

#### **Technical Memorandum**

To: El Paso County Planning and Community Development

From: SMH Consultants, Brett Louk

Date: 02/07/2023

Subject: Guntzelman Porcelain Pines Minor Subdivision Traffic Memo - PCD File No.

#### INTRODUCTION

SMH Consultants P.A. (SMH) was asked to prepare a traffic memo for the proposed Guntzelman Porcelain Pines Minor Subdivision. The intent of the traffic memo is to discuss the potential impacts, to the adjacent road network, of the proposed development. The traffic memo will satisfy the requirements as outlined in the El Paso County Engineering Criteria Manual (ECM).

#### METHODOLOGY

Per the ECM, a Traffic Impact Study (TIS) is not required if the following criteria are satisfied.

- Vehicular Traffic: (1) Daily vehicle trip-end generation is less than 100 or the peak hour trip generation is less than 10; (2) there are no additional proposed minor or major roadway intersections on major collectors, arterials or State Highways; (3) the increase in the number of vehicular trips does not exceed the existing trip generation by more than 10 peak hour trips or 100 daily trip ends; (4) the change in the type of traffic to be generated (i.e. the addition of truck traffic) does not adversely affect the traffic currently planned for and accompanied within, and adjacent to, the property; (5) acceptable LOS on the adjacent public roadways, accesses, and intersections will be maintained; (6) no roadway or intersection in the immediate vicinity has a history of safety or accident problems; and (7) there is no change of land use with access to a State Highway.
- Pedestrian Traffic: Paved pedestrian facilities exist or will be constructed on, or adjacent to, the site; or, the proposed use will not generate any new pedestrian traffic.
- Bicycle Traffic: Paved bicycle lanes or paths exist or will be constructed on, or adjacent to, the site; or, the proposed use will not generate any new bicycle traffic.

### **EXISTING CONDITIONS**

The existing site is located at TBD Nampa Road, is approximately 35.16 acres in size, and is zoned R-T. The existing site gains access from Nampa Road. The existing site is vacant and therefore generates no peak hour or daily trips. There is no pedestrian or bicycle traffic generated by the existing site, nor any of these facilities existing adjacent

to the site.

#### PROPOSED CONDITIONS

The site is proposed to be subdivided into four single-family residential lots. The four lots will be served by a private road to be constructed to the County's driveway standards. The proposed site will generate 10 trips in the A.M. peak hour, 5 trips in the P.M. peak hour, and 52 daily trips. This equates to a net increase of 10 trips in the A.M. peak hour, 5 trips in the P.M. peak hour, and 52 daily trips. There are no proposed minor or major roadway intersections on major collectors, arterials, or State Highways; the acceptable LOS on adjacent public roadways, accesses, and intersections will be maintained; there are no roadways or intersections in the immediate vicinity with a history of safety or accident problems; and there is no change of land use with access to a State Highway. The proposed site will not generate any new pedestrian and bicycle traffic.

### Traffic Impact Fee

The traffic impact fee for a development in El Paso County is \$3,830 per single-family dwelling. This proposed development will consist of four new single-family dwellings.

Traffic impact fees: 4 single family dwelling units x \$3,830/dwelling unit = \$15,320

The Subdivider(s) agrees on behalf of him/herself and any developer or builder successors and assignees that Subdivider and/or said successors and assigns shall be required to pay traffic impact fees in accordance with the El Paso County Road Impact Fee Program Resolution (Resolution No. 16-454), or any amendments thereto, at or prior to the time of building permit submittals. The fee obligation, if not paid at final plat recording, shall be documented on all sales documents and on plat notes to ensure that a title search would find the fee obligation before sale of the property.

### SUMMARY & RECOMMENDATION

In summary, it can be seen that the proposed subdivision meets all the criteria for not requiring a TIS to be submitted.

From a traffic perspective, the proposed development is an acceptable use of the property identified. The proposed development will have minimal impact on the adjacent road network.

## **Single-Family Detached Housing**

(210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

**AM Peak Hour of Generator** 

Setting/Location: General Urban/Suburban

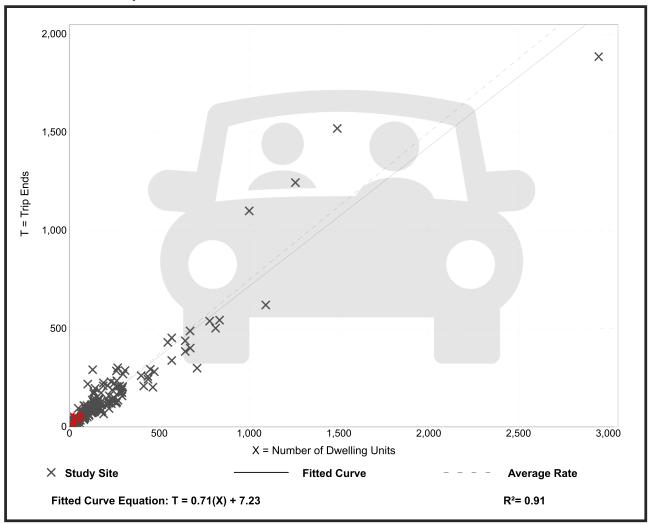
Number of Studies: 169 Avg. Num. of Dwelling Units: 217

Directional Distribution: 26% entering, 74% exiting

## **Vehicle Trip Generation per Dwelling Unit**

Average Rate	Range of Rates	Standard Deviation
0.75	0.34 - 2.27	0.25

## **Data Plot and Equation**



## **Single-Family Detached Housing**

(210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

**PM Peak Hour of Generator** 

Setting/Location: General Urban/Suburban

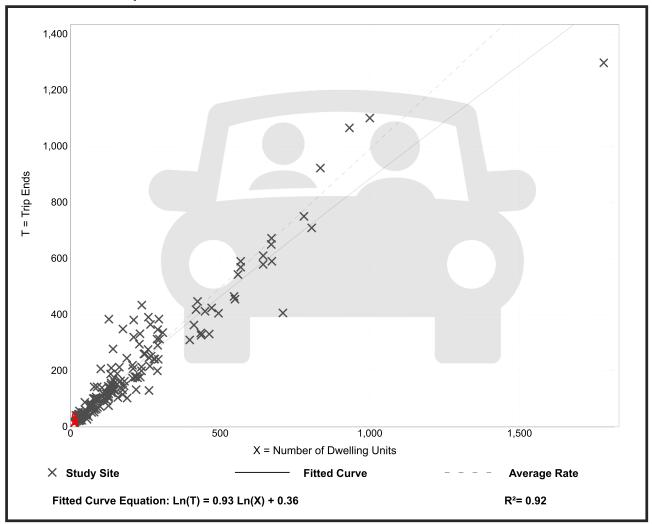
Number of Studies: 178 Avg. Num. of Dwelling Units: 203

Directional Distribution: 64% entering, 36% exiting

## **Vehicle Trip Generation per Dwelling Unit**

Average Rate	Range of Rates	Standard Deviation
0.99	0.49 - 2.98	0.28

## **Data Plot and Equation**



# **Single-Family Detached Housing**

(210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 174 Avg. Num. of Dwelling Units: 246

Directional Distribution: 50% entering, 50% exiting

## **Vehicle Trip Generation per Dwelling Unit**

Average Rate	Range of Rates	Standard Deviation	
9.43	4.45 - 22.61	2.13	

## **Data Plot and Equation**

