4.5 HAZARDS AND HAZARDOUS MATERIALS

4.5.1 INTRODUCTION

The Hazards and Hazardous Materials section of the EIR evaluates the potential for hazards and hazardous materials to be present on the Lincoln40 Project (proposed project) site or within the near vicinity of the site. In addition, this section discusses potential impacts posed by any such hazards to the environment, as well as to workers during construction of the project. The information and analysis in this section of the EIR is primarily based upon information from the *Phase I Environmental Site Assessment* (Phase 1 ESA)[1] prepared for the proposed project site by Environmental Research Consultants (ERC) (see Appendix K).

4.5.2 EXISTING ENVIRONMENTAL SETTING

The following site description and historical uses are based on the Phase I ESA prepared for the proposed project site.

Site Description

The proposed 5.92-acre project site is located along Olive Drive, immediately south of the Union Pacific Railroad (UPRR) tracks and the Davis Amtrak station, in the City of Davis. The site is bisected by Hickory Lane. The project site and general vicinity are within the East Olive Drive sub-area of the City's Gateway/Olive Drive Specific Plan. Regional access to the proposed project site is provided by the Olive Drive ramp from westbound Interstate 80 (I-80) and the I-80/Richards Boulevard interchange, located southwest of the project site. Olive Drive serves as an alternate route to Downtown Davis from I-80 West. The site is comprised of 11 separate parcels, identified by Assessor's Parcel Numbers (APNs) 070-280-010, -012, -013, -014, -015, -016, -017; 070-290-001, -002, -003, and -004.

The 5.92-acre project site consists of a small field, approximately 180 trees, and 24 existing residential units. The existing residential units include 10 single-family homes and an old lodging facility that was previously converted into a 14-unit apartment complex. The apartment complex is currently fully occupied. At the time of issuance of the NOP, six of the 10 single-family homes were occupied by renters; of the remaining four units, three were uninhabitable and one was vacant. According to ERC, the existing on-site structures appear to be of wood-framed construction with combination stucco and wood exteriors and composite shingle roofs. The interior of the residences consists of painted gypsum drywall walls, and wood panel ceilings. Carpeting covers the majority of interior floors, with vinyl sheet flooring present in kitchens and

[1] Environmental Research Consultants. *Phase I Environmental Site Assessment Lincoln40.* Revised August 12, 2016.

bathrooms. The surface lots accommodate tenant-owned automobiles. Other significant structures or surface features were not noted on-site at the time of the reconnaissance. Portions of the project site not containing structures are mostly dominated by weedy, ruderal vegetation with the aforementioned 180 existing trees scattered throughout the site.

The project site has an underground natural gas transmission line located at the eastern corner of the project site (see Figure 4.5-1). The gas line, owned by the Pacific Gas and Electric Company (PG&E), has a deeded easement for use and maintenance. In addition, the project site includes a 10-foot pole line easement for overhead power lines that traverse the project site north to south. It should be noted that 115 kilovolt (kV) overhead PG&E lines also traverse the site east to west at the southwestern corner of the site. The existing natural gas transmission line easement and the 10-foot overhead power line easement would remain with the development of the proposed project, and, as seen in Figure 4.5-1 above, the proposed project would avoid the overhead power lines.

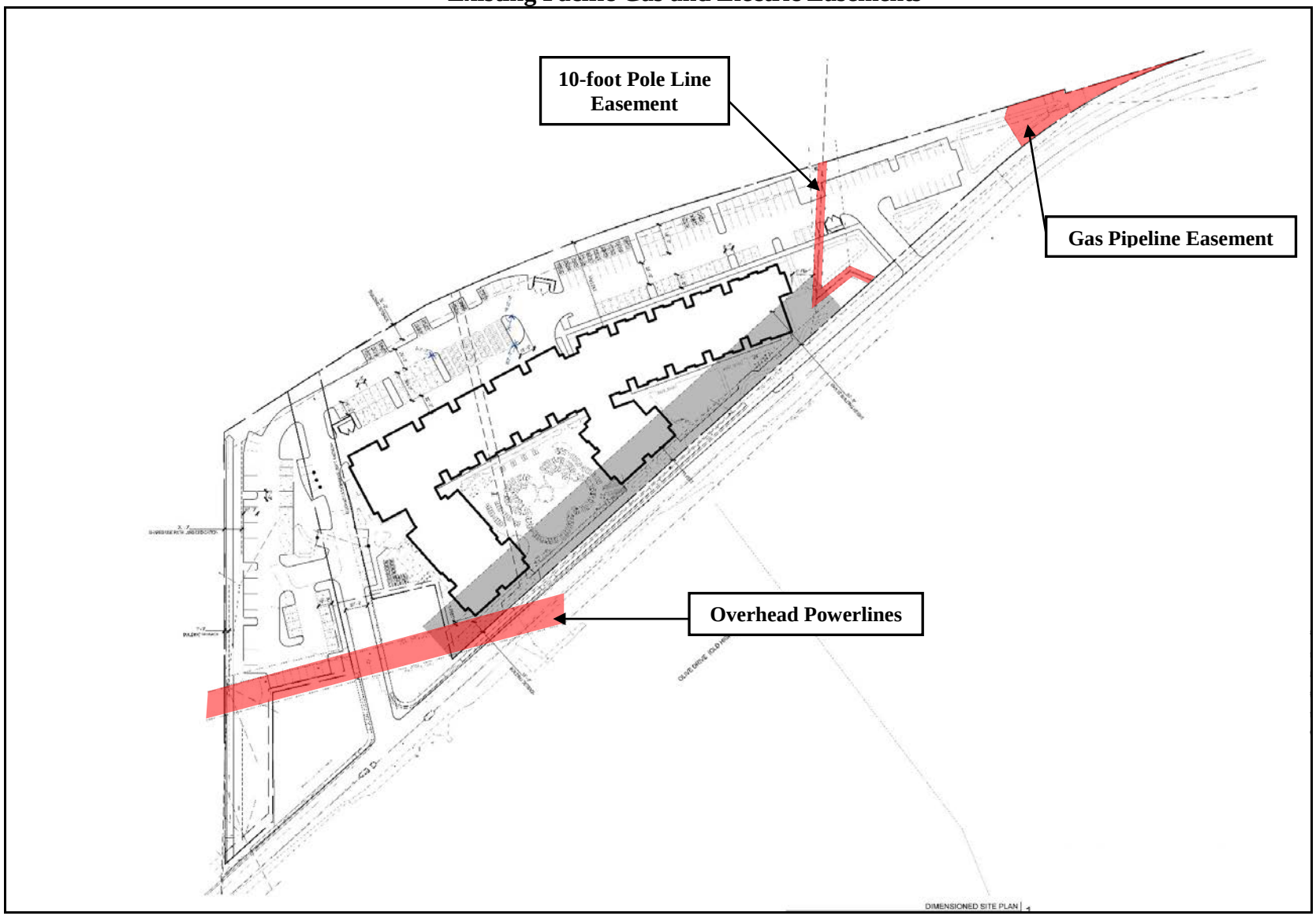
Surrounding Land Uses

Immediately south of the project site, on the opposite side of Olive Drive, are the Lexington Apartments, the Arbors Apartments, and Cesar Chavez Plaza, as well as a self-storage facility. Beyond the apartment and self-storage facility, further south from the project site, is the I-80 mainline. Commercial developments as well as the Slatter's Court mobile home park, are located west of the project site, while medium density residential developments and automotive uses are located to the east of the project site, south of Olive Drive. The UPRR tracks make up the northern border of the project site. A chainlink fence, installed by the UPRR, separates the project site from the tracks. Beyond the railway is the Old East Davis community, which contains a mix of residential and commercial uses. PG&E's Davis substation (236 K Street) is located north of the project site, across the UPRR tracks. According to the Phase I ESA, the surrounding properties do not include apparent conditions that would be considered evidence of a Recognized Environmental Condition (REC).[2] The American Society of Testing and Materials (ASTM) defines RECs in the E1527-13 Standard as "the presence or likely presence of any hazardous substance 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."[3]

[2] Environmental Research Consultants. *Phase I Environmental Site Assessment Lincoln40* [pg. 13]. Revised August 12, 2016.

[3] American Society of Testing and Materials International Website. Available at: https://www.astm.org/Standards/E1527.htm. Accessed February 3, 2017.

Figure 4.5-1
Existing Pacific Gas and Electric Easements



Records Review

ERC examined historical documents (aerial photographs, Fire Insurance Maps, Topographic Maps, Criss-Cross Directories), governmental databases, deed records (if available), governmental environmental files and conducted interviews with past and current property owners in an attempt to determine if RECs exist on-site. Historic mapping sources were reviewed at the Yolo County Civic Center Library.

Historical Aerial Photographs and Maps

Historic aerial photographs and maps were reviewed by ERC, which indicate the project site has been occupied with residences as far back as 1907. A 1907 and 1913 Topographic Map of Davisville (now Davis), California, shows the project site developed with one residence to the central north portion. Deeded easements for power utility lines along Olive Drive were granted in 1907 and 1923. The City of Davis advanced sewer to the properties in 1932 and 1957. Historical data indicates the majority of the structures were built between 1932 and 1969. Use, storage, or generation of regulated quantities of petroleum hydrocarbons or hazardous materials has not been identified during ERC's historical research of the project site. It should be noted that the Historical Resource Analysis Study prepared for the project site by Historic Resource Associates stated that the Callori family had a farm on the property until the 1930's; however, since the 1940s, the primary use for the project site has been residential. Therefore, the presence of pesticides or other substances associated with farming uses is not expected on the project site.

Adjacent Properties

A GeoSearch Radius Report was reviewed for the project site and the surrounding properties as part of the Phase 1 ESA. The search radii used for the GeoSearch Radius Report is based on the ASTM 1527-13 standard search radii. The site addresses, 1111, 1165, 1185, 1223, 1225 and 1231 Olive Drive and 113, 115 and 118 Hickory Lane, are not listed as regulated properties.

The facilities listed in the GeoSearch database that are located within the search radii were further evaluated. The closest listed facility is the Davis Amtrak property located northwestern of the project site. Review of subsurface investigations associated with the Davis Amtrak property report groundwater migration was not to the south, toward the project site. Review of the regulatory status and reporting, location and hydrologic position of the listed off-site regulated facilities did not reveal evidence of an off-site source of impact to shallow soil or groundwater at the project site.

The Shell Service Station, located at 1010 Olive Street, was previously the closest active Leaking Underground Fuel Tank (LUST) facility to the project site prior to demolition of the facility and construction of a new gas station in 2016. Demolition and construction activities included removal of the existing LUSTs and installation of new USTs to serve the newly-constructed gas station. The facility is located approximately 250 feet southwest of the project site. Review of the database listing does not include any additional regulatory status information regarding the facility. However, on-site observations and review of topographic maps indicate that the gradient at the facility is southwesterly and away from the project site. Therefore, based upon the review

of available information, the intervening distance between the Shell Service Station and the project site, the recent removal of the LUSTs, and the anticipated direction of groundwater flow, additional investigation is not warranted because contamination is not expected to have migrated to the project site.

Site Reconnaissance

Kathleen I. Buscher, ERC's Environmental Professional, performed the site reconnaissance on December 7, 2015. The site reconnaissance consisted of an inspection of the project site structures and surrounding parking areas. During the site reconnaissance, current or historical use of above or below ground storage tanks, septic systems, irrigation wells, or regulated quantities of hazardous materials or petroleum products was not identified. Two PG&E-owned pole-mounted transformers are present within the setback from Olive Drive, abutting the south side and southeast side of the combined lots. PG&E changed out all polychlorinated biphenyls (PCB) that contained oil with concentrations above 50 parts per million (ppm), as the result of a program that required all potentially PCB-containing equipment be sampled and analyzed. PG&E confirmed that the transformers along Olive Drive have been mitigated to concentrations of PCB of 50 ppm or less. Staining was not observed on the transformer exteriors or on the ground.

Nearby Railroad Tracks

As stated previously, the project site is located immediately south of the UPRR tracks and the Davis Amtrak station. The UPRR tracks are currently used for passenger and freight train operations. The passenger train operations, conducted by Amtrak on the UPRR tracks, involve 34 passenger trains per day.[4] Amtrak trains stop and idle for a limited period of time (approximately one minute) at the Davis Amtrak station, located to the northwest of the project site, when passing through the rail corridor. According to the *Preliminary Railroad Noise Assessment* prepared for the proposed project by j.c. brennan & associates, approximately 21 UPRR freight trains pass the site along the main line during a 24-hour period.[5]

In addition, the California Northern rail line, operated by the California Northern Railroad Company, is a freight line that runs through Davis and Woodland, and along Interstate 5 (I-5) past Dunnigan. In Davis, the California Northern rail line connects with the UPRR tracks east of the Davis Amtrak station, north of the project site, and curves northward towards Woodland. The freight line schedule varies depending on seasonal demands. The rail line carries an average of two trains daily, using between one and 50 rail cars and one or two locomotives, traveling at an average speed of 15 miles per hour.

[4] Bomar, Clem A. Division of Rail and Mass Transportation. Personal Communication [email] with Nick Pappani, Vice President of Raney Planning & Management, Inc. September 06, 2016.

[5] j.c. brennan & associates. *Preliminary Railroad Noise Assessment* [pg. 8]. July 28, 2015.

4.5.3 REGULATORY CONTEXT

The term "hazardous substance" refers to both hazardous materials and hazardous wastes. A material is hazardous if the material appears on a list of hazardous materials prepared by a federal, State, or local regulatory agency or if the material has characteristics defined as hazardous by such an agency. If a material appears on a list of hazardous materials prepared by a federal, State, or local regulatory agency, or if a material's characteristics are defined as hazardous by such an agency, that material is defined as hazardous.

The following discussion contains a summary review of regulatory controls pertaining to hazardous substances, including federal, State, and local laws and ordinances.

Federal Regulations

Federal agencies that regulate hazardous materials include the U.S. Environmental Protection Agency (USEPA), the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the National Institute of Health (NIH). The following federal laws and guidelines govern hazardous materials:

- Federal Water Pollution Control Act;
- Clean Air Act;
- Occupational Safety and Health Act;
- Federal Insecticide, Fungicide, and Rodenticide Act;
- Comprehensive Environmental Response, Compensation, and Liability Act;
- Guidelines for Carcinogens and Biohazards;
- Superfund Amendments and Reauthorization Act Title III;
- Resource Conservation and Recovery Act;
- Safe Drinking Water Act; and
- Toxic Substances Control Act.

Prior to August 1992, the principal agency at the federal level regulating the generation, transport and disposal of hazardous waste was the USEPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the California Department of Toxic Substance Control (DTSC) was authorized to implement the State's hazardous waste management program for the USEPA. The USEPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

CERCLA (the Act) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably The Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of, and response to, uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, the Act establishes a system for compensating appropriate individuals and assigning appropriate liability. The Act is designed to

plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

State Regulations

The California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC) defines hazardous waste, as found in the California Health and Safety Code, Section 25141(b), as follows:

> […] its quantity, concentration, or physical, chemical, or infectious characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

The Cal-EPA and the California State Water Resources Control Board establish rules governing the use of hazardous materials and the management of hazardous waste. Applicable State laws include the following:

- Public Safety/Fire Regulations/Building Codes;
- Hazardous Waste Control Law;
- Hazardous Substances Information and Training Act;
- Air Toxics Hot Spots and Emissions Inventory Law;
- Underground Storage of Hazardous Substances Act; and
- Porter-Cologne Water Quality Control Act.

Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL).

Local Regulations

The following are the local goals and policies relevant to hazards and hazardous materials.

<u>City of Davis General Plan</u>

The applicable goals and policies from the Hazards Chapter of the Davis General Plan are presented below.

Disaster Planning

Goal HAZ 3 Provide for the safety and protection of citizens from natural and environmental hazards.

Policy HAZ 3.1 Provide for disaster planning.

Toxics

Goal HAZ 4 Reduce the use, storage and disposal of toxic and hazardous substances in Davis, and promote alternatives to such substances and their clean up.

Policy HAZ 4.1 Reduce and manage toxics within the planning area.

Policy HAZ 4.2 Provide for the proper disposal of hazardous materials in Davis.

Policy HAZ 4.3 Reduce the potential for pesticide exposure for people, wildlife, and the environment.

Policy HAZ 4.5 Minimize impacts of hazardous materials on wildlife inhabiting or visiting the Davis area.

Combined Pollutants

Goal HAZ 5 Reduce the combined load of pollutants generated in the City by 30 percent by the year 2010.

Policy HAZ 5.1 Reduce the combined load of pollutants generated in the City's wastewater, stormwater, and solid waste streams. Such pollutants include, but are not limited to toxic and hazardous substances.

City of Davis Multi-Hazard Functional Planning Guide

According to the City's General Plan, the City of Davis Fire Department maintains the City's Multi-Hazard Functional Planning Guide, which plans for emergency management and evacuation in the event of disasters. The Guide includes operating procedures in the event of a disaster, as well as descriptions of emergency evacuation routes in Davis.

City of Davis Emergency Operations Plan

In recognition of the critical need to make emergency operations planning a priority for all urban areas, the City of Davis City Council approved a Strategic Plan in 2008 to begin an update to the City's 2004 version of the Emergency Operations Plan. The current (January 2010) update of the Emergency Operations Plan was extensive. The plan has been completely restructured and

includes expanded Emergency Operations Center (EOC) and Recovery Sections. In addition, the Emergency Operations Plan has been updated to include the National Incident Management System (NIMS), which is a requirement of the Federal Government.

The Davis Emergency Operations Plan is an essential document for emergency management. The plan provide a framework for response and emergency management systems, defines roles and responsibilities of the City's emergency response organization, and provides triggers for implementation of the plan during disasters, all of which, along with training and exercises, prepare the emergency organization to respond effectively when Davis is impacted by a disaster. The plan also fulfills federal and State planning requirements for continued Homeland Security Grant eligibility.

Gateway/Olive Drive Specific Plan

The City of Davis Gateway/Olive Drive Specific Plan does not include applicable policies or regulations related to hazards or hazardous materials.

4.5.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to hazards and hazardous materials. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines a land use and planning impact may be considered to be significant if any potential effects of the following conditions, or potential thereof, would result with the proposed project's implementation:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
- For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Issues Not Discussed Further

It should be noted that the Initial Study prepared for the proposed project (see Appendix B) determined that development of the proposed project would result in no impact or a less-than-significant impact related to the following impacts:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
- For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

For the reasons cited in the Initial Study, the impacts discussed above are not analyzed further in this EIR.

Method of Analysis

Evaluation of potential impacts of the proposed project associated with hazards and hazardous materials was primarily based on the Phase I ESA prepared for the proposed project. The standards of significance listed above are used to delineate the significance of any potential impacts.

Phase I ESA Methodology

The purpose of the Phase I ESA was to evaluate the proposed project site for evidence of potential RECs resulting from current and/or former site activities as defined by the ASTM

Standard E1527-13. The Phase 1 ESA was performed in general conformance with the ASTM Standard E1527-13. The following tasks were conducted as part of the Phase I ESA:

- Site reconnaissance for visual evidence of surface contamination and potential sources of subsurface contamination on December 7, 2015;
- A visual inspection of the adjoining properties for evidence of RECs;
- Interviews with the key site manager, major occupants, past and present owners, operators, and government and/or agency personnel, as available;
- A records review, including the following:
    - Physical setting documents to determine regional geology, general soil information, and local and regional groundwater conditions;
    - Historical information, including but not limited to, Sanborn maps, topographic maps, aerial photographs, ownership records, building department records, local street directories, zoning and land use records, and prior assessments, as available;
    - Environmental records, including federal, State, tribal, and county regulatory agency lists that will help identify RECs on the site and the adjoining properties; and
    - Based on the outcome of the database search, review of specific regulatory agency files for identified contaminated facilities in order to evaluate whether the listed facilities are hazardous materials threats to the site.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.5-1 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

The proposed project is a residential in-fill project located along Olive Drive, immediately south of the UPRR tracks and the Davis Amtrak station, in the City of Davis. Development of the proposed project would include the demolition of the existing apartment complex and 10 single-family homes and the construction of a 249,788-square foot (sf) multi-family residential building as well as parking areas and various amenities. Potentially hazardous issues at the site include proximity to existing railroad tracks and asbestos and lead-based paint exposure. The potential issues are discussed in further detail in the following sections.

Nearby Railroad Tracks

The proposed 5.92-acre project site is located immediately south of the UPRR tracks, southeast of the Davis Amtrak station, and further south from the California Northern rail line. The UPRR tracks are currently used for passenger and freight train operations, and the California Northern rail line is currently used for only freight operations. As

discussed above, the passenger train operation, conducted by Amtrak on the UPRR tracks, involves 34 passenger trains per day. The freight train operations along the UPRR tracks involve approximately 21 train events per day and the freight train operations along the California Northern tracks involve approximately two train events per day.

The Federal Railroad Administration's (FRA) Office of Railroad Safety promotes and regulates safety throughout the Nation's railroad industry. The regional offices enforce compliance with regulations related to hazardous materials, motive power equipment, operating practices, signal and train control, and tracks. California is in Region 7, which is headquartered in Sacramento.

In 2014, the City of Benicia released a Draft EIR for the Valero Benicia Crude by Rail Project (Valero Project), which proposed daily shipments of 70,000 barrels of crude oil originating at unidentified sites in North America that would be shipped to and assembled at the UPRR Roseville Yard into two daily 50-car trains to the Valero Benicia Refinery in Benicia. Each train would pass through the cities of Roseville, Sacramento, Davis, Dixon, Vacaville, Fairfield, Suisun City, and Benicia.

Within the City of Davis, the shipments would travel along the UPRR line located immediately north of the project site. As a result, the City of Davis submitted a comment letter on the Valero Project Draft EIR stating concerns associated with the Valero Project using, and increasing freight train operations, on a portion of the UPRR line through the City's downtown core and where a curve in the tracks exists adjacent the proposed project site. The City was concerned not only about the potential hazardous materials being transported through such a populated area of the City, but also about how the train operators intend to negotiate the existing curve in the rail line (with a 30-mile-per-hour speed limit) and potentially utilize a 10-mile-per-hour crossover immediately east of the curve in either direction.

However, on February 11, 2016, the City of Benicia Planning Commission declined to certify the Valero Crude by Rail Final EIR and denied the Use Permit application. On February 29, 2016, Valero Refinery submitted a letter appealing the decision of the Benicia Planning Commission. The Benicia City Council opened the hearing on the appeal on March 15, 2016 for Staff and Applicant presentations. On that date the applicant requested that the item be continued so that they may ask the Surface Transportation Board for a decision on the issue of preemption. The City of Benicia City Council continued deliberation on the appeal to September 20, 2016 to allow the Surface Transportation Board to weigh in on the issue of preemption; and a decision but not a declaratory order by the Surface Transportation Board was received by the City of Benicia on September 20, 2016. On October 4, 2016 the Benicia City Council adopted Resolution No. 16-150 denying the Use Permit for the Valero Crude by Rail Project at 3400 East 2nd Street.[6]

[6] City of Benicia. *Valero Crude by Rail*. Available at: http://www.ci.benicia.ca.us/index.asp?SEC=B7EDC93A-FFF0-4A14-9B1A-1C8563BC256A&Type=B_BASIC. Accessed December 14, 2016.

Because the Valero Project was denied, and therefore freight train operations carrying crude oil are not expected to increase along the proposed project site, the City of Davis' concerns regarding the existing UPRR line would not be exacerbated with the development of the proposed project. It is noted that crude oil is intermittently transported through Davis along the existing rail line. Union Pacific moves carloads of crude oil in California primarily on "manifest" trains in which tank cars carrying crude oil are interspersed with other commodities loaded in box cars. However, no train derailments have occurred within Davis and additional safeguards are nearing completion within the rail industry, namely Positive Train Control.

In 2008, Congress required Class I railroad main lines handling poisonous-inhalation-hazard materials and any railroad main lines with regularly scheduled intercity and commuter rail passenger service to fully implement Positive Train Control (PTC) by December 31, 2015. PTC uses communication-based/processor-based train control technology that provides a system capable of reliably and functionally preventing train-to-train collisions, overspeed derailments, incursions into established work zone limits, and the movement of a train through a main line switch in the wrong position.

In late 2015, Congress extended the deadline by at least three years to December 31, 2018, with the possibility for two additional years if certain requirements are met. The new legislation, the PTC Enforcement and Implementation Act, required that railroads submit a revised PTC Implementation Plan (PTCIP) by January 26, 2016, outlining when and how the railroad would have a system fully installed and activated.

While Union Pacific has not yet fully implemented PTC along the I-80 corridor, the track is PTC ready and UPRR has reported that it intends to meet the 2018 deadline for full PTC implementation.[7]

As a result, the proposed project would not be subject to a significant hazard associated with any upset and accident conditions involving the release of hazardous materials into the environment associated with existing nearby uses, and impacts would be considered less than significant.

Asbestos-Containing Materials and Lead-Based Paint

As previously discussed, existing structures are located on-site and would be removed as part of project construction. For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation and surface materials must be designated as "presumed asbestos-containing material" (PACM) unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act. Asbestos-containing materials (ACMs) were banned in

[7] See http://www.sacbee.com/news/local/transportation/article136366963.html; accessed June 6, 2017; and http://www.up.com/media/releases/170315-ptc-milestones.htm; accessed June 6, 2017.

the mid-1970s. ACMs could include, but are not limited to resilient floor coverings, drywall joint compounds, acoustic ceiling tiles, piping insulation, electrical insulation and fireproofing materials. Furthermore, the existing structures were constructed prior to lead-based paint being banned in 1978 by the Federal Government, making the presence of lead-based paint possible. Typically, exposure to lead from older vintage paint is possible when the paint is in poor condition or is being removed. In construction settings, workers could be exposed to airborne lead during renovation, maintenance, or demolition work. Lead-based paints were phased out of production in the early 1970s. Therefore, given the age of the structures, asbestos-containing materials and lead-based paint may be present within the structures.

Conclusion

The existing on-site structures were constructed prior to ACMs and lead-based paint being banned, and, as a result, the potential exists for asbestos and lead-based paint to be present in the on-site structures. Therefore, based on the analysis discussed above, development of the proposed project would result in a ***significant*** impact regarding hazardous materials.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce potential impacts to a *less-than-significant* level.

4.5-1(a) *Prior to issuance of a demolition permit by the City for any on-site structures, the project applicant shall provide a site assessment that determines whether any structures to be demolished contain lead-based paint. If structures do not contain lead-based paint, further mitigation is not required. If lead-based paint is found, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance with federal, State, and local regulations. The demolition contractor shall be informed that all paint on the buildings shall be considered as containing lead. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing lead paint in accordance with federal, State, and local regulations subject to approval by the City Engineer.*

4.5-1(b) *Prior to issuance of a demolition permit by the City for any on-site structures, the project applicant shall provide a site assessment that determines whether any structures to be demolished contain asbestos. If structures do not contain asbestos, further mitigation is not required. If asbestos-containing materials are detected, the applicant shall prepare and implement an asbestos abatement plan consistent with federal, State, and local standards, subject to approval by the City Engineer, City Building Official, and the Yolo-Solano Air Quality Management District.*

Implementation of the asbestos abatement plan shall include the removal and disposal of the asbestos-containing materials by a licensed and certified asbestos removal contractor, in accordance with local, State, and federal regulations. In addition, the demolition contractor shall be informed that all building materials shall be considered as containing asbestos. The contractor shall take appropriate precautions to protect his/her workers, the surrounding community, and to dispose of construction waste containing asbestos in accordance with local, State, and federal regulations subject to the City Engineer, City Building Official, and the Yolo-Solano Air Quality Management District.

Cumulative Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region. Other proposed and pending projects in the region under the cumulative context would include buildout of the City's General Plan, as well as development of the most recent planned land uses within the vicinity of the project area. Refer to Chapter 5, Statutorily Required Sections, of this EIR for more detail.

4.5-2 Increase in the number of people who could be exposed to potential hazards or hazardous materials and an increase in the transport, storage, and use of hazardous materials due to development of the proposed project in combination with future buildout in the City of Davis. Based on the analysis below, the cumulative impact is *less than significant.*

Hazardous materials and other public health and safety issues are generally site-specific and/or project-specific, and would not be significantly affected by other development inside or outside of the City. Other cumulative development would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community. Therefore, the contribution of the proposed project to cumulative impacts related to hazards and hazardous materials would be considered ***less than significant***.

Mitigation Measure(s)
None required.