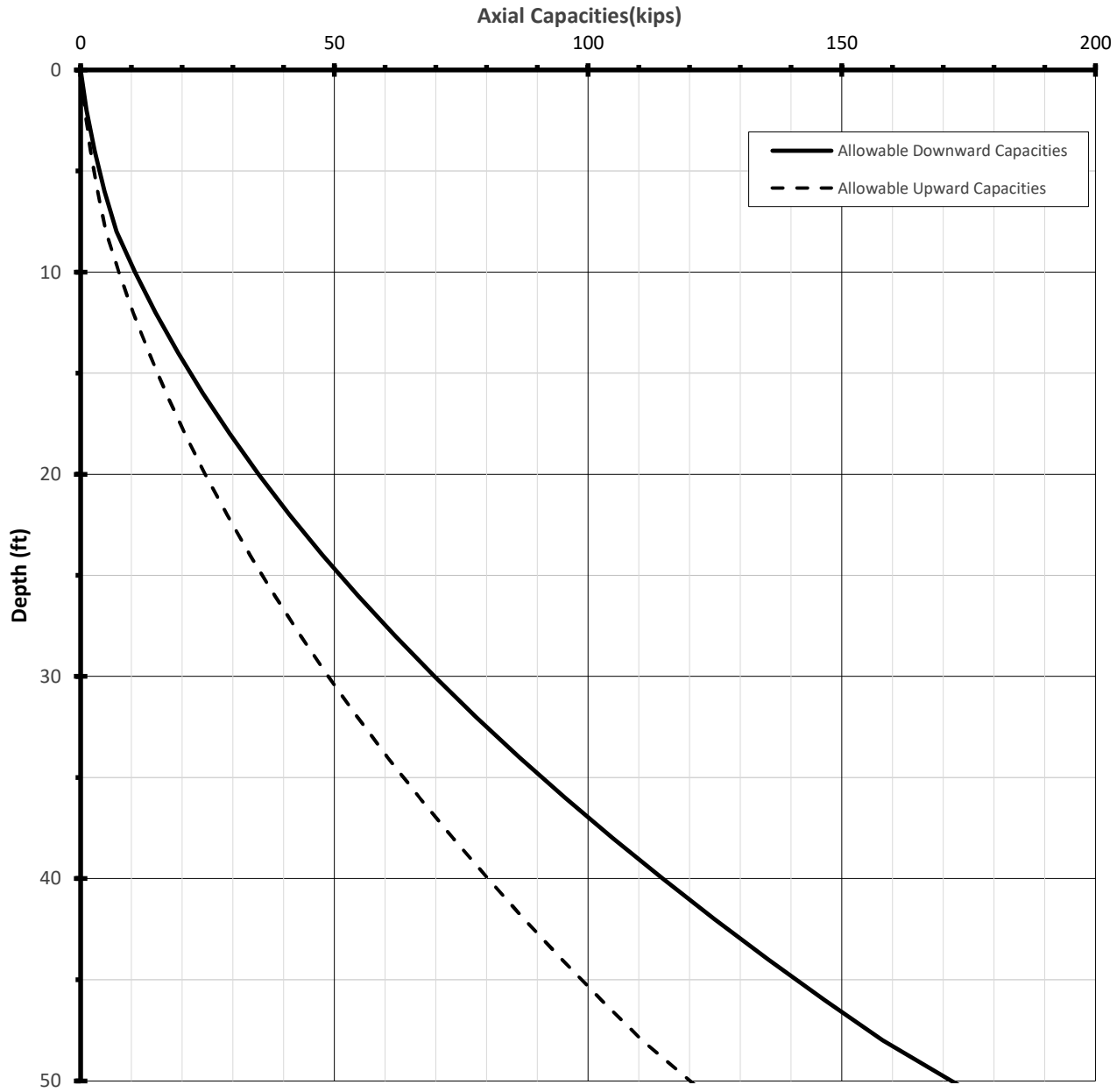
ALLOWABLE PILE CAPACITIES

32ND ST./USC PERFORMING ARTS MAGNET ES
LOS ANGELES, CALIFORNIA

PROJECT NUMBER:	FIGURE NUMBER:
LA1548	**7.1**

GROUP DELTA CONSULTANTS, INC
370 Amapola Ave. Suite 212, Torrance, CA 90501

30-INCH-DIAMETER CIDH PILE
ALLOWABLE AXIAL CAPACITIES



NOTE:

(1) The indicated values refer to the total of dead plus live loads; a one-third increase may be used when considering wind or seismic loads.

(2) Piles in groups should be spaced a minimum of 3 pile diameters on centers.

(3) The indicated values are based on the strength of the soils; the actual pile capacities may be limited to lesser values by the strength of the piles.

(4) For ultimate design, the indicated values may be multiplied by a Factor of Safety (FS) of 2.0.

GROUP DELTA

ALLOWABLE PILE CAPACITIES

32ND ST./USC PERFORMING ARTS MAGNET ES
LOS ANGELES, CALIFORNIA

PROJECT NUMBER:	FIGURE NUMBER:
LA1548	**7.2**

GROUP DELTA CONSULTANTS, INC
370 Amapola Ave. Suite 212, Torrance, CA 90501

APPENDIX A
FIELD EXPLORATIONS

A.1 Introduction

A geotechnical subsurface investigation was conducted by GDC for the preliminary geotechnical study at 32nd Street – USC Performing Arts Magnet ES Campus Modernization in Los Angeles, CA on December 4, 2021 and December 11, 2021. The investigation consisted of four (4) hollow stem auger borings and five (5) cone penetration tests (CPT). The exploration locations and numbers are shown in Figure 2 of the main report. A summary table of the GDC investigation are provided in Table B-1.

A.2 Soil Borings

Four hollow stem auger and hand auger borings were advanced from the ground surface to a depth of 31.5 feet to 51.5 feet. The borings were drilled at an approximate ground elevation of (+190) feet. Subsurface materials were visually classified and recorded by a GDC field engineer in accordance with the Unified Soil Classification System (USCS).

Drive samples and bulk samples of the encountered materials were obtained from the borings and recorded on the boring logs. Drive samples were obtained with a Modified California Sampler lined with 1-inch high metal sample rings and a Standard Penetration Test (SPT) sampler. The Modified California Sampler has an outside diameter of 3-inches, and the inside diameter of the rings is 2.42-inches. The samples were retained in brass rings and placed in sealed plastic canisters to prevent moisture loss. Standard penetration tests (SPT) were conducted using a standard 2-inch outside diameter, 1.375-inch inside diameter, split-spoon sampler in accordance with ASTM D 1586. SPT samples were placed in sealable plastic bags to protect the natural moisture. The SPT and Modified California samplers were driven into the soil at the bottom of the borehole using a 140-pound hammer free falling 30 inches. The penetration resistance (or "blowcount") in blows per six inches of driving was recorded on the logs. Bulk samples were obtained by a shovel and placed into polyethylene bags.

A key for soil classification and a boring record legend are presented in Figures A-1 and A-2, respectively. The boring logs are presented in Figures A-3a to A-6b.

A.3 Cone Penetration Tests (CPT)

Five cone penetration tests (CPT) were conducted at the site. The CPT's were advanced to depth of about 60 feet below existing grade. The CPT's were drilled at an approximate ground elevation of (+190) feet. The CPTs were performed in general accordance with ASTM D3441, using a truck-mounted electric piezocone penetrometer.

CPTs are advanced from the ground surface with a truck-mounted hydraulic ram that pushes a steel rod with a conical tip and a cylindrical friction-sleeve into the ground. The conical tip has a 60-degree apex angle and a projected cross-sectional area of 1.55 square inches. The cylindrical friction sleeve has a surface area of 23.25 square inches. Both the tip and the sleeve have outside diameters of 1.4 inches.

As the rod is advanced, electronic instruments measure and record both the tip resistance and the frictional resistance on the sleeve. The tip and frictional resistance are then analyzed, using available correlations, to estimate soil classification, density, strength, and compressibility of the subsurface materials. Unlike soil borings, in which drive samples are typically taken at discrete intervals, the CPT provides a continuous record of soil properties with depth. Hence, the CPT can define the subsurface soil profile with much higher resolution than a soil boring, often detecting thin layers that are easily missed with conventional drilling and sampling.

Shear wave velocity measurements versus depth were made in selected CPT. After each 5 ft of penetration the probe was stopped, a shear wave was generated at the ground surface, and the arrival of the shear wave was detected by the CPT probe. The arrival times of the shear waves were used to calculate the shear wave velocity versus depth.

The CPT logs and the shear wave velocity data are presented in this Appendix.

A.4 List of Attached Tables and Figures

The following table and figures are attached and complete this appendix:

Table A-1	Summary of GDC Field Explorations
Figure A-1	GDC Boring Record Legend
Figure A-2	Key for GDC Soil Classification
Figures A-3a to A-6b	GDC Boring Logs
Figures A-7 to A-11	GDC CPT Logs

Table A-1
Summary of GDC Field Explorations

Exploration No.	Date Performed	Ground Surface Elevation (feet, MSL)	Total Depth (ft)	Groundwater Depth (ft)	Exploration Type
B-1	12/4/2021	190	51.5	Not Encountered	Hollow Stem Auger
B-2	12/11/2021	190	31.5	Not Encountered	Hollow Stem Auger
B-3	12/4/2021	190	51.5	Not Encountered	Hollow Stem Auger
B-4	12/11/2021	190	31.5	Not Encountered	Hollow Stem Auger
CPT-1	12/11/2021	190	18.9	Not Encountered	Cone Penetration Test
CPT-2	12/11/2021	190	15.5	Not Encountered	Cone Penetration Test
CPT-3	12/11/2021	190	16.1	Not Encountered	Cone Penetration Test
CPT-4	12/11/2021	190	13.0	Not Encountered	Cone Penetration Test
CPT-5	12/11/2021	190	10.5	Not Encountered	Cone Penetration Test

SOIL IDENTIFICATION AND DESCRIPTION SEQUENCE

Sequence		Refer to Section		Required	Optional
		Field	Lab		
1	Group Name	2.5.2	3.2.2	●	
2	Group Symbol	2.5.2	3.2.2	●	
	Description Components				
3	Consistency of Cohesive Soil	2.5.3	3.2.3	●	
4	Apparent Density of Cohesionless Soil	2.5.4		●	
5	Color	2.5.5		●	
6	Moisture	2.5.6		●	
7	Percent or Proportion of Soil	2.5.7	3.2.4	●	◍
	Particle Size	2.5.8	2.5.8	●	◍
	Particle Angularity	2.5.9			○
	Particle Shape	2.5.10			○
8	Plasticity (for fine-grained soil)	2.5.11	3.2.5		○
9	Dry Strength (for fine-grained soil)	2.5.12			○
10	Dilatency (for fine-grained soil)	2.5.13			○
11	Toughness (for fine-grained soil)	2.5.14			○
12	Structure	2.5.15			○
13	Cementation	2.5.16		●	
14	Percent of Cobbles and Boulders	2.5.17		●	
	Description of Cobbles and Boulders	2.5.18		●	
15	Consistency Field Test Result	2.5.3		●	
16	Additional Comments	2.5.19			○

Describe the soil using descriptive terms in the order shown

Minimum Required Sequence:

USCS Group Name (Group Symbol); Consistency or Density; Color; Moisture; Percent or Proportion of Soil; Particle Size; Plasticity (optional).

◍ = optional for non-Caltrans projects

Where applicable:

Cementation; % cobbles & boulders;
Description of cobbles & boulders;
Consistency field test result

Ref.: Caltrans Soil and Rock Logging Classification, and Presentation Manual (2010)

HOLE IDENTIFICATION

Holes are identified using the following convention:

H-YY-NNN

Where:
H: Hole Type Code
YY: 2-digit year
NNN: 3-digit number (001-999)

Hole Type Code	Description
A	Auger boring (hollow or solid stem, bucket)
R	Rotary drilled boring (conventional)
RC	Rotary core (self-cased wire-line, continuously-sampled)
RW	Rotary core (self-cased wire-line, not continuously sampled)
P	Rotary percussion boring (Air)
HD	Hand driven (1-inch soil tube)
HA	Hand auger
D	Driven (dynamic cone penetrometer)
CPT	Cone Penetration Test
O	Other (note on LOTB)

Description Sequence Examples:

SANDY lean CLAY (CL); very stiff; yellowish brown; moist; mostly fines; some SAND, from fine to medium; few gravels; medium plasticity; PP=2.75.

Well-graded SAND with SILT and GRAVEL and COBBLES (SW-SM); dense; brown; moist; mostly SAND, from fine to coarse; some fine GRAVEL; few fines; weak cementation; 10% GRANITE COBBLES; 3 to 6 inches; hard; subrounded.

Clayey SAND (SC); medium dense, light brown; wet; mostly fine sand,; little fines; low plasticity.

GROUP DELTA

GROUP DELTA CONSULTANTS, INC. GEOTECHNICAL ENGINEERS AND GEOLOGISTS	FIGURE NUMBER A-1A
PROJECT NAME 32nd Street - USC Performing Arts Magnet ES Campus Modernization	PROJECT NUMBER LA1548

BORING RECORD LEGEND #1

GROUP SYMBOLS AND NAMES

Graphic / Symbol	Group Names
GW	Well-graded GRAVEL Well-graded GRAVEL with SAND
GP	Poorly graded GRAVEL Poorly graded GRAVEL with SAND
GW-GM	Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND
GW-GC	Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)
GP-GM	Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND
GP-GC	Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)
GM	SILTY GRAVEL SILTY GRAVEL with SAND
GC	CLAYEY GRAVEL CLAYEY GRAVEL with SAND
GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND
SW	Well-graded SAND Well-graded SAND with GRAVEL
SP	Poorly graded SAND Poorly graded SAND with GRAVEL
SW-SM	Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL
SW-SC	Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)
SP-SM	Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL
SP-SC	Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)
SM	SILTY SAND SILTY SAND with GRAVEL
SC	CLAYEY SAND CLAYEY SAND with GRAVEL
SC-SM	SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL
PT	PEAT
	COBBLES COBBLES and BOULDERS BOULDERS

Graphic / Symbol	Group Names
CL	Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
CL-ML	SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
ML	SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
OL	ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
OL	ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
CH	Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
MH	Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
OH	ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
OH	ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY elastic ELASTIC SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
OL/OH	ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND

FIELD AND LABORATORY TESTS

C	Consolidation (ASTM D 2435-04)
CL	Collapse Potential (ASTM D 5333-03)
CP	Compaction Curve (CTM 216 - 06)
CR	Corrosion, Sulfates, Chlorides (CTM 643 - 99; CTM 417 - 06; CTM 422 - 06)
CU	Consolidated Undrained Triaxial (ASTM D 4767-02)
DS	Direct Shear (ASTM D 3080-04)
EI	Expansion Index (ASTM D 4829-03)
M	Moisture Content (ASTM D 2216-05)
OC	Organic Content (ASTM D 2974-07)
P	Permeability (CTM 220 - 05)
PA	Particle Size Analysis (ASTM D 422-63 [2002])
PI	Liquid Limit, Plastic Limit, Plasticity Index (AASHTO T 89-02, AASHTO T 90-00)
PL	Point Load Index (ASTM D 5731-05)
PM	Pressure Meter
PP	Pocket Penetrometer
R	R-Value (CTM 301 - 00)
SE	Sand Equivalent (CTM 217 - 99)
SG	Specific Gravity (AASHTO T 100-06)
SL	Shrinkage Limit (ASTM D 427-04)
SW	Swell Potential (ASTM D 4546-03)
TV	Pocket Torvane
UC	Unconfined Compression - Soil (ASTM D 2166-06) Unconfined Compression - Rock (ASTM D 2938-95)
UU	Unconsolidated Undrained Triaxial (ASTM D 2850-03)
UW	Unit Weight (ASTM D 4767-04)
VS	Vane Shear (AASHTO T 223-96 [2004])

SAMPLER GRAPHIC SYMBOLS

- Standard Penetration Test (SPT)
- Standard California Sampler
- Modified California Sampler
- Shelby Tube
- Piston Sampler
- NX Rock Core
- HQ Rock Core
- Bulk Sample
- Other (see remarks)

DRILLING METHOD SYMBOLS

- Auger Drilling
- Rotary Drilling
- Dynamic Cone or Hand Driven
- Diamond Core

WATER LEVEL SYMBOLS

- First Water Level Reading (during drilling)
- Static Water Level Reading (after drilling, date)

DEFINITIONS FOR CHANGE IN MATERIAL

Term	Definition	Symbol
Material Change	Change in material is observed in the sample or core, and the location of change can be accurately measured.	———
Estimated Material Change	Change in material cannot be accurately located because either the change is gradational or because of limitations in the drilling/sampling methods used.	- - - - - - - -
Soil/Rock Boundary	Material changes from soil characteristics to rock characteristics.	~~~~~

Ref.: Caltrans Soil and Rock Logging Classification, and Presentation Manual (2010)

GROUP DELTA

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FIGURE NUMBER
A-1B

PROJECT NAME
32nd Street - USC Performing Arts Magnet ES Campus Modernization

PROJECT NUMBER
LA1548

BORING RECORD LEGEND #2

CONSISTENCY OF COHESIVE SOILS				
Descriptor	**Shear Strength (tsf)**	**Pocket Penetrometer, PP Measurement (tsf)**	**Torvane, TV. Measurement (tsf)**	**Vane Shear, VS. Measurement (tsf)**
Very Soft	< 0.12	< 0.25	< 0.12	< 0.12
Soft	0.12 - 0.25	0.25 - 0.50	0.12 - 0.25	0.12 - 0.25
Medium Stiff	0.25 - 0.50	0.50 - 1.0	0.25 - 0.50	0.25 - 0.50
Stiff	0.50 - 1.0	1.0 - 2.0	0.50 - 1.0	0.50 - 1.0
Very Stiff	1.0 - 2.0	2.0 - 4.0	1.0 - 2.0	1.0 - 2.0
Hard	> 2.0	> 4.0	> 2.0	> 2.0

APPARENT DENSITY OF COHESIONLESS SOILS	
Descriptor	**SPT N_{60} - Value (blows / foot)**
Very Loose	0 - 5
Loose	5 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	> 50

MOISTURE	
Descriptor	**Criteria**
Dry	No discernable moisture
Moist	Moisture present, but no free water
Wet	Visible free water

PERCENT OR PROPORTION OF SOILS	
Descriptor	**Criteria**
Trace	Particles are present but estimated to be less than 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

PARTICLE SIZE		
Descriptor		**Size (in)**
Boulder		> 12
Cobble		3 - 12
Gravel	Coarse	3/4 - 3
	Fine	1/5 - 3/4
Sand	Coarse	1/16 - 1/5
	Medium	1/64 - 1/16
	Fine	1/300 - 1/64
Silt and Clay		< 1/300

PLASTICITY OF FINE-GRAINED SOILS	
Descriptor	**Criteria**
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled, and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll, and not much time is required to reach the plastic limit; it cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

CONSISTENCY OF COHESIVE SOILS VS. N_{60}	
Description	SPT N_{60} (blows / foot)
Very Soft	0 - 2
Soft	2 - 4
Medium Stiff	4 - 8
Stiff	8 - 15
Very Stiff	15 - 30
Hard	> 30

Ref: Peck, Hansen, and Thornburn, 1974, "Foundation Engineering", Second Edition

Note: Only to be used (with caution) when pocket penetrometer or other data on undrained shear strength are unavailable. Not allowed by Caltrans Soil and Rock Logging and Classificaton Manual, 2010

CEMENTATION	
Descriptor	**Criteria**
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

Ref.: Caltrans Soil and Rock Logging Classification, and Presentation Manual (2010), with the exception of consistency of cohesive soils vs. N_{60}.

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FIGURE NUMBER
A-1C

PROJECT NAME
32nd Street - USC Performing Arts Magnet ES Campus Modernization

PROJECT NUMBER
LA1548

BORING RECORD LEGEND #3

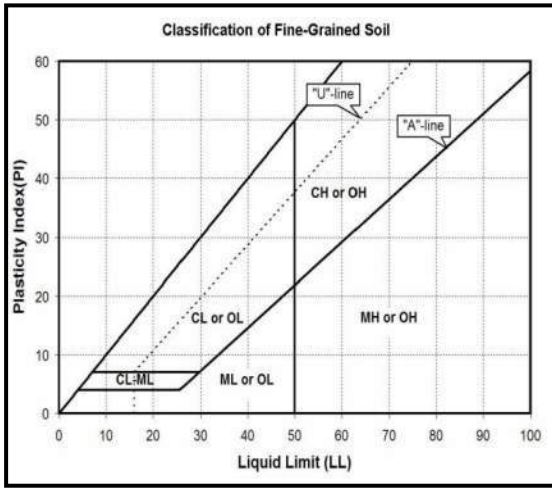
CLASSIFICATION OF INORGANIC FINE GRAINED SOILS (Soils with ≥50% finer than No. 200 Sieve)

GROUP SYMBOL				GROUP NAME
CL	<30% plus No. 200	<15% plus No. 200		Lean clay
		15-25% plus No. 200	%sand ≥%gravel	Lean clay with sand
			%sand <%gravel	Lean clay with gravel
	≥30% plus No. 200	% sand ≥ % gravel	<15% gravel	Sandy lean clay
			≥15% gravel	Sandy lean clay with gravel
		% sand < % gravel	<15% sand	Gravelly lean clay
			≥15% sand	Gravelly lean clay with sand
ML	<30% plus No. 200	<15% plus No. 200		Silt
		15-25% plus No. 200	%sand ≥%gravel	Silt with sand
			%sand <%gravel	Silt with gravel
	≥30% plus No. 200	% sand ≥ % gravel	<15% gravel	Sandy silt
			≥15% gravel	Sandy silt with gravel
		% sand < % gravel	<15% sand	Gravelly silt
			≥15% sand	Gravelly silt with sand
CH	<30% plus No. 200	<15% plus No. 200		Fat clay
		15-25% plus No. 200	%sand ≥%gravel	Fat clay with sand
			%sand <%gravel	Fat clay with gravel
	≥30% plus No. 200	% sand ≥ % gravel	<15% gravel	Sandy fat clay
			≥15% gravel	Sandy fat clay with gravel
		% sand < % gravel	<15% sand	Gravelly fat clay
			≥15% sand	Gravelly fat clay with sand
MH	<30% plus No. 200	<15% plus No. 200		Elastic silt
		15-25% plus No. 200	%sand ≥%gravel	Elastic silt with sand
			%sand <%gravel	Elastic silt with gravel
	≥30% plus No. 200	% sand ≥ % gravel	<15% gravel	Sandy elastic silt
			≥15% gravel	Sandy elastic silt with gravel
		% sand < % gravel	<15% sand	Gravelly elastic silt
			≥15% sand	Gravelly elastic silt with sand

Reference:
ASTM D 2487 and 2488

Laboratory Classification of Clay and Silt

REFERENCE: Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010).



CL: LL<50; above A-Line.

CH: LL≥50; above A-Line.

ML: LL<50; below A-Line, or PI<4, or Non-Plastic

MH: LL≥50; below A-Line.

CL-ML: above A-Line and PI=4 to 7

CL/CH, ML/MH: at or near LL=50

ML/CL, MH/CH: at or near the A-Line

Field Identification of Clays and Silts

Group Symbol	Dry Strength	Dilatancy	Toughness	Plasticity
ML	None to low	Slow to rapid	Low or thread cannot be formed	Low to nonplastic
CL	Medium to high	None to slow	Medium	Medium
MH	Low to medium	None to slow	Low to medium	Low to medium
CH	High to very high	None	High	High

GROUP DELTA

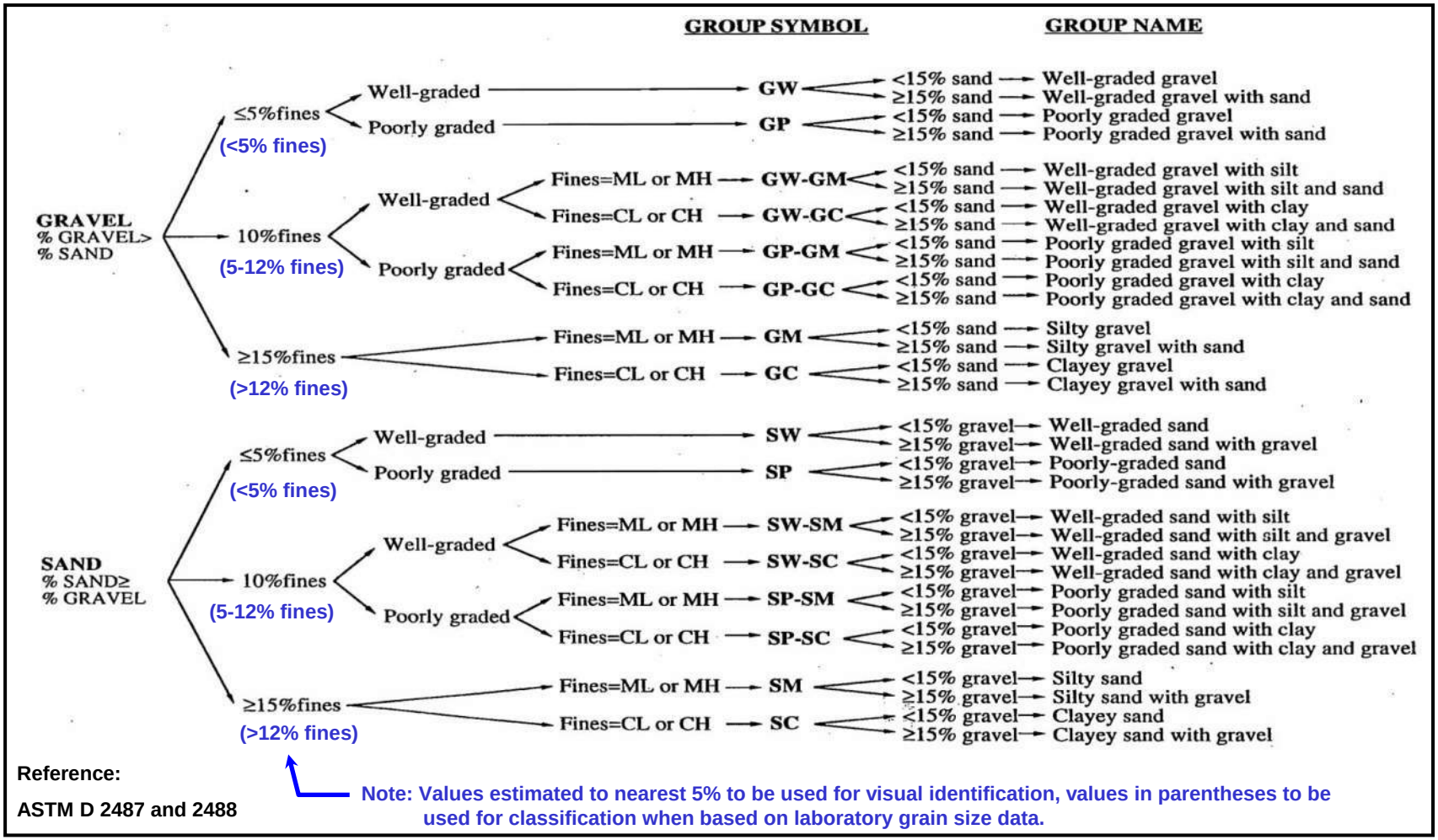
Group Delta Project No. LA1548

32nd Street - USC Performing Arts Magnet ES Campus Modernization,
Los Angeles, CA

KEY FOR SOIL CLASSIFICATION #1

Figure A-2A

CLASSIFICATION OF COARSE-GRAINED SOILS (Soils with <50% "fines" passing No. 200 Sieve)



Reference:

ASTM D 2487 and 2488

Note: Values estimated to nearest 5% to be used for visual identification, values in parentheses to be used for classification when based on laboratory grain size data.

Granular Soil Gradation Parameters

Coefficient of Uniformity: $C_u = D_{60}/D_{10}$

Coefficient of Curvature: $Cc = D_{30}^2 / (D_{60} \times D_{10})$

D_{10} = 10% of soil is finer than this diameter

D_{30} = 30% of soil is finer than this diameter

D_{60} = 60% of soil is finer than this diameter

Group Symbol	Gradation or Plasticity Requirement
SW	$C_u > 6$ and $1 \leq C_c \leq 3$
GW	$C_u > 4$ and $1 \leq C_c \leq 3$
GP or SP	Clean gravel or sand not meeting requirement for SW or GW
SM or GM	Non-plastic fines or below A-Line or PI<4
SC or GC	Plastic fines or above A-Line and PI>7

GROUP DELTA

Group Delta Project No. LA1548

32nd Street - USC Performing Arts Magnet ES
Campus Modernization,
Los Angeles, CA

KEY FOR SOIL CLASSIFICATION #2

Figure A-2B

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	B-1

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/4/2021	12/4/2021	1 of 3

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	51.5	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1					36			EI CR			ASPHALT: (2") AGGREAGTE BASE: (2.5") CLAYEY SAND (SC): yellow brown, moist, mostly fine grained SAND, some fines, little gravel, trace of debris (FILL). (Gravel = 16%, Sand = 48%, Fines = 36%)
5	185		R-2	10 16 21	37	3	123				C			SILTY SAND (SM): brown, moist, mostly medium grained SAND, little fines. Medium dense, light brown, mostly fine grained SAND, few coarse gravel (ALLUVIUM)
10	180		S-3	15 14 18	32									Poorly graded SAND with SILT (SP-SM): medium dense, brown, moist, mostly medium to grained SAND, little fine gravel, few fines.
15	175		R-4	24 50/5"	50/5"	4	130							Very dense, little coarse gravel.
20	170		S-5	25 23 27	50			8						Mostly coarse grained SAND, little coarse gravel, few fines. (Gravel = 23%, Sand = 69%, Fines = 8%)

GDC_LOG_BORING_2011 LA1548.GPJ GDCLOG.GDT 12/29/21

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FIGURE
A-3 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	B-1

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/4/2021	12/4/2021	2 of 3

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	51.5	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-6	43 50/2"	50/2"	3	122							Poorly graded SAND (SP): very dense, brown, moist, mostly coarse grained SAND, little coarse gravel.
30	160		S-7	12 34 40	74									Medium to coarse grained SAND
35	155		R-8	24 50/2"	50/2"	2	120							light brown, mostly medium to coarse grained SAND.
40	150		S-9	15 24 33	57									SILTY SAND (SM): very dense, brown, moist, mostly medium grained SAND, little fines, few coarse gravel.
45	145		R-10	39 50/2"	50/2"									Red brown, mostly fine grained SAND.

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FIGURE
A-3 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	B-1

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/4/2021	12/4/2021	3 of 3

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	51.5	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
		X	S-11	19 22 32	54									SILTY SAND (SM) (continued)
														Bottom of borehole at 51.5 feet. Groundwater not encountered. Boring backfilled with Portland-Bentonite grout and patched with cold patch asphalt.
55	135													
60	130													
65	125													
70	120													

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FIGURE
A-3 c

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	**B-2**

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/11/2021	12/11/2021	1 of 2

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	31.5	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1											ASPHALT: 2.5-inch AGGREGATE BASE: 2.5-inch SILTY SAND (SM): dark brown, moist, mostly medium grained SAND, little fines, few coarse gravel.
5	185		R-2	16 12 14	26	6	117				DS			Medium dense, brown, little gravel.
10	180		S-3	11 18 30	48			8						Poorly-graded SAND with SILT(SP-SM): Dense, yellowish brown, moist, mostly medium grained SAND, some gravel, few fines. (Gravel = 42%, Sand =50%, Fines = 8%)
15	175		R-4	50	REF	4	119							SILTY SAND with GRAVEL (SM): very dense, brown, moist, mostly fine to medium grained SAND, little fines, little coarse gravel.
20	170		S-5	26 50/6"	50/6"									Mostly coarse grained SAND.

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FIGURE
A-4 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	**B-2**

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/11/2021	12/11/2021	2 of 2

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	31.5	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-6	21 50/5"	50/5"									Poorly-graded SAND with SILT (SP-SM): very dense, orange brown, moist, mostly coarse grained SAND, some coarse gravel, few fines.
30	160		S-7	26 35 50	85									Light brown, mostly medium grained SAND, little fine gravel.
														Bottom of borehole at 31.5 feet. Groundwater not encountered. Boring backfilled with Portland-Bentonite grout and patched with cold patch asphalt.
35	155													
40	150													
45	145													

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FIGURE
A-4 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	B-3

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/4/2021	12/4/2021	1 of 3

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	51.5	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1								R CR			ASPHALT: 2.5-inch AGGREAGTE BASE: 2.5-inch CLAYEY SAND (SC): dark brown, moist, mostly medium grained SAND, some fines (ALLUVIUM).
5	185		R-2	5 6 11	17	11	119				DS			Medium dense.
10	180		S-3	9 14 22	36									SILTY SAND (SM): brown, dense, mostly medium grained SAND, little fines, few coarse gravel.
15	175		R-4	18 31 50/4"	50/4"	5	107				DS			Poorly graded SAND with SILT (SP-SM): brown, very dense, moist, mostly medium grained SAND, little coarse gravel, few fines.
20	170		S-5	16 25 31	56									Poorly graded SAND (SP): very dense, light brown, moist, mostly medium grained SAND, few fine gravel.

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GROUP DELTA

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FIGURE
A-5 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	B-3

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/4/2021	12/4/2021	2 of 3

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	51.5	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-6	8 25 46	71	2	123							Poorly graded SAND (SP): brown, very dense, mostly coarse grained SAND, little coarse gravel.
30	160		S-7	50/6"	NR									SILTY SAND (SM): Very dense, brown, moist, mostly medium grained SAND, little fines, trace of gravel.
35	155		R-8	22 44 50/4"	50/4"									Poorly graded SAND (SP): very dense, yellow brown, moist, mostly fine grained SAND.
40	150		S-9	25 49 47	96									Mostly coarse grained SAND.
45	145		R-10	18 50/5"	50/5"	3	123							

GDC_LOG_BORING_2011 LA1548.GPJ GDCLOG.GDT 12/29/21

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370 Amapola Ave., Suite 212
Torrance, CA 90501

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

FIGURE
A-5 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	B-3

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/4/2021	12/4/2021	3 of 3

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	51.5	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
		X	S-11	19 50/5"	50/5"									SANDY SILT (ML): Hard, brown, moist, mostly fines, some fine grained SAND, low plasticity.
														Bottom of borehole at 51.5 feet. Groundwater not encountered. Boring backfilled with Portland-Bentonite grout and patched with cold patch asphalt.
55	135													
60	130													
65	125													
70	120													

GDC_LOG_BORING_2011 LA1548.GPJ GDCLOG.GDT 12/29/21

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FIGURE
A-5 c

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	B-4

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/11/2021	12/11/2021	1 of 2

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	31	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1											SILTY SAND (SM): dark brown, moist, mostly fine grained SAND, little fines, trace of brick. (FILL)
5	185		R-2	9 6 7	13						C			Medium dense, mostly medium grained SAND, few gravel, trace of brick.
10	180		S-3	6 11 17	28			4						Poorly-graded SAND (SP): medium dense, brown, moist, mostly medium grained SAND, few gravel. (ALLUVIUM) (Gravel = 22%, Sand = 74%, Fines = 4%)
15	175		R-4	50	REF									No Recovery due to rock, shoe sample place in sample bag
20	170		S-5	40 50/3"	50/3"									SILTY SAND (SM): very dense, brown, moist, mostly medium grained SAND, little fines, little gravel.

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FIGURE
A-6 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	HOLE ID
32nd St USC Performing Arts Magnet ES Campus	LA1548	**B-4**

SITE LOCATION	START	FINISH	SHEET NO.
822 W 32nd Street, Los Angeles, CA 90007	12/11/2021	12/11/2021	2 of 2

DRILLING COMPANY	DRILL RIG	DRILLING METHOD	LOGGED BY	CHECKED BY
ABC Liovin	CME 75	Hollow Stem Auger	GV	PK

HAMMER TYPE (WEIGHT/DROP)	HAMMER EFFICIENCY (ERi)	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GW (ft)
140 lbs / 30 in	78.7	8	31	190	▽ NE / *na* DURING DRILLING

DRIVE SAMPLER TYPE(S) & SIZE (ID)	NOTES	
Bulk, MC (2.4"), SPT (1.4")	NA	▼ NE / *na* AFTER DRILLING

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	MOISTURE (%)	DRY DENSITY (PCF)	PASSING #200 (%)	ATTERBERG LIMITS (LL:PL:PI)	POCKET PEN (tsf)	OTHER TESTS	DRILLING METHOD	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-6	33 50	50/6"									Poorly-graded SAND (SP): very dense, light brown, moist, mostly coarse grained SAND, little coarse gravel.
30	160		S-7	28 50	50/6"									
														Bottom of borehole at 31.0 feet. Groundwater not encountered. Boring backfilled with Portland-Bentonite grout and patched with cold patch asphalt.
35	155													
40	150													
45	145													

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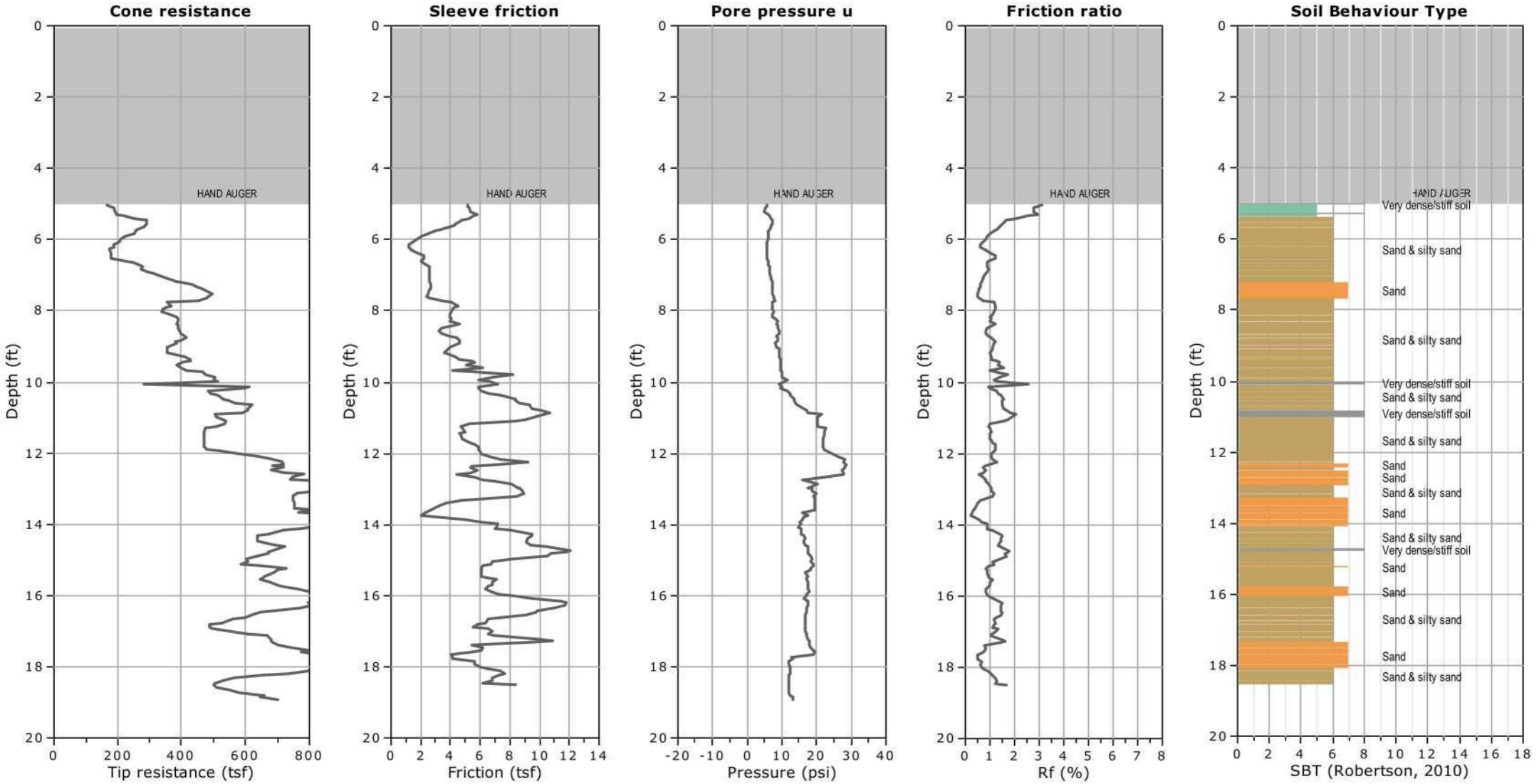
FIGURE
A-6 b

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: Group Delta Consultants / 32nd St / USC Performing Arts Magnet ES
Location: Los Angeles, CA

CPT-1
Total depth: 18.91 ft, Date: 12/11/2021



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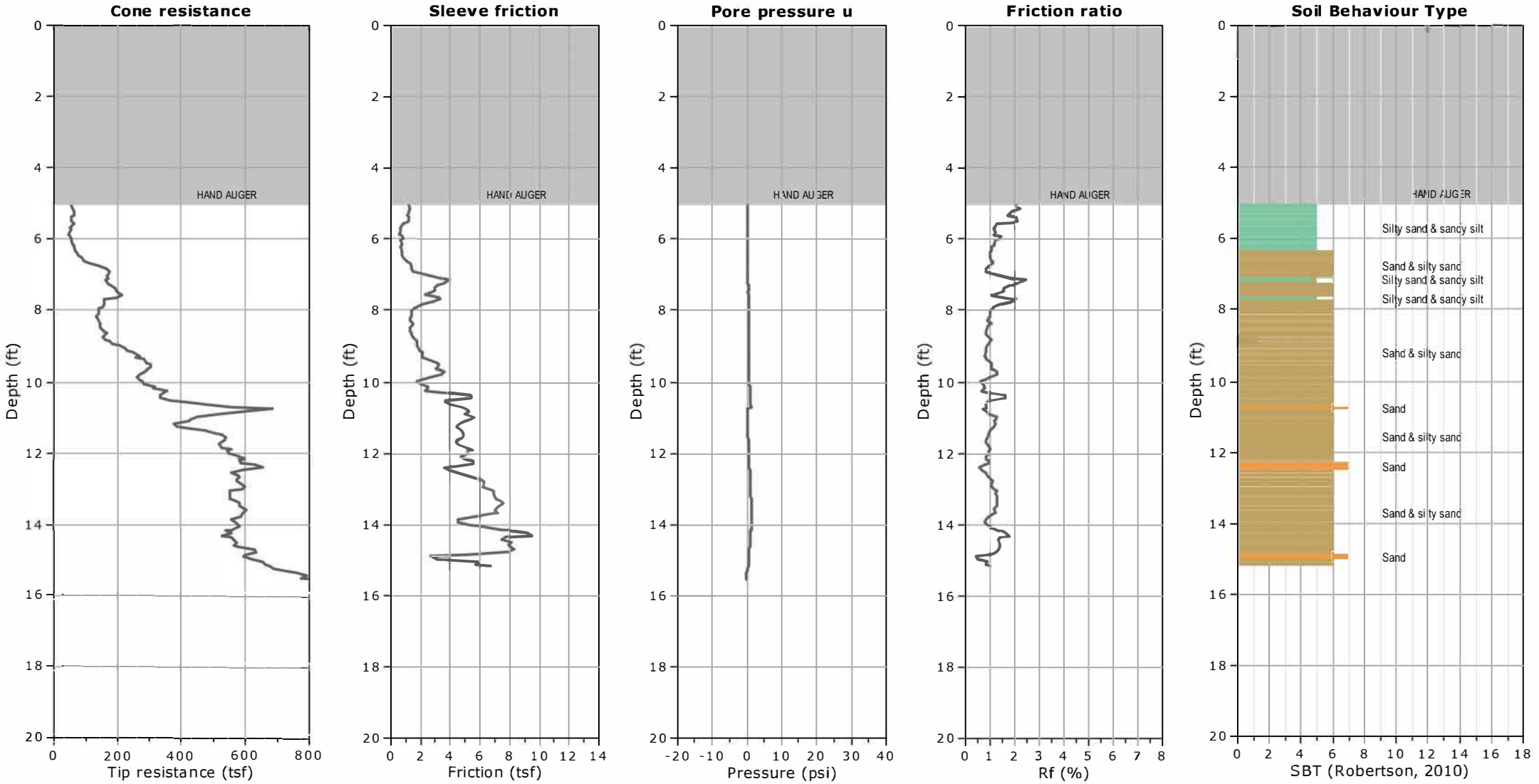
steve@kehoetesting.com
www.kehoetesting.com

Project: **Group Delta Consultants / 32nd St / USC Performing Arts Magnet ES**
Location: **Los Angeles, CA**

CPT-2
Total depth: 15.57 ft, Date: 12/11/2021



Kehoe Testing and Engineering
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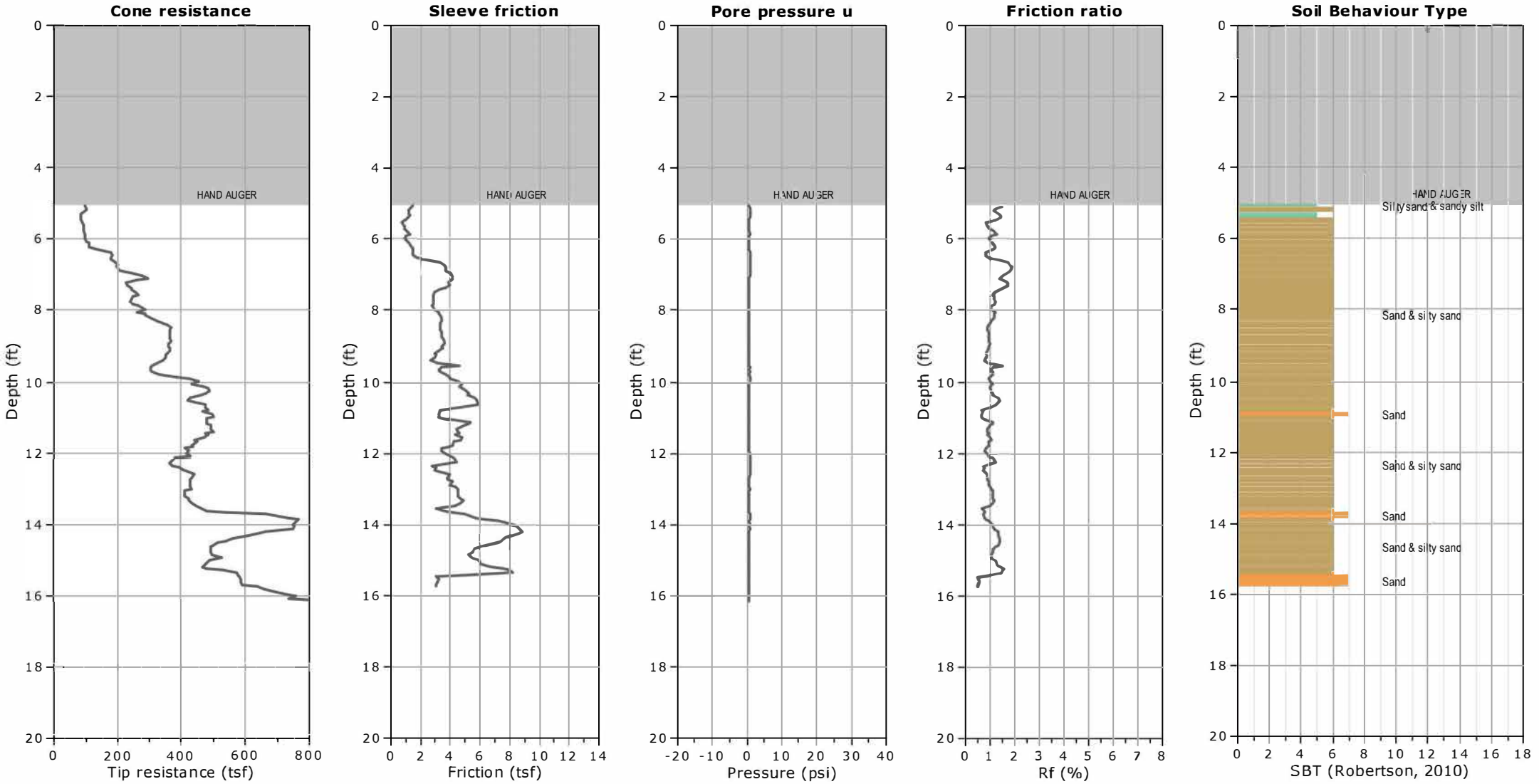
steve@kehoetesting.com
www.kehoetesting.com

Project: **Group Delta Consultants / 32nd St / USC Performing Arts Magnet ES**
Location: **Los Angeles, CA**

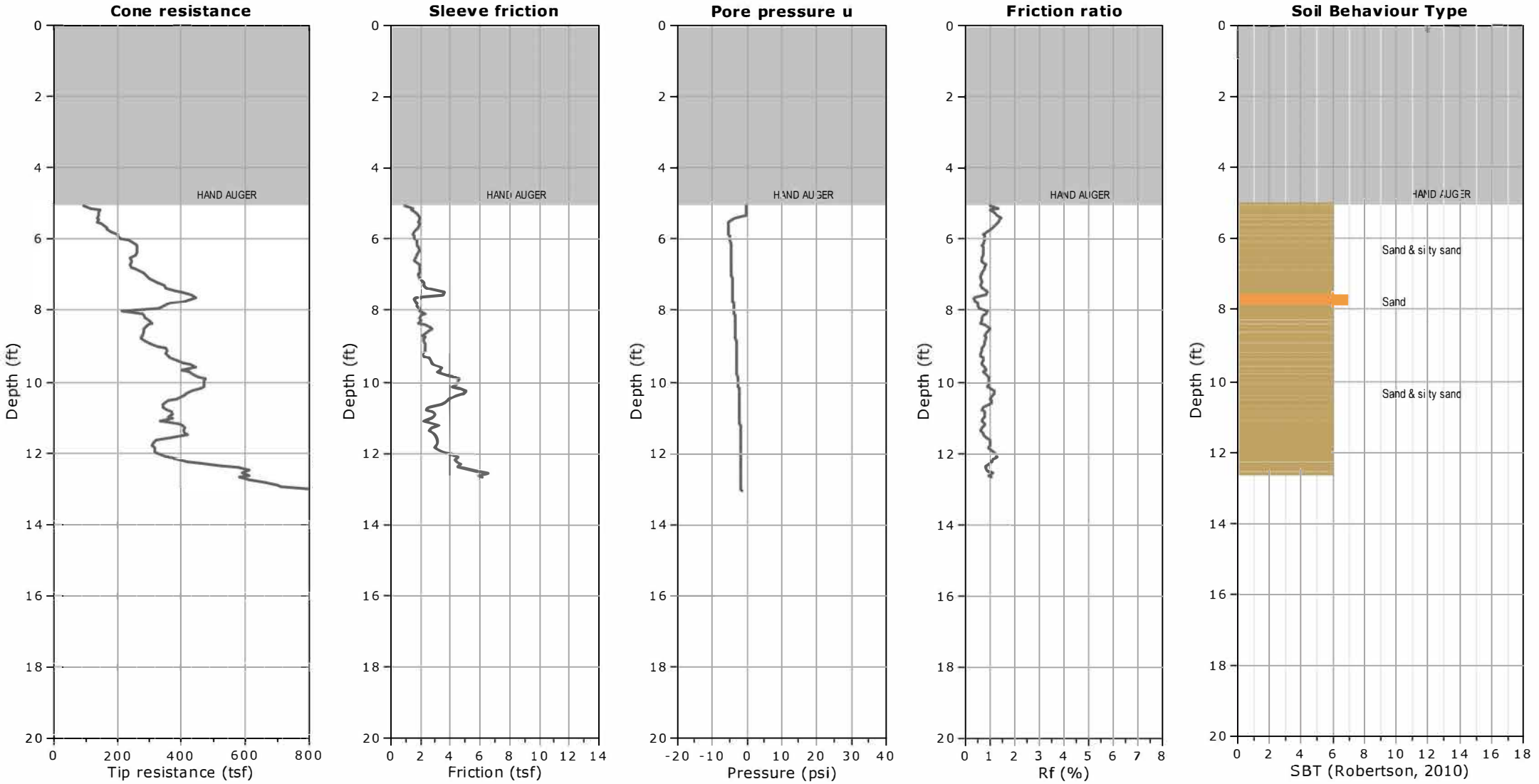
CPT-3
Total depth: 16.15 ft, Date: 12/11/2021



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Group Delta Consultants / 32nd St / USC Performing Arts Magnet ES**
Location: **Los Angeles, CA**

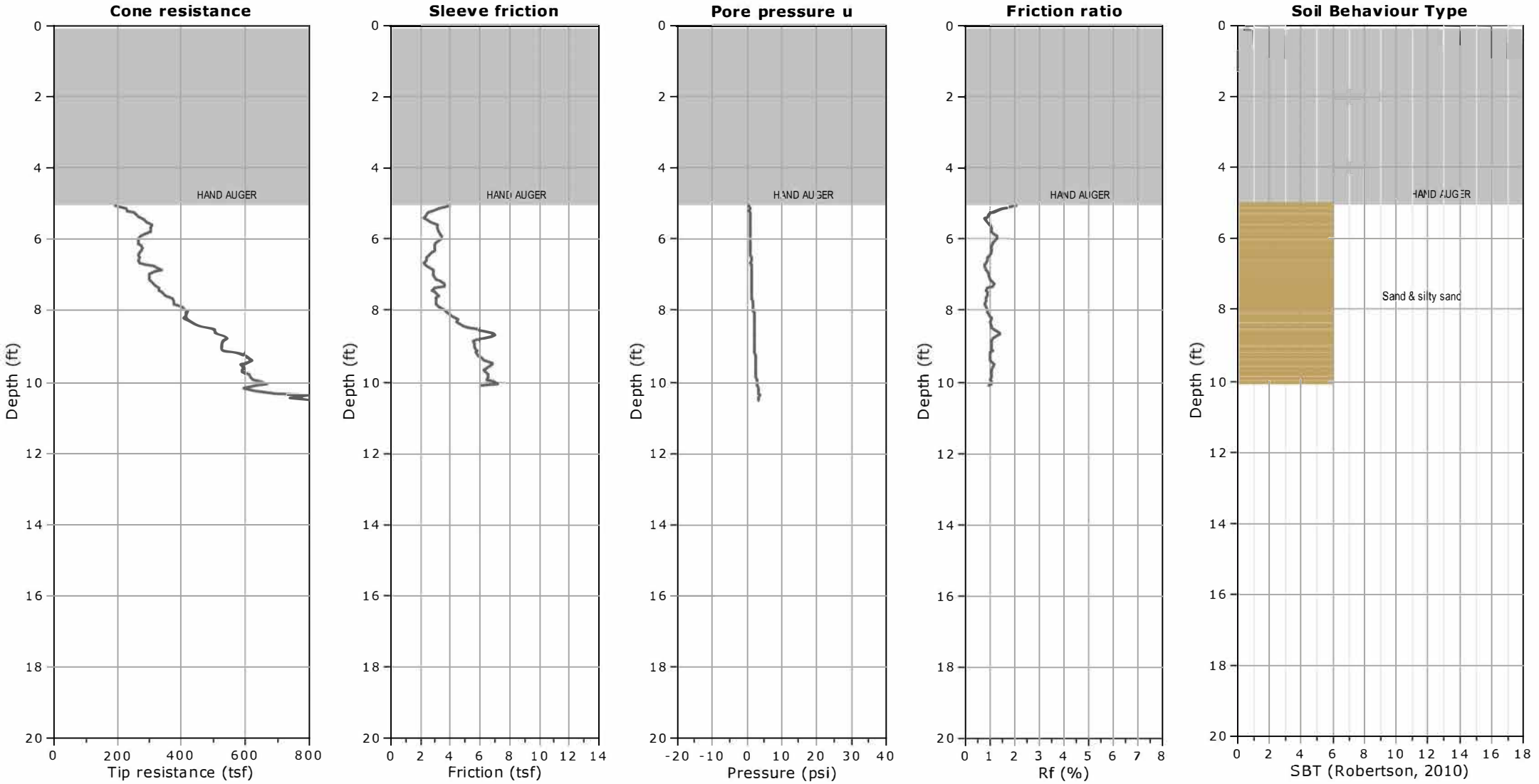
CPT-4
Total depth: 13.06 ft, Date: 12/11/2021



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Group Delta Consultants / 32nd St / USC Performing Arts Magnet ES**
Location: **Los Angeles, CA**

CPT-5
Total depth: 10.51 ft, Date: 12/11/2021



APPENDIX B
LABORATORY TESTING

B.1 Introduction

The laboratory testing was performed using appropriate American Society for Testing and Materials (ASTM) and Caltrans Test Methods (CTM).

Modified California drive samples, Standard Penetration Test (SPT) drive samples, and bulk samples collected during the field investigation were carefully sealed in the field to prevent moisture loss. The samples of earth materials were then transported to the laboratory for further examination and testing. Tests were performed on selected samples as an aid in classifying the earth materials and to evaluate their physical properties and engineering characteristics. Laboratory testing for this investigation included:

- Soil Classification: USCS (ASTM D 2487) and Visual Manual (ASTM D 2488);
- Moisture content (ASTM D 2216) and Dry Unit Weight (ASTM D 2937);
- Atterberg Limits (ASTM D 4318);
- Grain Size Distribution (ASTM D 422) & % Passing #200 Sieve (ASTM D 1140);
- One-Dimensional Consolidation (ASTM D 2435);
- Direct Shear (ASTM D 3080);
- Expansion Index (D 4829);
- R-Value (ASTM D2844, CTM 301)
- Soil Corrosivity:
  - pH (CTM 643);
  - Water-Soluble Sulfate (ASTM D 516, CTM 417);
  - Water-Soluble Chloride(Ion-Specific Probe, CTM 422);
  - Minimum Electrical Resistivity (CTM 643);

Brief descriptions of the laboratory testing program and test results are presented below.

B.2 Moisture Content and Dry Unit Weight

The natural moisture content of selected SPT and California ring samples and dry unit weight of California ring samples were determined in general accordance with ASTM D 2216 and ASTM D2937. Results of these tests are presented on the boring logs in Appendix A.

B.3 Atterberg Limits

Soil plasticity was evaluated by measuring the Atterberg limits. This test includes Liquid Limit (LL) and Plastic Limit (PL) tests to determine the Plasticity Index (PI) in accordance with ASTM D4318. Results of these tests are illustrated in the plasticity chart shown in Figure B-1A and on the boring logs of Appendix A.

B.4 Grain Size Distribution and Percent Passing No. 200 Sieve

Determination of fines verses coarser soil particles was performed by the percent #200 Sieve test. Representative samples were dried, weighed, soaked in water until individual soil particles were separated, and then washed on the No. 200 sieve. The percentage of fines (soil passing No. 200 sieve) was determined in accordance with ASTM D1140. The washed fraction retained on the No. 200 sieve was then screened on a No. 4 sieve, and the fraction retained on No. 4 was weighed to determine the percentage of gravel. The results of percent passing No. 200 sieve is presented in the boring logs in Appendix A.

B.5 One-Dimensional Consolidation

The consolidation characteristics of representative soil samples under incremental loading were evaluated by performing one-dimensional consolidation in general accordance with ASTM D 2435, using a floating ring consolidometer and dead weight system. Results of the tests are presented in Figures B-2A through B-2B

B.6 Direct Shear

To determine the drained shear strength parameters of the on-site soils, direct shear tests were performed on selected in situ samples in accordance with ASTM D 3080. After the initial weight and volume measurements were made, the sample was placed in the shear machine, and a selected normal load was applied. The sample was saturated or kept at field moisture (to model worst case field conditions), allowed to consolidate under the selected normal load, and then sheared to failure. Shear rate was selected to maintain drained conditions. Shear stress and vertical/horizontal sample deformations were monitored throughout the test. The process was repeated on additional samples of the same soil material at two additional normal loads. The test results are presented in Figures B-3A through B-3C of this appendix.

B.7 Expansion Index

The expansion potential of the site soils was estimated using the Expansion Index Test in accordance with ASTM D 4829. The results of this test are listed in Table B-1.

B.8 R-Value

An R-Value test was performed to measure the potential strength of the upper soils on site to use as potential subgrade. The results of this test are shown in Figures B-4A to B-4B.

B.9 Soil Corrosivity

Tests were performed in order to determine corrosion potential of site soils on concrete and ferrous metals. Corrosivity testing included minimum electrical resistivity and soil pH (Caltrans method 643), water soluble chlorides (Orion 170A+ Ion Probe or Caltrans Test Method 422), and water-soluble sulfates (ASTM D 516). The test results are summarized in Table B-2.

B.10 List of Attached Tables and Figures

The following tables and figures are attached and complete this appendix:

Table B-1	Summary of Expansion Index
Table B-2	Summary of Soil Corrosivity
Figure B-1A	Atterberg Limits Test Results
Figure B-2A to B-2B	One Dimensional Consolidation Test Results
Figure B-3A to B-3C	Direct Shear Test Results
Figure B-4A to B-4B	R-Value Test Results

Table B-1
Summary of Expansion Index

Boring No.	Depth (ft)	Expansion Index
B-1	0.37-5	28

Table B-2
Summary of Soil Corrosivity

Boring No.	Depth (ft)	pH	Sulfate Content (mg/kg)	Chloride Content (mg/kg)	Minimum Resistivity (ohm-cm)
B-1	0-5	7.6	60	6.0	6000
B-3	0-5	7.7	29	5.7	6800

ATTERBERG LIMITS

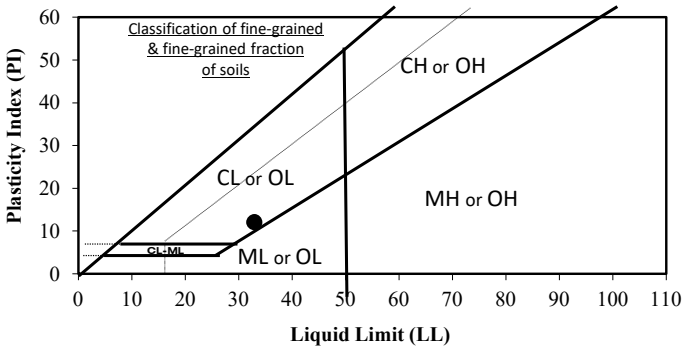
ASTM D-4318 / AASHTO T-89 / CTM 204

Project Name:	*32nd. St.-USC Performing Arts*	Tested By :	*Eric Y.*	Date:	*12/22/21*
Project No. :	*LA1548*	Data Input By:	*Eric Y.*	Date:	*12/23/21*
Boring No.:	*B-1*	Checked By:	*Pirooz K.*	Date:	
Sample No. :	*Bulk-1*	Depth (ft.) :	*0.37' - 5'*		
Initial Moisture:		Container No.:	*AL-12*		
Description.:	*Olive Brown Silty Clayey Sand*				

	PLASTIC LIMIT		LIQUID LIMIT			
TEST NO.	1	2	1	2	3	4
Number of Blows [N]			34	25	16	
Container No.	A	B	C	D	E	
Wet Wt. of Soil + Cont. (gm.)	22.30	22.03	28.74	29.17	30.40	
Dry Wt. of Soil + Cont. (gm.)	21.10	20.86	25.46	25.72	26.39	
Wt. of Container (gm.)	15.27	15.17	15.25	15.39	15.01	
Moisture Content (%) [Wn]	20.58	20.56	32.13	33.40	35.24	

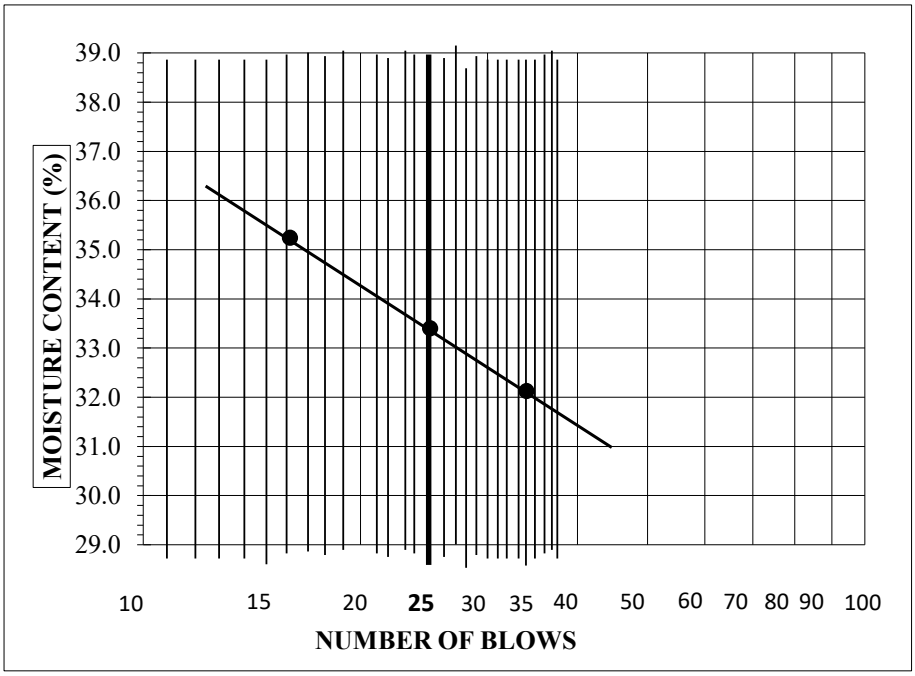
LIQUID LIMIT	**33**
PLASTIC LIMIT	**21**
PLASTICITY INDEX	**12**
PI at "A" - Line = 0.73(LL-20) =	**9.5**

One - Point Liquid Limit Calculation $LL=Wn(N/25)^{0.121}$



PROCEDURES USED

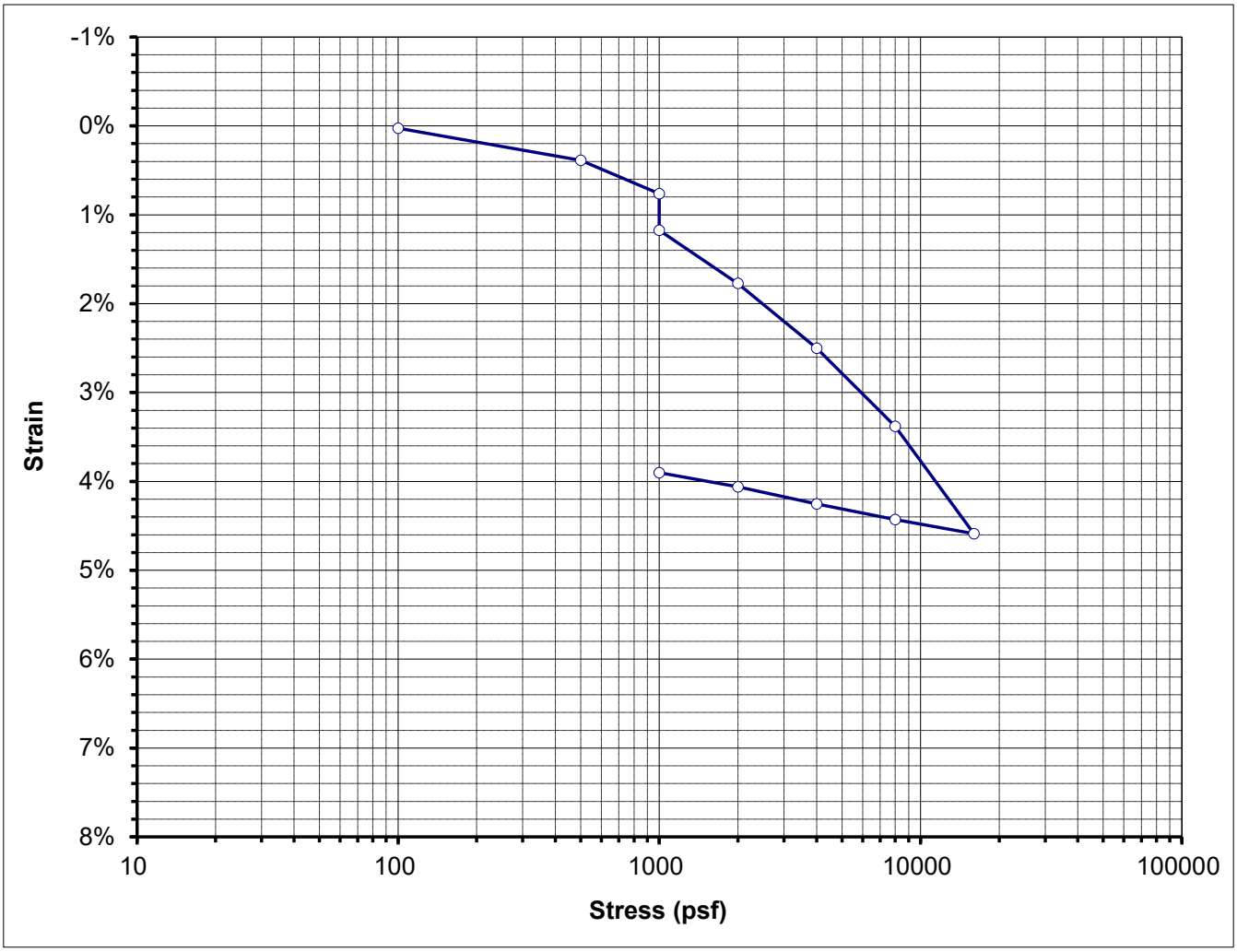
- ☐ Wet Preparation
  - Multipoint Wet Preparation
- ☒ Dry Preparation
  - Multipoint Dry Preparation
- ☒ Procedure A
  - Multipoint Test
- ☐ Procedure B
  - One-point Test



GROUP DELTA CONSULTANTS
1320 South Simpson Circle
Anaheim, CA 92806
(714) 660-7500 office
(714) 660-7550 fax

Figure B-1A

CONSOLIDATION TEST RESULTS
ASTM D-2435



Boring No.	B-1	Sample Depth	5'
Sample No.	R-2	USCS	SP-SM

BEFORE TEST

Initial Moisture Content:	2.91%	
Initial Dry Unit Wt:	123.2	pcf
Initial Total Unit Wt.:	126.8	pcf
Initial Void Ratio:	0.34	
Initial Degree of Saturation:	22.8%	

AFTER TEST

Final Moisture Content:	10.83%	
Final Dry Unit Wt:	128.1	pcf
Final Total Unit Wt.:	142.0	pcf
Final Void Ratio:	0.29	
Final Degree of Saturation:	100.0%	

Water Added at: 1000 psf

ATTERBERG LIMITS					
LL=	0	PL=	0	PI=	0

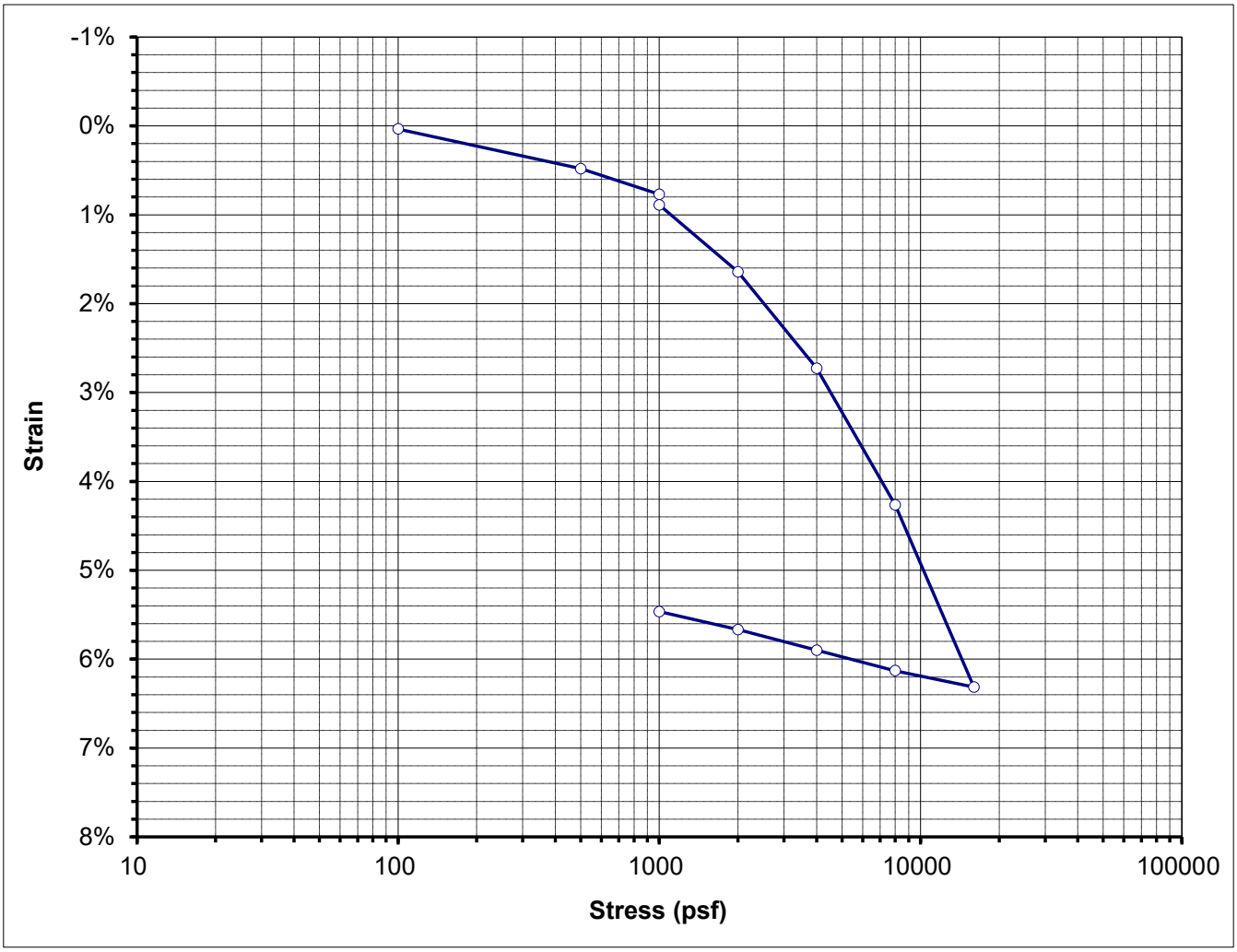
Assumed Specific Gravity of Solids, Gs: 2.64

PRESSURE (psf)	SAMPLE STRAIN	VOID RATIO
100	0.03%	0.337
500	0.39%	0.333
1000	0.76%	0.328
1000	1.17%	0.322
2000	1.77%	0.314
4000	2.50%	0.304
8000	3.38%	0.292
16000	4.59%	0.276
8000	4.43%	0.278
4000	4.25%	0.281
2000	4.06%	0.283
1000	3.90%	0.285

PROJECT NUMBER:	LA1548	PROJECT NAME:	32nd St. USC Performing Arts	FIGURE NO.	B-2A

GROUP DELTA

CONSOLIDATION TEST RESULTS
ASTM D-2435



Boring No.	B-4	Sample Depth	5'
Sample No.	R-2	USCS	SM

BEFORE TEST

Initial Moisture Content:	7.07%	
Initial Dry Unit Wt:	109.3	pcf
Initial Total Unit Wt.:	117.0	pcf
Initial Void Ratio:	0.45	
Initial Degree of Saturation:	40.1%	

AFTER TEST

Final Moisture Content:	14.51%	
Final Dry Unit Wt:	115.5	pcf
Final Total Unit Wt.:	132.3	pcf
Final Void Ratio:	0.37	
Final Degree of Saturation:	100.0%	

Water Added at: 1000 psf

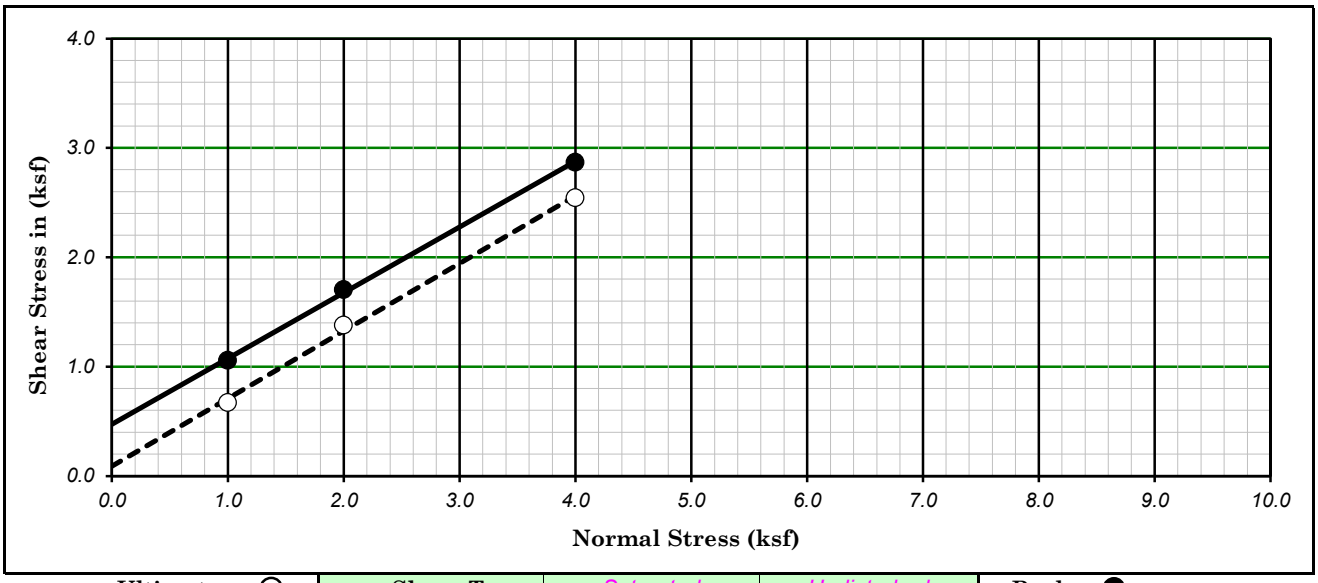
ATTERBERG LIMITS					
LL=	0	PL=	0	PI=	0

Assumed Specific Gravity of Solids, Gs: 2.53

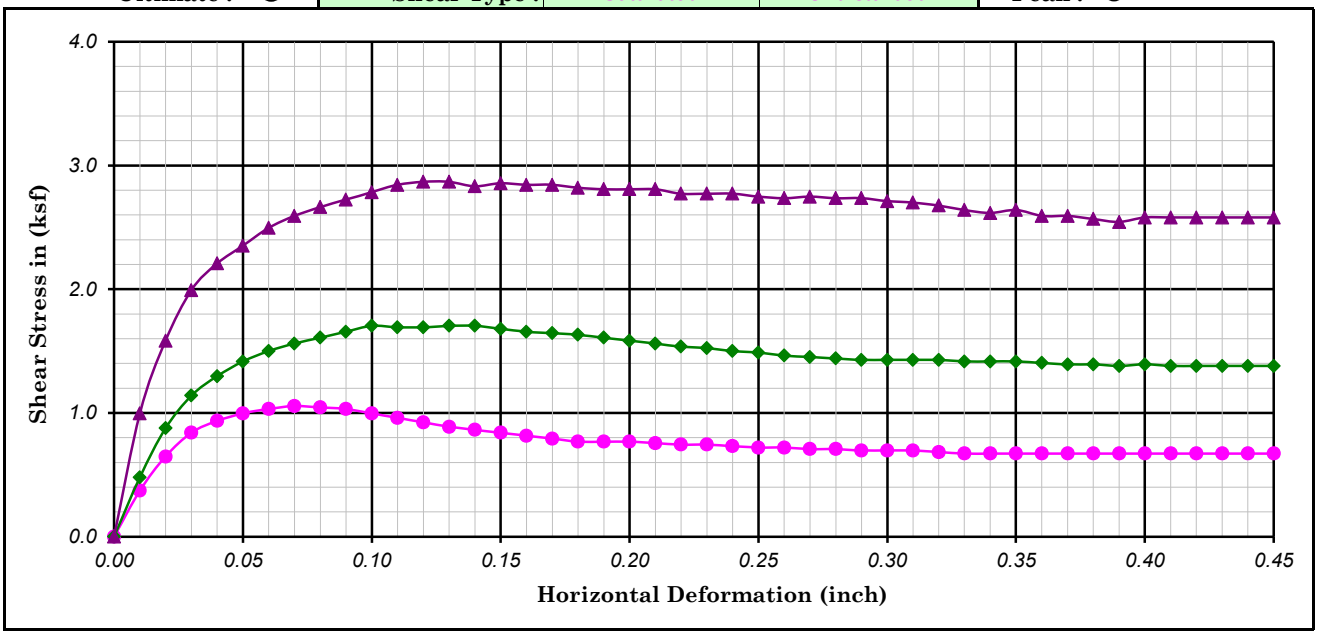
PRESSURE (psf)	SAMPLE STRAIN	VOID RATIO
100	0.03%	0.445
500	0.48%	0.439
1000	0.77%	0.435
1000	0.89%	0.433
2000	1.64%	0.422
4000	2.73%	0.406
8000	4.26%	0.384
16000	6.31%	0.354
8000	6.13%	0.357
4000	5.90%	0.360
2000	5.67%	0.364
1000	5.46%	0.367

PROJECT NUMBER:	LA1548	PROJECT NAME:	32nd St. USC Performing Arts	FIGURE NO.	B-2B

GROUP DELTA



Ultimate : ○	Shear Type :	Saturated	Undisturbed	Peak : ●



Boring No. : B-3		Strength Intercept (C) :	0.47	(ksf)	Peak	0.09	(ksf)	Ultimate
Sample No. : R-2			22.70	(kPa)		4.31	(kPa)	
Depth (ft/m) : 5.0	1.53	Friction Angle (ϕ) :	31.00	Degree		31.72	Degree	
Description : Very Dark Gray Clayey Sand with Gravel					Shear Rate (inch/minute) :		0.0003	

SYMBOL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DRY DENSITY (kN/m^3)	VOID RATIO	NORMAL STRESS (ksf)	NORMAL STRESS (kPa)	PEAK STRESS (ksf)	PEAK STRESS (kPa)	ULTIMATE STRESS (ksf)	ULTIMATE STRESS (kPa)
●	14.43	121.71	19.16	0.38	1.00	47.88	1.06	50.56	0.67	32.18
◆	14.69	121.76	19.16	0.38	2.00	95.76	1.70	81.59	1.38	66.07
▲	14.91	123.48	19.44	0.37	4.00	191.52	2.87	137.32	2.54	121.81

GROUP DELTA

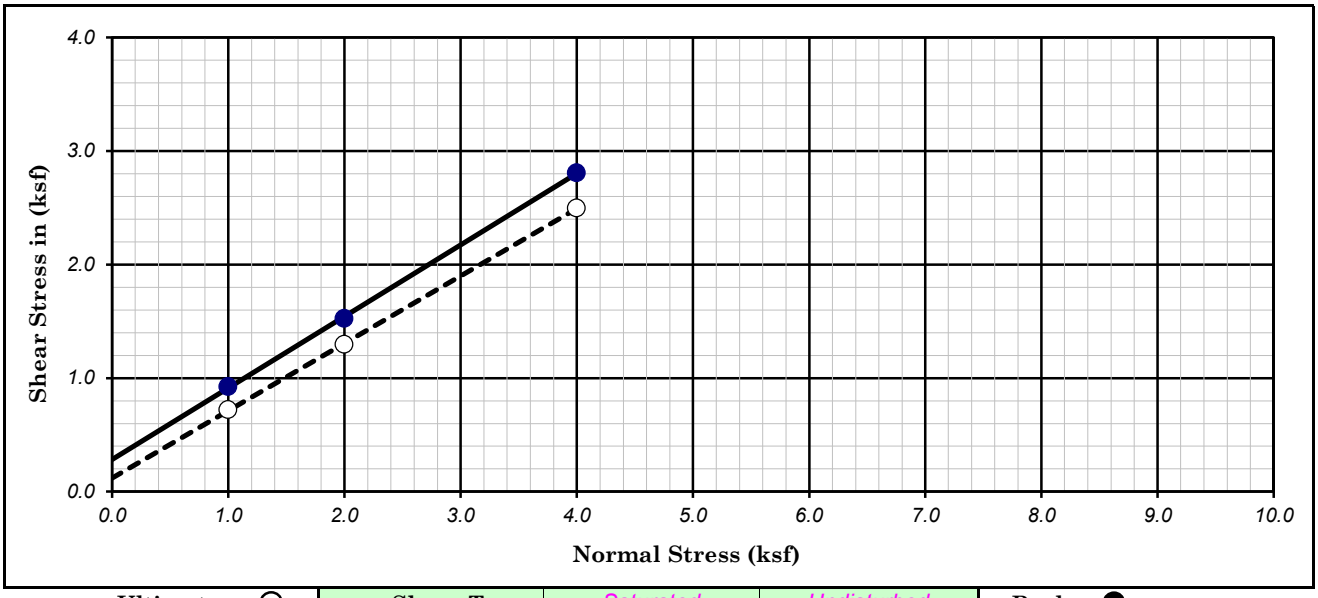
32nd. St. - USC Performing Arts Magnet ES Campus

Project No. : LA1548

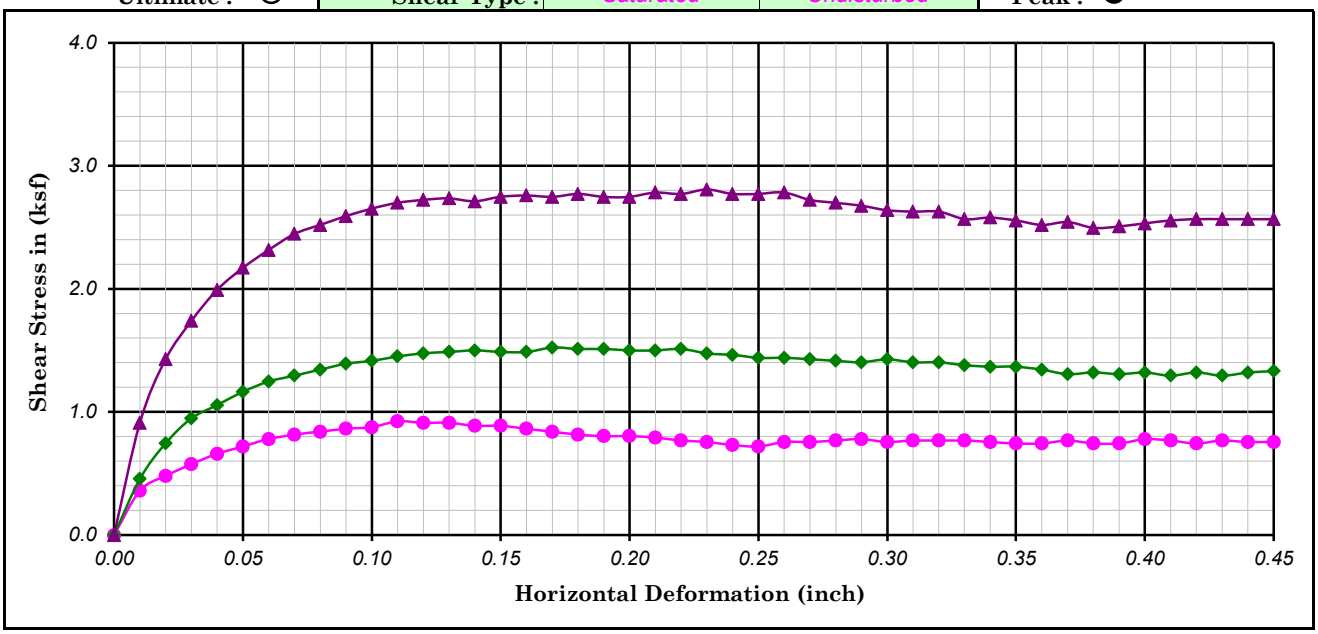
Date : 12/22/21

DIRECT SHEAR TEST
(ASTM D -3080)

Figure No. :B-3A



Ultimate : ○	Shear Type :	Saturated	Undisturbed	Peak : ●



Boring No. : B-3		Strength Intercept (C) :	0.28	(ksf)	Peak	0.12	(ksf)	Ultimate
Sample No. : R-4			13.50	(kPa)		5.75	(kPa)	
Depth (ft/m) : 15.0	4.58	Friction Angle (ϕ) :	32.21	Degree		30.67	Degree	
Description : Olive Brown Poorly-graded Sand with Silt and Gravel					Shear Rate (inch/minute) :		0.0005	

SYMBOL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DRY DENSITY (kN/m^3)	VOID RATIO	NORMAL STRESS (ksf)	NORMAL STRESS (kPa)	PEAK STRESS (ksf)	PEAK STRESS (kPa)	ULTIMATE STRESS (ksf)	ULTIMATE STRESS (kPa)
●	17.93	108.53	17.08	0.55	1.00	47.88	0.92	44.24	0.72	34.47
◆	17.92	108.56	17.09	0.55	2.00	95.76	1.52	72.97	1.30	62.05
▲	17.95	108.35	17.05	0.56	4.00	191.52	2.81	134.45	2.50	119.51

GROUP DELTA

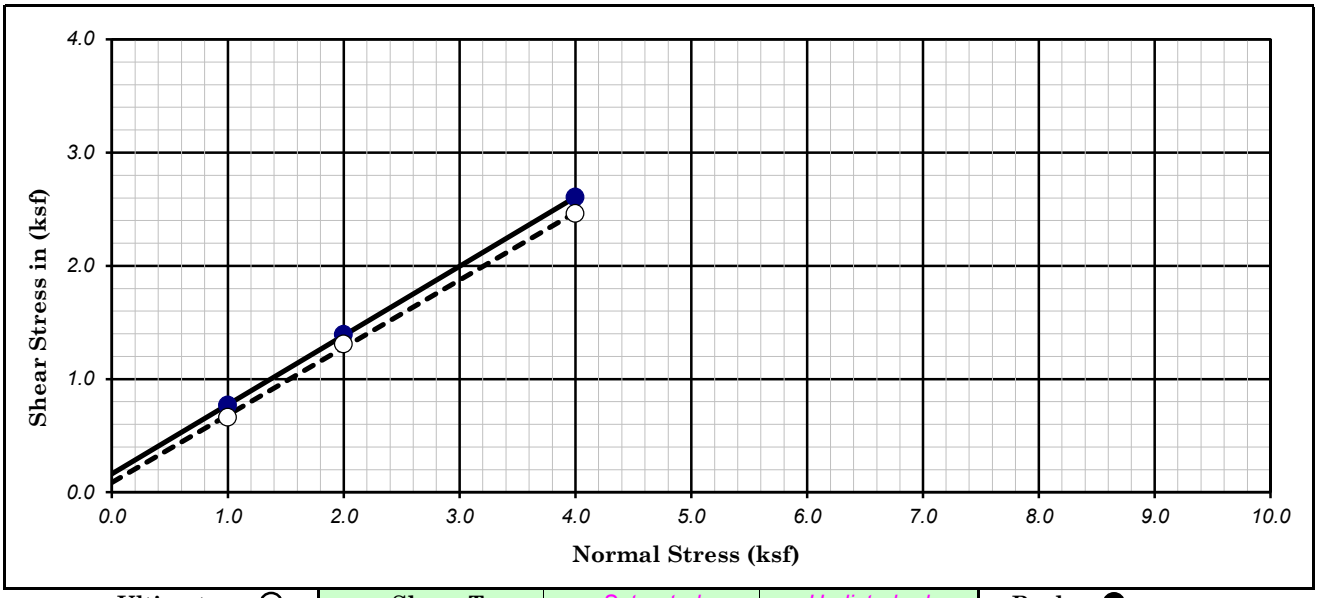
32nd. St. - USC Performing Arts Magnet ES Campus

Project No. : LA1548

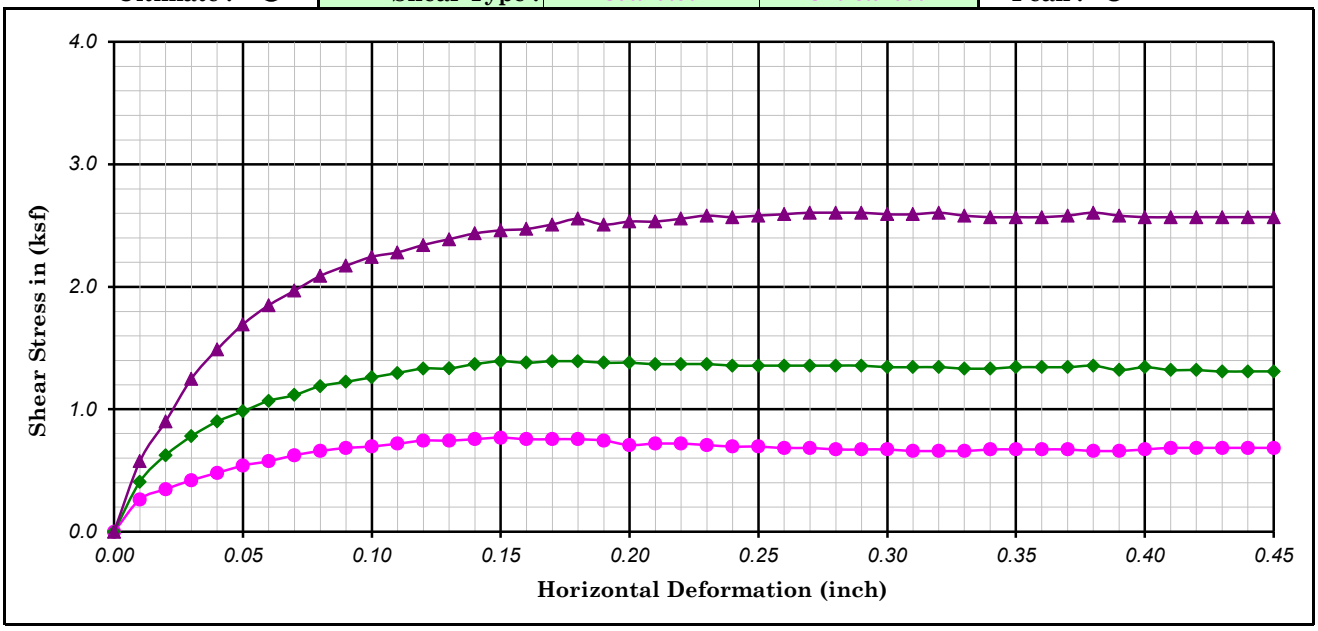
Date : 12/22/21

DIRECT SHEAR TEST
(ASTM D -3080)

Figure No. : B-3B



Ultimate : ○	Shear Type :	Saturated	Undisturbed	Peak : ●



Boring No. : B-4		Strength Intercept (C) :	0.16	(ksf)	Peak	0.08	(ksf)	Ultimate
Sample No. : R-2			7.76	(kPa)		4.02	(kPa)	
Depth (ft/m) : 5.0	1.53	Friction Angle (ϕ) :	31.43	Degree		30.82	Degree	
Description : Brown Silty Sand with Gravel					Shear Rate (inch/minute) :		0.0003	

SYMBOL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	DRY DENSITY (kN/m^3)	VOID RATIO	NORMAL STRESS (ksf)	NORMAL STRESS (kPa)	PEAK STRESS (ksf)	PEAK STRESS (kPa)	ULTIMATE STRESS (ksf)	ULTIMATE STRESS (kPa)
●	17.37	111.15	17.49	0.52	1.00	47.88	0.77	36.77	0.66	31.60
◆	17.46	112.21	17.66	0.50	2.00	95.76	1.39	66.65	1.31	62.63
▲	17.50	113.63	17.89	0.48	4.00	191.52	2.60	124.68	2.46	117.78

GROUP DELTA

32nd. St. - USC Performing Arts Magnet ES Campus

Project No. : LA1548

Date : 12/22/21

DIRECT SHEAR TEST
(ASTM D -3080)

Figure No. : B-3C

SAMPLE NO.: SO6285 **SAMPLE DATE:**

SAMPLE LOCATION: B-3 / Bulk-1 @ 0.41' - 5' **TEST DATE:** 12/21/21

SAMPLE DESCRIPTION: Dark Brown Clayey Silty Sand

LABORATORY TEST DATA

	TEST SPECIMEN	1	2	3	4	5	
A	COMPACTOR PRESSURE	175	150	125			[PSI]
B	INITIAL MOISTURE	9.2	9.2	9.2			[%]
C	BATCH SOIL WEIGHT	1200	1200	1200			[G]
D	WATER ADDED	25.0	30.0	35.2			[ML]
E	WATER ADDED (D*(100+B)/C)	2.3	2.7	3.2			[%]
F	COMPACTION MOISTURE (B+E)	11.5	11.9	12.4			[%]
G	MOLD WEIGHT	2077.5	2080.9	2075.0			[G]
H	TOTAL BRIQUETTE WEIGHT	3274.5	3256.1	3245.3			[G]
I	NET BRIQUETTE WEIGHT (H-G)	1197.0	1175.2	1170.3			[G]
J	BRIQUETTE HEIGHT	2.54	2.55	2.52			[IN]
K	DRY DENSITY (30.3*I/((100+F)*J))	128.1	124.8	125.2			[PCF]
L	EXUDATION LOAD	4190	3555	2425			[LB]
M	EXUDATION PRESSURE (L/12.54)	334	283	193			[PSI]
N	STABILOMETER AT 1000 LBS	68	74	76			[PSI]
O	STABILOMETER AT 2000 LBS	118	125	128			[PSI]
P	DISPLACEMENT FOR 100 PSI	3.57	3.70	3.86			[Turns]
Q	R VALUE BY STABILOMETER	20	16	14			
R	CORRECTED R-VALUE (See Fig. 14)	20	16	14			
S	EXPANSION DIAL READING	0.0000	0.0000	0.0000			[IN]
T	EXPANSION PRESSURE (S*43,300)	0	0	0			[PSF]
U	COVER BY STABILOMETER	0.73	0.77	0.78			[FT]
V	COVER BY EXPANSION	0.00	0.00	0.00			[FT]

TRAFFIC INDEX:	4.5
GRAVEL FACTOR:	1.58
UNIT WEIGHT OF COVER [PCF]:	130
R-VALUE BY EXUDATION:	17
R-VALUE BY EXPANSION:	100
R-VALUE AT EQUILIBRIUM:	17

*Note: Gravel factor estimated from pavement section using CTM 301, Section C, Part b.

REV. 2, DATED 1/31/15

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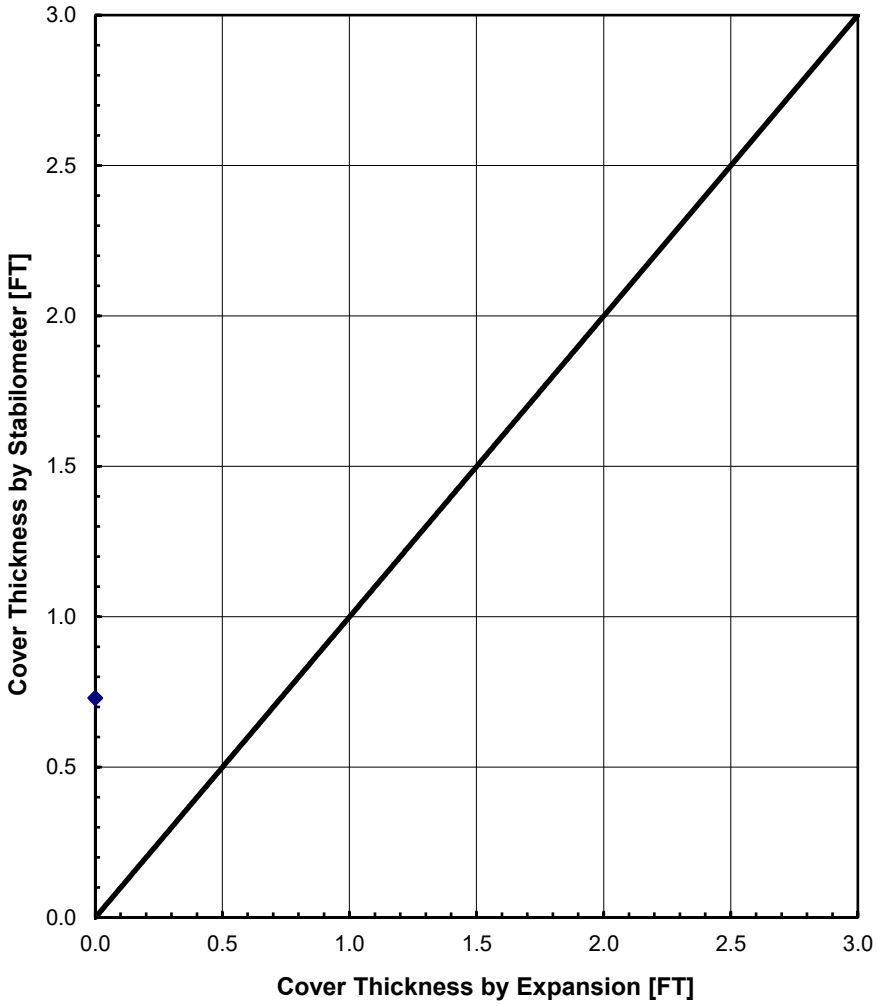
R-VALUE TEST RESULTS

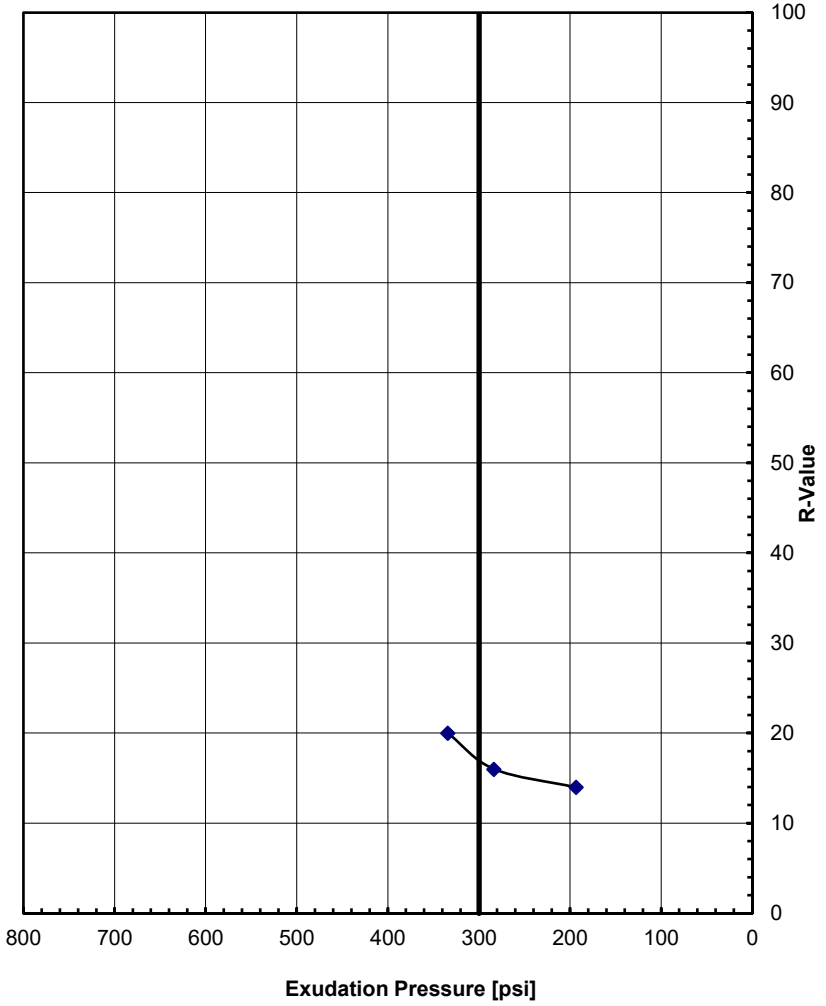
Project No. LA1548

FIGURE B-4A

Sample: SO6285, B-3 / Bulk-1 @ 0.41' - 5'

R-Value at Equilibrium: 17





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COVER AND EXUDATION CHARTS

Project No. LA1548

FIGURE B-4B

APPENDIX C
SITE-SPECIFIC SEISMIC HAZARD ANALYSIS PER ASCE 7-16

C.1 INTRODUCTION

This section presents the results of the site-specific seismic hazard analysis per the 2019 California Building Code (CBC) and ASCE 7-16 (ASCE/SEI 7-16) for the project site. The subsurface soil conditions used in this study were obtained from our field exploration program including seismic CPTs and hallow stem auger borings.

Horizontal Acceleration Response Spectra (ARS) for 5-percent damping was developed for the Risk-Targeted Maximum Considered Earthquake (MCE_R), as defined by ASCE 7-16, following Chapter 21.2, and performing both probabilistic and deterministic seismic hazard analyses. Site-specific probabilistic seismic hazard analyses were performed using the computer tool OpenSHA (Field, 2003), and the seismic source model used is the Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3). Development of the horizontal ARS was also performed using the ground motion models developed as part of the Next Generation Attenuation (NGA) – West 2 research project.

C.2. PROJECT LOCATION

The site is located in Los Angeles, California. The site coordinates are:

Latitude:	33.0243° N
Longitude:	118.2827° W

C.3. SEISMIC SETTING

The project site is located within the Los Angeles basin, an area with very high seismic activity. Table C-1 below lists the active faults closest to the site, along with their Fault Type, Maximum Magnitude (Mw) and Site-To-Source Rupture Distance (Rrup). These faults are obtained primarily from the Version 3 of the Uniform California Earthquake Rupture Forecast (UCERF3) (Field et al., 2013), which is the seismic source model developed by the Working Group on California Earthquake Probabilities (WGCEP) in 2013. The UCERF3 model was subsequently adopted by the 2014 U.S. National Seismic Hazard Mapping Program (NSHM) (Petersen et al., 2014) to develop probabilistic seismic hazard maps.

Table C-1. Significant Active Faults Near the Site

Fault	Fault Type	Maximum Magnitude, M_W	Site-to-Source Distance, R_{rup} (km)
Puente Hills (LA)	Reverse	7.0	2.8
Puente Hills	Reverse	7.1	5.4
Elysian Park	Reverse	6.7	7.1
Newport-Inglewood (alt 1 and alt 2)	Strike-slip	7.2	7.7
Santa Monica	Strike-slip	6.8	8.8
Hollywood	Strike-Slip	6.7	10.0
Compton	Reverse	7.5	13.0
Verdugo	Reverse	6.9	15.3
Puente Hills (Santa Fe Springs)	Reverse	6.6	15.8
Sierra Madre	Reverse	7.2	22.5
Southern San Andreas (Parkfield + Cholame + Carrizo + Big Bend + Northern Mojave + Southern Mojave + Northern San Bernardino + Southern San Bernardino + San Gorgonio Pass-Garnet Hill + Coachella)	Strike-slip	8.2	59.5

The maximum magnitudes and scenarios adopted are consistent with the published Building Seismic Safety Council 2014 Event Set (the adopted deterministic ruptures used for the 2014 USGS NSHM (BSSC, 2015). For multi-segment faults, such as San Andreas, where different earthquake scenarios are considered, the one producing the largest magnitude was reported in the table along with its combined segments.

C.4 SITE CHARACTERIZATION

Site-specific shear wave velocity measurements were performed in seismic CPTs in our investigation for estimation of average shear wave velocities in the upper 100 feet or approximately 30 meters ($V_{S,30}$). However, due to presence of a gravelly sandy layer within a depth range of 10 to 18, all performed CPTs hit refusal in this depth range. Correlations were used to supplement the measurements and develop the average shear wave velocity in the upper 30 meters ($V_{S,30}$). Seismic shear wave velocity measurements from CPTs were averaged in the upper 15 feet for site characterization. Below a depth of 15 feet, shear wave velocity at the site was estimated using correlations of V_S with SPT blowcounts (Wair and Shantz, 2012) down to the

explored depth of 51.5 feet. The empirical correlation based on Boore (2004) was used to extrapolate the shear wave velocity to 100 feet (30 meters). The $V_{S,30}$ value at the project site was estimated to be 338 m/s (1,109 ft/s). The estimation of $V_{S,30}$ value at the site and the adopted $V_{S,30}$ is shown graphically in Figure C-1.

Publicly available nearby shear wave velocity measurements were also reviewed to supplement our data. Based on a review of the USGS compilation of $V_{S,30}$ data in the United States (McPhillips et al., 2020), a site across the street at USC reported a $V_{S,30}$ value of 350 m/s based on measured shear wave velocity to 100 feet using the refraction microtremor (ReMi) method. This value is consistent with our estimated $V_{S,30}$ of 338 m/s (within 5 percent).

C.5 GROUND MOTION PREDICTION EQUATIONS

Site-specific ground motions are influenced by type of faulting, magnitude of characteristic earthquakes, and local soil conditions. Many ground motion models, also referred to as Ground Motion Prediction Equations (GMPEs) have been developed to estimate the variation of spectral acceleration with earthquake magnitude and source-to-site distance, among other parameters. The Pacific Earthquake Engineering Research (PEER) coordinated a large multidisciplinary project entitled "NGA (Next Generation Attenuation)-West 2 Research Project" (Bozorgnia et al., 2014), referred to as NGA-West2. In NGA-West2, five teams have developed and presented horizontal ground motion models for shallow crustal earthquakes in active tectonic regions including Western North America. These teams are Abrahamson et al. (2014), Boore et al. (2014), Campbell and Bozorgnia (2014), Choiu and Youngs (2014), and Idriss (2014). We have not used Idriss (2014) as this GMPE is only applicable to $V_{S,30} > 450$ m/s.

The NGA-West2 relationships use measured values of shear wave velocity ($V_{S,30}$) as input. As previously discussed, we have adopted an average $V_{S,30}$ of 338 m/s to represent the underlying soil conditions at the project site. In addition, some of the ground motion models require input for $Z_{1.0}$ (defined as the depth in meters to a shear wave velocity of V_s = 1 km/s) and $Z_{2.5}$ (defined as the depth in km to a shear wave velocity of V_s = 2.5 km/s). These two parameters are used to capture the basin effect on site response. The SCEC Community Velocity Model (CVM) Version 4, Caltrans basin maps of $Z_{1.0}$ and $Z_{2.5}$ for Los Angeles basin, and correlations included in the Campbell and Bozorgnia ground motion model (2013), were reviewed for selection of $Z_{1.0}$ and $Z_{2.5}$ values. $Z_{1.0}$ value of 500 m and $Z_{2.5}$ of 3.5 km were selected based on the values from SCEC CVM and Caltrans basin maps which were comparable for the project site.

C.6 PROBABILISTIC SEISMIC HAZARD ANALYSIS

Site-specific Probabilistic Seismic Hazard Analyses (PSHA) were performed using the computer tool OpenSHA (Fields, 2003), using the UCERF3 seismic source model and the updated NGA-West2 ground motion models. Uniform hazard horizontal ARS were developed up to a period of 10 seconds. The hazard spectrum, developed for 5-percent damping, is presented IN Figure C-2.

Note that supplementary probabilistic seismic hazard analyses were performed using the USGS Unified Hazard Tool (https://earthquake.usgs.gov/hazards/interactive/) for comparison to the OpenSHA analyses. These analyses were performed using the dynamic version of the Conterminous U.S. 2014 (v4.2.0) at available spectral periods, using the Site Class D option ($V_{S,30}$

= 259 m/s) and the Site Class C/D boundary ($V_{S,30}$ = 360 m/s). Results of these supplementary analyses show good agreement with our OpenSHA analyses.

The site-specific probabilistic MCE_R was developed in accordance with ASCE 7-16 Section 21.2.1, for the maximum horizontal component and adjusted for targeted risk (1-percent probability of collapse in 50 years). The median (RotD50) ground motion was adjusted to the maximum rotated component of ground motion (RotD100) using ASCE 7-16 default maximum direction factors (21.2). The second adjustment modifies the spectra from a 2-percent probability of exceedance in 50 years to a targeted risk of 1-percent probability of collapse in 50 years, which is performed using Method 1 of ASCE 7-16 (Section 21.2.1), using the risk coefficients C_{RS} and C_{R1}. The risk coefficients (per ASCE 7-16) were obtained using the Structural Engineers Association of California (SEAOC) / Office of Statewide Health Planning and Development (OSHPD) Seismic Design Maps website application (SEAOC/OSHPD, 2019). The risk coefficients of C_{RS} = 0.906 and C_{R1} = 0.902 were used in the analyses. The probabilistic MCE_R ARS for the project site is shown in Figure C-2.

C.7 DETERMINISTIC SEISMIC HAZARD ANALYSIS

Site-specific Deterministic Seismic Hazard Analyses (DSHA) were performed based on the characteristics of earthquake scenarios identified as predominant contributors to the regional seismic hazard. Pertinent characteristics of the earthquake scenarios include parameters such as distance from the site to the causative fault and the maximum magnitude of earthquake associated with the fault. The effects of local soil conditions ($V_{S,30}$) and the mechanism of faulting are accounted for in the ground motion models as well.

DSHAs were performed for the sources identified in Table C-1. The NGA West2 GMMs were used to develop a 5-percent damped spectral ARS for each source. A plot of the DSHA results for the project site is shown in Figure C-3. According to ASCE 7-16 Section 21.2.2, the deterministic MCE_R, which corresponds to the 84th-percentile (median plus one standard deviation), 5-percent damped spectral response accelerations in the direction of maximum horizontal response at any spectral period, must not be lower than deterministic lower limit. Therefore, the 84th-percentile spectral values obtained from the GMPEs are used to develop the deterministic spectrum. The ground motions were adjusted to the maximum rotated component of ground motion using the ASCE 7-16 default maximum direction factors (21.2). Figure C-4 shows the results of our DSHA along with ASCE 7-16 deterministic lower limit spectrum.

C.8 DETERMINATION OF SITE-SPECIFIC RESPONSE SPECTRA

Development of the site-specific MCE_R ARS as defined by ASCE 7-16, Chapter 21.2, was performed using the seismic hazard analysis procedure described in the previous sections. In accordance with ASCE 7-16 Section 21.2.3, the site-specific MCE_R acceleration response spectra are taken as the lesser of the probabilistic and deterministic MCE_R spectra, but not less than 150-percent of the 80% of site-specific design spectrum in Section 21.3. For the project site, the probabilistic spectrum controls over the deterministic spectrum at periods up to 4 seconds, and the 150-percent minimum site-specific design spectrum controls at periods above. Figure C-5 presents the 5-percent damped horizontal ARS along with tabulated values for the MCE_R.

C.9 SITE-SPECIFIC DESIGN ACCELERATION PARAMETERS

The short period design spectral acceleration (S_{DS}) and 1-second period design spectral acceleration (S_{D1}) parameters were determined in accordance with ASCE 7-16 Section 21.4. The parameter S_{DS} is taken as 90-percent of the maximum spectral acceleration from the site-specific spectrum at periods between 0.2 and 5 seconds. The parameter S_{D1} is taken as the maximum of the product between period and spectral acceleration for periods from 1 to 5 seconds for sites with $V_{S,30} \leq 365.76$ m/s. The parameters S_{MS} and S_{M1} shall be taken as 1.5 times S_{DS} and S_{D1} respectively. The values obtained shall not be less than 80 percent of the values determined in accordance with ASCE 7-16, Section 11.4.3 for S_{MS} and S_{M1} and Section 11.4.4 for S_{DS} and S_{D1}. Table C-2 presents the site-specific design acceleration parameters.

Maximum Considered Earthquake-Geometric Mean, MCE_G, peak ground acceleration adjusted for site effects, PGA_M, was calculated in accordance with ASCE 7-16 Section 21.5. Per ASCE 7-16 Section 21.5, PGA_M shall be taken as the lesser of the probabilistic geometric mean peak ground acceleration and the deterministic geometric mean peak ground acceleration and shall not be less than the 80% of PGA_M obtained from Equation 11.8-1 of this code. The site-specific PGA_M, was calculated equal to 0.897(g).

Table C-2. Seismic Design Acceleration Parameters

Design Parameters	General Seismic Design Parameter (ASCE 7-16 Section 11.4)	Site-Specific Seismic Design Parameters (ASCE 7-16 Section 21.4)
S_s (g)	1.899	-
S_1 (g)	0.673	-
Site Class	D	D
F_a	1.0	-
F_v	n/a	-
S_{MS} (g)	1.899	2.014
S_{M1} (g)	n/a	1.449
S_{DS} (g)	1.266	1.343
S_{D1} (g)	n/a	0.966

C.10 REFERENCES

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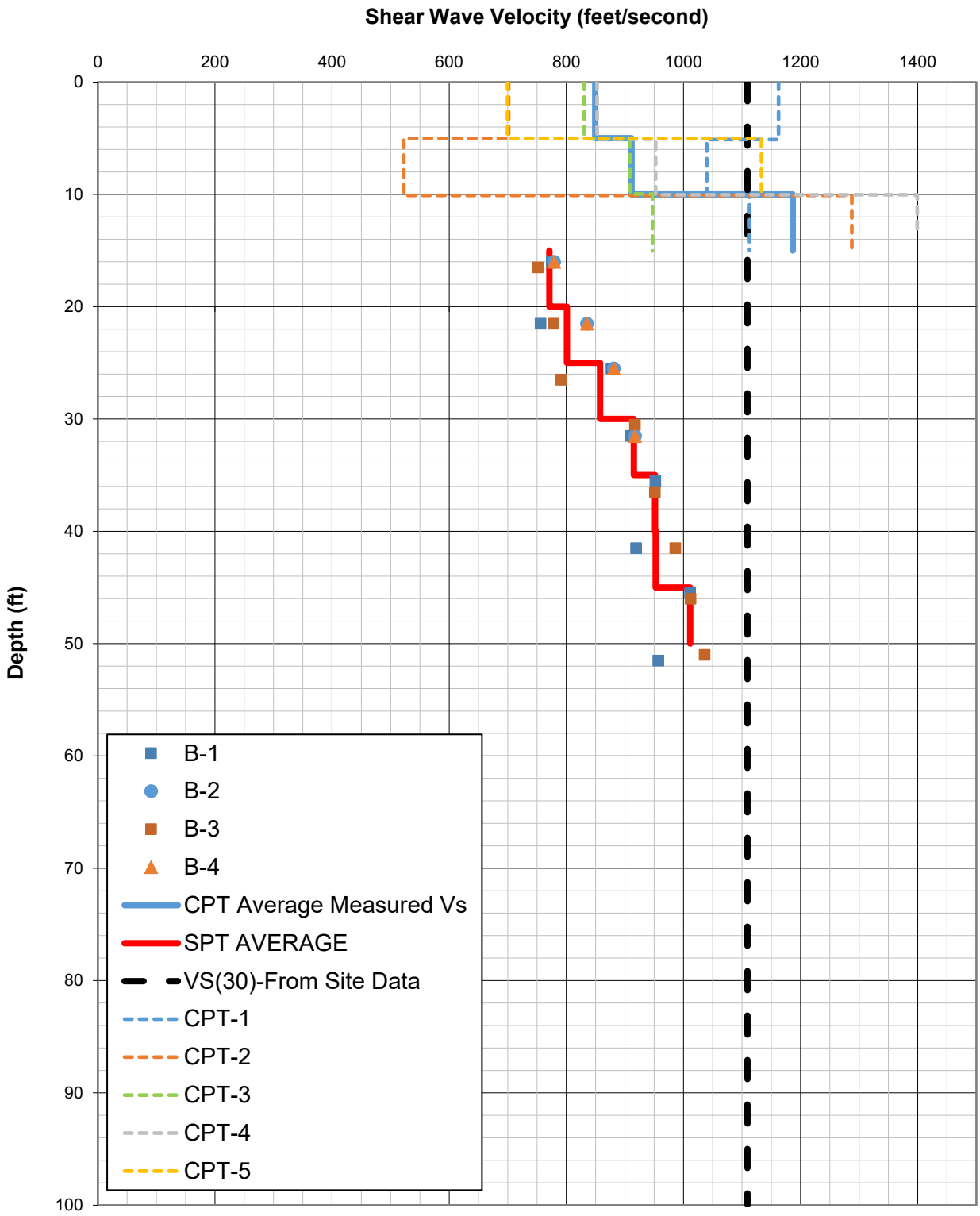
FIGURES

Figure C-1 Shear wave Velocity Profile
Figure C-2 Probabilistic ARS and MCE_R
Figure C-3 Deterministic ARS
Figure C-4 Deterministic MCE_R
Figure C-5 Site-Specific Design Earthquake and Site-Specific Design Acceleration Parameters



GROUP DELTA

Shear Wave Velocity Profile

32ND ST./USC PERFORMING ARTS MAGNET ES
822 W 32ND ST., LOS ANGELES, CA

PROJECT NUMBER:	FIGURE NUMBER:
LA1548	C-1

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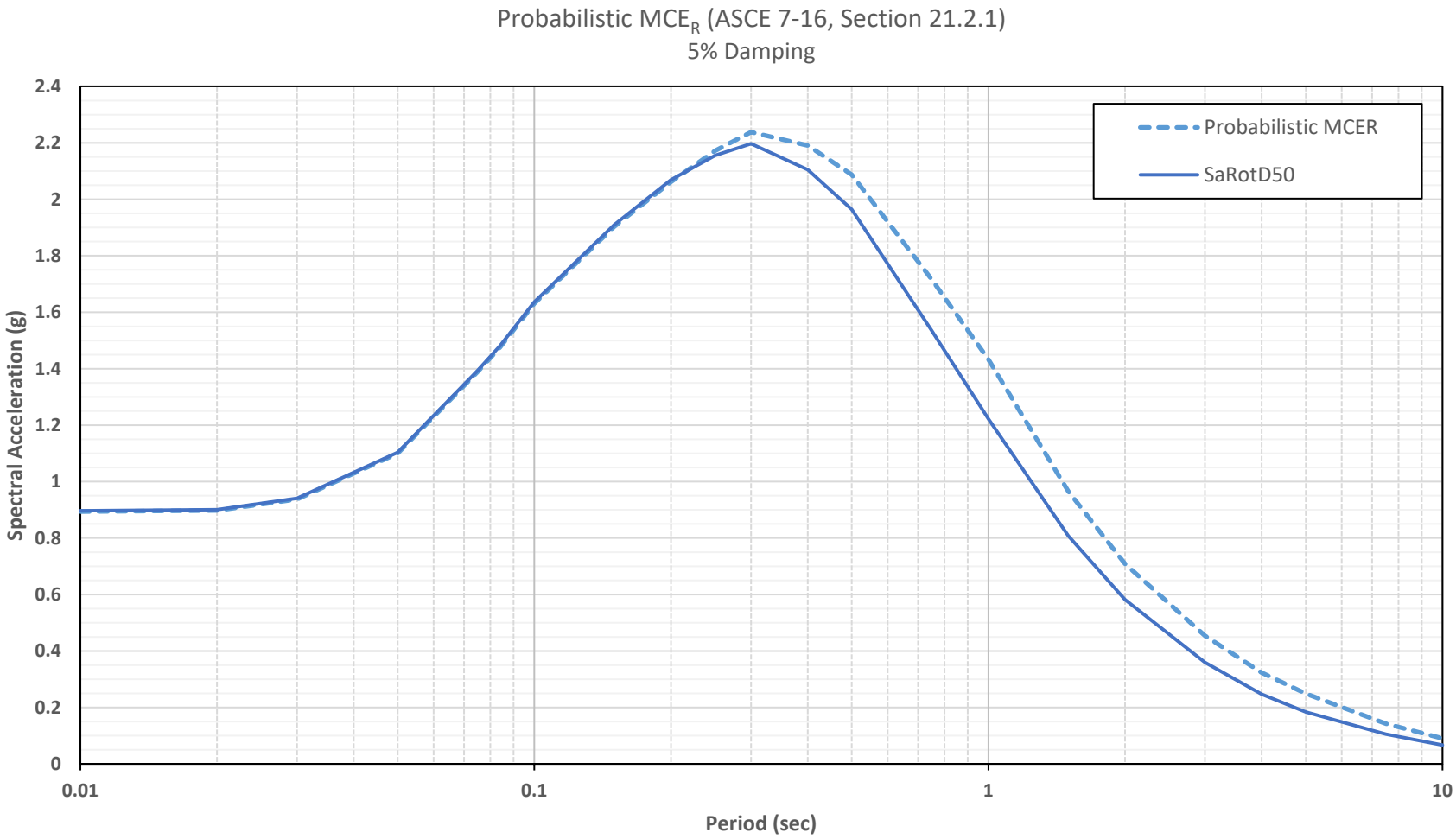
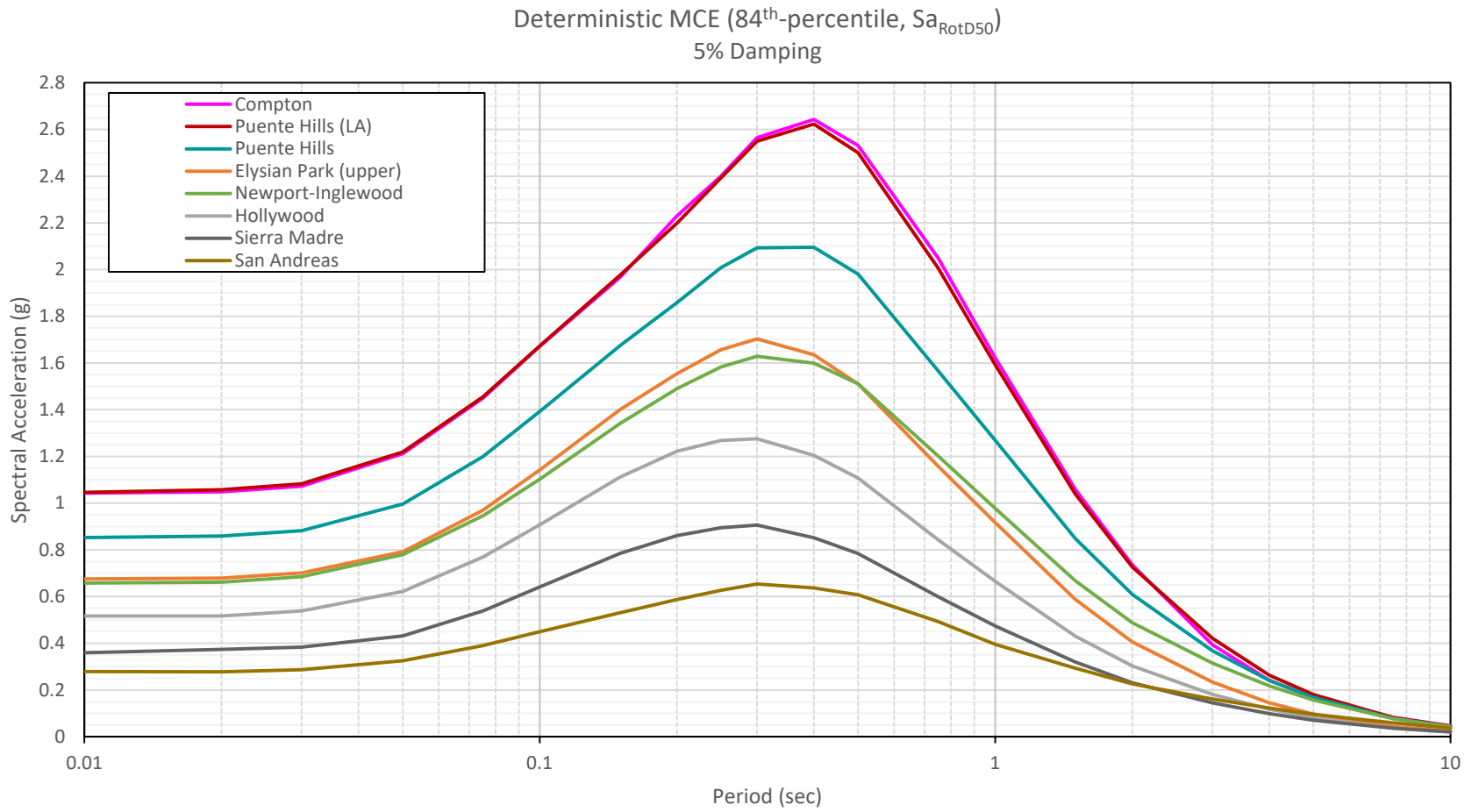
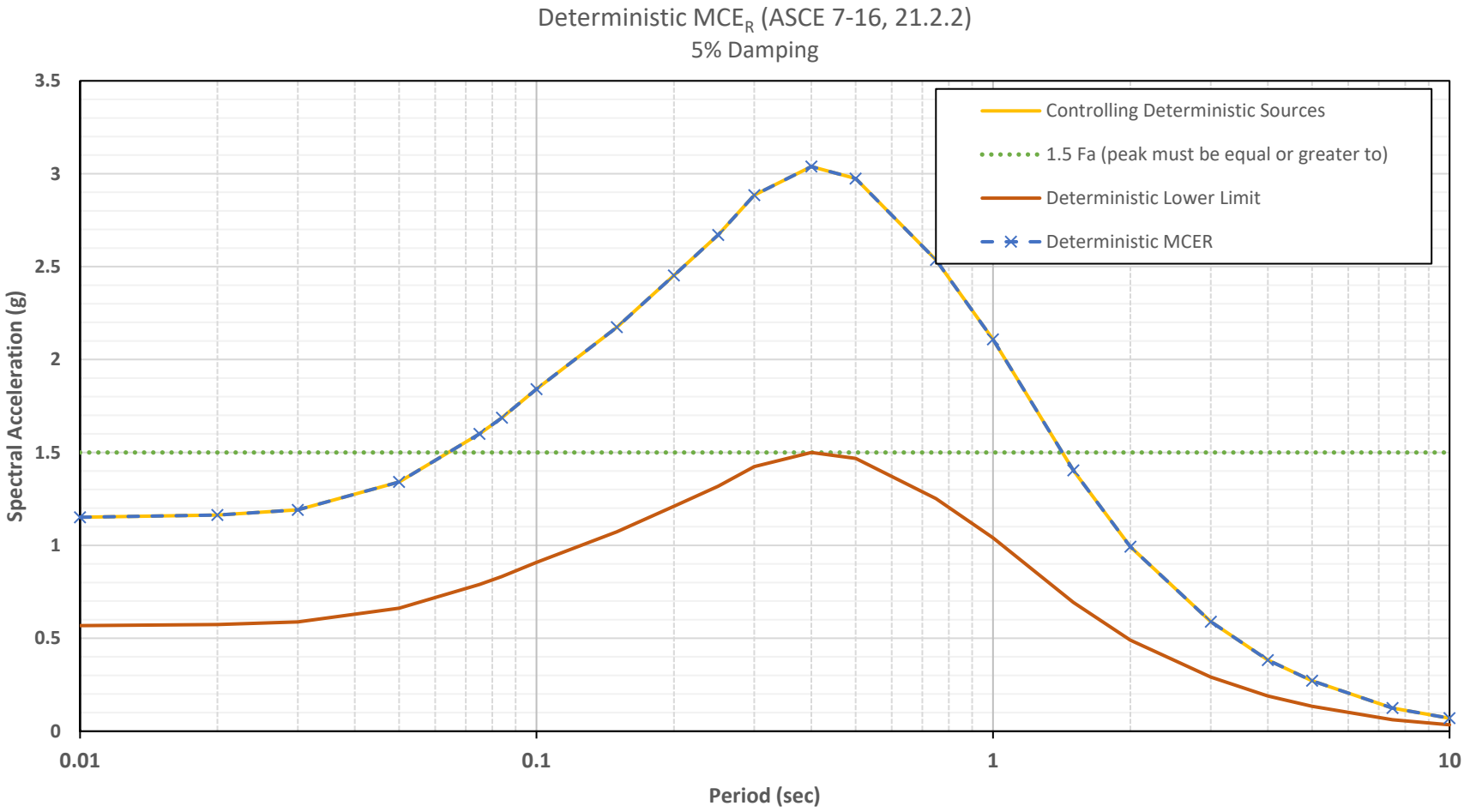
370 Amapola Ave. Suite 212, Torrance, CA 90501



PROJECT NAME	FIGURE NAME	GROUP DELTA	
32ND ST./USC PERFORMING ARTS MAGNET ES **822 W 32ND ST., LOS ANGELES, CA**	**Probabilistic MCE$_R$** **Acceleration Response Spectrum**	PROJECT NUMBER LA1548	FIGURE NUMBER C-2

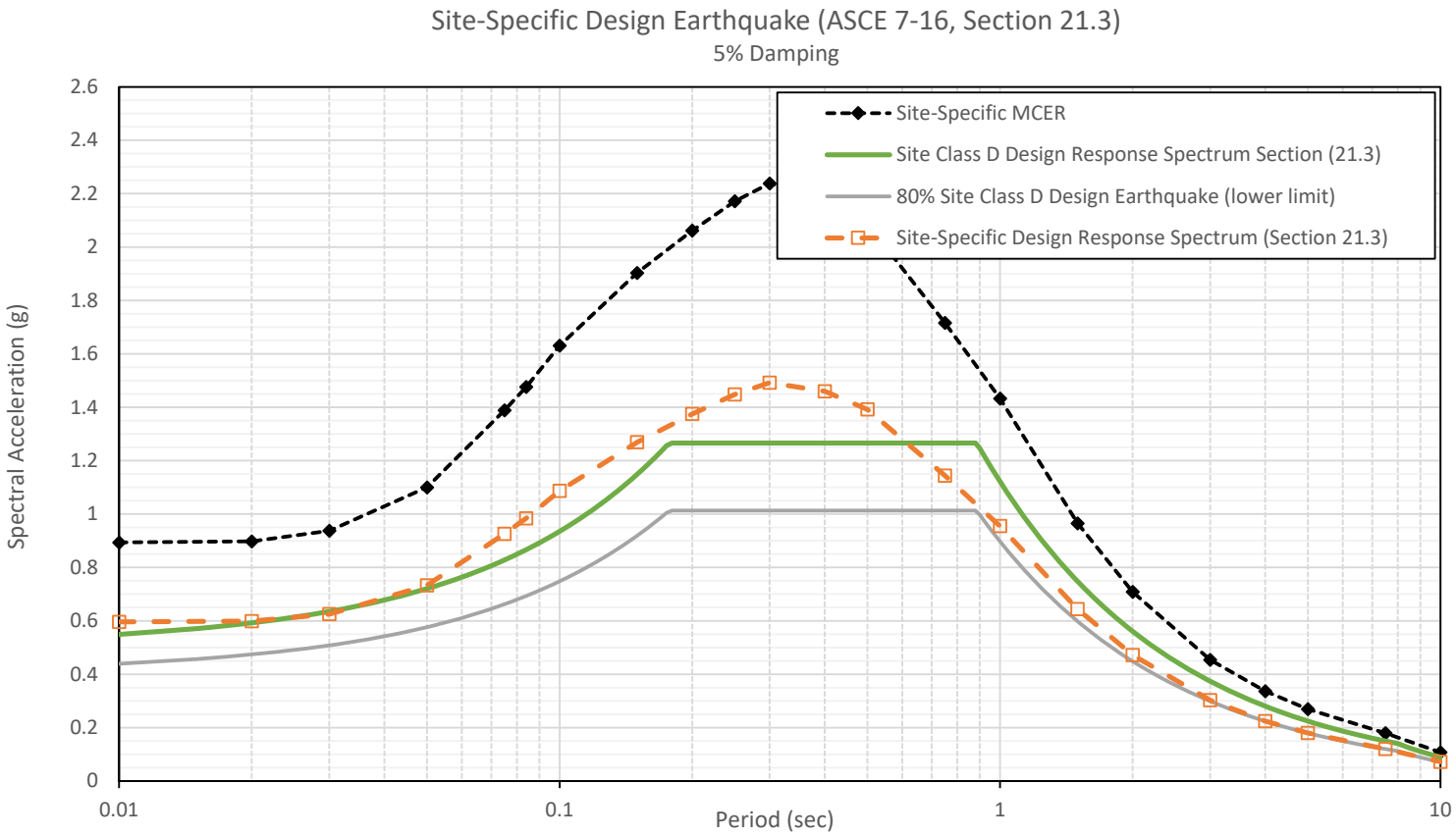


PROJECT NAME	FIGURE NAME	GROUP DELTA	
32ND ST./USC PERFORMING ARTS MAGNET ES **822 W 32ND ST., LOS ANGELES, CA**	**Deterministic** **Acceleration Response Spectra**	PROJECT NUMBER LA1548	FIGURE NUMBER C-3



PROJECT NAME	FIGURE NAME	GROUP DELTA	
32ND ST./USC PERFORMING ARTS MAGNET ES **822 W 32ND ST., LOS ANGELES, CA**	**Deterministic MCE$_R$** **Acceleration Response Spectra**	PROJECT NUMBER LA1548	FIGURE NUMBER C-4

ASCE 7-16 MCE_R and Design Earthquake		
Period	Design	MCE_R
(sec)	Sa (g)	Sa (g)
0.01	0.596	0.894
0.02	0.599	0.899
0.03	0.625	0.938
0.05	0.733	1.100
0.075	0.926	1.389
0.1	1.087	1.631
0.15	1.269	1.904
0.2	1.375	2.063
0.25	1.448	2.172
0.3	1.492	2.238
0.4	1.460	2.190
0.5	1.392	2.088
0.75	1.144	1.716
1	0.955	1.433
1.5	0.644	0.966
2	0.472	0.708
3	0.303	0.455
4	0.224	0.337
5	0.180	0.270
7.5	0.120	0.180
10	0.072	0.108



Site-Specific Design Acceleration Parameters (ASCE 7-16 Section 21.4)

S_{DS} = 90% of the peak S_a from T =0.2 to 5 s (not less than 80% of mapped S_{DS})

S_{D1} = Peak $T*S_a$ between periods of 1 second and 5 seconds (not less than 80% of mapped S_{D1})

S_{DS} = 1.343 **S_{D1} =** 0.966

PROJECT NAME	FIGURE NAME	GROUP DELTA	
32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA	**ASCE 7-16 Site-Specific Design Earthquake and Site-Specific Design Acceleration Parameters**	PROJECT NUMBER LA1548	FIGURE NUMBER C-5

APPENDIX D – SITE-SPECIFIC SEISMIC HAZARD ANALYSIS PER ASCE 41-17

APPENDIX D

SITE-SPECIFIC SEISMIC HAZARD ANALYSIS PER ASCE 41-17

D.1 INTRODUCTION

This appendix presents the results of the site-specific seismic hazard analyses performed in accordance with ASCE 41-17 for the project. The subsurface soil conditions used in this study were obtained from our field investigation program including seismic CPTs and hallow stem auger borings.

Horizontal Acceleration Response Spectra (ARS) for 5-percent damping were developed for the four Basic Safety Earthquake (BSE) hazard levels, BSE-2N, BSE-1N, BSE-2E and BSE-1E, as defined by ASCE 41-17. Note that BSE-2N and BSE-1N hazard levels correspond to the Risk-Targeted Maximum Considered Earthquake (MCE_R) and Design Earthquake per ASCE 7-16, respectively. In accordance with ASCE 41-17, Section 2.4.2.1, site-specific ARS are developed following the procedures of Chapter 21 of ASCE 7-16. The following sections document the development of site-specific ARS curves for BSE-2E and BSE-1E hazard levels. Details of site-specific seismic hazard analyses and ARS development for BSE-2N (MCE_R) and BSE-1N (Design Earthquake) hazard levels were discussed in Appendix C.

ARS and design acceleration parameters for all four BSE hazard levels are presented in this appendix.

D.2 SEISMIC SETTING

The project site is located within the Los Angeles basin, an area with very high seismic activity. The centroid of the subject building is at a latitude of 34.0243º north and a longitude of 118.2827º west. Table D-1 below lists the active faults closest to the site, along with their Fault Type, Maximum Magnitude (Mw) and Site-To-Source Rupture Distance (R_{rup}). These faults are obtained primarily from the Version 3 of the Uniform California Earthquake Rupture Forecast (UCERF3) (Field et al., 2013), which is the seismic source model developed by the Working Group on California Earthquake Probabilities (WGCEP) in 2013. The UCERF3 model was subsequently adopted by the 2014 U.S. National Seismic Hazard Mapping Program (NSHM) (Petersen et al., 2014) to develop probabilistic seismic hazard maps.

Table D-1. Significant Active Faults Near the Site

Fault	Fault Type	Maximum Magnitude, M_W	Site-to-Source Distance, R_{rup} (km)
Puente Hills (LA)	Reverse	7.0	2.8
Puente Hills	Reverse	7.1	5.4
Elysian Park	Reverse	6.7	7.1
Newport-Inglewood (alt 1 and alt 2)	Strike-slip	7.2	7.7
Santa Monica	Strike-slip	6.8	8.8
Hollywood	Strike-Slip	6.7	10.0
Compton	Reverse	7.5	13.0
Verdugo	Reverse	6.9	15.3
Puente Hills (Santa Fe Springs)	Reverse	6.6	15.8
Sierra Madre	Reverse	7.2	22.5
Southern San Andreas (Parkfield + Cholame + Carrizo + Big Bend + Northern Mojave + Southern Mojave + Northern San Bernardino + Southern San Bernardino + San Gorgonio Pass-Garnet Hill + Coachella)	Strike-slip	8.2	59.5

The maximum magnitudes and scenarios adopted are consistent with the published Building Seismic Safety Council 2014 Event Set (the adopted deterministic ruptures used for the 2014 USGS NSHM (BSSC, 2015). For multi-segment faults, such as San Andreas, where different earthquake scenarios are considered, the one producing the largest magnitude was reported in the table along with its combined segments.

D.3 SITE CHARACTERIZATION

In developing site-specific ground motions, the characteristics of the soils underlying the site are an important input to evaluate the site response at a given site. In particular, the average shear wave velocity in the upper 30 meters ($V_{S,30}$), is a necessary parameter to perform seismic hazard analyses. As it was discussed in Appendix C, the $V_{S,30}$ of 338 m/s was estimated for the project site and was used in our analyses.

D.4 SITE-SPECIFIC SEISMIC HAZARD ANALYSES

Probabilistic Seismic Hazard Analyses (PSHA) were performed to develop the horizontal 5-percent damped Acceleration Response Spectra (ARS) for the Basic Safety Earthquake (BSE) hazard levels, BSE-2E and BSE-1E, as defined by ASCE 41-17. BSE-2E hazard level is associated with a 5-percent probability of exceedance in 50 years, in the direction of maximum horizontal response, and the BSE-1E to a 20-percent probability of exceedance in 50 years, in the direction of maximum horizontal response. In accordance with ASCE 41-17, Sections 2.4.1.3 and 2.4.1.4, site-specific ARS developed for BSE-2E and BSE-1E hazard levels need not be higher than the ARS for BSE-2N and BSE-1N, respectively. Details are discussed in the following sections

Horizontal ARS for 5-percent damping was also developed for the Risk-Targeted Maximum Considered Earthquake (MCE_R), BSE-2N, as defined by ASCE 7-16, following Chapter 21.2, and performing both probabilistic and deterministic seismic hazard analyses. The horizontal 5-percent damped ARS for BSE-1N hazard level, Design Earthquake, was calculated as two-thirds of the BSE-2N ARS. Details of the site-specific hazard analysis and ARS development for the MCE_R, BSE-2N, hazard level was discussed in Appendix C.

D.4.1 GROUND MOTION MODELS

Site-specific ground motions are influenced by type of faulting, magnitude of characteristic earthquakes, and local soil conditions. Numerous ground motion models, also referred to as Ground Motion Prediction Equations (GMPEs) have been developed to estimate the variation of spectral acceleration with earthquake magnitude and source-to-site distance, among other parameters. The Pacific Earthquake Engineering Research (PEER) coordinated a large multidisciplinary project entitled “NGA (Next Generation Attenuation)-West 2 Research Project” (Bozorgnia et al., 2014), referred to as NGA-West2. In NGA-West2, five teams have developed and presented horizontal ground motion models for shallow crustal earthquakes in active tectonic regions including Western North America. These teams are Abrahamson et al. (2014), Boore et al. (2014), Campbell and Bozorgnia (2014), Chiou and Youngs (2014), and Idriss (2014).

We used four of these five models in our probabilistic seismic hazard analysis (PSHA). The Idriss (2014) model was not used as this ground motion model is only applicable to $V_{S,30} > 450$ m/s. The four models were each assigned a weight of 0.25. The Intensity Measure (IM) provided by these horizontal ground motion models corresponds to the 50th percentile of the rotated orientation-independent horizontal component, RotD50, defined by Boore (2010). The RotD50 is generally consistent with a geometric mean ground motion.

The NGA-West2 relationships use measured values of $V_{S,30}$ as input. As previously discussed, we have adopted an average $V_{S,30}$ of 338 m/s to represent the underlying soil conditions at the site. In addition, some of the ground motion models require input for $Z_{1.0}$ (defined as the depth in meters to a shear wave velocity of Vs = 1 km/s) and $Z_{2.5}$ (defined as the depth in km to a shear wave velocity of Vs = 2.5 km/s). These two parameters are used to capture the basin effect on site response.

The SCEC Community Velocity Model (CVM) Version 4, Caltrans basin maps of $Z_{1.0}$ and $Z_{2.5}$ for Los Angeles basin, and correlations included in the Campbell and Bozorgnia ground motion model (2013), were reviewed for selection of $Z_{1.0}$ and $Z_{2.5}$ values. $Z_{1.0}$ value of 500 m and $Z_{2.5}$ of 3.5 km were selected based on the values from SCEC CVM and Caltrans basin maps which were comparable for the project site.

D.4.2 PROBABILISTIC SEISMIC HAZARD ANALYSES

Site-specific Probabilistic Seismic Hazard Analyses (PSHA) were performed using the computer tool OpenSHA (Fields, 2003), using the Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3) seismic source model and the updated NGA-West2 ground motion models. Uniform hazard horizontal ARS were developed up to a period of 10 seconds. All spectra were developed for 5-percent damping. Figure D-1 presents the results of probabilistic seismic hazard analyses for the two seismic hazard levels, BSE-2E and BSE-1E.

In addition, supplementary PSHA were performed using the Unified Hazard Tool (https://earthquake.usgs.gov/hazards/interactive/), using the dynamic version of the Conterminous U.S. 2014 (v4.2.0) at available spectral periods, for the Site Class C/D boundary ($V_{S,30}$ = 360 m/s) and Site Class D ($V_{S,30}$ = 259 m/s). Results of these supplementary analyses showed good agreement with our OpenSHA analyses and validated our results.

The median (RotD50) ground motion was adjusted to the maximum rotated component of ground motion (RotD100) using the factors stated in section 21.2 of ASCE 7-16. Figure D-1 presents the comparison of the median ground motion to maximum horizontal component for hazard levels BSE-2E and BSE-1E.

D.4.3 SITE-SPECIFIC ACCELERATION RESPONSE SPECTRA

Development of the site-specific ARS for ASCE 41-17 is performed following the procedures recommended in Chapter 21 of ASCE 7-16. For a probabilistically defined spectrum (BSE-1E and BSE-2E), the procedure is followed, but neglects the deterministic ground motion development, and instead uses a cap of the BSE-1N (Design Earthquake per ASCE 7) or BSE-2N (MCE_R per ASCE 7) spectra, respectively. Per Commentary C2.4.2.1 of ASCE 41-17, the site-specific ARS is anchored to the general response spectrum as described in Chapter 21 of ASCE 7-16. Therefore, the site-specific BSE-1E or BSE-2E spectra may not be less than 80% of the general spectrum developed using mapped seismic parameters at each respective hazard level.

The site-specific BSE-1E and BSE-2E spectra developed in the previous section are compared to the general BSE-1N and BSE-2N spectra, respectively, as shown in Figure D-2. Both BSE-1E and BSE-2E spectra are less than the respective caps of BSE-1N and BSE-2N.

Figure D-3 presents the 5-percent damped horizontal ARS along with tabulated values for the BSE-1E and BSE-2E hazard levels. The two site-specific ARS are also compared with the generic spectra produced with mapped values, as well as the 80-percent lower limit.

Per ASCE 41-17, development of the site-specific MCE_R ARS (BSE-2N) is performed following the procedures of ASCE 7-16, Chapter 21.2. As discussed in Appendix C and in accordance with ASCE

7-16 Section 21.2.3, the site-specific MCE_R acceleration response spectra are taken as the lesser of the probabilistic and deterministic MCE_R spectra, but not less than 150-percent of the site-specific design spectrum in Section 21.3. The Design Earthquake (BSE-1N) is taken as two-thirds of the MCE_R (BSE-2N) ARS. Figure D-4 presents the 5-percent damped horizontal ARS along with tabulated values for the MCE_R ARS (BSE-2N) and the Design Earthquake (BSE-1N).

D.4.4 SITE-SPECIFIC DESIGN ACCELERATION PARAMETERS

The site-specific short period design spectral acceleration (S_{DS}) and 1-second period design spectral acceleration (S_{D1}) parameters were determined in accordance with ASCE 7-16 Section 21.4. The parameter S_{DS} is taken as 90-percent of the maximum spectral acceleration from the site-specific design spectrum at periods between 0.2 and 5 seconds. The parameter S_{D1} is taken as the maximum of the product between period and spectral acceleration for periods from 1 to 5 seconds for sites with $V_{S,30}$ < 1,200 ft/s (365 m/s). The values obtained shall not be less than 80-percent of the mapped values for each hazard level, respectively. Mapped design acceleration parameters were obtained from the online SEAOC/OSHPD Seismic Design Maps tool (SEAOC/OSPHD, 2021).

Table D-2 presents both the mapped seismic design acceleration parameters and the site-specific seismic design acceleration parameters.

Table D-2: Seismic Design Acceleration Parameters

Hazard Level	Parameter	Mapped Value	Site-Specific Value
BSE-1E	S_{XS}	0.868	0.935
	S_{X1}	0.493	0.537
BSE-2E	S_{XS}	1.449	1.655
	S_{X1}	0.901	1.094
BSE-1N	S_{XS}	1.266	1.343
	S_{X1}	0.763	0.966
BSE-2N	S_{XS}	1.899	2.014
	S_{X1}	1.144	1.449

D.5 REFERENCES

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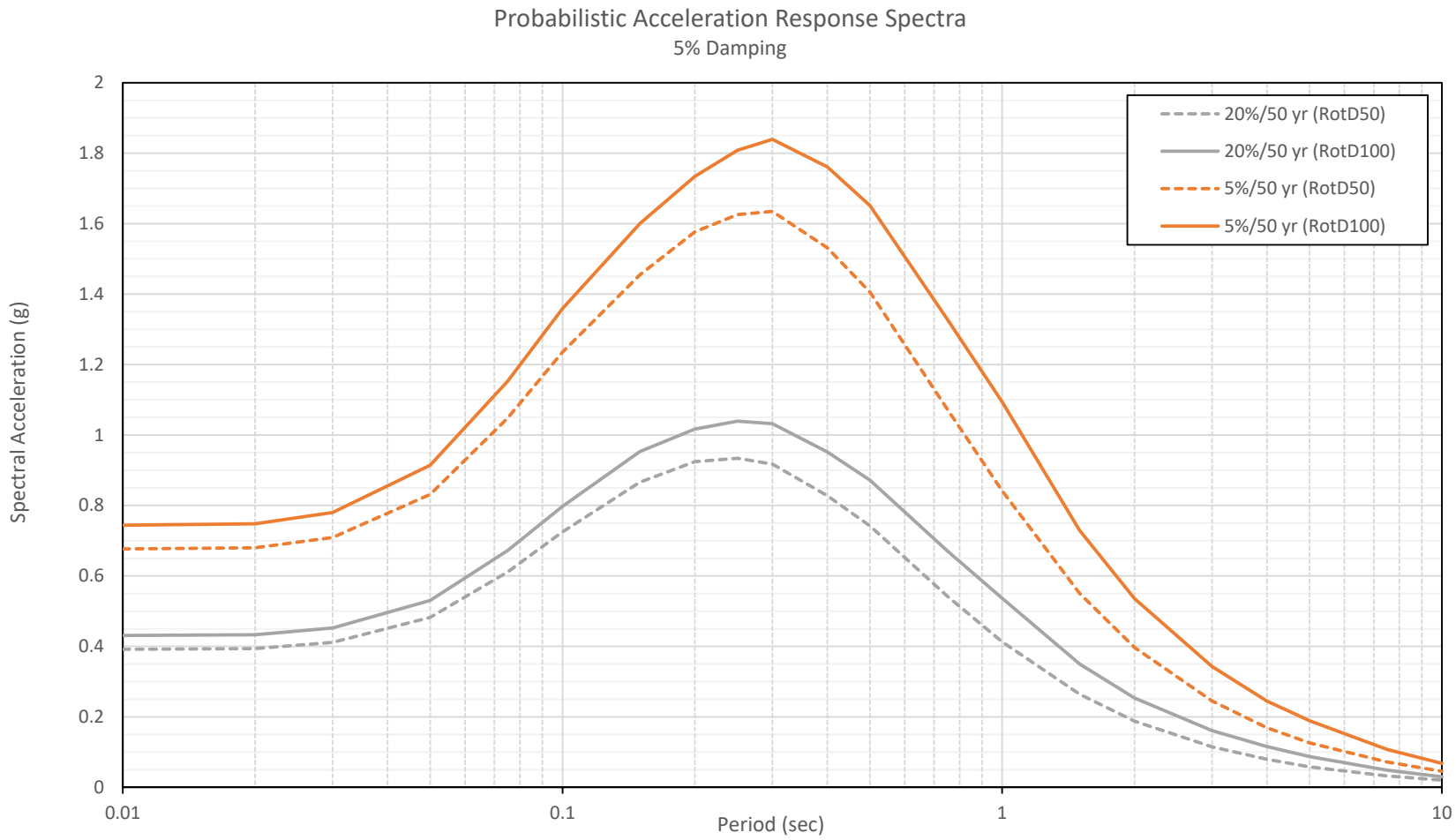
FIGURES

Figure D-1 Probabilistic Seismic Hazard Analyses for BSE-1E and BSE-2E Hazard Levels

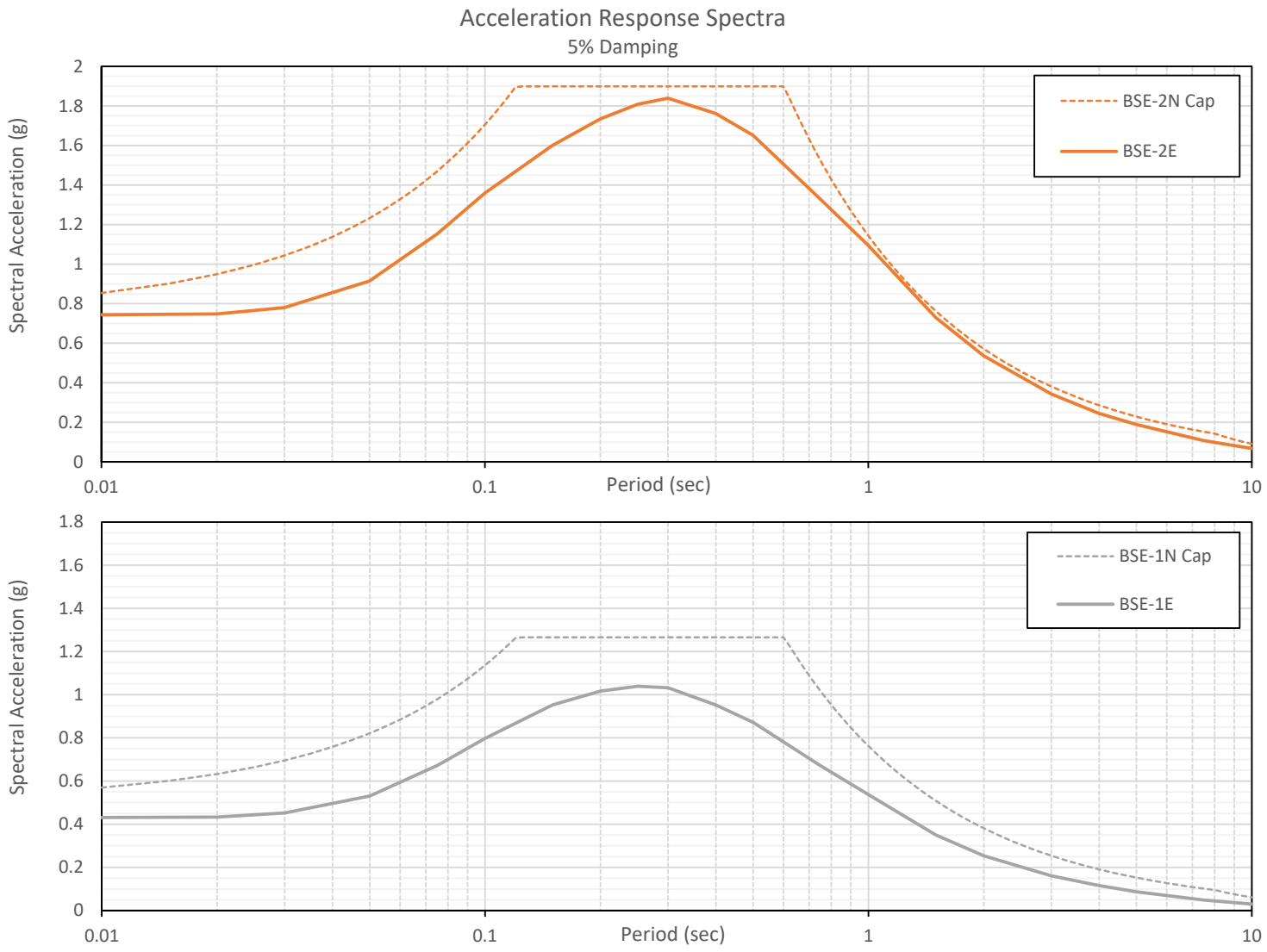
Figure D-2 Site-Specific BSE-1E and BSE-2E Comparison with BSE-1N and BSE-2N

Figure D-3 ASCE 4-17 Site-Specific BSE-1E and BSE-2E ARS and Design Acceleration Parameters

Figure D-4 ASCE 4-17 Site-Specific BSE-1N and BSE-2N ARS and Design Acceleration Parameters

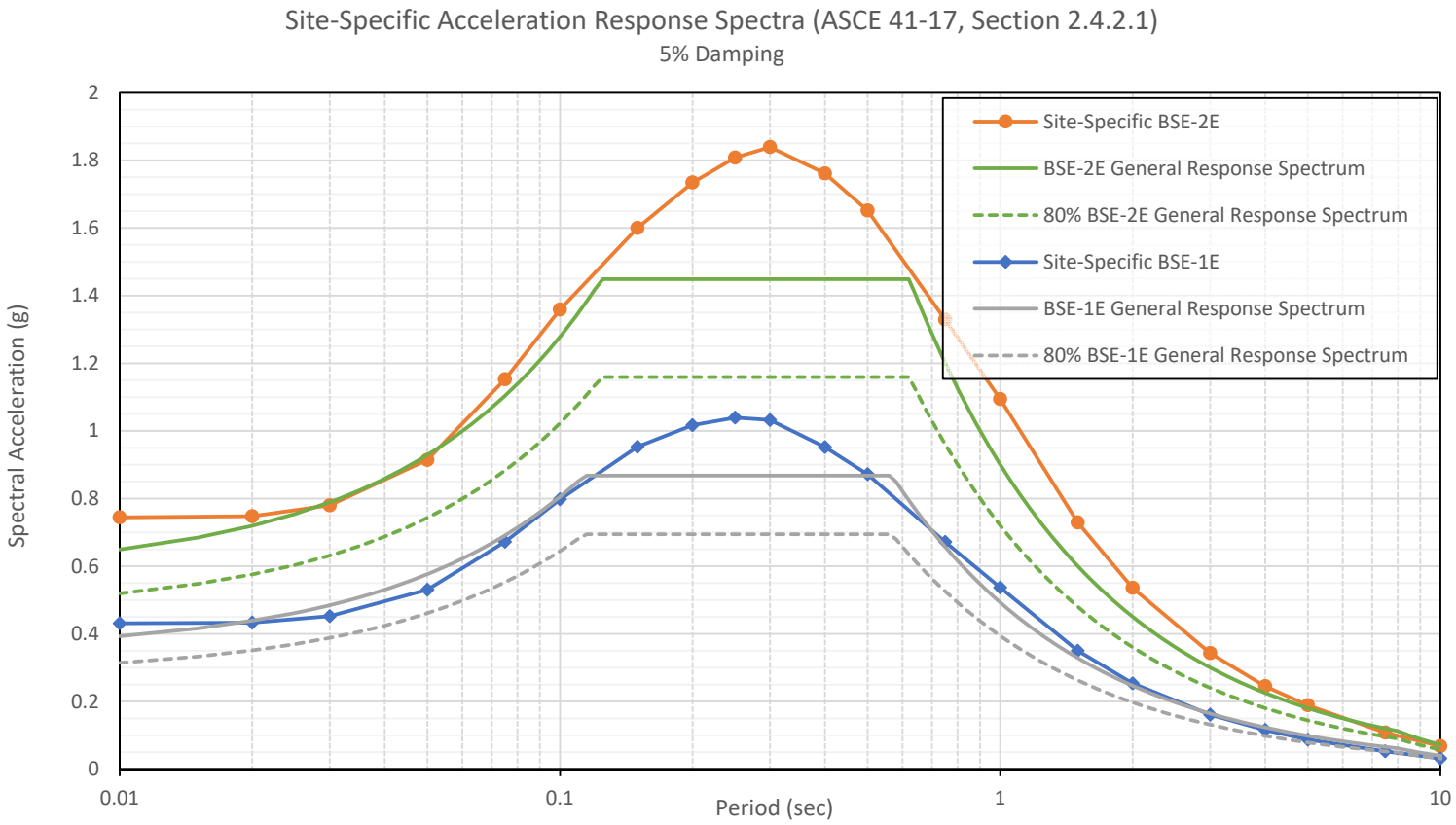


PROJECT NAME	FIGURE NAME	GROUP DELTA	
32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA	**Probabilistic Seismic Hazard Analyses For BSE-2E and BSE-1E Hazard Levels**	PROJECT NUMBER LA1548	FIGURE NUMBER D-1



PROJECT NAME	FIGURE NAME	GROUP DELTA	
32ND ST./USC PERFORMING ARTS MAGNET ES **822 W 32ND ST., LOS ANGELES, CA**	**Site-Specific BSE-1E and BSE-2E** **Comparison with BSE-1N and BSE-2N**	PROJECT NUMBER LA1548	FIGURE NUMBER D-2

ASCE 41-17 Site-Specific Acceleration Response Spectra		
Period	BSE-1E	BSE-2E
(sec)	Sa (g)	Sa (g)
0.01	0.431	0.744
0.02	0.433	0.748
0.03	0.452	0.780
0.05	0.531	0.914
0.075	0.672	1.152
0.1	0.798	1.359
0.15	0.953	1.600
0.2	1.017	1.734
0.25	1.039	1.808
0.3	1.032	1.839
0.4	0.952	1.761
0.5	0.872	1.651
0.75	0.672	1.329
1	0.537	1.094
1.5	0.350	0.729
2	0.254	0.536
3	0.161	0.343
4	0.115	0.245
5	0.087	0.189
7.5	0.053	0.108
10	0.032	0.068



Site-Specific Design Acceleration Parameters

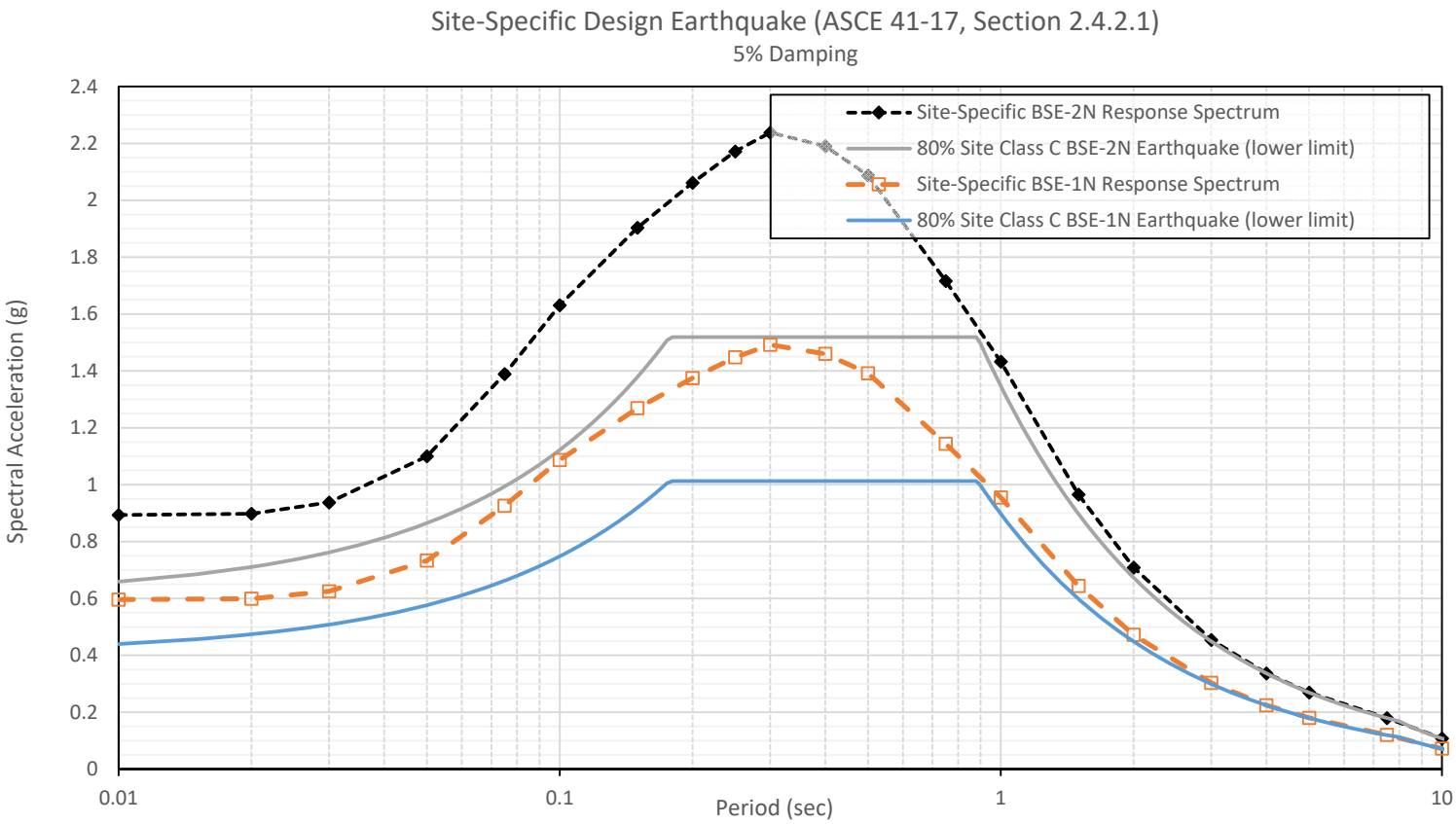
S_{XS} = 90% of the peak S_a from T =0.2 to 5 s (not less than 80% of mapped S_{XS})

S_{X1} = Peak T*S_a between periods of 1 second and 5 seconds (not less than 80% of mapped S_{X1})

$S_{XS,BSE-1E}$ =	0.935	$S_{XS,BSE-2E}$ =	1.655
$S_{X1,BSE-1E}$ =	0.537	$S_{X1,BSE-2E}$ =	1.094

PROJECT NAME	FIGURE NAME	GROUP DELTA	
32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA	**ASCE 41-17 Site-Specific BSE-1E and BSE-2E ARS and Design Acceleration Parameters**	PROJECT NUMBER LA1548	FIGURE NUMBER D-3

ASCE 41-17 Site-Specific Acceleration Response Spectra		
Period	BSE-1N	BSE-2N
(sec)	Sa (g)	Sa (g)
0.01	0.596	0.894
0.02	0.599	0.899
0.03	0.625	0.938
0.05	0.733	1.100
0.075	0.926	1.389
0.1	1.087	1.631
0.15	1.269	1.904
0.2	1.375	2.063
0.25	1.448	2.172
0.3	1.492	2.238
0.4	1.460	2.190
0.5	1.392	2.088
0.75	1.144	1.716
1	0.955	1.433
1.5	0.644	0.966
2	0.472	0.708
3	0.303	0.455
4	0.224	0.337
5	0.180	0.270
7.5	0.120	0.180
10	0.072	0.108



Site-Specific Design Acceleration Parameters

S_{XS} = 90% of the peak S_a from T =0.2 to 5 s (not less than 80% of mapped S_{XS})

S_{X1} = Peak T*S_a between periods of 1 second and 5 seconds (not less than 80% of mapped S_{X1})

$S_{XS,BSE-1N}$ =	1.343	$S_{XS,BSE-2N}$ =	2.014
$S_{X1,BSE-1N}$ =	0.966	$S_{X1,BSE-2N}$ =	1.449

PROJECT NAME	FIGURE NAME	GROUP DELTA	
32ND ST./USC PERFORMING ARTS MAGNET ES 822 W 32ND ST., LOS ANGELES, CA	**ASCE 41-17 Site-Specific BSE-1N and BSE-2N ARS and Design Acceleration Parameters**	PROJECT NUMBER LA1548	FIGURE NUMBER D-4

December 27, 2021 via email: ethant@groupdelta.com

Group Delta Consultants
370 Amapola Avenue, Suite 212
Torrance, CA, 90501

Attention: Ethan Tsai

Re: Soil Corrosivity Study
LAUSD 32nd/USC Performing Arts Magnet ES Campus Modernization
Los Angeles, CA
HDR #21-1233SCS, GDC #LA1548

Introduction

Laboratory tests have been completed on two soil samples provided for the referenced project. The purpose of these tests was to determine whether the soils are likely to have deleterious effects on underground utility piping, hydraulic elevator cylinders, and concrete structures. HDR assumes that the provided samples are representative of the most corrosive soils at the site.

The proposed structure has two stories and one subterranean level. The site is located at 822 West 32nd Street in Los Angeles, California, and the water table is reportedly greater than 50 feet deep.

The scope of this study is limited to a determination of soil corrosivity and general corrosion control recommendations for materials likely to be used for construction. HDR's recommendations do not constitute, and are not meant as a substitute for, design documents for the purpose of construction. If the architects and/or engineers desire more specific information, designs, specifications, or review of design, HDR will be happy to work with them as a separate phase of this project.

Soil Corrosivity Testing

Laboratory Testing

The electrical resistivity of each sample was measured in a soil box per ASTM International (ASTM) G187 in its as-received condition and again after saturation with distilled water. Resistivities are at about their lowest value when the soil is saturated. The pH of the saturated samples was measured per ASTM G51. A 5:1 water:soil extract from each sample was chemically analyzed for the major soluble salts commonly found in soil per ASTM D4327, ASTM D6919, and American Water Works Association (AWWA) Standard Method 2320-B.

The laboratory analyses were performed under HDR laboratory number 21-1233SCS. The full set of test results are shown in the attached Table 1.

Discussion

A major factor in determining soil corrosivity is electrical resistivity. The electrical resistivity of a soil is a measure of its resistance to the flow of electrical current. Corrosion of buried metal is an electrochemical process in which the amount of metal loss due to corrosion is directly proportional to the flow of electrical current (DC) from the metal into the soil. Corrosion currents, following Ohm's Law, are inversely proportional to soil resistivity. Lower electrical resistivities result from higher moisture and soluble salt contents and indicate corrosive soil. A correlation between electrical resistivity and corrosivity toward ferrous metals is shown in Table 1.[1]

Table 1: Soil Corrosivity Categories.

Soil Resistivity (ohm-cm)	Corrosivity Category
Greater than 10,000	Mildly Corrosive
2,001 to 10,000	Moderately Corrosive
1,001 to 2,000	Corrosive
0 to 1,000	Severely Corrosive

Other soil characteristics that may influence corrosivity towards metals are pH, soluble salt content, soil types, aeration, anaerobic conditions, and site drainage.

Electrical resistivities were in the mildly corrosive category with as-received moisture. When saturated, the resistivities were in the moderately corrosive category. The resistivities dropped considerably with added moisture because the samples were dry as-received.

Soil pH values varied from 7.6 to 7.7. This range is mildly alkaline.[2] These values do not particularly increase soil corrosivity.

The soluble salt content of the samples was low.

Per ACI-318, the soil is classified as S0 with respect to sulfate concentration.[3]

Nitrate was detected in low concentrations. Ammonium was not detected.

Tests were not made for sulfide and oxidation-reduction (redox) potential because these samples did not exhibit characteristics typically associated with anaerobic conditions.

In conclusion, this soil is classified as moderately corrosive to ferrous metals and negligible (S0) for sulfate attack on concrete.

Corrosion Control Recommendations

The life of buried materials depends on thickness, strength, loads, construction details, soil moisture, etc., in addition to soil corrosivity, and is, therefore, difficult to predict. Of more practical value are corrosion control methods that will increase the life of materials that would be subject to significant corrosion. The following recommendations are based on the evaluation of soil corrosivity described above. Unless otherwise indicated, these recommendations apply to the entire site or alignment.

---

[1] *Romanoff, Melvin. Underground Corrosion, NBS Circular 579. Reprinted by NACE. Houston, TX, 1989, pp. 166–167.*
[2] *Romanoff, Melvin. Underground Corrosion, NBS Circular 579. Reprinted by NACE. Houston, TX, 1989, p. 8.*
[3] *American Concrete Institute (ACI) 318-19 Table 19.3.1.1.*

All Pipe

1. On all pipes, appurtenances, and fittings not protected by cathodic protection, coat bare metal such as valves, bolts, flange joints, joint harnesses, and flexible couplings with wax tape per AWWA C217 after assembly.
2. Where metallic pipelines penetrate concrete structures such as building floors, vault walls, and thrust blocks use plastic sleeves, rubber seals, or other dielectric material to prevent pipe contact with the concrete and reinforcing steel.
3. To prevent differential aeration corrosion cells, provide at least 2 inches of pipe bedding or backfill material all around metallic piping, including the bottom. Do not lay pipe directly on undisturbed soil.

Steel Pipe

1. Underground steel pipe with rubber gasketed, mechanical, grooved end, or other nonconductive type joints should be bonded for electrical continuity. Electrical continuity is necessary for corrosion monitoring and the possible future application of cathodic protection.
2. Install corrosion monitoring test stations to facilitate corrosion monitoring and the possible future application of cathodic protection:
    a. At each end of the pipeline.
    b. At each end of all casings.
    c. Other locations as necessary so the interval between test stations does not exceed 1,200 feet.
3. To prevent dissimilar metal corrosion cells and to facilitate the possible future application of cathodic protection, electrically isolate each buried steel pipeline per NACE International (NACE) SP0286 from:
    a. Dissimilar metals.
    b. Dissimilarly coated piping (cement-mortar vs. dielectric).
    c. Above ground steel pipe.
    d. All existing piping.

    Insulated joints should be placed above grade or in vaults where possible. Wrap all buried insulators with wax tape per AWWA C217.

4. Choose one of the following corrosion control options:

OPTION 1

a. Apply a suitable dielectric coating intended for underground use such as:

i. Polyurethane per AWWA C222 *or*

ii. Extruded polyethylene per AWWA C215 *or*

iii. A tape coating system per AWWA C214 *or*

iv. Hot applied coal tar enamel per AWWA C203 *or*

v. Fusion bonded epoxy per AWWA C213.

b. Although it is customary to cathodically protect bonded dielectrically coated structures, cathodic protection is not recommended at this time because the soil is considered only moderately corrosive to ferrous materials. Install joint bonds, test stations, and insulated joints to provide for corrosion monitoring and/or the future application of cathodic protection to control leaks if needed.

OPTION 2

As an alternative to the coating systems described in Option 1 and possible future cathodic protection, apply a ¾-inch cement mortar coating per AWWA C205 or encase all buried portions of metallic piping so that there is a minimum of 3 inches of concrete cover provided over and around surfaces of pipe, fittings, and valves using any type of ASTM C150 cement. Install joint bonds, test stations, and insulated joints to provide for corrosion monitoring and/or the future application of cathodic protection if needed.

NOTE: Some steel piping systems, such as for oil, gas, and high-pressure piping systems, have special corrosion and cathodic protection requirements that must be evaluated for each specific application.

Ductile Iron Pipe

1. To prevent dissimilar metal corrosion cells and to facilitate the possible future application of cathodic protection, electrically insulate underground iron pipe from dissimilar metals and from above ground iron pipe with insulating joints per NACE SP0286.

2. Bond all nonconductive type joints for electrical continuity. Electrical continuity is necessary for corrosion monitoring and possible future application of cathodic protection.

3. Install corrosion monitoring test stations to facilitate corrosion monitoring and the possible future application of cathodic protection:

a. At each end of the pipeline.

b. At each end of any casings.

c. Other locations as necessary so the interval between test stations does not exceed 1,200 feet.

4. Choose one of the following corrosion control options:

OPTION 1

a. Apply a suitable coating intended for underground use such as:

i. Polyethylene encasement per AWWA C105; *or*

ii. Epoxy coating; *or*

iii. Polyurethane; *or*

iv. Wax tape.

NOTE: The thin factory-applied asphaltic coating applied to ductile iron pipe for transportation and aesthetic purposes does not constitute a corrosion control coating.

b. Although it is customary to cathodically protect coated structures, cathodic protection is not recommended at this time because the soil is considered only moderately corrosive to ferrous materials. Install joint bonds, test stations, and insulated joints to provide for corrosion monitoring and/or the future application of cathodic protection to control leaks if needed.

OPTION 2

As an alternative to the coating systems described in Option 1 and possible future cathodic protection, encase all buried portions of metallic piping so that there is a minimum of 3 inches of concrete cover provided over and around surfaces of pipe, fittings, and valves using any type of ASTM C150 cement. Install joint bonds, test stations, and insulated joints to provide for corrosion monitoring and/or the future application of cathodic protection if needed.

NOTE: Some iron piping systems, such as for fire water piping, have special corrosion and cathodic protection requirements that must be evaluated for each specific application.

Cast Iron Soil Pipe

1. Protect cast iron soil pipe with either a double wrap 4-mil or single wrap 8-mil polyethylene encasement per AWWA C105.

2. It is not necessary to bond the pipe joints or apply cathodic protection.

3. Provide 6 inches of clean sand backfill all around the pipe. Use the following parameters for clean sand backfill:

a. Minimum saturated resistivity of no less than 3,000 ohm-cm; *and*

b. pH between 6.0 and 8.0.

c. All backfill testing should be performed by a corrosion engineering laboratory.

Copper Tubing

1. Use Type K or Type L copper tubing as required by the applicable local plumbing code. Type M tubing should not be used for buried applications.[4]

2. Electrically insulate underground copper pipe from dissimilar metals and from above ground copper pipe with insulating devices per NACE SP0286. Sleeve copper pipe through footings and foundations to prevent pH concentration cells and prevent leaks caused by settlement.

3. Electrically insulate cold water piping from hot water piping systems.

4. Protect cold water pipe using all of the following measures:

    a. Place cold water copper tubing in an 8-mil polyethylene sleeve or encase in double 4-mil thick polyethylene sleeves. Ensure that sleeves are intact and free of cuts, tears, punctures, or other damage.

    b. Remove any construction debris, rocks, wood, or organic matter from the trench prior to backfill.

    c. Bed and backfill with at least 2 inches of clean sand all around the tubing, including the bedding. Use the following parameters for clean sand backfill:

        i. Minimum saturated resistivity of no less than 3,000 ohm-cm; and

        ii. pH between 6.0 and 8.0.

        iii. All backfill testing should be performed by a corrosion engineering laboratory.

    d. Copper tubing for cold water can also be treated the same as for hot water.

5. Hot water tubing may be subject to a higher corrosion rate. Protect hot copper tubing using one of the following measures:

    a. Prevent soil contact. Soil contact may be prevented by placing the tubing above ground or encasing the tubing with PVC pipe with solvent-welded joints. Either seal the PVC pipe at both ends using ammonia- and methanol-free caulk, or terminate both ends above-grade in a manner that doesn't allow water to infiltrate; *or*

    b. Applying cathodic protection per NACE SP0169. The amount of cathodic protection current needed can be minimized by coating the tubing with a suitable dielectric coating that is compatible with cathodic protection, such as Polyken 930.

---

[4] *2016 California Plumbing Code (CPC), July 1, 2018 Supplement, Section 604.3.*

Plastic and Vitrified Clay Pipe

1. No special corrosion control measures are required for plastic and vitrified clay piping placed underground.
2. Protect all metallic fittings and valves with wax tape per AWWA C217, or with epoxy and appropriately designed cathodic protection system per NACE SP0169.

Concrete Structures and Pipe

1. From a corrosion standpoint, any type of ASTM C150 cement may be used for concrete structures and pipe because the sulfate concentration is negligible (S0), from 0 to 0.10 percent. Use a minimum strength of 2,500 psi per applicable codes.[5,6,7]
2. Standard concrete cover over reinforcing steel may be used for concrete structures and pipe in contact with these soils due to the low chloride concentrations found on site.[8] Limit the water-soluble chloride ion content in the concrete mix design to less than 0.3 percent by weight of cement.

NOTE: Interior surfaces of concrete structures and pipe used to transport wastewater may require additional corrosion protection measures, such as linings, based on the flow conditions and wastewater characteristics. These considerations are beyond the scope of this report.

Concrete Piles

Steel Reinforced Cast in Place Concrete Piles

1. Protect steel reinforced cast-in-place and cast-in-drilled-hole concrete piles in accordance with the recommendations of the concrete structures section in this report.
2. If the piles are uncased or there is uncertainty about the shaft profile, consider whether additional concrete cover will be needed to ensure the minimum is achieved.

Hydraulic Elevators

1. Choose one of the following corrosion control options for the hydraulic steel cylinders.

OPTION 1

a. Coat hydraulic elevator cylinders with a suitable dielectric coating intended for underground use such as:

   i. Polyurethane per AWWA C222 or
   ii. Extruded polyethylene per AWWA C215 or
   iii. A tape coating system per AWWA C214 or
   iv. Hot applied coal tar enamel per AWWA C203 or
   v. Fusion bonded epoxy per AWWA C213.

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[5] *2018 International Building Code (IBC) which refers to American Concrete Institute (ACI) 318-19 Table 19.3.2.1*
[6] *2015 International Residential Code (IRC) which refers to American Concrete Institute (ACI) 318-19 Table 19.3.2.1*
[7] *2016 California Building Code (CBC) which refers to American Concrete Institute (ACI) 318-19 Table 19.3.2.1*
[8] *Design Manual 303: Concrete Cylinder Pipe. Ameron. p.65*

b. Electrically insulate each cylinder from building metals by installing dielectric material between the piston platen and car, insulating the bolts, and installing an insulated joint in the oil line; and

c. Apply cathodic protection to hydraulic cylinders as per NACE SP0169.

OPTION 2

As an alternative to electrical insulation and cathodic protection, place each cylinder in a plastic casing with a plastic watertight seal at the bottom.

2. The elevator oil line should be placed above ground if possible but, if underground, should be protected by one of the following corrosion control options:

OPTION 1

a. Provide a bonded dielectric coating,

b. Electrically isolate the pipeline, and

c. Apply cathodic protection to steel piping as per NACE SP0169.

OPTION 2

Place the oil line in a PVC casing pipe with solvent-welded joints and sealed at both ends to prevent contact with soil and moisture.

Closure

The analysis and recommendations presented in this report are based upon data obtained from the laboratory samples. This report does not reflect variations that may occur across the site or due to the modifying effects of construction. If variations appear, HDR should be notified immediately so that further evaluation and supplemental recommendations can be provided.

HDR's services have been performed with the usual thoroughness and competence of the engineering profession. No other warranty or representation, either expressed or implied, is included or intended.

Please call if you have any questions.

Respectfully Submitted,
HDR Engineering, Inc.

Steven Pierce, EIT
Corrosion EIT

Marc E N Wegner, PE
Sr Corrosion Project Manger

Enc: Table 1 – Laboratory Tests on Soil Samples

Table 1 - Laboratory Tests on Soil Samples

Group Delta Consultants
LAUSD 32nd/USC Performing Arts Magnet ES Campus Modernization
Your #LA1548, HDR Lab #21-1233SCS
16-Dec-21

Sample ID			B-1 @ 0-5'	B-3 @ 0-5'
Resistivity		**Units**		
as-received		ohm-cm	600,000	36,400
saturated		ohm-cm	6,000	6,800
pH			7.6	7.7
Electrical Conductivity		mS/cm	0.10	0.08
Chemical Analyses				
Cations				
calcium	Ca^{2+}	mg/kg	52	46
magnesium	Mg^{2+}	mg/kg	4.7	7.3
sodium	Na^{1+}	mg/kg	43	39
potassium	K^{1+}	mg/kg	6.0	6.9
ammonium	NH_4^{1+}	mg/kg	ND	ND
Anions				
carbonate	CO_3^{2-}	mg/kg	ND	ND
bicarbonate	HCO_3^{1-}	mg/kg	372	262
fluoride	F^{1-}	mg/kg	3.8	3.2
chloride	Cl^{1-}	mg/kg	6.0	5.7
sulfate	SO_4^{2-}	mg/kg	60	29
nitrate	NO_3^{1-}	mg/kg	4.3	19
phosphate	PO_4^{3-}	mg/kg	8.0	12
Other Tests				
sulfide	S^{2-}	qual	na	na
Redox		mV	na	na

Resistivity per ASTM G187, pH per ASTM G51, Cations per ASTM D6919, Anions per ASTM D4327, and Alkalinity per APHA 2320-B.

Electrical conductivity in millisiemens/cm and chemical analyses were made on a 1:5 soil-to-water extract.

mg/kg = milligrams per kilogram (parts per million) of dry soil.

Redox = oxidation-reduction potential in millivolts

ND = not detected

na = not analyzed

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APPENDIX E – PHASE I ENVIRONMENTAL SITE ASSESSMENT

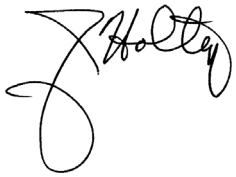
PHASE I ENVIRONMENTAL SITE ASSESSMENT

USC Performing Arts Magnet School
822 W. 32nd Street
Los Angeles, CA 90007

April 8, 2022

PHASE I ENVIRONMENTAL SITE ASSESSMENT

USC Performing Arts Magnet School
822 W. 32nd Street
Los Angeles, CA 90007



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Date:

April 8, 2022

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ACRONYMS AND ABBREVIATIONS

ACBM	asbestos-containing building material
APN	Assessor's Parcel Number
AST	aboveground storage tank
ASTM	ASTM International
AUL	activity and use limitation
bgs	below ground surface
CDE	California Department of Education
CFR	Code of Federal Regulations
CREC	controlled recognized environmental condition
DTSC	Department of Toxic Substances Control
Eco	Eco & Associates, Inc.
EDR	Environmental Data Resources, Inc.
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
HREC	historical recognized environmental condition
LADWP	Los Angeles Department of Water & Power
LAUSD	Los Angeles Unified School District
LBP	lead-based paint
LUST	leaking underground storage tank
OCP	organochlorine pesticide
PCB	polychlorinated biphenyl
PCE	perchloroethylene
pCi/L	picoCuries per liter
REC	recognized environmental condition
RWQCB	Regional Water Quality Control Board
TPH	total petroleum hydrocarbon
U.S.	United States
USC	University of Southern California

U.S. EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	underground storage tank
VOC	volatile organic compound

EXECUTIVE SUMMARY

Eco & Associates, Inc. (Eco) was retained by Los Angeles Unified School District (LAUSD), Office of Environmental Health & Safety, to conduct a Phase I Environmental Site Assessment (ESA) of the site identified as University of Southern California (USC) Performing Arts Magnet School located at 822 W. 32nd Street in Los Angeles, Los Angeles County, California (the Site). The Site is identified as Los Angeles County Assessor's Parcel Number 5123-008-905. This ESA report discusses our findings for the Site.

As directed by LAUSD, the Phase I ESA was performed in accordance with the ASTM International (ASTM) Standard E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The goal of the ESA was to identify recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), and historical recognized environmental conditions (HRECs) associated with the property in conformance with ASTM E1527-13.

Eco understands that the purpose for conducting this Phase I ESA is to assess and document the current status of environmental conditions at the Site prior to modernization of the school campus.

The Phase I ESA included a visual inspection of the property completed on March 14, 2022; observation of adjacent properties; reviews of environmental regulatory agency records and historical documents; and interviews with personnel represented to be familiar with the Site, if available, as indicated elsewhere in the report.

The findings identified by Eco are summarized below and discussed in greater detail in the body of the report.

Historical Findings

According to historical sources reviewed, the southern end of the Site was sparsely developed with portions of a retail/residential building and associated sheds by 1894. By the early 1900s, the Site was developed with W. Jefferson Street School and an annex building, approximately 14 residential properties, and a portion of the previous retail/residential building. A third school structure was added at the southwest corner of the Site in 1915. The W. Jefferson Street School and most residential structures were replaced with a new school structure in the early 1930s. The school structure at the southwest corner of the Site was removed in 1915. The 1930s school structure and retail/residential building were replaced with the existing school structures in the early to mid-1970s. The existing high school structure was developed in the southwest portion of the school property in 2008.

A former 1,500-gallon underground storage tank (UST) (specific contents unknown) was discovered in the southwest corner of the Site during excavation activities for the new construction in 2008. Soil sampling conducted under the oversight of the Los Angeles Fire Department (LAFD) identified contaminants of concern (total petroleum hydrocarbons [TPH]) above regulatory screening criteria. Affected soil was excavated and removed from the Site under manifest, and confirmation soil sampling indicated all contaminated soil above regulatory screening criteria had been removed. The LAFD issued a no further action letter to the Site in January 2009.

Based on historical LAUSD figures for the Site, it is possible an abandoned UST is also present in the northwest corner of the Site. Historical figure notations indicate an oil tank and oil gauge were present in

this area. It is unknown if the tank was aboveground or belowground. Any future construction work in this area of the Site should plan for the possible discovery of an abandoned UST.

Onsite Findings

The 3.67-acre Site consists of an operating kindergarten through grade 12 school with five permanent buildings and 13 portable buildings. The Site also includes playgrounds, basketball court, lunch shelter, asphalt-paved parking lot, and landscaping.

The buildings onsite include a single-story administration and classroom building, classroom building, portable classroom buildings, and a two-story high school classroom building. The administration/classroom building also contains a multi-purpose room and food preparation/kitchen area.

The buildings are constructed of wood and concrete and finished with stucco. Interior building materials include vinyl and ceramic floor tiles, plaster, drywall, suspended ceiling tiles, and glue-on ceiling tiles. The building materials observed onsite were in generally good physical condition. One area of damaged plaster and paint was observed on the ceiling of the former freezer area in the kitchen area of the Administration/Classroom building. The damage appeared to be caused by previous excessive moisture. Small areas of damaged floor tiles were also observed at the Site.

Equipment and storage rooms are located in the high school building in the southwest portion of the Site. Approximately eight 5-gallon poly containers of paint were observed in one of the rooms. The paint was stored on the concrete floor. No evidence of releases was observed. The rooms also contain numerous disinfectants, biodegradable cleaners, and soaps stored in new plastic one-gallon containers. The chemicals were stored on wood shelving. No evidence of releases was observed.

One elevator is present onsite. The elevator is located on the exterior of the high school building. The elevator equipment and room appeared to be in new condition and no evidence of releases, staining or odors was present.

Regulatory Findings

An environmental database report prepared by Environmental Data Resources, Inc. (EDR) was reviewed for local, state, and federal listings for the Site and properties within the site vicinity. Regulatory database lists were reviewed for cases pertaining to leaking underground storage tanks and aboveground storage tanks, hazardous waste sites, and abandoned sites within the specified radii of standards established by ASTM guidelines. According to the EDR database report, the Site is listed as LAUSD - 32nd Street in the HAZNET, HAZMAT, HWTS, RCRA NonGen, UST, FINDS, and ECHO databases. According to the HAZNET, HAZMAT, and HWTS databases, the following waste streams were identified between 1999 - 2010: other inorganic solid waste, asbestos containing waste, tank bottom waste, contaminated soil from site clean-up, laboratory waste chemicals, PCBs and material containing PCBs, and other organic solids. The UST database does not provide any information other than the status is “inactive.” The remaining databases are tracking databases and do not provide any additional relevant information. According to information provided by the LAFD, the UST was removed in 2008 and case closure was granted in early 2009.

The historical site address 713 W. Jefferson Boulevard is identified in 1929 and 1933 as C W Song in the Historical Cleaner database. The site type is listed as Chinese laundry. According to Building Department

records, this historical cleaner was present onsite until the 1960s. This address is listed as Cross Roads Cleaners in 1975 and 1976. Cross Roads Cleaners is also listed in the Drycleaner database at 3131 Hoover Street, which is approximately 0.1-mile northwest of the Site at its closest point. It is reported as using perchloroethylene (PCE) in 1985; however, the current status is "inactive."

The historical site address 719 W. Jefferson Boulevard is identified in 1937 as W M Gluck in the Historical Cleaner database. The site type is listed as "clothes pressers and cleaners."

The first widespread use of PCE in the dry cleaning industry was in the late 1930s. Therefore, it is possible PCE was used by two of the former cleaners onsite. However, no agency records were identified that indicate a release of PCE occurred at these properties.

According to the EDR report, numerous facilities are listed in the surrounding area based on the Site's location within an older, densely developed urban environment. However, based on their listing for regulatory tracking purposes only, case closed status, and/or distance from the Site, these offsite properties are not expected to represent a concern of environmental impairment or a vapor encroachment condition to the Site

LAUSD Scope Items

Eco's review of LAUSD-required scope items indicates:

- Asbestos-containing building materials (ACBMs) were identified onsite. It is possible lead-based paint (LBP) also exists onsite due to the age of the onsite buildings.
- There is a potential for elevated concentrations of arsenic from historical application of herbicides and elevated concentrations of organochlorine pesticides (OCPs) from historical application of termiticides to be present in shallow soil at the Site.

Further detail regarding these items can be found within the body of the report.

Eco completed a LAUSD *Preliminary Environmental Screening of Proposed Project at Existing School Site* checklist. The Site is located in a City of Los Angeles identified methane zone. No other obvious hazards were identified.

Conclusions

Eco has performed a Phase I ESA of the Site in conformance with the scope and limitations of ASTM Practice E1527-13. This assessment has revealed no evidence of RECs in connection with the Site, and no further investigation is recommended at this time. However, potential concerns identified for the Site are:

- A possible abandoned-in-place UST in the northwest corner of the Site.
- ACBMs and LBP may be present in site buildings.
- There is a potential for impacted shallow soil from historical application of herbicides and pesticides.
- The Site is located within a methane zone.

Further assessment prior to commencement of construction activities may be warranted.

The following HREC was identified:

- A former 1,500-gallon UST (specific contents unknown) was discovered in the southwest corner of the Site during excavation activities for new construction in 2008. Soil sampling conducted under the oversight of the LAFD identified contaminants of concern (TPH) above regulatory screening criteria. Affected soil was excavated and removed from the Site, and confirmation soil sampling indicated all contaminated soil above regulatory screening criteria had been removed. The LAFD issued a no further action letter to the Site in January 2009.

No CRECs or *de minimis* conditions were identified in connection with the Site.

1 INTRODUCTION

Eco & Associates, Inc. (Eco) was retained by Los Angeles Unified School District (LAUSD), Office of Environmental Health & Safety, to conduct a Phase I Environmental Site Assessment (ESA) of the site identified as University of Southern California (USC) Performing Arts Magnet School located at 822 W. 32nd Street in Los Angeles, Los Angeles County, California (the Site). The Site is identified as Los Angeles County Assessor's Parcel Number 5123-008-905. This ESA report discusses our findings for the Site.

1.1 Purpose

Eco understands that the purpose for conducting this Phase I ESA is to assess and document the current status of environmental conditions at the Site prior to modernization of the school campus.

1.2 Detailed Scope of Services

As directed by LAUSD, the Phase I ESA was conducted in accordance with the ASTM International (ASTM) E1527-13 Standard Practice for Site Assessments: Phase I Environmental Site Assessment Process. The goal of the ESA was to identify recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), and historical recognized environmental conditions (HRECs) associated with the property in conformance with ASTM E1527-13.

A REC is defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not RECs.

A CREC is defined as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority and that subjects the property to activity and/or use limitations.

A HREC is defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed in a manner accepted by the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent), without subjecting the property to any activity and use limitations.

The ASTM practice requires environmental professionals to identify data gaps following reasonable inquiry of site and LAUSD personnel and Eco's search for "reasonably attainable" resources. ASTM E1527-13 defines a data gap as "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information."

Eco's scope of work included:

- On-site inspection of the Site to identify environmental conditions issues as defined above;
- Review of available environmental documents for the Site, including previous site assessments and investigations;

- Interviews with persons represented to be familiar with the operation and history of the Site;
- Review of property history through interviews, aerial photographs, on-line planning portals, and historical mapping (as available);
- Observation of adjacent properties and the local area to evaluate the potential for adverse environmental impact to the Site; and
- Contracting of Environmental Data Resources, Inc. (EDR) to identify sites of concern as required in the regulatory records review section of the ASTM E1527-13.
- Additional items as requested by LAUSD and noted in Section 1.8 below.

The Phase I ESA did not include the collection or analysis of soil, air, water, groundwater, transformer/ electrical fluids, hazardous building materials, or other samples, nor did it include a lien or title search. This Phase I ESA did not include an assessment of the environmental (or health and safety) compliance status of the site operations.

1.3 Significant Assumptions

Eco has assumed that the information sources used for this assessment provided accurate information. Evaluations presented in this report are based exclusively on information provided by LAUSD and site personnel and observations made during the site visit. No invasive field activities were conducted, and no laboratory analyses were performed.

The boundaries of the Site were described in documents provided by LAUSD and by interviews with LAUSD personnel. Eco assumed this information was accurate.

1.4 Limitations and Exceptions

The services performed and any opinions expressed by Eco in this report are based upon the limits of the assessment described herein. Eco has relied upon the accuracy of documents, information, data, and other materials provided or made available by LAUSD and others. Eco has not independently verified such information and assumes no liability for the accuracy or completeness of such information. Eco makes no guarantee that site conditions do not exist, or will not exist in the future, that were undetected or that could lead to liability in connection with the Site. Similarly, past and present activities on the Site indicating the potential for the existence of environmental concerns may not have been discovered by Eco. Such activities may include those that would indicate the potential for regulated hazardous substances at the Site. Likewise, site conditions or site activities that were outside the scope of the services described above, or changes to site conditions or regulatory requirements may lead to liabilities in connection with the Site that are not identified in this report. Eco has reviewed the information obtained in connection with the performance of the services described above, in keeping with existing applicable environmental consulting standards and enforcement practices but cannot predict what actions any given agency may take or what standards and practices may apply in the future.

Where access to portions of the Site or to structures on the Site was unavailable or limited, Eco renders no opinion and accepts no responsibility for assessment of the condition of these portions of the Site, including specifically, but not limited to, the presence of hazardous substances or petroleum products at

these locations. In addition, Eco renders no opinion concerning the presence or absence of hazardous substances or petroleum products where direct observation of any part of the Site, or structure on the Site, is limited by physical obstructions.

The conclusions and observations are based upon limited data and professional opinions, and the assessment is performed on a particular date. Site conditions and activities may change after that date. Therefore, the risk of undiscovered environmental impairment of the Site cannot be ruled out. Eco does not make any representations or warranties regarding the condition or value of the Site, regardless of the results of the assessment presented in this report.

Eco makes no guarantees, certifications, warranties, or representations of any kind whatsoever, whether expressed or implied, regarding this ESA, the condition of the Site, or the liabilities associated with the Site.

1.5 Special Terms and Conditions

No special terms and conditions were imposed on this ESA.

1.6 Reliance

It is understood that this report will be prepared for the sole use of LAUSD, and the contents thereof may not be used or relied upon by any other person without the express written consent and authorization of Eco and LAUSD. Use of this report by any other party shall be at such party's sole risk and liability.

1.7 Deviations

No deviations from the referenced ASTM Standard occurred.

1.8 Additional Services

As requested by LAUSD, this Phase I ESA also includes discussion of several items outside the scope of ASTM E1527-13. These include asbestos-containing building materials, lead-based paint, arsenic-based herbicides, organochlorine pesticides, and radon. In addition, a *Preliminary Environmental Screening of Proposed Project at Existing School Site* checklist in general accordance with California Department of Education (CDE) guidance is appended to this report. No other additional services beyond those outlined in ASTM E1527-13 were conducted as part of the assessment.

2 SITE LOCATION / LAND USE

2.1 Site Location

The 3.67-acre, irregular-shaped Site is addressed as 822 W. 32nd Street and is located south of W. 32nd Street and north of W. Jefferson Boulevard in Los Angeles, California. The Site is located approximately 0.28-mile northwest of the 110 Freeway at its closest point. The main entrance to the Site is off of W. 32nd Street.

The Regional Area Map and Site Detail Map are presented as **Figures 1 and 2**, respectively.

2.2 Site and Vicinity Characteristics

The Site is an operating LAUSD magnet school for grades Kindergarten through 12. The Site consists of five permanent buildings and 13 portable buildings with a total of 45 classrooms. The Site also includes playgrounds, basketball court, lunch shelter, asphalt-paved parking lot, and landscaping.

The Site is located within an established residential and commercial area in the City of Los Angeles. The surrounding area is fully developed.

Photographs of the Site and surrounding areas were taken to document current conditions and are included in **Appendix A**.

2.3 Current Use of the Property

The Site is an operating (Grades K-12) Performing Arts, Media Arts, and Engineering Magnet school; approximately 1,000 students attend the school. The school has been redeveloped and expanded three major times since the original development in 1904. The existing development and configuration was developed in 1976-1977 and the south high school building was constructed in 2008. No significant onsite improvements have occurred since that time.

2.4 Description of Structures, Roads, and Other Improvements on the Site

Site improvements consist of five permanent buildings and 13 portable buildings with a total of 45 classrooms. The Site also includes playgrounds, basketball court, lunch shelter, asphalt-paved parking lot, and landscaping.

The buildings onsite include a single-story administration and classroom building, classroom building, portable classroom buildings, and a two-story high school classroom building. The administration/classroom building also contains a multi-purpose room and food preparation/kitchen area.

The buildings are constructed of wood and concrete and finished with stucco. Interior building materials include vinyl and ceramic flooring, plaster, drywall, suspended ceiling tiles, and glue-on ceiling tiles.

2.5 Current Uses of the Adjoining Properties

The adjoining properties and land uses include:

- Northeast: W. 32nd Street followed by residential properties.
- Southeast: Asphalt-paved parking lot followed by the Shrine Auditorium.
- Southwest: W. Jefferson Boulevard followed by the University of Southern California (USC).
- Northwest: University Avenue which is a walking mall, followed by a Catholic Church and Hillet USC, a Jewish Student Center.

Based on visual observations, current activities at the adjacent properties do not appear to be of environmental concern to the Site.

3 USER-PROVIDED INFORMATION

The following information was provided by LAUSD.

3.1 Environmental Liens

According to LAUSD, there are no environmental liens recorded for the Site. In addition, Eco's review of regulatory records did not identify environmental liens recorded for the Site. As part of the EDR package received for this report, one Environmental Lien and Activity and Use Limitations (AULs) Search report was received for APN 5123-008-905. No liens were identified. A copy of the EDR Environmental Lien and AUL Search report is included in **Appendix B**.

3.2 Activity and Use Limitations

According to LAUSD, there are no AULs recorded for the Site. In addition, Eco's review of regulatory records and the EDR Environmental Lien and AUL Search report did not identify AULs, such as engineering controls, land use restrictions or institutional controls, that are in place at the Site and/or have been filed or recorded in a registry.

3.3 Specialized Knowledge

No specialized knowledge of RECs or Other Environmental Conditions or potential RECs associated with the Site was reported to Eco by LAUSD or other site representatives.

3.4 Commonly Known or Reasonably Ascertainable Information

Eco was not provided with any commonly known knowledge or reasonably ascertainable information about the Site that would constitute a REC. However, the information listed below is considered common to many LAUSD properties based on past maintenance and construction practices:

Asbestos-Containing Building Materials (ACBMs). With the exception of newer buildings on the Site, it is considered likely that the buildings contain, or formerly contained ACBMs. Records from the LAUSD Asbestos Technical Unit have been requested but have not been reviewed as of the date of this report. Based on the age of some of the Site structures, ACBMs are likely present onsite.

Lead-based Paint. With the exception of newer buildings onsite, it is considered likely that the paint on the former buildings or buildings contains, or formerly contained, elevated lead concentrations. Due to slow deterioration with time, paint typically flakes off and accumulates in the adjoining soils. This can result in elevated lead concentrations in the soil. However, the onsite buildings are mostly adjoined by pavement. As such, the potential that the soils underlying this pavement have been impacted with lead is considered relatively low.

Arsenic-Based Herbicide. It was formerly common practice for LAUSD to apply an arsenic-based herbicide to the soil immediately prior to paving with asphalt. As such, there is a potential

that elevated arsenic concentrations (greater than background levels) are present in the soils immediately underlying the paved portions of the Site.

Organochlorine Pesticides (OCP). It was formerly common practice for LAUSD to apply termiticides around wooden structures at school sites as a means of pest control. As such, there is a potential that elevated OCP concentrations are present in site soils.

3.5 Owner, Property Manager, and Occupant Information

According to information provided by LAUSD and EDR, the Site is owned and managed by LAUSD. The Site is occupied by school personnel and students.

3.6 Reason for Performing ESA

The reason for performing the Phase I ESA is to evaluate the environmental condition of the Site prior to LAUSD's modernization of the school property.

4 SITE HISTORY

Historical information for this Phase I ESA was obtained from EDR and the Internet and is summarized in **Table 1**.

Table 1 Historical Information Reviewed

Source	Date	Information Obtained
Sanborn® Fire Insurance Maps (copies provided in **Appendix C**)	1894, 1900, 1907, 1922, 1950, 1954, 1957, 1958, 1959, 1960, 1966, 1968, and 1970	In the 1894 map, the Site is depicted as undeveloped land except for the southeast corner along W. Jefferson Street which is developed with small shops. Land north of the Site is unmapped, land west of the Site is improved with Key West Street followed by dwellings, land south of the Site is improved with W. Jefferson Street followed by dwellings, and land east of the Site is mainly unmapped. In the 1900 map, an alley and dwellings have been added to the central portion of the Site. In the 1907 map, two school buildings, identified as W. Jefferson Street School, have been constructed on the southern portion of the Site. The onsite alley, running in a north/south direction, has been extended and separates the two school buildings. The remainder of the Site is developed with dwellings and small shops. The surrounding area consists of residential uses, a police station, and the Shrine Auditorium. No significant changes are depicted in the 1922 map; however, the street adjacent west of the Site has been renamed University Avenue. In the 1950 map, the north end of the Site has been redeveloped and consists of one large building and one small building identified as 32nd Street Public School. A note on the large building states “Built 1931”. One dwelling remains in the northeast corner of the Site. The southern half of the Site consists of one of the former school buildings, undeveloped land where the second former school building was located, a new building in the southwest corner labeled 32nd Street School for Adults, and small shops in the southeast corner. No significant changes are depicted in the 1954 and 1957 maps. In the 1958 map, the adult school building in the southwest corner of the Site has been removed. The Site consists of two larger school buildings, one small school building, one dwelling, and small shops in the southeast corner of the Site. Land north of the Site is improved with dwellings, land west of the Site is improved with a church and dwellings, land south of the Site appears to be part of the USC campus, and land east of the Site is identified as parking followed by the Shrine Auditorium. No significant changes are depicted in the 1959 and 1960 maps. In the 1966 map, a small structure labeled “lunch shed” has been added to the Site. No significant changes are depicted in the 1968 and 1970 maps. No features were depicted onsite or offsite on the maps reviewed that would indicate an obvious environmental concern for the Site.

Source	Date	Information Obtained
Topographic Maps (copies provided in **Appendix C**)	1894, 1896, 1898, 1900, 1902, 1920, 1921, 1926/1928, 1953, 1966, 1972, 1981, 1991, 2012, 2015, and 2018	In the 1894 through 1902 maps, the Site is depicted as mostly undeveloped land except for several small structures in the southeast corner. The surrounding area is a grid of streets with small structures. The 1920 and 1921 maps only depict an urban grid of streets; no specific features are identified. In the 1926/1928 composite map, several small structures are depicted onsite. The surrounding area is shown as a well-developed urban area. In the 1953 map, the Site is depicted with two school buildings. The Shrine Auditorium is depicted east of the Site and the USC campus is depicted south of the Site. Most of the surrounding area is shaded red indicating an urban environment. In the 1966 map, the Site is labelled "32nd Street School." The surrounding area is similar to that depicted in the 1953 map except the Harbor (110) Freeway has been constructed farther east of the Site. No significant changes are depicted onsite or offsite in the 1972 through 1991 maps. In the 2012 map, the Site is identified as 32nd Street USC Magnet School. The USC campus is shown south of the Site and St. James Park is shown farther north of the Site. No other specific features other than streets and freeways are shown in the greater surrounding area. In the 2015 and 2018 maps, the Site is identified with an icon indicating a school. No significant features are depicted in the surrounding area. No features were depicted onsite or offsite on the maps reviewed that would indicate an environmental concern for the Site.
Aerial Photographs (copies provided in **Appendix C)**	1923, 1928, 1938, 1948, 1952, 1964, 1970, 1977, 1981, 1989, 1994, 2002, 2005, 2009, 2012, and 2016	In the 1923 photograph, the Site is developed with small residential and shop structures and two apparent school buildings. The surrounding area is a densely developed urban environment. The Shrine Auditorium is shown east of the Site. In the 1928 photograph, the Site appears to have been cleared of some of the residential uses. In the 1938 photograph, the Site is developed with three school buildings according to an earlier Sanborn map. Small shops and a residence are shown in the southeast and northeast corners of the Site, respectively. The surrounding area remains a densely developed urban environment. No significant changes are shown in the 1948 through 1970 photographs. In the 1977 photograph, some of the former school buildings have been replaced with new buildings and it appears portable buildings have been added to the eastern side of the Site. In the 1981 photograph, additional portable classroom buildings have been added to the Site. In the 1989 through 2005 photographs, the Site appears similar to the 1981 photograph. Permanent and portable classrooms occupy the majority of the Site with an open space area in the southwest corner. Due to scale, possible structures fronting W. Jefferson Boulevard at the southern end of the Site are not clear. In the 2009 photograph, the high school building in the southwest corner of the Site has been constructed. The southern boundary of the Site now appears to be a vegetated buffer area. No significant changes are observed in the 2012 and 2016 photographs. No obvious environmental concerns to the Site were identified from the review of historical aerial photographs.
City Directory Report (copy provided in **Appendix C**)	1920 - 2015	City directory listings were researched in approximate 5-years intervals from 1920 - 2015. Although Sanborn maps identified numerous historical addresses, only listings for the current address are reported here. The site address is first listed in the 1924 and 1929 directories as occupied by private individuals indicating residential use. From 1976 through 2015, the Site is listed with some variation of the name 32nd Street Elementary School. The YMCA is also listed twice and likely indicates an afterschool day care program. No environmental concerns were identified.

Source	Date	Information Obtained
Building Permit Report (copy provided in **Appendix C**)	1919 - 2021	The EDR Building Permit Report did not identify any permits for the site address through a search of Los Angeles City and County Building Department records. In addition, there were no permits for the Site's historical address of 3232 University Avenue. Eco researched building permits for the Site at the Los Angeles Department of Building and Safety. The former building in the southwest corner of the Site was addressed as 737 W. Jefferson Boulevard. The school structure was a two-story brick building with basement constructed in 1915. The building contained nine rooms. The building was modified in 1932 due to street widening and demolished in 1957. Historical dwellings and shops along W. Jefferson Boulevard were addressed as 713 - 727 W. Jefferson Boulevard. The addresses were occupied by various commercial and retail tenants. Of environmental note was "Mary Chinese Laundry" located at 713 W. Jefferson Boulevard. The facility was present from the 1920s to the 1960s. The buildings in this area were demolished in the early to mid-1970s and the land was acquired by LAUSD. The first school structures were constructed in approximately 1904 and addressed 3242 University Avenue. The structures consisted of a main school building and an Annex building. Building permits were not found for this address. The second school configuration and development was addressed 3232 University Avenue. The 3232 address was originally a dwelling that was moved in 1926. The main school structure was constructed in 1931-1932 and occupied the northwest portion of the Site. The 3242 University Avenue school structure was demolished in 1932 with a permit addressed as 3232 University Avenue. Building permits for 822 W. 32nd Street were only found for years 1912 to 1929 for modifications from a dwelling to an apartment building flat.
Internet Search	March 2022	According to an Internet search for the school at https://32ndstreet-uscmagnet.schoolloop.com/pf4/cms2/view_page?d=x&group_id=1520065546790&vdid=ii35g1szs1x3gm, the following historical information was obtained: *32nd Street/USC first opened its doors in September of 1904 on the corner of 32nd Street and Hoover and was surrounded by residential homes. The original school was a two-story brick building. The original school was damaged by an earthquake in the early 1970s and was torn down because of its perceived instability. Thereafter, between 1971 and 1974 a wooden school building was created and bungalows were actually built on site in support of that wooden structure. This wooden structure was subjected to a major fire, which again destroyed the primary building and finally, the school became a series of bungalows in addition to the main administration building that now currently exists.* *The LAUSD/USC Math, Science and Technology (MaST) High School began in 1994 as a collaboration between LAUSD, USC, and the California National Guard (initial plans called for temporarily housing the school in National Guard facilities). The magnet was designed for college-bound students focusing on basic and applied sciences, math and technology. MaST opened – temporarily, it was thought – on the 32nd Street/USC School campus until another location could be found.* *In honor of her 105th birthday, 32nd Street/USC MaST K-12 will receive a major face lift which will include the removal of some bungalows and the building and completion of a two-story, 12 classroom building, replete with additional restroom*

Source	Date	Information Obtained
		facilities and an elevator. The school is the largest drawing magnet school in LAUSD with some 3,700 applications being filed for 160 spaces.
LAUSD (copies provided in **Appendix C)**	March 2022	LAUSD provided historical site maps dated 1930, 1946, 1957, 1971, and 1976. The 1930 map identifies the Site with an address of 737 W. Jefferson Boulevard with access from W. Jefferson Boulevard and from University Avenue west of the Site. The Site is developed with a new school building in the northwest corner, a garden area in the northeast corner, a school building in the southeast corner, and a brick building in the southwest corner. A two-story "Frame Building" is depicted north of the brick building. An "oil tank/manhole" is depicted near the northwest corner of the building and the "oil intake" is shown along University Avenue west of the building. The present-day southeast corner of the Site along W. Jefferson Boulevard is not a part of the Site at this time. The 1946 map identifies the Site with an address of 3232 University Avenue (as do the remaining maps). The site configuration is basically the same as the 1930 map; however, more detail is shown around the buildings. Adjacent to the east of the building in the northwest corner are notes for an oil tank and an oil gauge. The oil tank may be a heating oil tank; however, it is unclear if the tank is above or below ground. The 1957 map only depicts the southwest corner of the Site, which is developed with the previously shown brick building. In the 1971 map, the Site is improved with the school buildings previously shown in the northwest and southeast corners of the Site. Two lunch shelters and eight portable classroom buildings have been added to the Site. An oil tank is still depicted adjacent to the east of the main building in the northwest corner of the Site. The brick building in the southwest corner of the Site is no longer shown. The 1976 map shows parking lots in the northwest and northeast corners of the Site. The previously shown building in the northwest corner of the Site is gone and has been replaced with the two buildings currently onsite (administration and classroom). The previously shown building in the southeast corner of the Site is gone and portable classroom buildings are now present along the eastern boundary of the Site. The southwest corner of the Site is an asphaltic concrete-covered playground area. The Site now appears to extend to W. Jefferson Boulevard in the southeast corner. Based on the maps and interviews with LAUSD personnel, there are no original buildings onsite. The maps also indicate the Site was expanded to its current footprint somewhere between 1971 and 1976, when the southeast corner was extended south to W. Jefferson Boulevard. Eco requested records from the Los Angeles Fire Department regarding possible historic underground storage tanks (USTs) onsite (see Section 5.2).

4.1 Previous Environmental Investigations

No previous environmental investigation reports were provided to Eco for review.

5 RECORDS REVIEW

As part of this assessment, Eco reviewed regulatory databases and available agency files and records for the Site. Information from these sources is discussed in the following sections.

5.1 Regulatory Database Research

An environmental database report prepared by EDR was reviewed for local, state, and federal listings for properties within the site area. Included in EDR's report are regulatory databases reviewed by EDR for cases pertaining to leaking underground storage tanks (USTs) and aboveground storage tanks (ASTs), hazardous waste sites, and abandoned sites within ASTM-specified radii **(Table 2)**. EDR also reviewed selected databases generated by the United States Environmental Protection Agency (U.S. EPA). Explanations of the regulatory agency databases reviewed are presented in EDR's report, which is included as **Appendix D**.

It should be noted that the computerized geocoding technology used in the database search is based on available census data and is only accurate to approximately 300 feet. Also, elevations were determined from the U.S. Geological Survey Digital Elevation Model and are relative (not absolute). Sites with an elevation equal to or higher than the target property have been differentiated from sites with an elevation lower than the target property.

Sites identified within the study radii were evaluated to determine if they are likely to have adversely impacted the Site. The criteria used to evaluate the potential for adverse impact to the Site include:

- Distance from the Site;
- Expected depth and direction of groundwater and surface water flow;
- Expected storm water flow direction; and
- Presence/absence of documented contaminant releases at the identified sites not identified as remediated.

Table 2 summarizes some of the major federal and state databases reviewed. However, numerous databases are provided within the EDR report, and all databases are reviewed by Eco.

Table 2 Regulatory Agency Databases / Lists Reviewed

Search Radius	Agency	Database	Type of Records in Database
1 mile	U.S. EPA	NPL	Sites designated for Superfund cleanup by the U.S. EPA
	U.S. EPA	CORRACTS	RCRA facilities undergoing "corrective actions"
	DHS	BEP	Specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds
	DTSC	ENVIROSTOR	Sites that have known contamination or sites for which there may be a reason to investigate

Search Radius	Agency	Database	Type of Records in Database
0.5 mile	U.S. EPA	SEMS	Sites under review by the U.S. EPA
	U.S. EPA	TSD	Facilities that treat, store, and/or dispose of hazardous waste
	RWQCB	LUST	Sites with LUSTs
	IWMB	SWLF/SWAT	Sites permitted as solid waste landfills, incinerators or transfer stations
	SWRCB	WMUDS/SWAT	Tracking and inventory of waste management units
	U.S. EPA	SEMS-Archive	Former CERCLIS sites with no further remedial actions planned.
Site or Adjacent Properties	U.S. EPA	RCRA Generator	Sites that generate large or small quantities of hazardous waste
	U.S. EPA and OES	ERNS	Sites with reported accidental releases of oil and hazardous substances
	SWRCB	UST	Sites with registered USTs

Notes:

BEP = Bond Expenditure Plan
CERCLIS = Comprehensive Environmental Response Compensation and Liability Information System
CORRACTS = Corrective Action Report
ERNS = Emergency Response Notification System
DHS = Department of Health Services
DTSC = Department of Toxic Substances Control
IWMB = Integrated Waste Management Board
LUST = Leaking Underground Storage Tank
NFRAP = No Further Remedial Action Planned
NPL=National Priorities List
OES = Office of Emergency Services
RWQCB = California Regional Water Quality Control Board
SWAT = Solid Waste Assessment Test
SWLF = Solid Waste Landfills
SWRCB = State Water Resources Control Board
TSD = Transformer Registration Database
WMUDS = Waste Management Unit Database
SEMS = Superfund Environmental Management System

5.1.1 Site

According to the EDR database report, the Site address is listed as LAUSD - 32nd Street in the HAZNET, HAZMAT, HWTS, RCRA NonGen, UST, FINDS, and ECHO databases. According to the HAZNET, HAZMAT, and HWTS databases, the following waste streams were identified between 1999 - 2010: other inorganic solid waste, asbestos containing waste, tank bottom waste, contaminated soil from site clean-up, laboratory waste chemicals, PCBs and material containing PCBs, and other organic solids. The UST database does not provide any information other than the status is “inactive.” The remaining databases are tracking databases and do not provide any additional relevant information. According to LAUSD, the District does not have historical UST information for the Site other than as depicted in historic site figures.

The historical site address 713 W. Jefferson Boulevard is identified in 1929 and 1933 as C W Song in the Historical Cleaner database. The site type is listed as Chinese laundry. According to Building Department records, this historical cleaner was present onsite until the 1960s. This address is listed as Cross Roads Cleaners in 1975 and 1976. Cross Roads Cleaners is also listed in the Drycleaner database at 3131

Hoover Street, which is approximately 0.1-mile northwest of the Site at its closest point. It is reported as using perchloroethylene (PCE) in 1985; however, the current status is “inactive.”

The historical site address 719 W. Jefferson Boulevard is identified in 1937 as W M Gluck in the Historical Cleaner database. The site type is listed as “clothes pressers and cleaners.”

The first widespread use of PCE in the dry cleaning industry was in the late 1930s. Therefore, it is possible PCE was used by two of the cleaners. However, no agency records were identified that indicate a release of PCE occurred at these properties.

5.1.2 Off-Site Properties

According to the EDR report, the following offsite properties of note were identified:

- 706, 711, and 801 W. Jefferson Boulevard were identified in the Historical Cleaner database. These addresses appear to have been historically located in proximity to the Site along W. Jefferson Boulevard. 706 was identified as a Chinese laundry in 1924 and 1933, and 711 and 801 were identified as “clothes pressers, cleaners, and repairers” in 1929. There are currently no dry cleaners present along W. Jefferson Boulevard in proximity to the Site.
- F O Kroll at 741 W. Jefferson Boulevard is listed in the Historical Auto database. On Google Earth this address plots in the southeast corner of the Site; however, based on Building Department records this address would have been offsite to the west. The facility is identified as “automobile repairing.” No further information was identified.

Several other historical cleaner and historical auto sites are listed in proximity to the Site in the database report; however, none of the listings are identified as historical or current release sites.

According to the EDR report, multiple other facilities are listed in the surrounding area based on the Site’s location within an older, densely developed urban environment. However, based on their listing for regulatory tracking purposes only, case closed status, and/or distance from the Site, these offsite properties are not expected to represent a concern of environmental impairment or a vapor encroachment condition to the Site.

One property is listed in EDR’s Orphan Summary section; however, it is located well beyond the ASTM search radius.

5.2 Agency Research

Files and records available at the agencies listed in **Table 3** were reviewed for information on the Site.

Table 3 Local Agency Files

Source	Date	Information Obtained
California Regional Water Quality Control Board (RWQCB)	March 2022	Available information maintained by the RWQCB at http://geotracker.waterboards.ca.gov was reviewed for records concerning hazardous spills, USTs, and LUSTs for the Site. No records were identified for the Site address. In addition, no open release cases were identified within 0.25-mile of the Site.

Department of Toxic Substances Control (DTSC)	March 2022	A review of the DTSC website (http://www.envirostor.dtsc.ca.gov/public/) did not identify any records for the Site address. In addition, no open release cases were identified within 0.25-mile of the Site.
Los Angeles Fire Department (LAFD)	April 2022	Public records for the Site were reviewed from the LAFD. A UST and associated piping were encountered during new construction at the southwest corner of the Site in 2008. The UST and associated piping were cleaned, certified inert, and then removed on October 24, 2008. Closure activities were conducted under the oversight of the LAFD in accordance with the provisions of a Division 5 Permit. During excavation activities for new construction, a 1,500-gallon single-walled steel UST was encountered in the northwestern portion of the construction area approximately 190 feet north of Jefferson Boulevard and 105 feet east of Hoover Street. Two 2-inch pipes extended from the UST to the west to a historic building foundation. Based on field observations and excavation activities, the top of the UST was at a depth of approximately 14 feet below ground surface (bgs) and had dimensions of 15-feet in length and 6-feet in diameter. The UST was found to have been previously filled with concrete slurry. Once the UST and associated piping had been removed, confirmation soil sampling of the excavation sidewalls and bottom was conducted, as directed by the LAFD inspector. Two soil samples were collected from 2 feet below the bottom of the UST excavation at the northern and southern ends of the UST (samples T1 and T2, respectively), and three soil samples were collected from 2 feet below the bottom of the piping trench (samples P1, P2, and P3). In addition, soil samples were collected from the stockpile generated from the UST overburden material (sample SP1) and the soil excavated from below the UST (sample TB1). The samples were analyzed in accordance with United States Environmental Protection Agency (EPA) test methods for total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs). The analytical results for the confirmation samples indicated that a release of petroleum hydrocarbons had occurred at the south end of the UST, in the vicinity of sample T2 (TPH as diesel [TPH-d] at 1, 860 mg/kg). This concentration exceeded the RWQCB MSSL of 1,000 mg/kg. All other reported TPH concentrations were below the MSSLs of 100 mg/kg for gasoline, 1,000 mg/kg for diesel, and 10,000 mg/kg for oil in soil 20 to 150 feet above groundwater. VOCs were not detected above screening criteria. On October 29 and 30, 2008, four borings (US-1, US-2, UE-1, and UE-2) were advanced up to 50 feet bgs, and soil samples were collected in 5-to-10-foot intervals between the depths of 15 and 50 feet bgs. The borings were drilled to aid in delineating the extent of TPH-impacted soil identified at the location of sample T2 collected from the excavation bottom. TPH-d, TPH-oil, and total recoverable petroleum hydrocarbons (TRPH) were detected in sample US-1 (collected at 25-feet bgs) at 490 mg/kg, 1,540 mg/kg, and 2, 190 mg/kg, respectively. These concentrations did not exceed the respective MSSL values of 1,000 mg/kg for TPH-d and 10,000 mg/kg for TPH-o for soils 20 to 150 feet above groundwater. All other samples were non-detect for all analytes. Based on the analytical results from these soil borings, TPH-impacted soil was determined to be limited to the area immediately around sample T2. On November 3, 2008, additional excavation was conducted within the extent of the original shoring system to a maximum depth of 25 feet bgs to remove additional stained soil. Confirmation samples were collected from the excavation bottom and sidewalls to confirm all TPH impacted soil had been removed. Based on the analytical results it was determined that soil to the south, beyond the limits of the initial shoring system, was impacted

		with TPH-d in excess of the regulatory guidelines. The shoring system was removed and the excavation was temporarily backfilled with clean onsite soil. Between November 11 and 19, 2008, the excavation shoring was extended additional times until confirmation sampling concluded concentrations were below the respective MSSLs. On November 19, 2008, it was therefore concluded that the impacted soil had been sufficiently removed and that no further excavation was required. The UST and impacted soil were hauled offsite for disposal under manifest. On November 24 and 25, 2008, the excavation was backfilled with 3-sack concrete slurry to approximately 7-feet bgs. A total of approximately 470 cubic yards of slurry were used to backfill the excavation. The shoring system was extracted from the excavation as the slurry was being placed. No further action was granted to the Site by the LAFD on January 23, 2009. Records regarding additional USTs or hazardous materials were not found at the LAFD. See **Appendix E** for a copy of the LAFD records including the no further action letter.
Los Angeles Department of Public Works, Environmental Programs Division (LADPW)	March 2022	A review of the LADPW website at https://dpw.lacounty.gov/epd/CleanLA/OpenFileReview.aspx did not identify any records for the existing Site address or former Site addresses.
California Geologic Energy Management Division (CalGEM)	March 2022	A review of CalGem's Well Finder database https://maps.conservation.ca.gov/doggr/wellfinder/#openModal identified a plugged "core hole" immediately adjacent to the basketball court in the northeast corner of the Site. The API for the well is 0403706320, the lease name is Dana Corehole, and the operator is Chevron U.S.A. Inc. Based on the type of well (a core hole is a hole drilled for the purpose of obtaining a rock sample), no environmental concern is identified. No other wells were identified in proximity to the Site.
City of Los Angeles, Bureau of Engineering, Department of Public Works	March 2022	Although oil wells were not identified onsite or in proximity to the Site, according to the City of Los Angeles *Methane and Methane Buffer Zones* map, dated March 31, 2004, the Site is located within a methane zone. Therefore, building construction and renovation projects require adherence to specific building codes.
National Pipeline Mapping System (NPMS)	March 2022	A review of the NPMS database at https://pvnpms.phmsa.dot.gov/PublicViewer did not identify any gas transmission lines on the Site or in proximity to the Site. A hazardous liquid pipeline is located 0.23-mile north of the Site at its closest point. No accidents are shown along the length of the pipeline.

6 ENVIRONMENTAL SETTING

6.1 Topography

According to information obtained from the U.S. Geological Survey 7.5-Minute Series Topographic Map of the Hollywood quadrangle dated 2018, the Site elevation is approximately 190-feet above mean sea level. The Site is relatively level. Topography of the surrounding area slopes gently towards the west.

6.2 Geology

The general geology summary provided by EDR specifies that the sediments beneath the Site have been identified as part of the Quaternary Series of the Quaternary System of the Cenozoic Era. According to the United States Department of Agriculture Soil Conservation Service, the Site is underlain by the Urban Land soil component, which is land that has been disturbed to the extent that native soil characteristics are no longer readily identifiable.

6.3 Surface Water

There are no surface water features onsite.

6.4 Hydrogeology

The Site lies within the Coastal Plain of Los Angeles Basin. According to a review of the RWQCB's GeoTracker website for a property located approximately 0.42-mile northeast of the Site (Mobil, 2620 Figueroa Street), groundwater in proximity to the Site exists in three very thin-perched groundwater zones between 55 and 60 feet below ground surface (bgs), between 140 and 145 feet bgs, and between 160 and 165 feet bgs. A flow direction was not provided; however, based on regional topography groundwater is anticipated to flow to the west/southwest.

6.5 Flood Zones

According to the EDR database report and Federal Emergency Management Agency (FEMA) data, the Site is located in a 2% Annual Chance Flood Hazard area per FEMA Flood Plain Panel 06037C1620F.

6.6 Earthquake Faults/Liquefaction

According to the interactive California Department of Conservation Fault Activity Map of California at https://maps.conservation.ca.gov/cgs/fam/, the Site does not lie on or in proximity to a mapped fault.

According to the Los Angeles County, California Liquefaction Zones website at https://koordinates.com/layer/95936-los-angeles-county-liquefaction-zones/, last updated June 21, 2019, the Site is not located within a liquefaction zone. A liquefaction zone is present approximately 0.62-mile southwest of the Site at its closest point.

6.7 Radon Gas

According to sources reviewed by the LAUSD Office of Environmental Health and Safety, the Site is located within a “low radon zone”, identified as having a low potential for radon gas levels to be above 4 picoCuries per liter (pCi/L) of air. The U.S.EPA’s action level for radon gas is 4 pCi/L of air. Therefore, during construction and/or renovation of onsite buildings, there are no requirements for radon testing or mitigation. See **Appendix F** for a copy of LAUSD’s *32nd St/USC Performing Arts Magnet Radon Determination* memorandum.

7 SITE RECONNAISSANCE

On March 14, 2022, Mr. Blake Hunter, a representative of Eco, performed a reconnaissance-level assessment of the Site to observe general site conditions and indications of the possible release(s) of chemicals to the subsurface. A walk-over site reconnaissance was conducted to identify visible evidence of RECs. Mr. Hunter was accompanied by Mr. Lawrence Browne with the LAUSD during the Site inspection. Photographs taken during the site reconnaissance are included in **Appendix A**.

7.1 Methodology and Limiting Conditions

Eco's representative was granted full access to the Site. The methodology for the site visit included walking and observing the Site.

7.2 General Site Conditions

7.2.1 Site Observations

The Site consists of an operating middle school with five permanent buildings and 13 portable buildings. The Site also includes playgrounds, basketball court, lunch shelter, asphalt-paved parking lot, and landscaping.

The buildings onsite include a single-story administration and classroom building, classroom building, portable classroom buildings, and a two-story high school classroom building. The administration/classroom building also contains a multi-purpose room and food preparation/kitchen area.

The buildings are constructed of wood and concrete and finished with stucco. Interior building materials include vinyl and ceramic floor tile, plaster, drywall, suspended ceiling tiles, and glue-on ceiling tiles. The building materials observed onsite were in generally good physical condition. One area of damaged plaster and paint was observed on the ceiling of the former freezer area in the kitchen area of the Administration/Classroom building. The damage appeared to be caused by previous excessive moisture. Small areas of damaged floor tiles were also observed at the Site.

Equipment and storage rooms are located in the high school building in the southwest portion of the Site. Approximately eight 5-gallon poly containers of paint were observed in one of the rooms. The paint was stored on the concrete floor. No evidence of releases was observed. The rooms also contain numerous disinfectants, biodegradable cleaners, and soaps stored in new plastic one-gallon containers. The chemicals were stored on wood shelving. No evidence of releases was observed.

One elevator is present onsite. The elevator is located on the exterior of the high school building. The elevator equipment and room appeared to be in new condition and no evidence of releases, staining or odors was present.

7.2.2 Hazardous Substances and Petroleum Products in Connection with Identified Uses

No hazardous substances were identified onsite. Maintenance and janitorial compounds are present onsite as described above in Section 7.2.1.

7.2.3 Storage Tanks

No ASTs were observed onsite. No evidence of USTs, such as dispensers, pipes, or vent lines, was observed on the Site.

7.2.4 Odors

No unusual odors were detected at the Site.

7.2.5 Pools of Liquid

No readily visible standing surface water, pools, or sumps containing liquids likely to be hazardous substances or petroleum products were identified during this assessment.

7.2.6 Drums

No drums were observed onsite.

7.2.7 Hazardous Substances and Petroleum Product Containers (Not Necessarily in Connection with Identified Uses)

No hazardous substances were observed onsite.

7.2.8 Unidentified Substance Containers

No unidentified substance containers were observed onsite.

7.2.9 PCBs

Three pad-mounted electrical transformers were observed onsite. The transformers are owned and maintained by the Los Angeles Department of Water and Power (LADWP). No evidence of releases or staining was observed on the equipment or on the surrounding concrete pad foundations. Any concerns with the electrical equipment would be the responsibility of LADWP. No other equipment suspected of containing polychlorinated biphenyls (PCBs) was observed onsite.

7.2.10 Pits, Ponds, or Lagoons

During the site visit, Eco's representative looked for pits, ponds, or lagoons on the Site and adjoining properties to the extent that such features could be visually and/or physically observed from the Site or identified in the interviews or records review. No such features were identified on or adjoining the Site.

7.2.11 Stained Soil or Pavement

No stained soil or pavement was observed onsite.

7.2.12 Stressed Vegetation

During the site visit, Eco's representative looked for areas of stressed vegetation (other than from water stress). No stressed vegetation was observed onsite.

7.2.13 Solid Waste

During the site visit, Eco's representative looked for areas that were apparently filled or graded by non-natural causes (or filled with material of unknown origin) that suggest the presence of trash construction debris, demolition debris, or other solid waste disposal, or mounds or depressions suggesting trash or other solid waste disposal. No such areas were observed.

No visual evidence of historical trash incineration was observed onsite nor was any reported by site representatives.

7.2.14 Wastewater

During the site visit, Eco looked for wastewater or other liquids or discharges into a drain, ditch, underground injection system, or stream on or adjacent to the Site. No process wastewater is discharged onsite.

7.2.15 Wells

During the site visit, Eco looked for wells, including water wells, dry wells, irrigation wells, injection wells, monitoring wells, abandoned wells, oil wells, or other wells. No wells were observed onsite or reported to be onsite.

7.2.16 Septic Systems

During the site visit, Eco looked for indications of onsite septic systems or cesspools. No septic systems or cesspools were observed onsite. The Site is connected to the sanitary sewer system.

7.2.17 Heating / Cooling

The Site buildings are heated and cooled by roof-mounted and wall-mounted (portable buildings) combination units.

7.2.18 Stains or Corrosion

No interior staining or corrosion was observed at the Site.

7.2.19 Drains or Sumps

Steel-grated stormwater drains are present throughout the Site. The drains appeared to be generally free of debris. Sink and restroom drains are present in buildings throughout the Site. No sumps were observed onsite.

8 PRELIMINARY ENVIRONMENTAL SCREENING FOR EXISTING SCHOOLS

A checklist was prepared by Eco and is included as **Appendix G** of this report. The screening is in general accordance with CDE guidance and assesses the potential for environmental hazards to students and staff at an existing school. These hazards include those associated with high voltage power transmission lines, railroads, traffic noise, faults, flood or dam inundation, pipelines and ASTs, liquefaction and landslides, traffic and pedestrian safety, compatible zoning, light, wind, and air pollution, easements, border zone properties, cellular phone towers, methane zones, oils wells, and airports. As Eco is not familiar with the details of the proposed Site modernization project, an adequate evaluation of all the components in the checklist cannot be provided. However, responses are provided to the extent possible based on Site and vicinity observations and records and Internet research. The Site is located within a City of Los Angeles identified methane zone. No other obvious hazards were identified during this screening assessment.

9 INTERVIEWS

9.1 Interview with Site Contacts

According to Mr. Lawrence Browne with the LAUSD, the Site has been developed with a school for over 120 years and has been redeveloped several times prior to its existing configuration. No original buildings are present onsite. Mr. Browne was not aware of any existing environmental concerns at the Site.

10 FINDINGS & CONCLUSIONS

Eco has performed a Phase I ESA in accordance with the ASTM International E1527-13 Standard Practice for Site Assessments: Phase I Environmental Site Assessment Process. Limitations or deviations from this practice are described in Section 1.4 of this report. The findings identified by Eco are summarized below and discussed in greater detail in the body of the report.

10.1 Recognized Environmental Conditions

No RECs were identified in connection with the Site.

However, based on historical LAUSD figures for the Site, it is possible an abandoned UST is present in the northwest corner of the Site. Historical figure notations indicate an oil tank and oil gauge were present in this area. It is unknown if the tank was aboveground or belowground. Any future construction work in this area of the Site should plan for the possible discovery of an abandoned UST.

10.2 Controlled Recognized Environmental Conditions

No CRECs were identified in connection with the Site.

10.3 Historical Recognized Environmental Conditions

The following HREC was identified in connection with the Site:

- A former 1,500-gallon UST (specific contents unknown) was discovered in the southwest corner of the Site during excavation activities for new construction in 2008. Soil sampling conducted under the oversight of the LAFD identified contaminants of concern (TPH) above regulatory screening criteria. Affected soil was excavated and removed from the Site under manifest, and confirmation soil sampling indicated all contaminated soil above regulatory screening criteria had been removed. The LAFD issued a no further action letter to the Site in January 2009.

10.4 *De Minimis* Conditions

No *de minimis* conditions were identified in connection with the Site.

10.5 LAUSD Scope Items

Eco's review of LAUSD-required scope items indicates:

- ACBMs were identified onsite. It is possible lead-based paint also exists onsite due to the age of the onsite buildings.
- There is a potential for elevated concentrations of arsenic from historical application of herbicides and elevated concentrations of OCPs from historical application of termiticides to be present in shallow soil at the Site.

Eco prepared a LAUSD *Preliminary Environmental Screening of Proposed Project at Existing School Site* checklist. The Site is located in a City of Los Angeles identified methane zone. No other obvious hazards were identified.

10.6 Conclusions

Eco has performed a Phase I ESA of the Site in conformance with the scope and limitations of ASTM Practice E1527-13 for Phase I ESAs. This assessment has revealed no evidence of RECs in connection with the Site, and no further investigation is recommended at this time. However, potential concerns identified for the Site are:

- A possible abandoned-in-place UST in the northwest corner of the Site.
- ACBMs and LBP may be present in site buildings.
- There is a potential for impacted shallow soil from historical application of herbicides and pesticides.
- The Site is located within a methane zone.

Further assessment prior to commencement of construction activities may be warranted.

No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. This evaluation was intended to reduce, but not eliminate uncertainty in RECs.

11 DATA GAPS

The following data gaps were identified in connection with the Site:

- Lack of reports describing previous surveys of ACBMs and LBP at the Site. The extent of existing ACBMs and LBP onsite is unknown.

- Information regarding a historical tank in the northwest corner of the Site.

Pertinent data, if any, obtained by LAUSD following the issuance of this report should be reviewed by an environmental professional and an addendum should be prepared to present an evaluation of the data and any changes to the conclusions of this report, as warranted by the data.

12 ENVIRONMENTAL PROFESSIONALS STATEMENT

The environmental assessment described herein was conducted by the undersigned employees of Eco. Eco's assessment consisted solely of the activities described in the Introduction of this Report and as generally outlined in ASTM E1527-13 guidelines for Phase I Environmental Site Assessments signed prior to initiation of the assessment, as applicable.

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 Code of Federal Regulations (CFR) 312, and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. *

Report Prepared By:

April 8, 2022

Blake Hunter
Senior Scientist
Environmental Professional

Date

Report Reviewed By:

April 8, 2022

Janet Holtz
Principal Scientist
Environmental Professional

Date

*A professional engineer's, geologist's, or environmental professional's certification of conditions comprises a declaration of his or her professional judgment. It does not constitute a warranty or guarantee, expressed or implied, nor does it relieve any other party of its responsibility to abide by contract documents, applicable codes, standards, regulations, and ordinances.

13 REFERENCES

ASTM International. 2013. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-13.

Converse Consultants. 2008. Underground Tank Removal – Closure Report, 32nd Street Magnet School, 822 W. 32nd Street, Los Angeles, CA. December 9.

Environmental Data Resources, Inc. (EDR). 2022. Radius Map Report with GeoCheck. Inquiry #6844958.2s. February 3.

EDR. 2022. Aerial Photo Decade Package. February 3.

EDR. 2022. Certified Sanborn Map Report. February 3.

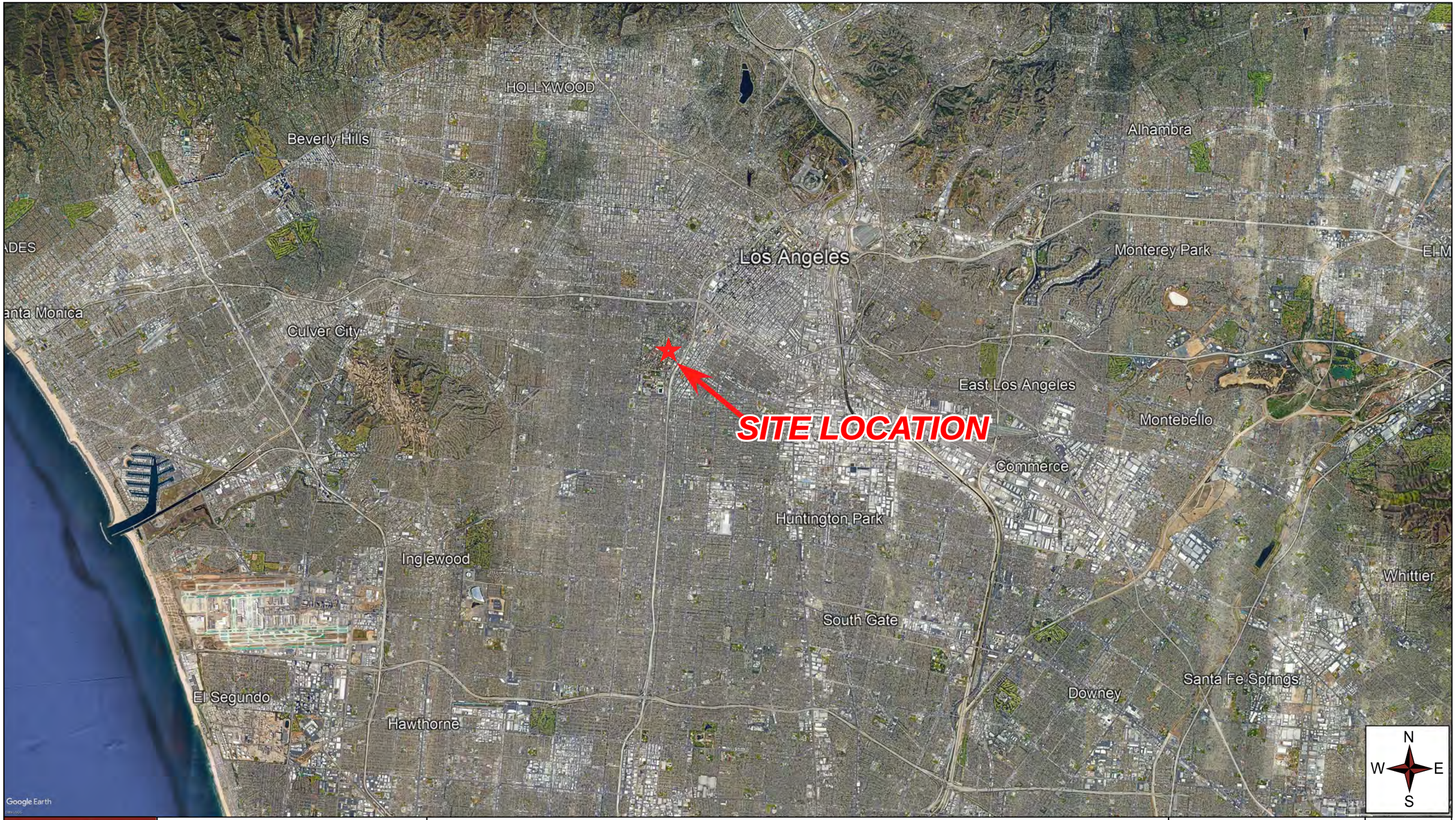
EDR. 2022. Environmental Lien and AUL Search. February 4.

EDR. 2022. Historical Topographic Map Report. February 3.

EDR. 2022. City Directory Abstract. February 3.

EDR. 2022. Building Permit Report. February 3

FIGURES



Environmental Excellence	**Eco & Associates, Inc.** 18231 Irvine Boulevard, Suite 204 Tustin, CA 92780 Phone: 714.289.0995 Fax: 714.289.0965	**REGIONAL AREA MAP** **LAUSD 32nd Street USC Magnet School** **822 West 32nd Street** **Los Angeles, CA**	PROJECT NO.: Eco-22-640 DATED March 2022	FIGURE 1

Environmental Excellence

Eco & Associates, Inc.
18231 Irvine Boulevard, Suite 204
Tustin, California 92780

Phone: 714.289.0995 Fax: 714.289.0965

Site Detail Map

LAUSD 32nd Street USC Magnet
822 West 32nd Street
Los Angeles, CA

PROJECT NO. Eco-22-640

DATED March 2022

FIGURE
2

APPENDIX A

Site Photographs

Photograph #1

Description of Photograph:
View of the Site towards south.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #2

Description of Photograph:
View of the interior hallway of the Administration/classroom building.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #3

Description of Photograph:
View of the portable classrooms on the east portion of the Site.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #4

Description of Photograph:
View of the high school building in the southwest portion of the Site.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #5

Description of Photograph:
View of a typical stormwater drain onsite.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #6

Description of Photograph:
View of cleaner and soap storage.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #7

Description of Photograph:
View of the elevator equipment.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #8

Description of Photograph:
View of paint and cleaner storage.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #9

Description of Photograph:
View of additional paint storage.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #10

Description of Photograph:
View of lunch shelter area.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #11

Description of Photograph:
View of former freezer area.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #12

Description of Photograph:
View of moisture damaged ceiling plaster in former freezer area.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #13

Description of Photograph:
View of the food preparation/kitchen.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #14

Description of Photograph:
View of the multi-purpose room.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #15

Description of Photograph:
View of basketball court at the northeast corner of the Site.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #16

Description of Photograph:
View of a typical transformer onsite.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #17

Description of Photograph:
View of the kindergarten playground area.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #18

Description of Photograph:
View of the dumpster area.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #19

Description of Photograph:
View of the northeast adjacent properties.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #20

Description of Photograph:
View of the southeast adjacent properties.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #21

Description of Photograph:
View of the south-southwest adjacent properties.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

Photograph #22

Description of Photograph:
View of the northwest adjacent properties.

Site Location:
822 W. 32nd Street
Los Angeles, California

Photograph Taken By:
Blake Hunter

Date of Photograph:
March 14, 2022

APPENDIX F – APPROVED PHASE 1 – ASBESTOS ENGINEERING ASSESSMENT REPORT

VISTA ENVIRONMENTAL CONSULTING

SACRAMENTO ● OAKLAND ● SAN JOSE ● MONTEREY ● ANAHEIM ● SAN DIEGO

To: Evangelique Zhao, Project Development Manager
Los Angeles Unified School District
Asset Management / Project Development
333 S. Beaudry Avenue
Los Angeles, CA 90017

Greta Galoustian, Facilities Environmental Technical Manager
Los Angeles Unified School District
Facilities Environmental Technical Unit
1240 S. Naomi Avenue
Los Angeles, CA 90021

Approved Phase 1 - Asbestos Engineering Assessment Report
Major Modernization Project

32nd Street/USC Magnet School (7137)
822 W. 32nd Street
Los Angeles, CA 90007

LAUSD (COLIN) Project No. 10372107
FETU Work Order No. 38096750

Date Prepared: August 19, 2024

Prepared by: Vista Environmental Consulting, Inc.
1054 North Tustin Avenue
Anaheim, CA 92807
(714) 289-2600
Vista Project No. 240334073

Carlos A. Galdamez, Certified Asbestos Consultant No. 98-2379

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Appendices

Appendix A	Site Plan
Appendix B	Asbestos Analytical Results from Samples
Appendix C	Asbestos Survey Form A
Appendix D	Consultant's Certifications
Appendix E	Scope of Work

Los Angeles Unified School District
Facilities Services Division

ALBERTO M. CARVALHO
Superintendent of Schools

INDIA GRIFFIN
Director
Maintenance & Operations

KRISZTINA TOKES
Chief Facilities Executive

GRETA GALOUSTIAN
Facilities Environmental Technical Manager
Facilities Environmental Technical Unit

August 27, 2024

Mr. Carlos Galdamez
Vista Environmental Consulting Inc.
1054 North Tustin Avenue
Anaheim, California 92807

RE: PHASE __I__ REVIEW AND APPROVAL FOR ASBESTOS __X__ and/or LEAD __NA__

The Facilities Environmental Technical Unit (FETU) has reviewed and approved your Phase __I__ document(s) for the project listed below.

School: 32nd Street USC Magnet School School Code # 7137

Project: Major Modernization Project – Administrative & Classroom Bldg. (005DAT), Classroom Bldg. (006DAT), Lunch Shelter (P0377K), New 2-Story Classroom Bldgs. 1 & 2 (35282 & 35283).

Colin No. 10372107

Date of Report: 8/19/2024 Maximo Work Order No. 38096750

If you have any questions regarding this approval, please call the FETU at (213) 745-1450.

Sincerely,

Digitally signed by Glenn Gutierrez
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File

LIST OF ACRONYMS
for Asbestos

ACM	Asbestos-Containing Material
ACBM	Asbestos-Containing Building Material
ACCM	Asbestos-Containing Construction Material (California only)
AHERA	Asbestos Hazard Emergency Response Act
CAC	California Asbestos Consultant
Cal/OSHA	California Division of Occupational Safety and Health
CCR	California Code of Regulations
CSST	California Site Surveillance Technician
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FETU	Facilities Environmental Technical Unit (LAUSD)
HEPA	High Efficiency Particulate Air
HVAC	Heating, Ventilation, and Air Conditioning
LAUSD	Los Angeles Unified School District
NEA	Negative Exposure Assessment
NESHAP	National Emission Standards for Hazardous Air Pollutants
OAR	Owner Authorized Representative
OEHS	Office of Environmental Health & Safety (LAUSD)
PEL	Permissible Exposure Limit
PLM	Polarized Light Microscopy
RACM	Regulated Asbestos-Containing Material
SCAQMD	South Coast Air Quality Management District

LIST OF DEFINITIONS
for Asbestos

Abatement: Control/elimination of asbestos through operations and maintenance, repair, enclosure, encapsulation, or removal.

Amended Water: Water to which a surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate ACM.

Asbestos: Asbestiform varieties of Chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonitegrunerite), anthophyllite, tremolite, and actinolite.

Asbestos-Containing Material (ACM): Material or product containing more than one percent (1%) asbestos

Asbestos-Containing Building Material (ACBM): Surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

Asbestos-Containing Construction Material (ACCM): For California only. Manufactured construction material that contains more than one-tenth of one percent (0.1%) asbestos by weight.

Building ID Number or Code: Six-digit alphanumeric identification code assigned to each building on a site; sometimes referred to as the insurance code, ID number, or other similar terms.

District: The Los Angeles Unified School District and its representatives.

Friable: Used in reference to a school building material which, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

High Efficiency Particulate Air (HEPA): Filter or system capable of removing particulates of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

Nonfriable: Used in reference to a school building material which, when dry, may not be crumbled, pulverized, or reduced to powder by hand pressure.

Plasticize: To cover floors, ceilings, and walls with plastic (polyethylene) sheeting.

Regulated Area: Area established by the employer (abatement contractor) to demarcate where asbestos work is conducted, and by the adjoining area where debris and waste from such asbestos work accumulate; a work area within which airborne concentrations of asbestos exceed or may exceed (with reasonable possibility) the permissible exposure limit.

I. Executive Summary, Introduction, Purpose, and Scope of Services

This Asbestos Engineering Assessment Report has been prepared by Vista Environmental Consulting, Inc. (Vista), for the upcoming project:

Project Name / Number:	Major Modernization Project LAUSD (COLIN) Project Number: 10372107 FETU Work Order Number: 38096750
Project Location / School:	32nd Street / USC Magnet School (7137) 822 W. 32nd Street Los Angeles, CA 90007.

Introduction

Vista was retained by Los Angeles Unified School District – Facilities Environmental Technical Unit (LAUSD – FETU) to conduct an asbestos engineering assessment at 32nd Street / USC Magnet School (7137) at the reference address above for the planned Major Modernization project. The asbestos engineering assessment included a review of the LAUSD current Asbestos Management Plans, a visual on-site inspection, and the collection of suspect asbestos-containing building materials (ACBM), if needed. Vista's field technicians were Mr. Carlos A. Galdamez, a State of California Division of Occupational Safety and Health (DOSH) Certified Asbestos Consultant (CAC) No. 98-2379 along with Mr. Francisco Barraza, a DOSH CAC No. 17-6066. The inspection was conducted on July 23, 24 & 27, 2024 and August 21, 2024.

At the time of the inspection, Mr. Francisco Barraza and Mr. Carlos A. Galdamez were all employed by Vista Environmental Consulting, Inc. located at 1054 N. Tustin Avenue in the City of Anaheim, California 92807 (714-289-2600).

Purpose and Scope of Services

The purpose of the asbestos engineering assessment was to determine if any suspect building materials, which are scheduled to be disturbed by the planned project, contain asbestos. The scope of services includes the following: 1) a review of the LAUSD asbestos management plan, 2) review of the scope of work; 3) identify suspect ACBM that will be impacted by the planned project, 4) collect adequate number of samples per AHERA guidelines (if needed), 5) analyze samples for asbestos content, and 6) provide LAUSD with a project specific report with our findings.

II. Scope of Work

The asbestos engineering assessment performed was limited only to the areas involved in and building materials impacted by the scope of work for the above referenced project. The following building(s) and area(s) will be impacted by the scope of work:

Administrative & Classroom Building (005DAT)
Classroom Building (006DAT)
Lunch Shelter (P0377K)
New 2-Story Classroom Building #1 (35282)
New 2-Story Classroom Building #2 (35283)

Grounds / Arcades (7137-G)

The scope of work consists of the following: 1) Remove and replacement of existing flooring materials; 2) interior painting; and 3) exterior painting. The removal of the flooring material will impact the existing flooring material as well as the cove base. The interior painting will impact the interior walls with minor impact. The exterior painting will cause minor impact for possible patch work to hydro washing prior to painting.

For more details, please refer to the Scope of Work provided by LAUSD (See Appendix E).

III. Visual Survey, Sampling Methodology, Analytical Procedures

Visual Survey

The asbestos engineering assessment report was performed generally in accordance with the AHERA protocol (40 CFR Part 763, Subpart E). Visual identification was performed by assessing visible and accessible structural, architectural, and mechanical components that may be impacted as part of this specific project, for the presence of suspect ACM at the Project Site. Each identified suspect asbestos-containing material (ACM) was sampled in accordance with procedures established by the United States Environmental Protection Agency (USEPA).

Quantities and locations are based upon areas that were provided by LAUSD. Materials similar those in this report may be present in areas which were not accessed. No asphalt and subsurface sampling was conducted as part of the project.

Sampling Methodology

In the next phase, a sampling strategy is then developed to provide representative sampling of the suspect materials using the methods identified in AHERA and Cal/OSHA. Each sample is placed in a container; the container is sealed, labeled and placed in a storage bag. Samples are documented by entering the sample data on a chain-of-custody for bulk analysis form, including a description of the material, sample number, location, condition, accessibility, friability, potential for damage, and quantity. Typically, the sample location is marked on an 8-1/2 x 11 inch not-to-scale floor plan. Throughout the process, special care is taken to prevent cross-contamination of the collected samples. Sampling equipment is cleaned after each sample is obtained. In addition, sample containers are placed directly beneath each sample location, when feasible, to collect any materials which may become dislodged during the sampling process. Any debris generated by the sampling is cleaned by wet-cleaning methods. Sample locations are appropriately repaired.

Analytical Procedures

A total of sixty-four (64) suspect ACM samples were submitted and delivered, under chain-of-custody, to AQ Environmental Laboratories, LLC located at 1508 E. 33rd Street, Signal Hills, California, 90755 (562-206-2770) for analysis. AQ Environmental Laboratories, LLC is an accredited laboratory under the National Voluntary Accreditation Program (NVLAP #500044-0) for asbestos.

All bulk sample analysis is conducted by Polarized Light Microscopy (PLM) with dispersion staining as described in the "Method for the Determination of Asbestos in Bulk Building Materials"

(EPA-600/R-93/116, July 1993). A suspect material is immersed in a solution of known refractive index and subjected to illumination of polarized light. The color displayed enables mineral identification. Quality control samples at a rate of 10% or one per project, whichever is greater, are reanalyzed by a second, independent analyst. Samples estimated to contain asbestos in amounts of 1% or less are also reanalyzed. Once analyzed, results are entered on bulk logs for inclusion in the report.

NOTE: The amended National Emission Standard for Hazardous Air Pollutants (NESHAP), November 20, 1990, included a requirement that when the asbestos content of a bulk sample material is determined using procedures outlined and the asbestos content is estimated to be less than 10% by a method other than point counting, the parties legally responsible for a building (owner/operator) may (1) elect to assume the amount to be greater than 1% and treat the material as a regulated asbestos-containing material, or (2) require verification of the amount by the Point Counting method. The purpose of this procedure is to minimize false negative analysis (reporting the samples as containing less than 1% asbestos for asbestos-containing samples actually containing greater than 1%) and false positives (reporting the sample as containing greater than 1% asbestos for samples containing less than 1% asbestos). Point Counting was included in NESHAP in response to an EPA study that found an unacceptable amount of false negative and false positive analyses by methods outlined in EPA-600/R-93/116, July 1993 method. Unless directed otherwise by LAUSD, Vista will assume that PLM analysis is acceptable for this facility. Reminder: in California the abatement of materials with detectable quantities of asbestos - legally defined as materials containing percentages of asbestos greater than one-tenth of one percent (>0.1%) by area - are regulated by Cal/OSHA and therefore considered positive in this report. Unless directed otherwise by LAUSD, samples with trace amounts of asbestos (less than 1%) will be assumed by Vista to be asbestos-containing and subject to all applicable regulations.

When a material is found to contain asbestos in concentration greater than 1 percent, it is defined by the EPA as an ACM. Title 8 CCR Section 1529 also defines ACM as construction material containing greater than 1 percent asbestos. However, Section 25919 of the California Health and Safety Code and Title 8 Section 1529 defines ACCM as one that contains greater than 0.1 percent asbestos by weight.

Under the California Health and Safety Code, asbestos notification to employees, occupants, and other working in buildings is required for materials containing greater than 0.1 percent asbestos. In addition, removal of more than 100 square feet (SF) of ACCM (greater than 0.1 percent asbestos) still requires a State of California licensed asbestos abatement contractor.

Under Cal/OSHA requirements, worker/employee notification and training are required when a material contains greater than 1 percent asbestos in an area where worker/employees perform work.

IV. Discussion of Survey Findings and Recommendations.

The survey was conducted in accordance with AHERA regulations and was limited to areas and materials impacted by the planned project. The school's plant manager provided access to the site at the time of the inspection.

The table below include materials that are anticipated to be impacted during the project.

Vista's findings are as follows:

A. Administrative & Classroom Building (005DAT)

1. Asbestos-Containing Materials (ACM >1%) and Asbestos-Containing Construction Materials (ACCM >0.1%) anticipated to be disturbed during the project:

	MATERIAL	LOCATIONS/CONDITION/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	Wall, Gypsum Wall Board with Joint Compound **(ACM)** **Approx. Qty**.: 9,500 SF	**Location**: Rooms 1 & 2, Library, A/V Room, Hallway, Principal's Office & Closet, Coordinator's Office (Conference Room), Main Office Area & Supply Room, Health Office Area, Work Room & Office, Parent Center, Dean's Office & Hallway, V.P. Office, and P.E. Room **Condition**: Intact **Scope of Impact**: Minor impact for the removal and replacement of the cove base and surface prep for painting.	2459391-025 to 032 (7/27/2024); 2407-0171D, 0172D, 0173D; 2407-0189, 0190, 0191 (7/1/2024); 2311-1529E, 1530, 1531D (11/21/2023)
b.	Floor, Vinyl Floor Tile, 12"x12" Lt. Beige w/ Brown Streaks & Mastic on Concrete Substrate (Core Samples) - (**ACM**) **Approx. Qty.:** 4,710 SF	**Location**: Auditorium & Foyer, Chair Storage, Workroom & Office, Main Office Area & Supply Room, Principal's Closet, Health Office Area, Parent's Center, Plant Manager's Office, and P.E. Room **Condition**: Intact **Scope of Impact**: Remove & Replace as per the scope of work.	2459393-001 to 009 (7/27/2024)
c.	Floor, Vinyl Floor Tile Lt. Beige with Brown Streaks & Orange (Patterned) and associated Mastic on Concrete Substrate (**ACM**) **Approx. Qty.:** 1,600 SF	**Location**: Hallway **Condition**: Intact **Scope of Impact**: Remove & Replace as per the scope of work.	1710-0580, 0581, 0582 (10/26/2017)

d.	Floor, 12”x12” Off-White Marbled Floor Tile with Mastic on Concrete Substrate (**ACM**) **Approx. Qty**.: 1,180 SF	**Locations:** Faculty Dining **Condition**: Intact **Scope of Impact:** Remove & Replace as per the scope of work.	1710-0571, 0572, 0573 (10/26/2017)
e.	Floor, 12”x12” Tan Marbled Floor Tile with Mastic on Concrete Substrate (**ACM**) **Approx. Qty**.: 110 SF	**Locations:** Health Office Restroom & Staff Restrooms **Condition**: Intact **Scope of Impact:** Remove & Replace as per the scope of work.	1710-0577, 0578, 0579 (10/26/2017)
f.	Black Mastic (**ACM**) associated with 12”x12” Blue Floor Tile on Concrete Substrate **Approx. Qty.:** 900 SF	**Locations:** Rooms 1 & 2 **Condition**: Intact **Scope of Impact:** Remove & Replace as needed as per the scope of work.	2407-0174, 0175, 0176 (7/1/2024)
g.	Joint Compound (**ACM**) associated with Drywall Ceiling (Non-ACM – Above Ceiling Tiles) **Approx. Qty**.: 5,100 SF	**Locations:** Hallway, Principal’s Office & Closet, Main Office Area & Supply Room, Coordinator’s Office (Conference Room), Health Office Area, Workroom & Office, Dean’s Office and Hallway, Parent’s Center, Plant Manager’s Office, and P.E. Room **Condition**: Unknown **Scope of Impact:** None. For information purposes only.	1710-0586, 0587, 0588 (10/26/2017); 0112-0549 to 0554, 0555C (12/13/2001)
h.	Exterior Stucco Walls (**ACM**) **Approx. Qty.:** 7,000 SF	**Locations:** Exterior Walls **Condition**: Intact **Scope of Impact:** Minor impact, surface prep for the exterior painting portion of the project.	2407-0201, 0202, 0203, 0204, 0205, 0206, 0207 (7/1/2024); 1710-0084, 0085, 0086 (10/4/2017 – Point Counted)

i.	Black Mastic (**ACM**) associated with Brown Carpet / Adhesive **Approx. Qty.:** 305 SF	**Location**: Asst. Principal's Office (Storage Room) **Condition**: Intact **Scope of Impact**: Remove and Replace as per the scope of work.	2408-1568, 1569, 1570 (8/21/2024)
j.	Exterior Stucco Ceiling (**ACM**) **Approx. Qty**.: 1,700 SF	**Location**: Exterior Ceiling **Condition**: Intact **Scope of Impact**: Minor impact, surface prep for the - exterior painting portion.	2008-1431, 1432, 1433 (8/17/2020)
k.	Roofing Debris (**ACM by Point Count Analysis**) **Approx. Qty**.: 20 SF	**Location**: Ceiling Space at Main Office Area **Condition**: Unknown **Scope of Impact**: None. For information purposes only.	0605-0889, 0890, 0891 (5/10/2006 – ACM by Point Count Analysis)

2. Non-Asbestos-Containing Materials (Non-ACM) anticipated to be disturbed during the project:

	MATERIAL	LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	Floor, Vinyl Floor Tile, 12"x12" Red with Mastic on Concrete Substrate (Core Sample)	**Location**: Principal's Office and Principal's Office Restroom **Scope of Impact**: Remove & Replace as per the scope of work.	2459391-001 to 009 (7/27/2024)
b.	Floor, Vinyl Floor Tile, 12"x12" Red & Yellow (Mix) with Mastic on Concrete Substrate (Core Samples)	**Locations:** Coordinator's Office (Conference Room) **Scope of Impact:** Remove & Replace as per the scope of work.	2459391-010 to 024 (7/27/2024)

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
c.	Wall, Plaster, Sand Finish with Button Board (Core Sample)	**Locations:** Rooms 1 & 2 Restroom, Principal's Office Restroom, Health Office Restrooms, Staff Restrooms, Girl's & Boy's Restrooms, Faculty Dining, Auditorium & Chair Storage, Foyer Women's & Men's Restrooms, Hopper Rooms, Plant Manager's Office, P.E. Room, and Electrical Room **Scope of Impact:** Minor impact during the removal and replacement of the cove base and surface prep for painting.	2459391-033 to 036; 2459392-001 to 010 (7/24/2024); 2407-0186, 0187, 0188 (7/1/2024)
d.	Ceiling, Plaster, Sand Finish with Button Board (Core Sample)	**Locations:** Rooms 1 & 2 Restroom, Principal's Office Restroom, Health Office Restrooms, Staff Restrooms, Girl's & Boy's Restrooms, Foyer Women's & Men's Restrooms, Hopper Rooms, Plant Manager's Office, and Electrical Room **Scope of Impact:** Minor impact; surface prep for painting.	2459392-011 to 024 (7/24/2024); 2407-0183, 0184, 0185 (7/1/2024)
e.	Ceiling, Acoustical Tile, 2'x4' Fine Fissure (Pinholes/Lay-In)	**Locations:** Library, Auditorium, Faculty Lounge, and Rooms 1 & 2 **Scope of Impact:** Remove & Replace as needed as per the scope of work.	2459393-010, 011, 012 (7/27/2024); 2407-0168, 0169, 0170 (7/1/2024); 9807-1813, 1814, 1815 (7/29/1998)
f.	Ceiling, Acoustical Tile, 12"x12" Random Holes (Glued-On)	**Locations:** Hallway, Principal's Office & Closet, Main Office Area & Supply Room, Coordinator's Office, Health Office Area, Workroom & Office, Dean's Office and Hallway, Parent's Center, and P.E. Room **Scope of Impact:** Remove & Replace as needed as per the scope of work.	2459393-013, 014, 015 (7/27/2024); 9807-1816, 1817, 1818 (7/29/1998)

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
g.	Ceiling, Acoustical Tile Mastic associated with 12”x12” Random Holes	**Locations:** Hallway, Principal’s Office & Closet, Main Office Area & Supply Room, Coordinator’s Office, Health Office Area, Workroom & Office, Dean’s Office and Hallway, Parent’s Center, and Plant Manager’s Office **Scope of Impact:** Remove & Replace as needed as per the scope of work.	2459393-016, 017, 018 (7/27/2024); 0112-0555, 0556, 0557 (12/13/2001)
h.	2” Black Cove Base with Mastic	**Locations:** Faculty Dining & Teacher’s Workroom **Scope of Impact:** Remove & Replace as needed as per the scope of work.	1710-0565, 0566, 0567 (10/26/2017)
i.	2” Gray Cove Base with Mastic	**Locations:** Faculty Dining **Scope of Impact:** Remove & Replace as needed as per the scope of work.	1710-0568, 0569, 0570 (10/26/2017)
j.	2” Brown Cove Base with Mastic	**Locations:** Hallway, Main Office Area & Supply Room, Health Office Area, Workroom & Office, Dean’s Office and Hallway, Parent’s Center, and Plant Manager’s Office **Scope of Impact:** Remove & Replace as needed as per the scope of work.	1710-0574, 0575, 0576 (10/26/2024); 2311-1529, 1530, 1531 (11/21/2023)
k.	2’x2’ Red Carpet Tiles with Adhesive on Concrete Substrate	**Locations:** Library **Scope of Impact:** Remove & Replace as needed as per the scope of work.	1710-0583, 0584, 0586 (10/26/2017)
l.	Carpet with Associated Adhesive / Mastic on Concrete Substrate (Core Samples)	**Locations:** Rooms 1 & 2 **Scope of Impact:** Remove as needed as per the scope of work.	2407-0177, 0178, 0179 (7/1/2024)

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
m.	4" Black Cove Base / Adhesive	**Locations:** Rooms 1 & 2, and Principal's Office & Restroom **Scope of Impact:** Remove as needed as per the scope of work.	2407-0171, 0172, 0173 (7/1/2024)
n.	4" Brown Cove Base / Adhesive	**Locations:** Coordinator's Office (Conference Room), Staff Restrooms, and Auditorium **Scope of Impact:** Remove as needed as per the scope of work.	0204-0973, 0974, 0975 (4/8/2002)
o.	Drywall Sheet Debris	**Locations:** Ceiling Space at FACP Room (P.E. Room) **Scope of Impact:** None. For information purposes only.	322221193-001, 002, 003 (10/19/2022)
p.	Red Fire Caulking	**Locations:** Ceiling Space at FACP Room (P.E. Room) **Scope of Impact:** None. For information purposes only.	322221193-004, 005, 006 (10/19/2022)
q.	Drywall Debris	**Locations:** Ceiling Space at Main Office Area **Scope of Impact:** None. For information purposes only.	0605-0892, 0893, 0894 (5/10/2006)
r.	Sand Plaster Walls	**Locations:** Hot Water Closet **Scope of Impact:** Minor impact, surface prep for the interior painting portion of the project.	0605-0895, 0896, 0897 (5/10/2006)
s.	Exterior, Barrier Paper (Black)	**Locations:** Exterior (Behind Stucco) **Scope of Impact:** Remove as needed as per the scope of work.	2407-0208, 0209, 0210 (7/1/2024); 1710-0087, 0088, 0089 (10/4/2017)
t.	Duct Seam Seal Tape	**Locations:** Ceiling Space Throughout the Building **Scope of Impact:** None. For information purposes only.	1607-0024, 0025, 0026 (6/28/2016)

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
u.	White Sealant	**Location**: Roof @ Top of Roof Flashing and Roof Hatch **Scope of Impact**: Minor impact, surface prep for the exterior painting portion.	2008-1428, 1429, 1430 (8/17/2020)

3. Recommendations for handling ACM and/or ACCM:

   a. ACM – Joint Compound associated with Drywall Walls

      1) Minor disturbance less than three (3) square feet per impact area (i.e. drilling, coring, cut-outs) totaling less than 100 square feet for the entire Project may be performed by authorized personnel that have minimum 16-hour AHERA O&M training per CCR Cal/OSHA and LAUSD Specification Section 02-8213 – "Asbestos Abatement and Asbestos Related Disturbances".

      2) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8213 (Asbestos Abatement and Asbestos Related Disturbance) under the supervision of FETU or a District approved Environmental Consultant.

   b. ACM - 12"x12" Light Beige with Brown Streaks Floor Tile and associated Black Mastic

      1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

   c. ACM – 12"x12" Light Beige with Brown Streaks & Orange (Patterned) Floor Tile and associated Black Mastic

      1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

   d. ACM – 12"x12" Off-White Marble Floor Tile and Associated Mastic

1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

e. ACM – 12”x12” Tan Marble Floor Tile and Associated Mastic

1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

f. ACM – Black Mastic associated with 12”x12” Blue Floor Tile

1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

g. ACM – Black Mastic associated with Brown Carpet / Adhesive

1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

h. ACM – Joint Compound associated with Drywall Ceiling

1) Minor disturbance less than three (3) square feet per impact area (i.e. drilling, coring, cut-outs) totaling less than 100 square feet for the entire Project may be performed by authorized personnel that have minimum 16-hour AHERA O&M training per CCR Cal/OSHA and LAUSD Specification Section 02-8213 – “Asbestos Abatement and Asbestos Related Disturbances”.

2) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8213 (Asbestos Abatement and Asbestos Related Disturbance) under the supervision of FETU or a District approved Environmental Consultant.

i. ACM – Exterior Stucco Walls

1) Minor disturbance less than three (3) square feet per impact area (i.e. drilling, coring, cut-outs) totaling less than 100 square feet for the entire Project may be performed by authorized personnel that have minimum 16-hour AHERA O&M training per CCR Cal/OSHA and LAUSD Specification Section 02-8213 – "Asbestos Abatement and Asbestos Related Disturbances".

2) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8213 (Asbestos Abatement and Asbestos Related Disturbance) under the supervision of FETU or a District approved Environmental Consultant.

j. ACM – Exterior Stucco Ceiling

1) Minor disturbance less than three (3) square feet per impact area (i.e. drilling, coring, cut-outs) totaling less than 100 square feet for the entire Project may be performed by authorized personnel that have minimum 16-hour AHERA O&M training per CCR Cal/OSHA and LAUSD Specification Section 02-8213 – "Asbestos Abatement and Asbestos Related Disturbances".

2) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8213 (Asbestos Abatement and Asbestos Related Disturbance) under the supervision of FETU or a District approved Environmental Consultant.

k. ACM – Roofing Debris

1) Per the scope of work, the ceiling space will not require access. However, if access is required, clean up of the ceiling space will need to be conducted under an approved South Coast Air Quality Management District (SCAQMD) Procedure 5 work plan.

4. General Notes:

a. Based on the scope of work, the Kitchen area is not part of this project.
b. Based on the scope of work, the Kindergarten Restroom located in Rooms 1 & 2 will be renovated as part of another project and will not be impacted by this project.
c. Ceramic floor tiles located in the Boy's & Girl's Restrooms and Auditorium Foyer Men's & Women's Restrooms will not be impacted by this scope of work.
d. There are ceiling space located throughout the building which according to the scope of work will not be access for the project.
e. No crawl space located in the building.
f. At the time of the inspection, most of the storage rooms has been converted into offices such as the Conference Room is now the Coordinator's Office; the Supply Room in the Main Office is now an office space, the FACP room is the Dean's Office, Library Supply Room is an Office Space, the Book Room is now the Parent Center, and Storage Room is now the V.P. Office.
g. No rain gutters and/or down spots located on the exterior of the building.
h. Aluminum windows with no glazing (putty).
i. Painted electrical conduits on the exterior of the building.
j. Metal roof cap on the roof.
k. No HVAC Ducts located on the roof.
l. Ceiling systems (i.e. ceiling tiles, plaster ceiling) throughout the building will need to be protected during the flooring removal.
m. Remove of assumed Lead-Based painted / coated surfaces shall be performed in accordance with LAUSD Specification, Section 02_8333 (Lead Abatement and Lead Related Construction Work) and must be removed by RRP Firm and RRP trained personnel qualified in the techniques of lead-related construction, handling, disposal of lead containing materials, and in accordance with Environmental Protection Agency (EPA) and Renovation, Repair and Painting (RRP). See Section VI for additional information.

B. Classroom Building (006DAT)

1. Asbestos-Containing Materials (ACM >1%) and Asbestos-Containing Construction Materials (ACCM >0.1%) anticipated to be disturbed during the project:

	MATERIAL	LOCATIONS/CONDITION/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	Floor, Vinyl Floor Tile 12"x12" Lt. Tan with Black Mastic on Concrete Substrate (Core Samples) – (**ACM**) **Approx. Qty**.: 6,300 SF	**Location**: Rooms #3, #4, #5, #6, #8, #9, & #10 **Condition**: Intact **Scope of Impact**: Remove & Replace as per the scope of work.	2459388-001 to 009 (7/24/2024); 9708-1970, 1971, 1972 (3/25/1997)
b.	Floor, Vinyl Floor Tile 12"x12" Lt. Tan & Orange (Patterned) with Black Mastic on Concrete Substrate (Core Samples) – (**ACM**) **Approx. Qty**.: 960 SF	**Location**: West & East Hallways **Condition**: Intact **Scope of Impact**: Remove & Replace as per the scope of work.	2459388-016 to 027 (7/24/2024)
c.	Floor, Vinyl Floor Tile 12"x12" Tan Marble **Patch** with Black Mastic on Concrete Substrate (**ACM**) **Approx. Qty**.: 20 SF	**Location**: Rooms #4 & #8 by Sink Area **Condition**: Intact **Scope of Impact**: Remove & Replace as per the scope of work.	2459388-028 to 033 (7/24/2024)
d.	Floor, Vinyl Floor Tile 12"x12" Dk. Tan Marble with Black Mastic on Concrete Substrate (Core Sample) – (**ACM**) **Approx. Qty**.: 900 SF	**Location**: Room #7 **Condition**: Intact **Scope of Impact**: Remove & Replace as per the scope of work.	2459389-001 to 006 (7/24/2024)

e.	Wall, Gypsum Board with Joint Compound (Core Samples) (**ACM**) **Approx. Qty**.: 13,200 SF	**Location**: Throughout the Building (Classrooms and Hallways) **Condition**: Intact **Scope of Impact**: Minor impact during the removal and replacement of the cove base and surface prep for the interior painting.	2459389-007 to 020 (7/24/2024)
f.	Exterior Stucco Ceiling (**ACM**) **Approx. Qty**.: 1,200 SF	**Location**: Exterior Ceiling **Condition**: Intact **Scope of Impact**: Minor impact, surface prep for the exterior painting portion.	2008-1425, 1426, 1427 (8/17/2020)
g.	Ceiling, Joint Compound (**ACCM**) associated with Drywall Ceiling (Above the Ceiling Tiles **Approx. Qty.:** 960 SF	**Location**: East & West Hallway **Condition**: Unknown **Scope of Impact**: None. For information purposes only.	0112-0574, 0575, 0576, 0577, 0578, 0579 (12/13/2001 – ACCM by Point Count Analysis)

2. Non-Asbestos-Containing Materials (Non-ACM) anticipated to be disturbed during the project:

	MATERIAL	LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	Wall, Cove Base 4” Brown / Adhesive	**Location**: Rooms #3 to #10 and East & West Hallway **Scope of Impact**: Remove & Replace as per the scope of work.	2459388-010, 011, 012, 013, 014, 015 (7/24/2024)
b.	Ceiling, Acoustical Tile, 2”x4” Fine Fissure (Pinhole/Lay-In)	**Location**: Throughout the Building (Classrooms) **Scope of Impact**: Remove & Replace as needed as per the scope of work.	2459389-021, 022; 2459390-001 (7/24/2024)

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
c.	Ceiling, Acoustical Tile, 2”x4” Fissured (Lay-In/Patch)	**Location**: Rooms #4 & #6 **Scope of Impact**: Remove & Replace as needed as per the scope of work.	2459390-002, 003, 004 (7/24/2024)
d.	Ceiling, 12”x12” Random Holes Ceiling Tiles (Glued-On)	**Location**: East & West Hallway **Scope of Impact**: Remove & Replace as needed as per the scope of work.	C1 to C7 (6/14/1988)
e.	Ceiling, Acoustical Ceiling Tile Mastic associated with 12”x12” Random Holes	**Location**: East & West Hallway **Scope of Impact**: Remove & Replace as needed as per the scope of work.	0112-0571, 0572, 0573 (12/13/2001)
f.	4” Brown Cove Base / Adhesive	**Location**: Throughout Building (Classrooms & Hallway) **Scope of Impact**: Remove & Replace as needed as per the scope of work.	0204-0966, 0967, 0968 (4/8/2002)
g.	Duct Seam Seal Tape	**Locations:** Ceiling Space Throughout the Building **Scope of Impact:** None. For information purposes only.	1607-0027, 0028, 0026 (6/26/2016)
h.	White Sealant	**Locations:** Roof @ Roof Flashing & Roof Hatch **Scope of Impact:** Minor impact, surface prep for the exterior painting portion of the project.	2008-1434, 1435, 1436 (8/18/2020)
i.	Exterior Stucco Walls	**Location**: Exterior Walls **Scope of Impact**: Minor impact, surface prep for the exterior painting portion of the project.	0204-0963, 0964, 0965 (4/8/2002 – Non-Regulated by Point Count Analysis)

2. Recommendations for handling ACM and/or ACCM:

   a. ACM - 12”x12” Lt. Tan Floor Tile and Associated Black Mastic

      1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

   b. ACM - 12”x12” Lt Tan & Orange Floor Tile (Patterned) and Associated Black Mastic

      1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

   c. ACM – Black Mastic associated with 12”x12” Tan Marble Patch Floor Tile

      1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

   d. ACM – Black Mastic associated with 12”x12” Dk. Tan Floor Tile

      1) Removal shall be conducted by an LAUSD approved Abatement Contractor in accordance with LAUSD Specifications Section 02_8213 (Asbestos Abatement and Asbestos Related Disturbance) and Phase 2 - Abatement Design (Project Manual), under the supervision of FETU or District approved Representative.

   e. ACM - Joint Compound associated with Drywall Walls

      1) Minor disturbance less than three (3) square feet per impact area (i.e. drilling, coring, cut-outs) totaling less than 100 square feet for the entire Project may be performed by authorized personnel that have minimum 16-hour AHERA O&M training per CCR Cal/OSHA and LAUSD Specification Section 02-8213 – “Asbestos Abatement and Asbestos Related Disturbances”.

2) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8213 (Asbestos Abatement and Asbestos Related Disturbance) under the supervision of FETU or a District approved Environmental Consultant t.

f. ACM – Exterior Stucco Ceiling

1) Minor disturbance less than three (3) square feet per impact area (i.e. drilling, coring, cut-outs) totaling less than 100 square feet for the entire Project may be performed by authorized personnel that have minimum 16-hour AHERA O&M training per CCR Cal/OSHA and LAUSD Specification Section 02-8213 – "Asbestos Abatement and Asbestos Related Disturbances".

2) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8213 (Asbestos Abatement and Asbestos Related Disturbance) under the supervision of FETU or a District approved Environmental Consultant.

g. ACCM – Joint Compound associated with Drywall Ceiling

1) Minor disturbance less than three (3) square feet per impact area (i.e. drilling, coring, cut-outs) totaling less than 100 square feet for the entire Project may be performed by authorized personnel that have minimum 16-hour AHERA O&M training per CCR Cal/OSHA and LAUSD Specification Section 02-8213 – "Asbestos Abatement and Asbestos Related Disturbances".

2) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8213 (Asbestos Abatement and Asbestos Related Disturbance) under the supervision of FETU or a District approved Environmental Consultant.

4. General Notes:

a. The ceiling spaces will not be access as per the scope of work. At the time of the inspection, observed no suspect materials inside the ceiling space.
b. No crawl space located in the building.

c. No rain gutters and/or down spots located on the exterior of the building.
d. Aluminum windows with no glazing (putty).
e. Painted electrical conduits on the exterior of the building.
f. Metal roof cap on the roof.
g. No HVAC Ducts located on the roof.
h. Ceiling systems (i.e. ceiling tiles, plaster ceiling) throughout the building will need to be protected during the flooring removal.
i. Where painted, varnished, and glazed building components are impacted, the work shall be performed in compliance with LAUSD Specification, Section 02 8333 (Lead Abatement and Lead Related Construction Work), and by RRP trained personnel qualified in the techniques of lead-related construction, handling, disposal of lead containing materials, and in accordance with Environmental Protection Agency (EPA) and Renovation, Repair and Painting (RRP) under the supervision of FETU or a District approved Environmental Consultant.

C. Lunch Shelter (P0377K)

1. Asbestos-Containing Materials (ACM >1%) and Asbestos-Containing Construction Materials (ACCM >0.1%) anticipated to be disturbed during the project:

MATERIAL		LOCATIONS/CONDITION/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	None.		

2. Non-Asbestos-Containing Materials (Non-ACM) anticipated to be disturbed during the project:

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	None.		

3. Recommendations for handling ACM and/or ACCM:

   a. None.

4. General Notes:

   a. This is a metal structure with no suspect materials.
   b. Where painted components are impacted, the work shall be performed in compliance with LAUSD Specification, Section 02 8333 (Lead Abatement and Lead Related Construction Work), and by RRP Firm and RRP trained personnel qualified in the techniques of lead-related construction, handling, disposal of lead containing materials, and in accordance with Environmental Protection Agency (EPA) and Renovation, Repair and Painting (RRP) under the supervision of FETU or a District approved Environmental Consultant.

D. New 2-Story Classroom Building #1 (35282)

1. Asbestos-Containing Materials (ACM >1%) and Asbestos-Containing Construction Materials (ACCM >0.1%) anticipated to be disturbed during the project:

MATERIAL		LOCATIONS/CONDITION/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	None.		

2. Non-Asbestos-Containing Materials (Non-ACM) anticipated to be disturbed during the project:

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	Exterior Stucco Walls	**Locations:** Exterior Stucco Walls **Scope of Impact**: Minor impact, surface prep for the exterior painting portion of the project.	2008-1454, 1455, 1456 (8/18/2020)
b.	Grey Sealant	**Locations:** Seams between Roof Flashing & Wall **Scope of Impact:** Minor impact, surface prep for the exterior painting portion of the project.	2008-1460, 1461, 1462 (8/18/2020)

3. Recommendations for handling ACM and/or ACCM:

   a. None.

4. General Notes:

   a. Based on the scope of work, only exterior painting will be conducted on said building.
   b. Aluminum windows with no glazing (putty).
   c. Down spouts are painted and in good condition.
   d. Where painted components are impacted, the work shall be performed in compliance with LAUSD Specification, Section 02 8333 (Lead Abatement and Lead Related Construction Work), and by RRP Firm and RRP trained personnel qualified in the techniques of lead-related construction, handling, disposal of lead containing materials, and in accordance with

Environmental Protection Agency (EPA) and Renovation, Repair and Painting (RRP) under the supervision of FETU or a District approved Environmental Consultant

E. New 2-Story Classroom Building #2 (35283)

1. Asbestos-Containing Materials (ACM >1%) and Asbestos-Containing Construction Materials (ACCM >0.1%) anticipated to be disturbed during the project:

MATERIAL		LOCATIONS/CONDITION/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	None.		

2. Non-Asbestos-Containing Materials (Non-ACM) anticipated to be disturbed during the project:

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	Exterior Stucco Walls	**Locations:** Exterior Stucco Walls **Scope of Impact**: Minor impact, surface prep for the exterior painting portion of the project.	2008-1442, 1443, 1444 (8/18/2020)
b.	Exterior Stucco Ceiling	**Locations:** Exterior Stucco Ceiling **Scope of Impact**: Minor impact, surface prep for the exterior painting portion of the project.	2008-1445, 1446, 1447 (8/18/2020)
c.	Leveling Compound at Support Beams	**Locations:** Exterior Beams **Scope of Impact:** Minor impact, surface prep for the exterior painting portion of the project.	2008-1448, 1449, 1450 (8/18/2020)
d.	Beige Sealant	**Locations:** Exterior at Seams between Supporting Beams and Portico Ceiling **Scope of Impact:** Minor impact, surface prep for the exterior painting portion of the project.	2008-1451, 1452, 1453 (8/18/2020)
e.	Grey Sealant	**Locations:** Seams between Roof Flashing & Wall **Scope of Impact:** Minor impact, surface prep for the exterior painting portion of the project.	2008-1463, 1464, 1465 (8/18/2020)

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
f.	White Sealant	**Locations:** Roof – Top of Roof Flashing **Scope of Impact:** Minor impact, surface prep for the exterior painting portion of the project.	2008-1466 (8/18/2020)

3. Recommendations for handling ACM and/or ACCM:

   a. None.

4. General Notes:

   a. Based on the scope of work, only exterior painting will be conducted on said building.
   b. Aluminum windows with no glazing (putty).
   c. Down spouts are painted and in good condition.
   d. Where painted components are impacted, the work shall be performed in compliance with LAUSD Specification, Section 02 8333 (Lead Abatement and Lead Related Construction Work), and by RRP Firm and RRP trained personnel qualified in the techniques of lead-related construction, handling, disposal of lead containing materials, and in accordance with Environmental Protection Agency (EPA) and Renovation, Repair and Painting (RRP) under the supervision of FETU or a District approved Environmental Consultant.

F. Grounds (7137-G)

1. Asbestos-Containing Materials (ACM >1%) and Asbestos-Containing Construction Materials (ACCM >0.1%) anticipated to be disturbed during the project:

MATERIAL		LOCATIONS/CONDITION/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	Exterior Stucco Ceiling (ACM) Approx. Qty.:	**Locations:** Arcade #1 – Stucco Ceiling **Condition**: Intact **Scope of Impact**: Minor impact, surface prep for the exterior painting portion of the project.	2008-1439, 1440, 1441 (8/18/2020)

2. Non-Asbestos-Containing Materials (Non-ACM) anticipated to be disturbed during the project:

MATERIAL		LOCATIONS/SCOPE OF IMPACT	LAB SAMPLE NUMBERS
a.	White Sealant	Locations: Roof Scope of Impact: Minor impact, surface prep for the exterior painting portion of the project.	2008-1437 (8/18/2020)
b.	Exterior Stucco Ceiling	**Locations:** Arcade #2 - Stucco Ceiling **Scope of Impact**: Minor impact, surface prep for the exterior painting portion of the project.	2008-1457, 1458, 1459 (8/18/2020)

3. Recommendations for handling ACM and/or ACCM:

   a. ACM – Exterior Stucco Ceiling

      1) Minor disturbance less than three (3) square feet per impact area (i.e. drilling, coring, cut-outs) totaling less than 100 square feet for the entire Project may be performed by authorized personnel that have minimum 16-hour AHERA O&M training per CCR Cal/OSHA and LAUSD Specification Section 02-8213 – "Asbestos Abatement and Asbestos Related Disturbances".

2) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8213 (Asbestos Abatement and Asbestos Related Disturbance) under the supervision of FETU or a District approved Environmental Consultant.

4. General Notes:

a. Based on the scope of work, only exterior painting will be conducted on said building.
b. Arcade #1 is located north of the Administrative & Classroom Building.
c. Arcade #2 is located north of the New 2-Story Buildings.
d. Where painted components are impacted, the work shall be performed in compliance with LAUSD Specification, Section 02 8333 (Lead Abatement and Lead Related Construction Work), and by RRP Firm and RRP trained personnel qualified in the techniques of lead-related construction, handling, disposal of lead containing materials, and in accordance with Environmental Protection Agency (EPA) and Renovation, Repair and Painting (RRP) under the supervision of FETU or a District approved Environmental Consultant.

V. General Recommendations and Notes

All suspect construction materials not identified above are presumed asbestos-containing. All attics and crawl spaces not specified herein as clear for normal access and ceiling spaces not inspected and identified as absent of contamination are to be considered asbestos-contaminated areas. If materials not identified in this report will be disturbed or if attics, crawl spaces or ceiling spaces not identified in this report as clear of contamination are to be accessed during construction, notify IOR or OAR. They will contact the Facilities Environmental Technical Unit for further direction prior to disturbance of these materials or access of the contaminated spaces.

Based on the scope of work for this project and extent of asbestos-containing materials to be impacted, a Phase II report is required. All work that will result in disturbance of asbestos containing materials shall be performed in accordance with all applicable specifications, laws and regulations, including but not limited to the LAUSD Facilities Standard Specifications and Procedures, Division 02 8213, "Asbestos Abatement and Asbestos Related Disturbance," 29 CFR 1926.1101, Title 8, CCR 1529, and AHERA.

The Contractor shall take care when demolishing materials which will open wall cavities, sealed ceiling areas, covered trenches, and in general, areas which were inaccessible during the limited asbestos inspection. If any additional known, presumed, or suspected asbestos-containing materials are discovered during the demolition/renovation, the Contractor shall immediately stop all work and then contact the FETU and the project Environmental Consultant to determine the proper course of action.

Flooring present on concrete substrate floor will required the mastic associated with the floor tile to be removed via bead blasting and/or by grinders with HEPA attachments approved by SCAQMD. Therefore, a full containment will be required along the ceiling system to be covered with polyethylene sheeting.

Destructive sampling was not conducted as part of the inspection as staff and students are present.

VI. Lead Related Construction and Impact to Coated Surfaces

A. The building(s) and ground(s) involved with this project are as follows:

Administrative & Classroom Building (005DAT)
Classroom Building (006DAT)
Lunch Shelter (P0377K)
New 2-Story Classroom Building #1 (35282)
New 2-Story Classroom Building #2 (35283)
Grounds / Arcades (7137-G)

B. Renovation, repair or painting work performed on buildings regardless of the date of construction shall require special handling and environmental monitoring when coated surfaces including, but not limited to, painted, varnished, and glazed surfaces are impacted. Coated surfaces are assumed to be lead-based. All work shall be performed in compliance with Facilities Standard Specification, Section 02 8333, "Lead Abatement and Lead Related Construction Work." XRF testing methodology is not acceptable in determining negative for lead content for Cal/OSHA compliance purposes, except for notification requirements. XRF may be used in determining lead-based paint for compliance with the U.S.E.P.A. Renovator,

Repair, and Painting Rule. Disturbance of coated surfaces by contractors will be monitored by qualified District staff or Environmental Consultant sufficient to ensure that proper training and work procedures, cleanup, and waste handling are employed.

C. Loose or flaky paint that will be disturbed during the work of this project or in close proximity of the work area shall be stabilized by removing the loose or flaky paint and leaving only paint in stable condition.

D. It should be noted that any coated surfaces and building materials not listed above are to be considered to be lead-based and asbestos-containing respectively. Should the project require the disturbance of these surfaces and building materials, the FETU shall be notified.

If any changes occur in the scope of work, notify the Consultant or the FETU immediately before further commencement of work.

This report may not be changed, modified or include additions without the express written permission from the FETU.

If you have any questions regarding this report, contact the FETU at (213) 745-1450.

Signatures below certify that the information contained herein has been proofread and is technically accurate.

Carlos A. Galdamez, CAC No. 98-2379

VII. Confidentiality and Limitations

Reasonable effort is made by Vista personnel to locate and sample suspect materials impacted by the planned project. However, for any school site the existence of unique or concealed asbestos-containing materials and debris is a possibility. In addition, sampling and laboratory analysis constraints typically hinder the investigation. Vista does not warrant, guarantee or profess to have the ability to locate or identify all asbestos-containing materials in a school site.

This report is based upon the site conditions at 32nd Street/USC Magnet School at the time of our inspection. Should the scope of work change affecting any other materials to be impacted, the LAUSD FETU shall be notified immediately.

Appendices

Appendix A. Site Plan

Appendix B. Asbestos Analytical Results from Samples and Sample Location Drawings

Appendix C. Asbestos Survey Form A

Appendix D. Consultant's Certifications

Appendix E. Scope of Work

APPENDIX A -
SITE PLAN

32nd Street / USC Magnet School
Site Plan

APPENDIX B:

ANALYTICAL RESULTS FROM SAMPLES AND SAMPLE LOCATIONS

2459388

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd Street / USC Magnet School | CODE: 7137 | PROJECT DESC: Admin. & Classroom Bldgs. Modernization | COLIN #: 10372107

SAMPLED BY: Carlos A. Galdamez | DATE SAMPLED: 7/24/2024 | DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. | TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
	1	006DAT	Classroom Bldg.	#3	W/Center	Floor, Vinyl Floor Tile, 12"x12" Lt. Tan with Black Mastic on Concrete (Core)	NO
	2	006DAT	Classroom Bldg.	#6	N/W	Floor, Vinyl Floor Tile, 12"x12" Lt. Tan with Black Mastic on Concrete (Core)	NO
	3	006DAT	Classroom Bldg.	#8	S/E by Sink Area	Floor, Vinyl Floor Tile, 12"x12" Lt. Tan with Black Mastic on Concrete (Core)	NO
	4	006DAT	Classroom Bldg.	#3	W/Center	Wall, Cove Base, 4" Brown / Adhesive	NO
	5	006DAT	Classroom Bldg.	#6	N/W	Wall, Cove Base, 4" Brown / Adhesive	NO
	6	006DAT	Classroom Bldg.	East Hallway	East Wall by Room 10	Wall, Cove Base, 4" Brown / Adhesive	NO
	7	006DAT	Classroom Bldg.	West Hallway	N/Center	Floor, Vinyl Floor Tile, 12"x12" Lt. Tan with Black Mastic on Concrete (Core)	NO
	8	006DAT	Classroom Bldg.	East Hallway	S/Center	Floor, Vinyl Floor Tile, 12"x12" Lt. Tan with Black Mastic on Concrete (Core)	NO
	9	006DAT	Classroom Bldg.	West Hallway	N/Center	Floor, Vinyl Floor Tile, 12"x12" Oange with Black Mastic on Concrete (Core)	NO
	10	006DAT	Classroom Bldg.	East Hallway	S/Center	Floor, Vinyl Floor Tile, 12"x12" Orange with Black Mastic on Concrete (Core)	NO
	11	006DAT	Classroom Bldg.	#4	S/E by Sink Area	Floor, Vinyl Floor Tile, 12"x12" Tan Marble Patch with Black Mastic on Concrete	NO
	12	006DAT	Classroom Bldg.	#8	S/E by Sink Area	Floor, Vinyl Floor Tile, 12"x12" Tan Marble Patch with Black Mastic on Concrete	NO

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Carlos A. Galdamez	Vista Environmnetal	12	7-29-2024	11:25 AM
Received By:	Jackie Tayag	AQ ENV. LABS	12	7/29/24	11:25
Relinquished By:					
Received By:					

Maximo Work Order Number: 38096750 | Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY: | RUSH? ☐ Yes ☐ No | APPROVAL:

FETU REVIEW DATE: 7/29/24 | POINT COUNT? ☐ Yes ☐ No | PT. CT. RUSH? ☐ Yes ☐ No | APPROVAL:

ENVIRONMENTAL LABORATORIES LLC

1508 East 33rd Street
Signal Hill, CA 90755
Tel: 562-206-2770
Fax: 562-206-2773

Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459388

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/02/2024
Date Reported 08/05/2024

Date Sampled 07/24/2024
Sampled By Carlos A. Galdamez
Total Samples 33

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459388-001	006DAT, Classroom Bldg., #3, W/Center					
1A	Floor, Vinyl Floor Tile, 12"x12", Lt. Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	35% 63%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459388-002	006DAT, Classroom Bldg., #3, W/Center					
1B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	95%	Chrysotile	5%
	Asbestos Present: Yes		Total % Non-Asbestos:	95.0%	**Total %Asbestos:**	**5.0%**
2459388-003	006DAT, Classroom Bldg., #3, W/Center					
1C	Concrete, Gray, Non-homogeneous	LAYER 1 100%	Quartz Mineral/Binders/Filler	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-004	006DAT, Classroom Bldg., #6, N/W					
2A	Floor, Vinyl Floor Tile, 12"x12", Lt. Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	35% 63%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459388-005	006DAT, Classroom Bldg., #6, N/W					
2B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	97%	Chrysotile	3%
	Asbestos Present: Yes		Total % Non-Asbestos:	97.0%	**Total %Asbestos:**	**3.0%**
2459388-006	006DAT, Classroom Bldg., #6, N/W					
2C	Concrete, Note: No concrete present	LAYER 1 100%				

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Attn.: Carlos Galdamez

Report Number 2459388

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/02/2024
Date Reported 08/05/2024

Date Sampled 07/24/2024
Sampled By Carlos A. Galdamez
Total Samples 33

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459388-007	006DAT, Classroom Bldg., #8, S/E by Sink Area					
3A	Floor, Vinyl Floor Tile, 12"x12", Lt. Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	35% 63%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459388-008	006DAT, Classroom Bldg., #8, S/E by Sink Area					
3B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	95%	Chrysotile	5%
	Asbestos Present: Yes		Total % Non-Asbestos:	95.0%	**Total %Asbestos:**	**5.0%**
2459388-009	006DAT, Classroom Bldg., #8, S/E by Sink Area					
3C	Concrete, Note: No concrete present	LAYER 1 100%				
2459388-010	006DAT, Classroom Bldg., #3, W/ Center					
4A	Wall, Cove Base, 4", Brown, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	40% 60%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-011	006DAT, Classroom Bldg., #3, W/ Center					
4B	Adhesive, White/Brown, Non-homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-012	006DAT, Classroom Bldg., #6, N/W					
5A	Wall, Cove Base, 4", Brown, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	40% 60%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

ENVIRONMENTAL LABORATORIES LLC

1508 East 33rd Street
Signal Hill, CA 90755
Tel: 562-206-2770
Fax: 562-206-2773

Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459388

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
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Date Reported 08/05/2024

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Total Samples 33

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459388-013	006DAT, Classroom Bldg., #6, N/W					
5B	Adhesive, Brown, Homogeneous	LAYER 1 100%	Adhesive Binders	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-014	006DAT, Classroom Bldg., East Hallway, East Wall by Room 10					
6A	Wall, Cove Base, 4", Brown, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	40% 60%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-015	006DAT, Classroom Bldg., East Hallway, East Wall by Room 10					
6B	Adhesive, White/Brown, Non-homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-016	006DAT, Classroom Bldg., West Hallway, N/Center					
7A	Floor, Vinyl Floor Tile, 12"x12", Lt. Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	35% 63%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459388-017	006DAT, Classroom Bldg., West Hallway, N/Center					
7B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	97%	Chrysotile	3%
	Asbestos Present: Yes		Total % Non-Asbestos:	97.0%	**Total %Asbestos:**	**3.0%**
2459388-018	006DAT, Classroom Bldg., West Hallway, N/Center					
7C	Concrete, Note: No concrete present	LAYER 1 100%				

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Total Samples 33

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459388-019	006DAT, Classroom Bldg., East Hallway, S/Center					
8A	Floor, Vinyl Floor Tile, 12"x12", Lt. Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	65% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-020	006DAT, Classroom Bldg., East Hallway, S/Center					
8B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	98%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459388-021	006DAT, Classroom Bldg., East Hallway, S/Center					
8C	Concrete, Note: No concrete present	LAYER 1 100%				
2459388-022	006DAT, Classroom Bldg., West Hallway, N/Center					
9A	Floor, Vinyl Floor Tile, 12"x12", Orange, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	40% 58%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459388-023	006DAT, Classroom Bldg., West Hallway, N/Center					
9B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	95%	Chrysotile	5%
	Asbestos Present: Yes		Total % Non-Asbestos:	95.0%	**Total %Asbestos:**	**5.0%**
2459388-024	006DAT, Classroom Bldg., West Hallway, N/Center					
9C	Concrete, Note: No concrete present	LAYER 1 100%				

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Total Samples 33

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459388-025	006DAT, Classroom Bldg., East Hallway, S/Center					
10A	Floor, Vinyl Floor Tile, 12"x12", Orange, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	65% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-026	006DAT, Classroom Bldg., East Hallway, S/Center					
10B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	95%	Chrysotile	5%
	Asbestos Present: Yes		Total % Non-Asbestos:	95.0%	**Total %Asbestos:**	**5.0%**
2459388-027	006DAT, Classroom Bldg., East Hallway, S/Center					
10C	Concrete, Note: No concrete present	LAYER 1 100%				
2459388-028	006DAT, Classroom Bldg., #4, S/E by Sink Area					
11A	Floor, Vinyl Floor Tile, 12"x12", Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	65% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-029	006DAT, Classroom Bldg., #4, S/E by Sink Area					
11B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	95%	Chrysotile	5%
	Asbestos Present: Yes		Total % Non-Asbestos:	95.0%	**Total %Asbestos:**	**5.0%**
2459388-030	006DAT, Classroom Bldg., #4, S/E by Sink Area					
11C	Concrete, Note: No concrete present	LAYER 1 100%				

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459388-031	006DAT, Classroom Bldg., #8, S/E by Sink Area					
12A	Floor, Vinyl Floor Tile, 12"x12", Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	65% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459388-032	006DAT, Classroom Bldg., #8, S/E by Sink Area					
12B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	95%	Chrysotile	5%
	Asbestos Present: Yes		Total % Non-Asbestos:	95.0%	**Total %Asbestos:**	**5.0%**
2459388-033	006DAT, Classroom Bldg., #8, S/E by Sink Area					
12C	Concrete, Note: No concrete present	LAYER 1 100%				

Method Detection Limit: Less than one percent (<1%). Asbestos content has been determined using calibrated visual estimation (CVES). Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. Non-homogeneous samples containing discrete and separable layers are analyzed and reported separately; composite results may be reported upon customer's request. Non-homogeneous samples with inseparable layers are analyzed and reported as composite samples. Due to the limitations of Polarized Light Microscopy, samples reported as None Detected or with low asbestos concentrations may not be reliable and further analysis such as TEM is recommended to confirm PLM results. This report shall not be reproduced except in full without the written approval of this laboratory. This report may not be used by the customer to claim product certification, endorsement, or approval by NIST/NVLAP or any agency of the government. Samples shall be disposed according to local, state and federal laws, 30 days after results are reported unless otherwise instructed.

CA-ELAP #2823

Cristina E Tabatt
Analyst - Cristina Tabatt

Cristina E Tabatt
Approved Signatory Cristina E. Tabatt

NVLAP TESTING
NVLAP Lab Code 500044-0

LOS ANGELES SCHOOL DISTRICT
DIAGRAM OF BUILDING AREAS

LOCATION 7137
APPLICATION NO. 22/
DRAWING THY02F1

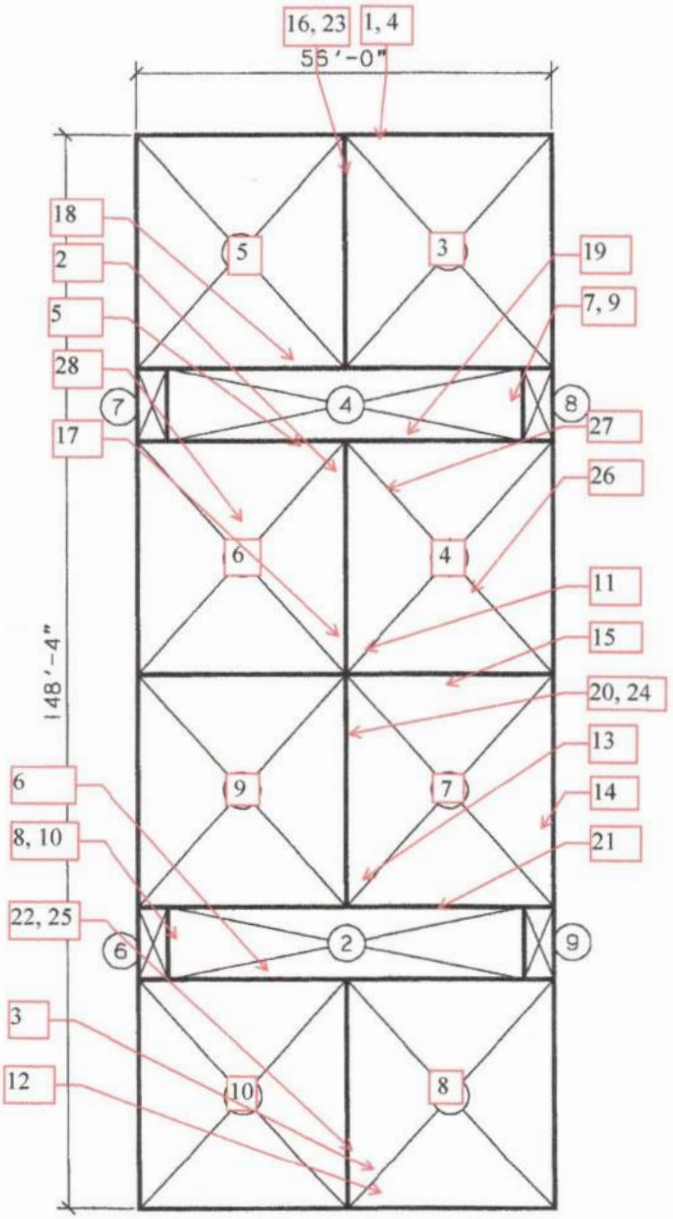
SCHOOL: 32ND STREET SCHOOL

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

BUILDING 2

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

Classroom Building (006DAT)



Legend

Samples 1-3: 12"x12" Lt. Tan VFT w/ Mastic
Samples 4-6: 4" Brown Cove Base / Adhesive
Samples 7-10: 12"x12" Lt. Tan & Orange VFT w/ Mastic
Samples 11, 12: 12"x12" Tan Marble VFT w/ Mastic (Patch)
Samples 13-15: 12"x12" Dk. Tan Marble VFT w/ Mastic
Samples 16-22: Gypsum Wall w/ J.C.
Samples 23-25: 2'x4' Fine Fissured C.T.
Samples 26-28: 2'x4' Fissured C.T. (Patch)

Sampled by: Carlos A. Galdamez (Vista)
Sampled on: 7/24/2024

PLOT SCALE: 1"=20'-0"

AUTHORIZED AGENT
LOS ANGELES UNIFIED SCHOOL DISTRICT

DATE: 10/20/89
SHEET 6 OF 44 SHEETS

2459389

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd Street / USC Magnet School | CODE: 7137 | PROJECT DESC: Admin. & Classroom Bldgs. Modernization | COLIN #: 10372107

SAMPLED BY: Carlos A. Galdamez | DATE SAMPLED: 7/24/2024 | DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. | TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
	13	006DAT	Classroom Bldg.	#7	S/E	Floor, Vinyl Floor Tile, 12"x12" Dk. Tan Marble w/ Black Mastic on Concrete (Core)	NO
	14	006DAT	Classroom Bldg.	#7	N/Center	Floor, Vinyl Floor Tile, 12"x12" Dk. Tan Marble w/ Black Mastic on Concrete (Core)	NO
	15	006DAT	Classroom Bldg.	#7	W/Center	Floor, Vinyl Floor Tile, 12"x12" Dk. Tan Marble w/ Black Mastic on Concrete (Core)	NO
	16	006DAT	Classroom Bldg.	#3	S/W	Wall, Gypsum Board with Joint Compound (Core)	NO
	17	006DAT	Classroom Bldg.	#6	N/E	Wall, Gypsum Board with Joint Compound (Core)	NO
	18	006DAT	Classroom Bldg.	#5	N/E	Wall, Gypsum Board with Joint Compound (Core)	NO
	19	006DAT	Classroom Bldg.	West Hallway	West Wall by Rolm 4	Wall, Gypsum Board with Joint Compound (Core)	NO
	20	006DAT	Classroom Bldg.	#7	S/W	Wall, Gypsum Board with Joint Compound (Core)	NO
	21	006DAT	Classroom Bldg.	East Hallway	West Wall by Rolm 7	Wall, Gypsum Board with Joint Compound (Core)	NO
	22	006DAT	Classroom Bldg.	#8	S/E	Wall, Gypsum Board with Joint Compound (Core)	NO
	23	006DAT	Classroom Bldg.	#3	S/E	Ceiling, Acoustical Tile, 2'x4' Fine Fissure (Pinhole / Lay-In)	YES
	24	006DAT	Classroom Bldg.	#7	S/W	Ceiling, Acoustical Tile, 2'x4' Fine Fissure (Pinhole / Lay-In)	YES

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Carlos A. Galdamez	Vista Environmnetal	12	7-29-2024	11:25 AM
Received By:	Jackie Payag	AQ ENV. Labs	12	7/29/24	11:25
Relinquished By:					
Received By:					

Maximo Work Order Number: 38096750 | Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other: _____

FETU USE ONLY

FETU REVIEWED BY: _____ | RUSH? ☐ Yes ☐ No | APPROVAL: _____

FETU REVIEW DATE: 7/29/24 | POINT COUNT? ☐ Yes ☐ No | PT. CT. RUSH? ☐ Yes ☐ No | APPROVAL: _____

ENVIRONMENTAL LABORATORIES LLC

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Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459389

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

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Date Sampled 07/24/2024
Sampled By Carlos A. Galdamez
Total Samples 22

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459389-001	006DAT, Classroom Bldg, #7, S/E					
13A	Floor, Vinyl Floor Tile, 12"x12", Dk. Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-002	006DAT, Classroom Bldg, #7, S/E					
13B	Mastic on concrete, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	100%	Chrysotile	<1%
	Asbestos Present: Yes		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**<1%**
2459389-003	006DAT, Classroom Bldg, N/Center					
14A	Floor, Vinyl Floor Tile, 12"x12", Dk. Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-004	006DAT, Classroom Bldg, N/Center					
14B	Mastic on concrete, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	97%	Chrysotile	3%
	Asbestos Present: Yes		Total % Non-Asbestos:	97.0%	**Total %Asbestos:**	**3.0%**
2459389-005	006DAT, Classroom Bldg, W/Center					
15A	Floor, Vinyl Floor Tile, 12"x12", Dk. Tan, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-006	006DAT, Classroom Bldg, W/Center					
15B	Mastic on concrete, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	100%	Chrysotile	<1%
	Asbestos Present: Yes		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**<1%**
2459389-007	006DAT, Classroom Bldg, #3, S/W					
16A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	20% <1% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459389-008	006DAT, Classroom Bldg, #3, S/W					
16B	Joint Compound, White, Homogeneous	LAYER 1 100%	Mica Calcium Carbonate	10% 88%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459389-009	006DAT, Classroom Bldg, #6, N/E					
17A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	10% <1% 90%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-010	006DAT, Classroom Bldg, #6, N/E					
17B	Joint Compound, Yellow/White, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Binder/Filler	80% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-011	006DAT, Classroom Bldg, #5, N/E					
18A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	10% <1% 90%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-012	006DAT, Classroom Bldg, #5, N/E					
18B	Joint Compound, Note: No Joint Compound Present	LAYER 1 100%				
2459389-013	006DAT, Classroom Bldg, West Hallway, West Wall by Room 7					
19A	Wall, Gypsum Board, White, Homogeneous	LAYER 1 100%	Perlite Calcium Carbonate Gypsum	20% 30% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459389-014	006DAT, Classroom Bldg, West Hallway, West Wall by Room 7					
19B	Joint Compound, White, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Binder/Filler	85% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-015	006DAT, Classroom Bldg, #7, S/W					
20A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	20% <1% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-016	006DAT, Classroom Bldg, #7, S/W					
20B	Joint Compound, Beige, Homogeneous	LAYER 1 100%	Mica Calcium Carbonate Binder/Filler	10% 80% 8%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459389-017	006DAT, Classroom Bldg, East Hallway, West Wall by Room 7					
21A	Wall, Gypsum Board, White, Homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	<1% <1% 100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-018	006DAT, Classroom Bldg, East Hallway, West Wall by Room 7					
21B	Joint Compound, Lt. Green/Cream, Non-homogeneous	LAYER 1 100%	Calcium Carbonate Binder/Filler	75% 25%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

ENVIRONMENTAL LABORATORIES LLC

1508 East 33rd Street
Signal Hill, CA 90755
Tel: 562-206-2770
Fax: 562-206-2773

Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459389

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/02/2024
Date Reported 08/05/2024

Date Sampled 07/24/2024
Sampled By Carlos A. Galdamez
Total Samples 22

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459389-019	006DAT, Classroom Bldg, #8, S/E					
22A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Gypsum/Filler	15% 85%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-020	006DAT, Classroom Bldg, #8, S/E					
22B	Joint Compound, White, Homogeneous	LAYER 1 100%	 Mica Calcium Carbonate	 10% 90%	Chrysotile	<1%
	Asbestos Present: Yes		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**<1%**
2459389-021	006DAT, Classroom Bldg, #3, S/E					
23	Ceiling, Acoustical Tile, 2'x4' Fine Fissure, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	45% 20% 30%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459389-022	006DAT, Classroom Bldg, #7, S/W					
24	Ceiling, Acoustical Tile, 2'x4' Fine Fissure, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	45% 20% 30%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

Method Detection Limit: Less than one percent (<1%). Asbestos content has been determined using calibrated visual estimation (CVES). Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. Non-homogeneous samples containing discrete and separable layers are analyzed and reported separately; composite results may be reported upon customer's request. Non-homogeneous samples with inseparable layers are analyzed and reported as composite samples. Due to the limitations of Polarized Light Microscopy, samples reported as None Detected or with low asbestos concentrations may not be reliable and further analysis such as TEM is recommended to confirm PLM results. This report shall not be reproduced except in full without the written approval of this laboratory. This report may not be used by the customer to claim product certification, endorsement, or approval by NIST/NVLAP or any agency of the government. Samples shall be disposed according to local, state and federal laws, 30 days after results are reported unless otherwise instructed.

CA-ELAP #2823

Cristina E Tabatt
Analyst - Cristina Tabatt

Cristina E Tabatt
Approved Signatory Cristina E. Tabatt

NVLAP TESTING
NVLAP Lab Code 500044-0

LOS ANGELES SCHOOL DISTRICT
DIAGRAM OF BUILDING AREAS

LOCATION 7137
APPLICATION NO. 22/
DRAWING THY02F1

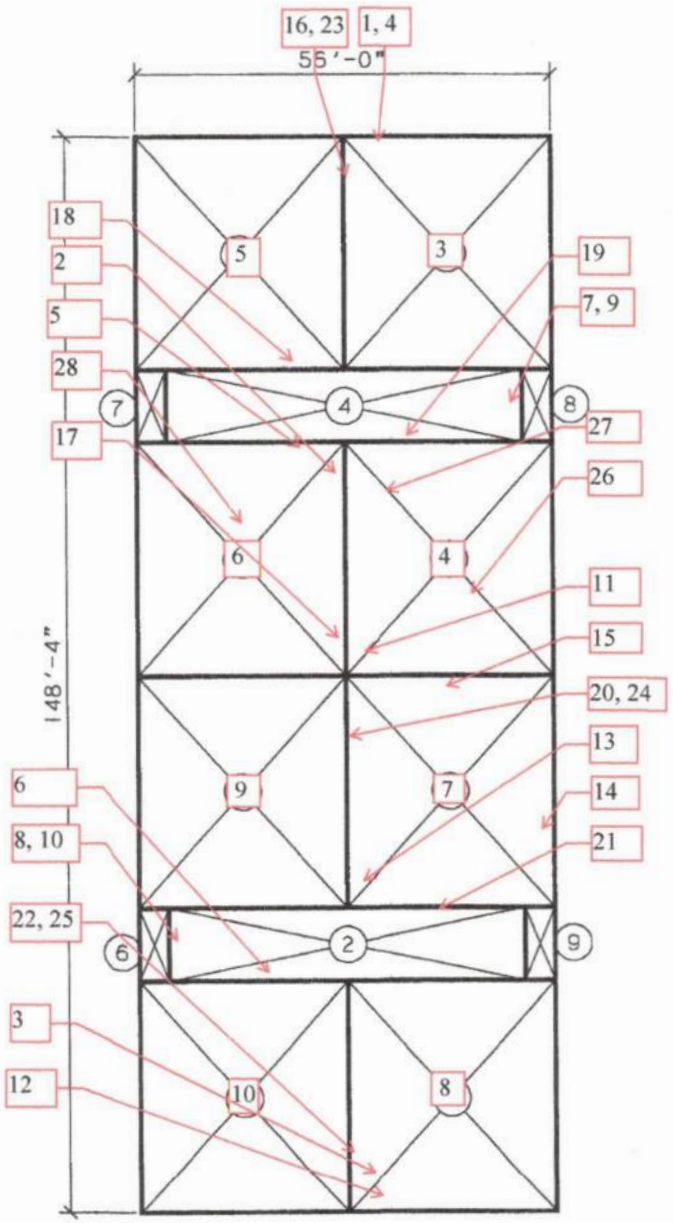
SCHOOL: 32ND STREET SCHOOL

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

BUILDING 2

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

Classroom Building (006DAT)



Legend
Samples 1-3: 12"x12" Lt. Tan VFT w/ Mastic
Samples 4-6: 4" Brown Cove Base / Adhesive
Samples 7-10: 12"x12" Lt. Tan & Orange VFT w/ Mastic
Samples 11, 12: 12"x12" Tan Marble VFT w/ Mastic (Patch)
Samples 13-15: 12"x12" Dk. Tan Marble VFT w/ Mastic
Samples 16-22: Gypsum Wall w/ J.C.
Samples 23-25: 2'x4' Fine Fissured C.T.
Samples 26-28: 2'x4' Fissured C.T. (Patch)

Sampled by: Carlos A. Galdamez (Vista)
Sampled on: 7/24/2024

PLOT SCALE: 1"=20'-0"

AUTHORIZED AGENT
LOS ANGELES UNIFIED SCHOOL DISTRICT

DATE: 10/20/89
SHEET 6 OF 44 SHEETS

2459390

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd Street / USC Magnet School CODE: 7137 PROJECT DESC: Admin. & Classroom Bldgs. Modernization COLIN #: 10372107

SAMPLED BY: Carlos A. Galdamez DATE SAMPLED: 7/24/2024 DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
	25	006DAT	Classroom Bldg.	#8	S/E	Ceiling, Acoustical Tile, 2'x4' Fine Fissured (Pinholes / Lay-In)	YES
	26	006DAT	Classroom Bldg.	#4	N/E	Ceiling, Acoustical Tile, 2'x4' Fissured (Lay-In / Patch)	YES
	27	006DAT	Classroom Bldg.	#4	S/W	Ceiling, Acoustical Tile, 2'x4' Fissured (Lay-In / Patch)	YES
	28	006DAT	Classroom Bldg.	#6	Center	Ceiling, Acoustical Tile, 2'x4' Fissured (Lay-In / Patch)	YES

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Carlos A. Galdamez	Vista Environmnetal	4	7-29-2024	11:25 AM
Received By:	Jackie Tayag	AQ ENV. Labs	4	7/29/24	11:25
Relinquished By:					
Received By:					

Maximo Work Order Number: 38096750 Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other: _____

FETU USE ONLY

FETU REVIEWED BY: _____ RUSH? ☐ Yes ☐ No APPROVAL: _____

FETU REVIEW DATE: 7/29/24 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL: _____

ENVIRONMENTAL LABORATORIES LLC

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Signal Hill, CA 90755
Tel: 562-206-2770
Fax: 562-206-2773

Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459390

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/03/2024
Date Reported 08/05/2024

Date Sampled 07/24/2024
Sampled By Carlos A. Galdamez
Total Samples 4

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459390-001	006DAT, Classroom Bldg., #8, S/E					
25	Ceiling, Acoustical Tile, 2'x4' Fine Fissured, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	50% 15% 30%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459390-002	006DAT, Classroom Bldg., #4, N/E					
26	Ceiling, Acoustical Tile, 2'x4' Fine Fissured, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	40% 20% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459390-003	006DAT, Classroom Bldg., #4, S/W					
27	Ceiling, Acoustical Tile, 2'x4' Fine Fissured, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	40% 20% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459390-004	006DAT, Classroom Bldg., #6, Center					
28	Ceiling, Acoustical Tile, 2'x4' Fine Fissured, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	50% 5% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

Method Detection Limit: Less than one percent (<1%). Asbestos content has been determined using calibrated visual estimation (CVES). Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. Non-homogeneous samples containing discrete and separable layers are analyzed and reported separately; composite results may be reported upon customer's request. Non-homogeneous samples with inseparable layers are analyzed and reported as composite samples. Due to the limitations of Polarized Light Microscopy, samples reported as None Detected or with low asbestos concentrations may not be reliable and further analysis such as TEM is recommended to confirm PLM results. This report shall not be reproduced except in full without the written approval of this laboratory. This report may not be used by the customer to claim product certification, endorsement, or approval by NIST/NVLAP or any agency of the government. Samples shall be disposed according to local, state and federal laws, 30 days after results are reported unless otherwise instructed.

CA-ELAP #2823

Cristina E Tabatt
Analyst - Cristina Tabatt

Cristina E Tabatt
Approved Signatory Cristina E. Tabatt

NVLAP TESTING
NVLAP Lab Code 500044-0

LOS ANGELES SCHOOL DISTRICT
DIAGRAM OF BUILDING AREAS

LOCATION 7137
APPLICATION NO. 22/
DRAWING THY02F1

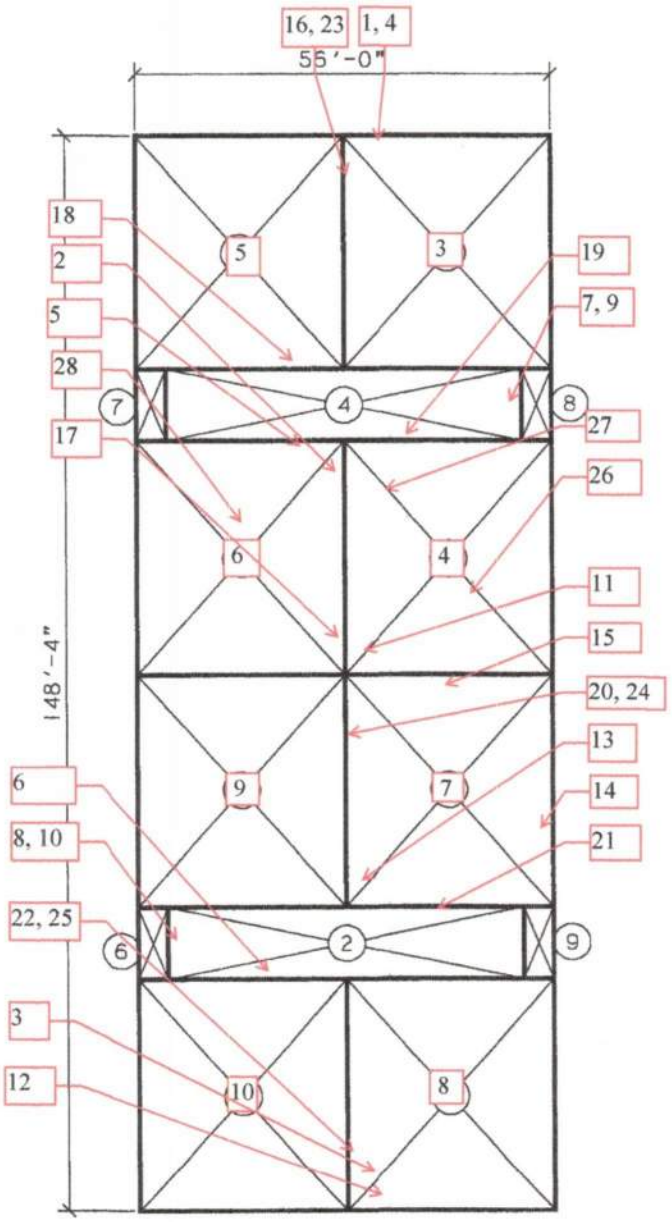
SCHOOL: 32ND STREET SCHOOL

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

BUILDING 2

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

Classroom Building (006DAT)



Legend

Samples 1-3: 12"x12" Lt. Tan VFT w/ Mastic
Samples 4-6: 4" Brown Cove Base / Adhesive
Samples 7-10: 12"x12" Lt. Tan & Orange VFT w/ Mastic
Samples 11, 12: 12"x12" Tan Marble VFT w/ Mastic (Patch)
Samples 13-15: 12"x12" Dk. Tan Marble VFT w/ Mastic
Samples 16-22: Gypsum Wall w/ J.C.
Samples 23-25: 2'x4' Fine Fissured C.T.
Samples 26-28: 2'x4' Fissured C.T. (Patch)

Sampled by: Carlos A. Galdamez (Vista)
Sampled on: 7/24/2024

PLOT SCALE: 1"=20'-0"

AUTHORIZED AGENT
LOS ANGELES UNIFIED SCHOOL DISTRICT

DATE: 10/20/89
SHEET 6 OF 44 SHEETS

2459391

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd Street / USC Magnet School | CODE: 7137 | PROJECT DESC: Admin. & Classroom Bldgs. Modernization | COLIN #: 10372107

SAMPLED BY: Carlos Galdamez / Francisco Barraza | DATE SAMPLED: 7/27/2024 | DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. | TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
	29	005DAT	Administrative & Classroom	Principal's Office	S/E	Floor, Vinyl Floor Tile, 12"x12" Red with Mastic on Concrete (Core)	NO
	30	005DAT	Administrative & Classroom	Principal's Office	S/W	Floor, Vinyl Floor Tile, 12"x12" Red with Mastic on Concrete (Core)	NO
	31	005DAT	Administrative & Classroom	Principal's Office Restroom	S/W	Floor, Vinyl Floor Tile, 12"x12" Red with Mastic on Concrete (Core)	NO
	32	005DAT	Administrative & Classroom	Coordinator's Office	N/E	Floor, Viny Floor Tile, 12"x12" Red & Yellow (Mix) w/ Mastic on Concrete (Core)	NO
	33	005DAT	Administrative & Classroom	Coordinator's Office	S/E	Floor, Viny Floor Tile, 12"x12" Red & Yellow (Mix) w/ Mastic on Concrete (Core)	NO
	34	005DAT	Administrative & Classroom	Coordinator's Office	S/W	Floor, Viny Floor Tile, 12"x12" Red & Yellow (Mix) w/ Mastic on Concrete (Core)	NO
	35	005DAT	Administrative & Classroom	Library	W/Center	Wall, Gypsum Board with Joint Compound	NO
	36	005DAT	Administrative & Classroom	Hallway	N/W	Wall, Gypsum Board with Joint Compound	NO
	37	005DAT	Administrative & Classroom	Main Office	S/E	Wall, Gypsum Board with Joint Compound	NO
	38	005DAT	Administrative & Classroom	Health Office	S/E (Cot Room)	Wall, Gypsum Board with Joint Compound	NO
	39	005DAT	Administrative & Classroom	Health Office Restroom	S/E	Wall, Plaster, Sand Finish with Buttonboard (Core)	NO
	40	005DAT	Administrative & Classroom	Staff Restroom	N/E	Wall, Plaster, Sand Finish with Buttonboard (Core)	NO

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Carlos A. Galdamez	Vista Environmnetal	12	7-29-2024	11:25 Am
Received By:	Jackie Tzyang	AQ Env. Labs	12	7/29/24	11:25
Relinquished By:					
Received By:					

Maximo Work Order Number: 38056750 | Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other: _____

FETU USE ONLY

FETU REVIEWED BY: _____ | RUSH? ☐ Yes ☐ No | APPROVAL: _____

FETU REVIEW DATE: 7/29/24 | POINT COUNT? ☐ Yes ☐ No | PT. CT. RUSH? ☐ Yes ☐ No | APPROVAL: _____

ENVIRONMENTAL LABORATORIES LLC

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Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459391

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/03/2024
Date Reported 08/05/2024

Date Sampled 07/27/2024
Sampled By C. Galdamez/F. Barraza
Total Samples 36

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459391-001	005DAT, Administrative & Classroom, Principal's Office, S/E					
29A	Floor, Vinyl Floor Tile, 12"x12", Red, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	65% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-002	005DAT, Administrative & Classroom, Principal's Office, S/E					
29B	Mastic, Yellow, Homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-003	005DAT, Administrative & Classroom, Principal's Office, S/E					
29C	Concrete, Gray, Homogeneous Note: Sample appears to be leveling compound	LAYER 1 100%	Quartz Calcium Carbonate Binder/Filler	10% 70% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-004	005DAT, Administrative & Classroom, Principal's Office, S/W					
30A	Floor, Vinyl Floor Tile, 12"x12", Red, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	65% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-005	005DAT, Administrative & Classroom, Principal's Office, S/W					
30B	Mastic, Yellow/Black, Non-homogeneous	LAYER 1 100%	Bituminous Matrix Adhesive Binders/Filler	10% 90%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Project Number 240334073
Project Name 32nd Street/USC Magnet School
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Date Sampled 07/27/2024
Sampled By C. Galdamez/F. Barraza
Total Samples 36

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459391-006	005DAT, Administrative & Classroom, Principal's Office, S/W					
30C	Concrete, Note: Insufficient material for analysis	LAYER 1 100%				
2459391-007	005DAT, Administrative & Classroom, Principal's Office Restroom, S/W					
31A	Floor, Vinyl Floor Tile, 12"x12", Red, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	65% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-008	005DAT, Administrative & Classroom, Principal's Office Restroom, S/W					
31B	Mastic, Yellow, Homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-009	005DAT, Administrative & Classroom, Principal's Office Restroom, S/W					
31C	Concrete, Gray, Homogeneous Note: Sample appears to be leveling compound	LAYER 1 100%	Cellulose Fiber Calcium Carbonate Binder/Filler	<1% 80% 20%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-010	005DAT, Administrative & Classroom, Coordinator's Office, N/E					
32A	Floor, Vinyl Floor Tile, 12"x12", Red, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-011	005DAT, Administrative & Classroom, Coordinator's Office, N/E					
32B	Mastic, Yellow, Homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Fax: 562-206-2773

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Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459391

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/03/2024
Date Reported 08/05/2024

Date Sampled 07/27/2024
Sampled By C. Galdamez/F. Barraza
Total Samples 36

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459391-012	005DAT, Administrative & Classroom, Coordinator's Office, N/E					
32C	Floor, Vinyl Floor Tile, 12"x12", Yellow, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-013	005DAT, Administrative & Classroom, Coordinator's Office, N/E					
32D	Mastic, Yellow, Homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-014	005DAT, Administrative & Classroom, Coordinator's Office, N/E					
32E	Concrete, Gray, Homogeneous Note: Sample appears to be leveling compound	LAYER 1 100%	Cellulose Fiber Calcium Carbonate Binder/Filler	2% 80% 18%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-015	005DAT, Administrative & Classroom, Coordinator's Office, S/E					
33A	Floor, Vinyl Floor Tile, 12"x12", Red, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-016	005DAT, Administrative & Classroom, Coordinator's Office, S/E					
33B	Mastic, Yellow, Homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Sampled By C. Galdamez/F. Barraza
Total Samples 36

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459391-017	005DAT, Administrative & Classroom, Coordinator's Office, S/E					
33C	Floor, Vinyl Floor Tile, 12"x12", Yellow, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-018	005DAT, Administrative & Classroom, Coordinator's Office, S/E					
33D	Mastic, Yellow, Homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-019	005DAT, Administrative & Classroom, Coordinator's Office, S/E					
33E	Concrete, Gray, Homogeneous	LAYER 1 100%	Cellulose Fiber Calcium Carbonate Binder/Filler	5% 80% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-020	005DAT, Administrative & Classroom, Coordinator's Office, S/W					
34A	Floor, Vinyl Floor Tile, 12"x12", Red, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-021	005DAT, Administrative & Classroom, Coordinator's Office, S/W					
34B	Mastic, Yellow, Homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

ENVIRONMENTAL LABORATORIES LLC

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Signal Hill, CA 90755
Tel: 562-206-2770
Fax: 562-206-2773

Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459391

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/03/2024
Date Reported 08/05/2024

Date Sampled 07/27/2024
Sampled By C. Galdamez/F. Barraza
Total Samples 36

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459391-022	005DAT, Administrative & Classroom, Coordinator's Office, S/W					
34C	Floor, Vinyl Floor Tile, 12"x12", Yellow, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-023	005DAT, Administrative & Classroom, Coordinator's Office, S/W					
34D	Mastic, Yellow, Homogeneous	LAYER 1 100%	Adhesive Binders/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-024	005DAT, Administrative & Classroom, Coordinator's Office, S/W					
34E	Concrete, Gray, Homogeneous Note: Sample appears to be leveling compound	LAYER 1 100%	Cellulose Fiber Calcium Carbonate Binder/Filler	5% 80% 15%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-025	005DAT, Administrative & Classroom, Library, W/Center					
35A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	10% <1% 90%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-026	005DAT, Administrative & Classroom, Library, W/Center					
35B	Joint Compound, Yellow/White, Non-homogeneous	LAYER 1 100%	Mica Calcium Carbonate Binder/Filler	5% 85% 10%	Chrysotile	<1%
	Asbestos Present: Yes		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**<1%**

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Total Samples 36

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459391-027	005DAT, Administrative & Classroom, Hallway, N/W					
36A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	10% <1% 90%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-028	005DAT, Administrative & Classroom, Hallway, N/W					
36B	Joint Compound, Beige, Non-homogeneous	LAYER 1 100%	 Mica Calcium Carbonate Binder/Filler	 5% 60% 35%	Chrysotile	<1%
	Asbestos Present: Yes		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**<1%**
2459391-029	005DAT, Administrative & Classroom, Main Office, S/E					
37A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	20% <1% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-030	005DAT, Administrative & Classroom, Main Office, S/E					
37B	Joint Compound, Peach/Beige, Non-homogeneous	LAYER 1 100%	 Mica Calcium Carbonate Binder/Filler	 10% 65% 25%	Chrysotile	<1%
	Asbestos Present: Yes		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**<1%**
2459391-031	005DAT, Administrative & Classroom, Health Office, S/E (Cot Room)					
38A	Wall, Gypsum Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	10% <1% 90%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Total Samples 36

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459391-032	005DAT, Administrative & Classroom, Health Office, S/E (Cot Room)					
38B	Joint Compound, Beige, Non-homogeneous	LAYER 1 100%	Mica Calcium Carbonate Binder/Filler	10% 65% 25%	Chrysotile	<1%
	Asbestos Present: Yes		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**<1%**
2459391-033	005DAT, Administrative & Classroom, Health Office Restroom, S/E					
39A	Plaster, White/ Beige, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	35% 10% 55%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-034	005DAT, Administrative & Classroom, Health Office Restroom, S/E					
39B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Gypsum/Filler	20% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-035	005DAT, Administrative & Classroom, Staff Restroom, N/E					
40A	Plaster, White/ Beige, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	40% 10% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459391-036	005DAT, Administrative & Classroom, Staff Restroom, N/E					
40B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Gypsum/Filler	25% 75%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)

Method Detection Limit: Less than one percent (<1%). Asbestos content has been determined using calibrated visual estimation (CVES). Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. Non-homogeneous samples containing discrete and separable layers are analyzed and reported separately; composite results may be reported upon customer's request. Non-homogeneous samples with inseparable layers are analyzed and reported as composite samples. Due to the limitations of Polarized Light Microscopy, samples reported as None Detected or with low asbestos concentrations may not be reliable and further analysis such as TEM is recommended to confirm PLM results. This report shall not be reproduced except in full without the written approval of this laboratory. This report may not be used by the customer to claim product certification, endorsement, or approval by NIST/NVLAP or any agency of the government. Samples shall be disposed according to local, state and federal laws, 30 days after results are reported unless otherwise instructed.

CA-ELAP #2823

Cristina E Tabatt

Analyst - Cristina Tabatt

Cristina E Tabatt

Approved Signatory Cristina E. Tabatt

NVLAP TESTING
NVLAP Lab Code 500044-0

LOS ANGELES SCHOOL DISTRICT
DIAGRAM OF BUILDING AREAS

LOCATION 7137

APPLICATION NO. 22/
DRAWING THYOIFI

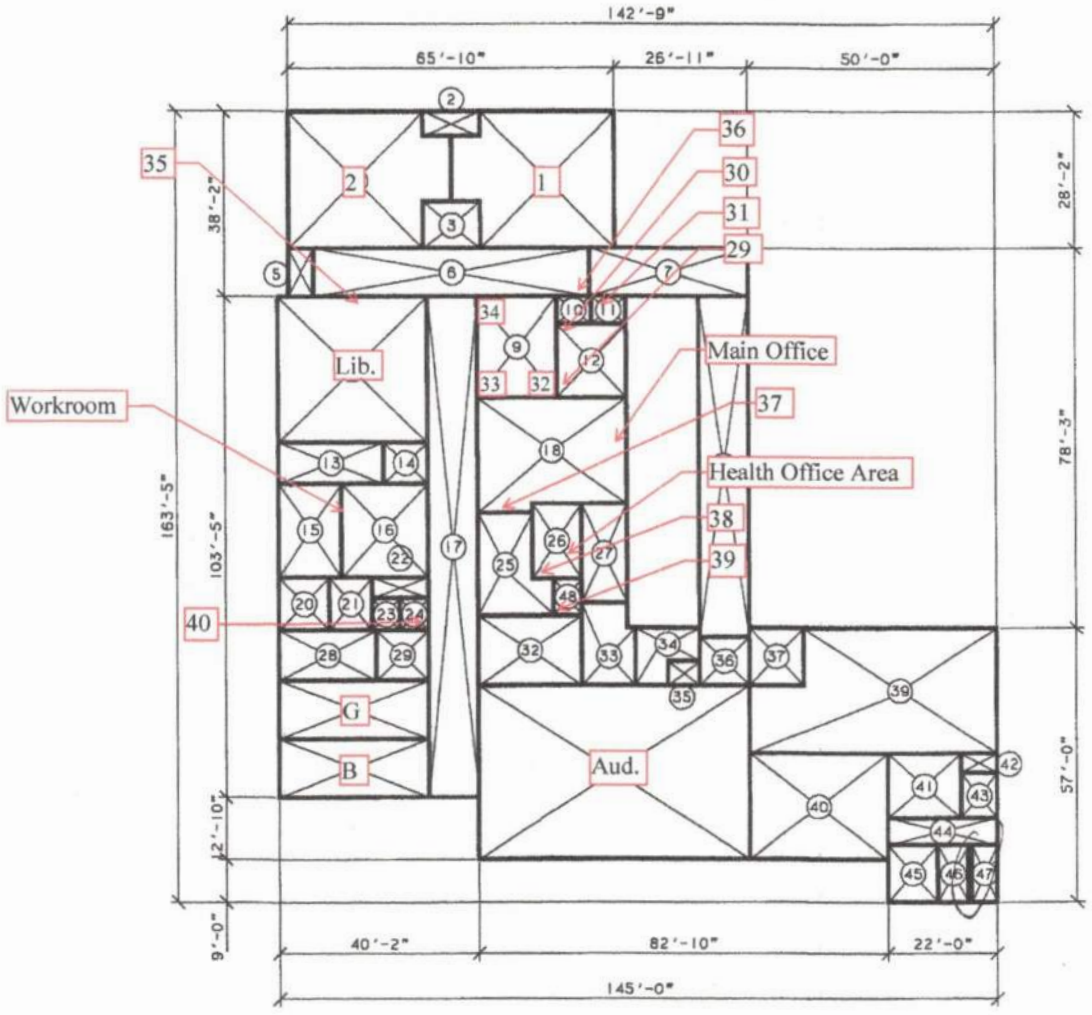
SCHOOL: 32ND STREET SCHOOL

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

BUILDING 1

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

Administration & Classroom Bldg.
(005DAT)



Working
North

Legend
Samples 29-31: 12"x12" Red VFT w/ Mastic
Samples 32-34: 12"x12" Red & Yellow VFT w/ Mastic
Samples 35-38: Gypsum Wall w/ Joint Compound
Samples 39, 40: Plaster Wall, Sand Finish w/ Buttonboard

Sampled by: Carlos Galdamez / Francisco Barraza (Vista)
Sample on: 7/27/2024

PLOT SCALE: 1"=30'-0"

AUTHORIZED AGENT
LOS ANGELES UNIFIED SCHOOL DISTRICT

DATE: 10/20/89
SHEET 3 OF 44 SHEETS

2459392

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd Street / USC Magnet School CODE: 7137 PROJECT DESC: Admin. & Classroom Bldgs. Modernization COLIN #: 10372107

SAMPLED BY: Carlos A. Galdamez DATE SAMPLED: 7/24/2024 DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
	41	005DAT	Administrative & Classroom	Girl's Restroom	N/E	Wall, Plaster, Sand Finish with Buttonboard (Core)	NO
	42	005DAT	Administrative & Classroom	Boy's Restroom	N/E	Wall, Plaster, Sand Finish with Buttonboard (Core)	NO
	43	005DAT	Administrative & Classroom	Auditorium	S/E	Wall, Plaster, Sand Finish with Buttonboard (Core)	NO
	44	005DAT	Administrative & Classroom	Women's Restroom	N/W	Wall, Plaster, Sand Finish with Buttonboard (Core)	NO
	45	005DAT	Administrative & Classroom	All-Gender Restroom	S/W	Wall, Plaster, Sand Finish with Buttonboard (Core)	NO
	46	005DAT	Administrative & Classroom	Health Office Restroom	S/Center	Ceiling, Plaster, Sand Finish with Buttonboard (Core)	NO
	47	005DAT	Administrative & Classroom	Staff Restroom	N/Center	Ceiling, Plaster, Sand Finish with Buttonboard (Core)	NO
	48	005DAT	Administrative & Classroom	Girl's Restroom	N/Center	Ceiling, Plaster, Sand Finish with Buttonboard (Core)	NO
	49	005DAT	Administrative & Classroom	Boy's Restroom	N/Center	Ceiling, Plaster, Sand Finish with Buttonboard (Core)	NO
	50	005DAT	Administrative & Classroom	Women's Restroom	S/W	Ceiling, Plaster, Sand Finish with Buttonboard (Core)	NO
	51	005DAT	Administrative & Classroom	All-Gender Restroom	S/Center	Ceiling, Plaster, Sand Finish with Buttonboard (Core)	NO
	52	005DAT	Administrative & Classroom	Hopper Room	W/Center	Ceiling, Plaster, Sand Finish with Buttonboard (Core)	NO

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Carlos A. Galdamez	Vista Environmnetal	12	7-29-2024	11:25 am
Received By:	Jackie Tayag	AQ Env. Labs	12	7/29/24	11:25
Relinquished By:					
Received By:					

Maximo Work Order Number: 38096750 Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other: _____

FETU USE ONLY

FETU REVIEWED BY: _____ RUSH? ☐ Yes ☐ No APPROVAL: _____

FETU REVIEW DATE: 7/29/24 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL: _____

ENVIRONMENTAL LABORATORIES LLC

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Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459392

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
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Date Received 07/29/2024
Date Analyzed 08/05/2024
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Date Sampled 07/24/2024
Sampled By Carlos A. Galdamez
Total Samples 24

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459392-001	005DAT, Administrative & Classroom, Girl's Restroom, N/E					
41A	Wall, Plaster, Cream, Non-homogeneous Note: Sample is paint only, no plaster present	LAYER 1 100%	Binder/Filler	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-002	005DAT, Administrative & Classroom, Girl's Restroom, N/E					
41B	Button Board (2 layers), White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Gypsum/Filler	20% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-003	005DAT, Administrative & Classroom, Boy's Restroom, N/E					
42A	Wall, Plaster, Cream/White/Beige, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	35% 10% 55%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-004	005DAT, Administrative & Classroom, Boy's Restroom, N/E					
42B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Gypsum/Binder/Filler	15% 85%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-005	005DAT, Administrative & Classroom, Auditorium, S/E					
43A	Wall, Plaster, Beige/ White, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	30% 20% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459392-006	005DAT, Administrative & Classroom, Auditorium, S/E					
43B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	25% <1% 75%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-007	005DAT, Administrative & Classroom, Women's Restroom, N/W					
44A	Wall, Plaster, Cream/White/Beige, Non-homogeneous	LAYER 1 100%	 Quartz Calcium Carbonate Gypsum/Binder/Filler	 35% 10% 55%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-008	005DAT, Administrative & Classroom, Women's Restroom, N/W					
44B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	25% <1% 75%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-009	005DAT, Administrative & Classroom, All-Gender Restroom, S/W					
45A	Wall, Plaster, Cream/White/Beige, Non-homogeneous	LAYER 1 100%	 Quartz Calcium Carbonate Gypsum/Binder/Filler	 30% 10% 60%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-010	005DAT, Administrative & Classroom, All-Gender Restroom, S/W					
45B	Button Board, White/Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	15% <1% 85%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459392-011	005DAT, Administrative & Classroom, Health Office Restroom, S/Center					
46A	Ceiling, Plaster, Peach/White/Beige, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	40% 10% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-012	005DAT, Administrative & Classroom, Health Office Restroom, S/Center					
46B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Gypsum/Filler	20% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-013	005DAT, Administrative & Classroom, Staff Restroom, N/Center					
47A	Ceiling, Plaster, Peach/White/Beige, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	40% 10% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-014	005DAT, Administrative & Classroom, Staff Restroom, N/Center					
47B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	25% <1% 75%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-015	005DAT, Administrative & Classroom, Girl's Restroom, N/Center					
48A	Ceiling, Plaster, White/ Beige, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	40% 10% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Total Samples 24

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459392-016	005DAT, Administrative & Classroom, Girl's Restroom, N/Center					
48B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	10% <1% 90%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-017	005DAT, Administrative & Classroom, Boy's Restroom, N/Center					
49A	Ceiling, Plaster, White/ Beige, Non-homogeneous	LAYER 1 100%	 Quartz Calcium Carbonate Gypsum/Binder/Filler	 40% 10% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-018	005DAT, Administrative & Classroom, Boy's Restroom, N/Center					
49B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	20% <1% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-019	005DAT, Administrative & Classroom, Women's Restroom, S/W					
50A	Ceiling, Plaster, Lt. Pink/White/Beige, Non-homogeneous	LAYER 1 100%	 Quartz Calcium Carbonate Gypsum/Binder/Filler	 40% 10% 50%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-020	005DAT, Administrative & Classroom, Women's Restroom, S/W					
50B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	20% <1% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Report Number 2459392

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/05/2024
Date Reported 08/05/2024

Date Sampled 07/24/2024
Sampled By Carlos A. Galdamez
Total Samples 24

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID Sample No.	Sample Location Description	Layer No. Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459392-021	005DAT, Administrative & Classroom, All-Gender Restroom, S/Center					
51A	Ceiling, Plaster, Cream/White/Beige, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	35% 10% 55%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-022	005DAT, Administrative & Classroom, All-Gender Restroom, S/Center					
51B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	40% <1% 60%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-023	005DAT, Administrative & Classroom, Hopper Room, W/Center					
52A	Ceiling, Plaster, Peach/White/Beige, Non-homogeneous	LAYER 1 100%	Quartz Calcium Carbonate Gypsum/Binder/Filler	45% 10% 45%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459392-024	005DAT, Administrative & Classroom, Hopper Room, W/Center					
52B	Button Board, White/ Brown, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Fibrous Glass Gypsum/Filler	20% <1% 80%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

ENVIRONMENTAL LABORATORIES LLC

1508 East 33rd Street
Signal Hill, CA 90755
Tel: 562-206-2770
Fax: 562-206-2773

Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459392

Project Number 240334073
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Total Samples 24

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)

Method Detection Limit: Less than one percent (<1%). Asbestos content has been determined using calibrated visual estimation (CVES). Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. Non-homogeneous samples containing discrete and separable layers are analyzed and reported separately; composite results may be reported upon customer's request. Non-homogeneous samples with inseparable layers are analyzed and reported as composite samples. Due to the limitations of Polarized Light Microscopy, samples reported as None Detected or with low asbestos concentrations may not be reliable and further analysis such as TEM is recommended to confirm PLM results. This report shall not be reproduced except in full without the written approval of this laboratory. This report may not be used by the customer to claim product certification, endorsement, or approval by NIST/NVLAP or any agency of the government. Samples shall be disposed according to local, state and federal laws, 30 days after results are reported unless otherwise instructed.

CA-ELAP #2823

Cristina E Tabatt

Analyst - Cristina Tabatt

Cristina E Tabatt

Approved Signatory Cristina E. Tabatt

NVLAP TESTING
NVLAP Lab Code 500044-0

LOS ANGELES SCHOOL DISTRICT

DIAGRAM OF BUILDING AREAS

LOCATION 7137

APPLICATION NO. 22/

DRAWING THYOIFI

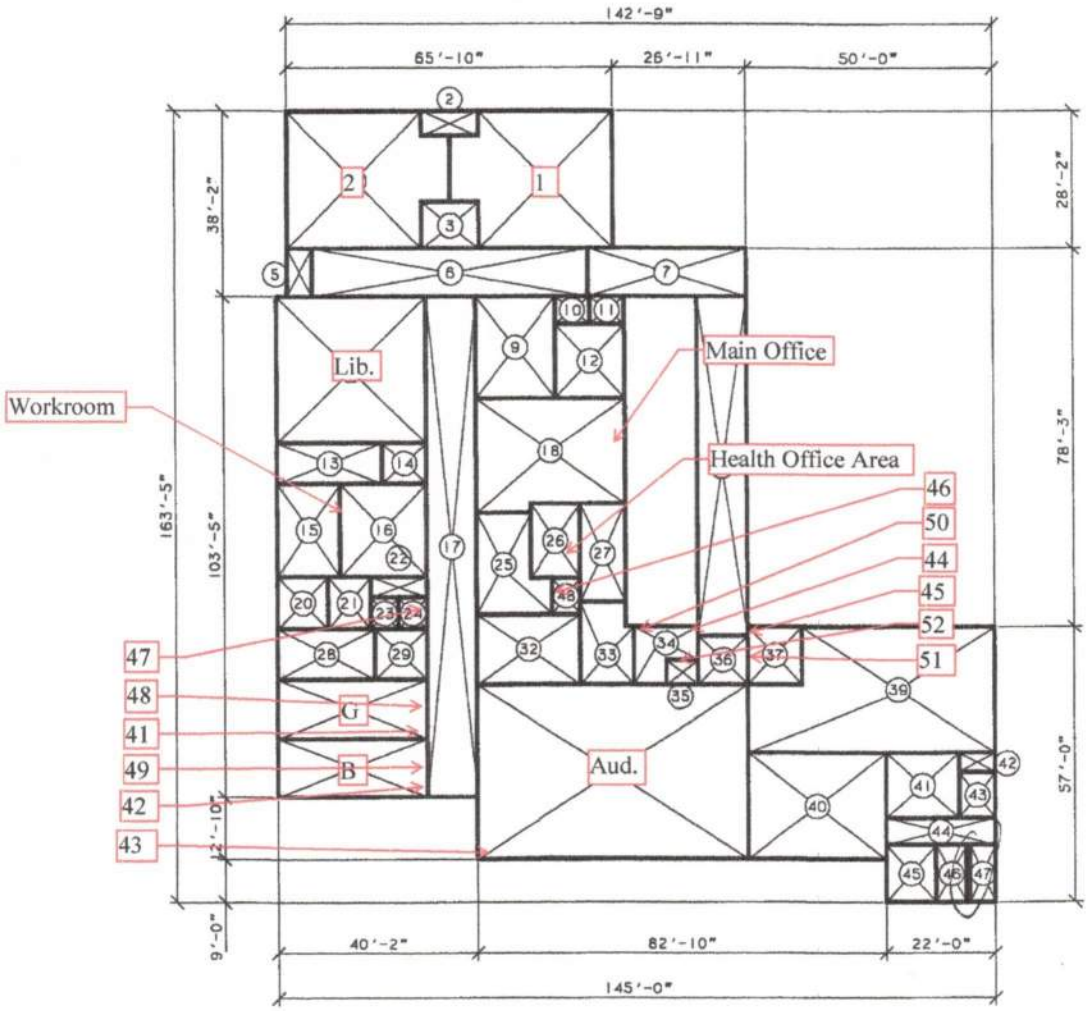
SCHOOL: 32ND STREET SCHOOL

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

BUILDING 1

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

Administration & Classroom Bldg.
(005DAT)



Working
North

Legend
Samples 41-45: Plaster Wall, Sand Finish w/ Buttonboard
Samples 46-52: Plaster Ceiling, Sand Finish w/ Buttonboard

Sampled by: Carlos Galdamez / Francisco Barraza (Vista)
Sample on: 7/27/2024

PLOT SCALE: 1"=30'-0"

AUTHORIZED AGENT
LOS ANGELES UNIFIED SCHOOL DISTRICT

DATE: 10/20/89
SHEET 3 OF 44 SHEETS

2459393

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd Street / USC Magnet School | CODE: 7137 | PROJECT DESC: Admin. & Classroom Bldgs. Modernization | COLIN #: 10372107

SAMPLED BY: Carlos Galdamez / Francisco Barraza | DATE SAMPLED: 7/27/2024 | DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. | TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
	53	005DAT	Administrative & Classroom	Auditorium	S/E	Floor, Vinyl Floor Tile, 12"x12" Lt. Beige w/ Brown Stks & Mastic on Concrete (Core)	NO
	54	005DAT	Administrative & Classroom	Workroom	N/E	Floor, Vinyl Floor Tile, 12"x12" Lt. Beige w/ Brown Stks & Mastic on Concrete (Core)	NO
	55	005DAT	Administrative & Classroom	Main Office	W/Center	Floor, Vinyl Floor Tile, 12"x12" Lt. Beige w/ Brown Stks & Mastic on Concrete (Core)	NO
	56	005DAT	Administrative & Classroom	Library	N/E	Ceiling, Acoustical Tile, 2'x4' Fine Fissure (Pinholes / Lay-In)	NO
	57	005DAT	Administrative & Classroom	Auditorium	N/E	Ceiling, Acoustical Tile, 2'x4' Fine Fissure (Pinholes / Lay-In)	NO
	58	005DAT	Administrative & Classroom	Faculty Lounge	Center	Ceiling, Acoustical Tile, 2'x4' Fine Fissure (Pinholes / Lay-In)	NO
	59	005DAT	Administrative & Classroom	Hallway	East Side	Ceiling, Acoustical tile, 12"x12" Random Holes (Glued-On)	NO
	60	005DAT	Administrative & Classroom	Workroom	N/E	Ceiling, Acoustical tile, 12"x12" Random Holes (Glued-On)	NO
	61	005DAT	Administrative & Classroom	Health Office	W/Center (Cot Room)	Ceiling, Acoustical tile, 12"x12" Random Holes (Glued-On)	NO
	62	005DAT	Administrative & Classroom	Hallway	East Side	Ceiling, Acoutical Tile Mastic a/w 12"x12" Random Holes	NO
	63	005DAT	Administrative & Classroom	Workroom	N/E	Ceiling, Acoutical Tile Mastic a/w 12"x12" Random Holes	NO
	64	005DAT	Administrative & Classroom	Health Office	W/Center (Cot Room)	Ceiling, Acoutical Tile Mastic a/w 12"x12" Random Holes	NO

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Carlos A. Galdamez	Vista Environmnetal	12	7-29-2024	11:25 am
Received By:	Jackie Tayag	AQ Env. Labs	12	7/29/24	11:25
Relinquished By:					
Received By:					

Maximo Work Order Number: 38096750 | Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other: _____

FETU USE ONLY

FETU REVIEWED BY: _____ | RUSH? ☐ Yes ☐ No | APPROVAL: _____

FETU REVIEW DATE: 7/29/24 | POINT COUNT? ☐ Yes ☐ No | PT. CT. RUSH? ☐ Yes ☐ No | APPROVAL: _____

ENVIRONMENTAL LABORATORIES LLC

1508 East 33rd Street
Signal Hill, CA 90755
Tel: 562-206-2770
Fax: 562-206-2773

Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459393

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
PO Number
WO Number

Date Received 07/29/2024
Date Analyzed 08/03/2024
Date Reported 08/05/2024

Date Sampled 07/27/2024
Sampled By C. Galdamez/F. Barraza
Total Samples 18

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459393-001	005DAT, Administrative & Classroom, Auditorium, S/E					
53A	Floor, Vinyl Floor Tile, 12"x12", Lt. Beige/Brown, Homogeneous	LAYER 1 100%	 Calcium Carbonate Vinyl Binder	 30% 68%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459393-002	005DAT, Administrative & Classroom, Auditorium, S/E					
53B	Mastic, Black, Homogeneous	LAYER 1 100%	 Bituminous Matrix	 96%	Chrysotile	4%
	Asbestos Present: Yes		Total % Non-Asbestos:	96.0%	**Total %Asbestos:**	**4.0%**
2459393-003	005DAT, Administrative & Classroom, Auditorium, S/E					
53C	Concrete, Gray, Non-homogeneous	LAYER 1 100%	 Quartz Mineral Binders/Filler	 65% 35%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459393-004	005DAT, Administrative & Classroom, Workroom, N/E					
54A	Floor, Vinyl Floor Tile, 12"x12", Lt. Beige/Brown, Homogeneous	LAYER 1 100%	 Calcium Carbonate Vinyl Binder	 30% 68%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459393-005	005DAT, Administrative & Classroom, Workroom, N/E					
54B	Mastic, Black, Homogeneous	LAYER 1 100%	 Bituminous Matrix	 96%	Chrysotile	4%
	Asbestos Present: Yes		Total % Non-Asbestos:	96.0%	**Total %Asbestos:**	**4.0%**
2459393-006	005DAT, Administrative & Classroom, Workroom, N/E					
54C	Concrete, Gray, Non-homogeneous	LAYER 1 100%	 Quartz Mineral Binders/Filler	 70% 30%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

ENVIRONMENTAL LABORATORIES LLC

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Vista Environmental Consulting
1054 N Tustin Avenue
Anaheim, CA 92807
Attn.: Carlos Galdamez

Report Number 2459393

Project Number 240334073
Project Name 32nd Street/USC Magnet School
Location Admin & Classroom Bldgs Modernization
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Date Received 07/29/2024
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Date Sampled 07/27/2024
Sampled By C. Galdamez/F. Barraza
Total Samples 18

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459393-007	005DAT, Administrative & Classroom, Main Office, W/Center					
55A	Floor, Vinyl Floor Tile, 12"x12", Lt. Beige/Brown, Homogeneous	LAYER 1 100%	Calcium Carbonate Vinyl Binder	30% 68%	Chrysotile	2%
	Asbestos Present: Yes		Total % Non-Asbestos:	98.0%	**Total %Asbestos:**	**2.0%**
2459393-008	005DAT, Administrative & Classroom, Main Office, W/Center					
55B	Mastic, Black, Homogeneous	LAYER 1 100%	Bituminous Matrix	96%	Chrysotile	4%
	Asbestos Present: Yes		Total % Non-Asbestos:	96.0%	**Total %Asbestos:**	**4.0%**
2459393-009	005DAT, Administrative & Classroom, Main Office, W/Center					
55C	Concrete, Gray, Non-homogeneous	LAYER 1 100%	Quartz Mineral Binders/Filler	60% 40%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459393-010	005DAT, Administrative & Classroom, Library, N/E					
56	Ceiling, Acoustical Tile, 2'x4' Fine Fissure, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	40% 25% 30%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459393-011	005DAT, Administrative & Classroom, Auditorium, N/E					
57	Ceiling, Acoustical Tile, 2'x4' Fine Fissure, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	40% 25% 30%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Sampled By C. Galdamez/F. Barraza
Total Samples 18

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459393-012	005DAT, Administrative & Classroom, Faculty Lounge, Center					
58	Ceiling, Acoustical Tile, 2'x4' Fine Fissure, White/ Beige, Non-homogeneous	LAYER 1 100%	Cellulose Fiber Mineral Wool Perlite	40% 25% 30%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459393-013	005DAT, Administrative & Classroom, Hallway, East Side					
59	Ceiling, Acoustical Tile, 12"x12" Random Holes, White/ Brown, Non-homogeneous	LAYER 1 100%	Wood Fiber Binder/Filler	95% 5%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459393-014	005DAT, Administrative & Classroom, Workroom, N/E					
60	Ceiling, Acoustical Tile, 12"x12" Random Holes, White/ Brown, Non-homogeneous	LAYER 1 100%	Wood Fiber Binder/Filler	95% 5%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459393-015	005DAT, Administrative & Classroom, Health Office, W/Center (Cot Room)					
61	Ceiling, Acoustical Tile, 12"x12" Random Holes, White/ Brown, Non-homogeneous	LAYER 1 100%	Wood Fiber Binder/Filler	95% 5%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459393-016	005DAT, Administrative & Classroom, Hallway, East Side					
62	Ceiling, Acoustical Tile Mastic a/w 12"x12", Dk. Brown, Homogeneous	LAYER 1 100%	Adhesive Binders	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

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Total Samples 18

Method of Analysis 40 CFR Part 763 Appendix E to Subpart E, EPA Method 600/M4-82-020; updated method 600 R-93/116 Determination of Asbestos in Bulk Building Materials.

Test Report

Laboratory ID / Sample No.	Sample Location / Description	Layer No. / Layer %	Non-Asbestos Components	(%)	Asbestos Type	(%)
2459393-017	005DAT, Administrative & Classroom, Workroom, N/E					
63	Ceiling, Acoustical Tile Mastic a/w 12"x12", Dk. Brown, Homogeneous	LAYER 1 100%	Adhesive Binders	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**
2459393-018	005DAT, Administrative & Classroom, Health Office, W/Center (Cot Room)					
64	Ceiling, Acoustical Tile Mastic a/w 12"x12", Dk. Brown, Homogeneous	LAYER 1 100%	Adhesive Binders	100%	None Detected	
	Asbestos Present: No		Total % Non-Asbestos:	100.0%	**Total %Asbestos:**	**No Asbestos Detected**

Method Detection Limit: Less than one percent (<1%). Asbestos content has been determined using calibrated visual estimation (CVES). Samples tested were received in acceptable condition unless otherwise stated. Test report relates only to items tested. Non-homogeneous samples containing discrete and separable layers are analyzed and reported separately; composite results may be reported upon customer's request. Non-homogeneous samples with inseparable layers are analyzed and reported as composite samples. Due to the limitations of Polarized Light Microscopy, samples reported as None Detected or with low asbestos concentrations may not be reliable and further analysis such as TEM is recommended to confirm PLM results. This report shall not be reproduced except in full without the written approval of this laboratory. This report may not be used by the customer to claim product certification, endorsement, or approval by NIST/NVLAP or any agency of the government. Samples shall be disposed according to local, state and federal laws, 30 days after results are reported unless otherwise instructed.

CA-ELAP #2823

Cristina E Tabatt
Analyst - Cristina Tabatt

Cristina E Tabatt
Approved Signatory Cristina E. Tabatt

NVLAP TESTING
NVLAP Lab Code 500044-0

LOS ANGELES SCHOOL DISTRICT
DIAGRAM OF BUILDING AREAS

LOCATION 7137
APPLICATION NO. 22/
DRAWING THYOIFI

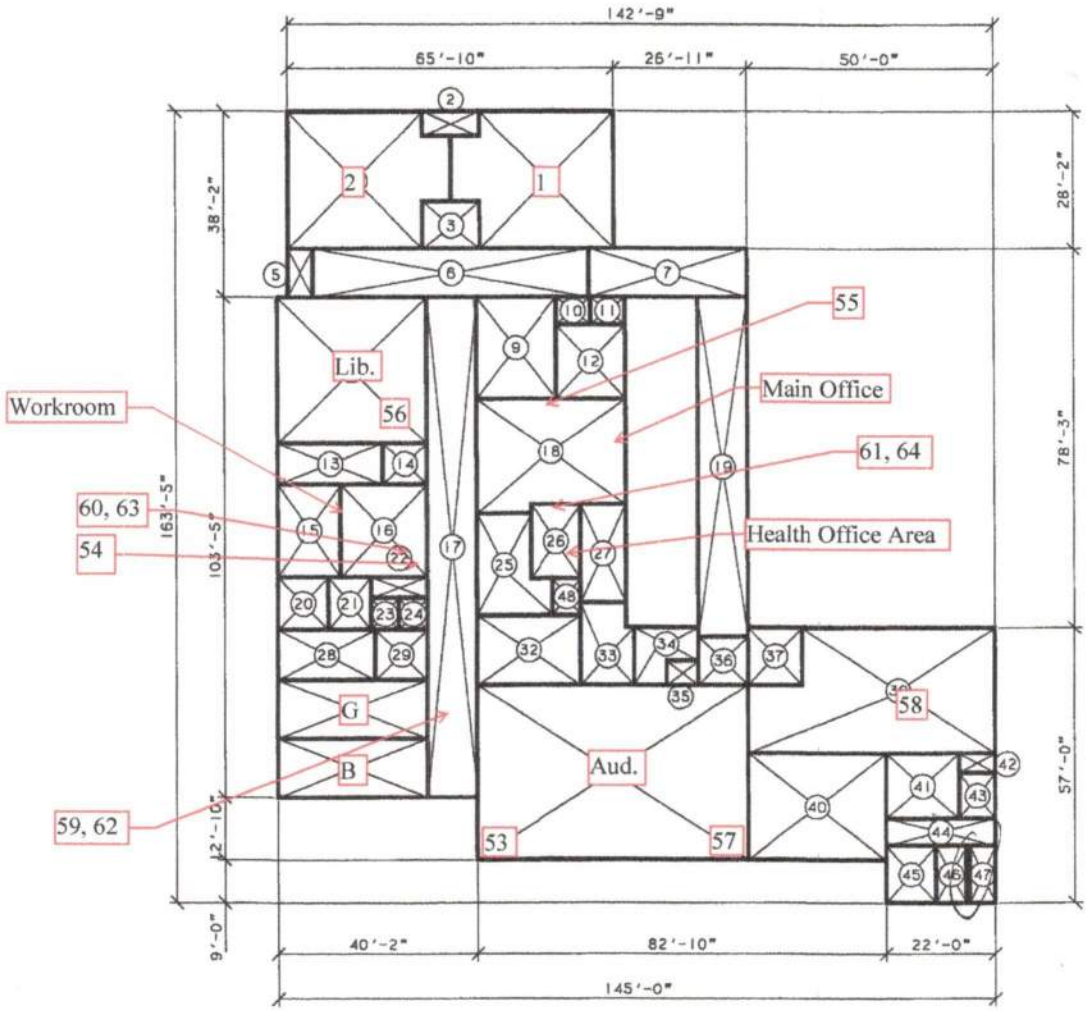
SCHOOL: 32ND STREET SCHOOL

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

BUILDING 1

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

Administration & Classroom Bldg.
(005DAT)



Working North

Legend
Samples 53-55: 12"x12" Lt. Beige w/ Brown Stks & Mastic
Samples 56-58: 2'x4' Fine Fissured C.T.
Samples 59-61: 12"x12" Random Holes C.T.
Samples 62-64: 12"x12" Random Holes C.T. Mastic

Sampled by: Carlos Galdamez / Francisco Barraza (Vista)
Sample on: 7/27/2024

PLOT SCALE: 1"=30'-0"

AUTHORIZED AGENT
LOS ANGELES UNIFIED SCHOOL DISTRICT

DATE: 10/20/89
SHEET 3 OF 44 SHEETS

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

54637

SITE NAME: 32nd ST. / USC Magnet CODE: 7137 PROJECT DESC Admin & Classroom Modernization COLIN #: 10372107

SAMPLED BY: FRANCISCO BARRAZA DATE SAMPLED: 8/21/24 DEPT. / CONSULTANT: VISTA ENV. TEL: (323-596-9

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
2408-1568	65	00SDAT	ADMIN. + CLASSROOM	ASSISTANT PRINCIPAL OFFICE	SOUTH WEST	CARPET, ADHESIVE MASTIC (CCRE) (BLACK YELLOW)	NO
2408-1569	66	↓	↓	↓	NORTH WEST	↓	↓
2408-1570	67	↓	↓	↓	NORTH EAST	↓	↓

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	FRANCISCO BARRAZA	VISTA ENVIRONMENTAL	3	8/21/2024	1426
Received By:	ROGELIO CARRILLO	FSD LAB	3	8/21/24	1428
Relinquished By:					
Received By:					

Maximo Work Order Number: 38096750 Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☒ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY: [signature] RUSH? ☒ Yes ☐ No APPROVAL: [signature]

FETU REVIEW DATE: 8/21/2024 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL: _____

Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP (TESTING) LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/21/2024

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024081568-A	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC SW	HOMOGENEOUS; NON-FRIABLE; LT.GRAY/ PURPLE; CARPET; FIBROUS	0	0	0	0	0	0	0	100% SYNTHETIC
2024081568-B	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC SW	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024081568-C	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC SW	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; TAR	4	0	0	0	0	0	4	TAR
					COMMENT(S): SMALL AMOUNT OF MATERIAL							
2024081568-D	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC SW	HOMOGENEOUS; NON-FRIABLE; WHITE; LEVELING MATERIAL; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024081568-E	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC SW	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER, ROCK
2024081569-A	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NW	HOMOGENEOUS; NON-FRIABLE; LT.GRAY/ PURPLE; CARPET; FIBROUS	0	0	0	0	0	0	0	100% SYNTHETIC
2024081569-B	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NW	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE

Lab Supervisor Signature and Date _____ 8/22/24

Signature of Analyst _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. ""Quantification done by optical estimate"" 1 - 5 % considered non-quantifiable.
This report relates to only the material tested. An asterisk '*' indicates preliminary results.
The laboratory is not responsible for samples and data collected by personnel who are not part of the laboratory.

This report is not used by LAUSD to claim product endorsement by NVLAP or any agency of the U.S. Government.
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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP (TESTING) LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/21/2024

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024081569-C	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NW	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; TAR	4	0	0	0	0	0	4	TAR
				COMMENT(S): SMALL AMOUNT OF MATERIAL								
2024081569-D	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NW	HOMOGENEOUS; NON-FRIABLE; WHITE; LEVELING MATERIAL; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024081569-E	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NW	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER, ROCK
2024081570-A	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NE	HOMOGENEOUS; NON-FRIABLE; LT.GRAY/ PURPLE; CARPET; FIBROUS	0	0	0	0	0	0	0	100% SYNTHETIC
2024081570-B	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NE	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024081570-C	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NE	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; TAR	3	0	0	0	0	0	3	TAR
				COMMENT(S): SMALL AMOUNT OF MATERIAL								
2024081570-D	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NE	HOMOGENEOUS; NON-FRIABLE; WHITE; LEVELING MATERIAL; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 8/22/24

Signature of Analyst _____

Note: 0%: No Asbestos Detected, <1%: Asbestos Detected Above 0% and Below or Equal to 1%
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2024081570-E	RC	08/22/2024	005DAT : ADMIN & CLSRM ASSISTANT PRINCIPAL'S OFC NE	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER, ROCK

Lab Supervisor Signature and Date _____ 8/22/24

Signature of Analyst _____

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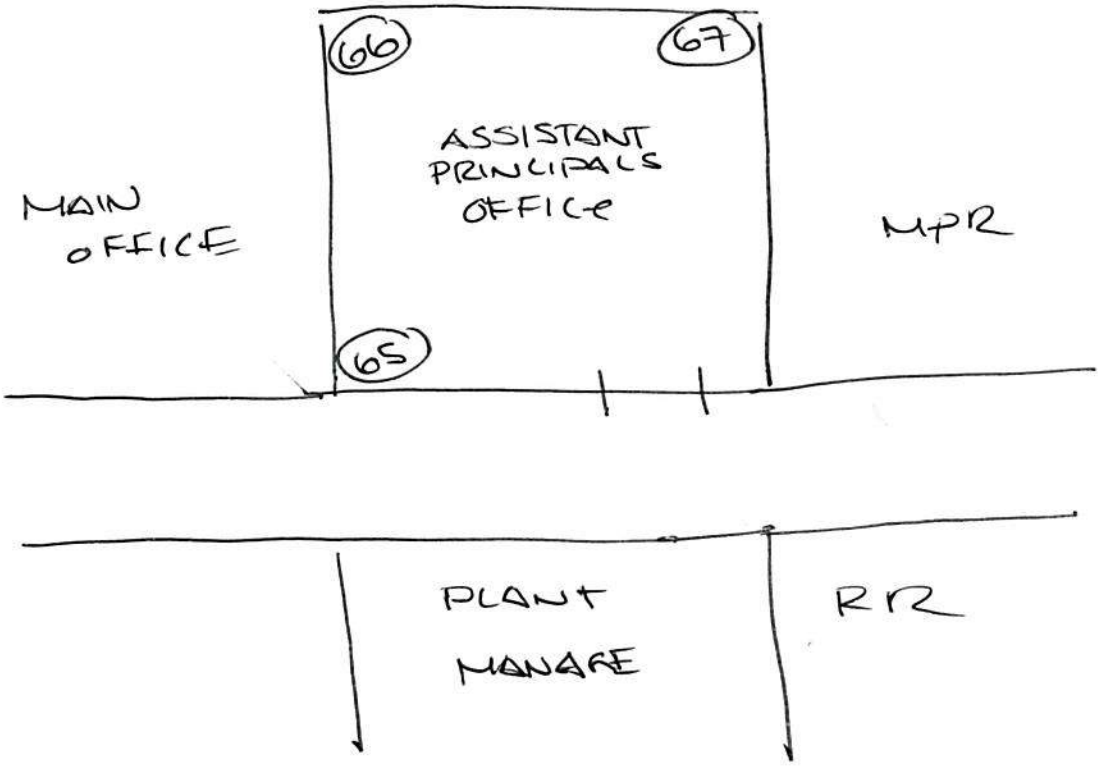
N

32ND STREET / USC MAGNET
7137
BLDG: ADMIN / CLASSROOM
OOSDAT



LEGEND
65 - 67 = CARPET, ADHESIVE / MASTIC.

DATE: 8/21/2024
SITE: 32ND ST USC MAGNET 7137
BLDG: ADMIN / CLASSROOM
OOSDAT
SAMPLED BY: FRANCISCO BARRAZA
VISTA ENVIRONMENTAL

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

J4123

SITE NAME: 32nd Street / USC Magnet School CODE: 7137 PROJECT DESC Major Modernization Project COLIN #: 10372107

SAMPLED BY: Francisco Barraza DATE SAMPLED: 7/1/2024 DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
2407-0168	350	005DAT	Administrative & Classroom Building	Room 1	North East	2'X4' Fine Fissured Ceiling Tile (Lay-In)	YES
2407-0169	351	005DAT	Administrative & Classroom Building	Room 2	North East	2'X4' Fine Fissured Ceiling Tile (Lay-In)	YES
2407-0170	352	005DAT	Administrative & Classroom Building	Room 2	South East	2'X4' Fine Fissured Ceiling Tile (Lay-In)	YES
2407-0171	353	005DAT	Administrative & Classroom Building	Room 1	North East	4" Black Cove Base & Adhesive	NO
2407-0172	354	005DAT	Administrative & Classroom Building	Room 2	South East	4" Black Cove Base & Adhesive	NO
2407-0173	355	005DAT	Administrative & Classroom Building	Room 2	North East	4" Black Cove Base & Adhesive	NO
2407-0174	356	005DAT	Administrative & Classroom Building	Room 1	South West	12"X12" Blue Vinyl Floor Tile (Core) On Concrete	NO
2407-0175	357	005DAT	Administrative & Classroom Building	Room 1	North East	12"X12" Blue Vinyl Floor Tile (Core) On Concrete	NO
2407-0176	358	005DAT	Administrative & Classroom Building	Room 2	South East	12"X12" Blue Vinyl Floor Tile (Core) On Concrete	NO
2407-0177	359	005DAT	Administrative & Classroom Building	Room 1	South East	Carpet Adhesive (Yellow) On Concrete	NO
2407-0178	360	005DAT	Administrative & Classroom Building	Room 2	North East	Carpet Adhesive (Yellow) On Concrete	NO
2407-0179	361	005DAT	Administrative & Classroom Building	Room 2	North East	Carpet Adhesive (Yellow) On Concrete	NO

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Francisco Barraza	Vista Environmnetal	12	7-3-24	1040 am
Received By:	VY PHAM	FSD lab	12	07/03/24	1040 Am
Relinquished By:					
Received By:					

Maximo Work Order Number: 37990831 Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY: RUSH? ☑ Yes ☐ No APPROVAL:

FETU REVIEW DATE: 7/3/24 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

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2024070168-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070168-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; FRIABLE; LT.GRAY; CEILING TILE; FIBROUS	0	0	0	0	0	0	0	55% CELLULOSE, 20% FIBERGLASS PERLITE
2024070169-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070169-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; FRIABLE; LT.GRAY; CEILING TILE; FIBROUS	0	0	0	0	0	0	0	55% CELLULOSE, 20% FIBERGLASS PERLITE
2024070170-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070170-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; FRIABLE; LT.GRAY; CEILING TILE; FIBROUS	0	0	0	0	0	0	0	55% CELLULOSE, 20% FIBERGLASS PERLITE
2024070171-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BLACK; COVE BASE; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER, MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/5/24

Signature of Analyst _____

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2024070171-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024070171-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070171-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	CARBONATES, MINERAL FILLER
					COMMENT(S): SMALL AMOUNT OF MATERIAL							
2024070171-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070172-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BLACK; COVE BASE; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2024070172-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024070172-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT

Lab Supervisor Signature and Date _____ 7/5/24

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2024070172-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070173-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BLACK; COVE BASE; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2024070173-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024070173-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070173-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	CARBONATES, MINERAL FILLER
					COMMENT(S): SMALL AMOUNT OF MATERIAL							
2024070174-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; BLUE; FLOOR TILE; VINYL	0	0	0	0	0	0	0	BINDER, CARBONATES
					COMMENT(S): INSUFFICIENT BLACK MASTIC FOR ANALYSIS							

Lab Supervisor Signature and Date _____ 7/5/24

Signature of Analyst _____

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2024070174-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024070174-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; ENCAPSULATION; COATED MATERIAL	0	0	0	0	0	0	0	BINDER
2024070174-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070175-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BLUE; FLOOR TILE; VINYL	0	0	0	0	0	0	0	BINDER, CARBONATES
2024070175-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024070175-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; ENCAPSULATION; COATED MATERIAL	0	0	0	0	0	0	0	BINDER
2024070175-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; TAR	2	0	0	0	0	0	2	TAR

COMMENT(S): SMALL AMOUNT OF MATERIAL

Lab Supervisor Signature and Date 7/5/24

Signature of Analyst _____

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2024070176-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BLUE; FLOOR TILE; VINYL	0	0	0	0	0	0	0	BINDER, CARBONATES
2024070176-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024070176-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; ENCAPSULATION; COATED MATERIAL	0	0	0	0	0	0	0	BINDER
2024070176-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; TAR	2	0	0	0	0	0	2	TAR
					COMMENT(S): SMALL AMOUNT OF MATERIAL							
2024070176-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070177-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE

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2024070177-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070178-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BLUE; CARPET; FIBROUS	0	0	0	0	0	0	0	95% SYNTHETIC BINDER
2024070178-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2024070178-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; ENCAPSULATION; COATED MATERIAL	0	0	0	0	0	0	0	BINDER
2024070178-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070179-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE

Lab Supervisor Signature and Date 7/5/24

Signature of Analyst _____

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Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP (TESTING) LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 07/03/2024

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070179-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; ENCAPSULATION; COATED MATERIAL	0	0	0	0	0	0	0	BINDER
2024070179-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/5/24

Signature of Analyst _____

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VISTA ENVIRONMENTAL CONSULTING

BUILDING DIAGRAM

Client: LAUSD

Date: 7/1/2024

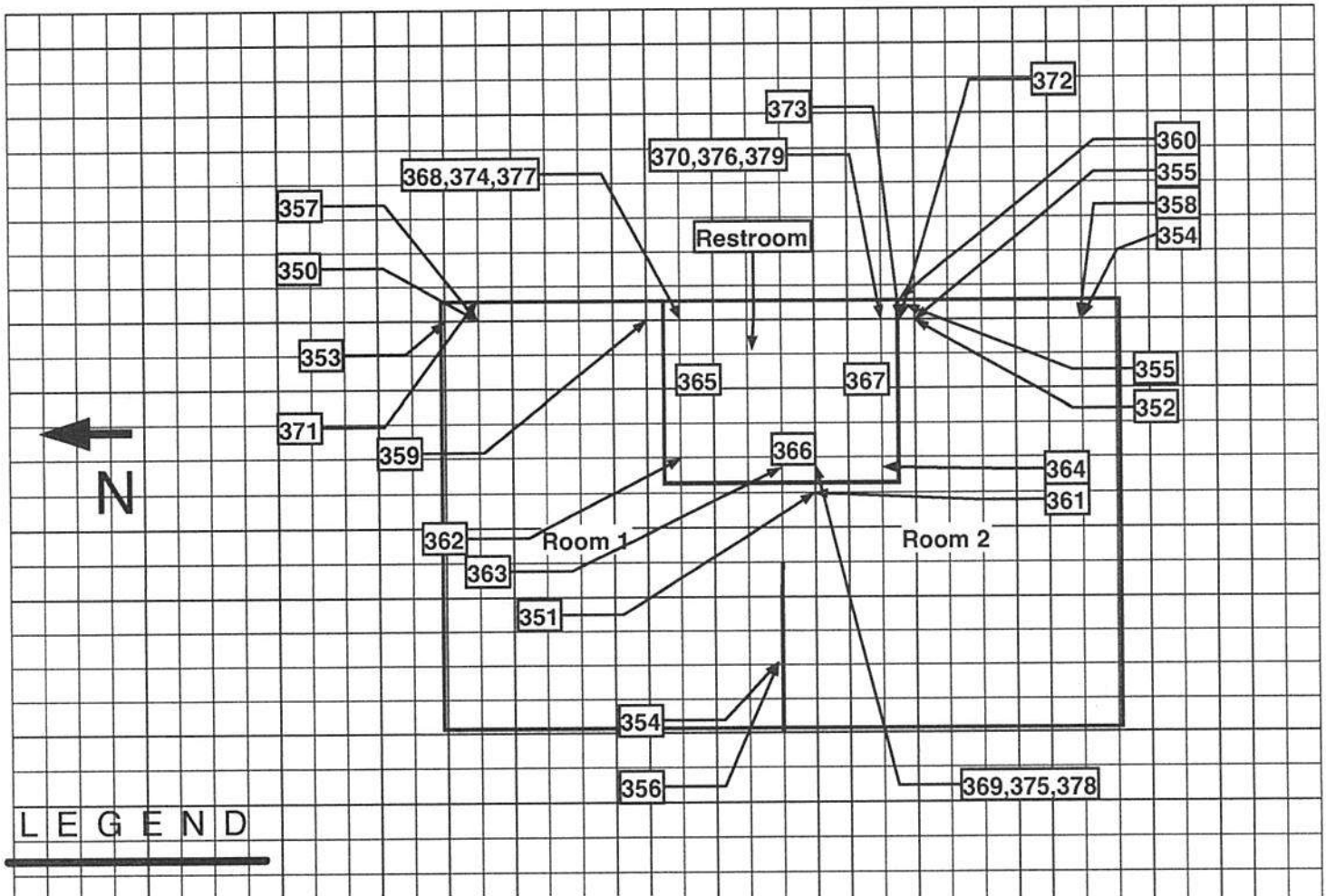
Address: 32nd Street Elementary

Project No:

Building: Administrative & Classroom Building 005DAT

Vista Inspector: Francisco Barraza

ATTIC Y / N BASEMENT Y / N CRAWL SPACE Y / N GARAGE Y / N NO # FLOORS:



LEGEND

350 - 352 = 2'X4' Fine Fissured Ceiling Tile
353 - 355 = 4" Black Cove & Adhesive
356 - 358 = 12"X12" Blue Vinyl Floor Tile (Core) On Concrete
359 - 361 = Carpet Adhesive (Yellow) On Concrete
362 - 364 = Batting Insulation w/Joint Compound Overspray
365 - 367 = Sand Plaster Ceiling w/ Button Board
368 - 370 = Sand Plaster Wall w/ Button Board
371 - 373 = Drywall Wall w/Jc And Tape
374 -376 = Yellow Ceramic Base Board w/Grout & Mortar
377 -379 = Lt Brown Ceramic Floor Tile w/Grout & Mortar

N

(Not to Scale)

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

54124

SITE NAME: 32nd Street / USC Magnet School CODE: 7137 PROJECT DESC Major Modernization Project COLIN #: 10372107

SAMPLED BY: Francisco Barraza DATE SAMPLED: 7/1/2024 DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
2407-0180	362	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	North West Ceiling Space	Batting Insulation w/Jc Overspray	NO
2407-0181	363	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	West Center Ceiling Space	Batting Insulation w/Jc Overspray	NO
2407-0182	364	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	South West Ceiling Space	Batting Insulation w/Jc Overspray	NO
2407-0183	365	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	North Center	Sand Plaster Ceiling w/ Button Board	NO
2407-0184	366	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	West Center	Sand Plaster Ceiling w/ Button Board	NO
2407-0185	367	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	South Center	Sand Plaster Ceiling w/ Button Board	NO
2407-0186	368	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	North East	Sand Plaster Wall w/ Button Board	NO
2407-0187	369	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	South West	Sand Plaster Wall w/ Button Board	NO
2407-0188	370	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	South East	Sand Plaster Wall w/ Button Board	NO
2407-0189	371	005DAT	Administrative & Classroom Building	Room 1	North East	Drywall Wall w/Joint Compound & Tape	NO
2407-0190	372	005DAT	Administrative & Classroom Building	Room 2	North East	Drywall Wall w/Joint Compound & Tape	NO
2407-0191	373	005DAT	Administrative & Classroom Building	Room 2	South East	Drywall Wall w/Joint Compound & Tape	NO

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Francisco Barraza	Vista Environmnetal	12	7-3-24	1040
Received By:	VY PHAM	FSD Lab	12	07/03/24	1040 Am
Relinquished By:					
Received By:					

Maximo Work Order Number: 37990831

Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY:

FETU REVIEW DATE: 7/3/24

RUSH? ☑ Yes ☐ No APPROVAL:

POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

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Asbestos Bulk Sample Analysis Laboratory Report

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7137

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Date Received: 07/03/2024

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070180-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHWEST CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; WHITE; OVERSPRAY; CHALKY	2	0	0	0	0	0	2	MINERAL FILLER
				COMMENT(S): SMALL AMOUNT OF MATERIAL								
2024070180-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHWEST CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; BLACK/ BROWN; BARRIER PAPER; FELT/ TAR	0	0	0	0	0	0	0	70% CELLULOSE TAR
2024070180-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHWEST CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; WHITE; INSULATION; FIBROUS	0	0	0	0	0	0	0	100% FIBERGLASS
2024070181-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM WEST CENTER CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; WHITE; OVERSPRAY; CHALKY	2	0	0	0	0	0	2	MINERAL FILLER
				COMMENT(S): SMALL AMOUNT OF MATERIAL								
2024070181-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM WEST CENTER CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; BLACK/ BROWN; BARRIER PAPER; FELT/ TAR	0	0	0	0	0	0	0	70% CELLULOSE TAR
2024070181-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM WEST CENTER CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; WHITE; INSULATION; FIBROUS	0	0	0	0	0	0	0	100% FIBERGLASS
2024070182-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; WHITE; OVERSPRAY; CHALKY	2	0	0	0	0	0	2	MINERAL FILLER
				COMMENT(S): SMALL AMOUNT OF MATERIAL								

Lab Supervisor Signature and Date _____ 7/5/24

Signature of Analyst _____

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2024070182-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; BLACK/ BROWN; BARRIER PAPER; FELT/ TAR	0	0	0	0	0	0	0	70% CELLULOSE TAR
2024070182-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST CEILING SPACE	HOMOGENEOUS; NON-FRIABLE; WHITE; INSULATION; FIBROUS	0	0	0	0	0	0	0	100% FIBERGLASS
2024070183-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070183-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER
2024070183-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; GRAY; SAND PLASTER; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070183-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070183-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM

Lab Supervisor Signature and Date _____ 7/5/24

Signature of Analyst _____

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Asbestos Bulk Sample Analysis Laboratory Report

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7137

NVLAP (TESTING) LAB# 101505-0
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2024070183-F	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070184-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM WEST CENTER	HOMOGENEOUS; NON-FRIABLE; GRAY; SAND PLASTER; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070184-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM WEST CENTER	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070184-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM WEST CENTER	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM
2024070184-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM WEST CENTER	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070185-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070185-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/5/24

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2024070185-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; GRAY; SAND PLASTER; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070185-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070185-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM
2024070185-F	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070186-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070186-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER
2024070186-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; SAND PLASTER; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/5/24

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2024070186-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM
2024070186-F	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070187-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070187-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER
2024070187-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; SAND PLASTER; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070187-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE

Lab Supervisor Signature and Date _____ 7/5/24

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2024070187-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM
2024070187-F	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070188-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070188-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER
2024070188-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; SAND PLASTER; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070188-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070188-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM

Lab Supervisor Signature and Date 7/5/24

Signature of Analyst _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
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1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP (TESTING) LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 07/03/2024

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070188-F	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070189-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070189-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	CARBONATES, MINERAL FILLER
2024070189-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; TAPE MATERIAL; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070189-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	CARBONATES, MINERAL FILLER
2024070189-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070189-F	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM

Lab Supervisor Signature and Date 7/5/24

Signature of Analyst _____

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2024070189-G	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070190-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070190-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	CARBONATES, MINERAL FILLER
2024070190-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; TAPE MATERIAL; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070190-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	CARBONATES, MINERAL FILLER
2024070190-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070190-F	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM

Lab Supervisor Signature and Date _____ 7/5/24

Signature of Analyst _____

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2024070190-G	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 NORTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070191-A	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070191-B	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	CARBONATES, MINERAL FILLER
2024070191-C	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; TAPE MATERIAL; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070191-D	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	CARBONATES, MINERAL FILLER
2024070191-E	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2024070191-F	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	5% FIBERGLASS GYPSUM

Lab Supervisor Signature and Date _____ 7/5/24

Signature of Analyst _____

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LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070191-G	VP	07/03/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 2 SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE

Lab Supervisor Signature and Date _____ 7/5/24

Signature of Analyst _____

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VISTA ENVIRONMENTAL CONSULTING

BUILDING DIAGRAM

Client: LAUSD

Date: 7/1/2024

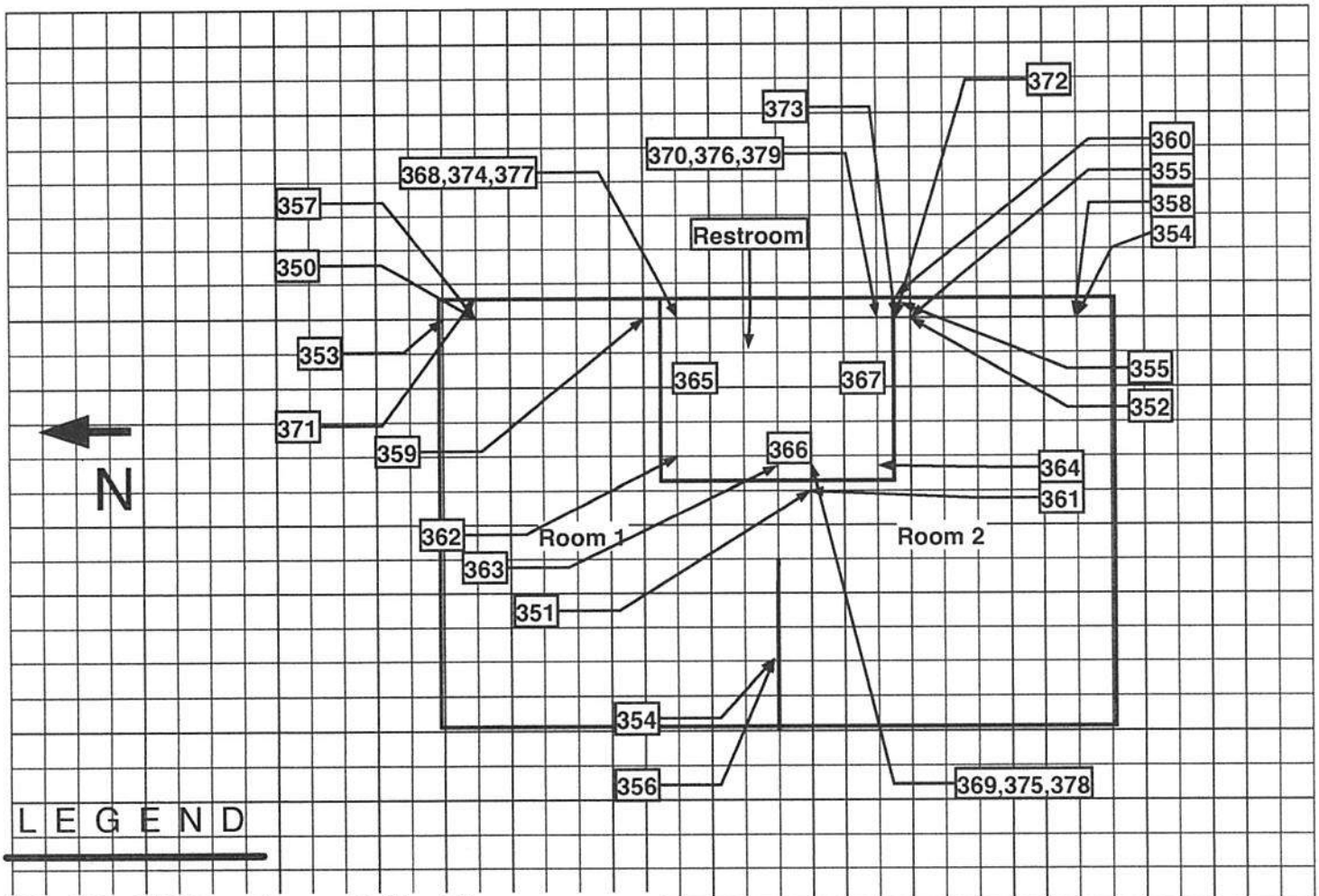
Address: 32nd Street Elementary

Project No:

Building: Administrative & Classroom Building 005DAT

Vista Inspector: Francisco Barraza

ATTIC Y / N BASEMENT Y / N CRAWL SPACE Y / N GARAGE Y / N NO # FLOORS:



LEGEND

350 - 352 = 2'X4' Fine Fissured Ceiling Tile
353 - 355 = 4" Black Cove & Adhesive
356 - 358 = 12"X12" Blue Vinyl Floor Tile (Core) On Concrete
359 - 361 = Carpet Adhesive (Yellow) On Concrete
362 - 364 = Batting Insulation w/Joint Compound Overspray
365 - 367 = Sand Plaster Ceiling w/ Button Board
368 - 370 = Sand Plaster Wall w/ Button Board
371 - 373 = Drywall Wall w/Jc And Tape
374 -376 = Yellow Ceramic Base Board w/Grout & Mortar
377 -379 = Lt Brown Ceramic Floor Tile w/Grout & Mortar

N

(Not to Scale)

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

54125

SITE NAME: 32nd Street / USC Magnet School CODE: 7137 PROJECT DESC Major Modernization Project COLIN #: 10372107

SAMPLED BY: Francisco Barraza DATE SAMPLED: 7/1/2024 DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
2407-0192	374	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	North East	Yellow Ceramic Base Board w/Grout & Mortar	NO
2407-0193	375	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	South West	Yellow Ceramic Base Board w/Grout & Mortar	NO
2407-0194	376	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	South East	Yellow Ceramic Base Board w/Grout & Mortar	NO
2407-0195	377	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	North East	Lt Brown Ceramic Floor Tile w/Grout & Mortar (Core) on Concrete	NO
2407-0196	378	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	South West	Lt Brown Ceramic Floor Tile w/Grout & Mortar (Core) on Concrete	NO
2407-0197	379	005DAT	Administrative & Classroom Building	Room 1 & 2 Restroom	South East	Lt Brown Ceramic Floor Tile w/Grout & Mortar (Core) on Concrete	NO
2407-0198	380	005DAT	Administrative & Classroom Building	Exterior	West Center Drinking Fountain	Lt Blue Ceramic Wall Tile w/Grout & Mortar (Core)	NO
2407-0199	381	005DAT	Administrative & Classroom Building	Exterior	West Center Drinking Fountain	Lt Blue Ceramic Wall Tile w/Grout & Mortar (Core)	NO
2407-0200	382	005DAT	Administrative & Classroom Building	Exterior	West Center Drinking Fountain	Lt Blue Ceramic Wall Tile w/Grout & Mortar (Core)	NO
2407-0201	383	005DAT	Administrative & Classroom Building	Exterior	West Center	Wall, Stucco, (Core)	NO
2407-0202	384	005DAT	Administrative & Classroom Building	Exterior	South West	Wall, Stucco, (Core)	NO
2407-0203	385	005DAT	Administrative & Classroom Building	Exterior	South Center	Wall, Stucco, (Core)	NO

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Francisco Barraza	Vista Environmnetal	12	7-3-24	10.40 am
Received By:	VY PHAM	FSD Lab	12	07/03/24	1040 AM
Relinquished By:					
Received By:					

Maximo Work Order Number: 37990831 Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY: RUSH? ☑ Yes ☐ No APPROVAL:

FETU REVIEW DATE: 7/3/24 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

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2024070192-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
				COMMENT(S): NO GROUT PRESENT								
2024070192-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; MORTAR; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070192-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070193-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; YELLOW; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
				COMMENT(S): DIFFERENT THAN 2407/0192 & 0194. NO GROUT PRESENT								
2024070193-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; MORTAR; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070193-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070193-D	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; YELLOW; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/8/24

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2024070194-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2024070194-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; GROUT; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070194-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; MORTAR; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070194-D	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070195-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2024070195-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; GROUT; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/8/24

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2024070195-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; MORTAR; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070195-D	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070196-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2024070196-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; GROUT; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070196-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; MORTAR; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070196-D	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070197-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/8/24

Signature of Analyst _____

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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP (TESTING) LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 07/03/2024

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070197-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; GROUT; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070197-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; MORTAR; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070197-D	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING ROOM 1 & 2 RESTROOM SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070198-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; BLUE; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
				COMMENT(S): DIFFERENT THAN 2407/0199 & 0200								
2024070198-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; WHITE; GROUT; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070198-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; WHITE; MORTAR; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER
2024070198-D	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/8/24

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Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

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7137

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LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070199-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; BLUE; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2024070199-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; WHITE; GROUT; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070199-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; MORTAR; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070199-D	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070200-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; BLUE; CERAMIC TILES; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2024070200-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; WHITE; GROUT; CHALKY	0	0	0	0	0	0	0	MINERAL FILLER
2024070200-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; DK.GRAY; MORTAR; GRANULAR/ CHALKY	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/8/24

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Laboratory Report

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7137

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2024070200-D	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER DRINKING FOUNTAIN	HOMOGENEOUS; NON-FRIABLE; GRAY; CONCRETE; CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070201-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070201-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER	HOMOGENEOUS; NON-FRIABLE; BROWN; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER, ROCK
2024070201-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; CEMENTITIOUS	<1	0	0	0	0	0	<1	MINERAL FILLER
2024070202-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070202-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; BROWN; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER, ROCK
2024070202-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; CEMENTITIOUS	<1	0	0	0	0	0	<1	MINERAL FILLER

Lab Supervisor Signature and Date _____ 7/8/24

Signature of Analyst _____

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Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

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7137

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LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070203-A	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070203-B	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; BROWN; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER, ROCK
2024070203-C	VP	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTH CENTER	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; CEMENTITIOUS	<1	0	0	0	0	0	<1	MINERAL FILLER

Lab Supervisor Signature and Date 7/8/24

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VISTA ENVIRONMENTAL CONSULTING

BUILDING DIAGRAM

Client: LAUSD

Date: 7/1/2024

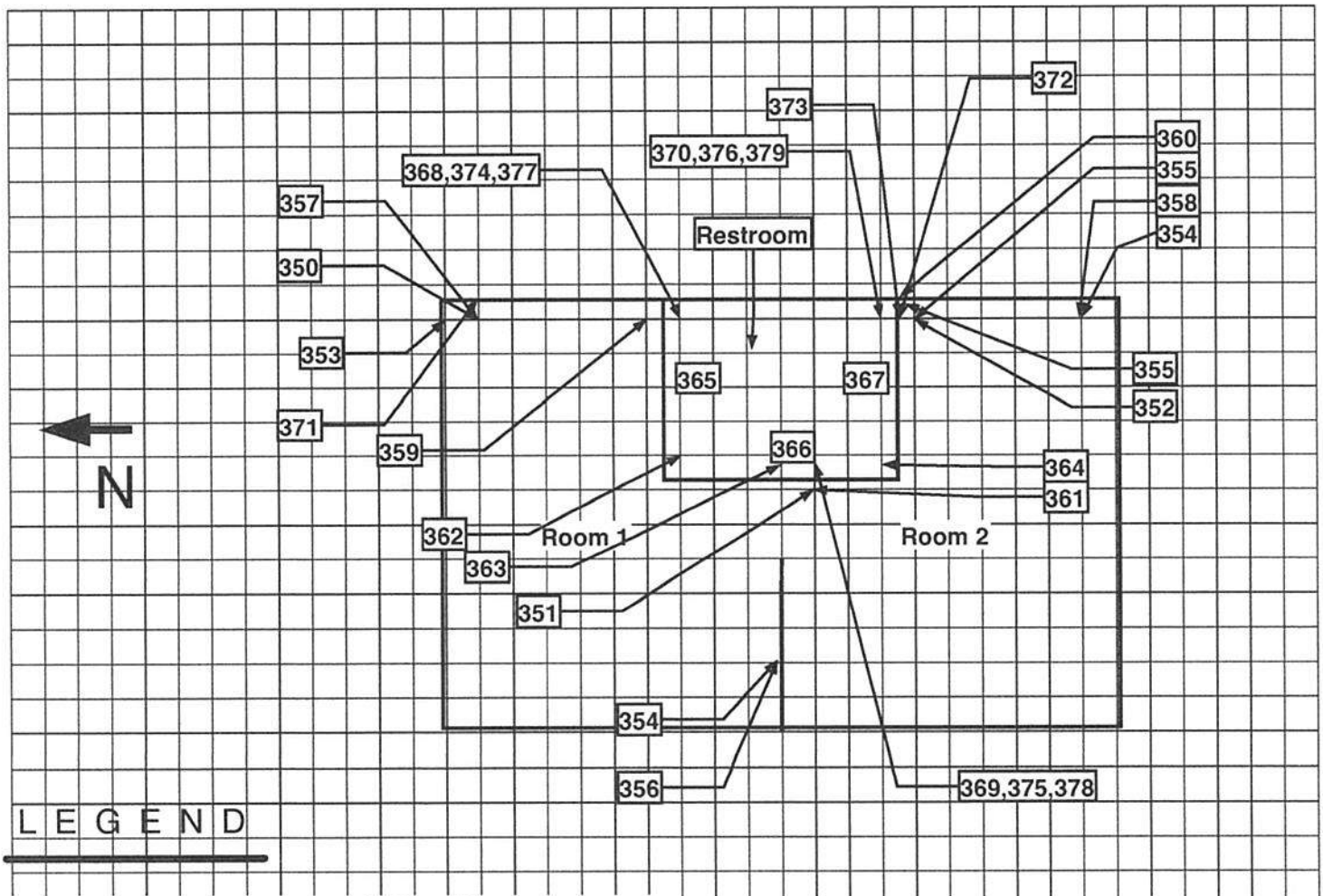
Address: 32nd Street Elementary

Project No:

Building: Administrative & Classroom Building 005DAT

Vista Inspector: Francisco Barraza

ATTIC Y / N BASEMENT Y / N CRAWL SPACE Y / N GARAGE Y / N NO # FLOORS:



LEGEND

350 - 352 = 2'X4' Fine Fissured Ceiling Tile
353 - 355 = 4" Black Cove & Adhesive
356 - 358 = 12"X12" Blue Vinyl Floor Tile (Core) On Concrete
359 - 361 = Carpet Adhesive (Yellow) On Concrete
362 - 364 = Batting Insulation w/Joint Compound Overspray
365 - 367 = Sand Plaster Ceiling w/ Button Board
368 - 370 = Sand Plaster Wall w/ Button Board
371 - 373 = Drywall Wall w/Jc And Tape
374 -376 = Yellow Ceramic Base Board w/Grout & Mortar
377 -379 = Lt Brown Ceramic Floor Tile w/Grout & Mortar

N

(Not to Scale)

VISTA ENVIRONMENTAL CONSULTING

BUILDING DIAGRAM

Client: LAUSD

Date: 7/1/2024

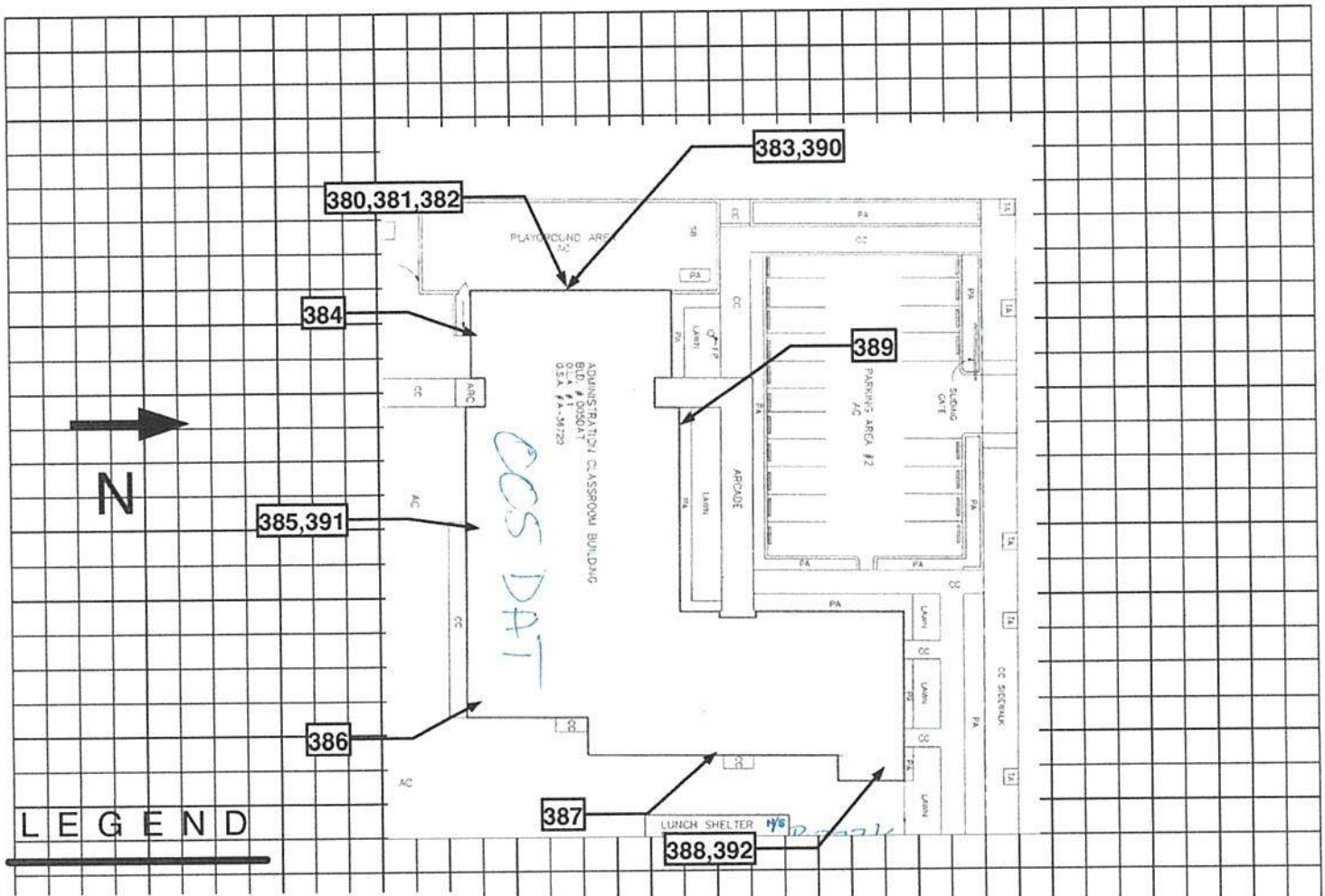
Address: 32nd Street Elementary

Project No:

Building: Administrative & Classroom Building 005DAT

Vista Inspector: Francisco Barraza

ATTIC Y / N BASEMENT Y / N CRAWL SPACE Y / N GARAGE Y / N NO # FLOORS:



LEGEND

380 - 382 = Lt Blue Ceramic Wall Tile W/Grout & Mortar
383 - 389 = Stucco Wall Exterior Core
390 - 382 = Wall Moisture Barrier Paper

N

(Not to Scale)

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

54126

SITE NAME: 32nd Street / USC Magnet School CODE: 7137 PROJECT DESC Major Modernization Project COLIN #: 10372107

SAMPLED BY: Francisco Barraza DATE SAMPLED: 7/1/2024 DEPT. / CONSULTANT: Vista Environmental Consulting, Inc. TEL: 6263535969

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
2407-0204	386	005DAT	Administrative & Classroom Building	Exterior	South East	Wall, Stucco, (Core)	NO
2407-0205	387	005DAT	Administrative & Classroom Building	Exterior	East Center	Wall, Stucco, (Core)	NO
2407-0206	388	005DAT	Administrative & Classroom Building	Exterior	North East	Wall, Stucco, (Core)	NO
2407-0207	389	005DAT	Administrative & Classroom Building	Exterior	North Center	Wall, Stucco, (Core)	NO
2407-0208	390	005DAT	Administrative & Classroom Building	Exterior	West Center Behind Stucco	Wall, Moisture Barrier Paper (Black)	NO
2407-0209	391	005DAT	Administrative & Classroom Building	Exterior	South Center Behind Stucc	Wall, Moisture Barrier Paper (Black)	NO
2407-0210	392	005DAT	Administrative & Classroom Building	Exterior	North East Behind Stucco	Wall, Moisture Barrier Paper (Black)	NO

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Francisco Barraza	Vista Environmnetal	7	7-3-24	10:40 am
Received By:	VY PHAM	FSD Lab	7	07/03/24	10:40 am
Relinquished By:					
Received By:					

Maximo Work Order Number: 37950831

Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☑ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY:

FETU REVIEW DATE: 7/3/24

RUSH? ☑ ~~Yes~~ ☐ No APPROVAL:

POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

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7137

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LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070204-A	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; OLIVE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070204-B	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BROWN; COATING; GRANULAR/ CEMENTITIOUS	2	0	0	0	0	0	2	MINERAL FILLER
2024070204-C	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR/ CEMENTITIOUS	<1	0	0	0	0	0	<1	MINERAL FILLER
2024070205-A	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR EAST CENTER	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070205-B	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR EAST CENTER	HOMOGENEOUS; NON-FRIABLE; BROWN; COATING; GRANULAR/ CEMENTITIOUS	2	0	0	0	0	0	2	MINERAL FILLER
2024070205-C	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR EAST CENTER	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR/ CEMENTITIOUS	<1	0	0	0	0	0	<1	MINERAL FILLER
2024070206-A	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT

COMMENT(S): DIFFERENT THAN 2407/0204, 0205 & 0207

Lab Supervisor Signature and Date _____ 7/8/24

Signature of Analyst _____

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2024070206-B	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; TAN; COATING; GRANULAR/ CEMENTITIOUS	0	0	0	0	0	0	0	MINERAL FILLER
2024070206-C	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR/ CEMENTITIOUS	2	0	0	0	0	0	2	MINERAL FILLER
2024070207-A	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2024070207-B	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; BROWN; COATING; GRANULAR/ CEMENTITIOUS	2	0	0	0	0	0	2	MINERAL FILLER
2024070207-C	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR NORTH CENTER	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR/ CEMENTITIOUS	<1	0	0	0	0	0	<1	MINERAL FILLER
2024070208-A	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER BEHIND STUCCO	HOMOGENEOUS; NON-FRIABLE; BLACK; BARRIER PAPER; TAR/ FIBROUS	0	0	0	0	0	0	0	90% CELLULOSE TAR
2024070208-B	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR WEST CENTER BEHIND STUCCO	HOMOGENEOUS; NON-FRIABLE; TAN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE

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Date Received: 07/03/2024

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2024070209	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR SOUTH CENTER BEHIND STUCCO	HOMOGENEOUS; NON-FRIABLE; BLACK; BARRIER PAPER; TAR/ FIBROUS	0	0	0	0	0	0	0	90% CELLULOSE TAR
2024070210-A	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR NORTHEAST BEHIND STUCCO	HOMOGENEOUS; NON-FRIABLE; BLACK; BARRIER PAPER; TAR/ FIBROUS	0	0	0	0	0	0	0	90% CELLULOSE TAR
2024070210-B	AC	07/05/2024	005DAT : ADMINISTRATIVE & CLASSROOM BUILDING EXTERIOR NORTHEAST BEHIND STUCCO	HOMOGENEOUS; NON-FRIABLE; TAN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE

Lab Supervisor Signature and Date _____ 7/8/24

Signature of Analyst _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. ""Quantification done by optical estimate"" 1 - 5 % considered non-quantifiable.
This report relates to only the material tested. An asterisk '*' indicates preliminary results.
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VISTA ENVIRONMENTAL CONSULTING

BUILDING DIAGRAM

Client: LAUSD

Date: 7/1/2024

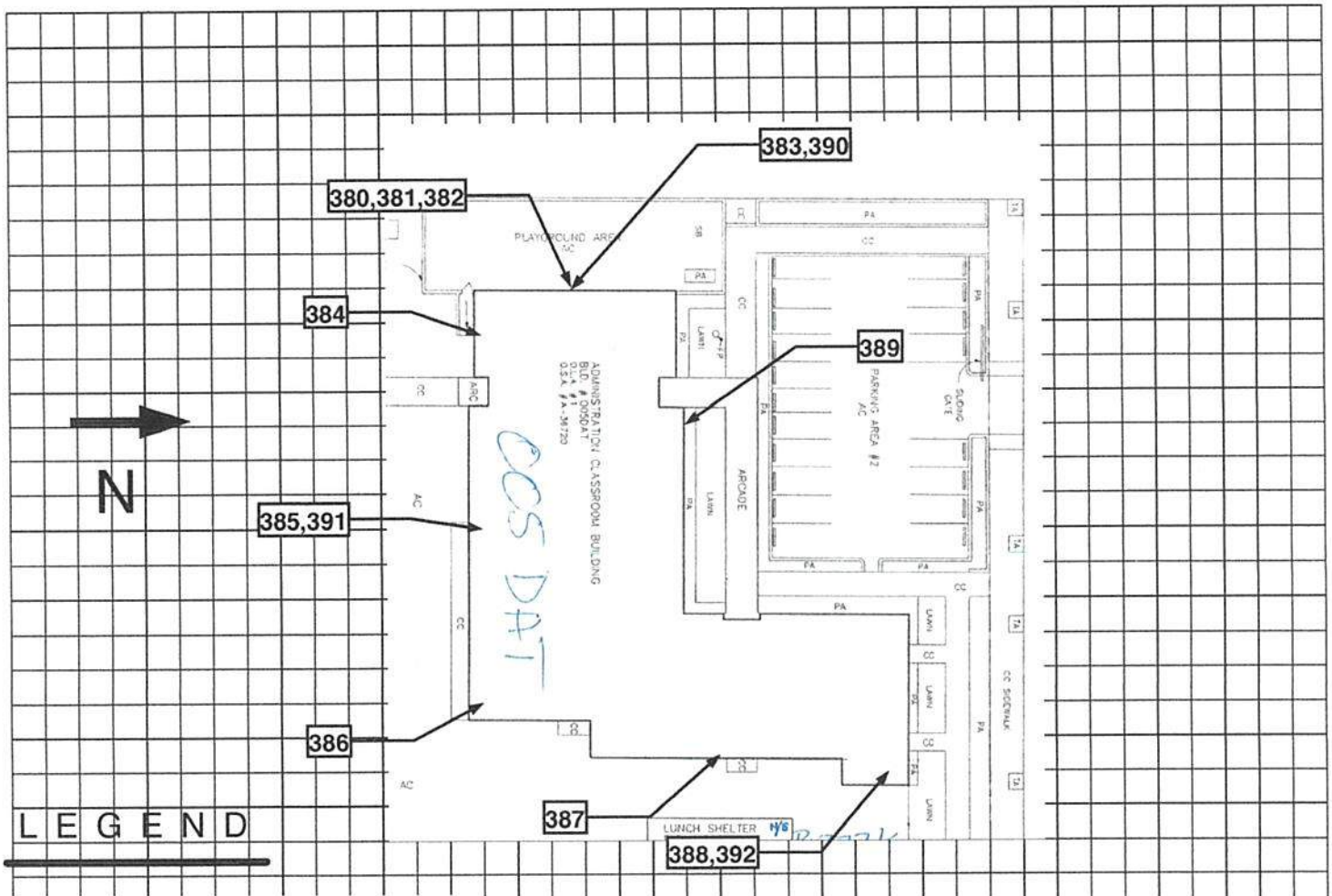
Address: 32nd Street Elementary

Project No:

Building: Administrative & Classroom Building 005DAT

Vista Inspector: Francisco Barraza

ATTIC Y / N BASEMENT Y / N CRAWL SPACE Y / N GARAGE Y / N NO # FLOORS:



LEGEND

380 - 382 = Lt Blue Ceramic Wall Tile W/Grout & Mortar
383 - 389 = Stucco Wall Exterior Core
390 - 382 = Wall Moisture Barrier Paper

N

(Not to Scale)

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

5 2013

SITE NAME: 32ND ST MAGNET CODE: 7137 PROJECT DESC: REMOVE CARPET COLIN #: _____

SAMPLED BY: George Valverde DATE SAMPLED: 11·21·23 DEPT. / CONSULTANT: ACC TEL:(213) 353-1240

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
2311-1529	1	005DAT	ADMIN. CLASSRM. BLDG.	LIBRARY	WEST	2" BROWN COVE BASE W/ WHITE, YELLOW, BROWN MASTIC	N
2311-1530	2	↓	↓	↓	NORTH	↓	↓
2311-1531	3	↓	↓	↓	EAST	↓	↓

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	George Valverde	ACC	3	11·21·23	0926
Received By:	VY PHAN	FSD Lab	3	11/21/23	0926
Relinquished By:					
Received By:					

Maximo Work Order Number: 37300180 Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K,R,Y,Q) ☐ Other: _____

FETU USE ONLY

FETU REVIEWED BY: VPHAN ESCOBAR RUSH? ☐ Yes ☐ No APPROVAL: _____

FETU REVIEW DATE: 11/28/23 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL: _____

21

Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

THIRTY-SECOND ST MAG

7137

NVLAP (TESTING) LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 11/21/2023

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2023111529-A	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY WEST	HOMOGENEOUS; NON-FRIABLE; BROWN; COVE BASE; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER
2023111529-B	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY WEST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2023111529-C	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY WEST	HOMOGENEOUS; NON-FRIABLE; BROWN; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2023111529-D	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY WEST	HOMOGENEOUS; NON-FRIABLE; YELLOW; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2023111529-E	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY WEST	HOMOGENEOUS; NON-FRIABLE; WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	MINERAL FILLER
2023111530-A	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY NORTH	HOMOGENEOUS; NON-FRIABLE; BROWN; COVE BASE; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER
2023111530-B	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY NORTH	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE

COMMENT(S): DIFFERENT THAN 2311/1529 & 1531

Lab Supervisor Signature and Date 11/30/23

Signature of Analyst

Note: "0" = No Asbestos Detected, "<1%" = Asbestos Detected Above 0% and Below or Equal to 1%
NA = Not Applicable "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
This report relates to only the material tested. An asterisk "*" indicates preliminary results
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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis Laboratory Report

Laboratory Report

THIRTY-SECOND ST MAG

7137

NVLAP (TESTING) LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 11/21/2023

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2023111530-C	VP	11/29/2023	006DAT : ADMIN CLSRM BLDG LIBRARY NORTH	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2023111531-A	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY EAST	HOMOGENEOUS; NON-FRIABLE; BROWN; COVE BASE; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER
2023111531-B	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY EAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2023111531-C	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY EAST	HOMOGENEOUS; NON-FRIABLE; BROWN; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2023111531-D	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY EAST	HOMOGENEOUS; NON-FRIABLE; WHITE; JOINT COMPOUND; CHALKY	2	0	0	0	0	0	2	MINERAL FILLER
				COMMENT(S): SMALL AMOUNT OF MATERIAL								
2023111531-E	VP	11/29/2023	005DAT : ADMIN CLSRM BLDG LIBRARY EAST	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE

Lab Supervisor Signature and Date L 11/30/23

Signature of Analyst

Note: 0% = No Asbestos Detected, <1% = Asbestos Detected Above 0% and Below or Equal to 1%
NA = Not Applicable **Quantification done by optical estimate" 1 - 5 % considered non-quantifiable
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#37300180 GEORGE VALVERDE

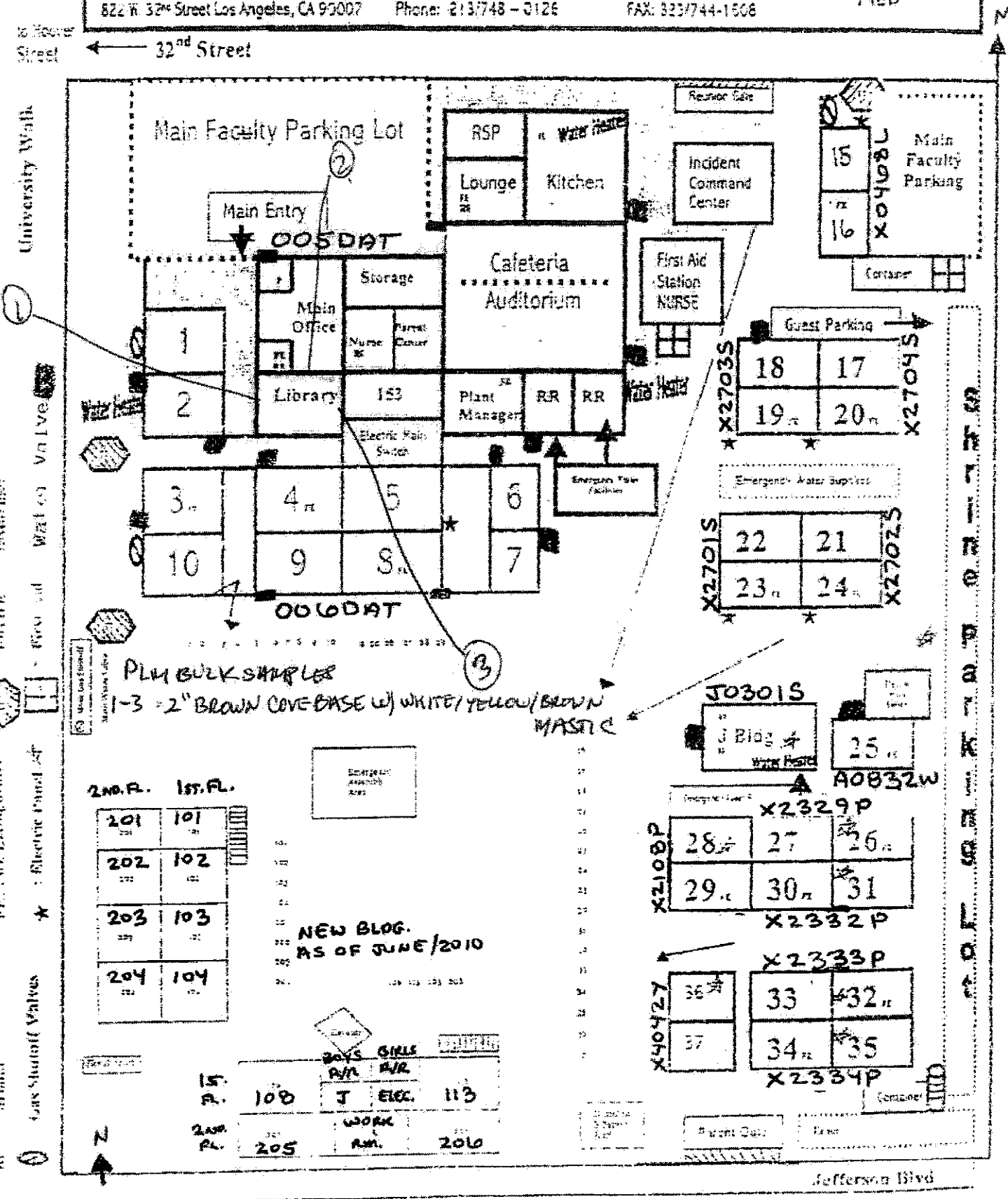
32nd Street Visual and Performing Arts Magnet School (7137)

USC/MaST High School

Principal Mrs. Lavern H. Brunt

Emergency Information Map

822 W. 32nd Street Los Angeles, CA 90007 Phone: 213/748 – 0126 FAX: 323/744-1606



LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

#322221193

SITE NAME: 32nd ST Magnet CODE: 7137 PROJECT DESC Evac 32nd St Magnet COLIN #:

SAMPLED BY: Alan Fong DATE SAMPLED: 10/19/22 DEPT. / CONSULTANT: Citadel EHS TEL:

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
	005 DAT	1	Administrative Building	FACP Room	Ceiling Space	Drywall Sheet Rock	Yes
		2					
		3					
		4				Fire caulking Pad	Yes
		5					
		6					

	NAME (PRINT & SIGN)	DEPT./AREA/CONSULTANT	# OF SAMPLES	DATE	TIME
Relinquished By:	Alan Fong	Citadel EHS	6	10/21/22	
Received By:	Annette Mckissack & Li Feiling		6	10/21/2022	1105
Relinquished By:					
Received By:					

Maximo Work Order Number: Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY: RUSH? ☐ No APPROVAL:

FETU REVIEW DATE: POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

OrderID: 322221193

OrderID: 322221193

Page 2 Of 3

LA Testing

520 Mission Street South Pasadena, CA 91030
Tel/Fax: (323) 254-9960 / (323) 254-9982
http://www.LATesting.com / pasadenalab@latesting.com

LA Testing Order:	322221193
Customer ID:	32CITA50F
Customer PO:	
Project ID:	

Attention:	Alan Fregoso	**Phone:**	(818) 246-2707
	Citadel Environmental Services, Inc.	**Fax:**	(818) 246-3145
	2525 Cherry Avenue, Suite 105	**Received Date:**	10/21/2022 11:05 AM
	Signal Hill, CA 90755	**Analysis Date:**	10/22/2022 - 10/24/2022
		Collected Date:	10/19/2022
Project:	2017. 1357.0/ Erate 32nd St ES		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
00SDAT *322221193-0001*	1 - admnistration classroom - facp rm - ceiling space - drywall sheet debirs	Brown/White Fibrous Heterogeneous	20% Cellulose 3% Glass	77% Non-fibrous (Other)	None Detected
00SDAT *322221193-0002*	2 - admnistration classroom - facp rm - ceiling space - drywall sheet debirs	Brown/White Fibrous Heterogeneous	20% Cellulose 3% Glass	77% Non-fibrous (Other)	None Detected
00SDAT *322221193-0003*	3 - admnistration classroom - facp rm - ceiling space - drywall sheet debirs	Brown/White Fibrous Heterogeneous	20% Cellulose 2% Glass	78% Non-fibrous (Other)	None Detected
00SDAT *322221193-0004*	4 - admnistration classroom - facp rm - ceiling space - fire caulking roof	Red Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
00SDAT *322221193-0005*	5 - admnistration classroom - facp rm - ceiling space - fire caulking roof	Red Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
00SDAT *322221193-0006*	6 - admnistration classroom - facp rm - ceiling space - fire caulking roof	Red Non-Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected

Analyst(s)
Nahid Motamedi (2)
Yisely Sanchez (4)

Jerry Drapala Ph.D, Laboratory Manager
or Other Approved Signatory

LA Testing maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by LA Testing. LA Testing bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore LA Testing recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by LA Testing South Pasadena, CA NVLAP Lab Code 200232-0, CA ELAP 2283

Initial report from: 10/24/2022 06:51:58

#322221193

LOS ANGELES SCHOOL DISTRICT
BUREAU OF BUILDING AREA
52ND STREET SCHOOL
822 WEST 52ND STREET
LOS ANGELES, CA 90007
DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

LOCATION 7157
APPLICATION NO. 322
DRAWING TYPE(S)

BUILDING 1

Sampled By Mark Segura

Citadel Elks

10/19/22

Samples

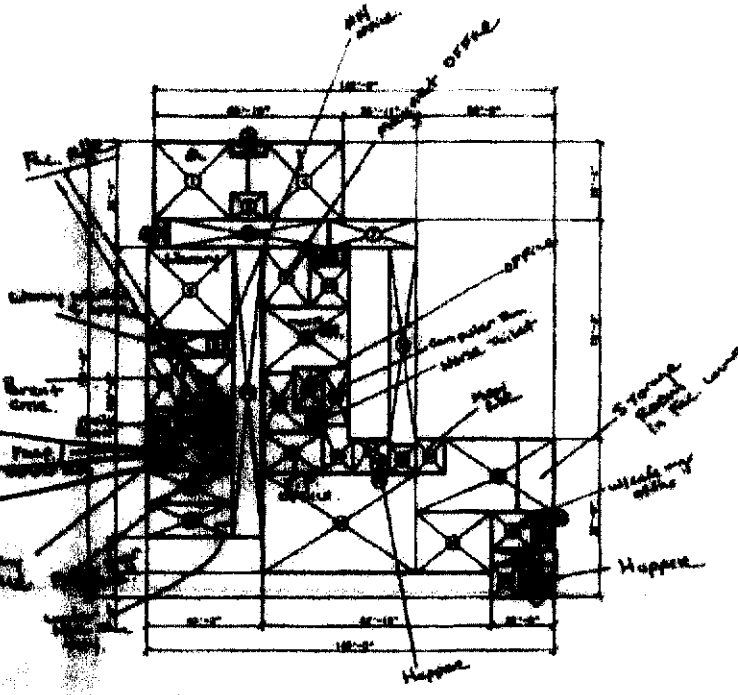
1-3 = Drywall Sheet debris

4-6 = Red Fire Caulking

4, 1

5, 2

6, 3



Admin.
005DAT

DATE: 10/20/88
SHEET 3 OF 44 SHEETS

Page 3 Of 3
Page 3 Of 3

OrderID: 322221193
OrderID: 322221193

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

41225

SITE NAME: 82nd St. Magnet ES CODE: 7137 PROJECT DESC: Exterior Painting Project COLIN #: 10371458

SAMPLED BY: Oscar Castro DATE SAMPLED: 8/17/2020 DEPT. / CONSULTANT: Panacea, Inc. TEL: (562) 860-2869

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES OR NO)
2008-1422	B-133	X2703S	2/3 Unit Relocatable	Exterior	South	Dashcoat on concrete steps	No
2008-1423	B-134	X2703S	2/3 Unit Relocatable	Exterior	Southwest	Exterior stucco wall	No
2008-1424	B-135	X2703S	2/3 Unit Relocatable	Exterior	Northeast	Exterior stucco wall	No
2008-1425	B-136	006DAT	Classroom building	Exterior	Northwest	Stucco ceiling	No
2008-1426	B-137	006DAT	Classroom building	Exterior	Northeast	Stucco ceiling	No
2008-1427	B-138	006DAT	Classroom building	Exterior	Southeast	Stucco ceiling	No
2008-1428	B-139	005DAT	Administrative & Classroom	Roof	Southwest	White sealant on top of roof flashing and roof hatch	No
2008-1429	B-140	005DAT	Administrative & Classroom	Roof	Southwest	White sealant on top of roof flashing and roof hatch	No
2008-1430	B-141	005DAT	Administrative & Classroom	Roof	Northeast	White sealant on top of roof flashing and roof hatch	No
2008-1431	B-142	005DAT	Administrative & Classroom	Exterior	Southeast	Stucco ceiling	No
2008-1432	B-143	005DAT	Administrative & Classroom	Exterior	Southwest	Stucco ceiling	No
2008-1433	B-144	005DAT	Administrative & Classroom	Exterior	West	Stucco ceiling	No

DATE:	TIME:	NAME (PRINT & SIGN):	DEPARTMENT / AREA / CONSULTANT:	# OF SAMPLES
08-19-20	3:00pm	Oscar Castro	Panacea, Inc C20-928.2FTM	12
8/19/20	3:20pm	Armando Cerros	FED Ups	12

Maximo Work Order Number: 30857689

Project Type: ☒ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K, R, Y, Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY:

FETU REVIEW DATED: 08/19/20

RUSH? ☐ Yes ☒ No

POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No

APPROVAL:

APPROVAL:

Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP# 101505-0
Method EPA/600/R-93/11 (SOP) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081422-A	AC	08/25/2020	X2703S : 2/3 UNIT RELOC. EXTERIOR SOUTH	HOMOGENEOUS; NON-FRIABLE; TAN; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081422-B	AC	08/25/2020	X2703S : 2/3 UNIT RELOC. EXTERIOR SOUTH	HOMOGENEOUS; NON-FRIABLE; BEIGE; DASHCOAT; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER
2020081423-A	AC	08/25/2020	X2703S : 2/3 UNIT RELOC. EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081423-B	AC	08/25/2020	X2703S : 2/3 UNIT RELOC. EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; TAN; COATING; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER
2020081423-C	AC	08/25/2020	X2703S : 2/3 UNIT RELOC. EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER
2020081424-A	AC	08/25/2020	X2703S : 2/3 UNIT RELOC. EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081424-B	AC	08/25/2020	X2703S : 2/3 UNIT RELOC. EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; TAN; COATING; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER
2020081424-C	AC	08/25/2020	X2703S : 2/3 UNIT RELOC. EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	0	0	0	0	0	0	0	MINERAL FILLER
2020081425-A	AC	08/25/2020	006DAT : CLASSROOM BLDG. EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT

Lab Supervisor Signature and Date: 8/26/20

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. *Quantification done by optical estimate* 1 - 5 % considered non-quantifiable.
This report relates to only the material tested. An asterisk '*' indicates preliminary results.

Signature of Analyst: _____

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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVL/ LAB# 101505-0
Method EPA/600/R-93/11 (ED) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081425-B	AC	08/25/2020	006DAT : CLASSROOM BLDG, EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; BEIGE; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER
2020081425-C	AC	08/25/2020	006DAT : CLASSROOM BLDG, EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	<1	0	0	0	0	0	<1	MINERAL FILLER
2020081426-A	AC	08/25/2020	006DAT : CLASSROOM BLDG, EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081426-B	AC	08/25/2020	006DAT : CLASSROOM BLDG, EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER
2020081426-C	AC	08/25/2020	006DAT : CLASSROOM BLDG, EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	<1	0	0	0	0	0	<1	MINERAL FILLER
2020081427-A	AC	08/25/2020	006DAT : CLASSROOM BLDG, EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081427-B	AC	08/25/2020	006DAT : CLASSROOM BLDG, EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER
2020081427-C	AC	08/25/2020	006DAT : CLASSROOM BLDG, EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	<1	0	0	0	0	0	<1	MINERAL FILLER
2020081428-A	AC	08/25/2020	005DAT : ADMIN. & CLASSROOM ROOF SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; PEACH; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT

Lab Supervisor Signature and Date: 8/26/20

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. "Quantification done by visual estimate" 1 - 5% considered non-quantifiable.
This report relates to only the material tested. An asterisk "*" indicates preliminary results.

Signature of Analyst: _____

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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP# 101505-0
Method EPA/600/R-93/116 (SOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081428-B	AC	08/25/2020	008DAT ; ADMIN. & CLASSROOM ROOF SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; TAN; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER, CARBONATES
2020081429-A	AC	08/25/2020	005DAT ; ADMIN. & CLASSROOM ROOF SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; PEACH; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081429-B	AC	08/25/2020	005DAT ; ADMIN. & CLASSROOM ROOF SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; TAN; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER, CARBONATES
2020081430-A	AC	08/25/2020	005DAT ; ADMIN. & CLASSROOM ROOF NORTHEAST	HOMOGENEOUS; NON-FRIABLE; PEACH; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081430-B	AC	08/25/2020	005DAT ; ADMIN. & CLASSROOM ROOF NORTHEAST	HOMOGENEOUS; NON-FRIABLE; TAN; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER, CARBONATES
2020081431-A	AC	08/25/2020	005DAT ; ADMIN. & CLASSROOM EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081431-B	AC	08/25/2020	005DAT ; ADMIN. & CLASSROOM EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; BEIGE; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER
2020081431-C	AC	08/25/2020	005DAT ; ADMIN. & CLASSROOM EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	<1	0	0	0	0	0	<1	MINERAL FILLER
2020081432-A	AC	08/25/2020	005DAT ; ADMIN. & CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT

Lab Supervisor Signature and Date: 8/26/20

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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Los Angeles U School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk ple Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVL AB# 101505-0
Method EPA/600/R-93/11 OD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081432-B	AC	08/25/2020	005DAT : ADMIN. & CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; BEIGE; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER
2020081432-C	AC	08/25/2020	005DAT : ADMIN. & CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	<1	0	0	0	0	0	<1	MINERAL FILLER
2020081433-A	AC	08/25/2020	005DAT : ADMIN. & CLASSROOM EXTERIOR WEST	HOMOGENEOUS; NON-FRIABLE; BEIGE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081433-B	AC	08/25/2020	005DAT : ADMIN. & CLASSROOM EXTERIOR WEST	HOMOGENEOUS; NON-FRIABLE; BEIGE; COATING; GRANULAR	2	0	0	0	0	0	2	MINERAL FILLER
2020081433-C	AC	08/25/2020	005DAT : ADMIN. & CLASSROOM EXTERIOR WEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	<1	0	0	0	0	0	<1	MINERAL FILLER

Lab Supervisor Signature and Date: 8-24-20

Signature of Analyst:

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
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LOS ANGELES UNIF[illegible] SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd St. Magnet ES CODE: 7137 PROJECT DESC: Exterior Painting Project COLIN #: 10371458

SAMPLED BY: Oscar Castro DATE SAMPLED: 8/18/2020 DEPT. / CONSULTANT: Panacea, Inc. TEL: (562) 860-2869

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES OR NO)
2008-1434	B-145	006DAT	Classroom Building	Roof	East	White sealant on top of roof flashing and roof hatch	No
2008-1435	B-146	006DAT	Classroom Building	Roof	Southwest	White sealant on top of roof flashing and roof hatch	No
2008-1436	B-147	006DAT	Classroom Building	Roof	Northeast	White sealant on top of roof flashing and roof hatch	No
2008-1437	B-148	43580	Arcade #1	Roof	Northwest	White sealant on roof	No
2008-1438	B-149	43580	Arcade #1	Roof	Northwest	Roof mastic	No
2008-1439	B-150	43580	Arcade #1	Exterior	Northwest	Stucco ceiling	No
2008-1440	B-151	43580	Arcade #1	Exterior	North	Stucco ceiling	No
2008-1441	B-152	43580	Arcade #1	Exterior	Northeast	Stucco ceiling	No
2008-1442	B-153	35283	New 2-Story Classroom	Exterior	North	Exterior stucco wall	No
2008-1443	B-154	35283	New 2-Story Classroom	Exterior	Southwest	Exterior stucco wall	No
2008-1444	B-155	35283	New 2-Story Classroom	Exterior	Northwest	Exterior stucco wall	No
2008-1445	B-156	35283	New 2-Story Classroom	Exterior	Southeast	Stucco ceiling	No

DATE:	TIME:	NAME (PRINT & SIGN):	DEPARTMENT / AREA / CONSULTANT:	# OF SAMPLES
08-19-20	3:00pm	Oscar Castro	Panacea, Inc C20-928.2FTM	12
8/19/20	3:00p	Ricardo Carrasco	FSD WHS	12

Maximo Work Order Number: 30857639

FETU USE ONLY

FETU REVIEWED BY: [signature]

FETU REVIEW DATED: 08/19/20

Project Type: ☒ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K, R, Y, Q) ☐ Other:

RUSH? ☐ Yes ☒ No

POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No

APPROVAL:

APPROVAL:

Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP L. 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081434-A	AI	08/25/2020	006DAT : CLASSROOM BLDG. ROOF EAST	HOMOGENEOUS; NON-FRIABLE; PEACH; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081434-B	AI	08/25/2020	006DAT : CLASSROOM BLDG. ROOF EAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081435-A	AI	08/25/2020	006DAT : CLASSROOM BLDG. ROOF SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; PEACH; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081435-B	AI	08/25/2020	006DAT : CLASSROOM BLDG. ROOF SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081436-A	AI	08/25/2020	006DAT : CLASSROOM BLDG. ROOF NORTHEAST	HOMOGENEOUS; NON-FRIABLE; PEACH; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081436-B	AI	08/25/2020	006DAT : CLASSROOM BLDG. ROOF NORTHEAST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081437-A	AI	08/25/2020	43580 : ARCADE 1 ROOF NORTHWEST	HOMOGENEOUS; NON-FRIABLE; PEACH/ WHITE; COATING; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081437-B	AI	08/25/2020	43580 : ARCADE 1 ROOF NORTHWEST	HOMOGENEOUS; NON-FRIABLE; BLACK; SEALANT; TAR	0	0	0	0	0	0	0	10% CELLULOSE TAR
2020081438-A	AI	08/25/2020	43580 : ARCADE 1 ROOF NORTHWEST	HOMOGENEOUS; NON-FRIABLE; PEACH/ WHITE; COATING; RUBBERY	0	0	0	0	0	0	0	BINDER

Lab Supervisor Signature and Date: 8/27/20

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk S...ple Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP L...101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081438-B	AI	08/25/2020	43580 : ARCADE 1 ROOF NORTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081439-A	AI	08/25/2020	43580 : ARCADE 1 EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081439-B	AI	08/25/2020	43580 : ARCADE 1 EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; COATED MATERIAL	2	0	0	0	0	0	2	MINERAL FILLER
2020081439-C	AI	08/25/2020	43580 : ARCADE 1 EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; LT GRAY; STUCCO; SOLID	1	0	0	0	0	0	1	MINERAL FILLER
2020081440-A	AI	08/26/2020	43580 : ARCADE 1 EXTERIOR NORTH	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081440-B	AI	08/26/2020	43580 : ARCADE 1 EXTERIOR NORTH	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; COATED MATERIAL	2	0	0	0	0	0	2	MINERAL FILLER
2020081440-C	AI	08/26/2020	43580 : ARCADE 1 EXTERIOR NORTH	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; STUCCO; SOLID	1	0	0	0	0	0	1	MINERAL FILLER
2020081441-A	AI	08/26/2020	43580 : ARCADE 1 EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081441-B	AI	08/26/2020	43580 : ARCADE 1 EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; COATED MATERIAL	2	0	0	0	0	0	2	MINERAL FILLER

Lab Supervisor Signature and Date: 8/27/20

Signature of Analyst:

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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP L... 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081441-C	AI	08/26/2020	43580 : ARCADE 1 EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; STUCCO; SOLID	2	0	0	0	0	0	2	MINERAL FILLER
2020081442-A	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTH	HOMOGENEOUS; NON-FRIABLE; BROWN; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081442-B	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTH	HOMOGENEOUS; NON-FRIABLE; WHITE; COATING; COATED MATERIAL	0	0	0	0	0	0	0	MINERAL FILLER
2020081442-C	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTH	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; STUCCO; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2020081443-A	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081443-B	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; YELLOW; COATING; COATED MATERIAL	0	0	0	0	0	0	0	MINERAL FILLER
2020081443-C	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; STUCCO; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2020081444-A	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081444-B	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; YELLOW; COATING; COATED MATERIAL	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date: 8/27/20

Signature of Analyst: _____

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Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP L... 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081444-C	AI	08/26/2020	35283 ; NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; STUCCO; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2020081445-A	AI	08/26/2020	35283 ; NEW 2-STORY CLASSROOM EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081445-B	AI	08/26/2020	35283 ; NEW 2-STORY CLASSROOM EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; YELLOW; COATING; COATED MATERIAL	0	0	0	0	0	0	0	MINERAL FILLER
2020081445-C	AI	08/26/2020	35283 ; NEW 2-STORY CLASSROOM EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; STUCCO; SOLID	0	0	0	0	0	0	0	MINERAL FILLER

Lab Supervisor Signature and Date: _____ 8/27/20

Signature of Analyst: _____

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LOS ANGELES UNIFI SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd St. Magnet ES CODE: 7137 PROJECT DESC: Exterior Painting Project COLIN #: 10371458

SAMPLED BY: Oscar Castro DATE SAMPLED: 8/18/2020 DEPT. / CONSULTANT: Panacea, Inc. TEL: (562) 860-2869

Fill in a ll information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES OR NO)
200 8-1446	B-157	35283	New 2-Story Classroom	Exterior	East	Stucco ceiling	No
2008-1447	B-158	35283	New 2-Story Classroom	Exterior	Northwest	Stucco ceiling	No
2008-1448	B-159	35283	New 2-Story Classroom	Exterior	Northwest	Leveling compound on base of support beams	No
2008-1449	B-160	35283	New 2-Story Classroom	Exterior	North	Leveling compound on base of support beams	No
2008-1450	B-161	35283	New 2-Story Classroom	Exterior	Northeast	Leveling compound on base of support beams	No
2008-1451	B-162	35283	New 2-Story Classroom	Exterior	Northwest	Beige sealant on seam between supporting beams and portico	No
2008-1452	B-163	35283	New 2-Story Classroom	Exterior	Southwest	Beige sealant on seam between supporting beams and portico	No
2008-1453	B-164	35283	New 2-Story Classroom	Exterior	East	Beige sealant on seam between supporting beams and portico	No
2008-1454	B-165	35282	New 2-Story Classroom	Exterior	Southeast	Exterior stucco wall	No
2008-1455	B-166	35282	New 2-Story Classroom	Exterior	Southwest	Exterior stucco wall	No
2008-1456	B-167	35282	New 2-Story Classroom	Exterior	Northwest	Exterior stucco wall	No
2008-1457	B-168	43603	Arcade #2	Exterior	Southwest	Stucco ceiling	No

DATE:	TIME:	NAME (PRINT & SIGN):	DEPARTMENT / AREA / CONSULTANT:	# OF SAMPLES
08-19-20	3:15pm	Oscar Castro	Panacea, Inc C20-928.2FTM	12
8/19/20	3:00pm	Ramiro Cano	FSD Lab	12

Maximo Work Order Number: 30857639 Project Type: ☒ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K, R, Y, Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY: [signature] RUSH? ☐ Yes ☒ No APPROVAL:

FETU REVIEW DATED: 08/19/20 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP La... 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081446-A	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR EAST	HOMOGENEOUS; NON-FRIABLE; RED; STUCCO; GRANULAR	0	0	0	0	0	0	0	2% POLYETHYLENE MINERAL FILLER
2020081446-B	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR EAST	HOMOGENEOUS; NON-FRIABLE; PINK; STUCCO; GRANULAR	0	0	0	0	0	0	0	3% FIBERGLASS, 2% POLYETHYLENE MINERAL FILLER
2020081447-A	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; TAN; COATING; GRANULAR	0	0	0	0	0	0	0	2% POLYETHYLENE MINERAL FILLER
2020081447-B	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	0	0	0	0	0	0	0	2% FIBERGLASS MINERAL FILLER
2020081448	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; LEVELING MATERIAL; GRANULAR	0	0	0	0	0	0	0	CARBONATES
2020081449	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTH	HOMOGENEOUS; NON-FRIABLE; GRAY; LEVELING MATERIAL; GRANULAR	0	0	0	0	0	0	0	CARBONATES
2020081450	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; LEVELING MATERIAL; GRANULAR	0	0	0	0	0	0	0	CARBONATES
2020081451	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; TAN; SEALANT; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER, CARBONATES
2020081452	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; TAN; SEALANT; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER, CARBONATES

Lab Supervisor Signature and Date: [signature] 8/27/20

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA. 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP Lab Code 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081453	AC	08/26/2020	35283 : NEW 2-STORY CLASSROOM EXTERIOR EAST	HOMOGENEOUS; NON-FRIABLE; TAN; SEALANT; RUBBER-LIKE	0	0	0	0	0	0	0	BINDER, CARBONATES
2020081454-A	AC	08/26/2020	35282 : NEW 2-STORY CLASSROOM EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; TAN; COATING; GRANULAR	0	0	0	0	0	0	0	2% POLYETHYLENE MINERAL FILLER
2020081454-B	AC	08/26/2020	35282 : NEW 2-STORY CLASSROOM EXTERIOR SOUTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	0	0	0	0	0	0	0	2% FIBERGLASS MINERAL FILLER
2020081455-A	AC	08/26/2020	35282 : NEW 2-STORY CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; TAN; COATING; GRANULAR	0	0	0	0	0	0	0	2% FIBERGLASS MINERAL FILLER
2020081455-B	AC	08/26/2020	35282 : NEW 2-STORY CLASSROOM EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	0	0	0	0	0	0	0	3% FIBERGLASS MINERAL FILLER
2020081456-A	AC	08/26/2020	35282 : NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; TAN; COATING; GRANULAR	0	0	0	0	0	0	0	2% POLYETHYLENE MINERAL FILLER
2020081456-B	AC	08/26/2020	35282 : NEW 2-STORY CLASSROOM EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; GRANULAR	0	0	0	0	0	0	0	2% FIBERGLASS MINERAL FILLER
2020081457-A	AC	08/26/2020	43603 : ARCADE 2 EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; RED; COATING; GRANULAR	0	0	0	0	0	0	0	2% POLYETHYLENE MINERAL FILLER
2020081457-B	AC	08/26/2020	43603 : ARCADE 2 EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; PINK; STUCCO; GRANULAR	0	0	0	0	0	0	0	3% FIBERGLASS, 2% POLYETHYLENE MINERAL FILLER

Lab Supervisor Signature and Date: [signature] 8/27/20

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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LOS ANGELES UNIF SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

SITE NAME: 32nd St. Magnet ES CODE: 7137 PROJECT DESC: Exterior Painting Project COLIN #: 10371458

SAMPLED BY: Oscar Castro DATE SAMPLED: 8/18/2020 DEPT. / CONSULTANT: Panacea, Inc. TEL: (562) 860-2869

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY, DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES OR NO)
2008-1458	B-169	43603	Arcade #2	Exterior	Southwest	Stucco ceiling	No
2008-1459	B-170	43603	Arcade #2	Exterior	Northeast	Stucco ceiling	No
2008-1460	B-171	35282	New 2-Story Classroom	Roof	West	Gray sealant on seams between roof flashing and wall	No
2008-1461	B-172	35282	New 2-Story Classroom	Roof	West	Gray sealant on seams between roof flashing and wall	No
2008-1462	B-173	35282	New 2-Story Classroom	Roof	Northeast	Gray sealant on seams between roof flashing and wall	No
2008-1463	B-174	35283	New 2-Story Classroom	Roof	South	Gray sealant on seams between roof flashing and wall	No
2008-1464	B-175	35283	New 2-Story Classroom	Roof	South	Gray sealant on seams between roof flashing and wall	No
2008-1465	B-176	35283	New 2-Story Classroom	Roof	Northeast	Gray sealant on seams between roof flashing and wall	No
2008-1466	B-177	35283	New 2-Story Classroom	Roof	West	White sealant on top of roof flashing	No
2008-1467	B-178	1	Metal Container	Exterior	Northeast	Gray sealant on seams and edges	No
2008-1468	B-179	1	Metal Container	Exterior	Northwest	Gray sealant on seams and edges	No
2008-1469	B-180	1	Metal Container	Exterior	Southwest	Gray sealant on seams and edges	No

DATE:	TIME:	NAME (PRINT & SIGN):	DEPARTMENT / AREA / CONSULTANT:	# OF SAMPLES
08-19-20	3:00pm	Oscar Castro	Panacea, Inc C20-928.2FTM	12
8/19/20	7:30a	[illegible] PSC	FETU Use	0

Maximo Work Order Number: 30857639 Project Type: ☒ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K, R, Y, Q) ☐ Other:

FETU USE ONLY
FETU REVIEWED BY: [signature] RUSH? ☐ Yes ☒ No APPROVAL:

FETU REVIEW DATED: 08/19/20 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP L 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081458-A	AI	08/26/2020	43603 : ARCADE 2 EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; RED; STUCCO; SOLID	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081458-B	AI	08/26/2020	43603 : ARCADE 2 EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; SOLID	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081459-A	AI	08/26/2020	43603 : ARCADE 2 EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; RED; STUCCO; SOLID	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081459-B	AI	08/26/2020	43603 : ARCADE 2 EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; STUCCO; SOLID	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081460-A	AI	08/26/2020	35282 : NEW 2-STORY CLASSROOM ROOF WEST	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081460-B	AI	08/26/2020	35282 : NEW 2-STORY CLASSROOM ROOF WEST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; STUCCO; SOLID	0	0	0	0	0	0	0	MINERAL FILLER
2020081461-A	AI	08/26/2020	35282 : NEW 2-STORY CLASSROOM ROOF WEST	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081461-B	AI	08/26/2020	35282 : NEW 2-STORY CLASSROOM ROOF WEST	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; STUCCO; SOLID	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081462	AI	08/26/2020	35282 : NEW 2-STORY CLASSROOM ROOF NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER

Lab Supervisor Signature and Date: [signature] 8/27/20

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP L[illegible]101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081463-A	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM ROOF SOUTH	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081463-B	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM ROOF SOUTH	HOMOGENEOUS; NON-FRIABLE; TAN; STUCCO; SOLID	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081464-A	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM ROOF SOUTH	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER
2020081464-B	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM ROOF SOUTH	HOMOGENEOUS; NON-FRIABLE; TAN; STUCCO; SOLID	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081465	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM ROOF NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	3	0	0	0	0	0	3	BINDER, MINERAL FILLER
					COMMENT(S): THIS SAMPLE IS DIFFERENT THAN 2008/ 1463 & 1464.							
2020081466-A	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM ROOF WEST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081466-B	AI	08/26/2020	35283 : NEW 2-STORY CLASSROOM ROOF WEST	HOMOGENEOUS; NON-FRIABLE; WHITE; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081467-A	AI	08/26/2020	1 ;METAL CONTAINER EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081467-B	AI	08/26/2020	1 ;METAL CONTAINER EXTERIOR NORTHEAST	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	5	0	0	0	0	0	5	BINDER, MINERAL FILLER

Lab Supervisor Signature and Date: [signature] 8/27/20

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP L... 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 08/19/2020

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2020081468-A	AI	08/26/2020	1 : METAL CONTAINER EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
				COMMENT(S): THIS SAMPLE IS DIFFERENT THAN 2008/1467 & 1469.								
2020081468-B	AI	08/26/2020	1 : METAL CONTAINER EXTERIOR NORTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	0	0	0	0	0	0	0	BINDER, MINERAL FILLER
2020081469-A	AI	08/26/2020	1 : METAL CONTAINER EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2020081469-B	AI	08/26/2020	1 : METAL CONTAINER EXTERIOR SOUTHWEST	HOMOGENEOUS; NON-FRIABLE; GRAY; SEALANT; RUBBERY	5	0	0	0	0	0	5	BINDER, MINERAL FILLER

Lab Supervisor Signature and Date: 8/27/20

Signature of Analyst:

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
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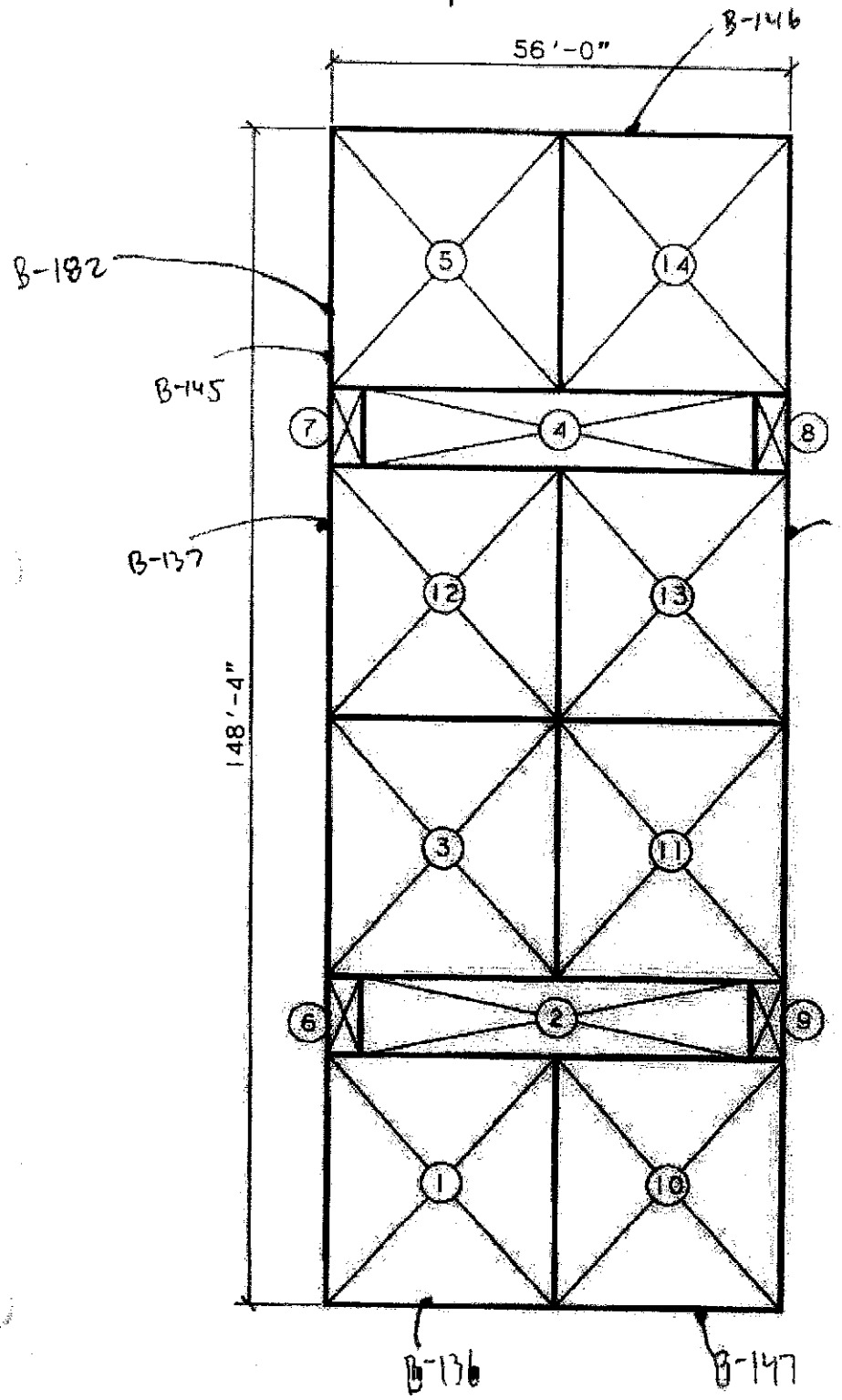
ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

BUILDING 2

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

32nd Street Magnet ES (7137)
Classroom Building (006DAT)
Sample By: Oscar Castro, Panacea, Inc.
Sample Date: 08-18-20



oc ceiling
Exterior Stucco Portico oc
B-136 to B-138

white sealant on top of roof flashing CB-145 to B-147
and asphalt

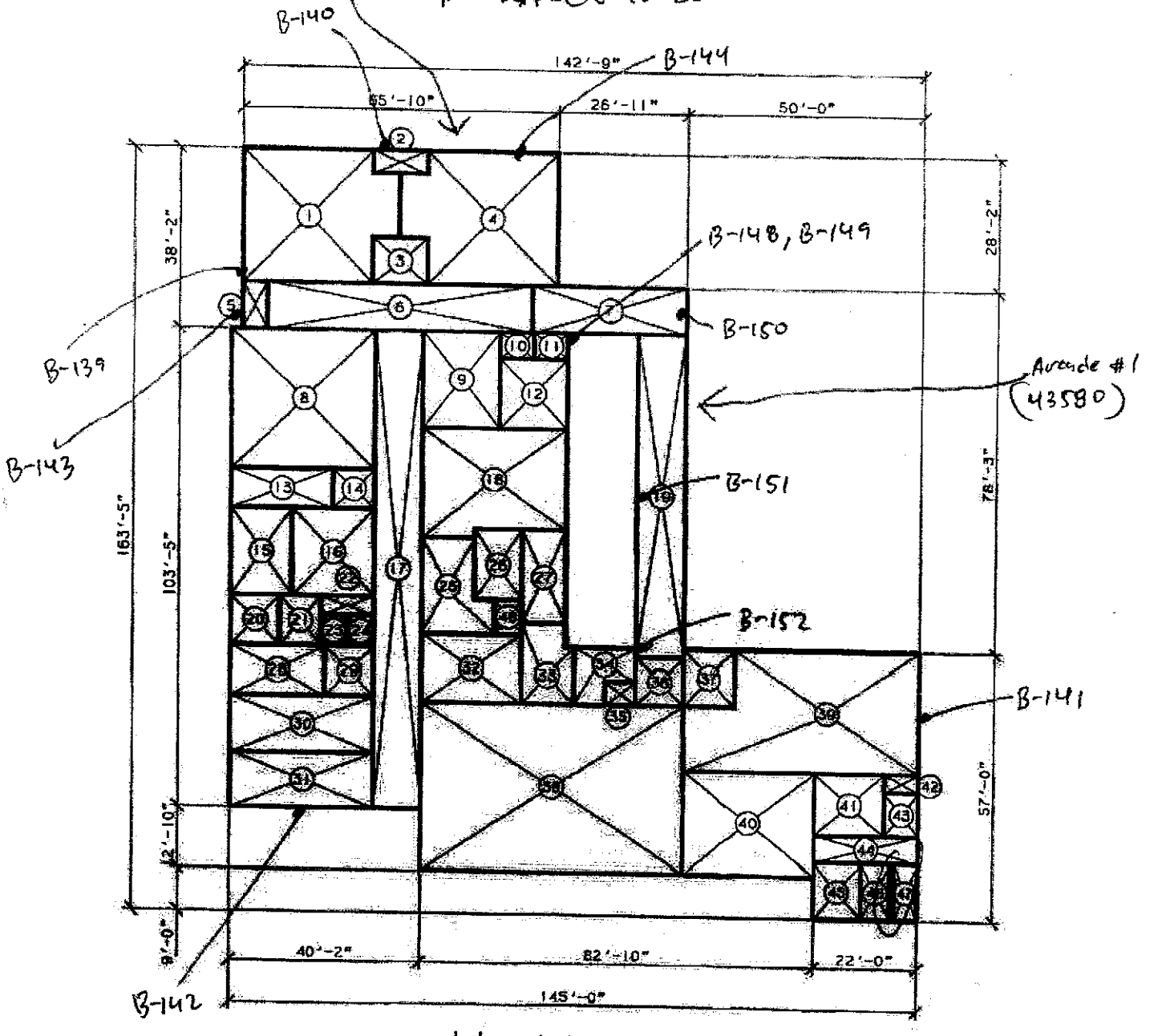
white sealant B-182
on base of wall
and asphalt

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

BUILDING 1

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

32nd Street Magnet E.S (7137)
Administrative & Classroom Building (005 DAT)
Sample By: Oscar Castro, Penaco, Inc.
Sample Date: 08-18-20



white Sealant on top of Roof Flashing B-139 to B-141 and roof hatch

Stucco Ceiling B-142 to B-144

White Sealant B-148 Arcade #1
on roof

Roof Mastic B-149

Stucco Ceiling B-150 to B-152

Exterior stucco wall B-153 to B-155

Stucco ceiling B-156 to B-158

leveling compound on base of support beam B-159 to B-161

Beige Sealant on seam of supporting beam B-162 to B-164
and portico

Exterior Stucco wall B-165 to B-167

Stucco ceiling B-168 to B-170

Gray Sealant B-171 to B-173

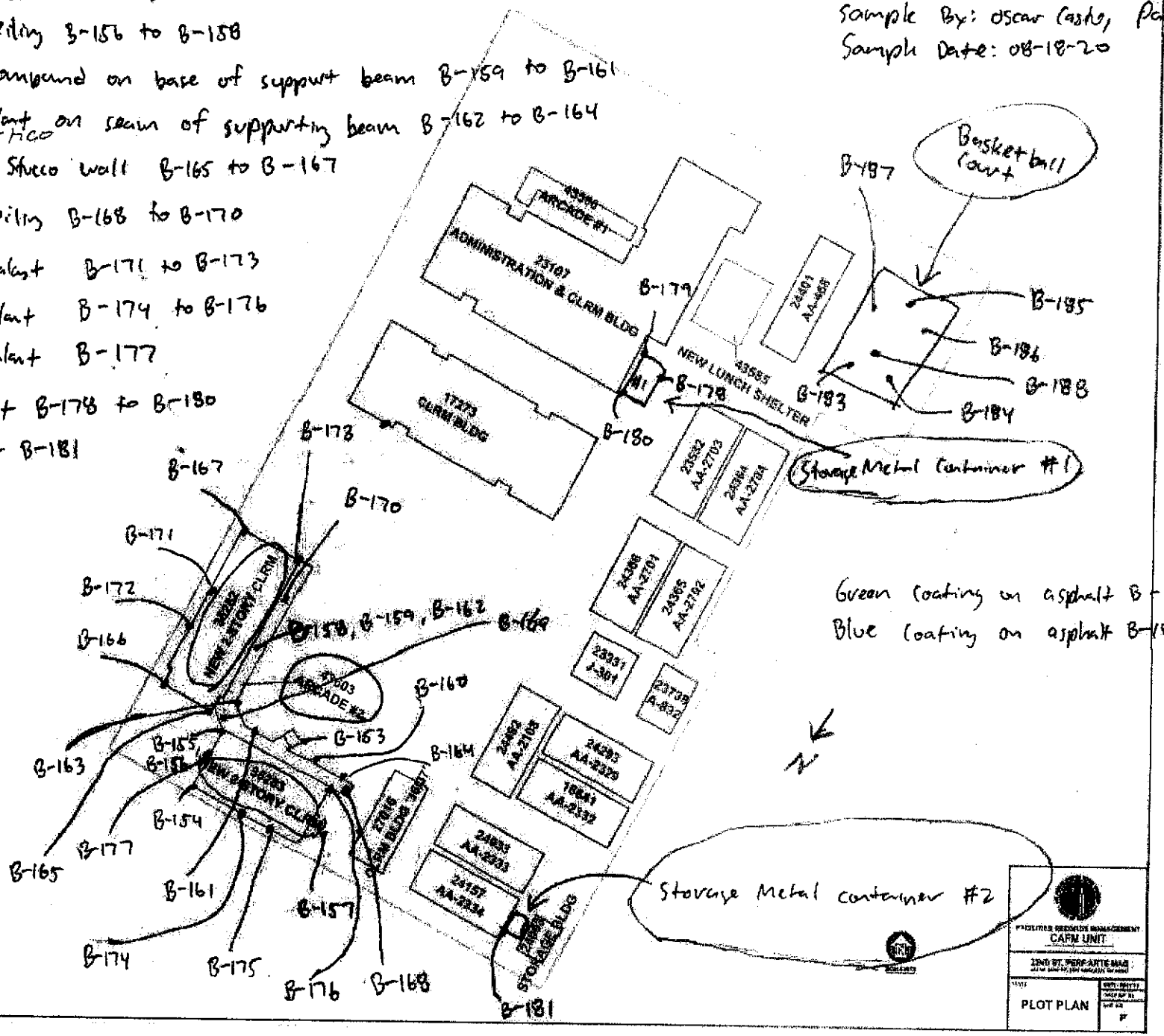
Gray Sealant B-174 to B-176

White Sealant B-177

Gray Sealant B-178 to B-180

Gray Sealant B-181

32nd Street Mgmt E.S (7187)
Sample By: Oscar Castro, Panarea, Inc.
Sample Date: 08-18-20



4-17-19
J. A

LOS ANGELES UNIFIED SC[illegible]L DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

37250

ITE NAME: 32nd St. Magnet CODE: 7137 PROJECT DESC: Full Site Flooring Replacement Project COLIN #:

AMPLED BY: Nick Anderson DATE SAMPLED: 10/26/2017 DEPT. / CONSULTANT: National Econ Corporation TEL: (714) 978-6320

ll in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) ith sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
1710-0565	01	005DAT	Administrative & Classroom Bldg	Faculty Dining	East Side of Room	2" Black Cove Base w/ Mastic	NO
1710-0566	02	005DAT	Administrative & Classroom Bldg	Faculty Dining	East Side of Room	2" Black Cove Base w/ Mastic	NO
1710-0567	03	005DAT	Administrative & Classroom Bldg	Storage Hallway	East Side of Room	2" Black Cove Base w/ Mastic	NO
1710-0568	04	005DAT	Administrative & Classroom Bldg	Faculty Dining	East Side of Room	2" Grey Cove Base w/ Mastic	NO
1710-0569	05	005DAT	Administrative & Classroom Bldg	Faculty Dining	West Side of Room	2" Grey Cove Base w/ Mastic	NO
1710-0570	06	005DAT	Administrative & Classroom Bldg	Faculty Dining	North Side of Room	2" Grey Cove Base w/ Mastic	NO
1710-0571	07	005DAT	Administrative & Classroom Bldg	Faculty Dining	East Side of Room	12"x12" Off-white Marbled w/ Mastic	NO
1710-0572	08	005DAT	Administrative & Classroom Bldg	Faculty Dining	West Side of Room	12"x12" Off-white Marbled w/ Mastic	NO
1710-0573	09	005DAT	Administrative & Classroom Bldg	Faculty Dining	North Side of Room	12"x12" Off-white Marbled w/ Mastic	NO
1710-0574	10	005DAT	Administrative & Classroom Bldg	Kitchen Storage Room	West Side of Room	2" Brown Cove Base w/ Mastic	NO
1710-0575	11	005DAT	Administrative & Classroom Bldg	Nurses Office	North Side of Room	2" Brown Cove Base w/ Mastic	NO
1710-0576	12	005DAT	Administrative & Classroom Bldg	Hallway	South Side of Hall	2" Brown Cove Base w/ Mastic	NO

ATE	IME:	NAME (PRINT & SIGN)	DEPARTMENT / AREA / CONSULTANT:	# OF SAMPLES
10-31-2017	11:25 AM	Nick Anderson	National Econ Corporation	12
11/21/17	11:25	M. Martinez	FSD lab	12

Maximo Work Order Number: 27658399 Project Type: ☑ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY: FH RUSH? ☐ Yes ☑ No APPROVAL:

FETU REVIEW DATE: 10/31/17 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

Rev. 8/2015

.os Angeles Unified School District
'acilities Services Division Laboratory
449 S. San Pedro St.
.os Angeles, CA 90015
213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 10/31/2017

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2017100565-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; COVE BASE; RUBBERY	0	0	0	0	0	0	0	BINDER
2017100565-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; TAN; ADHESIVE; RUBBERY	0	0	0	0	0	0	0	ADHESIVE
2017100565-C	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BROWN; ADHESIVE; FLAKY	0	0	0	0	0	0	0	ADHESIVE
2017100565-D	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2017100566-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; COVE BASE; RUBBERY	0	0	0	0	0	0	0	BINDER
2017100566-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; TAN; ADHESIVE; RUBBERY	0	0	0	0	0	0	0	ADHESIVE
2017100566-C	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BROWN; ADHESIVE; FLAKY	0	0	0	0	0	0	0	ADHESIVE
2017100566-D	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
2017100567-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. STORAGE HALLWAY EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; COVE BASE; RUBBERY	0	0	0	0	0	0	0	BINDER

Lab Supervisor Signature and Date: 11/1/17

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1158

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 10/31/2017

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
017100570-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING NO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; GRAY; COVE BASE; RUBBERY	0	0	0	0	0	0	0	BINDER
017100570-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING NO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BROWN; ADHESIVE; FLAKY	0	0	0	0	0	0	0	ADHESIVE
017100570-C	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING NO. SIDE OF RM	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; PAINT; PAINT MATERIAL	0	0	0	0	0	0	0	PAINT
017100571-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; FLOOR TILE; FLAT SOLID	7	0	0	0	0	0	7	BINDER
017100571-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING EAST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; TAR	7	0	0	0	0	0	7	TAR
017100572-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; FLOOR TILE; FLAT SOLID	7	0	0	0	0	0	7	BINDER
017100572-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; TAR	7	0	0	0	0	0	7	TAR
017100573-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING NO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; FLOOR TILE; FLAT SOLID	7	0	0	0	0	0	7	BINDER
017100573-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. FAC. DINING NO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; TAR	7	0	0	0	0	0	7	TAR

Lab Supervisor Signature and Date: _____ 11/1/17

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 10/31/2017

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2017100574-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. KITCHEN STORAGE RM WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; COVE BASE; RUBBERY	0	0	0	0	0	0	0	BINDER
2017100574-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. KITCHEN STORAGE RM WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; DARK BROWN; ADHESIVE; SOLID	0	0	0	0	0	0	0	ADHESIVE
2017100575-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. NURSE OFC. NO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; COVE BASE; RUBBERY	0	0	0	0	0	0	0	BINDER
2017100575-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. NURSE OFC. NO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; DARK BROWN; ADHESIVE; SOLID	0	0	0	0	0	0	0	ADHESIVE
2017100576-A	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAY SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; LITE BROWN; COVE BASE; RUBBERY	0	0	0	0	0	0	0	BINDER
2017100576-B	LN	10/31/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAY SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; DARK BROWN; ADHESIVE; SOLID	0	0	0	0	0	0	0	ADHESIVE

Lab Supervisor Signature and Date: _____ 11/1/17

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
N/A: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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LOS ANGELES UNIFIED SC[illegible]OL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

37251

SITE NAME: 32nd St. Magnet CODE: 7137 PROJECT DESC: Full Site Flooring Replacement Project COLIN #:

SAMPLED BY: Nick Anderson DATE SAMPLED: 10/26/2017 DEPT. / CONSULTANT: National Econ Corporation TEL: (714) 978-6320

Fill in all information legibly and precisely. Original must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be submitted to FETU when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
1710-0577	13	005DAT	Administrative & Classroom Bldg	Nurses R/R	West Side of Room	12"x12" Tan Marbled Floor Tile w/Mastic	NO
1710-0578	14	005DAT	Administrative & Classroom Bldg	Mens R/R	West Side of Room	12"x12" Tan Marbled Floor Tile w/Mastic	NO
1710-0579	15	005DAT	Administrative & Classroom Bldg	Womens R/R	West Side of Room	12"x12" Tan Marbled Floor Tile w/Mastic	NO
1710-0580	16	005DAT	Administrative & Classroom Bldg	Hallways	North/West Side of Hallway	12"x12" Lt. Beige w/Brown Marks, 12"x12" Orange w/Mastic (Mixed)	NO
1710-0581	17	005DAT	Administrative & Classroom Bldg	Hallways	North/West Side of Hallway	12"x12" Lt. Beige w/Brown Marks, 12"x12" Orange w/Mastic (Mixed)	NO
1710-0582	18	005DAT	Administrative & Classroom Bldg	Hallways	East Side of Hallway	12"x12" Lt. Beige w/Brown Marks, 12"x12" Orange w/Mastic (Mixed)	NO
1710-0583	19	005DAT	Administrative & Classroom Bldg	Library	North/West Side of Room	2'x2' Red Carpet Tile Adh.	NO
1710-0584	20	005DAT	Administrative & Classroom Bldg	Library	South/West Side of Room	2'x2' Red Carpet Tile Adh.	NO
1710-0585	21	005DAT	Administrative & Classroom Bldg	Library	Sout Side of Room	2'x2' Red Carpet Tile Adh.	NO
1710-0586	22	006DAT	Classroom Bldg	Hallways	South Side of Hall	Drywall Ceiling	NO
1710-0587	23	006DAT	Classroom Bldg	Hallways	South Side of Hall	Drywall Ceiling	NO
1710-0588	24	006DAT	Classroom Bldg	Hallways	North Side of Hall	Drywall Ceiling	NO

DATE	TIME:	NAME (PRINT & SIGN):	DEPARTMENT / AREA / CONSULTANT:	# OF SAMPLES
10-31-2017	11:25 AM	Nick Anderson	National Econ Corporation	12
10/31/17	11:25	M. Martinez	FSD lab	12

Maximo Work Order Number: 27658399 Project Type: ☑ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K,R,Y,Q) ☐ Other:

FETU USE ONLY

FETU REVIEWED BY: [signature] RUSH? ☐ Yes ☑ No APPROVAL:

FETU REVIEW DATE: 10/31/17 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

Rev: 9/2016

Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 10/31/2017

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2017100577-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. NURSES RR WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; TAN; FLOOR TILE; VINYL	0	0	0	0	0	0	0	BINDER
2017100577-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. NURSES RR WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; RESIN-LIKE	4	0	0	0	0	0	4	TAR
2017100578-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. MENS RR WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; TAN; FLOOR TILE; VINYL	0	0	0	0	0	0	0	BINDER
2017100578-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. MENS RR WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; RESIN-LIKE	4	0	0	0	0	0	4	TAR
2017100579-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. WOMENS RR WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; TAN; FLOOR TILE; VINYL	0	0	0	0	0	0	0	BINDER
2017100579-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. WOMENS RR WEST SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; RESIN-LIKE	4	0	0	0	0	0	4	TAR
2017100580-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAYS NW SIDE OF HALLWAY	HOMOGENEOUS; NON-FRIABLE; BEIGE/ OFF WHITE; FLOOR TILE; VINYL	5	0	0	0	0	0	5	BINDER
2017100580-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAYS NW SIDE OF HALLWAY	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; RESIN-LIKE	7	0	0	0	0	0	7	TAR
2017100581-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAYS NW SIDE OF HALLWAY	HOMOGENEOUS; NON-FRIABLE; ORANGE; FLOOR TILE; VINYL	4	0	0	0	0	0	4	BINDER

Lab Supervisor Signature and Date: 11/2/17

Signature of Analyst:

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
N/A: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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Facilities Services Division Laboratory
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(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 10/31/2017

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2017100581-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAYS NW SIDE OF HALLWAY	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; RESIN-LIKE	7	0	0	0	0	0	7	TAR
2017100582-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAYS EAST SIDE OF HALLWAY	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; FLOOR TILE; VINYL	0	0	0	0	0	0	0	BINDER
2017100582-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAYS EAST SIDE OF HALLWAY	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2017100582-C	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. HALLWAYS EAST SIDE OF HALLWAY	HOMOGENEOUS; NON-FRIABLE; BLACK; MASTIC; RESIN-LIKE	7	0	0	0	0	0	7	TAR
2017100583-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY NW SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; CLEAR; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2017100583-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY NW SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; LEVELING MATERIAL; POWDERY	0	0	0	0	0	0	0	3% CELLULOSE BINDER
2017100583-C	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY NW SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; SOLID	0	0	0	0	0	0	0	ADHESIVE
2017100584-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY SW SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; CLEAR; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2017100584-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY SW SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; LEVELING MATERIAL; POWDERY	0	0	0	0	0	0	0	3% CELLULOSE BINDER

Lab Supervisor Signature and Date: [signature] 11/2/17

Signature of Analyst: [signature]

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N/A: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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Facilities Services Division Laboratory
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Los Angeles, CA. 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 10/31/2017

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2017100584-C	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY SW SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; SOLID	0	0	0	0	0	0	0	ADHESIVE
2017100585-A	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY SO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; CLEAR; ADHESIVE; RESIN-LIKE	0	0	0	0	0	0	0	ADHESIVE
2017100585-B	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY SO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; LT.GRAY; LEVELING MATERIAL; POWDERY	0	0	0	0	0	0	0	3% CELLULOSE BINDER
2017100585-C	MS	11/01/2017	005DAT : ADMIN/CLSRM. BLDG. LIBRARY SO. SIDE OF RM	HOMOGENEOUS; NON-FRIABLE; YELLOW; ADHESIVE; SOLID	0	0	0	0	0	0	0	ADHESIVE
2017100586-A	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; POWDERY	2	0	0	0	0	0	2	CARBONATES
2017100586-B	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; TAPE MATERIAL; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2017100586-C	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; POWDERY	2	0	0	0	0	0	2	CARBONATES
2017100586-D	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2017100586-E	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	1% FIBERGLASS GYPSUM

Lab Supervisor Signature and Date: 11/2/17

Signature of Analyst:

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Facilities Services Division Laboratory
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(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAC
7137

NVLAP LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 10/31/2017

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2017100587-A	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; POWDERY	2	0	0	0	0	0	2	CARBONATES
2017100587-B	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2017100587-C	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS SO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	1% FIBERGLASS GYPSUM
2017100588-A	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS NO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; JOINT COMPOUND; POWDERY	2	0	0	0	0	0	2	CARBONATES
2017100588-B	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS NO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; BROWN; PAPER; FIBROUS	0	0	0	0	0	0	0	100% CELLULOSE
2017100588-C	MS	11/01/2017	006DAT : CLSRM. BLDG. HALLWAYS NO. SIDE OF HALL	HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DRYWALL; CHALKY	0	0	0	0	0	0	0	1% FIBERGLASS GYPSUM

Lab Supervisor Signature and Date: _____ 11/2/17

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
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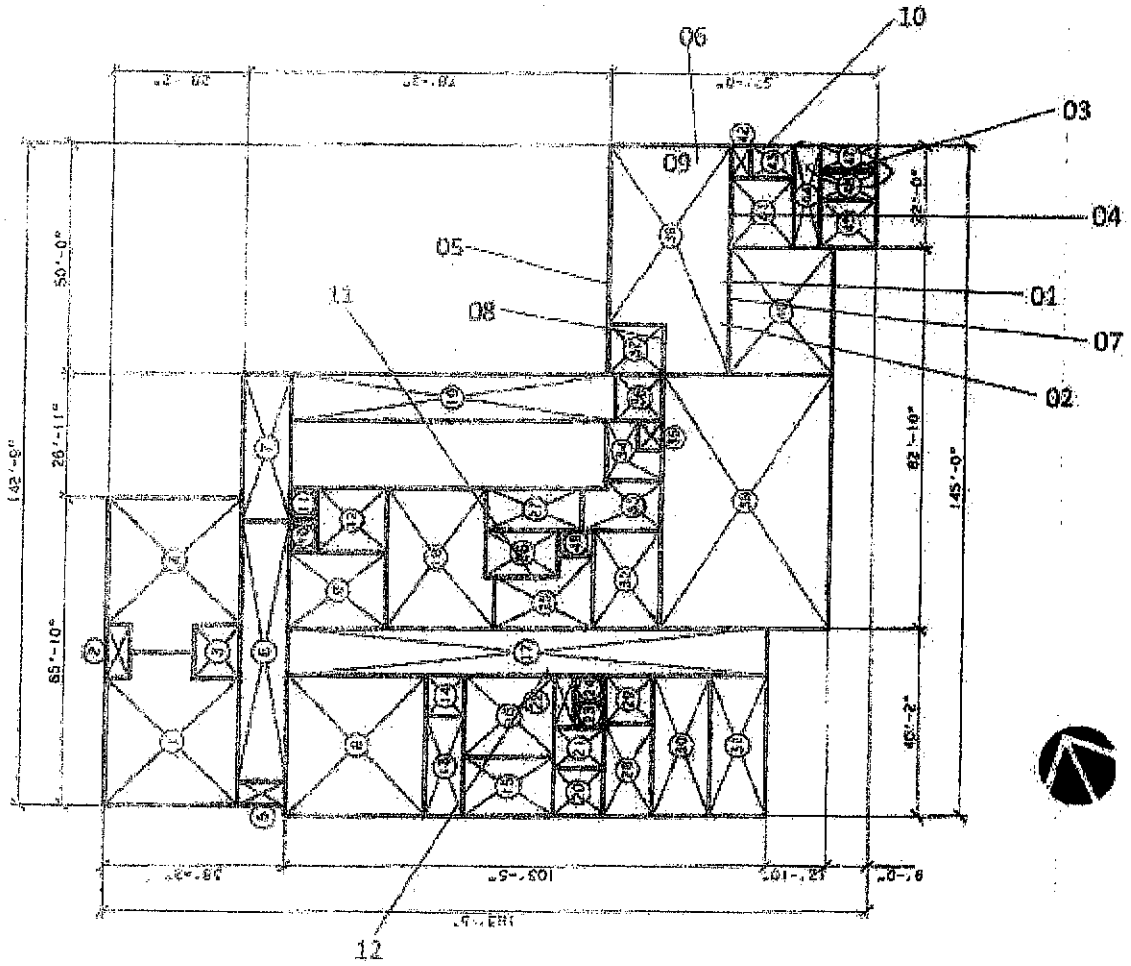
NATIONAL ECON

CORPORATION



SITE NAME: 32nd Street USC Performing Arts Magnet
LOCTION CODE: 7137
BUILDING NAMES: Administration Building
BUILDING NUMBER: 005DAT ROOM: ALL
PROJECT DESCRIPTION: Full Site Flooring Replacement

MATERIAL(s)	SAMPLE #'s:
a. 2" Black Cove Base w/Mastic	01, 02, 03
b. 2" Grey Cove Base w/Mastic	04, 05, 06
c. 12x12 Off-white Marbled Floor Tile w/ Mastic	07, 08, 09
d. 2" Brown Cove Base w/ Mastic	10, 11, 12

SAMPLED BY: Nick Anderson

DATE OF SAMPLING: 10-26-17

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES SERVICES DIVISION
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

AUG 0 4 2016 AE 35153

SITE NAME: 32nd St/USC Perf, Art Magnet CODE: 7137 PROJECT DESC: AHERA COLIN #:

SAMPLED BY: Anthony Pielin DATE SAMPLED: 6/28/2016 DEPT. / CONSULTANT: FETU TEL: 213/745/1464

Fill in all information legibly and precisely. **Original** must be submitted with the samples. Make a copy before submitting samples. Results and a copy of the Chain of Custody (COC) with sample numbers will be **submitted to FETU** when analysis is completed. ***USE BLACK/BLUE INK ONLY. DO NOT USE WHITE OUT! ALL RUSH ANALYSIS AND POINT COUNT REQUESTS MUST BE APPROVED BY FETU SUPERVISORS.***

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (YES or NO)
1607-0024	1	005DAT	Admin/Classroom	Library	Center	Duct Seam Seal Tape	NO
1607-0025	2	005DAT	Admin/Classroom	Teachers Work Rm	Center	Duct Seam Seal Tape	NO
1607-0026	3	005DAT	Admin/Classroom	Nurses Office	Center	Duct Seam Seal Tape	NO
1607-0027	4	006DAT	Classroom Bldg	Rm 10	Center	Duct Seam Seal Tape	NO
1607-0028	5	006DAT	Classroom Bldg	Rm 9	Center	Duct Seam Seal Tape	NO
1607-0029	6	006DAT	Classroom Bldg	Rm 3	Center	Duct Seam Seal Tape	NO

DATE:	TIME:	NAME (PRINT & SIGN):	DEPARTMENT / AREA / CONSULTANT:	# OF SAMPLES
6/29/16	9:00AM	Anthony Pielin	FETU	6
7/01/16	10:25AM	Henry Estrada	FETU	6

Maximo Work Order Number: 16611581 Project Type: ☐ Maintenance (MA) ☐ Deferred Maintenance ☐ Bond (specify: K,R,Y,Q) ☑ Other: AHERA

FETU USE ONLY

FETU REVIEWED BY: Robert Estrada RUSH? ☐ Yes ☒ No APPROVAL:

FETU REVIEW DATE: 7/1/16 POINT COUNT? ☐ Yes ☐ No PT. CT. RUSH? ☐ Yes ☐ No APPROVAL:

Rev. 9/2010

Los Angeles Unified School District
Facilities Services Division Laboratory
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sample Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLAP LAB# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 07/01/2016

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2016070024	LN	07/08/2016	005DAT : ADMIN/CLSRM, LIBRARY CENTER	NON-HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DUCT TAPE; COATED MATERIAL	0	0	0	0	0	0	0	50% SYNTHETIC BINDER
2016070025	LN	07/08/2016	005DAT : ADMIN/CLSRM. TEACHERS WORK RM CENTER	NON-HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DUCT TAPE; COATED MATERIAL	0	0	0	0	0	0	0	50% SYNTHETIC BINDER
2016070026	LN	07/08/2016	005DAT : ADMIN/CLSRM. NURSES OFC. CENTER	NON-HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DUCT TAPE; COATED MATERIAL	0	0	0	0	0	0	0	50% SYNTHETIC BINDER
2016070027	LN	07/08/2016	006DAT : CLSRM. BLDG. RM. 10 CENTER	NON-HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DUCT TAPE; COATED MATERIAL	0	0	0	0	0	0	0	50% SYNTHETIC BINDER
2016070028	LN	07/08/2016	006DAT : CLSRM. BLDG. RM. 9 CENTER	NON-HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DUCT TAPE; COATED MATERIAL	0	0	0	0	0	0	0	50% SYNTHETIC BINDER
2016070029	LN	07/08/2016	006DAT : CLSRM. BLDG. RM. 3 CENTER	NON-HOMOGENEOUS; NON-FRIABLE; OFF WHITE; DUCT TAPE; COATED MATERIAL	0	0	0	0	0	0	0	50% SYNTHETIC BINDER

Lab Supervisor Signature and Date: Riley Riggelhof MohdSuldi 7/11/16

Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
NA: Not Applicable. "Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
This report relates to only the material tested. An asterisk '*' indicates preliminary results.

This report is not used by LAUSD to claim product endorsement by NVLAP or any agency of the U.S. Government.
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32nd Street Visual and Performing Arts Magnet School (7137)

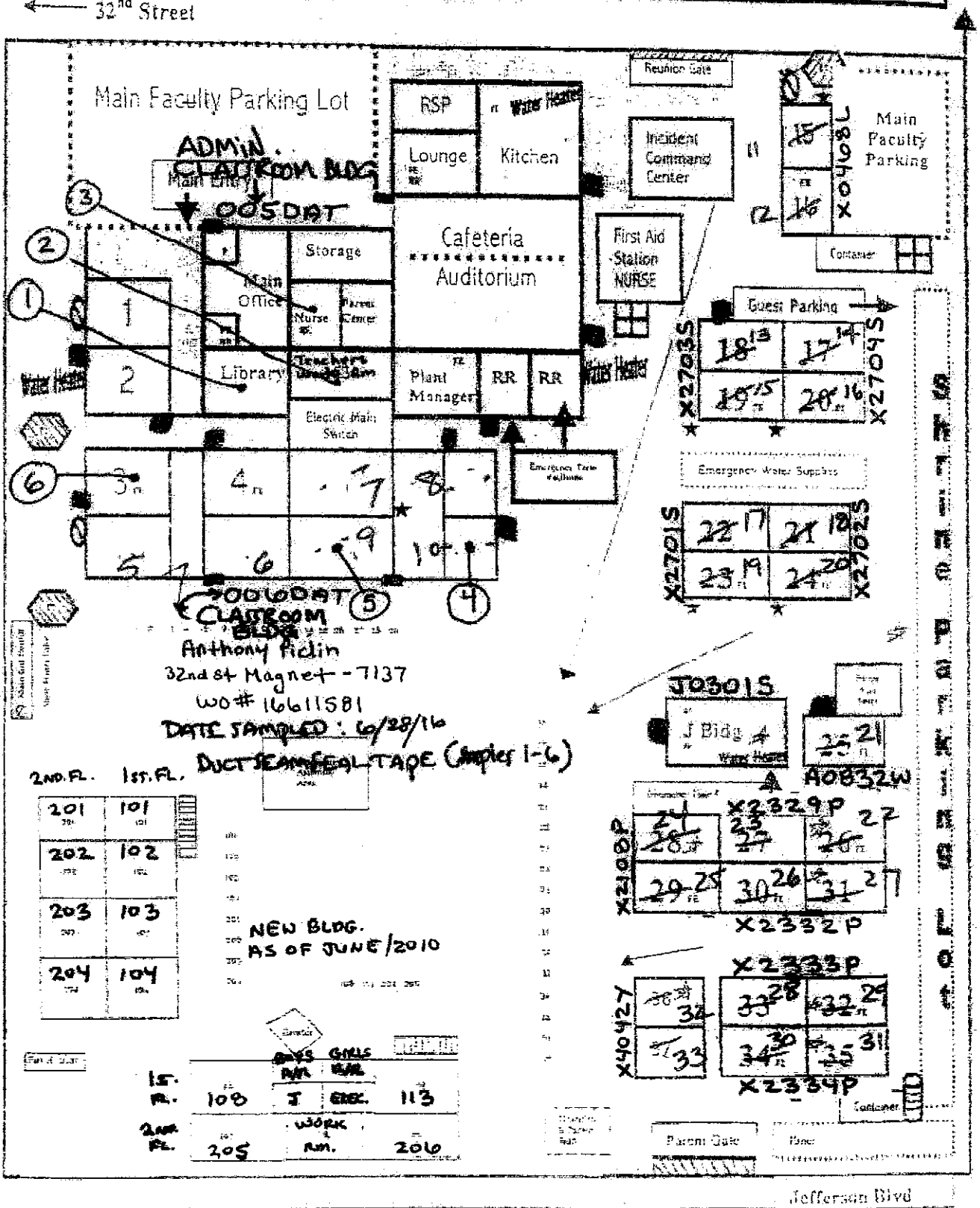
USC/MaST High School

Principal Mrs. Lavern H. Brunt

822 W. 32nd Street Los Angeles, CA 90007 Phone: 213/748 – 0126 FAX: 323/744-1508

Emergency Information Map

* New room #s (Feb)



LOS ANGELES UNIFIED SCHOOL DISTRICT
OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY
CHAIN-OF-CUSTODY FOR BULK ANALYSIS

P.09/11

E NAME: 32nd STREET E.S. (MAGNET) CODE: 7137 PROJECT: FIRE ALARM PROJECT 23177

MPLED BY: J. TAYAO DEPT / CONSULTANT: ACC TEL. NO.: (213) 353-1240 DATE SAMPLED: 5/10/06

In all information legibly and precisely. Sampler should make a copy before submitting samples to the lab. USE BLACK/BLUE INK ONLY.
ginal to OEHS lab with samples. Results and a copy of the Chain of Custody with sample numbers will be submitted to ATU when completed.

TO 3531244

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (CIRCLE ONE)
0605-0886	13	7173-38	3/3 UNIT RELOCATABLE	RM. 38	SOUTH	DRYWALL WALLS W/ NO J.C. BEHIND	YES (NO)
0605-0887	14	↓	↓	RM. 38	SW	FIBERBOARD	YES (NO)
0605-0888	15	↓	↓	RM. 39	SE	↓	YES (NO)
0605-0889	16	OOSTAT	ADMIN. CLASSROOM BLDG	MAIN OFFICE - CEILING SPACE	NW	POPPING DEBRIS	YES (NO)
0605-0890	17				NW ADJACENT	↓	YES (NO)
0605-0891	18				NW CENTER		YES (NO)
0605-0892	19				NW	DRYWALL DEBRIS	YES (NO)
0605-0893	20				NW ADJACENT	↓	YES (NO)
0605-0894	21			↓	NW CENTER	↓	YES (NO)
0605-0895	22			HOT WATER HEATER ROOM	EAST	SANDBLASTER WALLS	YES (NO)
0605-0896	23			↓	SOUTH	↓	YES (NO)
0605-0897	24	↓	↓	↓	WEST	↓	YES (NO)

FROM

TE:	TIME:	NAME (PRINT & SIGN):	DEPT/AREA/CONSULTANT:	NO. OF SAMPLES:
11/06	1:30 PM	J. TAYAO	ACC	12
1/06	1:30 p.m.	Brenda Davidson / Brenda Davidson	OEHS	12

15:41

MAY-16-2006

Bond Funded: ~~Yes~~ / No
Type of Bond: SME
Job Cost #: 23.0411.0

Other Than Bond Describe
Maintenance & Operations:
Deferred Maintenance:
Other:

Los Angeles Unified ... ool District
Office of Environmental Health and Safety
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk Sa... Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVLA ...3# 101505-0
Method EPA/600/R-93/116(...D) July 1993
Date Received: 05/11/2006

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2006050886	NLI	05/15/2006	7173-38 : 2/3 UNIT RELOC. RM. 38 S	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY W/ PAPER	0	0	0	0	0	0	0	10% CELLULOSE GYPSUM
2006050887	NLI	05/15/2006	7173-38 : 2/3 UNIT RELOC. RM. 38 SW	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY W/ PAPER	0	0	0	0	0	0	0	10% CELLULOSE GYPSUM
2006050888	NLI	05/15/2006	7173-38 : 2/3 UNIT RELOC. RM. 39 SE	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; CHALKY W/ PAPER	0	0	0	0	0	0	0	10% CELLULOSE GYPSUM
2006050889	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. MAIN OFC. CEILING SPACE NW	NON-HOMOGENEOUS; NON-FRIABLE; BLACK; ROOFING; DEBRIS	5	0	0	0	0	0	5	1% CELLULOSE ROCK, TAR
2006050890	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. MAIN OFC. CEILING SPACE NW ADJACENT	NON-HOMOGENEOUS; NON-FRIABLE; BLACK; ROOFING; DEBRIS	<1	0	0	0	0	0	<1	1% CELLULOSE ROCK, TAR COMMENT(S): CONFIRMED BY RC
2006050891	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. MAIN OFC. CEILING SPACE NW CTR.	NON-HOMOGENEOUS; NON-FRIABLE; BLACK; ROOFING; DEBRIS	1	0	0	0	0	0	1	1% CELLULOSE ROCK, TAR
2006050892	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. MAIN OFC. CEILING SPACE NW	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; DEBRIS	0	0	0	0	0	0	0	10% CELLULOSE, 2% FIBERGLASS DEBRIS, GYPSUM
2006050893	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. MAIN OFC. CEILING SPACE NW ADJACENT	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; DEBRIS	0	0	0	0	0	0	0	10% CELLULOSE, 2% FIBERGLASS DEBRIS, GYPSUM
2006050894	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. MAIN OFC. CEILING SPACE NW CTR.	NON-HOMOGENEOUS; NON-FRIABLE; WHITE; DRYWALL; DEBRIS	0	0	0	0	0	0	0	10% CELLULOSE, 2% FIBERGLASS DEBRIS, GYPSUM

Lab Supervisor Signature and Date: 5/16/06

Signature of Analyst:

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
"Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
This report relates to only the material tested. An asterisk "*" indicates preliminary results.

This report is not used by LAUSD to claim product endorsement by NVLAP or any agency of the U.S. Government.
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Los Angeles Unifie[illegible]ool District
Office of Environmental Health and Safety
1449 S. San Pedro St.
Los Angeles, CA 90015
(213)745-1138

Asbestos Bulk S[illegible] Analysis
Laboratory Report

THIRTY-SECOND ST MAG
7137

NVL[illegible] B# 101505-0
Method EPA/600/R-93/116(MOD) July 1993
Date Received: 05/11/2006

LAUSD Lab#	MIC	Date Analyzed	BUILDING/AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	CROC %	TREM %	ACT %	ANTH %	TOTAL %	MATERIAL BACKGROUND
2006050895	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. HOT WATER HEATER RM. E	NON-HOMOGENEOUS; NON-FRIABLE; BEIGE/ OFF WHITE; SAND PLASTER; COATED/ GRANULAR	0	0	0	0	0	0	0	CALCITE, GYPSUM, PAINT, QUARTZ
2006050896	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. HOT WATER HEATER RM. S	NON-HOMOGENEOUS; NON-FRIABLE; BEIGE/ OFF WHITE; SAND PLASTER; COATED/ GRANULAR	0	0	0	0	0	0	0	CALCITE, GYPSUM, PAINT, QUARTZ
2006050897	NLI	05/15/2006	005DAT : ADMIN. CLASS BLDG. HOT WATER HEATER RM. W	NON-HOMOGENEOUS; NON-FRIABLE; BEIGE/ OFF WHITE; SAND PLASTER; COATED/ GRANULAR	0	0	0	0	0	0	0	CALCITE, GYPSUM, PAINT, QUARTZ

Lab Supervisor Signature and Date: [illegible] 5/16/06

Signature of Analyst: [illegible]

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%
"Quantification done by optical estimate" 1 - 5 % considered non-quantifiable.
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This report may not be reproduced except in its entirety.

Sierra Madre, CA 91024
(626)355-4711
(626)355-4497 FAX

Preliminary Analytical Results - by Point Counting X 1000 Pts. ___ 400 Pts.

To: MARTHA M
From: Guillermo Hernandez
Total # of pages: ___
Client Job # 0605/0889-0891
32nd ST. ES (F.A.P.)

Of: LAUSD
Date 5-30-06 Time ___
Urgent! Please deliver as soon as possible.
Hygeia Ref. # 162306060347
Original Hygeia Ref. # ___

Client ID #	Hygeia ID #	Asbestos % Chrysotile	Amosite	Crocidolite	Other	Non Detected	Comments
0605-0889	10179331	7.0					
-0890	34						Not Analyzed
-0891	35						" "

Preliminary results are subject to management review.

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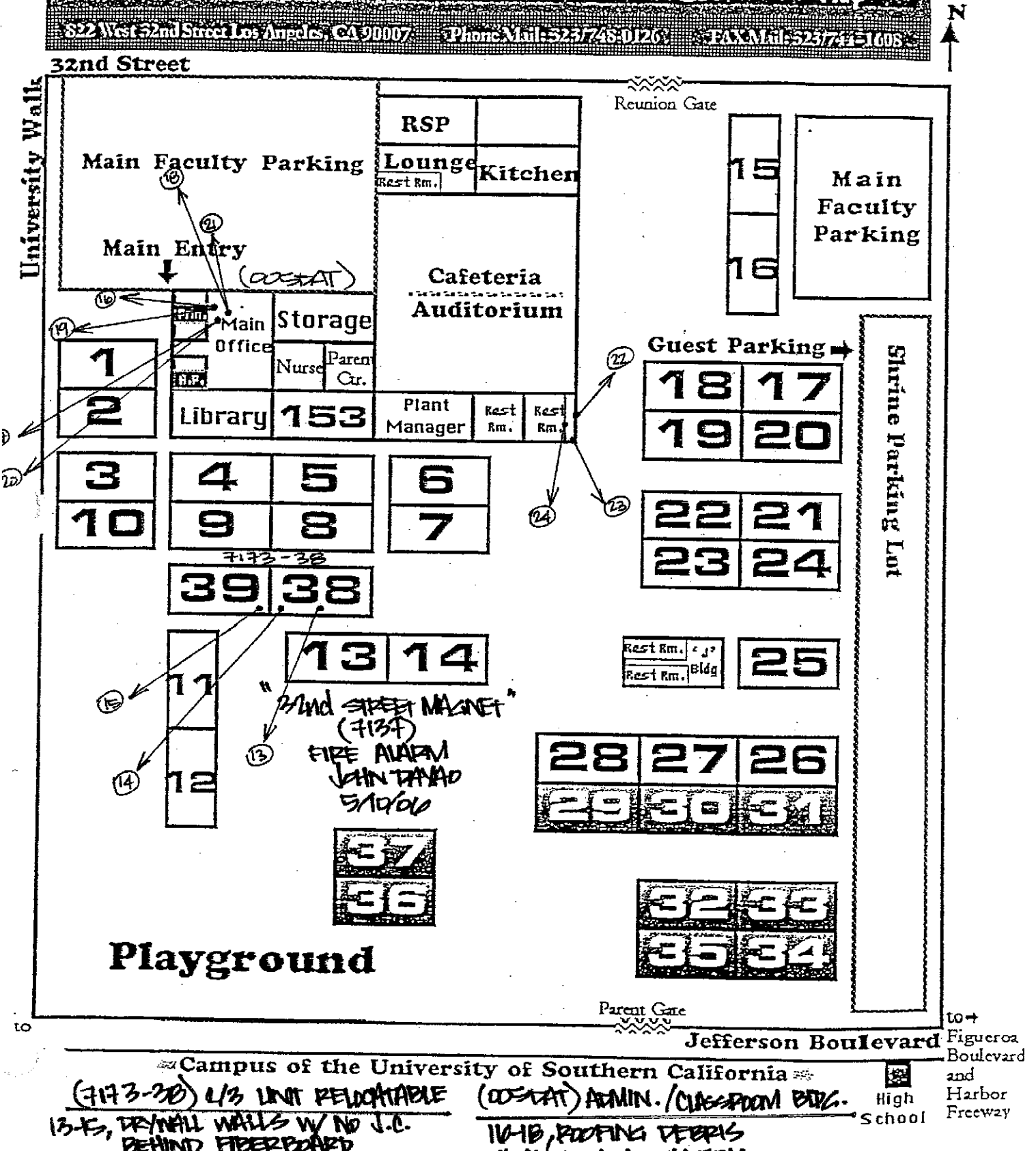
32nd Street /USC Magnet School K-8
(Visual and Performing Arts) School
USC / MaST High School 9-12 Information
Gail Greer Principal (Math, Science and Technology) Map

822 West 32nd Street Los Angeles, CA 90007 Phone Mail:323/748-0126 FAX Mail:323/741-1608



(7173-38) 4/3 UNIT RELOCATABLE
13-15, DRYWALL WALLS W/ NO J.C. BEHIND FIBERBOARD

(OOSTAT) ADMIN./CLASSROOM BLDG.
16-18, ROOFING DEBRIS
19-21, DRYWALL DEBRIS
11-24, SANDPLASTER WALLS

ASBESTOS BULK SAMPLE SUBMITTAL

SITE NAME: 32nd St CODE: 7137 PROJECT: Interior & Exterior Painting

SAMPLED BY: Laura Taguba, Steve Weatherton, Rodney Stansfield, Norman Else DEPT.: Converse TEL. NO.: 626-930-1200 DATE SAMPLED: 4/8/02

Fill in all information Legibly and Precisely. Sampler should make a copy before submitting to the lab. **BLACK INK ONLY** (Rev. 5/01)

Original to OEHS lab with samples. Lab will FAX a copy to ATU with sample numbers. Results sheet to be FAXED to ATU when completed.

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (CIRCLE)
• 0204-0963	31	006 DAT	Classroom Bldg	Exterior	South-Center	Exterior Stucco	YES (NO)
• 0204-0964	32	↓	↓	↓	NW Corner	↓	YES (NO)
• 0204-0965	33	↓	↓	↓	SE Corner	↓	YES (NO)
0204-0966	34	↓	↓	Room 5	SE Corner	Base board Mastic	YES (NO)
0204-0967	35	↓	↓	East Hallway	SE corner East Hallway	↓	YES (NO)
0204-0968	36	↓	↓	Room 3	↓	↓	YES (NO)
							YES NO
				Nothing Follows			YES NO
							YES NO
							YES NO

CHAIN OF CUSTODY:

DATE:	TIME:	NAME: PRINT AND SIGN	DEPARTMENT/AREA	NO. OF SAMPLES:
4/9/02	1600	Steve Weatherton	Converse	6
4/9/02	1600	Sean Te	OEHS	6

Los Angeles Unified School District
Environmental Health and Safety Branch
1449 S. San Pedro St.
Los Angeles, CA 90015
(213) 742-5086

ASBESTOS BULK SAMPLE ANALYSIS
LABORATORY REPORT
THIRTY-SECOND ST MAG
7137

METHOD EPA/600/R-93/116 (MOD) JULY 1993
Date Received: 4/9/02

LAUSD Lab#	MIC	Date Analyzed	BUILDING / AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	OTH %	TOTAL %	MATERIAL BACKGROUND
0204-0963	MS	4/12/02	006DAT,CLSSRM BLD,EXTR / SOUTH CENTER	NON-HOMOGENEOUS, NON-FRIABLE, GRAY/PEACH, EXTERIOR STUCCO, GRANULAR	<1	0	0	<1	CELLULOSE <1%, QUARTZ, CARBONATES, PAINT
0204-0964	MS	4/12/02	006DAT,CLSSRM BLD,EXTR / NORTH/WEST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, GRAY/PEACH, EXTERIOR STUCCO, GRANULAR	<1	0	0	<1	CELLULOSE <1%, QUARTZ, CARBONATES, PAINT
0204-0965	MS	4/12/02	006DAT,CLSSRM BLD,EXTR / SOUTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, GRAY/PEACH, EXTERIOR STUCCO, GRANULAR	<1	0	0	<1	CELLULOSE <1%, QUARTZ, CARBONATES, PAINT
0204-0966A	MS	4/12/02	006DAT,CLSSRM BLD,RM#5 / SOUTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, BROWN, BASEBOARD, RESIN-LIKE	0	0	0	0	CELLULOSE <1%, GLUE
0204-0966B	MS GS	4/12/02	006DAT,CLSSRM BLD,RM#5 / SOUTH/EAST CORNER	HOMOGENEOUS, NON-FRIABLE, OFFWHITE, MUD, POWDERY	<1 DRYWALL	0	0	<1	CELLULOSE <1%, CARBONATES
0204-0967A	MS	4/12/02	006DAT,CLSSRM BLD,EAST HALLWY / SOUTH/EAST CORNER EAST HALLWY	NON-HOMOGENEOUS, NON-FRIABLE, BROWN, BASEBOARD, RESIN-LIKE	0	0	0	0	CELLULOSE <1%, GLUE
0204-0967B	MS GS	4/12/02	006DAT,CLSSRM BLD,EAST HALLWY / SOUTH/EAST CORNER EAST HALLWY	HOMOGENEOUS, NON-FRIABLE, OFFWHITE, MUD, POWDERY	<1 DRYWALL	0	0	<1	CELLULOSE <1%, CARBONATES
0204-0968A	MS	4/12/02	006DAT,CLSSRM BLD,RM#3 / SOUTH/EAST CORNER EAST HALLWY	HOMOGENEOUS, NON-FRIABLE, BROWN, BASEBOARD, RESIN-LIKE	0	0	0	0	CELLULOSE <1%, GLUE
0204-0968B	MS GS	4/12/02	006DAT,CLSSRM BLD,RM#3 / SOUTH/EAST CORNER EAST HALLWY	HOMOGENEOUS, NON-FRIABLE, OFFWHITE, MUD, POWDERY	<1 DRYWALL	0	0	<1	CELLULOSE <1%, CARBONATES

Signature of Lab Supervisor: _____ Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%.
"Quantification done by optical estimate" 1 - 5% considered non-quantifiable.
This report relates to only the material tested.
This report is not used by the LAUSD/EHSB to claim product endorsement by NVLAP or any agency of the U.S. government.
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Hygeia Laboratories Inc.

2 W. Sierra Madre Blvd
Sierra Madre, CA 91024-2434
(626) 355-4711 (626) 355-4497 Fax

NIST / NVLAP Lab Code No. 102116-0
California ELAP Certificate No. 1269
New York ELAP Certificate No. 11017

Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116 Point Count - 1000 Points

April 27, 2002

Mr. Steve Weatherton
Converse Consultants
222 E. Huntington Dr., STE 211
Monrovia, CA 91016

Samples Analyzed: 3
Sampler: L.T./S.W./R.S./N.E.

Hygeia Reference No.: 80060 02 0121
DateCollected: April 8, 2002
Date Received: April 19, 2002
Date Analyzed: April 26, 2002

Client Reference: 02-41-162-01 LAUSD 32nd St.

Client Sample ID Hygeia Sample ID	Sample Description *Comments*	Detection Limit	Gravimetric Reduction	Analytical Results
0204-0963 748073	Exterior stucco	0.06%	7% organic 34% acid soluble	<0.1% chrysotile
0204-0964 748074	Exterior stucco	0.06%	10% organic 31% acid soluble	<0.1% chrysotile
0204-0965 748075	Exterior stucco	0.06%	6% organic 29% acid soluble	<0.1% chrysotile

Microscopist - Rafik Vartanian, Ph.D.

The analyses of the samples in this report were performed using gravimetric matrix reduction and polarized light microscopy (PLM) in accordance with the EPA method 600/R-93/116 July 1993. The asbestos concentration was determined using the semi-quantitative point count method. On a per sample basis, the accuracy and precision of point count results are not known. The result should lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory using the point count method. The limit of detection for this analytical method is 0.25 percent using 400 points and 0.10 percent using 1000 points (visual area estimates).

Hygeia recommends trasmission electron microscopy (TEM) analysis on organically bound bulk materials (eg., vinyl floor tile, mastics, roofing materials, joint compounds) when PLM analysis shows undetectable quantities of asbestos. These materials often contain milled asbestos with fiber diameters and lengths too small to be resolved by the PLM and the analysis may yield a false negative result.

Hygeia Laboratories Inc. is accredited under the NIST/NVLAP program for asbestos in bulk material by polarized light microscopy and the State of California for asbestos analysis.

Hygiea Laboratories Inc. and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analyses only. This report must not be used to claim product endorsement by NVLAP or any agency of the US Government. Hygeia will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.

Please feel free to contact Hygiea regarding any questions about these results, this report, or the analytical methods employed.

Arturo Casas - Supervisor of Optical Microscopy

Gustavo A. Delgado, Ph.D. - Director

ASBESTOS BULK S[illegible]MPLE SUBMITTAL

SITE NAME: 32nd St CODE: 7137 PROJECT: Interior & Exterior Painting

SAMPLED BY: Laura Tanaka, Steve Weatherton, Rodney Starnfield, Norman Eke DEPT.: Converse TEL. NO.: 626-930-1200 DATE SAMPLED: 4/8/02

Fill in all information Legibly and Precisely. Sampler should make a copy before submitting to the lab. **BLACK INK ONLY** (Rev. 5/01)

Original to OEHS lab with samples. Lab will FAX a copy to ATU with sample numbers. Results sheet to be FAXED to ATU when completed.

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (CIRCLE)
0204-0969	37	005DAT	Admin & Classroom	Auditorium	SE Corner	Sand. Plaster Walls	YES (NO)
0204-0970	38	↓	↓	Storage Room (Auditorium)	↓	↓	YES (NO)
0204-0971	39	↓	↓	(SW) Auditorium	NE Corner	↓	YES (NO)
0204-0972	40	↓	↓	Faculty Dining	↓	↓	YES (NO)
0204-0973	41	↓	↓	Auditorium	SW Corner	Baseboard Mastic	YES (NO)
0204-0974	42	↓	↓	↓	West Center	↓	YES (NO)
0204-0975	43	↓	↓	↓	SE Corner	↓	YES (NO)
0204-0976	44	↓	↓	Kitchen	NE Corner	Smooth Plaster Walls	YES (NO)
0204-0977	45	↓	↓	↓	SE Corner	↓	YES (NO)
0204-0978	46	↓	↓	Auditorium	South Wall Auditorium	Plaster Patch Material	YES (NO)

CHAIN OF CUSTODY:

DATE:	TIME:	NAME: PRINT AND SIGN	DEPARTMENT/AREA	NO. OF SAMPLES:
4/4/02	1600	Steve Weatherton	Converse	10
4/9/02	1600	SEQUA TO FED EX	OBTS	10

Environmental Health and Safety Branch
1449 S. San Pedro St.
Los Angeles, CA 90015
(213) 742-5086

LABORATORY REPORT
THIRTY-SECOND ST MAG
7137

METHOD EPA/600/R-93/116 (MCD) JULY 1993
Date Received: 4/9/02

LAUSD Lab#	MIC	Date Analyzed	BUILDING / AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	OTH %	TOTAL %	MATERIAL BACKGROUND
0204-0969	MS	4/12/02	005DAT, ADM/CLSRM, AUDIT / SOUTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, LITE BROWN, PLASTER WALL, GRANULAR	0	0	0	0	<1% CELLULOSE, PAINT, QUARTZ
0204-0970	MS	4/12/02	005DAT, ADM/CLSS, STRG.RM/AUD / SOUTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, LITE BROWN, PLASTER WALL, GRANULAR	0	0	0	0	<1% CELLULOSE, PAINT, QUARTZ
0204-0971	MS	4/12/02	005DAT, ADM/CLSRM, AUDIT / NORTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, LITE BROWN, PLASTER WALL, GRANULAR	0	0	0	0	<1% CELLULOSE, PAINT, QUARTZ
0204-0972	MS	4/12/02	005DAT, ADM/CLSRM, FAC. DINING / NORTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, LITE BROWN, PLASTER WALL, GRANULAR	0	0	0	0	<1% CELLULOSE, PAINT, QUARTZ
0204-0973	MS	4/12/02	005DAT, ADM/CLSRM, AUDIT / SOUTH/WEST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, BROWN, BASE W/MASTIC, RESIN-LIKE	0	0	0	0	<1% CELLULOSE, GLUE, QUARTZ
0204-0974	MS	4/12/02	005DAT, ADM/CLSRM, AUDIT / WEST/CENTER	NON-HOMOGENEOUS, NON-FRIABLE, BROWN, BASE W/MASTIC, RESIN-LIKE	0	0	0	0	<1% CELLULOSE, GLUE, QUARTZ
0204-0975	MS	4/12/02	005DAT, ADM/CLSRM, AUDIT / SOUTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, BROWN, BASE W/MASTIC, RESIN-LIKE	0	0	0	0	<1% CELLULOSE, GLUE, QUARTZ
0204-0976	MS	4/12/02	005DAT, ADM/CLSRM, KTCHN / NORTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, LITE BROWN, PLASTER WALL, GRANULAR	0	0	0	0	<1% CELLULOSE, PAINT, QUARTZ
0204-0977	MS	4/12/02	005DAT, ADM/CLSRM, KTCHN / SOUTH/EAST CORNER	NON-HOMOGENEOUS, NON-FRIABLE, LITE BROWN, PLASTER WALL, GRANULAR	0	0	0	0	<1% CELLULOSE, PAINT, QUARTZ
0204-0978	MS	4/12/02	005DAT, ADM/CLSRM, AUDIT / SOUTH WALL AUDITORIUM	NON-HOMOGENEOUS, NON-FRIABLE, OFF WHITE, PLASTER, POWDERY	0	0	0	0	<1% CELLULOSE, PAINT, CARBONATES

Signature of Lab Supervisor: _____ Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%.
"Quantification done by optical estimate" 1 - 5% considered non-quantifiable.
This report relates to only the material tested.
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This report may not be reproduced except in its entirety.

ASBESTOS BULK SAMPLE SUBMITTAL

SITE NAME: 32nd St. USC PERF. ARTS CODE: 7137 PROJECT: 00195A2-072 T-BAR

SAMPLED BY: AHMAD ABDOLLAHIAN DEPT.: GeoTek TEL. NO.: (714) 543-4223 DATE SAMPLED: 12/13/01

Fill in all information Legibly and Precisely. Sampler should make a copy before submitting to the lab. **BLACK INK ONLY** (Rev. 5/01)

Original to OEHS lab with samples. Lab will FAX a copy to ATU with sample numbers. Results sheet to be FAXED to ATU when completed.

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (CIRCLE)
0112-0549	1-01	005 DAT	Admin Bldg	1	NW corner above ceiling	Drywall	(YES) NO
0112-0550	1-02	005 DAT	↓	2	NE corner above ceiling	↓	(YES) NO
0112-0551	1-03	↓	↓	Storage Rm in Library	NW corner above ceiling	↓	(YES) NO
0112-0552	2-01	005 DAT	Admin Bldg	1	NW corner above ceiling	Mud joint	YES (NO)
0112-0553	2-02	005 DAT	↓	2	NE corner above ceiling	↓	YES (NO)
0112-0554	2-03	↓	↓	Storage Rm in Library	NW corner above ceiling	↓	YES (NO)
0112-0555	3-01	005 DAT	Admin Bldg	Storage Rm in Library	NW corner above ceiling	ceiling tile mastic	YES (NO)
0112-0556	3-02	↓	↓	Storage	SW corner above ceiling	↓	YES (NO)
0112-0557	3-03	↓	↓	Main office Computer room	SW corner above ceiling	↓	YES (NO)
							YES NO

CHAIN OF CUSTODY:

DATE:	TIME:	NAME: PRINT AND SIGN	DEPARTMENT/AREA	NO. OF SAMPLES:
12/14/01	3:20 pm	Ahmad Abdollahian/AAbdollahian	GeoTek	9
12/14/01	3:20	SEYRA TE Seyra TE	OEHS	9

Los Angeles Unified School District
Environmental Health and Safety Branch
1449 S. San Pedro St.
Los Angeles, CA 90015
(213) 742-5086

ASBESTOS BULK SAMPLE ANALYSIS
LABORATORY REPORT
THIRTY-SECOND ST MAG
7137

NVLAP #1505
METHOD EPA/600/R-93/116 (MOD) JULY 1993
Date Received: 12/14/01

LAUSD Lab#	MIC	Date Analyzed	BUILDING / AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	OTH %	TOTAL %	MATERIAL BACKGROUND
0112-0549A	LN	12/18/01	005DAT, ADMIN.BLDG., 1 / N.W.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, FRIABLE, WHT, DRYWALL, MUD	2	0	0	2	CARBONATES, PAINT
0112-0549B	LN	12/18/01	005DAT, ADMIN.BLDG., 1 / N.W.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, FRIABLE, WHT, DRYWALL, CHALKY W/PAPER	0	0	0	0	CELLULOSE 20%, FIBERGLASS 2%, GYPSUM
0112-0550A	LN	12/18/01	005DAT, ADMIN.BLDG., 2 / N.E.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, FRIABLE, WHT, DRYWALL, MUD	2	0	0	2	CARBONATES, PAINT
0112-0550B	LN	12/18/01	005DAT, ADMIN.BLDG., 2 / N.E.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, FRIABLE, WHT, DRYWALL, CHALKY W/PAPER	0	0	0	0	CELLULOSE 20%, FIBERGLASS 2%, GYPSUM
0112-0551A	LN	12/18/01	005DAT, AD.BLDG., STRG.RM.LIBR / N.W.CORNER ABOVE CEIL.	HOMOGENEOUS, FRIABLE, WHT, DRYWALL, MUD	2	0	0	2	CARBONATES
0112-0551B	LN	12/18/01	005DAT, AD.BLDG., STRG.RM.LIBR / N.W.CORNER ABOVE CEIL.	HOMOGENEOUS, FRIABLE, WHT, DRYWALL, CHALKY W/PAPER	0	0	0	0	CELLULOSE 20%, FIBERGLASS 2%, GYPSUM
0112-0552	LN	12/18/01	005DAT, AD.BLDG., 1 / N.W.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, NON-FRIABLE, WHT, JOINT COMPOUND, MUD	3	0	0	3	CARBONATES, PAINT
0112-0553	LN	12/18/01	005DAT, AD.BLDG., 2 / N.E.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, NON-FRIABLE, WHT, JOINT COMPOUND, MUD	3	0	0	3	CARBONATES, PAINT
0112-0554	LN	12/18/01	005DAT, AD.BLDG., STRG.RM.LIBR / N.W.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, NON-FRIABLE, WHT, JOINT COMPOUND, MUD	2	0	0	2	CARBONATES, PAINT
0112-0555A	LN	12/18/01	005DAT, AD.BLDG., STRG.RM.LIBR / N.W.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE, FIBROUS	0	0	0	0	CELLULOSE 60%, PAINT
0112-0555B	LN	12/18/01	005DAT, AD.BLDG., STRG.RM.LIBR / N.W.CORNER ABOVE CEIL.	HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE/MASTIC, SOLID	0	0	0	0	ADHESIVE

Signature of Lab Supervisor: Signature of Analyst:

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%.
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Los Angeles Unified School District
Environmental Health and Safety Branch
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Los Angeles, CA 90015
3) 742-5086

ASBESTOS BULK SAMPLE ANALYSIS
LABORATORY REPORT
THIRTY-SECOND ST MAG
7137

NVLAP #1505
METHOD EPA/600/R-93/116 (MOD) JULY 1993
Date Received: 12/14/01

LAUSD Lab#	MIC	Date Analyzed	BUILDING / AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	OTH %	TOTAL %	MATERIAL BACKGROUND
0112-0555C	LN	12/18/01	005DAT, AD.BLDG., STRG.RM.LIBR / N.W.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, NON-FRIABLE, WHT, MUD, MUD	2	0	0	2	PAINT, CARBONATES
0112-0556A	LN	12/18/01	005DAT, AD.BLDG., STRG. / S.W.CORNER ABOVE CEIL.	NON-HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE/MASTIC, FIBROUS	0	0	0	0	CELLULOSE 60%, PAINT
0112-0556B	LN	12/18/01	005DAT, AD.BLDG., STRG. / S.W.CORNER ABOVE CEIL.	HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE/MASTIC, SOLID	0	0	0	0	ADHESIVE
0112-0557A	LN	12/18/01	005DAT, AD.BLDG., MAIN OFC. / COMP.RM.,S.W.CORNR ABOVE CLG	NON-HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE/MASTIC, FIBROUS	0	0	0	0	CELLULOSE 60%, PAINT
0112-0557B	LN	12/18/01	005DAT, AD.BLDG., MAIN OFC. / COMP.RM.,S.W.CORNR ABOVE CLG	HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE/MASTIC, SOLID	0	0	0	0	ADHESIVE

Signature of Lab Supervisor: S Galoustian Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%.
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Hygeia Laboratories Inc.
82 W. Sierra Madre Blvd
Sierra Madre, CA 91024-2434
(626) 355-4711 (626) 355-4497 Fax

NIST / NVLAP Lab Code No. 102116-0
California ELAP Certificate No. 1269
New York ELAP Certificate No. 11017

Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116 Point Count - 1000 Points

January 15, 2002

Ms. Greta Galoustian
LA Unified School District
1449 S. San Pedro
Los Angeles, CA 90015
0112-0549-0552 & 0554-0555 32nd St.

Samples Analyzed: 5
Sampler: A. Abdollahian

Hygeia Reference No.: **71089 01 0821**
DateCollected: December 13, 2001
Date Received: December 20, 2001
Date Analyzed: January 12, 2002

Client Sample ID / Hygeia Sample ID	Sample Description / *Comments*	Detection Limit	Gravimetric Reduction	Analytical Results
0112-0549 711372p	Drywall	0.03%	37% organic 34% acid soluble	<0.1% chrysotile
0112-0550 711373p	Drywall	0.03%	34% organic 35% acid soluble	<0.1% chrysotile
0112-0551 711374p	Drywall	0.03%	29% organic 41% acid soluble	<0.1% chrysotile
0112-0552 711375p	Mud joint	0.01%	8% organic 81% acid soluble	0.2% chrysotile
0112-0554 711376p	Mud joint	0.02%	12% organic 66% acid soluble	0.24% chrysotile

Microscopist - Guillermo Hernandez

The analyses of the samples in this report were performed using gravimetric matrix reduction and polarized light microscopy (PLM) in accordance with the EPA method 600/R-93/116 July 1993. The asbestos concentration was determined using the semi-quantitative point count method. On a per sample basis, the accuracy and precision of point count results are not known. The result should lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory using the point count method. The limit of detection for this analytical method is 0.25 percent using 400 points and 0.10 percent using 1000 points (visual area estimates).

Hygeia recommends trasmission electron microscopy (TEM) analysis on organically bound bulk materials (eg., vinyl floor tile, mastics, roofing materials, joint compounds) when PLM analysis shows undetectable quantities of asbestos. These materials often contain milled asbestos with fiber diameters and lengths too small to be resolved by the PLM and the analysis may yield a false negative result.

Hygeia Laboratories Inc. is accredited under the NIST/NVLAP program for asbestos in bulk material by polarized light microscopy and the State of California for asbestos analysis.

Hygiea Laboratories Inc. and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liablility shall extend to providing replicate analyses only. This report must not be used to claim product endorsement by NVLAP or any agency of the US Government. Hygeia will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.

Please feel free to contact Hygiea regarding any questions about these results, this report, or the analytical methods employed.

Arturo Casas - Supervisor of Optical Microscopy

Gustavo A. Delgado, Ph.D. - Director

ASBESTOS BULK SAMPLE SUBMITTAL

SITE NAME: 32nd St. USC PERF. ARTS CODE: 7137 PROJECT: 00195A2-072 T-BAR
SAMPLED BY: AHMAD ABDOLLAHIAN DEPT.: GeoTek TEL. NO.: (714) 543-4223 DATE SAMPLED: 12/13/01

Fill in all information Legibly and Precisely. Sampler should make a copy before submitting to the lab. **BLACK INK ONLY** (Rev. 5/01)

Original to OEHS lab with samples. Lab will FAX a copy to ATU with sample numbers. Results sheet to be FAXED to ATU when completed.

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (CIRCLE)
0112-0568	7-01	006 DAT	classroom Bldg	Rm 4	wall #4	Drywall mud joint	(YES) NO
0112-0569	7-02	↓	↓	3	wall #1	↓	(YES) NO
0112-0570	7-03	↓	↓	10	wall #1	↓	(YES) NO
0112-0571	8-01	006 DAT	class bldg	hallway	NE corner of hallway	Ceiling tile mastic	YES (NO)
0112-0572	8-02	↓	↓	↓	NW corner of hallway	↓	YES (NO)
0112-0573	8-03	↓	↓	↓	SW corner of hallway	↓	YES (NO)
0112-0574	9-01	006 DAT	classroom bldg	hallway	NE corner of hallway	DRYWALL ~~Ceiling tile mastic~~ PP 12/18/01	YES (NO)
0112-0575	9-02	↓	↓	↓	NW corner of hallway	↓	YES (NO)
0112-0576	9-03	↓	↓	↓	SW corner of hallway	↓	YES (NO)
							YES NO

CHAIN OF CUSTODY:

DATE:	TIME:	NAME: PRINT AND SIGN	DEPARTMENT/AREA	NO. OF SAMPLES:
12/14/01	3:20 PM	Ahmad Abdollahian	GeoTek	9
12/14/01	3:20p	SEYKA TE	OEHS	9

Los Angeles Unified School District
Environmental Health and Safety Branch
1449 S. San Pedro St.
Los Angeles, CA 90015
3) 742-5086

ASBESTOS BULK SAMPLE ANALYSIS
LABORATORY REPORT
THIRTY-SECOND ST MAG
7137

NVLAP #1505
METHOD EPA/600/R-93/116 (MOD) JULY 1993
Date Received: 12/14/01

LAUSD Lab#	MIC	Date Analyzed	BUILDING / AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	OTH %	TOTAL %	MATERIAL BACKGROUND
0112-0568	EZM	12/18/01	006DAT, CLASS.BLDG., RM.4 / WALL4	HOMOGENEOUS, FRIABLE, OF WHT, DRYWALL/JNT COMPND, FLAT SOLID	<1	0	0	<1	BINDER
0112-0569	EZM	12/18/01	006DAT, CLASS.BLDG., RM.3 / WALL1	HOMOGENEOUS, FRIABLE, OF WHT, DRYWALL/JNT COMPND, FLAT SOLID	<1	0	0	<1	BINDER
0112-0570	EZM	12/18/01	006DAT, CLASS.BLDG., RM.10 / WALL1	HOMOGENEOUS, FRIABLE, OF WHT, DRYWALL/JNT COMPND, FLAT SOLID	<1	0	0	<1	BINDER
0112-0571	EZM LN	12/18/01	006DAT, CLASS.BLDG., HALL. / CORNER OF HALL.	HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE/MASTIC, GLUE	0	0	0	0	CELLULOSE 12%, BINDER
0112-0572	LN EZM	12/19/01	006DAT, CLASS.BLDG., HALL. / N.W.CORNER OF HALL.	NON-HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE/MASTIC, SOLID	<1	0	0	<1	CELL.20%,ADHES.,PAINT,CARBON., CHRYSATILE (POSITIVE IS IN MUD) *
2-0573	LN EZM	12/18/01	006DAT, CLASS.BLDG., HALL. / S.W.CORNER OF HALL.	HOMOGENEOUS, NON-FRIABLE, BRN, CEILING TILE/MASTIC, GLUE	0	0	0	0	CELLULOSE 12%, BINDER
0112-0574	LN	12/18/01	006DAT, CLASS.BLDG., HALL. / N.E.CORNER OF HALL.	HOMOGENEOUS, NON-FRIABLE, WHT, DRYWALL, CHALKY	1	0	0	1	CELLULOSE 15%, FIBERGLASS 3%, GYPSUM
0112-0575	LN	12/18/01	006DAT, CLASS.BLDG., HALL. / N.W.CORNER OF HALL.	HOMOGENEOUS, NON-FRIABLE, WHT, DRYWALL, CHALKY	0	0	0	0	CELLULOSE 15%, FIBERGLASS 3%, GYPSUM
0112-0576	LN	12/18/01	006DAT, CLASS.BLDG., HALL. / S.W.CORNER OF HALL.	HOMOGENEOUS, NON-FRIABLE, WHT, DRYWALL, CHALKY	1	0	0	1	CELLULOSE 15%, FIBERGLASS 3%, BINDER

Signature of Lab Supervisor: [signature] Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%.
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Hygeia Laboratories Inc.
82 W. Sierra Madre Blvd
Sierra Madre, CA 91024-2434
355-4711 (626) 355-4497 Fax

NIST / NVLAP Lab Code No. 102116-0
California ELAP Certificate No. 1269
New York ELAP Certificate No. 11017

Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116 Point Count - 1000 Points

January 15, 2002

Ms. Greta Galoustian
LA Unified School District
1449 S. San Pedro
Los Angeles, CA 90015
0112-0568-0570,0572,0574,0576 32nd St.

Samples Analyzed: 5
Sampler: A. Abdollahian

Hygeia Reference No.: **71089 01 0823**
DateCollected: December 13, 2001
Date Received: December 20, 2001
Date Analyzed: January 11, 2002

Client Sample ID Hygeia Sample ID	Sample Description *Comments*	Detection Limit	Gravimetric Reduction	Analytical Results
0112-0568 711381p	Drywall mud joint	0.01%	6% organic 87% acid soluble	0.35% chrysotile
0112-0569 711382p	Drywall mud joint	0.01%	11% organic 78% acid soluble	0.61% chrysotile
0112-0570 711383p	Drywall mud joint	0.01%	5% organic 89% acid soluble	0.31% chrysotile
0112-0574 711385p	Drywall	0.02%	18% organic 63% acid soluble	0.23% chrysotile
0112-0576 711386p	Drywall	0.02%	22% organic 62% acid soluble	0.14% chrysotile

Microscopist - Guillermo Hernandez

The analyses of the samples in this report were performed using gravimetric matrix reduction and polarized light microscopy (PLM) in accordance with the EPA method 600/R-93/116 July 1993. The asbestos concentration was determined using the semi-quantitative point count method. On a per sample basis, the accuracy and precision of point count results are not known. The result should lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory using the point count method. The limit of detection for this analytical method is 0.25 percent using 400 points and 0.10 percent using 1000 points (visual area estimates).

Hygeia recommends trasmission electron microscopy (TEM) analysis on organically bound bulk materials (eg., vinyl floor tile, mastics, roofing materials, joint compounds) when PLM analysis shows undetectable quantities of asbestos. These materials often contain milled asbestos with fiber diameters and lengths too small to be resolved by the PLM and the analysis may yield a false negative result.

Hygeia Laboratories Inc. is accredited under the NIST/NVLAP program for asbestos in bulk material by polarized light microscopy and the State of California for asbestos analysis.

Hygiea Laboratories Inc. and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liablility shall extend to providing replicate analyses only. This report must not be used to claim product endorsement by NVLAP or any agency of the US Government. Hygeia will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.

Please feel free to contact Hygiea regarding any questions about these results, this report, or the analytical methods employed.

Arturo Casas - Supervisor of Optical Microscopy

Gustavo A. Delgado, Ph.D. - Director

ASBESTOS BULK SAMPLE SUBMITTAL

SITE NAME: 32nd St. USC PERF. ARTS CODE: 7137 PROJECT: 00195A2-072 T-BAR
SAMPLED BY: AHMAD ABDOLLAHIAN DEPT.: GeoTek TEL. NO.: (714) 543-4223 DATE SAMPLED: 12/13/01

Fill in all information Legibly and Precisely. Sampler should make a copy before submitting to the lab. **BLACK INK ONLY** (Rev. 5/01)

Original to OEHS lab with samples. Lab will FAX a copy to ATU with sample numbers. Results sheet to be FAXED to ATU when completed.

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (CIRCLE)
0112-0577	10-1	006DAT	classroom bldg	hallway	NE corner of hallway	mud joint above ceiling	YES (NO)
0112-0578	10-2	↓	↓	↓	NW corner of hallway	↓	YES (NO)
0112-0579	10-3	↓	↓	↓	SW corner of hallway	↓	YES (NO)
0112-0580	11-01	A0832W	relocatable classroom	25	west side above ~~ceiling~~	drywall	(YES) NO
0112-0581	11-02	↓	↓	↓	north side above ceiling 12/13/01	↓	~~YES~~ NO
0112-0582	11-03	↓	↓	↓	south side above ceiling	↓	(YES) NO
							YES NO
							YES NO
							YES NO
							YES NO

CHAIN OF CUSTODY:

DATE:	TIME:	NAME: PRINT AND SIGN	DEPARTMENT/AREA	NO. OF SAMPLES:
12/14/01	3:20 PM	Ahmad Abdollahian/Ahmad Abdollahian	GeoTek	6
12/14/01	3:20p	Seyla To Seyla To	OCFB	6

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Environmental Health and Safety Branch
1449 S. San Pedro St.
Los Angeles, CA 90015
(213) 742-5086

ASBESTOS BULK SAMPLE ANALYSIS
LABORATORY REPORT
THIRTY-SECOND ST MAG
7137

METHOD EPA/600/R-93/116 (MOD) JULY 1993
Date Received: 12/14/01

USD Lab#	MIC	Date Analyzed	BUILDING / AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	OTH %	TOTAL %	MATERIAL BACKGROUND
0112-0577	EZM	12/19/01	006DAT, CLASS.BLDG., HALLWAY / N.E.CORNER OF HALLWAY	HOMOGENEOUS, NON-FRIABLE, WHT, JOINT COMPOUND, COATED MATERIAL/PAPER	<1	0	0	<1	CELLULOSE 60%, BINDER, GYPSUM
0112-0578	EZM	12/19/01	006DAT, CLASS.BLDG., HALLWAY / N.W.CORNER OF HALLWAY	HOMOGENEOUS, NON-FRIABLE, WHT, JOINT COMPOUND, COATED MATERIAL/PAPER	<1	0	0	<1	CELLULOSE 60%, BINDER, GYPSUM
0112-0579	EZM	12/19/01	006DAT, CLASS.BLDG., HALLWAY / S.W.CORNER OF HALLWAY	HOMOGENEOUS, NON-FRIABLE, WHT, JOINT COMPOUND, COATED MATERIAL/PAPER	<1	0	0	<1	CELLULOSE 60%, BINDER, GYPSUM
0112-0580	EZM	12/19/01	A0832W, RELOC.CLASS., 25 / W.SIDE ABOVE CEIL.	HOMOGENEOUS, FRIABLE, WHT, DRYWALL, CHALKY	0	0	0	0	CELLULOSE 60%, FIBERGLASS 3%, GYPSUM
0112-0581	EZM	12/19/01	A0832W, RELOC.CLASS., 25 / N.SIDE ABOVE CEIL.	HOMOGENEOUS, FRIABLE, WHT, DRYWALL, CHALKY	0	0	0	0	CELLULOSE 40%, FIBERGLASS 3%, GYPSUM
0112-0582	EZM	12/19/01	A0832W, RELOC.CLASS., 25 / S.SIDE ABOVE CEIL.	HOMOGENEOUS, FRIABLE, WHT, DRYWALL, CHALKY	0	0	0	0	CELLULOSE 40%, FIBERGLASS 3%, GYPSUM

Signature of Lab Supervisor: E Galoustian Signature of Analyst: _____

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%.
"Quantification done by optical estimate" 1 - 5% considered non-quantifiable.
This report relates to only the material tested.
This report is not used by the LAUSD/EHSB to claim product endorsement by NVLAP or any agency of the U.S. government.
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Hygeia Laboratories Inc.
82 W. Sierra Madre Blvd
Sierra Madre, CA 91024-2434
355-4711 (626) 355-4497 Fax

NIST / NVLAP Lab Code No. 102116-0
California ELAP Certificate No. 1269
New York ELAP Certificate No. 11017

Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116 Point Count - 1000 Points

January 25, 2002

Ms. Greta Galoustian
LA Unified School District
1449 S. San Pedro
Los Angeles, CA 90015
0112-0577-0579 32nd St. USC Perf. Arts

Samples Analyzed: 3
Sampler: A. Abdollahian

Hygeia Reference No.: **71089 02 0002**
DateCollected: December 13, 2001
Date Received: January 4, 2002
Date Analyzed: January 12, 2002

Client Sample ID / Hygeia Sample ID	Sample Description / *Comments*	Detection Limit	Gravimetric Reduction	Analytical Results
0112-0577 713818p	Mud joint above ceiling	0.01%	49% organic 42% acid soluble	0.16% chrysotile
0112-0578 713819p	Mud joint above ceiling	0.01%	46% organic 46% acid soluble	0.18% chrysotile
0112-0579 713820p	Mud joint above ceiling	0.01%	29% organic 59% acid soluble	0.3% chrysotile

Microscopist - Guillermo Hernandez

The analyses of the samples in this report were performed using gravimetric matrix reduction and polarized light microscopy (PLM) in accordance with the EPA method 600/R-93/116 July 1993. The asbestos concentration was determined using the semi-quantitative point count method. On a per sample basis, the accuracy and precision of point count results are not known. The result should lie within the statistical limits of variability calculated for standard reference samples routinely ...ed in the laboratory using the point count method. The limit of detection for this analytical method is 0.25 percent using 400 points and 0.10 percent using 1000 ...(visual area estimates).

Hygeia recommends trasmission electron microscopy (TEM) analysis on organically bound bulk materials (eg., vinyl floor tile, mastics, roofing materials, joint compounds) when PLM analysis shows undetectable quantities of asbestos. These materials often contain milled asbestos with fiber diameters and lengths too small to be resolved by the PLM and the analysis may yield a false negative result.

Hygeia Laboratories Inc. is accredited under the NIST/NVLAP program for asbestos in bulk material by polarized light microscopy and the State of California for asbestos analysis.

Hygiea Laboratories Inc. and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analyses only. This report must not be used to claim product endorsement by NVLAP or any agency of the US Government. Hygeia will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory.

Please feel free to contact Hygiea regarding any questions about these results, this report, or the analytical methods employed.

Arturo Casas - Supervisor of Optical Microscopy

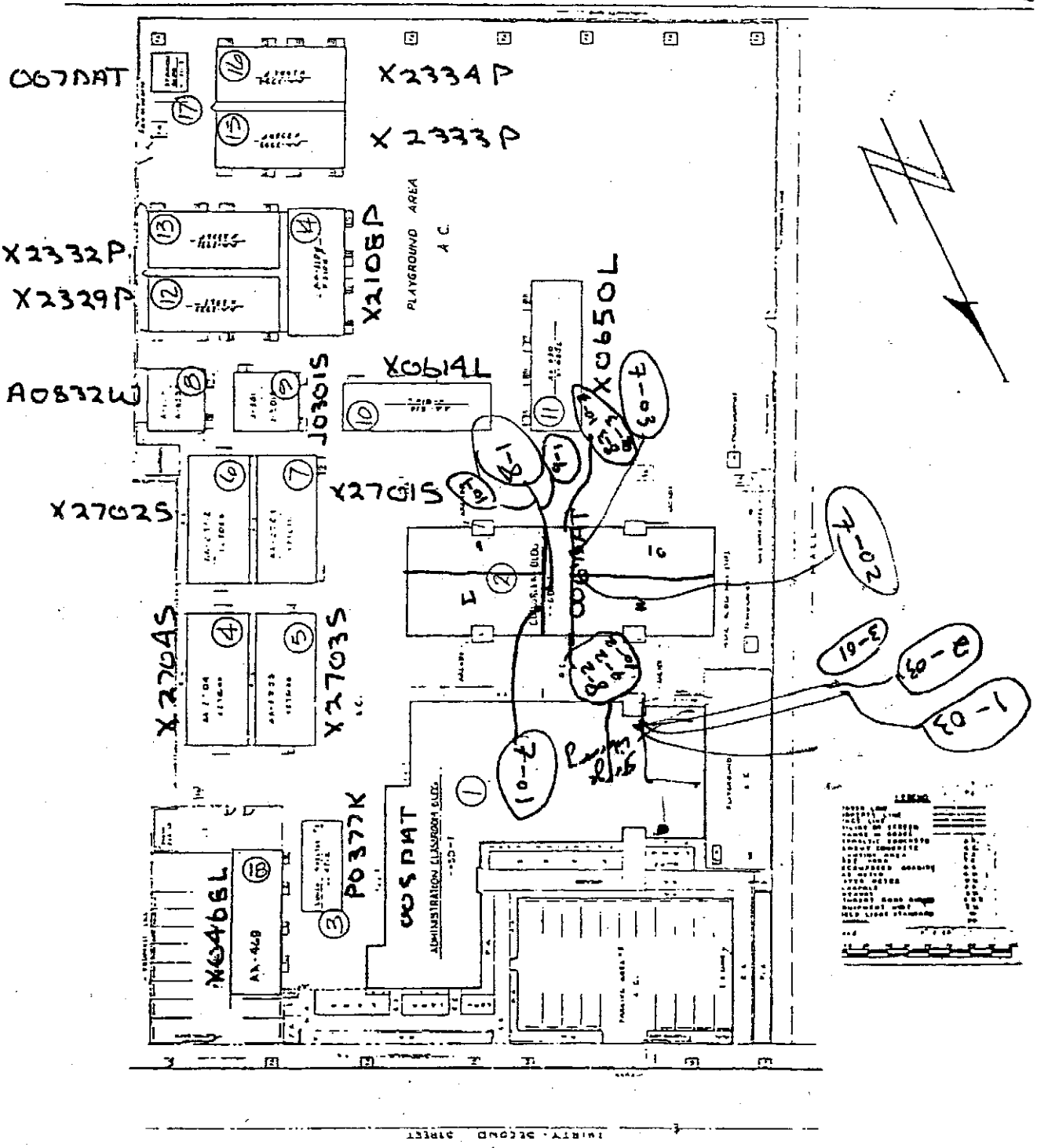
Gustavo A. Delgado, Ph.D. Director

DIAGRAM OF BUILDING AREAS

SCHOOL: 32nd Street

ADDRESS: 822 W. 32nd Street
Los Angeles, CA 90007

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT



AUTHORIZED AGENT
LOS ANGELES UNIFIED SCHOOL DISTRICT

Date:

Sheet 1 of 9 sheets

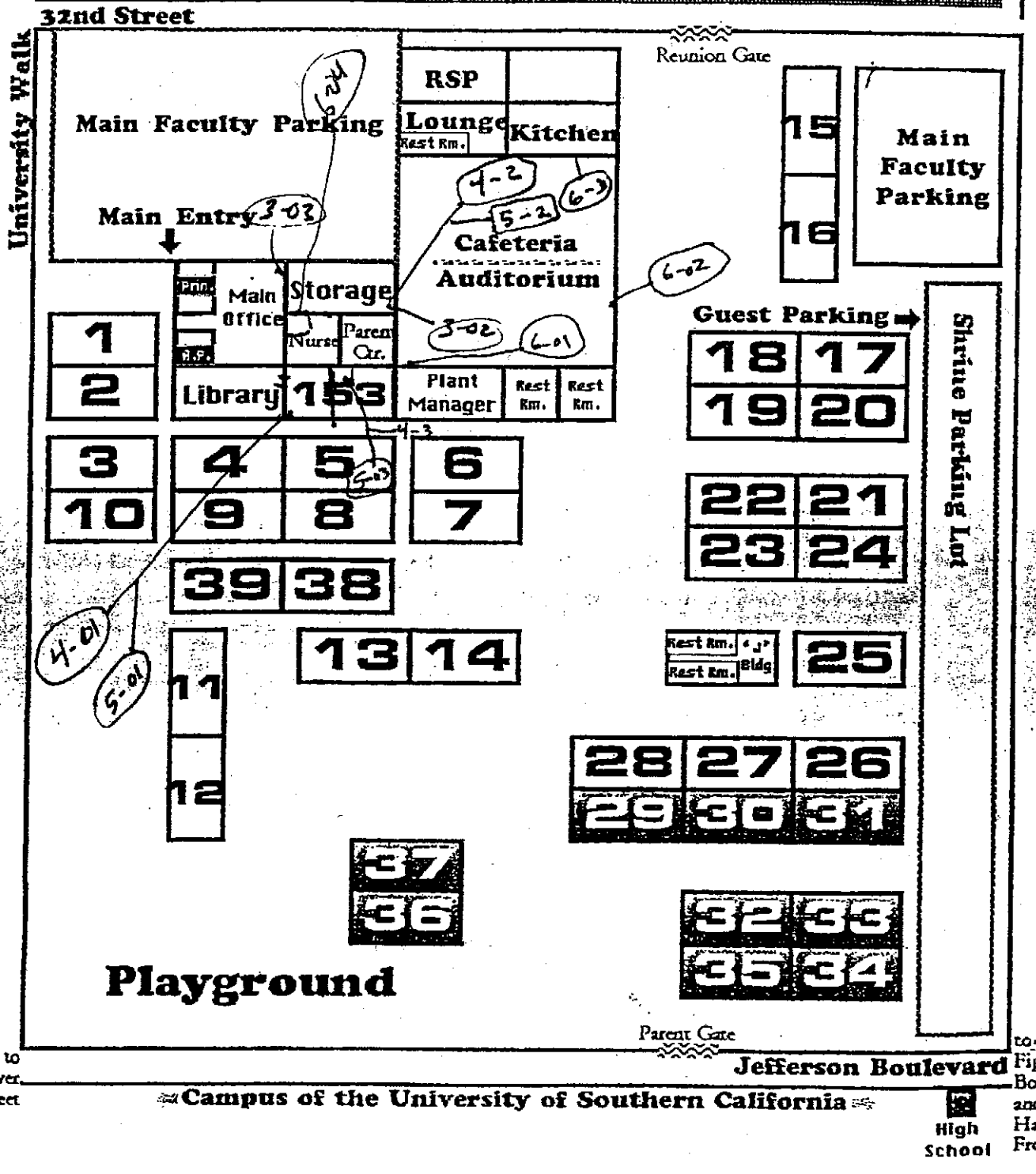
32nd Street /USC Magnet School K-8
(Visual and Performing Arts)

USC / MaST High School 9-12
(Math, Science and Technology)

School Information Map

Gail Greer
Principal

822 West 32nd Street Los Angeles, CA 90007 · Phone Main: 323/748-0126 · FAX Main: 323/741-1608



ASBESTOS BULK SAMPLE SUBMITTAL

SITE NAME: 32nd St Performing Arts Magnet CODE: 7137 PROJECT: AHERA

SAMPLED BY: R. Bowie DEPT.: 19 TEL. NO.: 763-1450 DATE SAMPLED: 7/29/98

Fill in all information Legibly and Precisely. Sampler should make a copy before submitting to the lab. DO NOT USE PENCIL (Rev. 4/95)

Original to EHSB lab with samples. Lab will FAX a copy to ATU with sample numbers. Results sheet to be FAXED to ATU when completed.

LAB NUMBER	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (CIRCLE)
9807-1813	1	005DOT	ADMIN CLASSROOM	Faculty Dining	W/C	Ceiling 2x4 Random Tile	YES (NO)
9807-1814	2	↓	↓	Assembly Rm	S/E	↓	YES (NO)
9807-1815	3			Room 1	S/W		YES (NO)
9807-1816	4			Hallway	S/W	Ceiling 12x12 Random Tile	YES (NO)
9807-1817	5			Work Room	N/C	↓	YES (NO)
9807-1818	6	↓	↓	Parents Meeting Rm	S/C	↓	YES (NO)
							YES NO
							YES NO
							YES NO
							YES NO
							YES NO

CHAIN OF CUSTODY:

DATE:	TIME:	NAME: PRINT & SIGN:	DEPARTMENT/AREA:	NO. OF SAMPLES:
7/29/98	10:30am	Ray Bowie Ray Bowie	19 ATU	6
7-29-98	10:48 AM	Brett Koontz Brett L. Koontz	EHSD	6

os Angeles Unified School District
nvironmental Health and Safety Branch
449 S. San Pedro St.
os Angeles, CA 90015
213) 743-5086

ASBESTOS BULK SAMPLE ANALYSIS
LABORATORY REPORT
THIRTY-SECOND ST MAG
7137

METHOD EPA/600/R-93/116 (MOD) JULY 1993
Date Received: 7/25/98

AUSD Lab#	MIC	Date Analyzed	BUILDING / AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	OTH %	TOTAL %	MATERIAL BACKGROUND
9807-1813	RPC	8/6/98	005D0T, ADM/CLSS, FAC.LNG / WEST/CENTER	NON-HOMOGENEOUS, NON-FRIABLE, GREY, CEILING TILE, SOLID/FIBROUS	0	0	0	0	90% CELLULOSE, 20% FIBROUSGLASS, BINDER
9807-1814	RPC	8/6/98	005D0T, ADM/CLSS, ASSEM / SOUTH/EAST	NON-HOMOGENEOUS, NON-FRIABLE, GREY, CEILING TILE, SOLID/FIBROUS	0	0	0	0	70% CELLULOSE, 20% FIBROUSGLASS, BINDER
9807-1815	RPC	8/6/98	005D0T, ADM/CLSS, RM. #1 / SOUTH/WEST	NON-HOMOGENEOUS, NON-FRIABLE, GREY, CEILING TILE, SOLID/FIBROUS	0	0	0	0	70% CELLULOSE, 20% FIBROUSGLASS, BINDER
9807-1816	RPC	8/6/98	005D0T, ADM/CLSS, HALLWAY / SOUTH/WEST	NON-HOMOGENEOUS, NON-FRIABLE, TAN, CEILING TILE, SOLID/FIBROUS	0	0	0	0	90% CELLULOSE, BINDER
9807-1817	RPC	8/6/98	005D0T, ADM/CLSS, WORKRM / NORTH/CENTER	NON-HOMOGENEOUS, NON-FRIABLE, TAN, CEILING TILE, SOLID/FIBROUS	0	0	0	0	90% CELLULOSE, BINDER
9807-1818	RPC	8/6/98	005D0T, ADM/CLSS, MTG.RM / SOUTH/CENTER	NON-HOMOGENEOUS, NON-FRIABLE, TAN, CEILING TILE, SOLID/FIBROUS	0	0	0	0	90% CELLULOSE, BINDER

Signature of Lab Supervisor: Deelynne Bryant Signature of Analyst: Rosalie F. Bruneau

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%.
"Quantification done by optical estimate" 1 - 5% considered non-quantifiable.
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ASBESTOS BULK SAMPLE SUBMITTAL

SITE NAME: 32ND ST CODE: 7137 PROJECT: REPLACE TILE

SAMPLED BY: J.P. SMALL DEPT.: FLOOR COVERING TEL. NO.: 763-2990 DATE SAMPLED: 03-25-97

Fill in all information Legibly and Precisely. Sampler should make a copy before submitting to the lab. DO NOT USE PENCIL (Rev. 4/95)

Original to EHSB lab with samples. Lab will FAX a copy to ATU with sample numbers. Results sheet to be FAXED to ATU when completed.

LAB	SAMPLE NUMBER	BUILDING NUMBER	BUILDING NAME	ROOM NUMBER AND/OR NAME	LOCATION IN ROOM	MATERIAL TYPE (DESCRIBE)	FRIABLE (CIRCLE)
[redacted]	1	006DOT	CLASSROOM	HALLWAY	4' DOWN RAMP ON EAST SIDE	12X12 TILE LT TAN MASTIC	YES (NO)
9703-1971	2	↓	↓	↓	EAST SIDE FEATURE STRIP	12X12 TILE ORANGE MASTIC	YES (NO)
9703-1972	3	↓	↓	↓	BOTTOM OF RAMP WEST SIDE	12X12 TILE LT TAN MASTIC	YES (NO)
							YES NO
							YES NO
							YES NO
							YES NO
							YES NO
							YES NO
							YES NO
							YES NO

CHAIN OF CUSTODY:

DATE:	TIME:	NAME: PRINT & SIGN:	DEPARTMENT/AREA:	NO. OF SAMPLES:
03-25-97	1:00 PM	J.P. SMALL J.P. Small	FLOOR COVERING ET 03	3
3-25-97	1:20 PM	S CHERRY S Cherry	EHSB	3

Los Angeles Unified School District
Environmental Health and Safety Branch
1449 S. San Pedro St.
Los Angeles, CA 90015
(213) 742-5086

ASBESTOS BULK SAMPLE ANALYSIS
LABORATORY REPORT
THIRTY-SECOND ST MAG
7137

NVLAP #1505
METHOD EPA/600/R-93/116 (MOD) JULY 1993
Date Sampled: 3/25/97

LAUSD Lab#	MIC	Date Analyzed	BUILDING / AREA SAMPLED	MATERIAL DESCRIPTION	CHR %	AM %	OTH %	TOTAL %	MATERIAL BACKGROUND
9703-1970A	CH	4/10/97	006D0T, CLASS, HALLWAY / EAST SIDE	NON-HOMOGENEOUS, NON-FRIABLE, BEIGE, FLOOR TILE, FLAT SOLID	1	0	0	1	CALCITE, QUARTZ
9703-1970B	CH	4/10/97	006D0T, CLASS, HALLWAY / EAST SIDE	NON-HOMOGENEOUS, NON-FRIABLE, BLACK, FLOOR TILE, MASTIC, TARLIKE	8	0	0	8	TAR, BINDER
9703-1971A	CH	4/10/97	006D0T, CLASS, HALLWAY / EAST SIDE	NON-HOMOGENEOUS, NON-FRIABLE, DARK BROWN, FLOOR TILE, FLAT SOLID	0	0	0	0	CALCITE, QUARTZ
9703-1971B	CH	4/10/97	006D0T, CLASS, HALLWAY / EAST SIDE	NON-HOMOGENEOUS, NON-FRIABLE, BLACK, FLOOR TILE, MASTIC, TARLIKE	5	0	0	5	5% CELLULOSE, TAR, BINDER
9703-1972A	CH	4/10/97	006D0T, CLASS, HALLWAY / WEST SIDE	NON-HOMOGENEOUS, NON-FRIABLE, BEIGE, FLOOR TILE, FLAT SOLID	0	0	0	0	CALCITE, QUARTZ
9703-1972B	CH	4/10/97	006D0T, CLASS, HALLWAY / WEST SIDE	NON-HOMOGENEOUS, NON-FRIABLE, BLACK, FLOOR TILE, TARLIKE	5	0	0	5	3% CELLULOSE, TAR, BINDER

Signature of Lab Supervisor: DeAnne Bryant Signature of Analyst:

Note: 0%: No Asbestos Detected; <1%: Asbestos Detected Above 0% and Below or Equal to 1%.
"Quantification done by optical estimate" 1 - 5% considered non-quantifiable.
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ASBESTOS SURVEY FORM B MAINTENANCE ORIGINAL

Sample Log

SCHOOL NAME 32 ND ST. LOCATION CODE 7137

BUILDING NAME Classroom BUILDING NO. --60-T

INSPECTOR'S NAME Kyle Pett NUMBER 1394

MATERIAL	SAMPLE NUMBERS	GRID NUMBER	LABORATORY RESULTS (OFFICE USE ONLY)
DRYWALL WALLS	B1	#7	None detected
	B2		
	B3		
	B4		
	B5		
	B6		
	B7		
Ceiling Tiles	C1	#8	None detected
	C2		
	C3		
	C4		
	C5		
	C6		
	C7		
Ceiling Tiles	D1	#9	None detected
	D2		
	D3		
Ceiling Tile	E1	#10	None detected
	E2		
	E3		

INSPECTOR'S SIGNATURE Kyle Pett DATE 6-14-88

ASBESTOS SURVEY FORM B

MAINTENANCE ORIGINAL

Sample Log

SCHOOL NAME 32 AND 58 LOCATION CODE 7137

BUILDING NAME Classroom BUILDING NO. --6D-T

INSPECTOR'S NAME Hyde/Peat NUMBER 1394

MATERIAL	SAMPLE NUMBERS	GRID NUMBER	LABORATORY RESULTS (OFFICE USE ONLY)
ceiling Tile	E4	# 10	None detected
	E5		S
PLASTER walls	H1	# 11	None detected
	H2		
	H3		S

INSPECTOR'S SIGNATURE Hyde/Peat DATE 6-14-88

Los Angeles Unified School District
Bulk Sample Analysis (Polarized Light Microscopy)
Analysis Protocol: 40 CFR, Part 763, Subpart F, Appendix A

LAUSD Proj. No.: 7137

Laboratory Name: BSE Labs Inc.

Date: 9/4/88

NVLAP Lab Code No.: #1344

Address: 50 East Foothill Blvd.
Arcadia, CA 91006

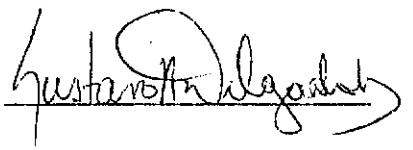
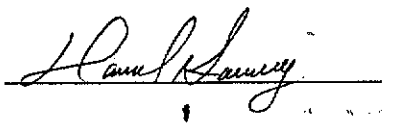
Contract No.: 885656

DHS Hazardous Waste Testing
Lab Certification No.: #243

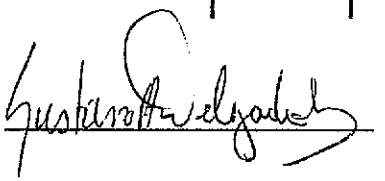
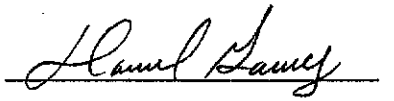
BLI Rpt No.: 1276

Microscopist: Daniel Gamez

	LAUSD Sample No.	BLI Ref. No.	Sample Description	Asbestos				Non Asbestos		QC
				% Chr.	% Amos.	% Other	% Total	Fibrous	Non Fibrous	
1	X2334 C1	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	XX
2	X2334 C2	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
3	X2334 C3	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
4	X2334 C4	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
5	X2334 C5	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
6	X650L C1	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
7	X650L C2	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
8	X650L C3	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
9	X650L C4	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
10	X650L C5	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	0	
11	6D-T B1	L988-264	WHITE, MASSIVE	N/D	N/D	N/D	N/D	CELLULOSE	Y	
12	6D-T B2	L988-264	WHITE, MASSIVE	N/D	N/D	N/D	N/D	CELLULOSE FIBERGLASS	Y	XX
13	6D-T B3	L988-264	WHITE, MASSIVE	N/D	N/D	N/D	N/D	CELLULOSE FIBERGLASS	Y	
14	6D-T B4	L988-264	WHITE, MASSIVE	N/D	N/D	N/D	N/D	CELLULOSE FIBERGLASS	Y	
15	6D-T B5	L988-264	WHITE, MASSIVE	N/D	N/D	N/D	N/D	CELLULOSE	Y	

Signatures: Lab Director  Microscopist 

16	6D-T	B6	L988-264	WHITE, MASSIVE	N/D	N/D	N/D	N/D	FIBERGLASS CELLULOSE	Y				
17	6D-T	B7	L988-264	WHITE, MASSIVE	N/D	N/D	N/D	N/D	FIBERGLASS CELLULOSE	Y				
18	6D-T	C1	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	FIBERGLASS CELLULOSE		0			
19	6D-T	C2	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			
20	6D-T	C3	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			
21	6D-T	C4	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			
22	6D-T	C5	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			
23	6D-T	C6	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			
24	6D-T	C7	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			
25	6D-T	D1	L988-264	GRAY, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE	PERLITE				
26	6D-T	D2	L988-264	GRAY, FIBROUS	N/D	N/D	N/D	N/D	MIN. WOOL CELLULOSE	PERLITE				
27	6D-T	D3	L988-264	GRAY, FIBROUS	N/D	N/D	N/D	N/D	MIN. WOOL CELLULOSE	PERLITE		XX		
28	6D-T	E1	L988-264	GRAY, FIBROUS	N/D	N/D	N/D	N/D	MIN. WOOL CELLULOSE	PERLITE				
29	6D-T	E2	L988-264	GRAY, FIBROUS	N/D	N/D	N/D	N/D	MIN. WOOL CELLULOSE	PERLITE				
30	6D-T	E3	L988-264	GRAY, FIBROUS	N/D	N/D	N/D	N/D	MIN. WOOL CELLULOSE	PERLITE				
31	6D-T	E4	L988-264	GRAY, FIBROUS	N/D	N/D	N/D	N/D	MIN. WOOL CELLULOSE	PERLITE				
32	6D-T	E5	L988-264	GRAY, FIBROUS	N/D	N/D	N/D	N/D	MIN. WOOL CELLULOSE	PERLITE				
33	X-468	C1	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	MIN. WOOL CELLULOSE		0			
34	X-468	C2	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			
35	X-468	C3	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			
36	X-468	C4	L988-264	TAN, FIBROUS	N/D	N/D	N/D	N/D	CELLULOSE		0			

Signatures: Lab Director  Microscopist 

APPENDIX C –
ASBESTOS SURVEY FORM A

ASBESTOS SURVEY FORM A
Reinspection Survey

School Name: 32ND ST. MAGNET **Loc. Code:** 7137

Building Name: ADMINISTRATIVE & CLASSROOM BLDG. **Building Number:** 005 DAT

Building Square Feet: 13,810' **Height of Typical Room:** 9'

Inspector: ROBERT ESTRADA **Number:** BI-15921

Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
A. ~~Plaster~~ Ceilings	~~All except noted below~~		
B. ~~Plaster~~ Walls	~~All except noted below~~		
C. Ceiling Tiles 12"x12" RANDOM	ALL EXCEPT NOTED BELOW	3 3	NEG. 3-8-99 NEG. 7-29-98
D. DRYWALL CEILINGS W/ TAPE & MUD (SEE LINES U-V. PAGE TWO)	• MAIN OFFICES • SUPPLY RM. • LIBRARY WORK RM. • DINING RM. • PARENT CENTER • TEACHERS WORK RM. • OFFICES • SCHOOL PSYCHOLOGIST'S WALL, NURSES OFFICE • PRODUCT STORAGE AREA (ALL ABOVE 12" CONTAIN C.T.)	9	POS. 2-13-01 POINT COUNT
E. BEIGE 12"x12" FLOOR TILE (REMOVED ON 8-21-00)	~~ROOMS 1 & 2~~		~~Assumed~~ 5.30.07 TILE & MASTIC POS.
F. 12"x12" LT. BEIGE FLOOR TILE W/ MASTIC	MAIN OFFICES & SUPPLY ROOM; LIBRARY BOOK RM, DINING ROOM, MEN'S R/R	#3 3	POS. 9-17-01
G.	WOMEN'S R/R, TEACHERS WORK RM. & OFFICE, DEANS OFFICE & HALLWAYS, PRINCIPALS R/R	3+3	POS 10/27/03 TW.
H.	• PRINCIPALS STORE RM., NURSES R/R OFFICE, FACULTY DINING RM. ~~MISC. PAINT, SUPPLIES, CLOSETS, DARK CLOSET~~	#3	~~Assumed~~ (NEG.) FROM (POS) PLANS 10-26-17
I. 12"x12" ORANGE FLOOR TILE W/ MASTIC (MIXED)	HALLWAYS	3	
J. 2'x4' RANDOM CEILING TILE	AUD., FACULTY DINING, ROOMS 1 & 2, LIBRARY.	3	NEG. 7-29-98
K. SAND PLASTER WALLS	WATER HEATER RM.	3	NEG. 5-10-04 4-5-04
L. SMOOTH PLASTER WALLS	CAFE MGR. OFFICE, CAFE HALLWAY, KITCHEN	3 #2	NEG. 3-26-97

Inspector's Signature: Robert Estrada **Date:** 06-13-02

	Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
REMOVED AS of 6-13-02	M. LT. TAN FLOOR TILE W/ MASTIC	~~Rooms 1 & 2~~ PRINCIPAL OFFICE REMOVED	5	~~Pos 11-4-98~~
	N. ASSUMED FLOOR TILE UNDER ORANGE CARPET	COOR. OFFICE, LIBRARY, ~~Rooms 1 & 2~~		Assumed
	O. SAND PLASTER CEILING	CAFE WORKER R/R., CAFE HOPPER ROOM, MULTI-PURPOSE WOMEN R/R	3	NEG. 3-26-97
	P. ROOFING Composite BLACK	ROOF ALL LAYERS	7	NEG. 10-7-98
	Q. FIRE DOOR	KITCHEN DOOR NEXT TO FACULTY DINING RM., & INSIDE KITCHEN STORE RM. Magnet OFFICE 3+		Assumed 4
REMOVED MARCH/2013	R. BLUE CARPET W/ PADDING	PRINCIPALS OFFICE	3	ASSUMED
	S. ROOFING COMPOSITE BLACK	ELEVATOR ROOF	4	NEG. 10-7-98
	T. ROOFING Composite BLACK	WALKWAY OVERHANG ROOF	4	NEG 10-7-98
	U. PENETRATION SEALANT GRAY & BLACK	MAIN ROOF, HVAC UNIT & VENT PIPES	6	POS. 10-7-98
SEE LINE B. ON PAGE TWO	V. SAND PLASTER WALLS	GIRLS TOILET, OFFICE ADJACENT TO DINING ROOM & MENS VESTIBULE	3	NEG. 3-8-99
	W. SAND PLASTER CEILING	GIRLS TOILET, MENS VESTIBULE & WATER HEATER ROOM.	3	NEG. 3-8-99
	X. DRYWALL WALL W/ TAPE & MUD	FRONT OF NURSES OFFICE, WAITING ROOM, CORRIDOR, FRONT OF PRINCIPALS OFFICE,	3 7	
	Y.	ROOMS 1 & 2, HALLWAYS LIBRARY & BOOK RM MEETING ROOM, TEACHERS WORK ROOM & OFFICE, DEANS OFFICE & HALL, MAIN OFFICES AND SUPPLY RM. MAGNET OFFICE,		
	Z.	NURSES OFFICE, VICE PRINCIPALS OFFICE.		
	AA.			
	BB. STUCCO	EXTERIOR WALLS	3+3	POS <1% 2-20-04 ACM (POS) per 10-26-17
	CC. 12"x12" ORANGE/BEIGE MARBLED FLOOR TILE W/ MASTIC	FACULTY DINING ROOM	3	

Inspector's Signature: Robert Estrada Date: 06-13-02

ASBESTOS SURVEY FORM A
Reinspection Survey

School Name: 32 ND ST. MAGNET **Loc. Code:** 7137

Building Name: ADMINISTRATIVE & CLASSROOM BLDG. **Building Number:** 005 DAT

Building Square Feet: 13,810' **Height of Typical Room:** 9'

Inspector: ROBERT ESTRADA **Number:** BI-15921

Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
A. SAND Plaster Ceilings	NURSE'S R/R., PRINCIPAL'S R/R, AUDITORIUM, AND STORAGE RM. ~~All except noted below~~	4	NEG. 12-13-01 NES 4-8-02
B. SAND Plaster Walls (SEE LINE V. ON PAGE ONE)	P.M. OFFICE, ASSEMBLY, FACULTY, R/R'S, HOPPER Rm. ~~All except noted below~~	4	
C. 12"X12" RANDOM. MASTIC Ceiling Tiles	• LIBRARY WORKROOM, • MAIN OFFICE Computer Rm. -AKA SUPPLY ROOM, TEACHERS WORKROOM	3	Pos 12-13-01.
D. WATER HEATER (HOYT)	WEST SPRINKLER/ STORAGE ROOM	∅	
E. 4" BLACK COVE BASE	Rooms 1 & 2		ASSUMED
F. 12"x12" BLUE FLOOR TILE	Rooms 1 & 2		ASSUMED
G. BLUE CARPET W/ ADHESIVE	Rooms 1 & 2		ASSUMED NO (NEG) RM 10-26-17
H. 2" BROWN COVE BASE W/MASTIC	HALLWAYS, LIBRARY & WORK RM., MEETING RM., TEACHERS WORK Rm. & OFFICE, DEAN'S OFFICE & HALL, PRINCIPALS OFFICE - STORE Rm. - R/R, MAIN OFFICE & SUPPLY RM., NURSES OFFICE, VICE PRINCIPAL OFFICE.	3	
I.			
J.			
K. DK. RED /GREEN CARPET W/ADHESIVE	LIBRARY		ASSUMED
L. 4" BROWN COVE BASE W/MASTIC	MEN & WOMENS R/R'S, NURSES R/R., STUDENT LOUNGE, & CAFETERIA R/R.	3/3	NEG. 4-8-02 5-30-07

Inspector's Signature: Robert Estrada **Date:** 06-13-02

	Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
(M.)	12"x12" TAN MARBLED FLOOR TILE w/MASTIC	MEN & WOMENS R/R, & NURSES R/R.		~~Assumed~~ 6
REMOVED → (N.)	BLUE w/ PINK CARPET W/ADHESIVE	~~MAGNET OFFICE~~		~~Assumed~~ 7 ND (NEG) PLM 10/26/17
(O.)	2" Black COVE BASE w/MASTIC	FACULTY DINING RM.	3	8
P.	WATER HEATER (BRADFORD WHITE)	EAST WATER HEATER ROOM. CONFIRMED! 3/21/14	N/A	
(Q)	DUCT SEAM SEAL TAPE	• ON DUCTWORK THRU-OUT ATTIC & CEILING SPACE		NEG. 6/28/16 ~~Assumed~~ 9
R.	FIBERGLASS INSULATION	THRU-OUT CEILING SPACE & THRU-OUT ATTIC		N/A
S.	3" FIBERGLASS PIPE INSULATION & ELBOWS	THRU-OUT CEILING SPACE & THRU-OUT ATTIC		N/A
REMOVED MARCH/2013 (T.)	POWDERY JOINT COMPOUND DRYWALL CEILING	BEHIND COVEBASE ADHESIVE & CARPET ADHESIVE IN PRINCIPAL'S OFFICE ~~ABOVE CT. IN ROOM 1, 2 &~~	6	BY POINT COUNT POS. 3-21-13
SEE LINE U. ON PAGE ONE (U.)		STORAGE Rm IN LIBRARY	3	point count NEG 12-13-01
(V.)	DRYWALL CEILING TAPE & MUD	~~ABOVE CT. IN ROOM 1, 2~~ & STORAGE Rm IN LIBRARY	2 5	Pos Point Count 12/15/02 Pos 12-13-01
W.	BLUE CARPET W/ YELLOW GLUE	A.P.S OFFICE	3	NEG 10/27/03 TW
(X.)	ROOFING DEBRIS	CEILING SPACE - ENTIRE SIDE FROM [illegible] TO STUDENT [illegible] CONFIRMED! 3/21/14	3	BY POINT COUNT POS. 5-10-01
Y.	DRYWALL DEBRIS	MAIN OFFICE CEILING SPACE	3	NEG. 5-10-01
(Z.)	9" BLACK COVE BASE W/MASTIC	MAGNET OFFICE		ASSUMED
AA.	12"x12" YELLOW AND 12"x12" RED FLOOR TILE W/ MASTIC / MIXED ADHESIVE ON	MAGNET OFFICE	N/S	ASSUMED
REMOVED MARCH/2013 (BB.)	BLACK COVEBASE	PRINCIPALS OFFICE	3	NEG. 3-21-13
(CC.)	BLUE CARPET	↓	3	NEG. 3-21-13

Inspector's Signature: Robert Estrada **Date:** 06-13-02

ASBESTOS SURVEY FORM A
Re-Inspection Survey

School Name: 32ND ST. MAGNET Loc. Code:

Building Name: ADMINISTRATIVE AND CLASSROOM BUILDING Building Number: 005DAT

Building Square Feet: 13,810' Height of Typical Room: 9'

Inspector: ROBERT ESTRADA Number BIR-1022-13-07

Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
A. 12"x12" LT. BLUE MARBLED FLOOR TILE W/ADHESIVE	ROOMS 1 & 2		ASSUMED
B. 4" BLACK COVE BASE W/ADHESIVE	ROOMS 1 & 2		ASSUMED
C. LT. BLUE CARPET W/ADHESIVE	ROOMS 1 & 2		ASSUMED
D. 12"x12 LT. RED W/YELLOW MARKS FLOOR TILE W/ADHESIVE	PRINCIPALS OFFICE & R/R		ASSUMED
E. 4" BLACK COVE BASE W/ADHESIVE	PRINCIPALS OFFICE & R/R		ASSUMED
F. 12"x12" DK. RED & YELLOW FLOOR TILES	MAGNET OFFICE INSIDE MAIN OFFICE		ASSUMED
G. 4" BROWN COVE BASE W/ADHESIVE	MAGNET OFFICE INSIDE MAIN OFFICE		ASSUMED
H. HEAT/VAPOR BARRIER PAPER	ABOVE STONE TO NURSES OFFICE		ASSUMED NO (NEG) PLM 10-26-17
I. 2" Grey Cove Base w/mastic	North side of Room, West side of Room	3	
2'x2' RED Carpet Tile w/Adhesive	Library	3	NO (NEG) PLM 10-26-17
J. Vapor Barrier paper w/ wall	Exterior	3	NO (NEG) PLM 10-26-17
K.	Exterior		NO NEG 9/14/20
L. Cork Board		3	

Inspector's Signature: Robert Estrada Date: 4/2/14

	Type of Suspect Material	Specific Location	Req. # of Samples	Asbestos Present
M.	white sealant on top of Roof Flashing & hatch Stucco ceiling	Roof	3	ND NEG 8/17/20
N.		Exterior	3	ACM POS 8/17/20
O.	INT & EXT DOORS	THROUGHOUT BUILDING		ASSUMED (POS)
P.	12X12 RED FLOOR TILE W/ ADH.	PRINCIPAL'S OFFICE W/ RR		ASSUMED (POS)
Q.				
R.				
S.				
T.				
U.				
V.				
W.				
X.				
Y.				
Z.				
AA.				
BB.				

Inspector's Signature: _____ **Date:** _____

ASBESTOS SURVEY FORM A
Reinspection Survey

School Name: 32ND ST. MAGNET **Loc. Code:** 7137

Building Name: CLASSROOM BLDG. **Building Number:** 006 DAT

Building Square Feet: 8,127' **Height of Typical Room:** 9'

Inspector: ROBERT ESTRADA **Number:** BI-15921

	Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
A.	Plaster Ceilings	All except noted below		
B.	DRYWALL W/TAPE & MUD ~~Plaster Walls~~	HALLWAYS, Rooms 3,4,5,6,7,8,9,10. ~~All except noted below~~	3 DRYWALL & 7 JCT HOT	POS. 12-13-01 POINT COUNT
C.	SEE LINE M. 12"x12" RANDOM Ceiling Tiles	HALLWAYS	7	NEG.
D.	2'x4' FISSURE CEILING TILE	Room 6 3 Fd	3	NEG.
E.	2'x4' RANDOM CEILING TILE	Rooms 3,4,5,7,8,9,10	5	NEG.
F.	PLASTER WALLS	SPRINKLER SHUT-OFF RM. 3		NEG.
G.	12"x12" LT. TAN FLOOR TILE W/MASTIC	Rooms 3,4,9,10,6, 5,7,8	2 TILE & NONASBESTOS MASTIC	POS. 3-25-97
H.	12"x12" ORANGE (MIXED) 12x12 LT. TAN FLOOR TILE W/MASTIC	HALLWAYS BOTH	1	POS. MASTIC 3-25-97 NEG. TILE
I.	REMOVED → 9"x9" WHITE W/BROWN FLOOR TILE	Room 5 7B	3	POS. <1% 5-22-98 REMOVED BY CREW ON 7-13-98 SEE ABATEMENT ACTIONS
J.	ROOFING COMPOSITE BLACK	ROOF ALL LAYERS ALL AREAS	7	NEG. 10-7-98
K.	12"x12" DK. TAN MARBLE FLOOR TILE	Room 5 7B		ASSUMED
L.	PENETRATION SEALANT BLACK & GRAY	ROOF HVAC UNIT & VENT PIPES	3	POS. 10-7-98

Inspector's Signature: Robert Estrada **Date:** 06-13-02

	Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
SEE LINE C. → M.	12"x12" RANDOM CEILING TILE MASTIC	HALLWAY	3	NEG. 12-13-01
SEE LINE U. → N.	JCT ON DRYWALL CEILING	HALLWAYS	3+3	POS. 12-13-01 | 10-26-17 POINT COUNT
O.	4" BROWN COVE BASE W/MASTIC	HALLWAYS, ROOMS 3,4,5,6,7,8,9,10	3	NEG. 4-8-02
P.	DUCT SEAM SEAL TAPE	ON DUCTWORK THRU-OUT ATTIC	(3)	NEG. 6/28/16
Q.	FIBERGLASS INSULATION	THRU-OUT ATTIC	—	N/A
R.	2" FIBERGLASS PIPE INSULATION	THRU-OUT ATTIC	—	N/A
S.	EXTERIOR STUCCO WALL	EXTERIOR WALLS	3	4-8-02 NEG BY POINT COUNT
T.		(ABOVE CEILING TILE)		ACM (POS) PLM 10-26-17 (SEE ABOVE)
SEE LINE N. → U.	DRYWALL CEILING	BOTH HALLWAYS	3	
V.	white sealant on top of Roof	Roof	3	NO NEG 8/14/20
W.	INT & EXT DOORS	THROUGHOUT BUILDING		ASSUMED (POS)
X.				
Y.				
Z.				
AA.				
BB.				
CC.				

Inspector's Signature: Robert Estrada Date: 06-13-02

ASBESTOS SURVEY FORM A
Reinspection Survey

School Name: 32ND ST. MAGNET **Loc. Code:** 7137

Building Name: LUNCH SHELTER **Building Number:** P0377K

Building Square Feet: 960' **Height of Typical Room:** 9'

Inspector: ROBERT ESTRADA **Number:** BI-15921

Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
A. METAL ~~Plaster~~ Ceilings	LUNCH SHELTER ~~All except noted below~~		N/A
B. METAL ~~Plaster~~ Walls	LUNCH SHELTER ~~All except noted below~~		N/A
C. Ceiling Tiles	NONE		N/A
D. LARGER SHELTER ERECTED IN SAME LOCATION WITH METAL POSTS AND METAL ROOF			
E.			
F.			
G.			
H.			
I.			
J.			
K.			
L.			

Inspector's Signature: Robert Estrada **Date:** 06-13-02

ASBESTOS SURVEY FORM A
Re-Inspection Survey

School Name: 32ND ST. MAGNET **Loc. Code:** 7137

Building Name: NEW 2-STORY CLASSROOM # 1 **Building Number:** #35282 ~~MAXIMO # 286416~~

Building Square Feet: ~6,000 **Height of Typical Room:** 9'

Inspector: GLENN BARROW **Number** 26243

Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
A.			
B. NO	SUSPECT MATERIALS		
C. NO	SAMPLING REQUIRED		
D. SEE	ATTACHED LETTER		
E. Gray Sealant on Seams Between Roof Flashing & Wall	Roof	3	ND NEG 8/18/20
F.			
G.			
H.			
I.			
J.			
K.			
L.			

Inspector's Signature: Glenn Barrow **Date:** 12/6/12

INTER-OFFICE CORRESPONDENCE
Los Angeles Unified School District

TO: Management Planner, Management Plan Room
Asbestos Technical Unit

DATE: December 6, 2012

FROM: Paul Flores, Asbestos Surveyor
Asbestos Technical Unit

SUBJECT: Addition AHERA Certification 32nd ST/USC Perf Art Mag(7137)

The following facts were discerned by me as I reviewed various District records and building plans and specifications:

1. The 32nd ST/USC Perf Art Mag Addition (887Q2)

2. The project was completed in March 2010

3. The construction contract General Conditions (00700) included the limitation: "The furnishing, use or installation of Lead Containing Paint or Asbestos'(sic) Containing Construction Materials into the Work, Project or onto OWNER property is not permitted."

4. Based upon these contract provisions, to the best of my knowledge, no **Asbestos Containing Building Material** was used as a building material in these buildings.

5. NEW TWO STORY CLASSROOM #1 MAXIMO # ~~286416~~ 35282
NEW TWO STORY CLASSROOM #2 MAXIMO # ~~286417~~ 35283

Given the above, AHERA inspections are no longer required of these buildings. However, the site should be monitored for the addition of portable buildings that may require AHERA surveillance and inspection.

Paul Flores
Asbestos surveyor
Cert. # 1624, California

EXCLUDED FROM AHERA INSPECTION BUT SUBJECT TO ASBESTOS SURVEY PRIOR TO ANY DISTURBANCE/RENOVATION/DEMOLITION ACTIVITY

ASBESTOS SURVEY FORM A
Re-Inspection Survey

School Name: 32nd ST. MAGNET **Loc. Code:** 7137

Building Name: NEW 2= STORY CLASSROOM #2 **Building Number:** ~~286417~~ #35283

Building Square Feet: ~6,000 **Height of Typical Room:** 9'

Inspector: G. BARROW **Number** 26243

Type of Suspected Material	Specific Location	Req. # of Samples	Asbestos Present
A.			
B. NO	SUSPECT MATERIAL		
C. NO	SAMPLING REQUIRED		
D.	SEE ATTACHED LETTER		
E. Gray Sealant on Seams Between roof Flashing and wall	Roof	3	ACM POS 8/18/20
F. White Sealant on roof Flashing	Roof	1	ND NEG 8/18/20
G.			
H.			
I.			
J.			
K.			
L.			

Inspector's Signature: Glenn Barrow **Date:** 12/6/12

INTER-OFFICE CORRESPONDENCE
Los Angeles Unified School District

TO: Management Planner, Management Plan Room
Asbestos Technical Unit

DATE: December 6, 2012

FROM: Paul Flores, Asbestos Surveyor
Asbestos Technical Unit

SUBJECT: Addition AHERA Certification 32nd ST/USC Perf Art Mag(7137)

The following facts were discerned by me as I reviewed various District records and building plans and specifications:

1. The 32nd ST/USC Perf Art Mag Addition (887Q2)

2. The project was completed in March 2010

3. The construction contract General Conditions (00700) included the limitation: "The furnishing, use or installation of Lead Containing Paint or Asbestos'(sic) Containing Construction Materials into the Work, Project or onto OWNER property is not permitted."

4. Based upon these contract provisions, to the best of my knowledge, no **Asbestos Containing Building Material** was used as a building material in these buildings.

5. NEW TWO STORY CLASSROOM #1 MAXIMO # ~~286416~~ 35282
NEW TWO STORY CLASSROOM #2 MAXIMO # ~~286417~~ 35283

Given the above, AHERA inspections are no longer required of these buildings. However, the site should be monitored for the addition of portable buildings that may require AHERA surveillance and inspection.

Paul Flores
Asbestos surveyor
Cert. # 1624, California

EXCLUDED FROM AHERA INSPECTION BUT SUBJECT TO ASBESTOS SURVEY PRIOR TO ANY DISTURBANCE/RENOVATION/DEMOLITION ACTIVITY

APPENDIX D -
CONSULTANT CERTIFICATIONS

STATE OF CALIFORNIA Gavin Newsom, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health-Asbestos Certification
1750 Howe Avenue, Suite 460
Sacramento, CA 95825
(916) 574-2993 Office http://www.dir.ca.gov/dosh/asbestos.html actu@dir.ca.gov

709206066C **428**

October 04, 2023

Francisco Barraza

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/mailing information within 15 days of the change.

Sincerely,

Kevin Graulich
Principal Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Name **Carlos A Galdamez**

Certification No. **98-2379**

Expires on **05/29/25**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

APPENDIX E -
SCOPE OF WORK

Submit by Email | Print Form

REQUEST FOR ASSISTANCE FORM

FACILITIES ENVIRONMENTAL TECHNICAL UNIT

Request for (Please select):

- [x] Environmental Assessment (Phase 1) & Abatement Design (Phase 2)
- [ ] Environmental Project Monitoring (Phase 3)
- [ ] Water Intrusion/Mold Remediation
- [ ] Asbestos Assistance
- [ ] Insulation
- [ ] Other:

Section 1 - General Information *(complete this section for all request types):*

Date: 7/2/2024	Requestor Office: Asset Management	
Requestor Name: Evangelique Zhao	Title: Project Development Manager	
Phone No: 213.608.5364	Email: evangelique.zhao@lausd.net	Site Reg/Dist: Region South / AREA S1
Site Name: 32nd St USC Magnet School		Site Code: 13905

Building Name & Number (e.g., Administrative Building (001CDG)), Specific Location (e.g., Room #1):

Potential scope of replacement of flooring, wall bases, interior painting (may involve minor patching and fixing prep work ahead of painting) as recovery scope if DBE uses Admin and Classroom Bldgs during construction. This would occur at 2 buildings: 1) Admin & Classroom Bldg (005DAT) , and 2) Classroom Bldg (006DAT). Exterior painting for 3x permanent buildings and lunch shelter, see site plan.

Section 2 - Project & Funding Information *(provide as much project and/or funding information as possible)*

Official Project Name: 32nd St./USC Magnets - Major Modernization Project

Cost Ctr or WBS Project #	Func. Area	GL Acct	Colin Project #	Funding Source
F312124-03-404-99	0000-8500-14935	580001	10372107	Other

*Section 3 - Phase 1 & 2 Request Information** *(Note: Failure to attach a scope or drawings may delay assessment)*

Written scope attached? Yes	Scope % Complete: 0 %	DSA drawings attached? No	Drawing % Complete: 0 %
Phase 1 & 2 supplemental form attached? No	Project Pre-Bid Meeting Date: Aug 1, 2017		

Note: *Phase 1 & 2 supplemental form MUST be filled out for ALL phase 1 & 2 requests! See page 2 of this form.

Section 4 - Phase 3 Request Information *(Note: You must attach a copy of FETU approved "Request to Advertise" form)*

WO # on RTA:	RTA Approver Name:

Section5 - Water Intrusion/Mold Remediation, Insulation, or Other Request Information

Describe the Problem:

PH 1 & 2 WO#: 38096750

PH 1 & 2 LAB WO#: 38096756

Section 6 - Asbestos Assistance Request Information

Room/Area Requiring Assistance:		
Asbestos Management Plan has been reviewed?	Work Order #:	
Bulk sample has been completed on:	Requesting FETU to sample suspect materials?	
Name Building Material in Question:	Asbestos Present?	
Description of Material(s) to be Abated:		
Quantity of Material to be Abated:	Abatement Type Requested:	
Tentative Start Date of Requestor's Project:	Abatement is required for:	

FOR FETU USE ONLY

FETU Received Date:	Senior Assigned:	Date Assigned:
Parent WO #	Ph. 1 & 2 WO #:	Ph. 3 WO #:
Crew I&P WO #:	Crew Removal WO #:	Crew Lab. WO #:
Date Assigned for Samples:	Date Assigned for Abatement:	
Date Requestor Contacted with Bulk Sample Results:	By:	
Date Requestor Notified of Abatement Completion:	By:	

ENVIRONMENTAL ASSESSMENT (PHASE 1) & ABATEMENT DESIGN (PHASE 2) SUPPLEMENTAL FORM

Purpose of Form: This form will assist the Requestor to determine the proper asbestos and lead requirements by identifying the project as a NO, MINIMAL OR MAJOR IMPACT PROJECT. In turn, information the Requestor provides herein will assist FETU to expeditiously process request for no or minimal impact projects that don't necessarily require a Phase 1 Environmental Assessment.

Date: 7/2/2024	**Requestor:** Evangelique Zhao	**School:** 32nd St USC Magnet School
Official Project Name: 32nd St./USC Magnets - Major Modernization Project		

Directions: Based on the project scope of work, please identify if this Project is a No, Minimal or Major Impact Project by checking the corresponding box below. Also, please check the appropriate sub-box(es) under each main category as appropriate and include any other information that substantiates this project, as No, Minimal or Major Impact Project in the COMMENTS section below.

☐ **THIS IS A NO IMPACT PROJECT**

- ☐ This project does not impact any structures/buildings. (*For example, new stand-alone shade structure.)*
- ☐ Materials to be impacted by this project are not coated with paint, varnish, glazing or any other coating, and are not suspect, known or assumed to be asbestos-containing. In addition, this project does not require working in or exposing any ceiling spaces, attics, crawl spaces or other building interstitial areas. *In the COMMENTS section below, identify the material (e.g., unpainted concrete floor, unpainted metal duct, unpainted concrete walls, unpainted brick wall, etc.).*
- ☐ This project includes work in a building(s) but does not impact any coated surfaces or building materials and does not require working in or exposing any ceiling spaces, attics, crawl spaces or other building interstitial areas. *Elaborate in COMMENTS section below. For example, the scope only includes the re-programming of the fire alarm system or only includes new utilities point of connection at existing conduit and pull box at exterior of building.*
- ☐ This project includes excavation.
- ☐ This project does not include excavation.
- ☐ New construction. Construction Date:
- ☐ Other. *Explain in COMMENTS section below.*

☐ **THIS IS A MINIMAL IMPACT PROJECT**

- ☐ This project requires minimal disturbance or removal of building materials and meets the following criteria:
  - Disturbance or removal of building materials, are less or equal to three (3) square feet per impact area.
  - Total quantity of building material impact does not exceed 99 square feet.
  - No ceiling spaces, attics, crawl spaces or other building interstitial areas are required to be worked in or exposed.
- ☐ This project impacts coated surfaces only.
- ☐ This project does not impact coated surfaces.

An example of a project, which may be a minimal impact project, is a fire alarm upgrade project, which only requires coring, installing surface mounted conduits/raceways and replacing existing surface-mounted fire alarm devices.

☒ **THIS IS A MAJOR IMPACT PROJECT**

- ☒ This project requires major impacts to building materials and/or work in ceiling spaces/attics/crawl spaces/other interstitial building areas. Major impacts to building materials are those that are greater than three (3) square feet for any impact area or total quantity of building material to be impacted exceeds 99 square feet total.

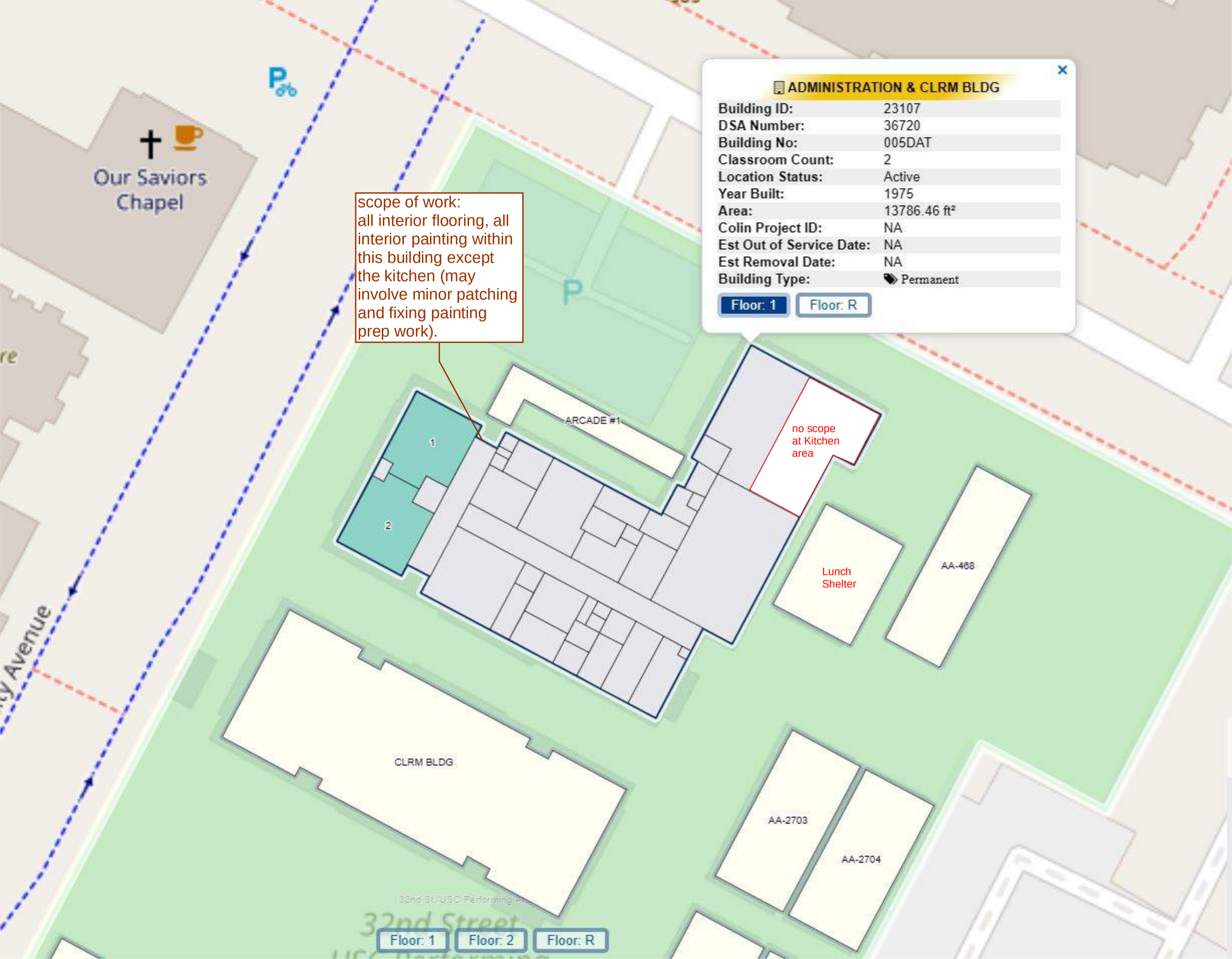
☐ **BASED ON THE SCOPE OF WORK, I AM NOT ABLE TO DETERMINE IF THE PROJECT IS A NO, MINIMAL OR MAJOR IMPACT PROJECT**

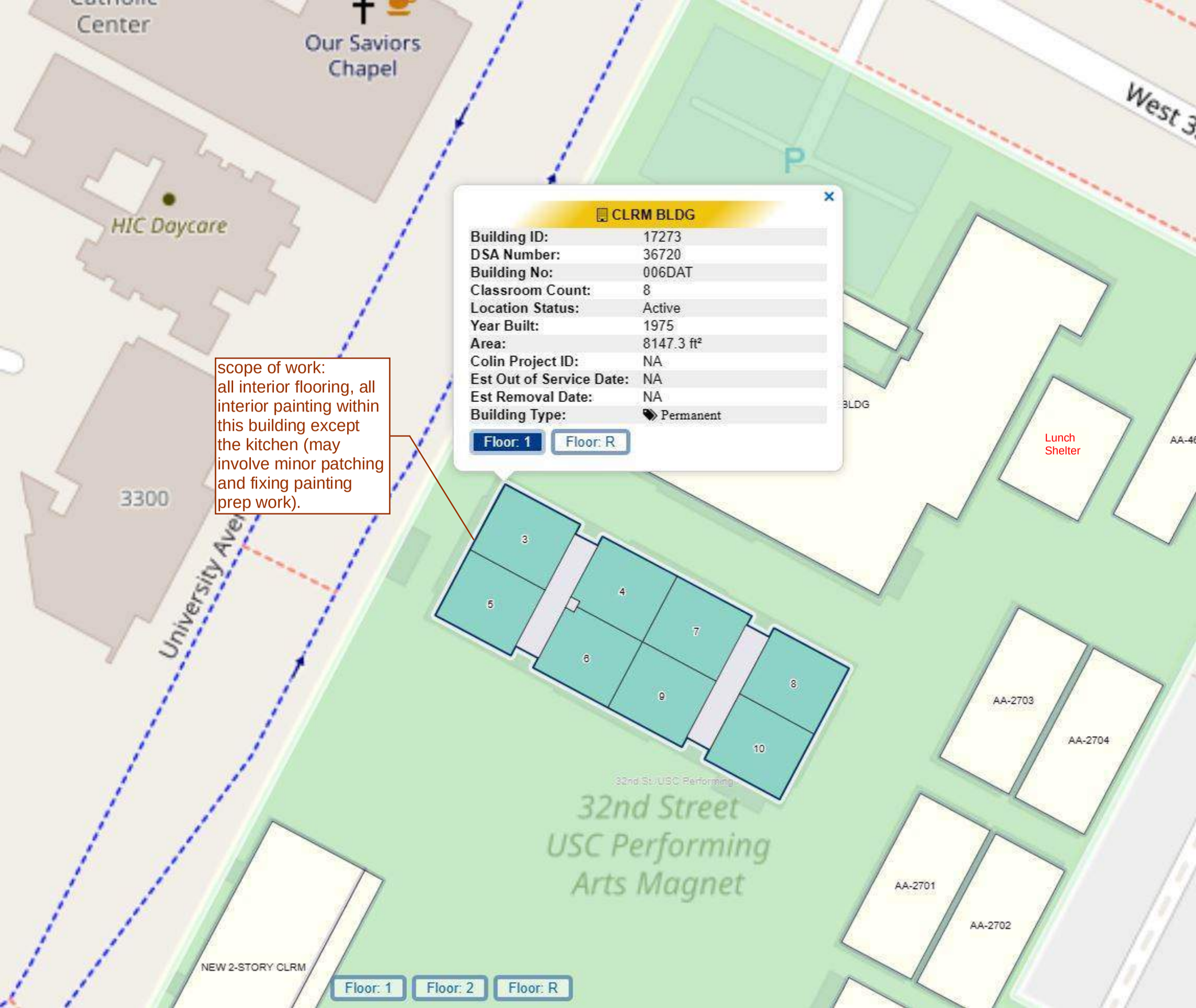
COMMENTS *(Include supplemental information regarding the scope of this project and/or additional information regarding no, minimal or major impacts to building materials)*

Potential scope of replacement of flooring, wall bases, interior painting (may involve minor patching and fixing prep work ahead of painting) as recovery scope if DBE uses Admin and Classroom Bldgs during construction. This would occur at 2 buildings: 1) Admin & Classroom Bldg (005DAT) , and 2) Classroom Bldg (006DAT). Exterior painting for 3x permanent buildings and lunch shelter, see attached site plan/bldg plans.

If there are any questions, please contact Evangelique Zhao: evangelique.zhao@lausd.net or 213.241.6463, cell 213.608.5364 Thanks!

scope of work:
exterior painting for these existing buildings, arcades/walkways and the lunch shelter
Parish & USC Caruso Catholic Center
Our Saviors Chapel
HIC Daycare
West 32nd Street
South Hoover Street
Royal Street
ARCADE #1
ADMINISTRATION & CLRM BLDG
Lunch Shelter
AA-468
CLRM BLDG
AA-2703
AA-2704
32nd Street USC Performing Arts Magnet
AA-2701
AA-2702
NEW 2-STORY CLRM
ARCADE #2
J-301
A-832
AA-2108
AA-2329
AA-2332
NEW 2-STORY CLRM
CLRM ...
AA-2333
AA-2334
STORA...
West Jefferson Boulevard
Jefferson & Hoover
Shrine Auditorium
Floor: 1
Floor: 2
Floor: R


ADMINISTRATION & CLRM BLDG
Building ID: 23107
DSA Number: 36720
Building No: 005DAT
Classroom Count: 2
Location Status: Active
Year Built: 1975
Area: 13786.46 ft²
Colin Project ID: NA
Est Out of Service Date: NA
Est Removal Date: NA
Building Type: Permanent
Floor: 1
Floor: R
scope of work:
all interior flooring, all interior painting within this building except the kitchen (may involve minor patching and fixing painting prep work).
no scope at Kitchen area
ARCADE #1
1
2
Lunch Shelter
AA-468
CLRM BLDG
AA-2703
AA-2704
Our Saviors Chapel
32nd Street
Floor: 1
Floor: 2
Floor: R


Our Saviors Chapel
HIC Daycare
3300
University Ave
West 3
P
CLRM BLDG
Building ID: 17273
DSA Number: 36720
Building No: 006DAT
Classroom Count: 8
Location Status: Active
Year Built: 1975
Area: 8147.3 ft²
Colin Project ID: NA
Est Out of Service Date: NA
Est Removal Date: NA
Building Type: Permanent
Floor: 1
Floor: R
scope of work:
all interior flooring, all interior painting within this building except the kitchen (may involve minor patching and fixing painting prep work).
3
4
5
6
7
8
9
10
Lunch Shelter
AA-2703
AA-2704
AA-2701
AA-2702
32nd Street USC Performing Arts Magnet
NEW 2-STORY CLRM
Floor: 1
Floor: 2
Floor: R

APPENDIX G – PHASE II ASBESTOS ABATEMENT PLAN

ATTACHMENT A
PROJECT MANUAL

FOR

MAJOR MODERNIZATION PROJECT

AT

32nd STREET / USC MAGNET SCHOOL (7137)

LOCATED AT

822 WEST 32ND STREET
LOS ANGELES, CA 90007

IN THE LOS ANGELES UNIFIED SCHOOL DISTRICT

PREPARED BY:

VISTA ENVIRONMENTAL CONSULTING, INC.
1054 NORTH TUSTIN AVENUE
ANAHEIM, CA 92867
VISTA PROJECT NO. 240334060

PREPARED FOR:

LOS ANGELES UNIFIED SCHOOL DISTRICT
FACILITIES ENVIRONMENTAL TECHNICAL UNIT
1240 SOUTH NAOMI AVENUE
LOS ANGELES, CA 90021
LAUSD (COLIN) PROJECT NO. 10372107
FETU WORK ODER NO. 38096750

DATE PREPARED: AUGUST 23, 2024

CARLOS A. GALDAMEZ, CERTIFIED ASBESTOS CONSULTANT NO. 98-2379

Los Angeles Unified School District
Facilities Services Division

ALBERTO M. CARVALHO
Superintendent of Schools

INDIA GRIFFIN
Director
Maintenance & Operations

KRISZTINA TOKES
Chief Facilities Executive

GRETA GALOUSTIAN
Facilities Environmental Technical Manager
Facilities Environmental Technical Unit

August 27, 2024

Mr. Carlos Galdamez
Vista Environmental Consulting Inc.
1054 North Tustin Avenue
Anaheim, California 92807

RE: PHASE II REVIEW AND APPROVAL FOR ASBESTOS X and/or LEAD NA

The Facilities Environmental Technical Unit (FETU) has reviewed and approved your Phase II document(s) for the project listed below.

School: 32nd Street USC Magnet School School Code # 7137

Project: Major Modernization Project – Administrative & Classroom Bldg. (005DAT), Classroom Bldg. (006DAT), Lunch Shelter (P0377K), New 2-Story Classroom Bldgs. 1 & 2 (35282 & 35283).

Colin No. 10372107

Date of Report: 8/19/2024 Maximo Work Order No. 38096750

If you have any questions regarding this approval, please call the FETU at (213) 745-1450.

Sincerely,

Digitally signed by Glenn Gutierrez
DN: cn=Glenn Gutierrez, o=LAUSD, ou=FETU, email=glenn.gutierrez@lausd.net, c=US
Date: 2024.08.28 12:10:59 -07'00'

Glenn Gutierrez
Senior Asbestos Abatement Worker
Facilities Environmental Technical Unit

c: Greta Galoustian, Facilities Environmental Technical Manager
Kwun Yang, FETU Analyst

32ND STREET / USC MAGNET SCHOOL (7137)
MAJOR MODERNIZATION PROJECT

I. Administrative & Classroom Building (005DAT)

A. Abatement contractor must remove and dispose of as friable and hazardous asbestos-containing waste the following material(s):

1. ACM – 12”x12” Lt. Beige with Brown Streaks Floor Tiles with ACM Black Mastic on concrete substrate, approximately 4,710 square feet located at Auditorium & Foyer, Chair Storage, Health Office Area, Main Office Area & Supply Room, Principal’s Closet Area, Work Room & Office, Office, Parent Center, Plant Manager’s Office, and P. E. Room.

    a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

2. ACM – 12”x12” Lt. Beige with Brown Streaks & Orange (Patterned) Floor Tiles with ACM Black Mastic on concrete substrate, approximately 1,600 square feet located at the Hallway of the building.

    a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

3. ACM – 12”x12” Off-White Floor Tile with ACM Black Mastic on concrete substrate, approximately 1,180 square feet located at Faculty Dining.

    a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

4. ACM – Black Mastic associated with Non-ACM 12”x12” Tan Marbled Floor Tiles on concrete substrate, approximately 110 square feet located at the Health Office Restroom and Staff Restrooms.

    a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

5. ACM – Black Mastic associated with Non-ACM 12”x12” Blue Floor Tile on Concrete Substrate, approximately 900 square feet located in Rooms 1 & 2.

    a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

6. ACM – Black Mastic associated with Non-ACM Brown Carpet / Adhesive on concrete substrate, approximately 305 square feet located at Assistant’s Principal Office.

a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

7. ACM – Joint Compound associated with Drywall Walls located in Rooms 1 & 2, Hallway, Library, A/V Room, Main Office Area & Supply, Principal's Office & Restroom, Coordinator's Office (Conference Room), Health Office Area, Work Room & Office, Dean's Office & Hallway, Parent Center, Plant Manager's Office, Asst. Principal's Office, and PE Room.

   a) Minor disturbance (i.e., drilling, coring, sawing, spot removal) of ACM and/or ACCM less than or equal to 3 square or linear feet per location and less than 100 square feet total for the entire project can be performed by AHERA-certified, 16 hour operation and maintenance trained personnel in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing), under the supervision of FETU or a District approved Environmental Consultant.

   b) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing Material) under the supervision of FETU or a District approved Environmental Consultant.

8. ACM – Joint Compound on Drywall Ceiling (Above the 12"x12" Ceiling Tiles) located in Hallway, Principal's Office & Restroom, Main Office Area & Supply Room, Health Office Area, Coordinator's Office (Conference Room), Work Room & Office, Dean's Office & Hallway, Parent Center, Plant Manager's Office, Asst. Principal's Office, PE Room, and Chair Storage.

   a) Minor disturbance (i.e., drilling, coring, sawing, spot removal) of ACM and/or ACCM less than or equal to 3 square or linear feet per location and less than 100 square feet total for the entire project can be performed by AHERA-certified, 16 hour operation and maintenance trained personnel in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing), under the supervision of FETU or a District approved Environmental Consultant.

   b) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing Material) under the supervision of FETU or a District approved Environmental Consultant.

9. ACM - Exterior Stucco Wall located on the exterior wall of the building.

   a) Minor disturbance (i.e., drilling, coring, sawing, spot removal) of ACM and/or ACCM less than or equal to 3 square or linear feet per location and less than 100 square feet total for the entire project can be performed by AHERA-certified, 16 hour operation and maintenance trained personnel in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement

Non-Friable Roofing), under the supervision of FETU or a District approved Environmental Consultant.

b) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing Material) under the supervision of FETU or a District approved Environmental Consultant.

10. ACM – Exterior Stucco Ceiling located on the exterior Portico Ceiling of the building.

a) Minor disturbance (i.e., drilling, coring, sawing, spot removal) of ACM and/or ACCM less than or equal to 3 square or linear feet per location and less than 100 square feet total for the entire project can be performed by AHERA-certified, 16 hour operation and maintenance trained personnel in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing), under the supervision of FETU or a District approved Environmental Consultant.

b) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing Material) under the supervision of FETU or a District approved Environmental Consultant.

B. Abatement Contractor must remove and dispose of as non-friable and non-hazardous asbestos-containing waste the following material(s):

1. Abatement Contractor must remove non-asbestos containing 2” Black Cove Base & Adhesive cross-contaminated with Joint Compound (ACM), approximately 20 square feet located in the Teacher’s Work Room.

a) The cove base & adhesive material must be remove in containment at the time the floor tile is being abated, no sooner.

2. Abatement Contractor must remove non-asbestos containing 2” Brown Cove Base & Adhesive cross-contaminated with Joint Compound (ACM), approximately 200 square feet located in the Hallway, Main Office Area & Supply Room, Health Office Area, Work Room & Office, Dean’s Office & Hallway, Plant Manger’s Office, Parent Center, and PE Storage.

a) The cove base & adhesive material must be remove in containment at the time the floor tile is being abated, no sooner.

3. Abatement Contractor must remove non-asbestos containing 4” Black Cove Base & Adhesive cross-contaminated with joint compound (ACM), approximately 40 square feet located in Rooms 1 & 2.

a) The cove base & adhesive material must be remove in containment at the time the floor tile is being abated, no sooner.

4. Abatement Contractor must remove non-asbestos containing Cove Base & Adhesive cross-contaminated with Joint Compound (ACM), approximately 60 square feet located in the Library, Principal's Office & Restroom, and Coordinator's Office (Conference Room).

    a) Disturbance of the joint compound (ACM) shall be performed utilizing drop cloth, HEPA vacuum and wet methods under regulated work area. This work must be performed under the supervision of District Representative and the area must pass visual inspection. Waste generated from the disturbance to the ACM joint compound shall be dispose as non-hazardous asbestos waste.

C. General Contractor shall marked the work area for the abatement contractor prior to any disturbances.

D. The work area is shown in the attached drawings, Figure 2.

Note: The Ceiling Space located at the Main Office Area is Off-Limits due to ACM Roofing Debris. Per the scope of work, the ceiling space will not be access.

II. Classroom Building (006DAT)

A. Abatement contractor must remove and dispose of as friable and hazardous asbestos-containing waste the following material(s):

1. ACM – 12"x12" Lt. Tan Floor Tiles with ACM Black Mastic on concrete substrate, approximately 6,300 square feet located in Rooms #3, #4, #5, #6, #8, #9, & #10. Includes the 12"x12" Tan Marble Floor Tile Patch with ACM Black Mastic in Rooms #4 & #8 by the Sink Area.

    a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

2. ACM – 12"x12" Lt. Tan & Orange (Patterned) Floor Tiles with ACM Black Mastic on concrete substrate, approximately 960 square feet located at the East & West Hallways.

    a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

3. ACM – Black Mastic associated the Non-ACM 12"x12" Dk. Tan Marbled Floor Tiles on concrete substrate, approximately 900 square feet located at Room #7.

    a) The Abatement Contractor shall remove the asbestos-containing black mastic and adhesive (ACM) and all ancillary materials from concrete substrate utilizing a Bead Blaster and/or grinder equipped with HEPA filtration permitted and approved by SCAQMD.

4. ACM – Joint Compound associated with Drywall Walls located in Rooms #3, #4, #5, #6, #7, #8, #9, & #10, and East & West Hallways.

a) Minor disturbance (i.e., drilling, coring, sawing, spot removal) of ACM and/or ACCM less than or equal to 3 square or linear feet per location and less than 100 square feet total for the entire project can be performed by AHERA-certified, 16 hour operation and maintenance trained personnel in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing), under the supervision of FETU or a District approved Environmental Consultant.

b) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing Material) under the supervision of FETU or a District approved Environmental Consultant.

5. ACM – Joint Compound on Drywall Ceiling (Above the 12”x12” Ceiling Tiles) located in the East & West Hallway.

a) Minor disturbance (i.e., drilling, coring, sawing, spot removal) of ACM and/or ACCM less than or equal to 3 square or linear feet per location and less than 100 square feet total for the entire project can be performed by AHERA-certified, 16 hour operation and maintenance trained personnel in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing), under the supervision of FETU or a District approved Environmental Consultant.

b) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing Material) under the supervision of FETU or a District approved Environmental Consultant.

6. ACM - Exterior Stucco Ceiling located on the exterior Portico Ceiling of the building.

a) Minor disturbance (i.e., drilling, coring, sawing, spot removal) of ACM and/or ACCM less than or equal to 3 square or linear feet per location and less than 100 square feet total for the entire project can be performed by AHERA-certified, 16 hour operation and maintenance trained personnel in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing), under the supervision of FETU or a District approved Environmental Consultant.

b) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing Material) under the supervision of FETU or a District approved Environmental Consultant.

B. Abatement Contractor must remove and dispose of as non-friable and non-hazardous asbestos-containing waste the following material(s):

1. Abatement Contractor must remove non-asbestos containing 4" Brown Cove Base & Adhesive cross-contaminated with Joint Compound (ACM), approximately 330 square feet located in Rooms #3 to #10, and East & West Hallways.

a) The cove base & adhesive material must be remove in containment at the time the floor tile is being abated, no sooner.

C. General Contractor shall marked the work area for the abatement contractor prior to any disturbances.

D. The work area is shown in the attached drawings, Figure 3.

III. Grounds / Arcades (7137-G)

A. Abatement Contractor must remove and dispose of as friable and hazardous asbestos-containing waste the following material(s):

1. ACM - Exterior Stucco Ceiling located on the exterior Arcade Ceiling at Arcade #1.

a) Minor disturbance (i.e., drilling, coring, sawing, spot removal) of ACM and/or ACCM less than or equal to 3 square or linear feet per location and less than 100 square feet total for the entire project can be performed by AHERA-certified, 16 hour operation and maintenance trained personnel in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing), under the supervision of FETU or a District approved Environmental Consultant.

b) Major disturbance of ACM and/or ACCM greater than three (3) square or linear feet per location and/or greater than 100 square feet total for the entire project shall be performed by a District-approved Asbestos Abatement Contractor in accordance with LAUSD Specification, Section 02 8219 (Asbestos Abatement Non-Friable Roofing Material) under the supervision of FETU or a District approved Environmental Consultant.

B. General Contractor shall marked the work area for the abatement contractor prior to any disturbances.

C. The work area is shown in the attached drawings, Figure 2.

IV. PEELING AND LOOSE PAINT

A. The buildings and grounds involved with this project are as follows:

Administrative & Classroom Building (005DAT)
Classroom Building (006DAT)
Lunch Shelter (P0377K)
New 2-Story Classroom Building #1 (35282)
New 2-Story Classroom Building #2 (35283)

B. All coated surfaces, including but not limited to painted, varnished, and glazed surfaces, to be impacted by the project are assumed to be lead-based. All work shall be performed in compliance with Section 02 8333, "Lead Abatement and Lead Related Construction Work" specifications. XRF testing methodology is not acceptable in determining negative for lead content for Cal/OSHA compliance purposes, except for notification requirements. Disturbance of coated surfaces by contractors is to be monitored by an Environmental Consultant sufficient to ensure proper work procedures, cleanup, and waste handling is performed.

C. Where loose or flaking paint or other coatings will be disturbed by the work required herein, stabilize all such loose and peeling paint.

D. Paint waste shall not be commingled with asbestos waste.

V. All work involving lead-based and/or lead-containing materials shall be performed in accordance with the attached specifications "Section 02 8333– Lead Abatement and Lead Related Construction Work" as prepared by the Los Angeles Unified School District.

VI. All work involving asbestos-containing materials shall be performed in accordance with the attached specifications "Section 02 8213 – Asbestos Abatement and Asbestos Related Disturbances" as prepared by the Los Angeles Unified School District.

Only contractors on the LAUSD Approved list of Asbestos Abatement Contractors are qualified to perform asbestos abatement on District projects.

32nd STREET / USC MAGNET SCHOOL (7137)
MAJOR MODERNIZATION PROJECT

I. GENERAL

A. The following special conditions shall take precedence over the standard specifications. The included drawing with these specifications show the plot and floor plans of the work areas.

B. Abatement contractor shall be responsible for verifying all dimensions / quantities prior to bid. Any amounts listed on these specifications are only estimated and are not to be considered final measurements.

C. Abatement contractor shall provide a secured and separate storage for all materials, equipment, and waste.

D. Abatement contractor shall physically secure all entrances and opening to work areas until final visual clearance has been achieved, as approved by the District representative.

E. In addition to the project specification submittal requirements, the Abatement contractor shall submit for review and approval an asbestos abatement work plan. The asbestos work plan shall detail the means and methods that will be used for controlling and containing fiber release during the removal/disturbance of asbestos containing material in accordance with the project specifications. The plan shall include, but not be limited to, a drawing that adequately depicts the location of asbestos control areas, change areas, emergency exit routes and exits, and any special features (e.g. critical barriers, pony walls, air filtration units, makeup air, air filtration unit exhaust, decontamination units, load out/bag out units, etc.).

F. The Abatement Contractor shall also submit, for review and approval, a lead related work plan. The lead related work plan shall detail the means and methods that will be used for controlling and containing dust released during the removal/disturbance of lead containing materials, in accordance with the project specifications. The plan shall include, but not be limited to, a drawing that adequately depicts the location of lead related control areas, change areas and any special features and engineering controls to be implemented for demarcating and containing lead related work areas.

G. The abatement contractor shall not proceed with the disturbance of ACM/ACCM until the asbestos work plan and written work schedule have been approved by a District representative in writing.

H. Noise from the work process shall not interfere with the normal and scheduled day or evening school activities. Work schedule will be determined with the involvement of the school staff at the job start meeting.

I. At the commencement of the project, all Contract Documents, Project Manual and Specifications shall be on site and remain until the completion of the project.

J. All furniture and equipment in the work area involved will be removed by District personnel prior to the start of abatement work, to be scheduled by the OAR.

K. Asbestos Contractor awarded the project shall notify SCAQMD (South Coast Air Quality Management District) ten working days prior to the start of abatement.

II. SITE SPECIFIC CONDITIONS

A. Load out and transportation of waste or materials shall not be performed when students are present.

B. The abatement contractor shall demarcate the work area to warn unauthorized persons from entering the workspace(s).

C. All electrical equipment, where applicable, shall be de-energized. All equipment, including but not limited to, junction boxes, cable connections, etc., and bookshelves shall be pre-cleaned and wrapped with one (1) layer of six (6)-mil polyethylene sheeting and seal with duct tape. This layer shall be removed after air clearance has been achieved.

D. All surfaces throughout the work area(s) shall be thoroughly pre-cleaned.

E. Removal of friable asbestos-containing materials shall be performed in full containment with three (3) stage decontamination unit in accordance with LAUSD Specifications 02 8213 (Asbestos Abatement and Asbestos Related Disturbance).

F. Hard barrier construction with plywood ceiling will be required for the decontamination units and it shall not interfere with closing of any doors. The door(s) shall be locked when the work site is unattended such as during breaks and lunch and at the end of the workday.

G. All electrical and mechanical equipment, including but not limited to, gauges, valves, etc., throughout the work areas involved shall not be encapsulated or a lockdown applied. These items shall be decontaminated, left in place, and protected during the duration of the contract.

H. Contractor shall be responsible for all costs incurred (e.g., monitoring, analyses, etc.) resulting from failure to receive initial air clearance.

I. Concrete Subfloor

a. After removal of the flooring system, Abatement Contractor shall remove the asbestos-containing material mastic material and all ancillary materials down to the concrete substrate utilizing Bead Blasting equipment with HEPA filtration permitted and approved by SCAQMD.

b. The Bead Blaster, grinding equipment, and/or any other similar abrasive tools that are utilized in this project shall be equipped with HEPA filtration that are permitted and approved by SCAQMD.

c. All surfaces throughout the work area(s) that the Bead Blaster machine is unreachable shall be removed using SCAQMD permitted and approved mechanical grinders equipped with HEPA filtration attachments.

J. Contractor shall clean and cover with an airtight seal all porous, dropped, or perforated ceiling systems, including any vents, air circulating units, and registers (where the air handling system is turned off), in the work area, with 6-mil polyethylene sheeting, sealed around all edges.

K. Air Monitoring

1. Perimeter air sampling (Area) during the removal process must be conducted by District Representative.

L. Clearance Air Monitoring

1. Following the completion of the abatement work and cleanup operations, TEM clearance air monitoring shall be performed by the District Representative.

2. The District Representative shall arrange for sampling of the air in the Abatement Work area for airborne fiber concentrations.

3. When all air samples collected from each Abetment Work Area indicate concentrations of airborne fiber within the limits of AHERA Requirements, 40 CFR, Part 763, Subpart E, (70 structures/mm^2), the Abatement Contractor shall remove the containment barriers and work area shall be released for occupancy.

4. Areas failing to pass visual and /or air clearance monitoring shall be re-cleaned and/or rested until satisfactory levels are obtained in compliance with this specification Abatement contractor shall be responsible for all cost incurred (e.g., monitoring, analyses, etc.,) resulting from failure to receive initial air clearance.

III. CLOSE-OUT DOCUMENTS

A. The contractor shall provide the District all of the following documents:

1. Filter change logs for all respirators
2. Foreman's daily job report
3. Employee's entry/exit logs for all containments
4. Visitor's entry/exit logs for all containments
5. Air samples for personnel
6. Copy of any waste manifest(s)
7. All signed LAUSD Contractor-Daily Personnel Report Forms
8. Signed Code of Conduct form, from each employee working on this project
9. Signed LAUSD Asbestos Abatement Project Personnel Logs

B. Abatement contractor shall have thirty (30) working days after tear down of the last work area containment to submit the required close-out documents. Close-out documents shall be in accordance with PART 1.13 of LAUSD Specifications "Section 02 8213 - Asbestos Abatement and Asbestos Related Disturbance".

C. Failure to provide the documents as required will result in a corrective item value in an amount sufficient to cover the cost that would be incurred if a regulatory agency citation was issued for the absence of such documentation or, in the absence of such a regulation, in an amount the District deems fair and reasonable for the efforts of pursuing the document(s) from the Contractor and obtaining the documentation from other sources.

This report may not be changed, modified or include additions without the express written permission from the FETU.

END OF SECTION

32nd Street / USC Magnet School
Site Plan

LOS ANGELES SCHOOL DISTRICT

DIAGRAM OF BUILDING AREAS

LOCATION 7137

APPLICATION NO. 22/

DRAWING THYOIFI

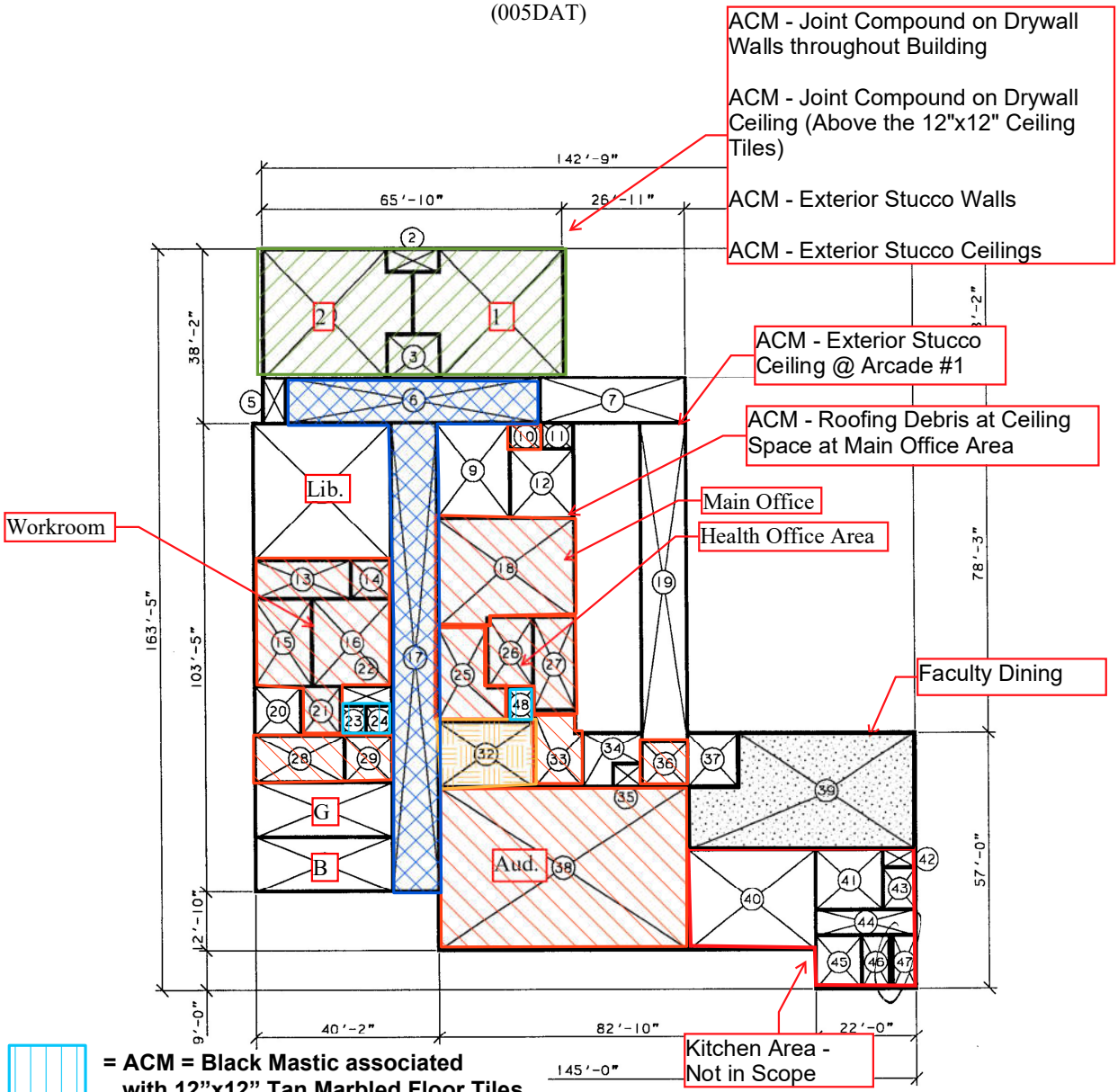
SCHOOL: 32ND STREET SCHOOL

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

BUILDING 1

Administration & Classroom Bldg.
(005DAT)



= ACM = Black Mastic associated with 12"x12" Tan Marbled Floor Tiles

= ACM 12"x12" Off-White Floor Tiles with Black Mastic

= ACM 12"x12 Lt. Beige w/ Brown Floor Tiles with Black Mastic

= ACM Black Mastic underneath Brown Carpet

= ACM Black Mastic associated with 12"x12" Blue Floor Tiles

North

= ACM 12"x12" Lt Beige w/ Brown & Orange (Patterned) Floor Tiles with Black Mastic

Figure 2

LOS ANGELES SCHOOL DISTRICT

DIAGRAM OF BUILDING AREAS

LOCATION 7137

APPLICATION NO. 22/

DRAWING THYO2F1

SCHOOL: 32ND STREET SCHOOL

ADDRESS: 822 WEST 32ND STREET
LOS ANGELES, CA 90007

DISTRICT: LOS ANGELES UNIFIED SCHOOL DISTRICT

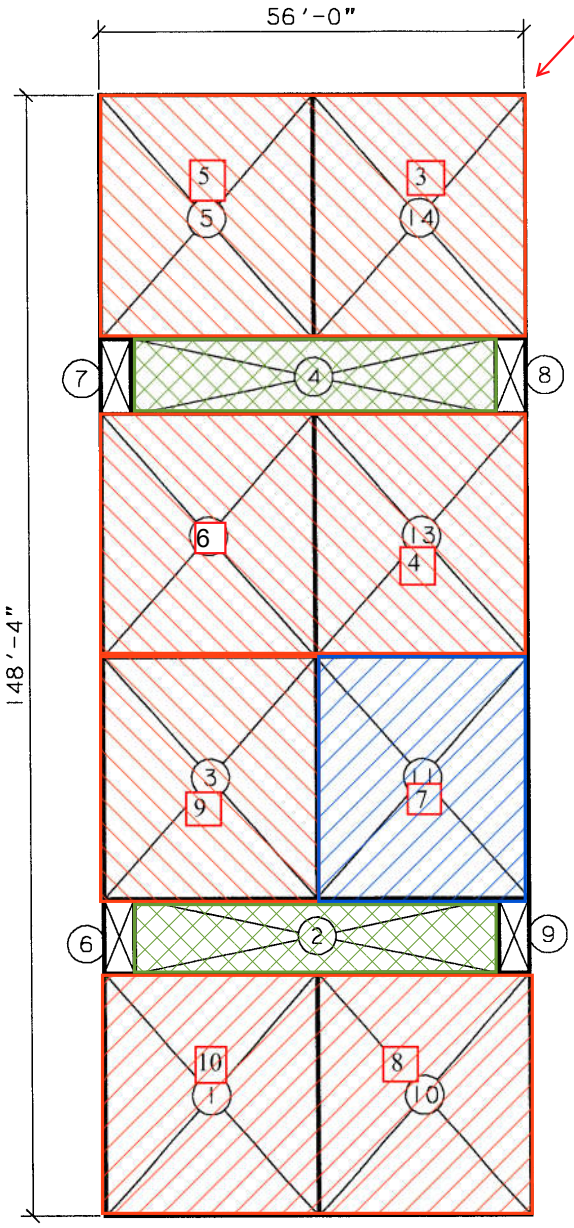
BUILDING 2

Classroom Building (006DAT)

ACM - Joint Compound on Drywall Walls throughout Building

ACCM - Joint Compound on Drywall Ceiling (Above the 12"x12" Ceiling Tiles) at Hallways

ACM - Exterior Stucco Ceiling



= ACM 12"x12" Lt. Tan Floor Tiles & Black Mastic

= ACM 12"x12" Lt. Tan & Orange (Patterned) Floor Tiles & Black Mastic

= ACM Black Mastic 12"x12" Dk. Tan Marbled Floor Tiles

North

PLOT SCALE: 1"=20'-0"

AUTHORIZED AGENT
LOS ANGELES UNIFIED SCHOOL DISTRICT

Figure 3

APPENDIX H – NOISE IMPACT ANALYSIS

NOISE IMPACT ANALYSIS

32ND STREET/USC MAGNET SCHOOL MAJOR MODERNIZATION PROJECT

CITY OF LOS ANGELES

Lead Agency:

Los Angeles Unified School District
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Project No. 24029

October 21, 2025

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ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	City of Los Angeles
CNEL	Community Noise Equivalent Level
dB	Decibel
dBA	A-weighted decibels
DOT	Department of Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
EPA	Environmental Protection Agency
FTES	Full Time Equivalent Students
HVAC	Heating Ventilation & Air Conditioning System
Hz	Hertz
Ldn	Day-night average noise level
Leq	Equivalent sound level
Lmax	Maximum noise level
ONAC	Federal Office of Noise Abatement and Control
OSHA	Occupational Safety and Health Administration
PPV	Peak particle velocity
RMS	Root mean square
SEL	Single Event Level or Sound Exposure Level
STC	Sound Transmission Class
VdB	Vibration velocity level in decibels

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Noise Impact Analysis has been prepared to determine the noise impacts associated with the proposed 32nd Street/USC Magnet School Major Modernization project (proposed project). The following is provided in this report:

- A description of the study area and the proposed project;
- Information regarding the fundamentals of noise;
- Information regarding the fundamentals of vibration;
- A description of the local noise guidelines and standards;
- An evaluation of the current noise environment;
- An analysis of the potential short-term construction-related noise impacts from the proposed project; and,
- An analysis of long-term operations-related noise impacts from the proposed project.

1.2 Site Location and Study Area

The existing campus (project site) is located at 822 West 32nd Street, which is in the University Park neighborhood in the City of Los Angeles (City). The 3.67-acre project site is bounded 32nd Street and USC dormitory residential uses to the north, a parking lot and the Shrine Auditorium to the east, Jefferson boulevard and the USC campus to the south, and University Avenue (pedestrian walkway), the USC Catholic Center, HIC Daycare, and the USC Jewish Center to the west. The project study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors are the USC Catholic Center, HIC Daycare and USC Jewish Center that are as near as 65 feet west of the project site. There are also the USC dormitories that are as near as 85 feet north of the project site.

1.3 Proposed Project Description

The proposed project would consist of two phases that include but not limited to:

Phase 1 would consist of temporarily relocating the School to the former Downtown Business Magnet (DBM) campus that is currently vacant and located at 1081 West Temple Street, Los Angeles. Phase 1 may require the reconfiguration of the demountable partitions. As such, construction-related noise created from Phase 1 would be nominal. In addition, the DBM is located approximately 3.2 miles north of the project site, which would result in only a nominal change in bus routes and worker commutes during the temporary relocation of the School. As such, operations-related noise impacts from Phase 1 would be nominal. No further analysis of Phase 1 is provided in this Report.

Phase 2 would consist of the demolition of 23 classrooms and restrooms in 13 relocatable buildings and a storage building that total 22,265 square feet of building space and demolition of the paved areas on the southern and eastern areas of the campus that cover approximately 82,000 square feet. Minor modernization of existing administration building, the single-story and two-story classroom buildings, and

lunch shelter that total approximately 40,127 square feet and would include accessibility upgrades, utility infrastructure upgrades and exterior painting. New construction of a 3-story classroom building that would total 46,380 square feet. Outside improvements that would include landscape, hardscape and infrastructure upgrades and construction of an onsite access road that would start at the location of the existing basketball courts adjacent to 32nd Street and would extend to the southwest portion of the campus.

Construction is planned to start on July 28, 2026 and would be completed by November 7, 2028. Construction activities will occur between the hours of 7:00 a.m. and 9:00 p.m., per Section 41.40 of the City's Municipal Code. Upon project completion, the Campus would return to the same operations as current conditions. There would be no increase in staff or student enrollment as a result of the proposed project. Implementation of the proposed project would also decrease the demand for repair and maintenance and alleviate the burden placed on school-site administration and custodial staff. The proposed site plan is shown in Figure 2.

1.4 Standard Noise Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the City of Los Angeles and State of California.

City of Los Angeles Municipal Code

The following lists the noise and vibration regulations from the Municipal Code that are applicable, but not limited to the proposed project.

- Section 41.40 – Construction Noise Limits
- Section 111.03 – Minimum Ambient Noise Levels
- Section 112.02 – Air Conditioning, Refrigeration, Heating, Pumping, Filtering Equipment Noise Limits
- Section 112.03 – Construction Time Limits

State of California Rules

The following lists the State of California noise regulations that are applicable, but not limited to the proposed project.

- California Vehicle Code Section 2700-27207 – On Road Vehicle Noise Limits
- California Vehicle Code Section 38365-38350 – Off-Road Vehicle Noise Limits

1.5 Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines noise checklist questions.

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 impact.

Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact.

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?

Less than significant impact.

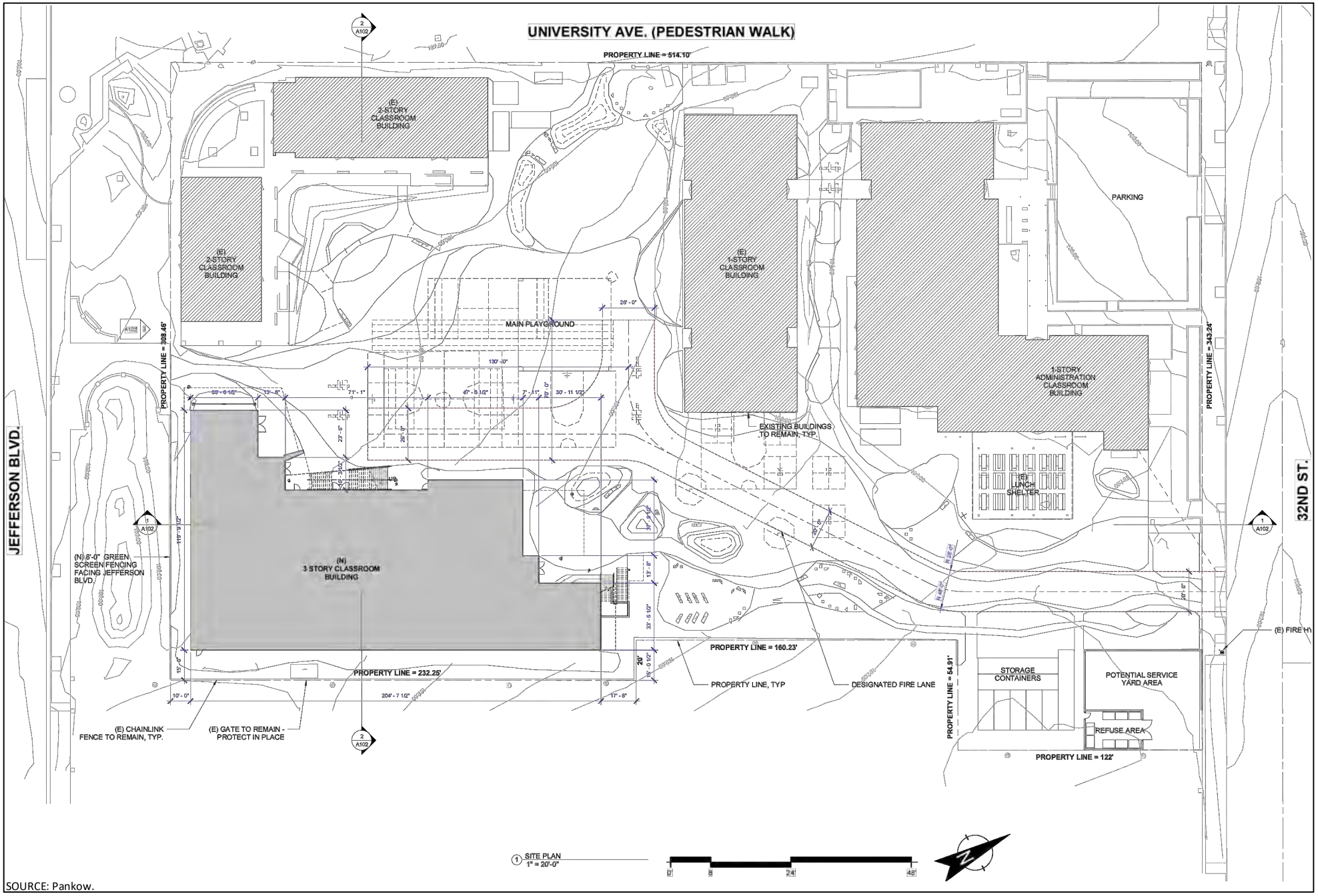
1.6 Mitigation Measures for the Proposed Project

This analysis found that through adherence to the noise and vibration regulations detailed in Section 1.4 above, all noise and vibration impacts would be reduced to less than significant levels and no mitigation is required.

SOURCE: Google Maps.

VISTA ENVIRONMENTAL

Figure 1
Project Location Map



SOURCE: Pankow.

VISTA ENVIRONMENTAL

Figure 2
Proposed Site Plan

2.0 NOISE FUNDAMENTALS

Noise is defined as unwanted sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear.

2.1 Noise Descriptors

Noise Equivalent sound levels are not measured directly, but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The peak traffic hour Leq is the noise metric used by California Department of Transportation (Caltrans) for all traffic noise impact analyses.

The Day-Night Average Level (Ldn) is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of ten decibels to sound levels at night between 10 p.m. and 7 a.m. While the Community Noise Equivalent Level (CNEL) is similar to the Ldn, except that it has another addition of 4.77 decibels to sound levels during the evening hours between 7 p.m. and 10 p.m. These additions are made to the sound levels at these time periods because during the evening and nighttime hours, when compared to daytime hours, there is a decrease in the ambient noise levels, which creates an increased sensitivity to sounds. For this reason, the sound appears louder in the evening and nighttime hours and is weighted accordingly. The City of Los Angeles relies on the CNEL noise standard to assess transportation-related impacts on noise sensitive land uses.

2.2 Tone Noise

A pure tone noise is a noise produced at a single frequency and laboratory tests have shown that humans are more perceptible to changes in noise levels of a pure tone. For a noise source to contain a “pure tone,” there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to “stand out” against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contiguous one-third octave bands by:

- 5 dB for center frequencies of 500 hertz (Hz) and above
- 8 dB for center frequencies between 160 and 400 Hz
- 15 dB for center frequencies of 125 Hz or less

2.3 Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound

from point sources, such as air conditioning condensers, radiate uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

2.4 Ground Absorption

The sound drop-off rate is highly dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models, soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA/DD is typically observed over soft ground with landscaping, as compared with a 6.0 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. For line sources a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3.0 dBA/DD drop-off rate for hard-site conditions. Caltrans research has shown that the use of soft-site conditions is more appropriate for the application of the Federal Highway Administration (FHWA) traffic noise prediction model used in this analysis.

3.0 GROUND-BORNE VIBRATION FUNDAMENTALS

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

3.1 Vibration Descriptors

There are several different methods that are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Due to the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels and is denoted as (L_v) and is based on the rms velocity amplitude. A commonly used abbreviation is "VdB", which in this text, is when L_v is based on the reference quantity of 1 micro inch per second.

3.2 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

3.3 Vibration Propagation

The propagation of ground-borne vibration is not as simple to model as airborne noise. This is due to the fact that noise in the air travels through a relatively uniform median, while ground-borne vibrations travel through the earth which may contain significant geological differences. There are three main types of vibration propagation; surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation."

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

4.0 REGULATORY SETTING

The project site is located in the City of Los Angeles. Noise regulations are addressed through the efforts of various federal, state, and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce
- Assisting state and local abatement efforts
- Promoting noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The Department of Transportation (DOT) assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration (FAA) regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA). Transit noise is regulated by the FTA, while freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that "noise sensitive" uses are either prohibited from being sited adjacent to a highway or, alternately that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Although the proposed project is not under the jurisdiction of the FTA, the *Transit Noise and Vibration Impact Assessment Manual* (FTA Manual), prepared by the FTA, September 2018, is a guidance document from a government agency that provides specific guidance for construction noise. The FTA recommends developing construction noise criteria on a project-specific basis that utilizes local noise ordinances if possible. However, local noise ordinances usually relates to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the noise impacts of a construction project. Project construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land uses. The FTA standards are based on extensive studies by the FTA and other governmental agencies on the human effects and reaction to noise and a summary of the FTA findings for a Detailed Analysis of construction noise are provided below in Table A. It should be noted that even though the project has been analyzed based on the General Assessment methodology, the more stringent Detailed Analysis construction noise thresholds have been utilized in this analysis.

Table A – FTA Construction Noise Criteria

Land Use	Day (dBA Leq(8-hour))	Night (dBA Leq(8-hour))	30-day Average (dBA Ldn)
Residential	80	70	75
Commercial	85	85	80*
Industrial	90	90	85*

Notes:
* 24-hour Leq not Ldn.
Source: Federal Transit Administration, 2018.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

4.2 State Regulations

Noise Standards

California Department of Health Services Office of Noise Control

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the "Land Use Compatibility for Community Noise Environments Matrix," which allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise. The Land Use Compatibility Matrix that was adopted by the City is shown in Figure 3.

California Noise Insulation Standards

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 dBA CNEL. When such structures are located within a 60-dBA CNEL (or greater) noise contour, an acoustical analysis is required to ensure that interior levels do not exceed the 45-dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code requires that all habitable rooms, hospitals, convalescent homes, and places of worship shall have an interior CNEL of 45 dB or less due to aircraft noise.

Government Code Section 65302

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

Exhibit I: Guidelines for Noise Compatible Land Use

(Based on the Governor's Office of Planning and Research, "General Plan Guidelines", 1990. To help guide determination of appropriate land use and mitigation measures vis-a-vis existing or anticipated ambient noise levels)

Land Use Category	Day-Night Average Exterior Sound Level (CNEL dB)						
	50	55	60	65	70	75	80
Residential Single Family, Duplex, Mobile Home	A	C	C	C	N	U	U
Residential Multi-Family	A	A	C	C	N	U	U
Transient Lodging, Motel, Hotel	A	A	C	C	N	U	U
School, Library, Church, Hospital, Nursing Home	A	A	C	C	N	N	U
Auditorium, Concert Hall, Ampitheater	C	C	C	C/N	U	U	U
Sports Arena, Outdoor Spectator Sports	C	C	C	C	C/U	U	U
Playground, Neighborhood Park	A	A	A	A/N	N	N/U	U
Golf Course, Riding Stable, Water Recreation, Cemetery	A	A	A	A	N	A/N	U
Office Building, Business, Commercial, Professional	A	A	A	A/C	C	C/N	N
Agriculture, Industrial, Manufacturing, Utilities	A	A	A	A	A/C	C/N	N

A = Normally acceptable. Specified land use is satisfactory, based upon assumption buildings involved are conventional construction, without any special noise insulation.

C = Conditionally acceptable. New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning normally will suffice.

N = Normally unacceptable. New construction or development generally should be discouraged. A detailed analysis of noise reduction requirements must be made and noise insulation features included in the design of a project.

U = Clearly unacceptable. New construction or development generally should not be undertaken.

SOURCE: City of Los Angeles General Plan Noise Element.

VISTA ENVIRONMENTAL

Figure 3
City of Palmdale Land Use Compatibility Standards

California Vehicle Code Section 27200-27207 – On-Road Vehicle Noise

California Vehicle Code Section 27200-27207 provides noise limits for vehicles operated in California. For vehicles over 10,000 pounds noise is limited to 88 dB for vehicles manufactured before 1973, 86 dB for vehicles manufactured before 1975, 83 dB for vehicles manufactured before 1988, and 80 dB for vehicles manufactured after 1987. All measurements are based at 50 feet from the vehicle.

California Vehicle Section 38365-38380 – Off-Road Vehicle Noise

California Vehicle Code Section 38365-38380 provides noise limits for off-highway motor vehicles operated in California. 92 dBA for vehicles manufactured before 1973, 88 dBA for vehicles manufactured before 1975, 86 dBA for vehicles manufactured before 1986, and 82 dBA for vehicles manufactured after December 31, 1985. All measurements are based at 50 feet from the vehicle.

Vibration Standards

Title 14 of the California Administrative Code Section 15000 requires that all state and local agencies implement the California Environmental Quality Act (CEQA) Guidelines, which requires the analysis of exposure of persons to excessive groundborne vibration. However, no statute has been adopted by the state that quantifies the level at which excessive groundborne vibration occurs.

Caltrans issued the *Transportation and Construction Vibration Guidance Manual*, April 2020. The Manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. However, this manual is also used as a reference point by many lead agencies and CEQA practitioners throughout California, as it provides numeric thresholds for vibration impacts. Thresholds are established for continuous (construction-related) and transient (transportation-related) sources of vibration, which found that the human response becomes distinctly perceptible at 0.25 inch per second PPV for transient sources and 0.04 inch per second PPV for continuous sources.

4.3 Local Regulations

The City of Los Angeles General Plan and Municipal Code establishes the following applicable policies related to noise and vibration. .

City of Los Angeles General Plan Noise Element

Goal A city where noise does not reduce the quality of urban life.

Objective 2 (Nonairport)
Reduce or eliminate nonairport related intrusive noise, especially relative to noise sensitive uses.

Policy 2.2 Enforce and/or implement applicable city, State and federal regulations intended to mitigate proposed noise producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance. (The applicable Federal and State regulations have been detailed above in Sections 4.1 and 4.2)

Objective 3 (Land Use Development)
Reduce or eliminate noise impacts associated with proposed development of land and changes in land use.

Policy 3.1 Develop land use policies and programs that will reduce or eliminate potential and existing noise impacts.

City of Los Angeles Municipal Code

The City of Los Angeles Municipal Code establishes the following applicable standards related to construction noise.

Section 41.40 Noise Due to Construction, Excavation Work – When Prohibited

(a) No person shall, between the hours of 9:00 P.M. and 7:00 A.M. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power driven drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and wilfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.

(j) As determined by the Executive Director of the Board, the provisions of Subsection (c) shall not apply to major public works construction by the City of Los Angeles and its proprietary Departments, including all structures and operations necessary to regulate or direct traffic due to construction activities. The Board, through its Executive Director, pursuant to Subsection (b) will grant a variance for this work and construction activities will be subject to all conditions of the variance as granted. Concurrent with the request for a variance, the City Department that will conduct the construction work will notify each affected Council district office and established Neighborhood Council of projects where proposed Sunday and/or Holiday work will occur.

Section 111.03 Minimum Ambient Noise Level

Where the ambient noise level is less than the presumed ambient noise level designated in this section, the presumed ambient noise level in this section shall be deemed to be the minimum ambient noise level for purposes of this chapter.

Table B – City of Los Angeles Presumed Ambient Noise Levels

	Presumed Ambient Noise Level[1] (dB(A))	
Zone[2]	Day	Night
A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5	50	40
P, PB, CR, C1, C1.5, C2, C4, C5, and CM	60	55
M1, MR1, and MR2	60	55
M2 and M3	65	65

Notes:
[1] Daytime levels are to be used from 7:00 a.m. to 10:00 p.m. and nighttime levels from 10:00 p.m. to 7 a.m.
[2] At the boundary line between two zones, the presumed ambient noise level of the quieter zone shall be used.
Source: City of Los Angeles Municipal Code Section 111.03 Table II.

Section 112.02 Air Conditioning, Refrigeration, Heating, Pumping, Filtering Equipment

(a) It shall be unlawful for any person, within any zone of the city to operate any air conditioning, refrigeration or heating equipment for any residence or other structure or to operate any

pumping, filtering or heating equipment for any pool or reservoir in such manner as to create any noise which would cause the noise level on the premises of any other occupied property or if a condominium, apartment house, duplex, or attached business, within any adjoining unit to exceed the ambient noise level by more than five (5) decibels

(b) This section shall not be applicable to emergency work as defined in Section 111.01(c) of this chapter, or to periodic maintenance or testing of such equipment reasonably necessary to maintain such equipment in good working order.

Section 112.03 Construction Noise

Noise due to construction or repair work shall be regulated as provided by Section 41.40 of this Code.

Section 114.03 Vehicles – Loading and Unloading

(a) It shall be unlawful for any person, between the hours of 10:00 p.m. and 7:00 a.m. of the following day, to load or unload any vehicle, or operate any dollies, carts, forklifts, or other wheeled equipment, which causes any impulsive sound, raucous or unnecessary noise within 200 feet of any residential building.

(b) Irrespective of the provisions of Subsection (a), loading or unloading of vehicles of the type of activity referred to in Subsection (a) may occur between the hours of 6:00 a.m. to 11:00 p.m. of the same day pursuant to a permit issued by the Department of Transportation in accordance with a business program as defined by said department. This permit program would be limited to the area bounded by Western Avenue, Santa Monica Freeway, Central Avenue, and the San Diego Freeway, within the limits of the City of Los Angeles. Such permits will not be issued to high-noise businesses such as trash pickup.

5.0 EXISTING NOISE CONDITIONS

To determine the existing noise levels, noise measurements have been taken in the vicinity of the project site. The field survey noted that noise within the proposed project area is generally characterized by vehicle traffic on the nearby adjacent roads, students on the adjacent walkway to USC, and from school activities.

5.1 Noise Measurements taken in Project Vicinity

The following describes the measurement procedures, measurement locations, and noise measurement results of the noise measurements taken in the project vicinity.

Noise Measurement Equipment

The noise measurements were taken using a Larson-Davis Model 831 Type 1 precision sound level meter programmed in "slow" mode to record noise levels in "A" weighted form as well as the frequency spectrum of the noise broken down into 1/3 octaves. The sound level meter and microphone were mounted on a tripod five feet above the ground and were equipped with a windscreen during all measurements. The sound level meter was calibrated before and after the monitoring using a Larson-Davis calibrator, Model CAL 200. The accuracy of the calibrator is maintained through a program established through the manufacturer and is traceable to the National Bureau of Standards. The noise level measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (ANSI S1.4-2014 standard).

Noise Measurement Locations

The noise monitoring locations were selected in order to obtain noise levels in the vicinity of the project site. Descriptions of the noise monitoring sites are provided below in Table C and are shown in Figure 4. Appendix A includes a photo index of the study area and noise level measurement locations.

Noise Measurement Timing and Climate

The noise measurements were recorded between 11:36 a.m. and 12:28 p.m. on Wednesday, October 8, 2025. During the noise measurements, the sky was partly cloudy, the temperature was 74 degrees Fahrenheit, the humidity was 60 percent, barometric pressure was 29.68 inches of mercury, and there was no wind.

Noise Measurement Results

The results of the noise level measurements are presented in Table C and the noise monitoring data printouts are included in Appendix B.

Table C – Existing (Ambient) Noise Measurement Results

Site No.	Description	Primary Noise Sources	Start Time of Measurement	Measured Noise Level	
				dBA Leq	dBA Lmax
1	Located northeast of the School, in the front yard at 731 32nd Street, approximately 42 feet north of 32nd Street centerline and 54 feet east of Royal Street centerline.	Vehicles on 32nd Street	11:36 a.m.	58.7	71.4
2	Located west of the School, at bike rack in front of the USC Jewish Center, approximately 62 feet west of the School.	Students on Pedestrian Walkway	11:54 a.m.	54.7	73.0
3	Located approximately 30 feet west of southeast corner of School, 3 feet south of chain link fence and 95 feet north of Jefferson Boulevard centerline.	Vehicles on Jefferson Boulevard and students	12:13 p.m.	59.1	76.8

Notes: Noise measurements taken with a Larson-Davis Model 831 Type 1 precision sound level meter on Wednesday, October 8, 2025.

VISTA ENVIRONMENTAL

Figure 4
Field Noise Monitoring Locations

6.0 MODELING PARAMETERS AND ASSUMPTIONS

6.1 Construction Noise

The noise impacts from construction of the proposed project have been analyzed through use of the FHWA's Roadway Construction Noise Model (RCNM). The FHWA compiled noise measurement data regarding the noise generating characteristics of several different types of construction equipment used during the Central Artery/Tunnel project in Boston. Table D below provides a list of the construction equipment anticipated to be used for each phase of construction as detailed in the *Air Quality, Energy and Greenhouse Gas Emissions Impact Analysis* 32nd Street/USC Magnet School Major Modernization Project (Air Quality Analysis), prepared by Vista Environmental, October 20, 2025.

Table D – Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Number of Equipment	Acoustical Use Factor[1] (percent)	Spec 721.560 Lmax at 50 feet[2] (dBA, slow[3])	Actual Measured Lmax at 50 feet[4] (dBA, slow[3])
Demolition				
Concrete/Industrial Saw	1	20	90	90
Rubber Tired Dozer	1	40	85	82
Backhoe	1	40	80	78
Front End Loader	1	40	80	79
Tractor	1	40	84	N/A
Grading				
Grader	1	40	85	83
Rubber Tired Dozer	1	40	85	82
Front End Loader	1	40	80	79
Tractor	1	40	84	N/A
Underground Utilities				
Excavator	1	40	85	81
Backhoe	1	40	80	78
Front End Loader	1	40	80	79
Tractor	1	40	84	N/A
Building Construction				
Crane	1	16	85	81
Forklift (Gradall)	2	40	85	83
Generator	1	50	82	81
Tractor	1	40	84	N/A
Welders	3	40	73	74
Paving				
Cement and Mortar Mixer	1	40	85	79
Paver	1	50	85	77
Paving Equipment	1	50	85	77
Rollers	2	20	85	80
Tractor	1	40	84	N/A
Architectural Coating				
Air Compressor	1	40	80	78

Notes:

[1] Acoustical use factor is the percentage of time each piece of equipment is operational during a typical workday.
[2] Spec 721.560 is the equipment noise level utilized by the RCNM program.
[3] The "slow" response averages sound levels over 1-second increments. A "fast" response averages sound levels over 0.125-second increments.
[4] Actual Measured is the average noise level measured of each piece of equipment during the Central Artery/Tunnel project in Boston, Massachusetts primarily during the 1990s.
Source: Federal Highway Administration, 2006.

Table D also shows the associated measured noise emissions for each piece of equipment from the RCNM model and measured percentage of typical equipment use per day. Construction noise impacts to the nearby sensitive receptors have been calculated according to the equipment noise levels and usage factors listed in Table D and through use of the RCNM. For each phase of construction, all construction equipment was analyzed based on being placed in the middle of the School, which is based on the analysis methodology detailed in FTA Manual for a General Assessment. However, in order to provide a conservative analysis, all equipment was analyzed, instead of just the two nosiest pieces of equipment as detailed in the FTA Manual. The RCNM model printouts are provided in Appendix C.

6.2 Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Table E gives approximate vibration levels for particular construction activities. The data in Table E provides a reasonable estimate for a wide range of soil conditions.

Table E – Vibration Source Levels for Construction Equipment

Equipment		Peak Particle Velocity (inches/second)	Approximate Vibration Level (L_v)at 25 feet
Pile driver (impact)	Upper range	1.518	112
	typical	0.644	104
Pile driver (sonic)	Upper range	0.734	105
	typical	0.170	93
Clam shovel drop (slurry wall)		0.202	94
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drill		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Federal Transit Administration, 2020.

The construction-related vibration impacts have been calculated through the vibration levels shown above in Table E and through typical vibration propagation rates. The equipment assumptions were based on the equipment lists provided above in Table D.

7.0 IMPACT ANALYSIS

7.1 CEQA Thresholds of Significance

Consistent with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, a significant impact related to noise would occur if a proposed project is determined to 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;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- 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.

7.2 Generation of Noise Levels in Excess of Standards

The proposed project would not generate 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. The following section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the proposed project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the proposed project are anticipated to include demolition of 23 classrooms and restrooms in 13 relocatable buildings and a storage building and associated pavement, grading of approximately 2.75 acres of the project site, installation of new underground utilities, building construction that would include the minor modernization of approximately 40,127 square feet of building space and new construction of a 3-story classroom building that would total 46,380 square feet, paving associated with the outside improvements that would include landscape and hardscape upgrades, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

Section 41.40(a) of the City of Los Angeles Municipal Code exempts construction activities from the City's noise standards provided construction activities do not take place between the hours of 9:00 p.m. and 7:00 a.m. For construction activities that occur during the allowed hours, Section 112.05(a) of the Municipal Code limits the noise from construction equipment to 75 dBA at the nearby residential dormitory uses. Since the Municipal Code does not provide any construction noise limits at the adjacent commercial uses, the FTA construction noise level standard of 85 dBA at the nearby religious centers and daycare facility, USC Campus and Shrine Auditorium have been utilized in this analysis.

Construction noise levels to the nearby sensitive receptors have been calculated through use of the RCNM and the parameters and assumptions detailed in Section 6.1 of this report including Table D – Construction Equipment Noise Emissions and Usage Factors. The results are shown below in Table F and the RCNM printouts are provided in Appendix C.

Table F – Construction Noise Levels at the Nearby Sensitive Receptors

Construction Phase	Construction Noise Level (dBA Leq) at:			
	Religious & Daycare to West[1]	Dormitories to North[2]	USC Campus to South[3]	Shrine Auditorium to East[4]
Demolition	74	69	68	70
Grading	73	68	67	69
Underground Utilities	71	66	65	67
Building Construction	74	69	68	69
Paving	72	67	65	67
Painting	62	57	56	57
Construction Noise Thresholds[5]	**85**	**75**	**85**	**85**
Exceed Thresholds?	No	No	No	No

[1] The USC Catholic Center, HIC Daycare and USC Jewish Center to the west are located as near as 200 feet from the center of the School.
[2] The USC Dormitories to the north are located as near as 350 feet from center of the School.
[3] The USC Campus to the south is located as near as 400 feet from the center of the School.
[4] The Shrine Auditorium to the east is located as near as 330 feet from the center of the School.
[5] The Construction noise thresholds are from Section 112.05(a) for the dormitories to the north and from the FTA daytime commercial noise threshold (see Table A, above) for the religious and daycare facilities to the west and USC campus to the south.
Source: RCNM, Federal Highway Administration, 2006

Table F shows that the greatest noise impacts would occur during the demolition and building construction phases, with noise levels as high as 74 dBA Leq at the religious centers and daycare to the west, 69 dBA Leq at the dormitories to the north, 68 dBA Leq at the USC Campus to the south, and 70 dBA Leq at the Shrine Auditorium to the east. The calculated construction noise levels shown in Table F are within the residential noise standard of 75 dBA from Section 112.05(a) of the Municipal Code at the dormitories to the north and the daytime commercial noise standard of 85 dBA from the FTA at the religious and daycare centers to the west, USC Campus to the south, and Shrine Auditorium to the east. Therefore, through adherence to allowable construction times provided in Section 41.40(a) of the Municipal Code, the construction activities for the proposed project would not create a substantial temporary increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

Operational-Related Noise

The proposed project consists of the operation of the modernized school structures that would not result in an increase in student enrollment nor would it result in a new use on campus. As such, no offsite roadway noise impacts are anticipated to be created from operation of the proposed project.

The proposed project would include outdoor improvements that include modernization of the existing lunch shelter, landscape, hardscape and infrastructure upgrades. No new noise generating sources such as outdoor play equipment or play courts would be added as part of the proposed project.

The proposed project would also include construction of an onsite access road that would start at the location of the existing basketball courts adjacent to 32nd Street and would extend to the southwest portion of the campus. The new access road is being provided for fire department access to the school buildings and would also be utilized occasionally by maintenance vehicles. Since daily trips would not regularly occur on the access road, the access road would not be considered an operational noise source.

As such, potential new onsite sources that may be created from operation of the proposed project are limited to new HVAC units on the modernized structures and new structure. Section 112.02 of the Municipal Code limits noise from mechanical equipment, that would include the proposed rooftop mechanical equipment to the ambient noise plus 5 dB. Section 111.03 of the Municipal Code defines the minimum ambient noise level as 60 dBA during the daytime and 55 dBA during the nighttime at the nearby commercial uses and 50 dBA during the daytime and 40 dBA during the nighttime at the nearby residential uses.

In order to determine the noise impacts from the operation of the HVAC units, a reference noise measurement was taken of a HVAC unit at a school, which was utilized to calculate the noise levels at the nearby sensitive receptors based on the standard geometric spreading of noise, which provides an attenuation rate of 6 dB per doubling the distance between source and receptor. The reference noise measurement printouts are provided in Appendix D and Table G shows the calculated HVAC unit noise levels at the nearby homes.

Table G – Operational Onsite Noise Levels at the Nearby Sensitive Receptors

Noise Source	Calculated Noise Levels (dBA Leq) at[1]:			
	Religious & Daycare to West[2]	Dormitories to North[3]	USC Campus to South[4]	Shrine Auditorium to East[5]
HVAC Equipment[6]	34	31	29	27
City Noise Standards (Day/Night)[7]	60/55	50/40	60/55	60/55
Exceed City Noise Standards (Day/Night)?	No/No	No/No	No/No	No/No

Notes:
[1] Noise levels calculated through standard geometric spreading of noise, which results in a 6 dB drop in noise when distance is doubled.
[2] The USC Catholic Center, HIC Daycare and USC Jewish Center to the west are located as near as 100 feet from potential HVAC unit locations.
[3] The Dormitories to the north are located as near as 130 feet from potential HVAC unit locations.
[4] The USC Campus to the south is located as near as 170 feet from potential HVAC unit locations.
[5] The Shrine Auditorium to the east is located as near as 210 feet from potential HVAC unit locations.
[6] The HVAC reference noise measurement captured a noise level of 53.5 dBA at 10 feet (see Appendix D).
[7] The City Noise Standards were obtained from Section 111.03 of the Municipal Code.

Table G shows that the operation of new HVAC equipment on the project site would create a noise level as high as 31 dBA at the nearest dormitories to the north, which would be within the City's residential noise standards of 50 dBA during the daytime and 40 dBA during the nighttime and would create a noise level as high as 34 dBA at the nearest commercial use (religious and daycare to west), which would be within the City's commercial noise standards of 60 dBA during the daytime and 55 during the nighttime. Therefore, the operational activities for the proposed project would not create a substantial long-term increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

Level of Significance

Less than significant impact.

7.3 Generation of Excessive Groundborne Vibration

The proposed project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the proposed project.

Construction-Related Vibration Impacts

The construction activities for the proposed project are anticipated to include demolition of 23 classrooms and restrooms in 13 relocatable buildings and a storage building and associated pavement, grading of approximately 2.75 acres of the project site, installation of new underground utilities, building construction that would include the minor modernization of approximately 40,127 square feet of building space and new construction of a 3-story classroom building that would total 46,380 square feet, paving associated with the outside improvements that would include landscape and hardscape upgrades, and application of architectural coatings. The nearest offsite sensitive receptor to these proposed improvements are the USC Catholic Center, HIC Daycare and USC Jewish Center that are as near as 65 feet west of the project site.

Since neither the City of Los Angeles General Plan or Municipal Code provide any vibration standards for construction activities, Caltrans guidance that is detailed in Section 4.2 has been utilized, which defines the threshold of perception from transient sources at 0.25 inch per second PPV.

The primary source of vibration during construction would be from the operation of a vibratory roller. From Table E above a vibratory roller would create a vibration level of 0.003 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the structures to the west (65 feet away) would be 0.073 inch per second PPV. The vibration level at the nearest offsite structures would be below the 0.25 inch per second PPV threshold detailed above. Impacts would be less than significant.

Operations-Related Vibration Impacts

The proposed project would consist of the on-going operation of the new and modernized school structures. The on-going operation of the proposed project would not include the operation of any known vibration sources. Therefore, a less than significant vibration impact is anticipated from the operation of the proposed project.

Level of Significance

Less than significant impact.

7.4 Aircraft Noise

The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airports include Hawthorne Municipal Airport that is located as near as 7.3 miles south of the project site and Los Angeles International Airport that is located as near as 8 miles southwest of the project site. The project site is located outside of the 60 dBA CNEL noise contours of both of these airports. A less than significant impact would occur from aircraft noise.

Level of Significance

Less than significant impact.

8.0 REFERENCES

California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analytics Protocol*, September 2013.

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

City of Los Angeles, *Noise Element of the Los Angeles City General Plan,* November, 1998.

City of Los Angeles, *Official City of Los Angeles Municipal Code Seventh Edition,* June 30, 2025.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* September 2018.

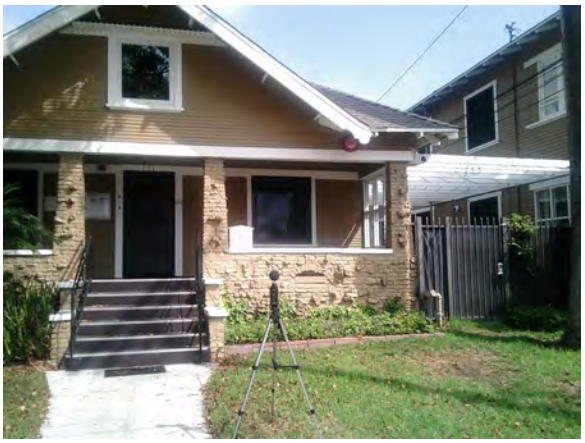
U.S. Department of Transportation, *FHWA Roadway Construction Noise Model User's Guide,* January, 2006.

Vista Environmental, *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis 32nd Street/USC Magnet School Major Modernization Project,* October 20, 2025.

APPENDIX A

Field Noise Measurements Photo Index

Noise Measurement Site 1 - looking north



Noise Measurement Site 1 - looking northeast

Noise Measurement Site 1 - looking east

Noise Measurement Site 1 - looking southeast

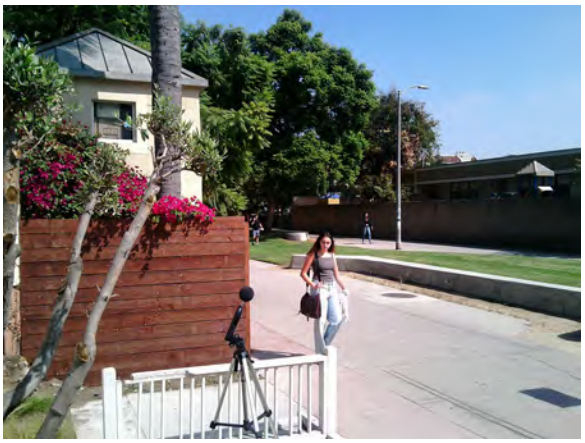
Noise Measurement Site 1 - looking south

Noise Measurement Site 1 - looking southwest

Noise Measurement Site 1 - looking west

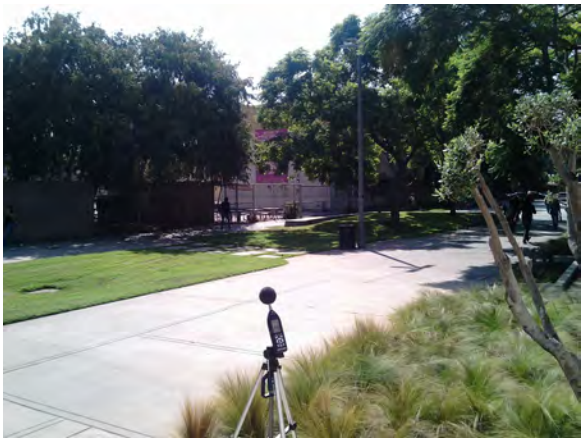
Noise Measurement Site 1 - looking northwest

Noise Measurement Site 2 - looking north



Noise Measurement Site 2 - looking northeast

Noise Measurement Site 2 - looking east



Noise Measurement Site 2 - looking southeast

Noise Measurement Site 2 - looking south

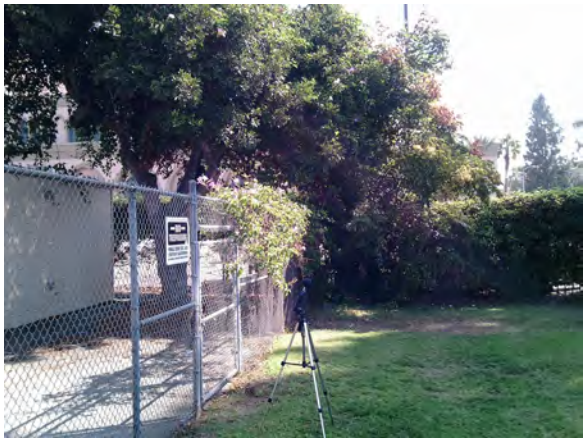
Noise Measurement Site 2 - looking southwest

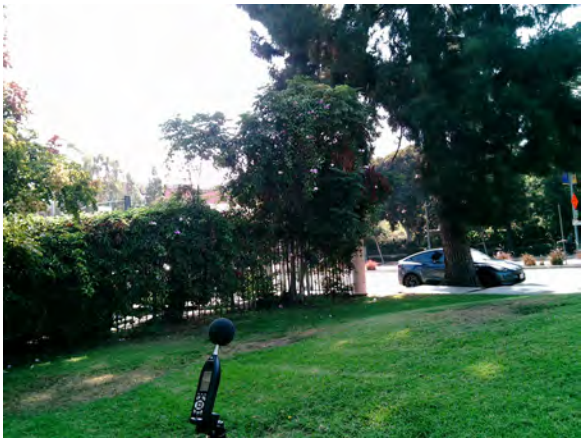
Noise Measurement Site 2 - looking west

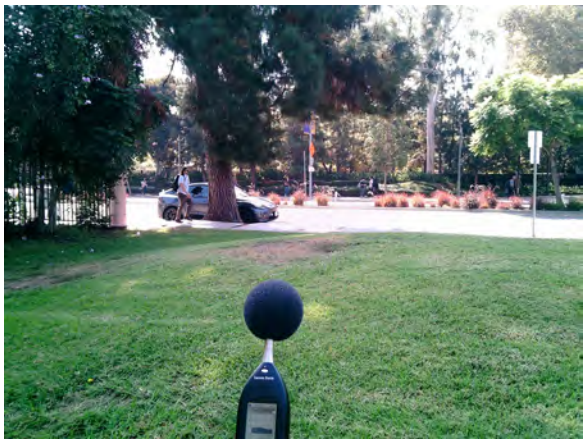
School Campus - looking east

Noise Measurement Site 3 - looking north

Noise Measurement Site 3 - looking northeast


Noise Measurement Site 3 - looking east


Noise Measurement Site 3 - looking southeast


Noise Measurement Site 3 - looking south

Noise Measurement Site 3 - looking southwest

Noise Measurement Site 3 - looking west

Noise Measurement Site 3 - looking northwest

APPENDIX B

Field Noise Measurements Printouts

Measurement Report

Report Summary

Meter's File Name	831_Data.001.s	Computer's File Name	831_0002509-20251008 113644-831_Data.001.ldbin
Meter	831 0002509	Firmware	2.403
User	GT	Location	NE of School in front of home at 731 32nd St
Job Description	LAUSD 32nd St/USC Magnet School Modernization		
Note	Approx 42 ft N of 32nd St CL and 54 ft E of Royal St CL		

Measurement

Start Time	2025-10-08 11:36:44	Duration	0:15:00.0		
End Time	2025-10-08 11:51:44	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2025-10-08 11:35:21	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	58.7 dB		
LAE	88.2 dB	SEA	--- dB
EA	74.1 µPa²h		
LZ_{peak}	98.1 dB	2025-10-08 11:37:51	
LAS_{max}	71.4 dB	2025-10-08 11:47:05	
LAS_{min}	45.8 dB	2025-10-08 11:44:19	
LA_{eq}	58.7 dB		
LC_{eq}	69.5 dB	LC_{eq} - LA_{eq}	10.8 dB
LAI_{eq}	61.3 dB	LAI_{eq} - LA_{eq}	2.6 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	11	0:00:57.6
LAS > 85.0 dB	0	0:00:00.0
LZpk > 135.0 dB	0	0:00:00.0
LZpk > 137.0 dB	0	0:00:00.0
LZpk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
58.7 dB	58.7 dB	--- dB

LDEN	LDay	LEve	LNight
58.7 dB	58.7 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	58.7 dB		69.5 dB		71.7 dB	
$LS_{(max)}$	71.4 dB	2025-10-08 11:47:05	86.9 dB	2025-10-08 11:37:52	87.2 dB	2025-10-08 11:37:52
$LF_{(max)}$	76.9 dB	2025-10-08 11:47:05	91.0 dB	2025-10-08 11:37:51	91.2 dB	2025-10-08 11:37:51
$LI_{(max)}$	80.1 dB	2025-10-08 11:47:05	92.0 dB	2025-10-08 11:37:51	92.3 dB	2025-10-08 11:37:51
$LS_{(min)}$	45.8 dB	2025-10-08 11:44:19	61.4 dB	2025-10-08 11:44:35	65.0 dB	2025-10-08 11:44:35
$LF_{(min)}$	45.0 dB	2025-10-08 11:44:27	59.2 dB	2025-10-08 11:44:33	62.4 dB	2025-10-08 11:42:47
$LI_{(min)}$	45.6 dB	2025-10-08 11:44:17	62.7 dB	2025-10-08 11:44:31	66.3 dB	2025-10-08 11:44:44
$L_{Peak(max)}$	89.9 dB	2025-10-08 11:47:05	97.7 dB	2025-10-08 11:37:51	98.1 dB	2025-10-08 11:37:51

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	64.7 dB
LAS 10.0	62.4 dB
LAS 33.3	57.0 dB
LAS 50.0	54.8 dB
LAS 66.6	52.5 dB
LAS 90.0	49.4 dB

Measurement Report

Report Summary

Meter's File Name	831_Data.002.s	Computer's File Name	831_0002509-20251008 115408-831_Data.002.ldbin
Meter	831 0002509	Firmware	2.403
User	GT	Location	West of School at bike rack for USC Hillel Building
Job Description	LAUSD 32nd St/USC Magnet School Modernization		
Note	Approx 62 ft west of School next to University Ave Pedestrian Way		

Measurement

Start Time	2025-10-08 11:54:08	Duration	0:15:00.0		
End Time	2025-10-08 12:09:08	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2025-10-08 11:35:19	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	54.7 dB		
LAE	84.2 dB	SEA	--- dB
EA	29.5 µPa²h		
LZ_{peak}	101.9 dB	2025-10-08 11:56:48	
LAS_{max}	73.0 dB	2025-10-08 11:56:48	
LAS_{min}	47.9 dB	2025-10-08 12:06:37	
LA_{eq}	54.7 dB		
LC_{eq}	66.6 dB	LC_{eq} - LA_{eq}	11.9 dB
LAI_{eq}	59.9 dB	LAI_{eq} - LA_{eq}	5.2 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	1	0:00:05.5
LAS > 85.0 dB	0	0:00:00.0
LZpk > 135.0 dB	0	0:00:00.0
LZpk > 137.0 dB	0	0:00:00.0
LZpk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
54.7 dB	54.7 dB	--- dB

LDEN	LDay	LEve	LNight
54.7 dB	54.7 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	54.7 dB		66.6 dB		69.6 dB	
$L_{S(max)}$	73.0 dB	2025-10-08 11:56:48	77.7 dB	2025-10-08 12:09:02	82.3 dB	2025-10-08 11:54:08
$L_{F(max)}$	79.5 dB	2025-10-08 11:56:48	80.8 dB	2025-10-08 12:09:02	85.7 dB	2025-10-08 11:54:08
$L_{I(max)}$	83.5 dB	2025-10-08 11:56:48	84.1 dB	2025-10-08 11:56:48	88.3 dB	2025-10-08 11:54:08
$L_{S(min)}$	47.9 dB	2025-10-08 12:06:37	63.1 dB	2025-10-08 11:58:16	66.5 dB	2025-10-08 11:58:26
$L_{F(min)}$	47.2 dB	2025-10-08 12:06:37	61.2 dB	2025-10-08 11:58:26	63.3 dB	2025-10-08 11:58:26
$L_{I(min)}$	47.4 dB	2025-10-08 12:06:36	64.2 dB	2025-10-08 11:58:08	67.3 dB	2025-10-08 11:56:17
$L_{Peak(max)}$	102.2 dB	2025-10-08 11:56:48	101.6 dB	2025-10-08 11:56:48	101.9 dB	2025-10-08 11:56:48

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	58.6 dB
LAS 10.0	57.1 dB
LAS 33.3	53.6 dB
LAS 50.0	52.3 dB
LAS 66.6	51.1 dB
LAS 90.0	49.8 dB

Measurement Report

Report Summary

Meter's File Name	831_Data.003.s	Computer's File Name	831_0002509-20251008 121309-831_Data.003.ldbin
Meter	831 0002509	Firmware	2.403
User	GT	Location	South Side of School on Lawn
Job Description	LAUSD 32nd St/USC Magnet School Modernization		
Note	Approx 30 ft west of SE Corner of School and 3 ft south of fence		

Measurement

Start Time	2025-10-08 12:13:09	Duration	0:15:00.0		
End Time	2025-10-08 12:28:09	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2025-10-08 11:35:19	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	59.1 dB		
LAE	88.6 dB	SEA	--- dB
EA	81.3 µPa²h		
LZ_{peak}	99.2 dB	2025-10-08 12:25:14	
LAS_{max}	76.8 dB	2025-10-08 12:25:14	
LAS_{min}	49.5 dB	2025-10-08 12:22:34	
LA_{eq}	59.1 dB		
LC_{eq}	70.6 dB	LC_{eq} - LA_{eq}	11.5 dB
LAI_{eq}	63.0 dB	LAI_{eq} - LA_{eq}	3.9 dB

Exceedances	Count	Duration
LAS > 65.0 dB	9	0:00:33.9
LAS > 85.0 dB	0	0:00:00.0
LZpk > 135.0 dB	0	0:00:00.0
LZpk > 137.0 dB	0	0:00:00.0
LZpk > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	59.1 dB	59.1 dB	--- dB

LDEN	LDay	LEve	LNight
59.1 dB	59.1 dB	--- dB	--- dB

Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	59.1 dB		70.6 dB		72.7 dB	
$L_{S(max)}$	76.8 dB	2025-10-08 12:25:14	82.6 dB	2025-10-08 12:25:14	86.7 dB	2025-10-08 12:13:10
$L_{F(max)}$	81.7 dB	2025-10-08 12:22:10	85.5 dB	2025-10-08 12:25:14	91.5 dB	2025-10-08 12:13:09
$L_{I(max)}$	84.3 dB	2025-10-08 12:22:10	88.0 dB	2025-10-08 12:25:14	94.2 dB	2025-10-08 12:13:09
$L_{S(min)}$	49.5 dB	2025-10-08 12:22:34	64.6 dB	2025-10-08 12:24:08	67.3 dB	2025-10-08 12:24:08
$L_{F(min)}$	48.4 dB	2025-10-08 12:22:34	62.9 dB	2025-10-08 12:22:29	64.9 dB	2025-10-08 12:22:36
$L_{I(min)}$	49.1 dB	2025-10-08 12:22:34	65.4 dB	2025-10-08 12:24:05	68.1 dB	2025-10-08 12:22:29
$L_{Peak(max)}$	95.9 dB	2025-10-08 12:25:09	97.7 dB	2025-10-08 12:25:09	99.2 dB	2025-10-08 12:25:14

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	63.0 dB
LAS 10.0	61.1 dB
LAS 33.3	58.4 dB
LAS 50.0	56.8 dB
LAS 66.6	55.2 dB
LAS 90.0	52.2 dB

APPENDIX C

RCNM Model Construction Noise Calculations

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Demolition

				---- Receptor #1 ----
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Religious Centers & Daycare to West	Commercial	54.7	54.7	54.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	200	0
Dozer	No	40		81.7	200	0
Backhoe	No	40		77.6	200	0
Front End Loader	No	40		79.1	200	0
Tractor	No	40	84		200	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Concrete Saw		77.5	70.5	N/A	N/A	N/A	N/A
Dozer		69.6	65.6	N/A	N/A	N/A	N/A
Backhoe		65.5	61.5	N/A	N/A	N/A	N/A
Front End Loader		67.1	63.1	N/A	N/A	N/A	N/A
Tractor		72.0	68.0	N/A	N/A	N/A	N/A
	Total	**78**	**74**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Demolition

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Dormitories to North	Residential	58.7	58.7	58.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	350	0
Dozer	No	40		81.7	350	0
Backhoe	No	40		77.6	350	0
Front End Loader	No	40		79.1	350	0
Tractor	No	40	84		350	0

Equipment	Calculated (dBA) ***Lmax**	**Leq**	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Concrete Saw	72.7	65.7	N/A	N/A	N/A	N/A
Dozer	64.8	60.8	N/A	N/A	N/A	N/A
Backhoe	60.7	56.7	N/A	N/A	N/A	N/A
Front End Loader	62.2	58.2	N/A	N/A	N/A	N/A
Tractor	67.1	63.1	N/A	N/A	N/A	N/A
Total	**73**	**69**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Demolition

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
USC Campus to South	Commercial	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	400	0
Dozer	No	40		81.7	400	0
Backhoe	No	40		77.6	400	0
Front End Loader	No	40		79.1	400	0
Tractor	No	40	84		400	0

Equipment		Results Calculated (dBA) ***Lmax**	**Leq**	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Concrete Saw		71.5	64.5	N/A	N/A	N/A	N/A
Dozer		63.6	59.6	N/A	N/A	N/A	N/A
Backhoe		59.5	55.5	N/A	N/A	N/A	N/A
Front End Loader		61.0	57.1	N/A	N/A	N/A	N/A
Tractor		65.9	62.0	N/A	N/A	N/A	N/A
	Total	**72**	**68**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Demolition

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Shrine Auditorium to East	Commercial	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	330	0
Dozer	No	40		81.7	330	0
Backhoe	No	40		77.6	330	0
Front End Loader	No	40		79.1	330	0
Tractor	No	40	84		330	0

Equipment		Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq
Concrete Saw		73.2	66.2	N/A	N/A	N/A	N/A
Dozer		65.3	61.3	N/A	N/A	N/A	N/A
Backhoe		61.2	57.2	N/A	N/A	N/A	N/A
Front End Loader		62.7	58.7	N/A	N/A	N/A	N/A
Tractor		67.6	63.6	N/A	N/A	N/A	N/A
	Total	**73**	**70**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Religious Centers & Daycare to West	Commercial	54.7	54.7	54.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		200	0
Dozer	No	40		81.7	200	0
Front End Loader	No	40		79.1	200	0
Tractor	No	40	84		200	0

Equipment		Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Grader		73.0	69.0	N/A	N/A	N/A	N/A
Dozer		69.6	65.6	N/A	N/A	N/A	N/A
Front End Loader		67.1	63.1	N/A	N/A	N/A	N/A
Tractor		72.0	68.0	N/A	N/A	N/A	N/A
	Total	**73**	**73**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Grading

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Dormitories to North	Residential	58.7	58.7	58.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax **(dBA)**	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		350	0
Dozer	No	40		81.7	350	0
Front End Loader	No	40		79.1	350	0
Tractor	No	40	84		350	0

Equipment		Results Calculated (dBA) ***Lmax**	**Leq**	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Grader		68.1	64	N/A	N/A	N/A	N/A
Dozer		64.8	60.8	N/A	N/A	N/A	N/A
Front End Loader		62.2	58.2	N/A	N/A	N/A	N/A
Tractor		67.1	63.1	N/A	N/A	N/A	N/A
	Total	**68**	**68**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Grading

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
USC Campus to South	Commercial	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		400	0
Dozer	No	40		81.7	400	0
Front End Loader	No	40		79.1	400	0
Tractor	No	40	84		400	0

Equipment		Results Calculated (dBA) ***Lmax**	**Leq**	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Grader		66.9	63.0	N/A	N/A	N/A	N/A
Dozer		63.6	59.6	N/A	N/A	N/A	N/A
Front End Loader		61.0	57.1	N/A	N/A	N/A	N/A
Tractor		65.9	62.0	N/A	N/A	N/A	N/A
	Total	**67**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Grading

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Shrine Auditorium	Commercial	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		330	0
Dozer	No	40		81.7	330	0
Front End Loader	No	40		79.1	330	0
Tractor	No	40	84		330	0

Equipment		Results Calculated (dBA) ***Lmax**	**Leq**	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Grader		68.6	64.6	N/A	N/A	N/A	N/A
Dozer		65.3	61.3	N/A	N/A	N/A	N/A
Front End Loader		62.7	58.7	N/A	N/A	N/A	N/A
Tractor		67.6	63.6	N/A	N/A	N/A	N/A
	Total	**69**	**69**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Underground Utilities

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Religious Centers & Daycare to West	Commercial	54.7	54.7	54.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	200	0
Backhoe	No	40		77.6	200	0
Front End Loader	No	40		79.1	200	0
Tractor	No	40	84		200	0

		Results Calculated (dBA)		Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator		68.7	64.7	N/A	N/A	N/A	N/A
Backhoe		65.5	61.5	N/A	N/A	N/A	N/A
Front End Loader		67.1	63.1	N/A	N/A	N/A	N/A
Tractor		72.0	68.0	N/A	N/A	N/A	N/A
	Total	**72**	**71**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Underground Utilities

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Dormitories to North	Residential	58.7	58.7	58.7

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	**(dBA)**	(dBA)	(feet)	(dBA)
Excavator	No	40		80.7	350	0
Backhoe	No	40		77.6	350	0
Front End Loader	No	40		79.1	350	0
Tractor	No	40	84		350	0

	Results					
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator	63.8	60	N/A	N/A	N/A	N/A
Backhoe	60.7	56.7	N/A	N/A	N/A	N/A
Front End Loader	62.2	58.2	N/A	N/A	N/A	N/A
Tractor	67.1	63.1	N/A	N/A	N/A	N/A
Total	**67**	**66**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Underground Utilities

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
USC Campus to South	Commercial	59.1	59.1	59.1

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40		80.7	400	0
Backhoe	No	40		77.6	400	0
Front End Loader	No	40		79.1	400	0
Tractor	No	40	84		400	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Excavator		62.6	58.7	N/A	N/A	N/A	N/A
Backhoe		59.5	55.5	N/A	N/A	N/A	N/A
Front End Loader		61.0	57.1	N/A	N/A	N/A	N/A
Tractor		65.9	62.0	N/A	N/A	N/A	N/A
	Total	**66**	**65**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Underground Utilities

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Shrine Auditorium to East	Commercial	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	330	0
Backhoe	No	40		77.6	330	0
Front End Loader	No	40		79.1	330	0
Tractor	No	40	84		330	0

Equipment	Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Excavator	64.3	60.3	N/A	N/A	N/A	N/A
Backhoe	61.2	57.2	N/A	N/A	N/A	N/A
Front End Loader	62.7	58.7	N/A	N/A	N/A	N/A
Tractor	67.6	63.6	N/A	N/A	N/A	N/A
Total	**68**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Building Construction

		Baselines (dBA)		**---- Receptor #1 ----**
Description	Land Use	Daytime	Evening	Night
Religious Centers & Daycare to West	Commercial	54.7	54.7	54.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	200	0
Gradall	No	40		83.4	200	0
Gradall	No	40		83.4	200	0
Generator	No	50		80.6	200	0
Tractor	No	40	84		200	0
Welder / Torch	No	40		74	200	0
Welder / Torch	No	40		74	200	0
Welder / Torch	No	40		74	200	0

		Calculated (dBA)		Results Noise Limits (dBA) Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Crane		68.5	60.6	N/A	N/A	N/A	N/A
Gradall		71.4	67.4	N/A	N/A	N/A	N/A
Gradall		71.4	67.4	N/A	N/A	N/A	N/A
Generator		68.6	65.6	N/A	N/A	N/A	N/A
Tractor		72.0	68.0	N/A	N/A	N/A	N/A
Welder / Torch		62.0	58.0	N/A	N/A	N/A	N/A
Welder / Torch		62.0	58.0	N/A	N/A	N/A	N/A
Welder / Torch		62.0	58.0	N/A	N/A	N/A	N/A
	Total	**72**	**74**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Building Construction

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Dormitories to North	Residential	58.7	58.7	58.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	350	0
Gradall	No	40		83.4	350	0
Gradall	No	40		83.4	350	0
Generator	No	50		80.6	350	0
Tractor	No	40	84		350	0
Welder / Torch	No	40		74	350	0
Welder / Torch	No	40		74	350	0
Welder / Torch	No	40		74	350	0

Equipment		Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Crane		63.6	55.7	N/A	N/A	N/A	N/A
Gradall		66.5	62.5	N/A	N/A	N/A	N/A
Gradall		66.5	62.5	N/A	N/A	N/A	N/A
Generator		63.7	60.7	N/A	N/A	N/A	N/A
Tractor		67.1	63.1	N/A	N/A	N/A	N/A
Welder / Torch		57.1	53.1	N/A	N/A	N/A	N/A
Welder / Torch		57.1	53.1	N/A	N/A	N/A	N/A
Welder / Torch		57.1	53.1	N/A	N/A	N/A	N/A
	Total	**67**	**69**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Building Construction

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
USC Campus to South	Commercial	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	400	0
Gradall	No	40		83.4	400	0
Gradall	No	40		83.4	400	0
Generator	No	50		80.6	400	0
Tractor	No	40	84		400	0
Welder / Torch	No	40		74	400	0
Welder / Torch	No	40		74	400	0
Welder / Torch	No	40		74	400	0

Equipment		Calculated (dBA) *Lmax	Leq	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Crane		62.5	54.5	N/A	N/A	N/A	N/A
Gradall		65.3	61.4	N/A	N/A	N/A	N/A
Gradall		65.3	61.4	N/A	N/A	N/A	N/A
Generator		62.6	59.6	N/A	N/A	N/A	N/A
Tractor		65.9	62.0	N/A	N/A	N/A	N/A
Welder / Torch		55.9	52.0	N/A	N/A	N/A	N/A
Welder / Torch		55.9	52.0	N/A	N/A	N/A	N/A
Welder / Torch		55.9	52.0	N/A	N/A	N/A	N/A
	Total	**66**	**68**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Building Construction

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Shrine Auditorium to East	Commercial	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	330	0
Gradall	No	40		83.4	330	0
Gradall	No	40		83.4	330	0
Generator	No	50		80.6	330	0
Tractor	No	40	84		330	0
Welder / Torch	No	40		74	330	0
Welder / Torch	No	40		74	330	0
Welder / Torch	No	40		74	330	0

Equipment		Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Crane		64.2	56.2	N/A	N/A	N/A	N/A
Gradall		67.0	63.0	N/A	N/A	N/A	N/A
Gradall		67.0	63.0	N/A	N/A	N/A	N/A
Generator		64.2	61.2	N/A	N/A	N/A	N/A
Tractor		67.6	63.6	N/A	N/A	N/A	N/A
Welder / Torch		57.6	53.6	N/A	N/A	N/A	N/A
Welder / Torch		57.6	53.6	N/A	N/A	N/A	N/A
Welder / Torch		57.6	53.6	N/A	N/A	N/A	N/A
	Total	**68**	**69**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Religious Centers & Daycare to West	Commercial	54.7	54.7	54.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	200	0
Paver	No	50		77.2	200	0
Paver	No	50		77.2	200	0
Roller	No	20		80	200	0
Roller	No	20		80	200	0
Tractor	No	40	84		200	0

Equipment	Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Concrete Mixer Truck	66.8	62.8	N/A	N/A	N/A	N/A
Paver	65.2	62.2	N/A	N/A	N/A	N/A
Paver	65.2	62.2	N/A	N/A	N/A	N/A
Roller	68.0	61.0	N/A	N/A	N/A	N/A
Roller	68.0	61.0	N/A	N/A	N/A	N/A
Tractor	72.0	68.0	N/A	N/A	N/A	N/A
Total	**72**	**72**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Paving

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Dormitories to North	Residential	58.7	58.7	58.7

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	350	0
Paver	No	50		77.2	350	0
Paver	No	50		77.2	350	0
Roller	No	20		80	350	0
Roller	No	20		80	350	0
Tractor	No	40	84		350	0

Equipment	Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Concrete Mixer Truck	61.9	58	N/A	N/A	N/A	N/A
Paver	60.3	57.3	N/A	N/A	N/A	N/A
Paver	60.3	57.3	N/A	N/A	N/A	N/A
Roller	63.1	56.1	N/A	N/A	N/A	N/A
Roller	63.1	56.1	N/A	N/A	N/A	N/A
Tractor	67.1	63.1	N/A	N/A	N/A	N/A
Total	**67**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Paving

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
USC Campus to South	Commercial	59.1	59.1	59.1

Description	Impact Device	Usage(%)	Equipment Spec Lmax **(dBA)**	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	400	0
Paver	No	50		77.2	400	0
Paver	No	50		77.2	400	0
Roller	No	20		80	400	0
Roller	No	20		80	400	0
Tractor	No	40	84		400	0

Equipment	Calculated (dBA) ***Lmax**	**Leq**	Results Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Concrete Mixer Truck	60.7	56.8	N/A	N/A	N/A	N/A
Paver	59.2	56.1	N/A	N/A	N/A	N/A
Paver	59.2	56.1	N/A	N/A	N/A	N/A
Roller	61.9	54.9	N/A	N/A	N/A	N/A
Roller	61.9	54.9	N/A	N/A	N/A	N/A
Tractor	65.9	62.0	N/A	N/A	N/A	N/A
Total	**66**	**65**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Paving

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Shrine Auditorium to East	Commercial	59.1	59.1	59.1

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	330	0
Paver	No	50		77.2	330	0
Paver	No	50		77.2	330	0
Roller	No	20		80	330	0
Roller	No	20		80	330	0
Tractor	No	40	84		330	0

Results

Equipment	Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Concrete Mixer Truck	62.4	58.4	N/A	N/A	N/A	N/A
Paver	60.8	57.8	N/A	N/A	N/A	N/A
Paver	60.8	57.8	N/A	N/A	N/A	N/A
Roller	63.6	56.6	N/A	N/A	N/A	N/A
Roller	63.6	56.6	N/A	N/A	N/A	N/A
Tractor	67.6	63.6	N/A	N/A	N/A	N/A
Total	**68**	**67**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Painting

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Religious Centers & Daycare to West	Commercial	54.7	54.7	54.7

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Compressor (air)	No	40		77.7	200	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Compressor (air)		65.6	61.6	N/A	N/A	N/A	N/A
	Total	**66**	**62**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Dormitories to North	Residential	58.7	58.7	58.7

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Compressor (air)	No	40		77.7	350	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Compressor (air)		60.8	57	N/A	N/A	N/A	N/A
	Total	**61**	**57**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/21/2025
Case Description: 32nd St-USC Modernization - Painting

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
USC Campus to South	Commercial	59.1	59.1	59.1

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Compressor (air)	No	40		77.7	400	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Compressor (air)		59.6	55.6	N/A	N/A	N/A	N/A
	Total	**60**	**56**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Shrine Auditorium to East	Commercial	59.1	59.1	59.1

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Compressor (air)	No	40		77.7	330	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		***Lmax**	**Leq**	Lmax	Leq	Lmax	Leq
Compressor (air)		61.3	57.3	N/A	N/A	N/A	N/A
	Total	**61**	**57**	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX D

Operational Reference Noise Measurement Printouts

AC Unit - looking north

AC Unit - looking northeast

AC Unit - looking east

General Information

Serial Number	02509
Model	831
Firmware Version	2.314
Filename	831_Data.001
User	GT
Job Description	Shenandoah ES
Location	NE Corner of South Parking Lot
Measurement Description	
Start Time	Wednesday, 2019 September 18 11:18:07
Stop Time	Wednesday, 2019 September 18 11:28:07
Duration	00:10:00.0
Run Time	00:10:00.0
Pause	00:00:00.0
Pre Calibration	Wednesday, 2019 September 18 11:09:09
Post Calibration	None
Calibration Deviation	---

Note

Noise from Portables AC Units _Classroom noise
78F, 29.71 in Hg, 55% hu, no wind, partly cloudy

Overall Data

LAeq		53.5	dB
LASmax	2019 Sep 18 11:22:34	63.6	dB
LZpeak (max)	2019 Sep 18 11:18:07	102.9	dB
LASmin	2019 Sep 18 11:21:59	51.7	dB
LCeq		65.7	dB
LAeq		53.5	dB
LCeq - LAeq		12.2	dB
LAIeq		57.2	dB
LAeq		53.5	dB
LAIeq - LAeq		3.6	dB
Ldn		53.5	dB
LDay 07:00-22:00		53.5	dB
LNight 22:00-07:00		---	dB
Lden		53.5	dB
LDay 07:00-19:00		53.5	dB
LEvening 19:00-22:00		---	dB
LNight 22:00-07:00		---	dB
LAE		81.3	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		0	
OBA Overload Duration		0.0	s

Statistics

LAS5.00	55.8	dBA
LAS10.00	54.5	dBA
LAS33.30	53.3	dBA
LAS50.00	52.9	dBA
LAS66.60	52.6	dBA
LAS90.00	52.2	dBA

LAS > 65.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LAS > 85.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LZpeak > 135.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LZpeak > 137.0 dB (Exceedence Counts / Duration)	0 /	0.0	s
LZpeak > 140.0 dB (Exceedence Counts / Duration)	0 /	0.0	s

Settings

RMS Weight	A Weighting	
Peak Weight	Z Weighting	
Detector	Slow	
Preamp	PRM831	
Integration Method	Linear	
OBA Range	Low	
OBA Bandwidth	1/1 and 1/3	
OBA Freq. Weighting	Z Weighting	
OBA Max Spectrum	Bin Max	
Gain	+0	dB
Under Range Limit	26.5	dB
Under Range Peak	78.6	dB
Noise Floor	17.3	dB
Overload	144.2	dB

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZeq	58.9	58.7	56.7	60.5	63.5	52.4	47.4	49.0	44.0	39.6	35.1	28.1
LZSmax	83.1	73.1	64.8	71.5	68.3	68.1	58.5	58.9	56.9	56.6	53.8	47.1
LZSmin	49.8	52.6	51.9	55.3	62.1	46.8	43.7	46.9	41.3	36.0	30.9	21.9

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	55.0	54.8	52.6	54.0	54.8	52.8	51.9	51.1	52.6	58.4	55.7	49.2
LZSmax	78.8	79.1	71.9	71.6	64.7	64.2	60.9	61.2	62.6	70.3	69.1	66.8
LZSmin	41.8	42.3	43.3	46.2	48.0	47.2	46.1	45.8	47.2	52.0	47.6	39.4

Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	50.9	63.1	49.8	48.5	47.9	45.9	43.3	42.0	42.5	44.1	43.5	45.0
LZSmax	66.4	66.2	61.1	65.1	60.3	63.3	56.1	53.7	50.8	52.0	55.1	54.5
LZSmin	44.7	61.7	44.6	41.0	42.8	39.4	38.5	37.1	39.4	41.4	41.1	42.3

Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	40.1	39.0	38.3	35.7	34.6	33.7	31.1	30.0	29.5	25.9	22.8	18.0
LZSmax	53.2	53.2	52.7	52.2	52.1	51.2	49.7	49.1	47.5	45.2	40.8	37.0
LZSmin	36.6	35.7	34.8	32.3	30.4	29.4	26.7	25.2	23.8	19.6	16.0	11.8

Calibration History

Preamp	Date	dB re. 1V/Pa
PRM831	18 Sep 2019 11:09:07	-26.6
PRM831	07 Aug 2019 12:27:09	-27.3
PRM831	07 Aug 2019 05:49:21	-27.0
PRM831	06 Aug 2019 15:11:44	-26.3
PRM831	06 Aug 2019 12:24:00	-26.0
PRM831	22 Jul 2019 10:48:48	-26.3
PRM831	12 Jul 2019 20:18:07	-26.0
PRM831	29 May 2019 13:46:43	-25.9
PRM831	07 May 2019 12:46:08	-24.7
PRM831	07 May 2019 11:41:50	-25.6
PRM831	29 Apr 2019 09:04:32	-25.7

APPENDIX I – PEDESTRIAN STUDY

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MEMORANDUM

Date:	October 28, 2025	**GTS:**	240419
To:	Chambers Group		
From:	GTS		
Subject:	Pedestrian Safety Study – Downtown Business Magnet (DBM) campus		

GTS prepared this pedestrian safety study memorandum to document the existing pedestrian amenities at the Downtown Business Magnet (DBM) located at 1081 West Temple Street, Los Angeles, CA and assess the potential pedestrian safety consideration. The DBM will temporarily host school operations during the construction of 32nd Street / USC Magnets Major Modernization Project. This memorandum follows the guidelines of the Los Angeles Unified School District.

Project Background

The Los Angeles Unified School District (LAUSD) is proposing a major modernization of the 32nd Street / USC Magnets Campus, including demolition of existing buildings, construction of new buildings, and upgrades of associated infrastructure. The Project would not increase the current capacity of the campus.

Figure 1 shows the project location and vicinity map and Figure 2 shows the project site plan.

During construction the school operations will be hosted at the Downtown Business Magnet (DBM) located at 1081 West Temple Street, Los Angeles CA. The DBM campus was vacated by Downtown Business Magnet High School in the Summer of 2022 and currently serves as interim space for Rise Kohyang High School operated by Bright Star Schools. A portion of the site houses KLCS Education Foundation (KLCS), which will remain in place while 32nd Street / USC Magnets temporarily occupies the site.

Figure 3 shows the temporary DBM campus site plan and Figure 4 shows its location and vicinity map.

Figure 1. Project location and vicinity map (source: Chambers Group)

Figure 2. Project Site Plan

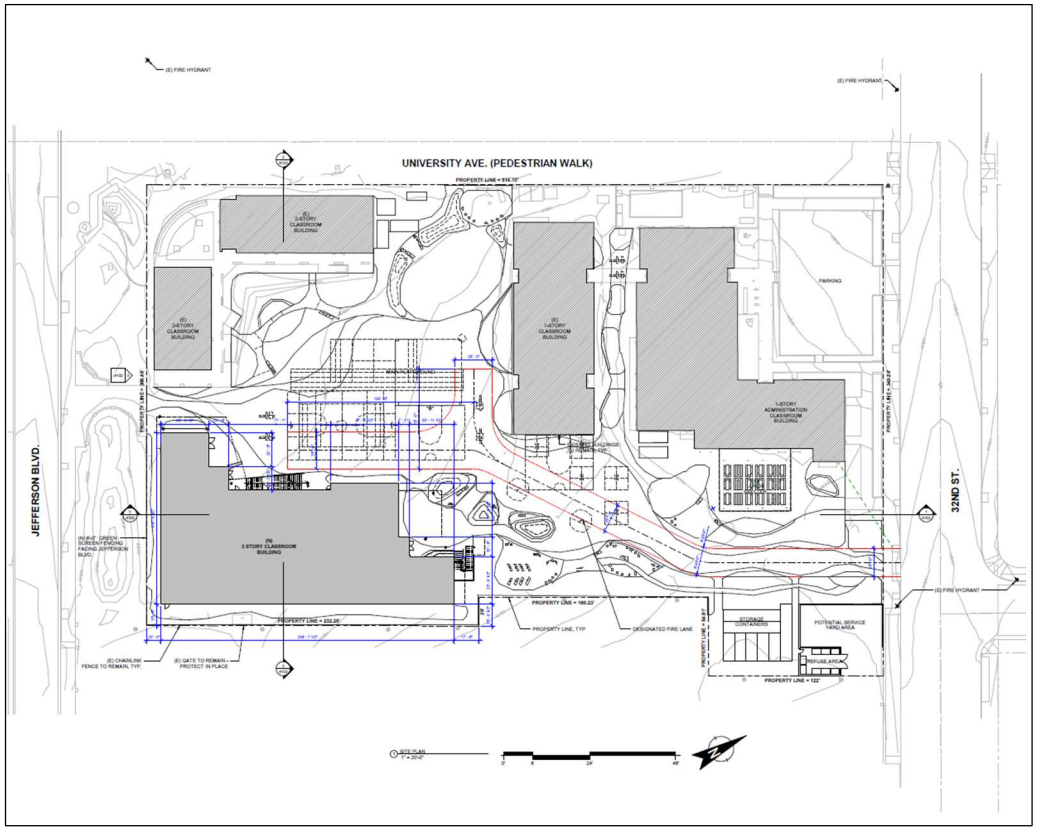

Figure 3. DBM Campus Site Plan

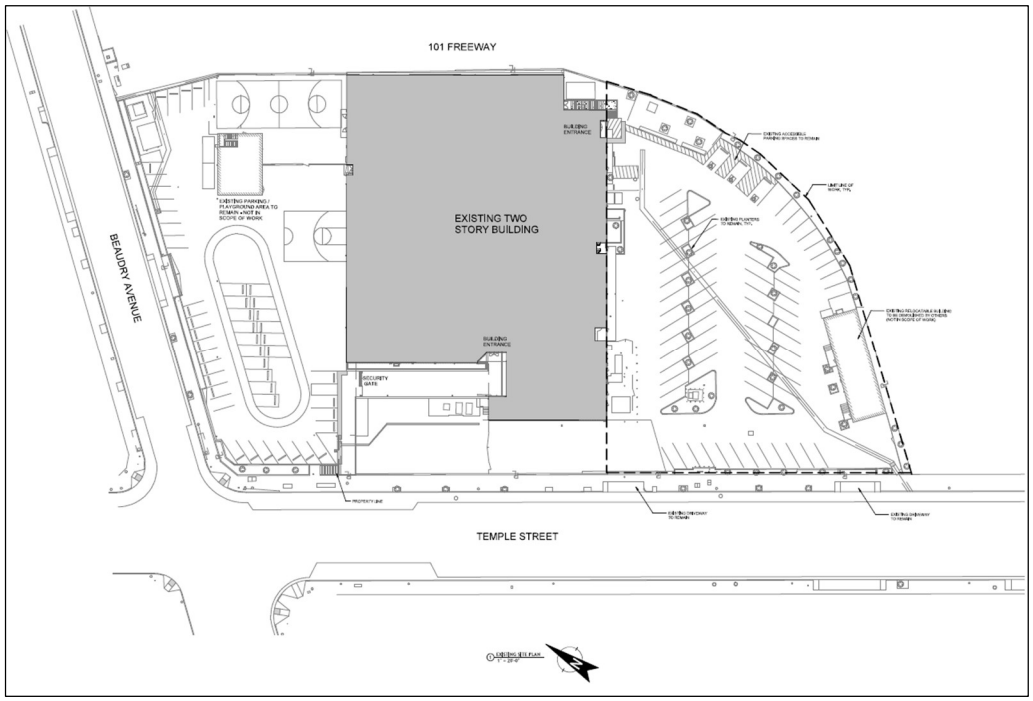

Figure 4. DBM Campus Vicinity Map (source: Google Earth)

Existing Conditions

Roadway Network

The DBM campus is served by the following roadway network:

- W Temple St: Fronting the DBM, is a 60-feet-wide, 5-lane street. Per the Citywide General Plan Circulation System in the LA Mobility Plan 2035, W Temple St is designated as Avenue II. The posted speed limit is 25 mph during school drop-off and pick-up hours and 35 mph otherwise. Sidewalks exist on both sides of the street. Parking is not allowed with “No Stopping At Anytime” signs are posted along both sides.

- N Beaudry Ave: Abutting the DBM to the north, is a 40-feet-wide, 4-lane street. Per to the Citywide General Plan Circulation System in the LA Mobility Plan 2035, N Beaudry Ave is designated as Avenue II to the north of Temple St and Avenue I to its south. Sidewalks exist on both sides and parking is restricted along the school frontage during school hours except for school buses. The intersection of N Beaudry Ave and W Temple St is a signalized intersection with yellow striped crosswalks on all approaches and curb ramps. Red curbs are provided to daylight the intersection with bus stops along Temple St fronting the school.

- Harbor Fwy (SR 110) and Hollywood Fwy (SR 101): Are freeways running east and south of the campus respectively with a ramp connecting both facilities abutting the campus from the east and south. The ramp is above grade from DBM campus and is grade separated at both Temple St. and Beadury Ave.

Public Transit

The DBM campus is served by Metro bus lines 10, 48, and 92. Metro bus station Terminal 25 is located at the immediate vicinity of the campus to the northeast of Temple and Beaudry intersection.

Bicycle and Pedestrian Facilities

Pedestrians and bicyclists are important users of the local roadway network traveling to and from school. In the vicinity of the DBM campus, N Beaudry Ave and W Temple St feature 10-ft sidewalks on both sides and no dedicated bicycles lanes.

The LA Mobility Plan 2035 features Tier 2 Bicycle Lanes along Beaudry and Tier 3 Bicycle Lanes along Temple north of Beaudry. Per the plan Tier 2 bicycle lanes are more likely than Tier 3 bicycle lanes to be built by 2035. Pedestrian segments are also featured along Temple Ave and Beaudry which signify streets that could be prioritized to provide better walking connections to and from the major destinations within communities..

School Travel Modes

Due to the temporary relocation of 32nd St./USC operations to the former DBM campus during construction, an increase in the traffic is anticipated during the students drop-off and pick-up times. It is anticipated that all modes of transport (walking, biking, transit, and vehicular) will be used to access the site albeit at different rates. Per the District currently about 660 students are dropped off both at the morning valet on Jefferson and on 32nd Street. There are roughly 210 students that arrive by bus daily. The District issues TAP cards to students which are renewed yearly. Several other students (estimated about 20 to 30) walk to school.

Pedestrian Safety Analysis Framework

This section summarizes federal, state, regional, and local laws, regulations, plans, and guidelines along with LAUSD Standards of relevance to the pedestrian safety analysis These are included to assist in identifying potential impacts and significance thresholds. .

Federal Regulatory Framework

Americans with Disabilities Act (ADA) and Accessible Pedestrian Routes

The Americans with Disabilities Act of 1990 (ADA) is the primary federal civil-rights law ensuring equal access for individuals with disabilities. Title II of the ADA applies to state

and local governments, including public schools, and requires that programs and facilities, such as campuses and pedestrian access routes, be accessible to individuals with disabilities. The implementing regulations for Title II (28 CFR Part 35) require public entities to ensure that when facilities, streets, or sidewalks are altered, they are made accessible "to the maximum extent feasible."

Current accessibility standards reference the 2010 ADA Standards for Accessible Design and the Public Rights-of-Way Accessibility Guidelines (PROWAG), which establish criteria such as:

- Continuous clear width: At least 48 inches of unobstructed pedestrian route width.
- Curb ramps and landings: Smooth transitions with slopes not exceeding 8.33% (1:12), cross-slopes not exceeding 2%, and level landings at top and bottom.
- Detectable warning surfaces: Installed where pedestrian routes transition to vehicular ways (e.g., curb ramps, blended transitions, medians, and islands), with a minimum depth of 24 inches and extending the full width of the ramp.
- Firm, stable, and slip-resistant surfaces: Routes must be free of discontinuities, tripping hazards, and excessive slopes.
- Accessible path continuity: All pedestrian routes between school facilities and the public right-of-way should remain continuous and compliant during the temporary relocation period.

For existing campuses such as the DBM, ADA compliance primarily involves ensuring that pedestrian routes used by students, staff, and visitors provide accessible connections between key site elements such as drop-off and pick-up areas, parking lots, building entrances, crosswalks, and adjacent sidewalks.

Since the campus will temporarily accommodate additional students, the assessment should verify that accessible routes can handle the increased pedestrian demand and that temporary circulation patterns (e.g., new drop-off/pick-up zones, portable classrooms, or construction barriers) do not block or degrade accessibility. Any temporary pedestrian detours must also meet ADA criteria, including firm surfaces, compliant slopes, and detectable warnings where applicable.

State Regulatory Framework

Assembly Bill 1475 (AB 1475) — Streets & Highways Code §§ 2331, 2333, 2333.5

The California legislation enacted in 1999 (AB 1475) established a statewide "Safe Routes to School" (SR2S) construction program, administered by the California Department of Transportation (Caltrans). The law directed Caltrans to utilize certain federal transportation funds for infrastructure projects aimed at improving pedestrian and bicyclist safety, traffic calming, and school-route conditions. Over time the program has evolved to include both infrastructure (sidewalks, curb ramps, crossings) and non-infrastructure elements (education, encouragement, enforcement) in order to support safe walking and bicycling to schools.

California Manual on Uniform Traffic Control Devices (California MUTCD) — Part 7: Traffic Control for School Areas

Issued by Caltrans under California law (Vehicle Code §21400), the California MUTCD sets the uniform standards for traffic control devices (signs, pavement markings, signals) in school areas. Part 7 specifically addresses traffic controls in school zones, including the

requirement for each school site to develop a School Route Plan and School Traffic Control Plan, identify established walk routes and crossings, and implement appropriate warning or regulatory devices based on traffic volume, speed, width of roadway, number of students, etc.

Assembly Bill 1358 (Complete Streets Act) — Government Code §§ 65040.2, 65302

Effective January 1, 2011, AB 1358 requires cities and counties updating their General Plans (specifically the circulation/transportation element) to consider the needs of all roadway users — motorists, transit riders, bicyclists, and pedestrians. This legislation frames the broader policy environment and supports pedestrian safety initiatives.

California Vehicle Code (CVC) Provisions for School Crossings and Traffic Control Devices

- CVC § 21368 (Division 11, Chapter 2, Article 1): Marked pedestrian crosswalks adjacent to school grounds must be painted or marked in yellow. Other marked crosswalks may be painted or marked in yellow if certain conditions are met (within 600 ft of school grounds, etc.). The statute also requires the words “SLOW-SCHOOL XING” be painted on the lanes leading to the yellow marked crosswalks (unless at an intersection controlled by stop signs, signals, or yield signs).
- CVC § 21372: The Department of Transportation and local authorities must establish warrants (guidelines) for placement of traffic control devices near schools, based on pedestrian and vehicle volumes, roadway width, speed, terrain, alignment, proximity to the school, etc.
- CVC § 21373: A school district’s governing board may request the appropriate city/county/state agency to install traffic control devices in accordance with the warrants. The agency must perform an engineering/traffic survey within 90 days and install the devices if the warrants are met.
- CVC § 21400: Authorizes Caltrans to adopt the uniform standards and specifications for all official traffic control devices in California (which underlies the California MUTCD).

Together, these provisions highlight the legal basis for school-zone traffic control, crosswalk delineation, markings and devices, under California statutory authority.

In the DBM context (existing campus accommodating additional students temporarily), the state regulatory framework underscores that attention must be paid not just to classroom buildings but to the pedestrian routes, crossings, sidewalks and drop-off/pick-up zones that serve students arriving and departing the campus

Because the DBM deals with an existing campus and the potential increase in pedestrian volumes, it is essential to ensure the pedestrian routes, crossings and school-zone traffic controls align with the regulation’s intent and are being monitored / maintained accordingly.

Local City of Los Angeles Framework

Los Angeles Department of Transportation (LADOT) – Vision Zero and Pedestrian Safety Policies

The City of Los Angeles adopted Vision Zero LA in 2015, a citywide initiative led by the Los Angeles Department of Transportation (LADOT) to eliminate all traffic deaths by 2035. The program focuses on improving safety for vulnerable users, particularly children walking to and from school. Vision Zero identifies a High Injury Network (HIN), the 6% of city streets where over 65% of severe and fatal collisions occur, and prioritizes these corridors for safety interventions. In school areas, Vision Zero measures include school-zone speed reductions, enhanced crosswalks, pedestrian refuge islands, rectangular rapid-flashing beacons (RRFBs), and daylighting (removal of parking near crosswalks to improve visibility). The program also supports school travel plans and community-based education initiatives in coordination with Safe Routes to School (LA SRTS).

These policies underscore the City's commitment to pedestrian safety and provide the framework for evaluating and recommending improvements around the campus to safely accommodate the temporary increase in students.

Temple Street fronting the DBM is identified as part of the High Injury Network (Figure 5).

Figure 5. High Injury Network along Temple Street fronting DBM (Source: City of Los Angeles GeoHub)

Mobility Plan 2035 – Complete Streets Policy

Adopted in 2015 as part of the City's General Plan Framework, Mobility Plan 2035 establishes policies to promote safety, equity, and access for all transportation modes. It implements California's Complete Streets Act (AB 1358) at the local level, directing that all street design and improvement projects consider the needs of pedestrians, bicyclists, transit users, and motorists.

For school areas, the plan emphasizes the creation of safe pedestrian corridors, integration of traffic-calming features, and coordination between LADOT, the Bureau of Engineering

(BOE), and LAUSD to improve student access. The plan also provides a policy basis for implementing context-sensitive design solutions to support Vision Zero safety goals.

Los Angeles Municipal Code (LAMC) – School Zone Traffic Control and Parking Regulations

The Los Angeles Municipal Code (LAMC) provides the legal framework for regulating parking, traffic control, and curb management around schools:

- LAMC § 80.55 authorizes LADOT to prohibit or restrict parking and stopping adjacent to school frontages where such conditions could create a hazard or obstruct pedestrian or vehicle passage.
- LAMC § 80.10 requires that all parking or traffic regulations be supported by official signage or pavement markings for enforcement.
- LAMC § 80.56 and related provisions govern colored-curb zones, which are frequently applied near schools to manage arrival and dismissal activities.
- LAMC § 80.36.1 allows LADOT to establish temporary traffic control measures (e.g., cones, barricades, temporary signage) for school events, construction, or operational changes, an important consideration for a campus hosting additional students.

Safe Routes to School Los Angeles (LA SRTS)

LADOT administers the LA Safe Routes to School (LA SRTS) program to improve conditions for children walking, biking, or rolling to school. The program prioritizes schools based on collision history, socioeconomic factors, and enrollment, and develops School Safety Plans with community input.

School Zone Speed Limit Reductions and Enhanced Crossings

In 2023, the City of Los Angeles expanded its School Zone Speed Reduction Program, authorizing 15 mph speed limits on hundreds of streets adjacent to public and private schools pursuant to California Vehicle Code § 22358.4. LADOT also continues to install high-visibility continental crosswalks, flashing beacons, and pedestrian warning signs at priority locations near schools.

LAUSD Standards

LAUSD Self-Evaluation & Transition Plan / ADA Compliance

LAUSD has adopted a Board-approved Self-Evaluation and Transition Plan under Title II of the Americans with Disabilities Act (ADA) which governs accessibility of its programs, services, activities and physical facilities.

The district's Office of ADA Compliance monitors construction and modernization (bond programs, Rapid Access Program etc.), and ensures facilities and routes provide equal access.

For the existing DBM campus temporarily receiving additional students, it is essential to

ensure that accessible pedestrian routes, drop-off/pick-up zones, building entrances, and crossing points comply with the district's accessibility expectations, and that no temporary circulation change reduces accessibility.

LAUSD Standard Conditions of Approval for Construction, Upgrade & Improvement Projects

LAUSD's *"Standard Conditions of Approval for District Construction, Upgrade, and Improvement Projects"* (2018 update) includes among its topics "Pedestrian Safety". It compiles standards, guidelines, and mitigation measures to be used in LAUSD capital projects.

Though the DBM project may not be a new construction, the standard conditions provide useful benchmarks for pedestrian safety improvements around the campus, for example when recommending upgrades to existing sidewalks, crosswalks, or controlled drop-off zones.

Table 1 lists the pedestrian safety related standard conditions.

Table 1. Los Angeles Unified School District Standard Conditions of Approval for District Construction, Upgrade, and Improvement Projects (Updated 2018)

Reference #	Topic	Trigger for Compliance	Project Implementation Phase	Standard Conditions	Original Source	Responsible Implementing Party (LAUSD or its Designee)
Pedestrian Safety						
SC-PED-1	Pedestrian Safety Analysis	Increase student capacity by more than 25% or 10 classrooms	During project design (Planning)	LAUSD shall participate in the Safe Routes to School (SR2S) program. **Caltrans SR2S program.** LAUSD is a participant in the SR2S program administered by Caltrans, local law enforcement, and transportation agencies. OEHS provides pedestrian safety evaluations as a component of traffic studies conducted for new school projects. This pedestrian safety evaluation includes a determination of whether adequate walkways and sidewalks are provided along the perimeter of, across from, and adjacent to a proposed school site and along the paths of identified pedestrian routes within a 0.25-mile radius of a proposed school site. The purpose of this review is to ensure that pedestrians are adequately separated from vehicular traffic.	OEHS pedestrian safety evaluation. REF- 4492.1, School Traffic Study, July 23, 2012 (as amended).	OEHS, Design Team, AM, AE Services
SC-PED-2	Pedestrian Safety Analysis	New campus, new pedestrian/vehicular right-of-ways, or an increase in student capacity by more than 25% or 10 classrooms	During project design	LAUSD shall implement the applicable requirements and recommendations associated with the OEHS Traffic and Pedestrian Safety Program. **OEHS Traffic and Pedestrian Safety Program** LAUSD has developed these performance guidelines to minimize potential pedestrian safety risks to students, faculty and staff, and visitors at LAUSD schools. The performance guidelines include the requirements for: student drop-off areas, vehicle access, and pedestrian routes to school. School traffic/circulation studies shall identify measures to ensure separation between pedestrians and vehicles along potential pedestrian routes, such as sidewalks, crosswalks, bike paths, crossing guards, pedestrian and traffic signals, stop signs, warning signs, and other pedestrian access measures.	REF-5314.2, Procedures for Environmental Review of Proposed Projects, June 12, 2017 (as amended). 2015 School Upgrade Program EIR, certified by the Board of Education in November 2015 (as amended).	OEHS, Design Team, AM, AE Services
SC-PED-3	Pedestrian Safety Analysis	New campus, new pedestrian/vehicular right-of-ways, or an increase in student capacity by more than 25% or 10 classrooms	During project design (Planning)	LAUSD shall implement the applicable sidewalk requirements outlined in the School Design Guide. LAUSD shall also coordinate with the responsible traffic jurisdiction/agency to implement infrastructure improvements prior to the opening of a school. Improvements shall include, but are not limited to: • Clearly designate passenger loading areas with the use of signage, painted curbs, etc. • Install new walkway and/or sidewalk segments where none exist. • Substandard walkway/sidewalk segments shall be improved to a minimum of eight feet wide. • Provide other alternative measures that separate foot traffic from vehicular traffic, such as distinct travel pathways or barricades.	REF-5314.2, Procedures for Environmental Review of Proposed Projects, June 12, 2017 (as amended). 2015 School Upgrade Program EIR, certified by the Board of Education in November 2015.	OEHS, Design Team, AM, AE Services
SC-PED-4Pedestrian Safety Analysis	New campus, new pedestrian/vehicular right-of-ways, or an increase in student capacity by more than 25% or 10 classrooms	During project design (Planning)	LAUSD shall design the project to comply with the traffic and pedestrian guidelines in the School Traffic Safety Reference Guide. **School Traffic Safety Reference Guide REF- 4492.1.** This Reference Guide replaces Reference Guide 4492.0, School Traffic Safety, September 30, 2008. Updated information is provided, including new guidance on passenger loading zones and the Safety Valet Program. This guide sets forth requirements for traffic and pedestrian safety, and procedures for school principals to request assistance from OEHS, the Los Angeles Schools Police Department (LASPD), or the local police department regarding traffic and pedestrian safety. Distribution and posting of the Back to School Safety Tips flyer is required. This guide also includes procedures for traffic surveys, parking restrictions, crosswalks, advance warning signs (school zone), school parking signage, traffic controls, crossing guards, or for determinations on whether vehicle enforcement is required to ensure the safety of students and staff.	LAUSD Traffic Safety Reference Guide. REF-4492.1. July 23, 2012 (as amended).	OEHS, Design Team, AM, AE Services	
SC-PED-5	Safe Access to School	Construct bus loading area, student dropoff/pick-up area, and/or parking	During project design (Planning)	LAUSD shall design new student drop-off, pick-up, bus loading areas, and parking areas to comply with the School Design Guide. School Design Guide. The Guide states student drop-off and pick-up, bus loading areas, and parking areas shall be separated to allow students to enter and exit the school grounds safely.	School Design Guide. Los Angeles Unified School District (as amended).	Design Team, OEHS, AM, AE Services
SC-T-3	Traffic Analysis	Increase student capacity by more than 25% or 10 classrooms and/or generate additional traffic or shifts traffic patterns	Prior to project approval (Planning, Pre-Construction	Implementation of SC-T-3.		OEHS, Design Team, AM, AE Services
SC-T-4	Construction Traffic	Large construction equipment required to use public roadways	Prior to construction (Construction)	Implementation of SC-T-4.		PEX, Construction Contractor

LAUSD School Design Guide / Design Standards

LAUSD's *School Design Guide* (Updated February 26, 2025) presents district criteria for site design (including vehicular access, parking, circulation) and technical criteria (civil engineering, site design) for new schools and major modernization.

While the DBM campus is existing, the Guide's site design chapter (vehicular access & parking) provides design criteria for analyzing drop-off/pick-up areas, circulation routes, and pedestrian/vehicular interfaces which include the following:

1. Ensure adequate and safe access for students, staff and visitors, walking, entering, and circulating on the campus. Vehicle traffic patterns shall not interfere with major pedestrian traffic patterns. Foot traffic shall not pass through entrance driveways. Crosswalks must be clearly marked. Refer to the OEHS Traffic and Pedestrian Safety Requirements for New Schools.
2. In general, orient the primary site and building entrance toward the street with the least traffic volume and activity.
3. To optimize the traffic flow to and from the school site and to minimize traffic hazards to pedestrians, meet with representatives of the Los Angeles Department of Transportation (or other local traffic authority) early in the design process to review the schematic site design.
4. Provide safe and clearly indicated student drop-off and pick-up provisions by car or bus.
    a. For new schools, provide on-site drive lanes or curb inset lanes for parent and bus drop-off and pick-up wherever space permits. Comply with ADA requirements for curb drop-off and site access as well as LAUSD's Office of Environmental Health and Safety's (OEHS) "Traffic and Pedestrian Safety Requirements for New School" requirements.
    b. Provide the parent's student drop-off area adjacent to the main entry gate.
    c. Locate the main gate in the farthest forward position along the curb to maximize curb space for stacking vehicles and to allow visual supervision of the greatest number of vehicles.
    d. Provide adequate curb length for expected drop-off and pick-up traffic, with a minimum of 160 feet for Elementary Schools and 200 feet for Secondary Schools. Use curb cuts and inset drop-off lanes when site space permits.
    e. Separate parent's student drop-off and bus loading areas to minimize traffic conflicts and to allow more effective supervision of waiting areas.
    f. Locate bus drop-off space at a separate secondary entry or from a perpendicular street wherever possible. Provide adequate safe waiting space for students.
    g. Provide adequate curb length for expected bus parking for drop-off and pick-up, with a minimum of 100 feet for Elementary Schools and 200 feet for Secondary Schools.
    h. Locate bus drop-off areas for special education students in the same area as regular education students to provide equal access and the least restrictive environment.
    i. Provide curb cuts for accessibility at both bus and automobile loading zones.
    j. Provide appropriate "Passenger Loading" signs at all passenger loading zones.

LAUSD Safe School Traffic Program / Pedestrian & Traffic Safety Resources

LAUSD operates a "Safe School Traffic Program" in coordination with the City of Los Angeles, which addresses safe travel to and from school by students (walking, biking, being driven).

Additionally, LAUSD provides pedestrian & traffic safety tip sheets for students/staff/parents.

LAUSD Facilities Information / Charter Co-location Requirements

LAUSD's "Facilities Information" documents (for charter schools and for occupancy) require that before occupancy, the site comply with safety, accessibility, occupancy, fire and life safety requirements etc.

Thresholds of Significance

LAUSD has developed criteria for determining student pedestrian safety impacts. A project could result in a significant pedestrian safety impact if it would:

LAUSD has developed criteria for determining student pedestrian safety impacts. A proposed SUP-related project could result in a significant pedestrian safety impact if it would: PED-1 Substantially increase vehicular and/or pedestrian safety hazards due to a design feature or incompatible uses; PED-2 Create unsafe routes to schools for students walking from local neighborhoods; PED-3 Be located on a site that is adjacent to or near a major arterial roadway or freeway that may pose a safety hazard.

PED-1 Substantially increase vehicular and/or pedestrian safety hazards due to a design feature or incompatible uses

PED-2 Create unsafe routes to schools for students walking from local neighborhoods;

PED-3 Be located on a site that is adjacent to or near a major arterial roadway or freeway that may pose a safety hazard.

Environmental Impacts

Threshold PED-1:	**The project implementation would not substantially increase vehicular and/or pedestrian safety hazards due to a design feature or incompatible uses.**

As the DBM is a temporary site that has been historically used as a school site, it is not anticipated to substantially increase the vehicular and/or pedestrian safety hazards due to a design feature or incompatible uses. The temporary site features standard driveway widths and turning radii and provision of adequate line of sight to avoid design elements that could result in hazards.

The bus loading areas along Beaudry do not overlap with car loading areas along Temple, which would reduce the potential for conflicts between cars and buses arriving and departing, especially during the busiest drop-off and pick-up periods.

Under the School Design Guide, Section 2.3 (Vehicular Access and Parking) LAUSD will:

- Ensure adequate and safe access for students, staff and visitors walking, entering and circulating on the campus. Vehicle traffic patterns shall not interfere with major pedestrian traffic patterns. Foot traffic shall not pass through entrance driveways.
- Provide safe and clearly indicated student drop-off and pick-up provisions by car and bus.
- Delivery and utility vehicles shall have direct access from the street without crossing playgrounds or fields.

In addition, the site is required to accommodate ingress and egress of emergency vehicles as required by the City of Los Angeles Fire Department or other affected emergency service vehicles. All access features are subject to and must satisfy fire department code in each affected jurisdiction.

LAUSD has several policies to coordinate with local traffic engineering departments and to provide adequate access, parking, and circulation in the vicinity of a school site.

Additionally, pursuant to California Vehicle Code Sections 21272 and 21273, local jurisdictions must install traffic control devices required to mitigate hazards for students traveling to and from school. Local jurisdictions may request the District to reimburse the City up to 50 percent of the cost of installing such devices. Impacts would be less than significant.

Threshold PED-1:	**The project would not create unsafe routes to schools for students walking from local neighborhoods.**

All SUP Projects That Generate Additional Trips

The DBM site is a temporary site. The project temporarily increases student capacity or attendance and include installation of any missing signs and roadway markings pursuant to Part 7, School Area Traffic Controls, of the California MUTCD. Impacts would be less than significant.

Threshold PED-3:	**The project would not pose a safety hazard if adjacent to or near a major arterial roadway or freeway**

Though the project site is in the vicinity of a freeway, it is grade separated and no direct access is available between the freeway and the site's immediate vicinity. The DBM access is located on a collector streets, not on major highways. The California Air Resources Board's *Air Quality and Land Use Handbook* recommends that sensitive land uses, including schools, be 500 feet or more from freeways or from urban roads carrying traffic volumes of 100,000 or more vehicles per day.This temporary site was built prior to the freeways and/or regulations for siting schools, so LAUSD has some schools near high-traffic roads.

Students already walk and bike to the DBM, and safety devices—such as crosswalks, traffic lights, and signage—are already in place; therefore, additional students on a temporary basis would not exacerbate any current conditions.

Impacts would be less than significant.

4. Conclusion

Based on the applicable regulations and standard conditions, the pedestrian safety study showed that none of the thresholds of significance is met following the temporary relocation of 32nd St./USC operations to the former DBM campus during construction. Therefore, the project level of impact on pedestrian safety is less than significant and no mitigation measures are required.