

To: Weber County

From: Jason Watson, PE, PTOE

FOCUS Engineering & Surveying, LLC

File: Las Americas Eden Boat & RV
Storage

Date: March 9, 2020

Reference: Las Americas Eden Boat & RV Storage Trip Generation Statement

INTRODUCTION

FOCUS Engineering and Surveying, LLC (FOCUS) has been retained to complete a Traffic Study for the Las Americas Eden Boat & RV Storage Development in Eden, Utah. The purpose of this study is to project the number of vehicles that will be entering and exiting the proposed site onto Clark Lane during a typical day. This proposed development will access onto Clark Lane by one access into and out of this site. The site currently consists of natural vegetation and is unoccupied. Exhibit 1 illustrates the vicinity map of the proposed project site.

Exhibit 1 – Project Vicinity Map



Reference: Las Americas Eden Boat & RV Storage

EXISTING CONDITIONS

Surrounding Land Uses

The Las Americas Eden Boat & RV Storage Development is bordered to the west by the North Fork Ogden River, Clark Lane to the south, and Snowcrest Jr. High School to the north and east. There is also an existing residence located to the east of this property. The Las Americas Eden Boat & RV Storage Development is located within the city limits of Eden. The proposed site for this development currently consists of undeveloped land.

Roadways

Clark Lane: Clark Lane currently consists of 22' of asphalt pavement allowing one lane in each direction. Currently the roadway is unstriped. This part of Eden has very minimal traffic along Clark Lane. The pavement ends at the boundary of the Las Americas Eden Boat & RV Storage property. To the west it continues as a dirt road over the North Fork Ogden River to an existing farm house. The posted speed limit is 25 mph.

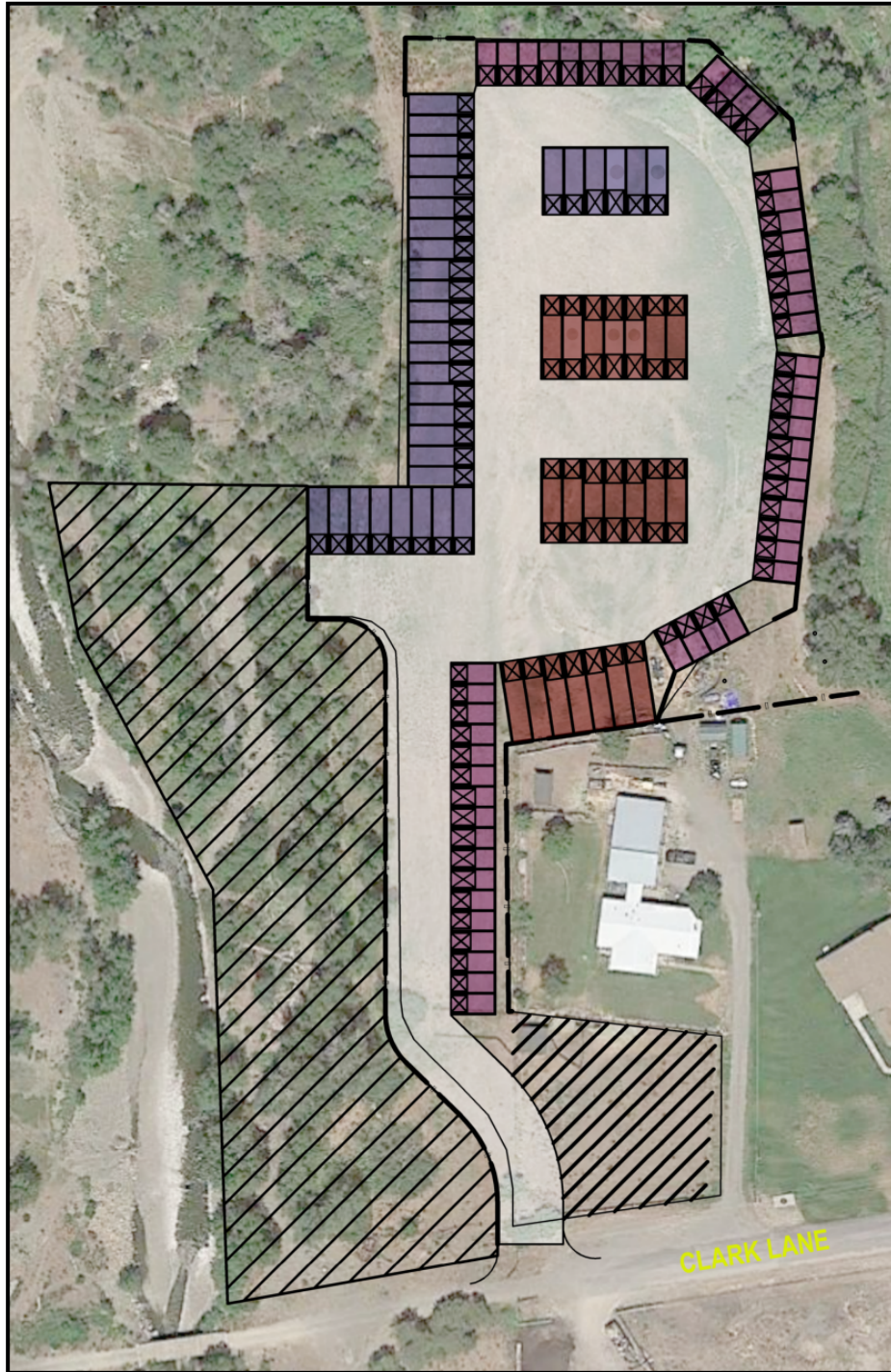
SR-162: SR-162 currently consist of one lane in each direction with occasional left turn lanes for vehicles to access developments adjacent to the highway. Historical traffic counts taken by UDOT illustrate that traffic along SR-162 has grown at roughly 3.8% from 2012 to 2017. The latest traffic volumes available by UDOT, illustrate there are 5,316 vehicles traveling in both directions along SR-162 on an average day. The posted speed limit along SR-162 at the Clark Lane intersection is 40 mph. SR-162 extends north to the Town of Liberty and serves as the main route for vehicles to access Eden and continue south to Ogden Canyon.

PROPOSED SITE CONDITIONS

The proposed Las Americas Eden Boat & RV Storage Development will consist of 108 storage units. These storage units will range from 12'x26' to 12'x50' and will primarily be used to store boats and RV's. All traffic exiting and entering the proposed site will access Clark Lane and travel east to SR-162. It is anticipated this development will be built-out and occupied by 2021. Refer to Exhibit 2 for the proposed layout of the Las Americas Eden Boat & RV Storage Property.

Reference: Las Americas Eden Boat & RV Storage

Exhibit 2 – Site Plan for Las Americas Eden Boat & RV Storage



Reference: Las Americas Eden Boat & RV Storage

TRIP GENERATION

Typically to generate the anticipated number of vehicles entering and exiting a proposed site, the Institute of Transportation Engineer's (ITE) Trip Generation Manual is used. However, for a Boat & RV Storage Facility there have not been any previous studies performed to generate the number of trips entering and exiting a land use of this type. There is not a typical "peak hour" for facilities of this type. Tenants who store their boat or RV tend to come and go at all hours of the day. Therefore, we have contacted similar developments around Pineview Reservoir and also around Bear Lake that will be operating similar to the Las Americas Eden Boat & RV Storage Development to get their estimated number of trips that enter and exit their property on a daily basis. We contacted Sweetwater Storage and Bear Lake Storage located near Bear Lake and Huntsville Storage located in Huntsville. All three of these locations mentioned their peak times are during the summer and on weekends. Most of their tenants who store boats and RV's in the rental unit, access their units at all times throughout the day and there isn't a typical "peak hour". Most will return in the late afternoon to return their watercraft to the storage unit. This makes for a total of 4 trips a day for each user, 2 entering and 2 exiting trips. On an average weekend, the three storage unit facilities mentioned, only see about 10% of their units being accessed. The trips per unit equate to 0.40 total trips per unit with 50% entering and 50% exiting.

Using these number for trip generation for the 108 units at the Las Americas Eden Boat & RV Storage Facility, it is anticipated this development will generate roughly 44 daily trips, with 22 entering and 22 exiting the development throughout an entire day.

The closest Land Use Code from the ITE Trip Generation Manuals is Land Use: 151 – Mini-Warehouse. The description of this land use states, "A *mini-warehouse* is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as "self-storage" facilities. Each unit is physically separated from other units and access is usually provided through an overhead door or other common access point." Although the Las Americas Eden Boat & RV Storage will be similar to this type of land use, each unit will primarily be used for boat and RV storage and not necessarily the storage of goods. To generate trips using this land use, the average rate per 100 storage units is 17.96 for an average weekday and 16.29 for an average Saturday. This also uses a directional distribution of 50% entering and 50% exiting each day. Using these rates and the proposed 108 units for the Las Americas Eden Boat & RV Storage Facility, it would generate 20 total trips on an average weekday, with 10 entering and 10 exiting and 18

Reference: Las Americas Eden Boat & RV Storage

total trips on an average Saturday with 9 entering and 9 exiting. Refer to the appendix for the ITE Trip Generation Rates.

Using the rates that have been generated from gathering information from existing facilities near Pineview Reservoir and Bear Lake, will generate slightly higher traffic volumes than using the ITE Trip Generations Rates, which don't exactly match this type of land use. It is estimated the number of trips that will be generated from the Las Americas Eden Boat & RV Storage Facility will have very minimal impact to the existing flow of traffic along Clark Lane and SR-162. With minimal traffic along SR-162, there will be enough gaps in traffic that vehicles exiting the storage facility will have sufficient time to make a safe movement entering and exiting the facility and SR-162.

CONCLUSION

Based on the provided site plan, the Las Americas Eden Boat & RV Storage will consist of 108 Storage Units, primarily for boats and RV's. As vehicles enter and exit the storage facility, 100% will exit the site making a left turn onto Clark Lane to head east to SR-162. At SR-162 it is anticipated 100% of the trips will make a right turn to head south on SR-162 toward Pineview Reservoir. By the end of the day, it is assumed these vehicles will return to the storage facility making a left turn from SR-162 onto Clark Lane and then turn right into the storage facility. Traffic volumes along SR-162 are minimal. UDOT traffic counts along this highway illustrate that the Average Daily Traffic is 5,316 and has been growing at a rate less than 4% since 2012. From conversations and research that was gathered from existing boat storage facilities around Bear Lake and Pineview Reservoir, it is anticipated the Las Americas Eden Boat & RV Storage facility will generate 44 daily trips on a typical weekend day during the Summer months, with 50% of those trips entering (22 vehicles) and 50% exiting the site (22 vehicles). These volumes are anticipated to occur over a full day.

With the minimal amount of traffic along this rural stretch of SR-162 and the minimal amount of vehicles entering and exiting the site at the proposed access location, it is concluded that traffic generated by this storage facility will have very minimal impact to the traffic along Clark Lane and SR-162. There will be enough gaps in the flow of traffic along SR-162 that the vehicles exiting the proposed site will be able to safely access the highway.

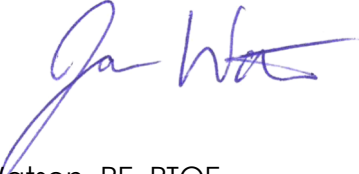
Reference: Las Americas Eden Boat & RV Storage

It is proposed that the access to the proposed site along Clark Lane be improved to accommodate a wide enough turning radius for vehicles pulling a trailer and longer RV's to safely enter and exit the proposed site. The access to the site should be designed and constructed to meet County Standards with appropriate signing and striping.

Please feel free to contact me with any questions or comments.

Sincerely,

FOCUS ENGINEERING & SURVEYING, LLC



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