2017 Plus Project (Phases 1-4) AM Peak Hour
2: Demaree Street & Riverway Drive

Intersection	
Intersection Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	6	45	14	258	301	5
Conflicting Peds, #/hr	10	10	10	0	0	10
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	49	15	280	327	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	511	350	343	0	-	0
Stage 1	340	-	-	-	-	-
Stage 2	171	-	-	-	-	-
Follow-up Headway	3.519	3.319	2.218	-	-	-
Pot Capacity-1 Maneuver	507	693	1216	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	492	681	1206	-	-	-
Mov Capacity-2 Maneuver	571	-	-	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	825	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0.4	0
HCM LOS	B		

Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1206	-	666	-	-
HCM Lane V/C Ratio	0.013	-	0.083	-	-
HCM Control Delay (s)	8.023	-	10.9	-	-
HCM Lane LOS	A		B		
HCM 95th %tile Q(veh)	0.038	-	0.271	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

APPENDIX G

2017 PLUS PROJECT (PHASES 1-4) CONDITIONS LOS CALCULATIONS

Greenhouse Gas Analysis Report

Lowrey Ranch Subdivision
Visalia, CA

Prepared for:
Hyde Commercial Real Estate
3330 W. Mineral King Avenue, Suite F
Visalia, CA 93291
(559) 739-9900

Greenhouse Gas Analysis Preparation Date:

11/12/2013

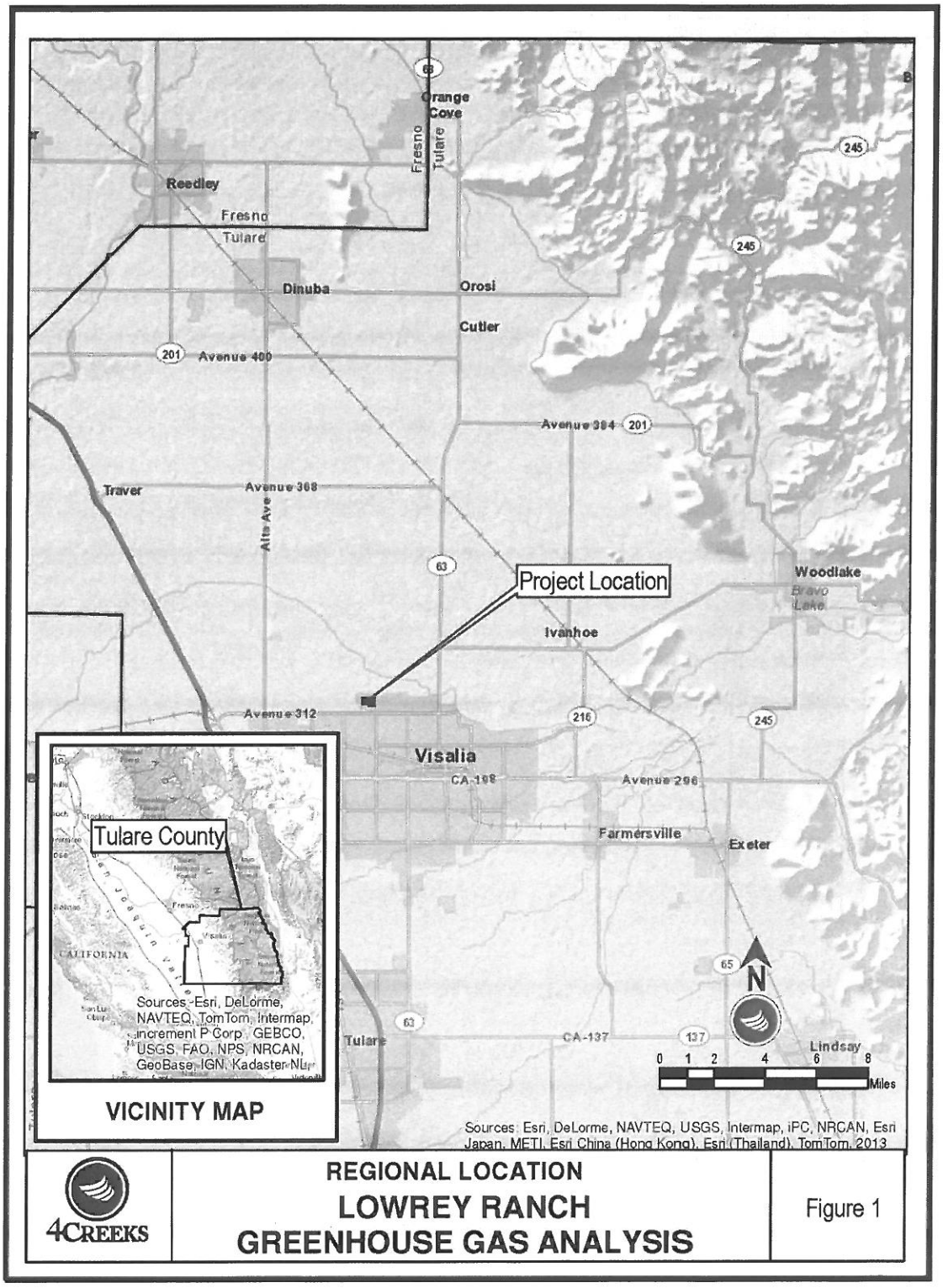
Estimated Construction Dates:
Construction Start Date: 05/05/2014 Construction Completion Date: 01/03/2020

Prepared By:

4CREEKS, INC.
2929 W. MAIN ST., Suite A
VISALIA, CA 93291
(559) 802-3052

ACRONYMS AND ABBREVIATIONS

$\mu g/m^3$	micrograms per cubic meter
°C	degrees Celsius
AB	Assembly Bill
ARB	California Air Resources Control Board
BPS	Best Performance Standards
CalEEMod	California Emissions Estimator Model
CCAP	Climate Change Action Plan
CEQA	California Environmental Quality Act
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gas
GWP	global warming potential
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Traffic Engineers
KBTU	thousand British thermal unites
$MTCO_2e$	metric tons of carbon dioxide equivalent
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
NOx	nitrogen oxides
N_2O	nitrogen oxide
PM10	fine particulate matter less than 10 micrometers in diameter
PM2.5	fine particulate matter less than 2.5 micrometers in diameter
ppm	parts per million
ppt	parts per trillion
SB	Senate Bill
SCE	Southern California Edison
So_x	oxides of sulfur
SJVAPCD	San Joaquin Valley Air Pollution Control District
sf	square foot, square feet
VOC	Volatile Organic Compound


Orange Cove
Fresno
Tulare
Reedley
Fresno
Tulare
Dinuba
Orosi
Cutler
Avenue 400
Avenue 384
Traver
Avenue 368
Alta Ave
Project Location
Woodlake
Ivanhoe
Avenue 312
Visalia
CA-198
Avenue 296
Farmersville
Exeter
Tulare
CA-137
Lindsay
Tulare County
CALIFORNIA
Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,
VICINITY MAP
N
0 1 2 4 6 8
Miles
Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013
4CREEKS
REGIONAL LOCATION
LOWREY RANCH
GREENHOUSE GAS ANALYSIS
Figure 1

PROPOSED PROJECT

The total project area consists of 72.54 acres of residential development. As showing in Figure 3: Site Plan, the project would construct 219 Single-Family Units within the 72.54 acres. The following is a breakdown of the total acreage of the project site:

TABLE 1:
SITE ACREAGE

Description	Acres
Phase 1 – Single Family	21.95
Phase 2 – Single Family	10.34
Phase 3 – Single Family	12.27
Phase 4 – Single Family	14.94
Phase 5 – Single Family	13.04
Total Site Density	72.54

1.3 Analysis Summary

GHG-1 Impact: The project would generate direct and indirect GHG emissions; however, the emissions would result in a **less than significant impact** on the environment.

GHG-2 Impact: The project would not conflict with any applicable plan; policy or regulation of an agency adopted to reduce the emissions of greenhouse gases and would result in a **less than significant impact.**

1.4 Greenhouse Gas Emissions Reduction

The project has incorporated the following design features that reduce GHG emissions. GHG reduction occurs in many variations, on being Carbon Storage. Carbon Storage is the act of trees and other vegetation, taking on carbon dioxide and storing them.

Landscaping

The project will have onsite landscaping and new street trees will be planted in the subdivision. Shade provided would reduce the heat island effect thereby potentially reducing the cooling requirements for the buildings. The onsite landscaping will assist in counter-balancing the project's contribution of GHG by providing onsite carbon storage within the trees and shrubs. The incorporation of trees and other vegetation throughout the project will provide a benefit to the project site both visually and environmentally.

Project Location

Central location and within a close proximity of other commercially classified land, the project will require less vehicle mileage and in return reduce its corresponding GHG emissions. Located less than 500 feet from an existing local-serving retail at Demaree Street and Riggin Avenue, within a 3 miles radius from Downtown Visalia, central location around retail sectors will assist in the reduction of driving and emissions created from vehicle use.

Aside from being located near retail sectors, Lowrey Ranch will be located less than a mile from existing Manual F. Hernandez Elementary School, existing Elk Grove Elementary School, Existing Shannon Ranch Elementary, and future Lowrey Ranch Middle School.

Bicycle and Pedestrian Features

The project will provide a bicycle friendly environment for residents and pedestrians through the incorporation of sidewalks and pedestrian access for residence in the subdivision. The subdivision will incorporate walk through cul de sacs that will provide direct access to N. Demaree Street and Shannon Parkway. Centrally located near existing Class 2 and Class 3 bicycle lanes residents can easily use an alternative means of transportation. The promotion and easy accessibility to bicycle routes and storage will work collectively to provide alternative forms of transportation. The reduction of motor vehicles, due to the alternative forms of transportation, will in return reduce the use of motor vehicles and reduce GHG emissions.

Recycling

The City of Visalia has incorporated recycle bins into both residential and commercial businesses. By providing alternative bins for separate classifications of waste the City has been able to achieve a 50 percent diversion rate. The reduction is waste leads to fewer GHG emissions generated at landfills.

TABLE 2: CALIFORNIA GREEN BUILDING CODE REQUIREMENTS			
Code Requirement	**Section of Standards Code**	**Requirements**	**Project Implementation**
Water Efficiency and Conservation (Indoor)	4.303.1	Fixtures and fixture fittings reducing the overall use of water within the building by at least 20 percent shall be provided.	The project will incorporate showerheads (≤2.0 gpm @80 psi); Residential Lavatory Faucets(≤1.5 gpm @60 psi); Kitchen Faucets (.8 gpm @ 60 psi); Toilets (≤1.28 gal/flush)
Water Efficiency and Conservation (Outdoor)	4.304.1	Automatic irrigation system controllers for landscaping.	The project will implement weather based controllers with a separate wired or wireless rain sensor which connects or communications with the controllers
Construction Waste Reduction of at least 50 percent	4.408.1 – 4.408.5	Recycle and/or salvage for reuse a minimum of 50 percent of the nonhazardous construction and demolition waste	Project will be except to meet the 50 percent requirement through recycling of excavated soil and land-clearing debris.
Environmental Quality	4.503.1	Gas fireplace shall be a direct-vent sealed-combustion type. Woodstove or pellet stove shall comply with U.S. EPA Phase II emission limits.	Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any woodstove or pellet stove shall comply with U.S. EPA Phase II emission limits.
Materials Pollution	4.504.1 – 4.504.6	Low-pollutant emitting interior finish materials such as paint, carpet, vinyl flooring and particleboard.	Project will comply will all regulations using low pollutant materials within the interior of the building.
Installer and Special Inspector Qualifications	702.1 – 702.1	Mandatory special installer inspector qualifications for installation and inspection of energy systems.	The City of Visalia has certified inspectors which will be overseeing the project and installation of the air conditioner, mechanical equipment, etc.

Source: CalGreen Code

Local

The project is required to comply with regulations and standards established by the San Joaquin Valley Air Pollution Control Board regarding air pollution. The project is also required to comply with measure implemented by the City of Visalia.

SECTION 2: CLIMATE CHANGE

Climate Change is a change is the average weather of the earth that may be measured by alterations in wind patterns, storms, precipitation, and temperatures. These changes are assessed using historical records of temperatures changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level a statistical significance, specifically focusing on temperature records from the last 150 years, the Industrial Age, that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHG needed to stabilize global temperatures and climate change impacts. The IPCC predicted that global mean temperatures change from 1990 to 2100, given six scenarios, could range from 1.1 degree Celsius (°C) to 6.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios (IPCC 2007).

In California, climate change may result in consequences such as the following from (CCCC 2006 and Moser et al. 2009).

1. A reduction in the quality and supply of water to the State from the Sierra snowpack.
2. Increased risk of large wildfires.
3. Reduction in the quality and quantity of certain agriculture products.
4. Exacerbation of air quality problems.
5. A rise in sea levels resulting in the displacement of coastal businesses and residence.
6. Damage to marine ecosystems and that natural environment.
7. An increase in infections, disease, asthma, and other health-related problems.
8. A decrease in the health and productivity of California's forest. (CCCC 2006 and Moser et al. 2009)

2.1 GREENHOUSE GASES

Greenhouse Gases (GHG) are gases that trap heat in the atmosphere are called greenhouse gases. The effect is equivalent to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide, methane, nitrous oxide, ozone, chlorofluorocarbons, hydro chlorofluorocarbons, and hydro fluorocarbons, per fluorocarbons, sulfur and hexafluoride. However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. Some greenhouse gases can remain in the atmosphere for over hundreds of years.

Some gases are more effective than other and for each greenhouse gases, a GWP, has been calculated to reflect how long it remains in the atmosphere, on average, and how strongly it absorbs energy. Gases with a higher GWP absorb more energy, per pound, than gases with a lower GWP, and thus contribute more to global warming. For example one pound of methane is equivalent to twenty-one pounds of carbon dioxide.

Natural processes and human activities emit greenhouse gases. The presence of GHGs in the atmosphere affects the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 34°C cooler (CAT 2006). However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of

	the formula N_2O. It is an oxide of nitrogen. At room temperature, it is a colorless, non-flammable gas, with a slightly sweet odor and taste. It is used in surgery and dentistry for its anesthetic and analgesic effect s.			fossil fuels and solid waste.
Pre-fluorocarbons	Has a stable molecular structure and only breaks down by ultraviolet rays about 60 kilometers above Earth's surface.	50,000 years	6,500 to 9,200	Two main sources of pre-fluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	An inorganic, odorless, colorless, and nontoxic nonflammable gas.	3,200 years	23,900	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing and as a tracer gas.

Source: Compiled from a variety of sources, primarily Intergovernmental Panel on Climate Change 2007a and 2007b.

Each gas's effect on climate change depends on three main factors. The first being the quantity of these gases are in the atmosphere, followed by how long they stay in the atmosphere and finally how strongly they impact global temperatures.

In regards to the quantity of these gases are in the atmosphere, we first must establish the amount of particular gas in the air, known as Concentration, or abundance, which are measured in parts per million, parts per billion and even parts per trillion. To put these measurement in more relatable terms, one part per million is equivalent to one drop of water diluted into about 13 gallons of water, roughly a full tank of gas in a compact car. Therefore, it can be assumed larger emission of greenhouse gases lead to a higher concentration in the atmosphere.

Each of the designated gases described above can reside in the atmosphere for different amounts of time, ranging from a few years to thousands of years. All of these gases remain in the atmosphere long enough to become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world regardless of the source of the emission.

Emissions Inventories

The development of a complete emission inventory is an important step in an air quality management process. Emission inventories are used to help determine significant sources of air pollutants, establish emission trends over time, target regulatory actions, and estimate air quality through computer dispersion modeling. An emission inventory includes estimates of the emissions from various pollution sources in a specific geographical area. A complete inventory typically contains all regulated pollutants. The City of Visalia conducted a GHG emissions inventory and developed a preliminary Local Climate Action Plan. The GHG emissions inventory for the City of Visalia calculated GHG emissions from both municipal operations and community activities for Visalia for the year 2000. Currently, a recommended emissions reduction target, and a number of reduction measures that the City can potentially implement to help meet the reduction target is being drafting for the City's Preliminary Action Plan (CAP).

TABLE 6:
NATIONAL GREENHOUSE GAS REGULATIONS

REGULATION	ADOPTED	PROTOCOL
		National Regulations
Greenhouse Gas Endangerment	December 7, 2009	The EPA Administrator signed two distinct findings regarding GHG emissions under section 2029(a) of the Clean Air Act. 1. **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases — carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) 2. **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.
Corporate Average Fuel Economy (CAFE)	Adopted: 1975 Revised: July 29, 2011	An agreement with thirteen large automakers to increase fuel economy to 54.5 miles per gallon for cars and light-duty trucks by model year 2025. He was joined by Ford, GM, Chrysler, BMW, Honda, Hyundai, Jaguar/Land Rover, Kia, Mazda, Mitsubishi, Nissan, Toyota, and Volvo, which together account for over 90% of all vehicles sold in the United States, as well as the United Auto Workers (UAW), and the State of California, who were all participants in the deal. The agreement will result in new CAFE regulations for model year 2017-2025 vehicles which were finalized on August 28, 2012. The major increases in stringency and the changes in the structure of CAFE create a need for research that incorporates the demand and supply sides of the new vehicle market in a more detailed manner than was needed with static fuel economy standards
Mandatory Reporting for Greenhouse Gases	September 22, 2009	Requires reporting of GHG emissions from large sources and suppliers in the United States. Any facility that emits 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.
New Source Review	May 13, 2013	Tailors the requirements of the Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits.
Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electrical Utility Generating Units	March 27, 2012	The EPA proposed new performance standards for emissions of carbon dioxide for new affected fossil fuel-fired electrical utility generated units. New sources greater than 25 megawatt would be required to meet an output-based standard of 1,000 pound of carbon dioxide per megawatt-hour, based on the performance of widely used natural gas combined cycle technology
Proposed Energy Tax Prevention of 2011	Passed the house of Representatives in 2011 Has yet to pass the Senate	If passed, this bill would amend several core components of the Clean Air Act (CAA). Title III of the CAA would be amended to have the term "greenhouse gas" include: water vapor, carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, perfluorocarbons and any other substance subject to, or proposed to be subject to, regulation, action, or consideration under this Act to address climate change.
Cap and Trade	*Yet to be formally adopted.*	An environmental policy tool that delivers results with a mandatory cap on emissions while providing sources flexibility in how they comply. Successful cap and trade programs reward innovation, efficiency, and early action and provide strict environmental accountability without inhibiting economic growth.
Western Climate Initiative Partner	*Yes to be formally adopted*	Jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario and Quebec. Its cap and trade program is estimated to be fully implemented by 2012

TABLE 8:
REGIONAL GREENHOUSE GAS REGULATIONS

REGULATION	ADOPTED	PROTOCOL
Regional Regulations		
San Joaquin Valley Air Pollution Control District		The San Joaquin Valley Air Pollution Control District is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern. The Valley Air District is governed by an fifteen member Governing Board consisting of representatives from the Board of Supervisors of all eight counties, one Health and Science member, one Physician, and five Valley city representatives.
Climate Change Action Plan		A climate change action plan lays out a strategy, including specific policy recommendations that a state will use to address climate change and reduce its greenhouse gas emissions. The following states have completed a climate change action plan.
SJVAPCD CEQA Greenhouse Gas Guidance		The SJVAPCD approach is intended to streamline the process of determining if project specific GHG emissions would have a significant effect. Best Performance Standards would be established according to performance-based determinations.
San Joaquin Valley Carbon Exchange	November 2008	Intended to quantify, verify, and track voluntary GHG emissions reductions generated within the San Joaquin Valley
Rule 2301	January 19, 2012	Emission Reduction Credit Banking. Provided an administrative mechanism for sources to bank GHG emissions, mechanism for sources to transfer GHG reductions to other users and defines eligibility standards, quantitative and procedures.
San Joaquin Valley Blueprint Planning Process (2010)		A plan for the future of the San Joaquin valley and is used to guide growth over the next 50 years.
Tulare County Regional Blueprint		A plan for the future of the San Joaquin valley and is used to guide growth over the next 50 years with the incorporation of the Tulare County Association of Governments (TCAG) through extensive public outreach to develop Tulare Counties vision statement, guiding principles, goals and objectives.

TABLE 9:
LOCAL GREENHOUSE GAS REGULATIONS

REGULATION	ADOPTED	PROTOCOL
Local Regulations		
City of Visalia General Plan		The City has several goals established within its General Plan which are applicable to GHG reduction. Goals include to the improvement of air quality through proper land use planning in Visalia. Conserve, restore and enhance significant natural, cultural and historical resources to sustain the Visalia planning area's environmental quality.
Preliminary Draft Climate Action Plan	*Drafted May 2010*	The GHG emissions inventory for Visalia calculated GHG emissions from both municipal operations and community activities for Visalia for the year 2000. SEI conducted this inventory using ICLEI's Clean Air and Climate Protection software and the new standardized Local Government Operations Protocol recently developed by the California Air Resources Board, ICLEI, California Climate Action Registry, and The Climate Registry.
Visalia Climate Change Initiatives	January 2007	The City of Visalia signed the "Cool Cities" pledge, part of the U.S. Mayors Climate Protection Agreement. The City adopted the goal of reducing citywide emissions to 7% below 1990 by 2012. The City is also a member of the Cities for Climate Protection (CCP). The CCP campaign is a global coalition of local governments working to reduce GHG at the community level.

TABLE 10:
CONSTRUCTION SCHEDULE

Construction Phase	Start Date	End Date	Total Days Taken
Demolition	May 5, 2014	August 8, 2014	70
Site Preparation	August 9, 2014	October 3, 2014	40
Grading	October 6, 2014	March 6, 2015	110
Building Construction	March 9, 2015	June 7, 2019	1,110
Paving	June 10, 2019	September 20, 2019	75
Architectural Coating	September 23, 2013	January 3, 2020	75

Source: CalEEMod

The construction equipment list is shown in Table 11. The equipment list was generated using the CalEEMod defaults for a project of this size. The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of the engine, the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum-rated horsepower. The load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity.

TABLE 11:
CONSTRUCTION EQUIPMENT ASSUMPTION

Construction Phase	Equipment	Unit Amount	Usage Hours	Horsepower	Load Factor
Demolition	Concrete/Industrial Saw	1	8	81	0.73
	Excavator	3	8	157	0.57
	Rubber Tire Dozers	2	8	359	0.59
Site Preparation	Rubber Tired Dozers	3	8	358	0.59
	Tractors/Loaders/Backhoes	4	8	75	0.55
Grading	Excavators	2	8	157	0.57
	Graders	1	8	162	0.61
	Rubber Tired Dozers	1	8	358	0.59
	Scrapers	2	8	356	0.72
	Tractors/Loaders/Backhoes	2	8	75	0.55
Building Construction	Cranes	1	7	208	0.43
	Forklifts	3	8	149	0.30
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	75	0.55
	Welders	1	8	46	0.45
Paving	Pavers	2	8	89	0.62
	Paving Equipment	2	8	82	0.53
	Rollers	2	8	84	0.56
Architectural Coating	Air Compressors	1	6	78	0.48

Source: CalEEMod

3.3.2 GREENHOUSE GASES EVALUATED

This analysis is restricted to greenhouse gases identified by AB 32, which include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The project would generate a variety of greenhouse gases, including several defined by AB 32 such as carbon dioxide, methane and nitrous oxide.

The project may emit greenhouse gases that are not defined in AB 32. For example, the project may generate aerosols through emissions of diesel particulate matter from the vehicles and trucks that will be accessing the project site. Aerosols are short-lived particles, as they remain in the atmosphere for about one week.

Water vapor could be emitted from evaporated water from the landscaping, but this I not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emission from project-related activities.

The project would emit nitrogen oxides and volatile organic compounds, which are ozone precursors. Ozone is a greenhouse gas; and found in two regions of the Earth's atmosphere – at ground level and in the upper regions of the atmosphere. Both types of ozone have the same chemical composition (O3). While upper atmospheric ozone protects the earth from the sun's harmful rays, ground level ozone is the main component of smog.

Troposheric, or ground level ozone, is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC). Ozone is likely to reach unhealthy levels on hot sunny days in urban environments. Ozone can also be transported long distances by wind. For this reason, even rural areas can experience high ozone levels.

3.3.3 SOURCES

California is the fifteenth largest emitter of greenhouse gases on the planet, representing about two percent of the worldwide emissions. Figure 1 show 2002 to 2004 average emissions and estimates for projected emissions in 2020 without any greenhouse gas reduction measures, business as usual.

Trips can be classified into three main categories. First being primary trips, those that travel to the project as the primary destination. Second, diverted trips are those that have another primary destination, but detour some small distance (up to a couple blocks) to reach the project on the way to the primary destination. Lastly, pass-by trips are those that have another primary destination and pass directly by the project site, thus requiring no change in travel patterns to patronize the project before continuing on to the primary destination.

Trip Lengths

Trip lengths for the project are likely to mainly be primary trips given the nature and location of the project. Most residents will travel to the project site as their primary trip. Although it is reasonable that the project would have reduced trip lengths, the CalEEMod default trip lengths were used to provide a "worst-case" estimate. The trip assumptions for the project are shown in Table 14.

TABLE 14:
OPERATIONAL TRIP ASSUMPTIONS

Land Use	Primary Trip %	Diverterd Trip %	Pass-By Trip %
Single-Family Residential	45.60	19.00	35.40

Source: CalEEMod

Vehicle Fleet

The vehicle fleet information is vital because it classifies vehicle traffic by individual fleets which all have individual emission rates. The CalEEMod default fleet mix, District recommendation for Urban projects are shown in Table 15. The CalEEMod defaults for the vehicle fleet were used for this analysis.

TABLE 15:
VEHICLE FLEET MIX COMPARISON

Type of Vehicle	CalEEMod Default Fleet Mix %
Light Duty Automobile (LDA)	40.1282
Light Duty Truck (LTD1)	11.5317
Light Duty Truck (LTD2)	18.8562
Medium Duty Vehicle (MDV)	10.624
Light-Heavy Duty Truck (LHDT1)	2.2979
Light-Heavy Duty Truck (LHDT2)	0.816
Medium-Heavy Truck (MHDT)	1.9871
Heavy-Heavy Truck (HHDT)	12.0851
Other Bus (OBUS)	0.1106
Urban Bus (UBUS)	0.1474
Motorcycle (MCY)	0.93
School Bus (SBUS)	0.183
Motor Home (MH)	0.3024

Source: CalEEMod

There would be greenhouse gas emissions generated from the electricity required to transport and treat the water to be used on the project site. The proposed water use for the project is 24,420.148 gallons per day for outdoor irrigation and 38,735.407 gallons per day for indoor domestic use. This equates 8,913,353.98 gallons and 14,138423.56 gallons per year, respectively.

There will be greenhouse gas emissions from the domestic waste generated by the project. The default waste generation rates from CalEEMod were used in this analysis.

4.2 THRESHOLDS OF SIGNIFICANCE

In accordance with the District's guidance for addressing greenhouse gas emission impact for new projects under CEQA, a project would be considered to have a less than significant individual and cumulative impact on climate change if it were to do at least one of the following:

- Exempt from the requirements of CEQA, or
- Comply with an approved GHG emissions reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located. Such plans or program must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA complaint environmental review document adopted by the lead agency, or
- Implement approved best performance standards, or
- Quantify project GHG emissions an reduce those emissions by at least 29 percent compared to business as usual. "Business as usual" is referred in ARB's AB 32 Scoping Plan as emissions occurring in 2020 levels without additional control. Therefore, 2002-2004 emissions factors, on a unit of activity basis, multiplied by the activity expected to occur in 2020, is an appropriate representation of 2020 business as usual. The reductions can be based on any combination of reduction measures, including GHG reductions achieved as a result of changes in building and appliance standards occurring since 2002-2004 baseline period.

After project analysis it has been determined that it is not exempt from CEQA and there is not an approved GHG emissions reduction plan or GHG mitigation plan for the area where the project is located. The Scoping Plan prepared pursuant to AB 32 demonstrates how California would reduce GHG emissions to 1990 levels by the year 2020. However, most of the measures in the Scoping Plan are not applicable to the project. There are no approved best performance standards that would apply to the project. Therefore, the approach used in this analysis is to quantify GHG emissions and reduce the emissions by at least 29 percent compared to business as usual.

TABLE 16: CONSTRUCTION GREENHOUSE GAS EMISSIONS (2014-2020)			
	Onsite Total CO2 (MT/year)	Offsite Total C02(MT/per year)	Total CO2 (MT/per year)
2014 Demolition	238.41	6.41	244.82
2014 Site Preparation	14.07	2.95	17.02
2014 Grading	310.16	5.17	315.33
2015 Grading	231.39	3.76	235.15
2015 Building Construction	329.11	128.73	457.84
2016 Building Construction	478.33	154.85	633.18
2017 Building Construction	476.40	152.30	628.7
2018 Building Construction	478.23	151.10	629.33
2019 Building Construction	208.88	65.30	274.18
2019 Paving	99.23	4.09	103.32
2019 Architectural Coating	9.18	4.19	13.37
2020 Architectural Coating	0.38	0.17	0.55
Total	*2,873.77*	*679.02*	*3,552.79*

Source: CalEEMod (Appendix A)

The project is able to benefit from the following mitigation measures during construction of the project:

- Water Exposed Area
- Reduced Vehicle Speed on Unpaved Roads
- Improved Pedestrian Network

Operation

Expected operational or long-term emissions expected over the lifetime of the project include mobile operations, waste generated, water consumed, and energy consumed. Sourced of operation emissions are represented in Table 17. As represented in Table 11, mitigation and regulation required to reduce business as usual emissions beyond 29 percent by 2020 to remain compliant with the States requirement to reduce GHG emissions to 1990 levels.

TABLE 17: PROJECT OPERATIONAL GREENHOUSE GASES			
Source	Business as Usual ($MTCO2_e$)	2020 (with Regulation) $MTCO2_e$ per year	2020 (with Regulation and Standard Measures) $MTCO2_e$ per year
Energy- Natural Gas	412.98	412.98	353.924
Energy - Electrical	450.99	360.79	256.634
Mobile	284.68	2.40	1.515
Landscaping	1.62	1.52	1.52
Waste	31.49	25.79	25.79
Water	47.43	23.71	23.71

- Use of Low VOC Pain- Low VOC paint will be used on both the non-residential interior and exterior of the project site.
- Water Efficient Landscaping: To ensure a reduction in water used for project landscaping and maintenance a water efficient irrigation system and water efficient landscaping will be incorporated as part of the project.

These above measures are represented in CalEEMod as mitigation measures. Reductions from these measures are calculated by CalEEmod and are based on the methodology presented in the California Air Pollution control Officer's 2010 report, "Quantifying Greenhouse Gas Mitigation Measure's." Table 18 shows the percentage reduction calculated by CalEEmod for the new regulations and standards.

TABLE 18:
GREENHOUSE GAS REDUCTIONS

Measures	Category	Percent reduction
Pavely and Low Carbon Fuel Standards	Mobile Sources	27%
Electricity – Renewable Portfolio Standards	Energy: Electricity	17%
Title 24 Standards	Energy: Electricity and Natural Gas	14.3%
Locational and Standard Measures	Mobile Sources	13.5%

Source: CalEEMod

Collectively these measures together accounts for a 46.1% reduction in GHG emissions from the projects previous Business as Usual emissions. The percent reduction achieves the recommended threshold established by the SSJVAPCD to find GHG emissions less than cumulatively significant. Therefore the level of significance before mitigation measures are enacted is less than significant and no mitigation measures are required.

5.2 IMPACT 2: CONFLICT WITH THE CITY PLAN, STATE/FEDERAL POLICY AND EXISTING REGULATION

Impact GHG-2:	The 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.

Currently, the City of Visalia has yet to implement a Greenhouse Gas Reduction Plan or set any regulations regarding GHG emissions. As discussed in Impact 1, the project will remain consistent with the SSJVAQCB GHG reduction of 29 percent by 2020. This minimum reduction from the projects Business As Usual ensures that the project is meeting all Regional Guidance.

Therefore, the project will not conflict with any applicable City Plan, State/ Federal Policy or Existing Regulations.

Being that there is no local or regional plan the project will be held to standards from both the SJVAPCD's recommendations in its guidance for addressing GHGs in CEQA (SJVAPCD 2009) and compliance with the Scoping Plan designated in Assembly Bill (AB) 32.

Climate Initiative Partner Jurisdictions Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California.	cost emissions reductions. Reductions from compliance offset projects must be quantified using rigorous measurement and enforcement protocols that provide a basis to determine whether the reductions are also additional.
2. California Light- 2. California Light—Duty Vehicle Duty Vehicle Duty Vehicle Greenhouse Gas Standards Greenhouse Gas Standards Greenhouse Gas Standards Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Include reducing greenhouse gas emissions from vehicles, reducing the carbon content of the fuel these vehicles burn, and reducing the miles these vehicles travel. While the project is centrally located and could help reduce mileages, however this is not applicable to the project.
3. Energy Efficiency Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).	This measure would set new targets for statewide annual energy demand reductions; however the project design features multiple energy efficient products and features.
4. Renewables Portfolio Standard 4. Renewables Portfolio Standard Achieve 33 percent renewable energy mix statewide.	The project will work with SCE in its efforts to diversify its power supply.
5. Low Carbon Fuel Standard Develop and adopt the Low Carbon Fuel Standard	This measures is applicable to the project because it is a state initiative however, it would applicable to the fuel used for vehicles to travel to and from their home.
6. Regional Transportation Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.	This measure is not applicable to the project being that they will not be developing any Greenhouse Gas reductions.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	Could reduce light-duty greenhouse gas emissions from light-duty vehicles that enter the project site.
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	This measure is not applicable to the project being that that is does not propose the use of shore power for ships or to improve good movement activities.
9. Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	This measure is not applicable to the project being that it does not plan to implement any solar power into the design of the project building.
10. Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	This measure is not applicable to the project being that it is a statewide measure. However, it would be applicable to vehicles that enter the project site.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions	This measure is not applicable to the project being that this measure would apply to the direct greenhouse gas emissions at major industrial Facilities, which the proposed project is not.

SUMMARY

The project is expected to generate GHG emissions in the short-term as a result of the construction of a residential building within the City of Visalia and long-term as a result of day-to-day operations of the proposed Single-Family and Multi-Family Subdivision. Estimates GHG emissions calculations are contained within the CalEEMod report, Appendix A.

Taking into account the proposed project's emissions, project design features, standard measures and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the project assists in the states goals of reducing greenhouse gas emission to 1990 levels by 2020 and an 80-percent reduction below 1990 to 2050.

Through the assessment of both short-term and long-term emissions it is our conclusion that the construction of Lowry Ranch in Visalia, CA will assist in the states attainment of their ultimate emissions reduction goal.

CEC-500-2006-077. Website: www.climatechange.ca.gov/publications/biennial_reports/index.html. Accessed January 7, 2010

CEC 2006a California Energy Commission. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 Staff Report Publication #CEC-600-2006-013. Website: www.climatechange.ca.gov/inventory/index.html. Accessed August 11, 2009.

CEC 2006b California Energy Commission. Net System Power. A Small Share of California's Power Mix in 2005. Publication # CEC 300-2006-009-F, April 2006. Website: http://www.energy.ca.gov/sb1305/documents/index.html. Accessed September 13, 2012

CNRA 2009 California Natural Resources Agency. 200*9 California Climate Adaptation Strategy. Website: www.climatechange.ca.gov/adaptation/.

EPA 2003 U.S. Environmental Protection Agency, Office of Air and Radiation. June 2003. Ozone: Good up high bad nearby. EPA-451-5-03-001. Website: www.epa.gov/air/ozonepollution.pdfs/ozonegb.pdf. Accessed January 20, 2010

EPA 2006a U.S. Environmental Protection Agency, Office of Atmospheric Programs. April 2006. The U.S. Inventory of Greenhouse Gas Emissions and Sinks: Fast Facts. Website: http://epa.gov.climatechnage/emissions/downloads06/06FastFacts.pdf. Accessed January 20, 2010

EPA 2006b U.S. Environmental Protection Agency. Last updated October 19, 2006. High Global Warming Potential Gases. Science. Website: www.epa.gov/highgwp/scientific.html. Accessed January 20, 2010.

EPA 2007 U.S. Environmental Protection Agency. Inventory U.S. Greenhouse Gas Emissions and Sinks: 1990-2005. Executive Summary. April 2007. USEPA #430-R-07-002. Website: www.epa.gov/climatechange/emissions/usgginv_archive.html. Accessed January 20, 2010.

EPA 2008 U.S. Environmental Protection Agency. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006. April 2008. USEPA #430-R-08-005. Website: www.epa.gov/climatechange/emissions/usginv_archive.html. Accessed January 20, 2010.

EPA 2009 U.S. Environmental Protection Agency. February 2009. Potential for Reducing Greenhouse Gas Emissions in the Construction Sector. Website: www.epa.gov/sectors/pdf/construction-sector-report.pdf. Accessed January 20, 2010.

EPA 2011 U.S. Environmental Protection Agency. 2001. 2001 U.S. Greenhouse Gas Inventory Report. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009. EPA 430-11-005. Website: www.epa.gov/climatechange/emissions/usinventoryreport.html. Accessed September 12, 2012.

EUETS 2007 European Union Against Climate Change, EU Emission Trading: an Open System Promoting Global Innovation. 2007. Website: http://ec.europa.eu/environment/climat/pdf/bali/eu_action.pdf. Accessed January 20, 2010.

IPEC 2004 Intergovernmental Panel on Climate Change. 2004. 16 years of Scientific Assessment in Support of the Climate Convention. December 2004. Website: www.ipcc.ch.pdf/10th-anniversary/anniversary-brochure.pdf. Accessed January 20, 2010.

IPCC 2007 Intergovernmental Panel on Climate Change. Climate Change 2007: The Physical Science Basis. Contribution of Working Group 1 to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. [Solomon, S., D. Qin, , M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge

2012	Measures for Development Projects. Website: www.Valleyair.org/Programs/CCAP/ghg/ghg_idx.htm. Accessed September 12, 2012.
UNFCCC 2006	United Nations Framework Convention on Climate Change. 2006. Greenhouse Gas Emissions Data, Predefined Queries, Annex I Parties – greenhouse gas total without LULUCF (land use, land-use change, and forestry). Website: http://unfccc.int/ghg_emissions_data/predefined_queries/items/3841.php. Accessed August 11, 2009.
UNFCCC 2010	United Nations Framework Convention on Climate Change. Essential Background. Website: http://unfcc.int/essential_background/convention/items/2627.php. Accessed January 20, 2010.
WCI 2009	Western Climate Initiative. 2009. Designing the Program. Website: www.westernclimateinitiative.org/designing-the-program. Accessed January 20, 2010.
Visalia 1963	City of Visalia, 1963. Visalia General Plan (updated in 1976 and 1991)
Visalia 2003	City of Visalia, 2003. Visalia Waterways and Trails Master Plan.
Visalia 2006	City of Visalia, 2006. Visalia Bikeway Plan Update.
Visalia 2010	City of Visalia, 2009. Visalia Climate Action Plan (Preliminary draft May 2010)
Visalia 2012	City of Visalia, 2012. Visalia General Plan Draft Elements Part 2. Website: http://www.visaliageneralplanupdate.com/reports.html. Accessed September 17, 2012

APPENDIX A

APPENDIX A

CALEEMOD REPORT

Lowrey Ranch Subdivision

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	217	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Utility Company**	Southern California Edison
Climate Zone	3	**Precipitation Freq (Days)**	45		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.84	6.69	4.00	0.01	0.42	0.32	0.73	0.18	0.32	0.50	0.00	708.17	708.17	0.07	0.00	709.61
2015	0.79	5.48	4.31	0.01	0.29	0.30	0.59	0.09	0.29	0.39	0.00	755.99	755.99	0.06	0.00	757.32
2016	0.60	3.91	3.72	0.01	0.09	0.22	0.31	0.00	0.22	0.22	0.00	633.08	633.08	0.05	0.00	634.08
2017	0.55	3.54	3.62	0.01	0.09	0.19	0.29	0.00	0.19	0.20	0.00	628.69	628.69	0.04	0.00	629.61
2018	0.51	3.22	3.55	0.01	0.09	0.17	0.26	0.00	0.17	0.17	0.00	629.33	629.33	0.04	0.00	630.17
2019	3.87	2.21	2.38	0.00	0.05	0.14	0.19	0.00	0.14	0.14	0.00	390.88	390.88	0.03	0.00	391.48
2020	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.55
Total	**7.31**	**25.05**	**21.58**	**0.05**	**1.03**	**1.34**	**2.37**	**0.27**	**1.33**	**1.62**	**0.00**	**3,746.69**	**3,746.69**	**0.29**	**0.00**	**3,752.82**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.94	0.02	1.50	0.00		0.00	0.01		0.00	0.01	0.00	2.40	2.40	0.00	0.00	2.45
Energy	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	773.77	773.77	0.02	0.01	778.55
Mobile	1.74	8.30	14.12	0.03	2.75	0.23	2.98	0.05	0.22	0.27	0.00	2,887.05	2,887.05	0.09	0.00	2,889.03
Waste						0.00	0.00		0.00	0.00	23.71	0.00	23.71	1.40	0.00	53.15
Water						0.00	0.00		0.00	0.00	0.00	25.78	25.78	0.35	0.01	35.84
Total	**3.72**	**8.68**	**15.77**	**0.03**	**2.75**	**0.23**	**3.02**	**0.05**	**0.22**	**0.31**	**23.71**	**3,689.00**	**3,712.71**	**1.86**	**0.02**	**3,759.02**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.29	2.32	1.44	0.00		0.11	0.11		0.11	0.11	0.00	238.41	238.41	0.02	0.00	238.91
Total	**0.29**	**2.32**	**1.44**	**0.00**	**0.00**	**0.11**	**0.11**	**0.00**	**0.11**	**0.11**	**0.00**	**238.41**	**238.41**	**0.02**	**0.00**	**238.91**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.01	0.01	0.00	0.02	0.00	0.03	0.00	0.00	0.00	0.00	2.10	2.10	0.00	0.00	2.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.31	4.31	0.00	0.00	4.31
Total	**0.00**	**0.01**	**0.04**	**0.00**	**0.02**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**6.41**	**6.41**	**0.00**	**0.00**	**6.41**

3.3 Site Preparation - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.16	0.00	0.16	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.19	1.50	0.86	0.00		0.07	0.07		0.07	0.07	0.00	145.07	145.07	0.02	0.00	145.39
Total	**0.19**	**1.50**	**0.86**	**0.00**	**0.16**	**0.07**	**0.23**	**0.09**	**0.07**	**0.16**	**0.00**	**145.07**	**145.07**	**0.02**	**0.00**	**145.39**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.95	2.95	0.00	0.00	2.96
Total	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2.95**	**2.95**	**0.00**	**0.00**	**2.96**

3.4 Grading - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.21	0.00	0.21	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.35	2.85	1.60	0.00		0.13	0.13		0.13	0.13	0.00	310.16	310.16	0.03	0.00	310.76
Total	**0.35**	**2.85**	**1.60**	**0.00**	**0.21**	**0.13**	**0.34**	**0.09**	**0.13**	**0.22**	**0.00**	**310.16**	**310.16**	**0.03**	**0.00**	**310.76**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.17	5.17	0.00	0.00	5.18
Total	**0.00**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.17**	**5.17**	**0.00**	**0.00**	**5.18**

3.4 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.21	0.00	0.21	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.25	1.96	1.15	0.00		0.09	0.09		0.09	0.09	0.00	231.39	231.39	0.02	0.00	231.81
Total	**0.25**	**1.96**	**1.15**	**0.00**	**0.21**	**0.09**	**0.30**	**0.09**	**0.09**	**0.18**	**0.00**	**231.39**	**231.39**	**0.02**	**0.00**	**231.81**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.76	3.76	0.00	0.00	3.76
Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.76**	**3.76**	**0.00**	**0.00**	**3.76**

3.5 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.46	3.12	2.46	0.00		0.19	0.19		0.19	0.19	0.00	392.11	392.11	0.04	0.00	392.91
Total	**0.46**	**3.12**	**2.46**	**0.00**		**0.19**	**0.19**		**0.19**	**0.19**	**0.00**	**392.11**	**392.11**	**0.04**	**0.00**	**392.91**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.36	0.20	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	61.99	61.99	0.00	0.00	62.02
Worker	0.04	0.05	0.47	0.00	0.06	0.00	0.07	0.00	0.00	0.00	0.00	66.74	66.74	0.00	0.00	66.82
Total	**0.07**	**0.41**	**0.67**	**0.00**	**0.07**	**0.01**	**0.09**	**0.00**	**0.01**	**0.01**	**0.00**	**128.73**	**128.73**	**0.00**	**0.00**	**128.84**

3.5 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	**0.52**	**3.46**	**2.97**	**0.01**		**0.21**	**0.21**		**0.21**	**0.21**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**479.11**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.40	0.23	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	75.55	75.55	0.00	0.00	75.58
Worker	0.05	0.05	0.51	0.00	0.08	0.00	0.08	0.00	0.00	0.01	0.00	79.30	79.30	0.00	0.00	79.39
Total	**0.09**	**0.45**	**0.74**	**0.00**	**0.10**	**0.01**	**0.11**	**0.00**	**0.01**	**0.02**	**0.00**	**154.85**	**154.85**	**0.00**	**0.00**	**154.97**

3.5 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	**0.48**	**3.13**	**2.94**	**0.01**		**0.18**	**0.18**		**0.18**	**0.18**	**0.00**	**476.40**	**476.40**	**0.04**	**0.00**	**477.20**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.36	0.21	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	75.21	75.21	0.00	0.00	75.24
Worker	0.04	0.04	0.46	0.00	0.08	0.00	0.08	0.00	0.00	0.01	0.00	77.09	77.09	0.00	0.00	77.17
Total	**0.07**	**0.40**	**0.67**	**0.00**	**0.10**	**0.01**	**0.11**	**0.00**	**0.01**	**0.02**	**0.00**	**152.30**	**152.30**	**0.00**	**0.00**	**152.41**

3.5 Building Construction - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	**0.44**	**2.84**	**2.93**	**0.01**		**0.16**	**0.16**		**0.16**	**0.16**	**0.00**	**478.23**	**478.23**	**0.04**	**0.00**	**478.97**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.33	0.20	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	75.45	75.45	0.00	0.00	75.48
Worker	0.04	0.04	0.42	0.00	0.08	0.00	0.08	0.00	0.00	0.01	0.00	75.65	75.65	0.00	0.00	75.72
Total	**0.07**	**0.37**	**0.62**	**0.00**	**0.10**	**0.01**	**0.11**	**0.00**	**0.01**	**0.02**	**0.00**	**151.10**	**151.10**	**0.00**	**0.00**	**151.20**

3.5 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.17	1.12	1.27	0.00		0.06	0.06		0.06	0.06	0.00	208.88	208.88	0.01	0.00	209.18
Total	**0.17**	**1.12**	**1.27**	**0.00**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**208.88**	**208.88**	**0.01**	**0.00**	**209.18**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.14	0.08	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	32.94	32.94	0.00	0.00	32.95
Worker	0.02	0.02	0.17	0.00	0.03	0.00	0.03	0.00	0.00	0.00	0.00	32.36	32.36	0.00	0.00	32.39
Total	**0.03**	**0.16**	**0.25**	**0.00**	**0.04**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**65.30**	**65.30**	**0.00**	**0.00**	**65.34**

3.6 Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.14	0.87	0.75	0.00		0.07	0.07		0.07	0.07	0.00	99.23	99.23	0.01	0.00	99.47
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.14**	**0.87**	**0.75**	**0.00**		**0.07**	**0.07**		**0.07**	**0.07**	**0.00**	**99.23**	**99.23**	**0.01**	**0.00**	**99.47**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.09	4.09	0.00	0.00	4.10
Total	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.09**	**4.09**	**0.00**	**0.00**	**4.10**

3.7 Architectural Coating - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.52					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.07	0.07	0.00		0.00	0.00		0.00	0.00	0.00	9.18	9.18	0.00	0.00	9.20
Total	**3.53**	**0.07**	**0.07**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**9.18**	**9.18**	**0.00**	**0.00**	**9.20**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.19	4.19	0.00	0.00	4.20
Total	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.19**	**4.19**	**0.00**	**0.00**	**4.20**

3.7 Architectural Coating - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.15					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.38	0.38	0.00	0.00	0.38
Total	**0.15**	**0.00**	**0.00**	**0.00**		**0.00**	**0.00**		**0.00**	**0.00**	**0.00**	**0.38**	**0.38**	**0.00**	**0.00**	**0.38**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.17
Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.17**	**0.17**	**0.00**	**0.00**	**0.17**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Single Family Housing	10.80	7.30	7.50	45.60	19.00	35.40

5.0 Energy Detail

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	360.79	360.79	0.02	0.01	363.05
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	450.99	450.99	0.02	0.01	453.82
NaturalGas Mitigated	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	412.98	412.98	0.01	0.01	415.49
NaturalGas Unmitigated	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	412.98	412.98	0.01	0.01	415.49
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Single Family Housing	1.55049e+006					450.99	0.02	0.01	453.82
Total						450.99	0.02	0.01	453.82

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Single Family Housing	1.24039e+006					360.79	0.02	0.01	363.05
Total						360.79	0.02	0.01	363.05

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.53					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.03	0.00	0.00	0.00		0.00	0.02		0.00	0.02	0.00	282.02	282.02	0.01	0.01	283.73
Landscaping	0.05	0.02	1.63	0.00		0.00	0.01		0.00	0.01	0.00	2.66	2.66	0.00	0.00	2.72
Total	**1.98**	**0.02**	**1.63**	**0.00**		**0.00**	**0.03**		**0.00**	**0.03**	**0.00**	**284.68**	**284.68**	**0.01**	**0.01**	**286.45**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.53					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.04	0.02	1.50	0.00		0.00	0.01		0.00	0.01	0.00	2.40	2.40	0.00	0.00	2.45
Total	**1.94**	**0.02**	**1.50**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**	**0.00**	**2.40**	**2.40**	**0.00**	**0.00**	**2.45**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Single Family Housing	14.1384 / 8.91335					31.49	0.43	0.01	44.06
Total						**31.49**	**0.43**	**0.01**	**44.06**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Single Family Housing	11.3107 / 7.7082					25.78	0.35	0.01	35.84
Total						**25.78**	**0.35**	**0.01**	**35.84**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Single Family Housing	116.825					23.71	1.40	0.00	53.15
Total						23.71	1.40	0.00	53.15

9.0 Vegetation

Lowrey Ranch Subdivision

San Joaquin Valley Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	217	Dwelling Unit

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Utility Company**	Southern California Edison
Climate Zone	3	**Precipitation Freq (Days)**	45		

1.3 User Entered Comments

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2011	1.45	11.63	6.64	0.01	0.43	0.60	1.03	0.18	0.60	0.77	0.00	1,043.32	1,043.32	0.12	0.00	1,045.79
2012	0.86	5.53	4.21	0.01	0.09	0.35	0.45	0.00	0.35	0.36	0.00	641.69	641.69	0.07	0.00	643.12
2013	0.79	5.12	4.06	0.01	0.09	0.32	0.41	0.00	0.32	0.32	0.00	639.53	639.53	0.06	0.00	640.84
2014	0.72	4.72	3.93	0.01	0.09	0.28	0.38	0.00	0.28	0.28	0.00	637.42	637.42	0.06	0.00	638.62
2015	0.66	4.29	3.82	0.01	0.09	0.25	0.34	0.00	0.25	0.25	0.00	635.24	635.24	0.05	0.00	636.34
2016	3.91	1.54	1.26	0.00	0.02	0.12	0.14	0.00	0.12	0.12	0.00	180.91	180.91	0.02	0.00	181.34
Total	**8.39**	**32.83**	**23.92**	**0.05**	**0.81**	**1.92**	**2.75**	**0.18**	**1.92**	**2.10**	**0.00**	**3,778.11**	**3,778.11**	**0.38**	**0.00**	**3,786.05**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.93	0.02	1.49	0.00		0.00	0.01		0.00	0.01	0.00	2.40	2.40	0.00	0.00	2.44
Energy	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	773.77	773.77	0.02	0.01	778.55
Mobile	1.20	6.01	9.54	0.03	2.75	0.16	2.91	0.05	0.15	0.20	0.00	2,736.16	2,736.16	0.07	0.00	2,737.59
Waste						0.00	0.00		0.00	0.00	23.71	0.00	23.71	1.40	0.00	53.15
Water						0.00	0.00		0.00	0.00	0.00	25.78	25.78	0.35	0.01	35.84
Total	**3.17**	**6.39**	**11.18**	**0.03**	**2.75**	**0.16**	**2.95**	**0.05**	**0.15**	**0.24**	**23.71**	**3,538.11**	**3,561.82**	**1.84**	**0.02**	**3,607.57**

3.0 Construction Detail

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.34	2.79	1.61	0.00		0.14	0.14		0.14	0.14	0.00	238.41	238.41	0.03	0.00	239.00
Total	**0.34**	**2.79**	**1.61**	**0.00**	**0.00**	**0.14**	**0.14**	**0.00**	**0.14**	**0.14**	**0.00**	**238.41**	**238.41**	**0.03**	**0.00**	**239.00**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.02	0.01	0.00	0.02	0.00	0.03	0.00	0.00	0.00	0.00	2.10	2.10	0.00	0.00	2.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.63	4.63	0.00	0.00	4.64
Total	**0.00**	**0.02**	**0.06**	**0.00**	**0.02**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**6.73**	**6.73**	**0.00**	**0.00**	**6.74**

3.3 Site Preparation - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.16	0.00	0.16	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.22	1.79	1.01	0.00		0.09	0.09		0.09	0.09	0.00	145.07	145.07	0.02	0.00	145.44
Total	**0.22**	**1.79**	**1.01**	**0.00**	**0.16**	**0.09**	**0.25**	**0.09**	**0.09**	**0.18**	**0.00**	**145.07**	**145.07**	**0.02**	**0.00**	**145.44**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.18	3.18	0.00	0.00	3.18
Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**3.18**	**3.18**	**0.00**	**0.00**	**3.18**

3.4 Grading - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.21	0.00	0.21	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.72	6.09	3.17	0.01		0.30	0.30		0.30	0.30	0.00	541.55	541.55	0.06	0.00	542.78
Total	**0.72**	**6.09**	**3.17**	**0.01**	**0.21**	**0.30**	**0.51**	**0.09**	**0.30**	**0.39**	**0.00**	**541.55**	**541.55**	**0.06**	**0.00**	**542.78**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.01	0.01	0.10	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	9.70	9.70	0.00	0.00	9.72
Total	**0.01**	**0.01**	**0.10**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**9.70**	**9.70**	**0.00**	**0.00**	**9.72**

3.5 Building Construction - 2011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.12	0.80	0.48	0.00		0.06	0.06		0.06	0.06	0.00	73.29	73.29	0.01	0.00	73.50
Total	**0.12**	**0.80**	**0.48**	**0.00**		**0.06**	**0.06**		**0.06**	**0.06**	**0.00**	**73.29**	**73.29**	**0.01**	**0.00**	**73.50**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.10	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	11.63	11.63	0.00	0.00	11.63
Worker	0.01	0.01	0.14	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	13.76	13.76	0.00	0.00	13.78
Total	**0.02**	**0.11**	**0.19**	**0.00**	**0.01**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**25.39**	**25.39**	**0.00**	**0.00**	**25.41**

3.5 Building Construction - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.73	4.87	3.10	0.01		0.33	0.33		0.33	0.33	0.00	478.23	478.23	0.06	0.00	479.48
Total	**0.73**	**4.87**	**3.10**	**0.01**		**0.33**	**0.33**		**0.33**	**0.33**	**0.00**	**478.23**	**478.23**	**0.06**	**0.00**	**479.48**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.05	0.58	0.32	0.00	0.02	0.02	0.04	0.00	0.02	0.02	0.00	75.80	75.80	0.00	0.00	75.84
Worker	0.07	0.08	0.79	0.00	0.08	0.00	0.08	0.00	0.00	0.01	0.00	87.66	87.66	0.01	0.00	87.79
Total	**0.12**	**0.66**	**1.11**	**0.00**	**0.10**	**0.02**	**0.12**	**0.00**	**0.02**	**0.03**	**0.00**	**163.46**	**163.46**	**0.01**	**0.00**	**163.63**

3.5 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.67	4.52	3.06	0.01		0.30	0.30		0.30	0.30	0.00	478.23	478.23	0.05	0.00	479.38
Total	**0.67**	**4.52**	**3.06**	**0.01**		**0.30**	**0.30**		**0.30**	**0.30**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.38**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.05	0.53	0.29	0.00	0.02	0.02	0.03	0.00	0.02	0.02	0.00	75.73	75.73	0.00	0.00	75.77
Worker	0.07	0.07	0.71	0.00	0.08	0.00	0.08	0.00	0.00	0.01	0.00	85.57	85.57	0.01	0.00	85.69
Total	**0.12**	**0.60**	**1.00**	**0.00**	**0.10**	**0.02**	**0.11**	**0.00**	**0.02**	**0.03**	**0.00**	**161.30**	**161.30**	**0.01**	**0.00**	**161.46**

3.5 Building Construction - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.62	4.18	3.03	0.01		0.26	0.26		0.26	0.26	0.00	478.23	478.23	0.05	0.00	479.28
Total	**0.62**	**4.18**	**3.03**	**0.01**		**0.26**	**0.26**		**0.26**	**0.26**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.28**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.48	0.27	0.00	0.02	0.02	0.03	0.00	0.01	0.01	0.00	75.66	75.66	0.00	0.00	75.70
Worker	0.06	0.06	0.64	0.00	0.08	0.00	0.08	0.00	0.00	0.01	0.00	83.53	83.53	0.01	0.00	83.64
Total	**0.10**	**0.54**	**0.91**	**0.00**	**0.10**	**0.02**	**0.11**	**0.00**	**0.01**	**0.02**	**0.00**	**159.19**	**159.19**	**0.01**	**0.00**	**159.34**

3.5 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	**0.57**	**3.80**	**3.00**	**0.01**		**0.23**	**0.23**		**0.23**	**0.23**	**0.00**	**478.23**	**478.23**	**0.05**	**0.00**	**479.20**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.04	0.43	0.25	0.00	0.02	0.01	0.03	0.00	0.01	0.01	0.00	75.61	75.61	0.00	0.00	75.64
Worker	0.05	0.06	0.57	0.00	0.08	0.00	0.08	0.00	0.00	0.01	0.00	81.40	81.40	0.00	0.00	81.50
Total	**0.09**	**0.49**	**0.82**	**0.00**	**0.10**	**0.01**	**0.11**	**0.00**	**0.01**	**0.02**	**0.00**	**157.01**	**157.01**	**0.00**	**0.00**	**157.14**

3.5 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.05	0.34	0.30	0.00		0.02	0.02		0.02	0.02	0.00	47.64	47.64	0.00	0.00	47.73
Total	**0.05**	**0.34**	**0.30**	**0.00**		**0.02**	**0.02**		**0.02**	**0.02**	**0.00**	**47.64**	**47.64**	**0.00**	**0.00**	**47.73**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.53	7.53	0.00	0.00	7.53
Worker	0.00	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	7.90	7.90	0.00	0.00	7.91
Total	**0.00**	**0.04**	**0.07**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**15.43**	**15.43**	**0.00**	**0.00**	**15.44**

3.6 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.17	1.06	0.76	0.00		0.09	0.09		0.09	0.09	0.00	99.23	99.23	0.01	0.00	99.52
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.17**	**1.06**	**0.76**	**0.00**		**0.09**	**0.09**		**0.09**	**0.09**	**0.00**	**99.23**	**99.23**	**0.01**	**0.00**	**99.52**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.38	4.38	0.00	0.00	4.39
Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.38**	**4.38**	**0.00**	**0.00**	**4.39**

3.7 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.66					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.09	0.07	0.00		0.01	0.01		0.01	0.01	0.00	9.56	9.56	0.00	0.00	9.59
Total	**3.67**	**0.09**	**0.07**	**0.00**		**0.01**	**0.01**		**0.01**	**0.01**	**0.00**	**9.56**	**9.56**	**0.00**	**0.00**	**9.59**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.67	4.67	0.00	0.00	4.68
Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**4.67**	**4.67**	**0.00**	**0.00**	**4.68**

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Single Family Housing	10.80	7.30	7.50	45.60	19.00	35.40

5.0 Energy Detail

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	360.79	360.79	0.02	0.01	363.05
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	450.99	450.99	0.02	0.01	453.82
NaturalGas Mitigated	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	412.98	412.98	0.01	0.01	415.49
NaturalGas Unmitigated	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03	0.00	412.98	412.98	0.01	0.01	415.49
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Single Family Housing	1.55049e+006					450.99	0.02	0.01	453.82
Total						**450.99**	**0.02**	**0.01**	**453.82**

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Single Family Housing	1.24039e+006					360.79	0.02	0.01	363.05
Total						**360.79**	**0.02**	**0.01**	**363.05**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.53					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	1.46	0.21	13.04	0.04		0.00	2.15		0.00	2.15	284.81	282.02	566.83	1.34	0.01	596.50
Landscaping	0.05	0.02	1.62	0.00		0.00	0.01		0.00	0.01	0.00	2.66	2.66	0.00	0.00	2.72
Total	**3.41**	**0.23**	**14.66**	**0.04**		**0.00**	**2.16**		**0.00**	**2.16**	**284.81**	**284.68**	**569.49**	**1.34**	**0.01**	**599.22**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.53					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.04	0.02	1.49	0.00		0.00	0.01		0.00	0.01	0.00	2.40	2.40	0.00	0.00	2.44
Total	**1.94**	**0.02**	**1.49**	**0.00**		**0.00**	**0.01**		**0.00**	**0.01**	**0.00**	**2.40**	**2.40**	**0.00**	**0.00**	**2.44**

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Single Family Housing	14.1384 / 8.91335					31.49	0.43	0.01	44.06
Total						**31.49**	**0.43**	**0.01**	**44.06**

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Single Family Housing	11.3107 / 7.7082					25.78	0.35	0.01	35.84
Total						**25.78**	**0.35**	**0.01**	**35.84**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

8.2 Waste by Land Use

Mitigated

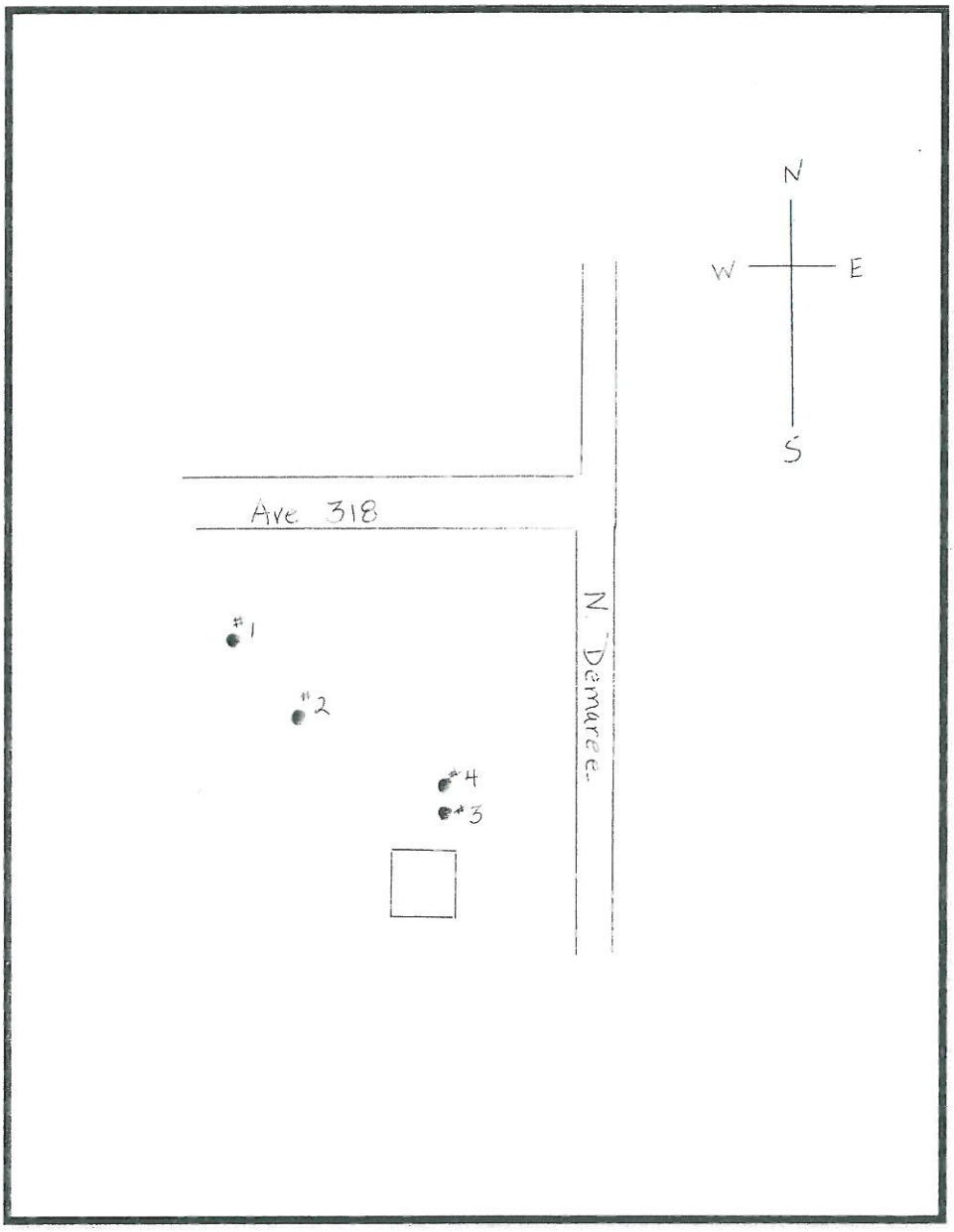
	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Single Family Housing	116.825					23.71	1.40	0.00	53.15
Total						23.71	1.40	0.00	53.15

9.0 Vegetation

LOWERY RANCH SUBDIVISION

OAK TREE EVALUATION

CONDUCTED BY HALSEYS TREE SERVICE ON NOVEMBER 18, 2013



4CREEKS

HALSEYS TREE SERVICE

"Quality Isn't Expensive ...It's Priceless"

Estimate

31048 Rd 160 Visalia, Ca. 93292 *License #778845 *Insured Workers Comp.9023011-12
Certified Arborist #WE-5787A Phone (559) 733-8713

Nov. 18, 2013

CUSTOMER: Four Creeks, Inc.

SUBJECT: In-depth visual examination, root crown excavation, core drilling with the resistograph, photos taken and a written report prepared with recommendations.

LOCATION: The trees are located in a vacant field @ the s/w corner of N. Demaree and Ave. 318 in Visalia.

Subject is one of 4 Valley Oak (*Quercus lobata*) trees to be evaluated at this site. This will be **tree # 1** as indicated on the attached map. It is at the west end of the lot.
This tree is estimated to be between 180 and 250 years old. It is approximately 51 feet high, with a canopy width of about 47 feet and a DBH of 62 inches.
Overall condition of the tree is **VERY POOR.**

On Nov. 13, 2013, I performed a complete evaluation of the tree in question. The results of that evaluation are as follows:

STRUCTURE: The tree exhibits a lean to the south at a ratio of 90 /10.
There are conks *(fruiting bodies) caused by internal decay, about 10 feet up on the north side of the trunk. The tree has had many past failures. These failures have left 3 large wounds below the main fork. The largest of these wounds is 36 inches in diameter.

*Dead foliage can be seen in this picture.

None of these wounds have healed over.
Over the last 5-6 years, the tree has lost at least 10 large branches. All of these old wounds show significant decay ranging from 25-80%.

*The old wounds from past failures can be seen in the photo to the right as well as the photo on the previous page.

CANOPY: The canopy has very little remaining foliage. Only 4 branches show sparse growth at their tips. There are large DEAD stubs throughout the entire canopy, as can be seen in the photo above.

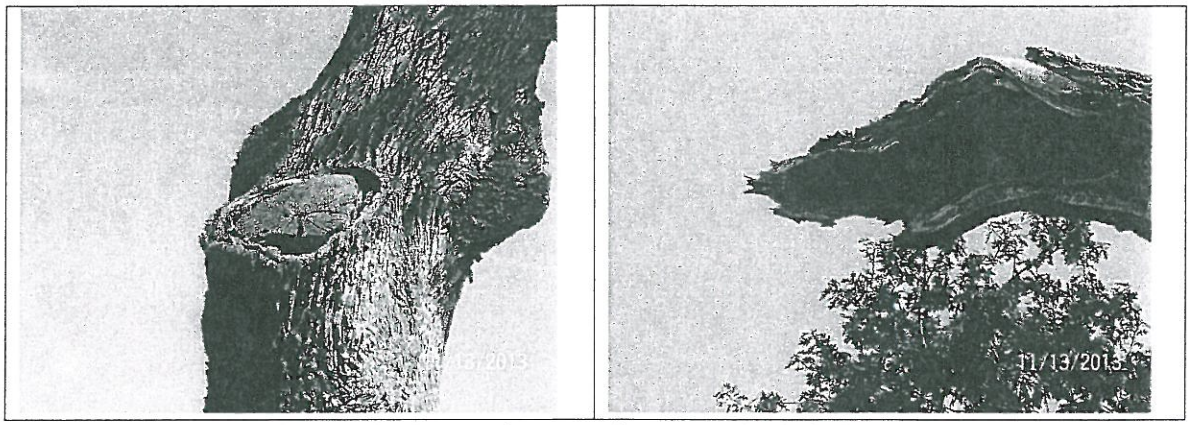


*Photo shows an old cut, which was done to clean up a limb failure. This cut has not healed over. On the right is an old failure that was not cleaned up. It also has not healed.

ROOT CROWN: I performed a complete root crown excavation. The main buttress roots were exposed for examination. Three of the main buttress roots tested 60-85% hollow using the resistograph.
The center of the tree is mostly hollow, although I wasn't able to get completely to the center due to the large girth of the trunk.

RECOMMENDATIONS: This tree is unsafe and is declining quickly. I am recommending **REMOVAL.**

Steve Halsey
Certified Arborist WE-5787A
Halseys Tree Service
(559) 733-8713

HALSEYS TREE SERVICE

"Quality Isn't Expensive...It's Priceless"
31048 Rd 160 Visalia, Ca. 93292 *License #778845 *Insured Workers Comp.9023011-12
Certified Arborist #WE-5787A Phone (559) 733-8713

Nov. 18, 2013

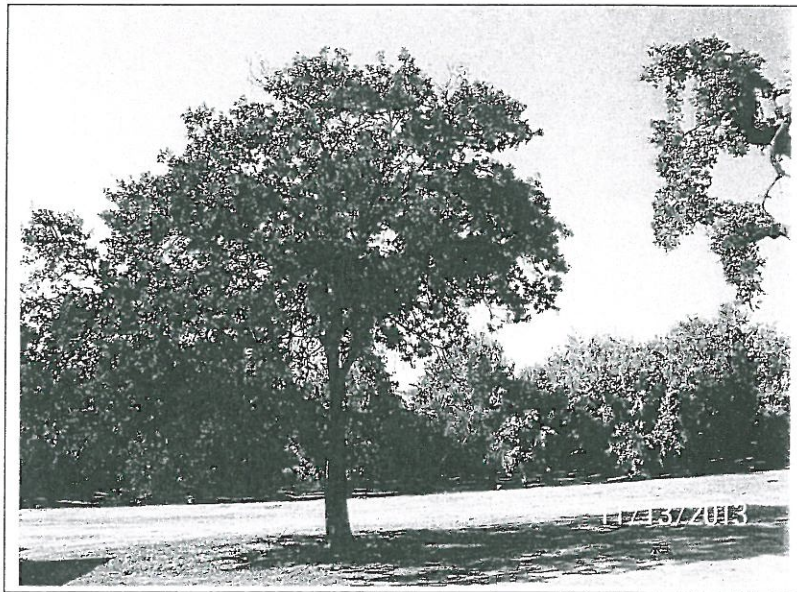
CUSTOMER: Four Creeks, Inc.

SUBJECT: In-depth visual examination, root crown excavation, core drilling with the resistograph, photos taken and a written report prepared with recommendations.

LOCATION: The trees are located in a vacant field @ the s/w corner of N. Demaree and Ave. 318 in Visalia.

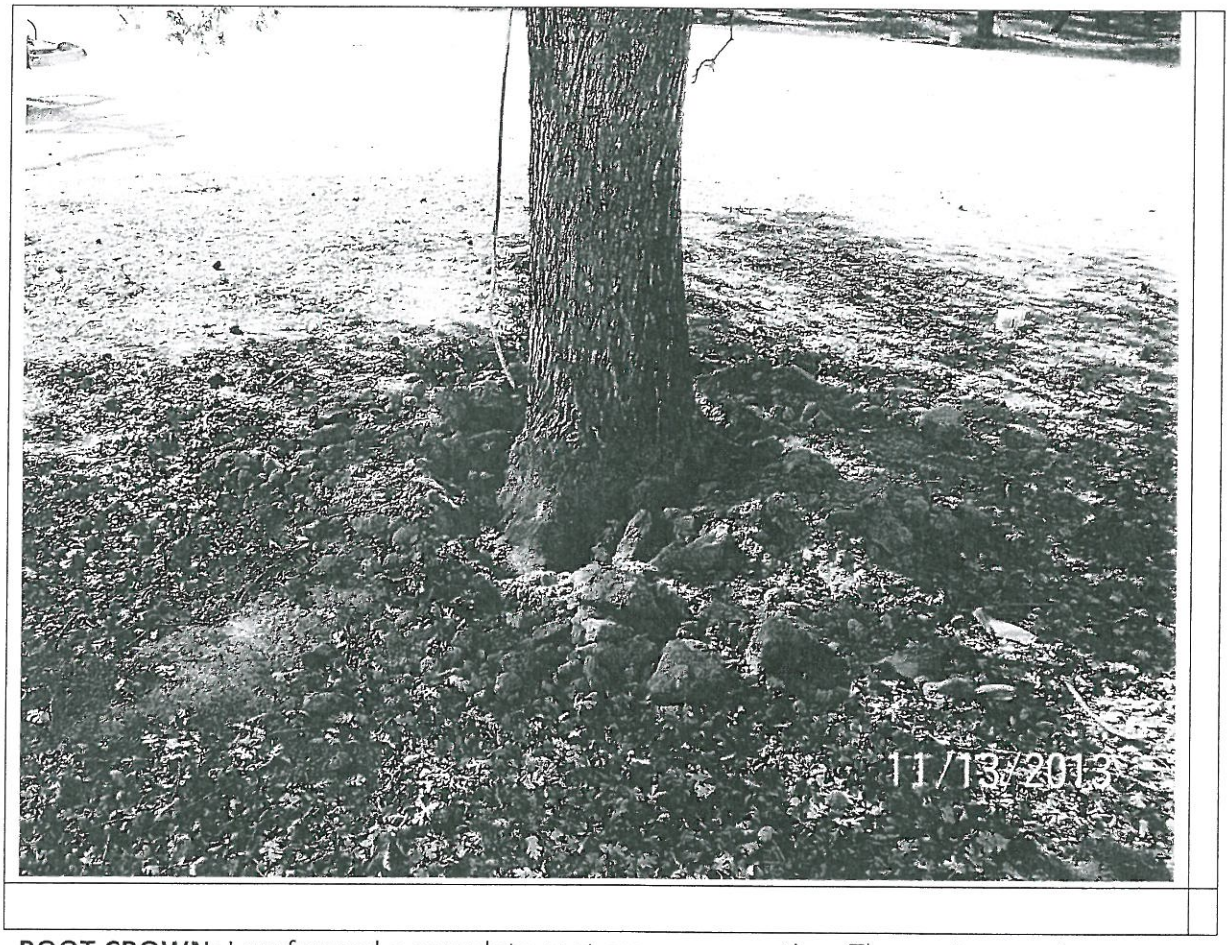
Subject is one of 4 Valley Oak (*Quercus lobata*) trees to be evaluated at this site. This will be **tree # 2** as indicated on the attached map.
This tree is estimated to be between 30 and 50 years old. It is approximately 29 feet high, with a canopy width of about 34 feet and a DBH of 16 inches.
Overall condition of the tree is **FAIR.**

On Nov. 13, 2013, I performed a complete evaluation of the tree in question. The results of that evaluation are as follows:



STRUCTURE: This tree has co-dominant stems starting at 5 feet high. These co-dominant stems have bark inclusion in them. There are 3 main forks, the center one of which has 2 main forks. All of these forks exhibit bark inclusion.

CANOPY: The canopy is healthy although, growing very slowly. The tree is suffering from water shortage. There is small dead wood throughout the canopy and only 8-12 inches of new shoot tip growth.



ROOT CROWN: I performed a complete root crown excavation. The root crown is healthy. I saw no evidence of any disease or pests. There was no armallaria or woodborers present.

RECOMMENDATIONS: This tree is in FAIR condition overall and only needs to be **TRIMMED** and have a better water source.

Steve Halsey
Certified Arborist WE-5787A
Halseys Tree Service
(559) 733-8713

HALSEYS TREE SERVICE

"Quality Isn't Expensive...It's Priceless"
31048 Rd 160 Visalia, Ca. 93292 *License #778845 *Insured Workers Comp.9023011-12
Certified Arborist #WE-5787A Phone (559) 733-8713

Nov. 18, 2013

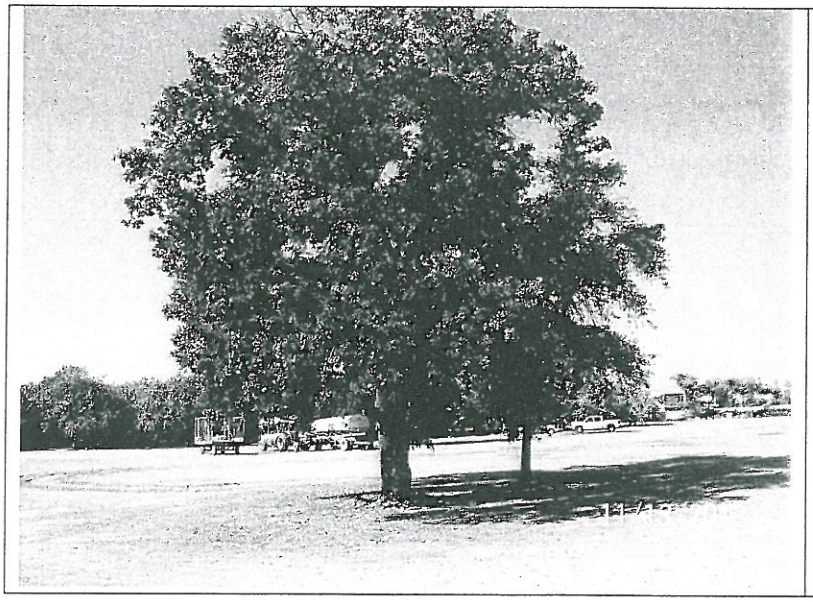
CUSTOMER: Four Creeks, Inc.

SUBJECT: In-depth visual examination, root crown excavation, core drilling with the resistograph, photos taken and a written report prepared with recommendations.

LOCATION: The trees are located in a vacant field @ the s/w corner of N. Demaree and Ave. 318 in Visalia.

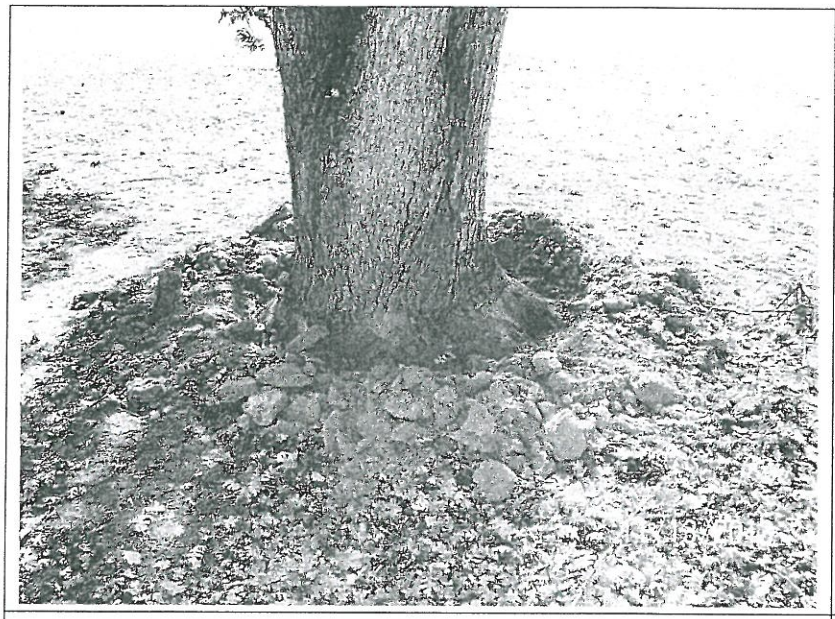
Subject is one of 4 Valley Oak (*Quercus lobata*) trees to be evaluated at this site. This will be **tree # 3** as indicated on the attached map. It stands 100 feet north of the house @ the s/e side of the lot.
This tree is estimated to be between 30 and 60 years old. It is approximately 35 feet high, with a canopy width of about 39 feet and a DBH of 23 inches.
Overall condition of the tree is **FAIR.**

On Nov. 13, 2013, I performed a complete evaluation of the tree in question. The results of that evaluation are as follows:



STRUCTURE: Tree #3 is the front tree in this picture. It has 3 equally sized stems starting at waist height. There is severe bark inclusion in the main fork, an inherent structural defect which cannot be fixed by pruning practices. There is an extreme infestation of woodborers all up and down the eastern stems as well as on the trunk below. I observed 23 borer exit holes.

CANOPY: The canopy is mostly healthy although, showing very slow growth, probably due to the borer infestation. There is only 6-10 inches of new shoot tip growth.

	**ROOT CROWN**: I excavated the root crown and examined the buttress roots. I found no armallaria. There were 5 borer holes underground. The borers are severe and have done a lot of damage to the tree.

RECOMMENDATIONS: This tree is in FAIR condition overall, however, due to its health and structural instability *(heavy bark inclusion) in the main fork, I am recommending **REMOVAL.**

Steve Halsey
Certified Arborist WE-5787A
Halseys Tree Service
(559) 733-8713

HALSEYS TREE SERVICE

"Quality Isn't Expensive...It's Priceless"
31048 Rd 160 Visalia, Ca. 93292 *License #778845 *Insured Workers Comp.9023011-12
Certified Arborist #WE-5787A Phone (559) 733-8713

Nov. 18, 2013

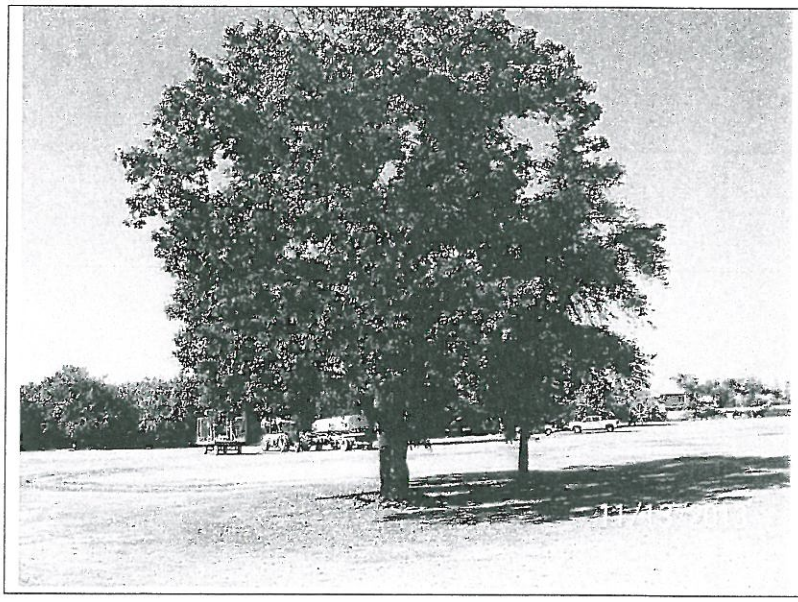
CUSTOMER: Four Creeks, Inc.

SUBJECT: In-depth visual examination, root crown excavation, photos taken and a written report prepared with recommendations.

LOCATION: The trees are located in a vacant field @ the s/w corner of N. Demaree and Ave. 318 in Visalia.

Subject is one of 4 Valley Oak (*Quercus lobata*) trees to be evaluated at this site. This will be **tree # 4** as indicated on the attached map. It stands 15 feet north of tree #3.
This tree is estimated to be between 20 and 40 years old. It is approximately 30 feet high, with a canopy width of about 17 feet and a DBH of 11 inches.
Overall condition of the tree is **POOR.**

On Nov. 13, 2013, I performed a complete evaluation of the tree in question. The results of that evaluation are as follows:



STRUCTURE: Tree #4 is the small tree located behind tree #3 in this photo.
It is a single stem tree up until 12 feet above ground level, where it splits into 2 equal sides.
It has a slight lean to the east.

CANOPY: The tree is infested with woodborers. They are destroying the cambium on the east and west sides of the trunk starting at ground level and moving upwards to about head high. The tree exhibits a lot of bleeding sap on its west side. There is a lot of dead wood throughout the canopy and it is in general decline due to the damage from the borers.

ROOT CROWN: The root crown was excavated completely. It has a 6 inch scar at ground level. The borers more than likely got their start in the decay which has formed in and around this old wound.

RECOMMENDATIONS: This tree is in POOR condition overall. It has a lot of damage to its cambium, *(The cambium is a very thin layer of tissue that is responsible for new cell growth. It makes the trunk, branches and roots grow larger in diameter.) Once the cambium is destroyed, it cannot recover. Without the cambium functioning properly, the tree cannot grow and therefore, goes into a decline that eventually leads to its death.
It is for this reason, that I am recommending **REMOVAL**.

Steve Halsey
Certified Arborist WE-5787A
Halseys Tree Service
(559) 733-8713

MEETING DATE 08/21/2013

SITE PLAN NO. 13-089

PARCEL MAP NO.

SUBDIVISION

LOT LINE ADJUSTMENT NO.

Enclosed for your review are the comments and decisions of the Site Plan Review committee. Please review all comments since they may impact your project.

☐ **RESUBMIT** Major changes to your plans are required. Prior to accepting construction drawings for building permit, your project must return to the Site Plan Review Committee for review of the revised plans.

☐ During site plan design/policy concerns were identified, schedule a meeting with

☐ Planning ☐ Engineering prior to resubmittal plans for Site Plan Review.

☐ Solid Waste ☐ Parks and Recreation ☐ Fire Dept.

☒ **REVISE AND PROCEED** (see below)

☐ A revised plan addressing the Committee comments and revisions must be submitted for Off-Agenda Review and approval prior to submitting for building permits or discretionary actions.

☐ Submit plans for a building permit between the hours of 8:30 a.m. and 4:30 p.m., Monday through Friday.

☐ Your plans must be reviewed by:

☐ CITY COUNCIL ☐ REDEVELOPMENT

☐ PLANNING COMMISSION ☐ PARK/RECREATION

☐ HISTORIC PRESERVATION ☐ OTHER _____

☐ **ADDITIONAL COMMENTS** _____

If you have any questions or comments, please call Jason Huckleberry at (559) 713-4259.

Site Plan Review Committee

ITEM NO: 3 DATE: August 21, 2013

City of Visalia

Building: Site Plan Review Comments

SITE PLAN NO: SPR13089 ***RESUBMIT***
PROJECT TITLE: LOWREY RANCH SUBDIVISION MAP
DESCRIPTION: TENTATIVE SUBDIVISION MAP WITH 221 SFD UNITS WITH 5 PHASES ON 72 ACRES (R16 ZONED)
APPLICANT: 4 CREEKS INC - AINLEY MATT
PROP OWNER: FORGE FAMILY PARTNERSHIP THE
LOCATION: 3629 N DEMAREE ST
APN(S): 077-060-022 077-060-024

NOTE: These are general comments and DO NOT constitute a complete plan check for your specific project
Please refer to the applicable California Code & local ordinance for additional requirements.

- ☐ A building permit will be required. *For information call (559) 713-4444*
- ☐ Submit 5 sets of professionally prepared plans and 2 sets of calculations. (Small Tenant Improvements)
- ☐ Submit 5 sets of plans prepared by an architect or engineer. Must comply with 2010 California Building Cod Sec. 2308 for conventional light-frame construction or submit 2 sets of engineered calculations.
- ☐ Indicate abandoned wells, septic systems and excavations on construction plans.

<u>You are responsible to ensure compliance with the following checked items:</u>

- ☐ Meet State and Federal requirements for accessibility for persons with disabilities.
- ☐ A path of travel, parking and common area must comply with requirements for access for persons with disabilities.
- ☐ All accessible units required to be adaptable for persons with disabilities.
- ☐ Maintain sound transmission control between units minimum of 50 STC.
- ☐ Maintain fire-resistive requirements at property lines.
- ☐ A demolition permit & deposit is required. *For information call (559) 713-4444*
- ☐ Obtain required permits from San Joaquin Valley Air Pollution Board. *For information call (559) 230-6000*
- ☐ Plans must be approved by the Tulare County Health Department. *For information call (559) 624-8011*
- ☐ Project is located in flood zone _____ * ☐ Hazardous materials report.
- ☐ Arrange for an on-site inspection. (Fee for inspection $146.40) *For information call (559) 713-4444*
- ☐ School Development fees. Commercial $0.47 per square foot. Residential $2.97 per square foot.
- ☐ Park Development fee $_____, per unit collected with building permits.
- ☐ Existing address must be changed to be consistent with city address. *For information call (559) 713-4320*
- ☐ Acceptable as submitted
- ☒ No comments at this time

Additional comments: _____

G. Ferreira 8-30-13
Signature

Site Plan Review Comments For:

Visalia Fire Department
Kurtis Brown, Assistant Fire Marshal
707 W Acequia
Visalia, CA 93291
559-713-4261 *office*
559-713-4808 *fax*

ITEM NO: 3 DATE: August 21, 2013

SITE PLAN NO:	SPR13089 ***RESUBMIT***
PROJECT TITLE:	LOWREY RANCH SUBDIVISION MAP
DESCRIPTION:	TENTATIVE SUBDIVISION MAP WITH 221 SFD UNITS WITH 5 PHASES ON 72 ACRES (R16 ZONED)
APPLICANT:	4 CREEKS INC - AINLEY MATT
PROP OWNER:	FORGE FAMILY PARTNERSHIP THE
LOCATION:	3629 N DEMAREE ST
APN(S):	077-060-022 077-060-024

The following comments are applicable when checked:

☐ Refer to previous comments dated .

☐ More information is needed before a Site Plan Review can be conducted. Please submit plans with more detail.

☒ The Site Plan Review comments in this document are not all encompassing, but a general overview of the California Fire Code, and City of Visalia Municipal Codes. Additional requirements may come during the plan review process.

☐ No fire protection items required for parcel map or lot line adjustment; however, any future projects will be subject to fire protection requirements.

☐ Address numbers must be placed on the exterior of the building in such a position as to clearly and plainly visible from the street. Numbers will be at least six inches (6") high and shall be of a color to contrast with their background. If multiple addresses served by a common driveway, the range of numbers shall be posted at the roadway/driveway.

☐ No additional fire hydrants are required for this project; however, additional fire hydrants may be required for any future development.

☒ There will be fire hydrants required for this project. **Fire Hydrant locations will be submitted and signed off by the fire department prior to each phase being approved.**

☐ The turning radius for emergency fire apparatus is 20 feet inside radius and 43 feet outside radius. Ensure that the turns identified to you during site plan comply with the requirements. An option is a hammer-head constructed to City standards.

☐ An access road is required and shall be a minimum of 20 feet wide. The road shall be an all-weather driving surface accessible prior to and during construction.

☐ Buildings or portions of buildings or facilities exceeding 30 feet in height above the lowest level of fire department vehicle access shall be provided with an approved fire apparatus access roads capable of accommodating fire department aerial apparatus. Access roads shall have a minimum unobstructed width of 26 feet, exclusive of shoulders. Access routes shall be located within a minimum of 15 feet and maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building.

☒ A fire lane is required for this project. **The location will be given to you during the site plan meeting. An access road is required and shall be a minimum of 20 feet wide with no parking allowed and street width will be increase if park is allowed.**

☐ A Knox Box key lock system is required. Applications are available at the Fire Department Administrative Office. (Note: Knox boxes shall be ordered using an approved application that can be found at Fire Administration Office located at 707 W. Acequia Ave. Please allow adequate time for shipping and installation.)

☐ The security gates, if to be locked, shall be locked with a typical chain and lock that can be cut with a common bolt cutter, or the developer may opt to provide a Knox Box key lock system. Applications are available at the Fire Department Administrative Office.

☐ That portion of the building that is built upon a property line shall be constructed as to comply with Section 503.4 and Table 5-A of the California Building Code.

☐ Commercial dumpsters with 1.5 cubic yards or more shall not be stored or placed within 5 feet of combustible walls, openings, or a combustible roof eave line except when protected by a fire sprinkler system.

☐ If you handle hazardous material in amounts that exceed the exempt amounts listed on Table 3-D of the California Building Code, you are required to submit an emergency response plan to the Tulare County Health Department. Prior to the building final inspection, we will want a copy of the plan and any Material Safety Data Sheets.

☐ An automatic fire sprinkler system will be required for this building. A fire hydrant is required within 50 feet of the fire department connection. The fire hydrant, fire department connection and the PIV valve should be located together and minimum 25' from the building, if possible. The caps on the FDC shall be Knox locking caps.

☐ All hardware on exit doors shall comply with Chapter 10 of the California Fire Code. This includes all locks, latches, dolt locks, and panic and fire exit hardware.

☐ Provide Illuminated exit signs and emergency lighting though-out building.

☐ All Fire and Life Safety systems located within the building shall be maintained.

☐ An automatic fire extinguishing system for protection of the kitchen grease hood and ducts is required.

☐ Special comments:

Kurtis Brown, Assistant Fire Marshal

QUALITY ASSURANCE DIVISION

SITE PLAN REVIEW COMMENTS

ITEM NO: 3 DATE: August 21, 2013

SITE PLAN NO:	SPR13089 ***RESUBMIT***
PROJECT TITLE:	LOWREY RANCH SUBDIVISION MAP
DESCRIPTION:	TENTATIVE SUBDIVISION MAP WITH 221 SFD UNITS WITH 5 PHASES ON 72 ACRES (R16 ZONED)
APPLICANT:	4 CREEKS INC - AINLEY MATT
PROP OWNER:	FORGE FAMILY PARTNERSHIP THE
LOCATION:	3629 N DEMAREE ST
APN(S):	077-060-022 077-060-024

YOU ARE REQUIRED TO COMPLY WITH THE CITY OF VISALIA WASTEWATER ORDINANCE 13.08 RELATIVE TO CONNECTION TO THE SEWER, PAYMENT OF CONNECTION FEES AND MONTHLY SEWER USER CHARGES. THE ORDINANCE ALSO RESTRICTS THE DISCHARGE OF CERTAIN NON-DOMESTIC WASTES INTO THE SANITARY SEWER SYSTEM.

YOUR PROJECT IS ALSO SUBJECT TO THE FOLLOWING REQUIREMENTS:

- ☐ WASTEWATER DISCHARGE PERMIT APPLICATION
- ☐ SAND AND GREASE INTERCEPTOR – 3 COMPARTMENT_____
- ☐ GREASE INTERCEPTOR____min. 1000 GAL_____
- ☐ GARBAGE GRINDER – ¾ HP. MAXIMUM_____
- ☐ SUBMISSION OF A DRY PROCESS DECLARATION_____
- ☐ NO SINGLE PASS COOLING WATER IS PERMITTED_____
- ☐ OTHER_____
- ☒ SITE PLAN REVIEWED – NO COMMENTS

CALL THE QUALITY ASSURANCE DIVISION AT (559) 713-4529 IF YOU HAVE ANY QUESTIONS.

CITY OF VISALIA
PUBLIC WORKS DEPARTMENT
QUALITY ASSURANCE DIVISION
7579 AVENUE 288
VISALIA, CA 93277

AUTHORIZED SIGNATURE

8-19-13
DATE

SITE PLAN REVIEW COMMENTS

Paul Bernal, Planning Division (559) 713-4025
Date: August 21, 2013

SITE PLAN NO:	13-089 RESUBMITTAL
PROJECT TITLE:	LOWERY RANCH SUBDIVISION MAP
DESCRIPTION:	TENTATIVE SUBDIVISION MAP WITH 221 SFD UNITS WITH 5 PHASES ON 72 ACRES (R16 ZONED)
APPLICANT TITLE:	4 CREEKS INC – AINLEY MATT
PROP. OWNER:	FORGE FAMILY PARTNERSHIP
LOCATION TITLE:	3629 N DEMAREE ST
APN TITLE:	077-060-022 & 077-060-024
General Plan:	RLD – Residential Low Density
Existing Zoning:	R-1-6 – Single-Family Residential 6,000 sq. ft. min. site area

Planning Division Recommendation:

☒ Revise and Proceed
☐ Resubmit

Project Requirements

- Tentative Subdivision Map
- Greenhouse Gas Analysis
- Traffic Impact Study
- Oak Tree Evaluation
- Building Permits
- Additional Information As Needed

PROJECT SPECIFIC INFORMATION: 08/21/2013

1. The project must have an oak tree evaluation for the valley oak trees located in Phase 1 of the subdivision project. If oak tree evaluation determinations trees are health, staff will include a condition that will require the subdivider to delineate the drip line of the oak tree.
2. Staff will condition any lots affected by the crown drip line of a valley oak tree that a "No Build Area" shall be incorporated into those lots prohibiting the location of any accessory structures and/or main structure within the crown drip line of these oak trees. This will ensure the protection of the oak tree from future development of the R-1-6 lots, and provide disclosure to future owners of those R-1-6 lots affected by the "No Build Easement" that there are restrictions that may limit development into the yard area. This "No Build Easement" will be included as a Condition of Project Approval for the tentative subdivision map.
3. All "Key Lots" shall be subject to Section 17.12.100.B of Zoning Ordinance.
4. Provide a Greenhouse Gas Reduction Plan with the submittal of the Tentative Subdivision map application.
5. Lot K on the tentative map should be revised and labeled as a "Reminder" of the map.

PREVIOUS COMMENTS

PROJECT SPECIFIC INFORMATION: 05/22/2013

1. Staff recommends a redesign of the local circulation pattern or further information on why Shannon Parkway and Riverway Drive are designed to converge at the traffic circle. Based on preliminary street pattern designs, these two streets were designed to remain parallel from Demaree Street to Akers Street and not converge at any time.

2. Staff recommends a redesign to allow another local street to connect to Shannon Parkway for Phases 2, 3 & 4. The local streets to consider for this additional connection are Julienne Street or Cindy Street.
3. Clearly depict the dripline of all oak trees. Staff will condition any lots affected by the crown dripline of an oak tree that a "No Build Area" shall be incorporated into those lots prohibiting the location of any accessory structures and/or main structure within the crown dripline of these oak trees. This will ensure the protection of the oak tree from future development of the R-1-6 lots, and provide disclosure to future owners of those R-1-6 lots affected by the "No Build Easement" that there are restrictions that may limit development into the rear yard area. This "No Build Easement" will be included as a Condition of Project Approval for the tentative subdivision map.
4. Provide a Greenhouse Gas Reduction Plan with the submittal of the Tentative Subdivision map application.
5. Staff recommends the applicant provide a detailed plan depicting the major street alignments to the west of the proposed subdivision. This additional information may help in answers questions regarding the Shannon Parkway alignment as currently depicted on the Lowery Subdivision map dated May 22, 2013.

CITY GENERAL PLAN CONSISTENCY

Staff initial finding is that the proposed site plan IS CONSISTENT with the City General Plan. Because this project requires discretionary approval by the City Council and/or Planning Commission the final determination of consistency will be made by the Planning Commission and/or City Council.

R-1-6 Single Family Residential Zone [17.12]

Maximum Building Height: 35 Feet

Minimum Setbacks:	**Building**	**Landscaping**
➢ Front	15 Feet	15 Feet
➢ Front Garage (garage w/door to street)	22 Feet	22 Feet
➢ Side	5 Feet	5 Feet
➢ Street side on corner lot	10 Feet	10 Feet
➢ Rear	25 Feet*	25 Feet

Minimum Site Area: 6,000 square feet

Accessory Structures:

Maximum Height: 12 feet (as measured from average grade next to the structure)
Maximum Coverage: 20% of required Rear Yard (last 25 feet by the width)
Reverse Corner Lots: No structure in the 25 feet of adjacent lot's front yard area, see Zoning Ordinance Section 17.12.100 for complete standards and requirements.

Valley Oak Tree

NOTE: Any development under the canopy of a Valley Oak Tree must be reviewed and approved by David Pendergraft – City Arborist, 559-713-4295. Applicants should not prepare any final plans without a review and approval of a detailed site plan by David Pendergraft or his appointee.

Landscaping and Lighting Act District:

1. A landscaping and lighting act district, or similar instrument, may be required for the maintenance of common areas or infrastructure such as street lights and similar infrastructure.

2. That a Landscaping and Lighting Act Assessment District be formed, prior to recordation of the final map, for the maintenance of the landscaping and fences and/or walls along the public street frontages and open space areas of the subdivision. The Landscaping and Lighting Act Assessment District shall also include the operational and maintenance cost for the street lights both internal to the subdivision and along streets abutting the subdivision. The Landscape and Lighting Act District shall also include provisions for the City to collect payments from the subdivider to cover the estimated cost to operate and maintain the improvements of the District prior to assessments occurring on the property tax roll.

Parking:

1. Provide two covered parking spaces per each dwelling unit (see Zoning Ordinance Section 17.34.020).

Fencing and Screening:

1. Cross Sections need to be provided for site Plan Review if there is greater than an 18-inch difference between the elevation of the subject site and the adjacent properties, and the sections would be required for the public hearing process also.
2. Provide minimum of seve-foot high concrete block wall or masonry wall along/around the following: along all lots backing onto Riverway Drive, Demaree Street and Shannon Parkway.
3. If there is an anticipated grade difference of more than 12-inches between this site and the adjacent sites, a cross section of the difference and the walls must be provided as a part of the Subdivision and/or CUP application package.
4. NOTE: The maximum height of block walls and fences is 7-feet in the appropriate areas; this height is measured on the tallest side of the fence. If the height difference is such that the fence on the inside of the project site is not of sufficient height, the fence height should be discussed with Planning Staff prior to the filing of applications to determine if an Exception to fence/wall height should also be submitted.

Landscaping:

1. On September 30, 2009, the State Model Water Efficient Landscape Ordinance (MWELO) was finalized by the State Department of Water Resources to comply with AB 1881. AB 1881 along with the MWELO became effective on January 1, 2010. As of January 1, 2010, the State Model Water Efficient Landscape Ordinance became effective by adoption of a City urgency ordinance on December 21, 2009. The ordinance applies to projects installing 2,500 square feet or more of landscaping. It requires that landscaping and irrigation plans be certified by a qualified entity (i.e., Landscape Architect) as meeting the State water conservation requirements. The City's implementation of this new State law will be accomplished by self-certification of the final landscape and irrigation plans by a California licensed landscape architect or other qualified entity with sections signed by appropriately licensed or certified persons as required by the ordinance. **NOTE: Prior to a final for the project, a signed Certificate of Compliance for the MWELO standards is required indicating that the landscaping has been installed to MWELO standards.**
2. Provide street trees at an average of 20-feet on center along street frontages. All trees to be 15-gallon minimum size (Zoning Ordinance Section 17.30.130.C).
3. Provide a conceptual landscape plan for resubmittal or planning commission review.
4. Locate existing oak trees on site and provide protection for all oak trees greater than 2" diameter (see Oak Tree Preservation Ordinance).

Maintenance of landscaped areas. - A landscaped area provided in compliance with the regulations prescribed in this title or as a condition of a use permit or variance shall be planted with materials suitable for screening or ornamenting the site, whichever is appropriate, and plant materials shall be maintained and replaced as needed, to screen or ornament the site. (Prior code § 7484)

Lighting:

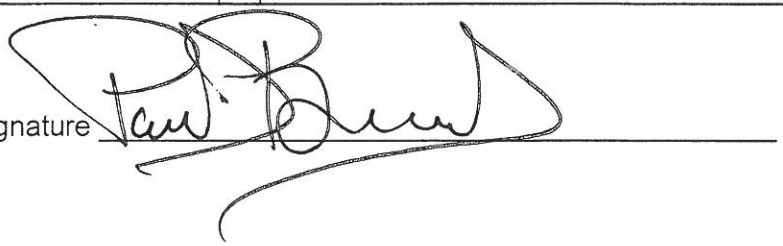
1. All lighting is to be designed and installed so as to prevent any significant direct or indirect light or glare from falling upon any adjacent residential property. This will need to be demonstrated in the building plans and prior to final on the site.
2. Parking lot and drive aisle lighting adjacent to residential units or designated property should consider the use of 15-foot high light poles, with the light element to be completely recessed into the can. A reduction in the height of the light pole will assist in the reduction/elimination of direct and indirect light and glare which may adversely impact adjacent residential areas.
3. Building and security lights need to be shielded so that the light element is not visible from the adjacent residential properties, if any new lights are added or existing lights relocated.
4. NOTE: Failure to meet these lighting standards in the field will result in no occupancy for the building until the standards are met.
5. In no case shall more than 0.5 lumens be exceeded at any property line, and in cases where the adjacent residential unit is very close to the property line, 0.5 lumens may not be acceptable.

San Joaquin Valley Air Pollution Control District (SJVAPCD)

Please note that the project is subject to SJVAPCD Rule 9510. The applicant is encouraged to do early indirect source modeling consultation with the Air District (please see http://www.aqmd.gov/rules/proposed/2301/sjvapcd_rule9510.pdf).

The comments found on this document pertain to the site plan submitted for review on the above referenced date. Any changes made to the plan submitted must be submitted for additional review.

NOTE: Staff recommendations contained in this document are not to be considered support for a particular action or project unless otherwise stated in the comments.

Signature 

ITEM NO: 3 DATE: August 21, 2013

SITE PLAN NO: SPR13089 ***RESUBMIT***
PROJECT TITLE: LOWREY RANCH SUBDIVISION MAP
DESCRIPTION: TENTATIVE SUBDIVISION MAP WITH 221 SFD UNITS WITH 5 PHASES ON 72 ACRES (R16 ZONED)
APPLICANT: 4 CREEKS INC - AINLEY MATT
PROP OWNER: FORGE FAMILY PARTNERSHIP THE
LOCATION: 3629 N DEMAREE ST
APN(S): 077-060-022 077-060-024

City of Visalia
Police Department
303 S. Johnson St.
Visalia, Ca. 93292
(559) 713-4370

Site Plan Review Comments

☒ No Comment at this time.

☐ Request opportunity to comment or make recommendations as to safety issues as plans are developed.

☒ Public Safety Impact fee:
Ordinance No. 2001-11 Chapter 16.48 of Title 16 of the Visalia Municipal Code
Effective date - August 17, 2001

Impact fees shall be imposed by the City pursuant to this Ordinance as a condition of or in conjunction with the approval of a development project. "New Development or Development Project" means any new building, structure or improvement of any parcels of land, upon which no like building, structure of improvement previously existed. *Refer to Engineering Site Plan comments for fee estimation.

☐ Not enough information provided. Please provide additional information pertaining to:

☐ Territorial Reinforcement: Define property lines (private/public space).

☐ Access Controlled / Restricted etc:

☐ Lighting Concerns:

☐ Landscaping Concerns:

☐ Traffic Concerns:

☐ Surveillance Issues:

☐ Line of Sight Issues:

☐ Other Concerns:

Lieutenant Steven Phillips
Visalia Police Department

SUBDIVISION & PARCEL MAP REQUIREMENTS
ENGINEERING DIVISION

☐ Jason Huckleberry	713-4259
☐ Ken McSheehy	713-4447
☒ Adrian Rubalcaba	713-4164

ITEM NO: 3 DATE: AUGUST 21, 2013

SITE PLAN NO.:	13-089 RESUBMITTAL
PROJECT TITLE:	LOWREY RANCH SUBDIVISION MAP
DESCRIPTION:	TENTATIVE SUBDIVISION MAP WITH 221 SFD UNITS WITH 5 PHASES ON 72 ACRES (R16 ZONED)
APPLICANT:	4 CREEKS INC - MATT AINLEY
PROP. OWNER:	FORGE FAMILY PARTNERSHIP
LOCATION:	3629 N DEMAREE ST
APN:	077-060-022 & 077-060-024

SITE PLAN REVIEW COMMENTS

☒ REQUIREMENTS (Indicated by checked boxes)

☒ Submit improvements plans detailing all proposed work; ☒ Subdivision Agreement will detail fees & bonding requirements

☒ Bonds, certificate of insurance, cash payment of fees/inspection, and approved map & plan required prior to approval of Final Map.

☒ The Final Map & Improvements shall conform to the Subdivision Map Act, the City's Subdivision Ordinance and Standard Improvements.

☒ A preconstruction conference is required prior to the start of any construction.

☒ Right-of-way dedication required. A title report is required for verification of ownership. ☒ by map ☐ by deed

☒ City Encroachment Permit Required which shall include an approved traffic control plan.

☐ CalTrans Encroachment Permit Required. ☐ CalTrans comments required prior to tentative parcel map approval. CalTrans contacts: David Deel (planning) 488-4088

☒ Landscape & Lighting District/Home Owners Association required prior to approval of Final Map. Landscape & Lighting District will maintain common area landscaping, street lights, street trees and local streets as applicable. Submit completed Landscape and Lighting District application and filing fee a min. of 75 days before approval of Final Map. Contact Doug Damko, 713-4268, 315 E. Acequia Ave.

☒ Landscape & irrigation improvement plans to be submitted for each phase. Landscape plans will need to comply with the City's street tree ordinance. The locations of street trees near intersections will need to comply with Plate SD-1 of the City improvement standards. A street tree and landscape master plan for all phases of the subdivision will need to be submitted with the initial phase to assist City staff in the formation of the landscape and lighting assessment district.

☒ Dedicate landscape lots to the City that are to be maintained by the Landscape & Lighting District.

☐ Northeast Specific Plan Area: Application for annexation into Northeast District required 75 days prior to Final Map approval.

☒ Written comments required from ditch company. Contacts: James Silva 747-1177 for Modoc, Persian, Watson, Oakes, Flemming, Evans Ditch and Peoples Ditches; Paul Hendrix 686-3425 for Tulare Irrigation Canal, Packwood and Cameron Creeks; Bryce George 747-5601 for Mill Creek and St. John's River.

☒ Final Map & Improvements shall conform to the City's Waterways Policy. ☒ Access required on ditch bank, 12' minimum. ☒ Provide ~~50'~~ not correct 25' wide riparian dedication from top of bank.

☒ Sanitary Sewer master plan for the entire development shall be submitted for approval prior to approval of any portion of the system. The sewer system will need to be extended to the boundaries of the development where future connection and extension is anticipated. The sewer system will need to be sized to serve any future developments that are anticipated to connect to the system.

☒ Grading & Drainage plan required. If the project is phased, then a master plan is required for the entire project area that shall include pipe network sizing and grades and street grades. ☒ Prepared by registered civil engineer or project architect. ☒ All elevations shall be based on the City's benchmark network. Storm run-off from the project shall be handled as follows: a) ☐ directed to the City's existing storm drainage system; b) ☐ directed to a permanent on-site basin; or c) ☒ directed to a temporary on-site basin is required until a connection with adequate capacity is available to the City's storm drainage system. On-site

basin: ***3:1*** maximum side slopes, perimeter fencing required, provide access ramp to bottom for maintenance.

☒Show Oak trees with drip lines and adjacent grade elevations. ☒ Protect Oak trees during construction in accordance with City requirements. ☒A permit is required to remove oak trees. The City will evaluate Oak trees with removal permit applications. ☒ Oak tree evaluations by a certified arborist are required to be submitted to the City in conjunction with the tentative map application. ☒ A pre-construction conference is required. Contact: David Pendergraft, City Arborist, 713-4295

☒Show adjacent property grade elevations on improvement plans. A retaining wall will be required for grade differences greater than 0.5 feet at the property line.

☒Relocate existing utility poles and/or facilities.

☐Underground all existing overhead utilities within the project limits. Existing overhead electrical lines over 50kV shall be exempt from undergrounding.

☒Provide "R" value tests: each at

☒Traffic indexes per city standards:

☒All public streets within the project limits and across the project frontage shall be improved to their full width, subject to available right of way, in accordance with City policies, standards and specifications.

☒All lots shall have separate drive approaches constructed to City Standards.

☒Install street striping as required by the City Engineer.

☒Install sidewalk: ft. wide, with ft. wide parkway on

☒Cluster mailbox supports required at 1 per 2 lots, or use postal unit (contact the Postmaster at 732-8073).

☐Subject to existing Reimbursement Agreement to reimburse prior developer:

☒Abandon existing wells per City of Visalia Code. A building permit is required.

☒Remove existing irrigation lines & dispose off-site. ☒Remove existing leach fields and septic tanks.

☒ Fugitive dust will be controlled in accordance with the applicable rules of San Joaquin Valley Air District's Regulation VIII. Copies of any required permits will be provided to the City.

☒ If the project requires discretionary approval from the City, it may be subject to the San Joaquin Valley Air District's Rule 9510 Indirect Source Review per the rule's applicability criteria. A copy of the approved AIA application will be provided to the City.

☒If the project meets the one acre of disturbance criteria of the State's Storm Water Program, then coverage under General Permit Order 2009-0009-DWQ is required and a Storm Water Pollution Prevention Plan (SWPPP) is needed. A copy of the approved permit and the SWPPP will be provided to the City.

☒Comply with prior comments ☐Resubmit with additional information ☒Redesign required

Additional Comments:

1. Riverway intersection at Shannon Parkway will need to be redesigned to accommodate lengthier 90 degree intersect segment.

2. The Lowrey Ranch development is intended to drain to the Modoc Basin, a future City regional ponding basin. Until such time as the City is able to obtain possession of the Modoc basin, a temporary onsite basin must be provided for this development. Temp. basin design parameters to be further coordinated with Engineering Dept.

3. Cindy street to be redesigned to intersect Shannon Parkway at 90 degrees.

4. Based upon the current City transportation impact fee program, partial reimbursement for Shannon Parkway improvements is applicable with exception to median and median landscaping.

5. All local street intersections at Shannon Parkway and Riverway Drive shall have 30' radius returns. Shannon Parkway and Riverway Drive intersections at Demaree shall have dual ramp 35' radius returns.

6. Demaree cross section is not shown on Site Plan however shall meet current 84' collector standards of 10' parkway, 5' sidewalk, and 5' landscape lot to block wall.

7. There is a discrepancy with Riverway right-of-way cross section and site plan design; also does not address ditch channel. Revise tentative map accordingly.

8. There is a discrepancy between Modoc ditch improvement widths on Site plan and cross section, along south side of Sedona Avenue.

SUMMARY OF APPLICABLE DEVELOPMENT IMPACT FEES

Site Plan No: **13-089 RESUBMITTAL**
Date: **8/21/2013**

Summary of applicable Development Impact Fees to be collected at the time of final/parcel map recordation:

(Preliminary estimate only! Final fees will be based on approved subdivision map & improvements plans and the fee schedule in effect at the time of recordation.)

(Fee Schedule Date:**7/1/2013**)
(Project type for fee rates:**SFD**)

☐ Existing uses may qualify for credits on Development Impact Fees.

FEE ITEM	FEE RATE
☒ Trunk Line Capacity Fee	**$683/UNIT**
☒ Sewer Front Foot Fee	**$37.03/LF (DEMAREE/RIVERWAY)**
☒ Storm Drainage Acquisition Fee	**$2,713.70/AC**
☒ Park Acquisition Fee	**$1,343.20/UNIT**
☐ Northeast Acquisition Fee Total Storm Drainage Block Walls Parkway Landscaping Bike Paths	
☒ Waterways Acquisition Fee	**$2,213.30/AC**

Additional Development Impact Fees will be collected at the time of issuance of building permits.

City Reimbursement:

1.) No reimbursement shall be made except as provided in a written reimbursement agreement between the City and the developer entered into prior to commencement of construction of the subject planned facilities.
2.) Reimbursement is available for the development of arterial/collector streets as shown in the City's Circulation Element and funded in the City's transportation impact fee program. The developer will be reimbursed for construction costs and right of way dedications as outlined in Municipal Code Section 16.44. Reimbursement unit costs will be subject to those unit costs utilized as the basis for the transportation impact fee.
3.) Reimbursement is available for the construction of storm drain trunk lines and sanitary sewer trunk lines shown in the City's Storm Water Master Plan and Sanitary Sewer System Master Plan. The developer will be reimbursed for construction costs associated with the installation of these trunk lines.

Adrian Rubalcaba

SITE PLAN REVIEW COMMENTS

CITY OF VISALIA TRAFFIC SAFETY DIVISION

August 21, 2013

ITEM NO: 3	RESUBMTL
SITE PLAN NO:	SPR13089
PROJECT TITLE:	LOWREY RANCH SUBDIVISION MAP
DESCRIPTION:	TENTATIVE SUBDIVISION MAP WITH 221 SFD UNITS WITH 5 PHASES ON 72 ACRES (R16 ZONED)
APPLICANT:	4 CREEKS INC - AINLEY MATT
PROP. OWNER:	FORGE FAMILY PARTNERSHIP THE
LOCATION:	3629 N DEMAREE ST
APN(S):	077-060-022 077-060-024

THE TRAFFIC DIVISION WILL PROHIBIT ON-STREET PARKING AS DEEMED NECESSARY

☐ No Comments

☐ See Previous Site Plan Comments

☒ Install Street Light(s) per City Standards.

☒ Install Street Name Blades at each intersection..

☐ Install Stop Signs at Locations.

☐ Construct parking per City Standards PK-1 through PK-4.

☐ Construct drive approach per City Standards.

☒ Traffic Impact Study required.

Additional Comments:

- Provide documentation warranting proposed 3-Way Stop
- Alignment of street by Lot 217 must intersect at 90° to Shannon Parkway.
- At Riverway Drive and Shannon Parkway, the alignment of Riverway Drive (straight tangent of 100ft.) must intersect at 90°.

Leslie Blair

13-089R

CITY OF VISALIA
S LID WASTE DIVISION
36 N. BEN MADDOX
VISALIA CA. 93291
713 - 4500

COMMERCIAL BIN SERVICE

ITEM NO: 3 DATE: August 21, 2013

SITE PLAN NO: SPR13089 *RESUBMIT*
PROJECT TITLE: LOWREY RANCH SUBDIVISION MAP
DESCRIPTION: TENTATIVE SUBDIVISION MAP WITH 221 SFD UNITS WITH 5 PHASES ON 72 ACRES (R16 ZONED)
APPLICANT: 4 CREEKS INC - AINLEY MATT
PROP OWNER: FORGE FAMILY PARTNERSHIP THE
LOCATION: 3629 N DEMAREE ST
APN(S): 077-060-022 077-060-024

[ ]	No comments.
[ ]	Same comments as as
[ ]	Revisions required prior to submitting final plans. See comments below.
[ ]	Resubmittal required. See comments below.
[X]	Customer responsible for all cardboard and other bulky recyclables to be broken down be fore disposing of in recycle containers.
[ ]	ALL refuse enclosures must be R-3 or R-4
[ ]	Customer must provide combination or keys for access to locked gates/bins
[ ]	Type of refuse service not indicated.
[ ]	Location of bin enclosure not acceptable. See comments below.
[ ]	Bin enclosure not to city standards double.
[ ]	Inadequate number of bins to provide sufficient service. See comments below.
[ ]	Drive approach too narrow for refuse trucks access. See comments below.
[ ]	Area not adequate for allowing refuse truck turning radius of : Commercial (X) 50 ft. outside 36 ft. inside; Residential ( ) 35 ft. outside, 20 ft. inside.
[X]	Paved areas should be engineered to withstand a 55,000 lb. refuse truck.
[ ]	Bin enclosure gates are required
[ ]	Hammerhead turnaround must be built per city standards.
[ ]	Cul - de - sac must be built per city standards.
[ ]	Bin enclosures are for city refuse containers only. Grease drums or any other items are not allowed to be stored inside bin enclosures.
[ ]	Area in front of refuse enclosure must be marked off indicating no parking
[ ]	Enclosure will have to be designed and located for a STAB service (DIRECT ACCESS)
[ ]	Customer will be required to roll container out to curb for service.
[ ]	Must be a concrete slab in front of enclosure as per city standards

The width of the enclosure by ten(10) feet, minimum of six(6) inches in depth.

☐ Roll off compactor's must have a clearance of 3 feet from any wall on both sides and there must be a minimum of 53 feet clearance in front of the compactor to allow the truck enough room to provide service.

☐ Bin enclosure gates must open 180 degrees and also hinges must be mounted in front of post

see page 2 for instructions

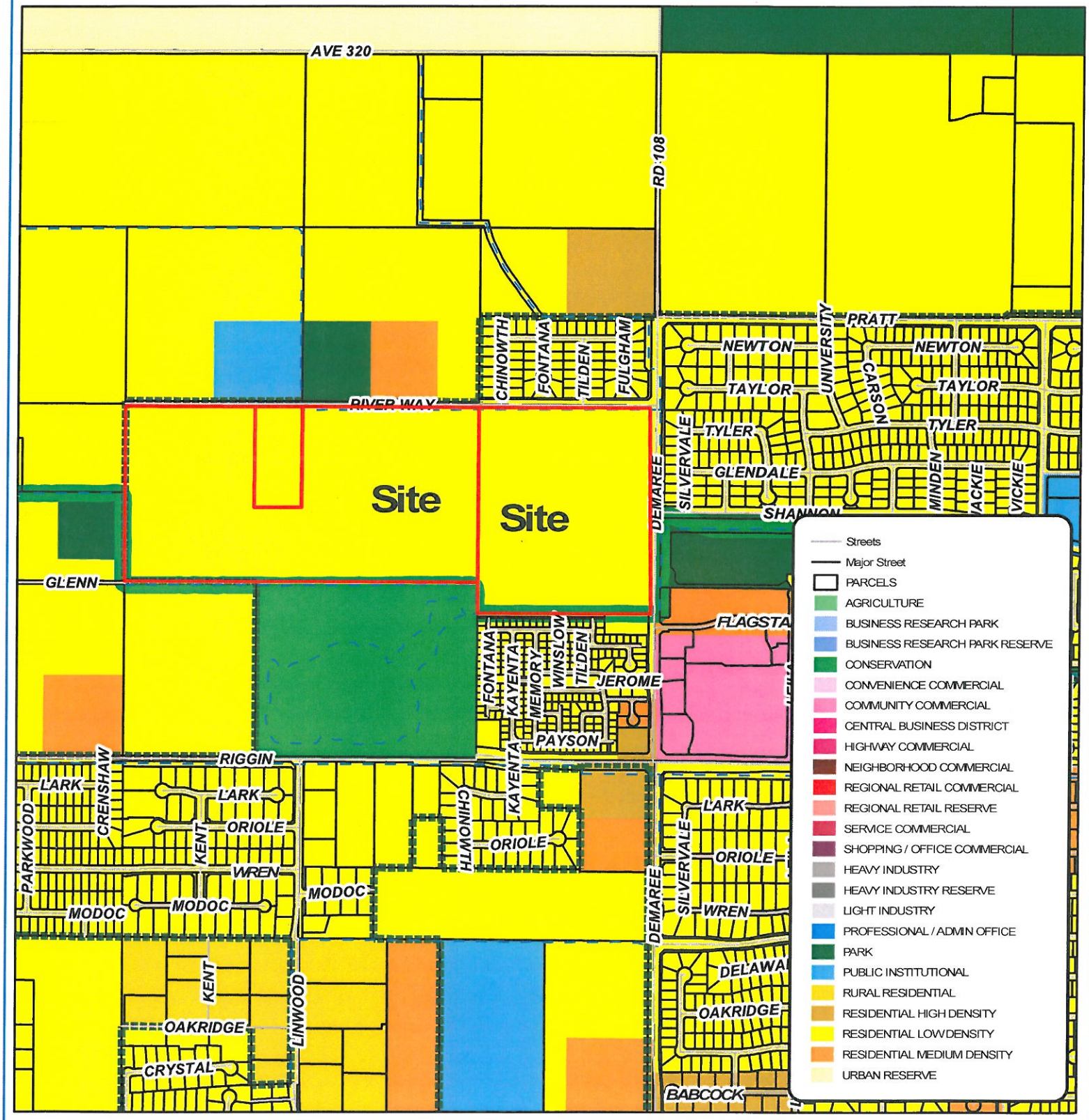
RESIDENTIAL CAN SERVICE OK.

Javier Hernandez, Solid Waste Front Load Supervisor 713-4338

☐

Lowery Ranch Tentative Subdivision Map No. 5550

APN: 077-060-009, 077-060-022 & 077-060-024



General Plan Land Use Map

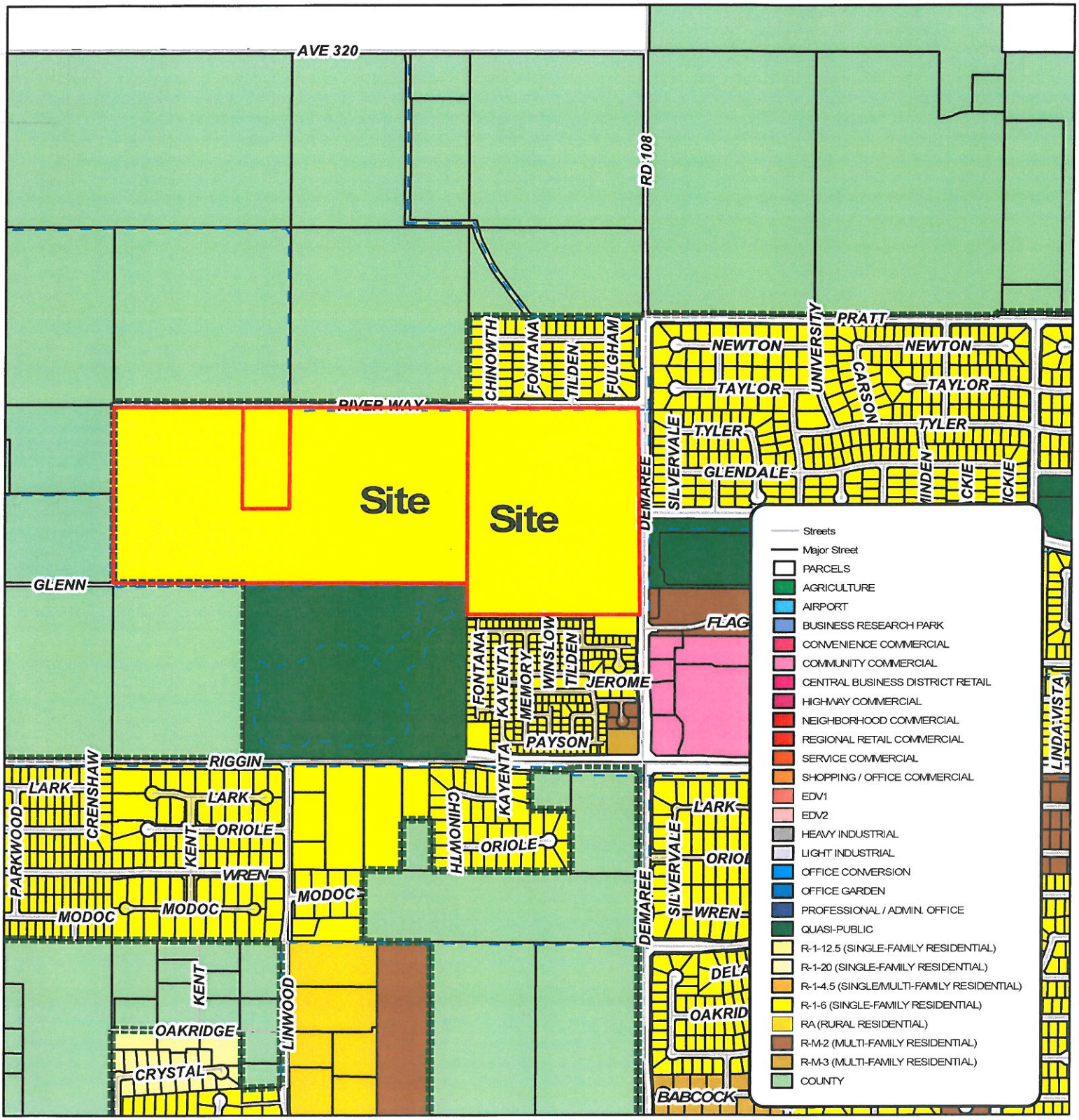
Feet

600 300 0 600 1,200

N W E S

Lowery Ranch Tentative Subdivision Map No. 5550

APN: 077-060-009, 077-060-022 & 077-060-024



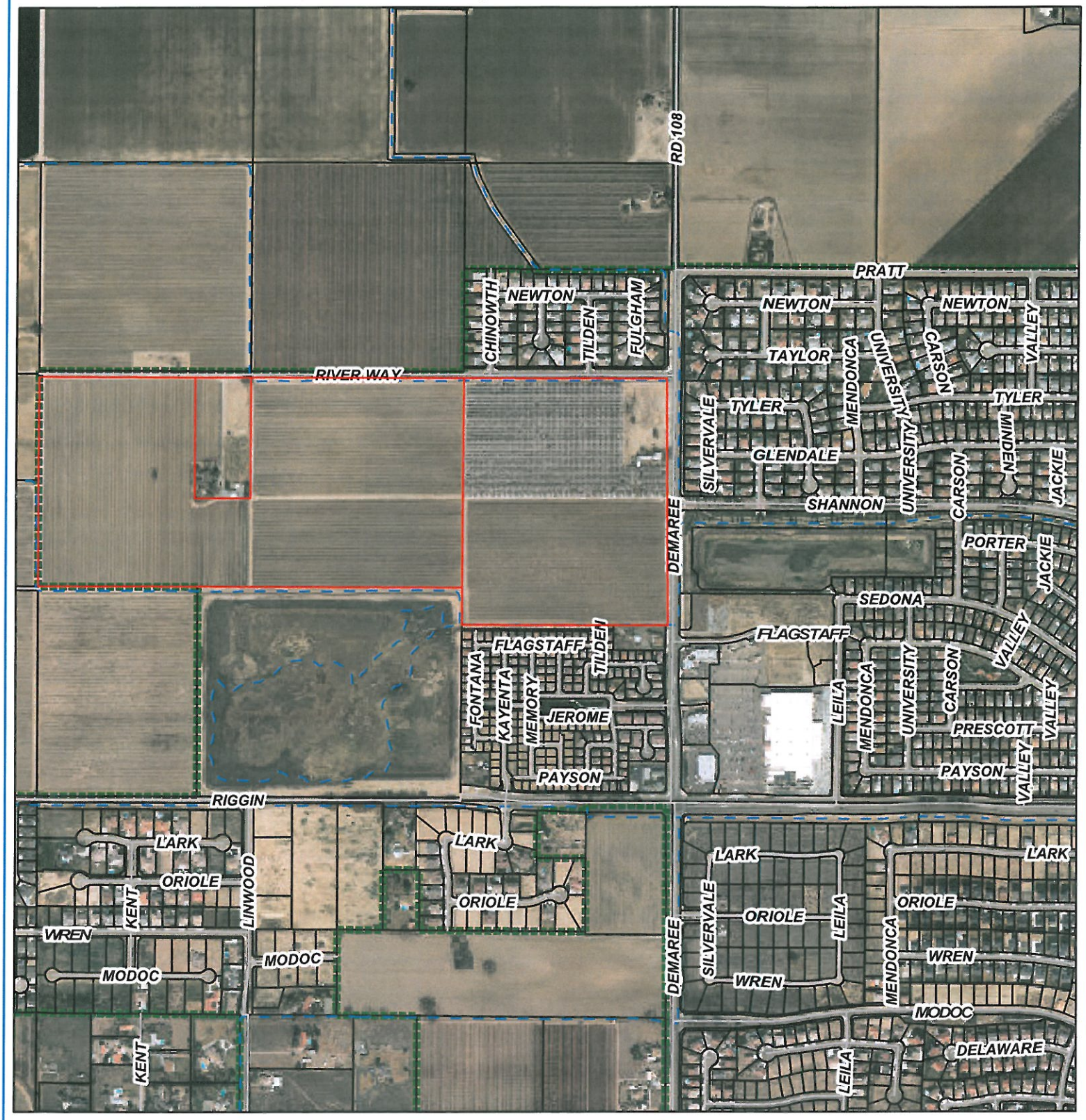
Zoning Map

600 300 0 600 1,200 Feet

N W E S

Lowery Ranch Tentative Subdivision Map No. 5550

APN: 077-060-009, 077-060-022 & 077-060-024



Aerial Photo

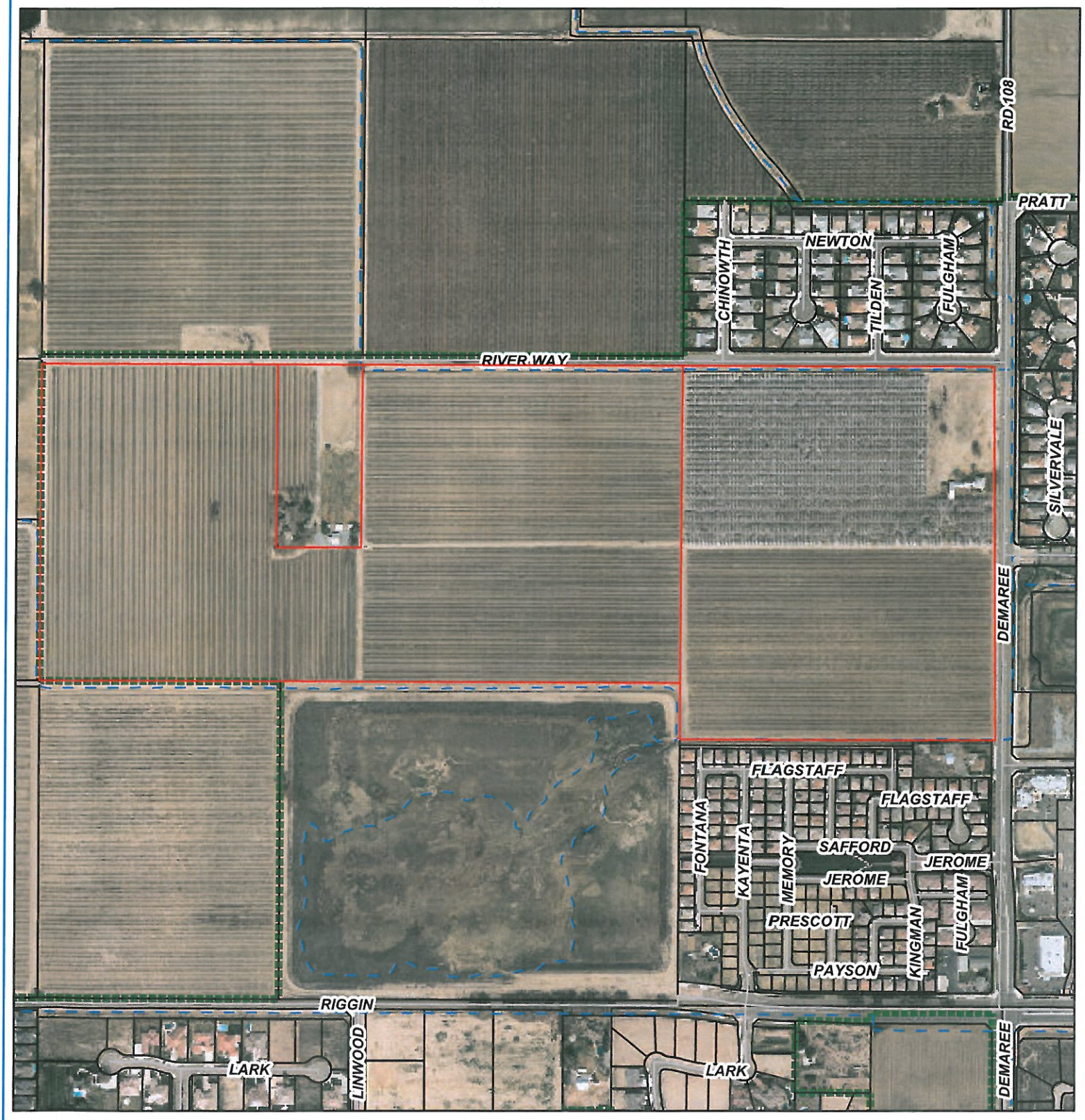
Feet

600 300 0 600 1,200

N W E S

Lowery Ranch Tentative Subdivision Map No. 5550

APN: 077-060-009, 077-060-022 & 077-060-024



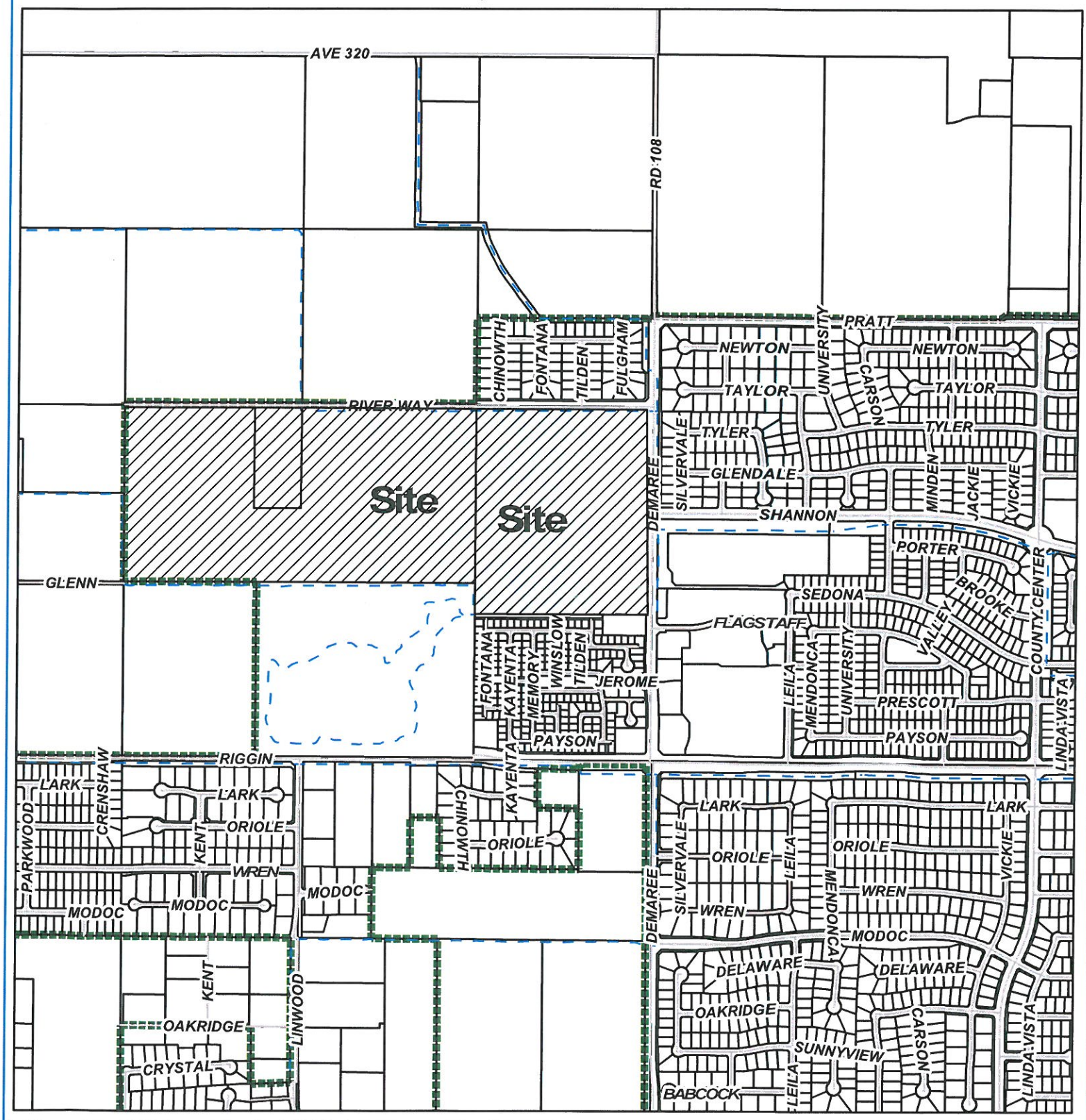
Aerial Photo

600 300 0 600 1,200 Feet

N W E S

Lowery Ranch Tentative Subdivision Map No. 5550

APN: 077-060-009, 077-060-022 & 077-060-024



Vicinity Map

Feet

600 300 0 600 1,200

N

W E

S

Visalia UNIFIED SCHOOL DISTRICT

Raising Expectations

Robert Gröeber
Assistant Superintendent
Administrative Services

To: City of Visalia – Division Planning

From: Robert Gröeber, Assistant Superintendent

Date: 03-12-14

Re: Lowery Ranch Tentative Subdivision Map 5550

Visalia Unified School District has reviewed the above mentioned development.

The present boundary information indicates that this parcel will be served by the following schools:

Elementary: Oak Grove

Middle School: Green Acres

High School: Redwood

Please be aware that as our district grows and new schools are built boundary studies periodically take place and changes could occur. At such time that a boundary study should take place, the district will solicit community input.

Enrollment:

☐ District enrollment indicates that these schools are at capacity.

☒ District enrollment indicates that these schools are not at capacity.

Comments:_____

Traffic/Transportation

☒ No Impact

☐ Some Impact

☐ Significant Impact

Comments:_____

5000 W. Cypress Avenue
Visalia, CA 93277
(559) 730-7529; fax (559) 730-7346

Paul Scheibel

From: Jim Vagim <bitterend@comcast.net>
Sent: Wednesday, March 19, 2014 11:08 AM
To: Paul Scheibel
Cc: m_avedian@yahoo.com
Subject: Lowery Ranch Tentative Subdivision Map

Attn: Project Planner

I am writing to you in regards to the proposed Lowery Ranch Subdivision. I live within the gated community of Avalon at 3230 N. Fontana St. Visalia, California, and I was noticed because I live within 300 feet of the proposed subdivision.

At the north perimeter wall of Avalon, we have two gates to access the bike and pedestrian trail. One at the west end of the wall and the other at the east end of the wall. On the proposed subdivision map, it shows that there is only one proposed bridge to access the bike and pedestrian trail.

I am asking the developer and the Visalia Planning Commission to consider a second bridge in the area of Avalon's east gate. This will give our new neighbors to the north, two locations to enter the trail, and it will give the residents at Avalon, two bridges to access our new neighbors to the north.

If you have any questions concerning my request, please contact me via email, or my personal cell number, (559) 783-3369.

Thank you for your consideration,

--
Jim Vagim

Sent from my iPhone