



SPEED ZONE SURVEY

CARSON CROSSING DRIVE (No. 2791)

FROM WHITE ROCK ROAD (NO. 34) TO GOLDEN FOOTHILL PARKWAY (NO. 1124)
(NEW SPEED ZONE)

Reviewed by the Traffic Advisory Committee on NOV - 7 2024

☒ COMMITTEE APPROVED STAFF'S RECOMMENDATION.

APPROVED

☐ COMMITTEE REQUESTED FURTHER ACTION.

APR 30 2025

Action REEVALUATE SPEED ZONE DUE TO DEVELOPMENT OF PARK
AREAS AND HIGHER TRAFFIC VOLUME, BRING BACK TO
4/30/25
TAC SPRING 2025. APPROVED 35 MPH SPEED ZONE ENTIRE
LENGTH AND 10 TON WEIGHT LIMIT RESTRICTION. "(C) CARSON CROSSING
DRIVE (No. 2791) WEIGHT LIMIT OF 20,000 POUNDS (10 TONS) FROM WHITE ROCK ROAD (No. 34)
TO GOLDEN FOOTHILL PARKWAY (No. 1124)"

DEPARTMENT OF TRANSPORTATION
ENGINEERING AND TRAFFIC SURVEY

Location: Carson Crossing Drive (No. 2791) from White Rock Road (No. 34) to Golden Foothill Parkway (No. 1124)

Subject: Speed Zone Survey: New Speed Zone

Date: July 15, 2024

2023 ENGINEERING AND TRAFFIC SURVEY FOR SPEED LIMITS

1. INTRODUCTION

The California Vehicle Code, Section 22358, allows local authorities to establish speed limits based on an “Engineering and Traffic Survey”. The Vehicle Code goes on, in Section 40801 to prohibit the use of “speed traps” for the purpose of speed enforcement and, in Section 40802, defines “speed trap”. Section 40802 also indicates that an “Engineering and Traffic Survey” is required where speed enforcement involves the use of radar and establishes the frequency with which surveys must be conducted for continued radar enforcement. In order to comply with the provisions of the Vehicle Code, and ensure that radar enforced speed zones are based on recent data, the County of El Dorado has established a practice of conducting engineering and traffic survey updates based on a cycle length of five (5) years or less.

In Section 627, the Vehicle Code provides a definition for “Engineering and Traffic Survey”, and states that an “Engineering and Traffic Survey” shall include:

1. Prevailing speeds as determined by traffic engineering measurements.
2. Accident records.
3. Highway, traffic, and roadside conditions not readily apparent to the driver.

In addition, the 2001 edition of the Vehicle Code added that residential density, pedestrian, and bicycle safety may be considered.

While the California Vehicle Code is silent regarding the relationship of the 85th percentile speed to the posted speed, the California Manual on Uniform Traffic Control Devices (CAMUTCD), Section 2B.13, “Speed Limit Sign”, “Engineering and Traffic Survey”, states in part:

“When a speed limit is to be posted, it shall be established at the nearest 5 mph increment of the 85th percentile speed of free-flowing traffic . . . [except] the posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th percentile speed . . .”

Section 2B.13 further states in part:

“If the speed limit to be posted has had the 5 mph reduction applied, then an E&TS shall document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer. The reasons for the lower speed limit shall comply with CVC Sections 627 and 22358.5.

All “Engineering and Traffic Surveys” performed by the El Dorado County Department of Transportation for establishing speed limits, stop controlled intersections, crosswalks, painted traffic curbs, regulatory traffic signage, and other traffic control devices, use the current publications of the California Vehicle Code, CAMUTCD, California Manual for Setting Speed Limits, applicable County Ordinance Code, and other Civil Engineering publications and California Codes pertaining to the establishment and placement of traffic control devices.

2. CARSON CROSSING DRIVE (No. 2791) FROM WHITE ROCK ROAD (NO. 34) TO GOLDEN FOOTHILL PARKWAY (NO. 1124) (NEW SPEED ZONE)

This Engineering and Traffic Survey was initiated in response to a change in roadway characteristics due to El Dorado County accepting ownership of a previously private section of Carson Crossing Drive. The proposed Carson Crossing Speed Zone consists of two segments. Segment one was accepted into the County Maintained Mileage System on July 18th, 2006. El Dorado County accepted ownership of Segment two on March 7th, 2023.

Carson Crossing Drive is a two to four lane, Local Road, 1.58 miles in length serving an average of 2,497 vehicles per day. There has been one (1) reported collision with one (1) injury and zero (0) fatalities in the past three years, resulting in a collision rate of 0.30 Collisions per Million Vehicle Miles. Carson Crossing Drive functions as a collector road connecting several age restricted subdivisions to major collector and arterial roads.

- 85th percentile speeds of forty-seven (47) and forty-five (45) miles per hour were recorded.
- The calculated average daily traffic volume was 2,497 vehicles per day.
- Roadway is mostly straight with a few curves. The grades are level to gentle.
- There are zero (0) intersecting County maintained roads.
- Carson Crossing Drive functions as a collector. It provides access to several age restricted subdivisions as well as a community park.
- There was one (1) collision reported on Carson Crossing Drive for the three (3) year period from January 1, 2020, through December 31, 2022, with a collision rate of 0.30 Collisions per Million Vehicle Miles. This collision rate is lower than the countywide benchmark of 1.70 collisions per Million Vehicle Miles.
- Staff observed zero (0) bicyclists, and four (4) pedestrians utilizing Carson Crossing Drive during the field review that lasted approximately two (2) hours.
- The existing 85th percentile speeds of forty-seven (47) and forty-five (45) miles per hour, justifies, in accordance with the CAMUTCD, a radar enforced forty-five (45) miles per hour speed zone.

<i>2023 SITE LOCATIONS</i>	<i>MILE POST</i>	<i>EXISTING SPEED LIMIT</i>	<i>85% SPEED</i>	<i>10 MPH PACE</i>	<i>% IN PACE SPEED</i>
<i>At Mission Canyon Drive North</i>	<i>0.62</i>	<i>55 mph</i>	<i>47 mph</i>	<i>38-47 mph</i>	<i>77.4%</i>
<i>At De La Vina Drive</i>	<i>0.84</i>	<i>55 mph</i>	<i>45 mph</i>	<i>36-45 mph</i>	<i>75.9%</i>

RECOMMENDATION:

Based on the findings of this survey it is recommended that the Traffic Advisory Committee approve the following.

1. The Traffic Advisory Committee approves the speed zone with a limit of forty-five (45) miles per hour on Carson Crossing Drive from White Rock Road to Golden Foothill Parkway.
2. Following approval by the Traffic Advisory Committee, the following resolution be prepared and referred to the Board of Supervisors with a recommendation for adoption:

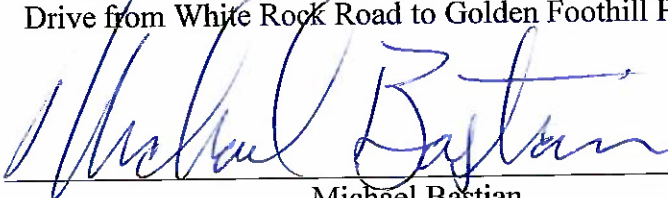
BE IT RESOLVED that resolution No. 247-81, which establishes speed restrictions pursuant to Section 10.08.020 of the El Dorado County Ordinance Code, is amended as follows:

ADD:

“(**) Carson Crossing Drive (No. 2791) forty-five (45) miles per hour from White Rock Road (No. 34) to Golden Foothill Parkway. (No. 1124).”

3. That following the adoption of the sanctioning Resolution by the County of El Dorado Board of Supervisors, R2-1 (45) (Forty-Five Mile per Hour signs) and R48 (CA) (Radar Enforced) signs be installed on the east and westbound lanes of Carson Crossing Drive between White Rock Road and Golden Foothill Parkway.
4. That the California Highway Patrol utilize radar enforcement on Carson Crossing Drive from White Rock Road to Golden Foothill Parkway.

Prepared by:



Michael Bastian
Senior Engineering Technician

APPROVED BY: _____


Rafael Martinez, TE, Director
El Dorado County Department of Transportation

on _____

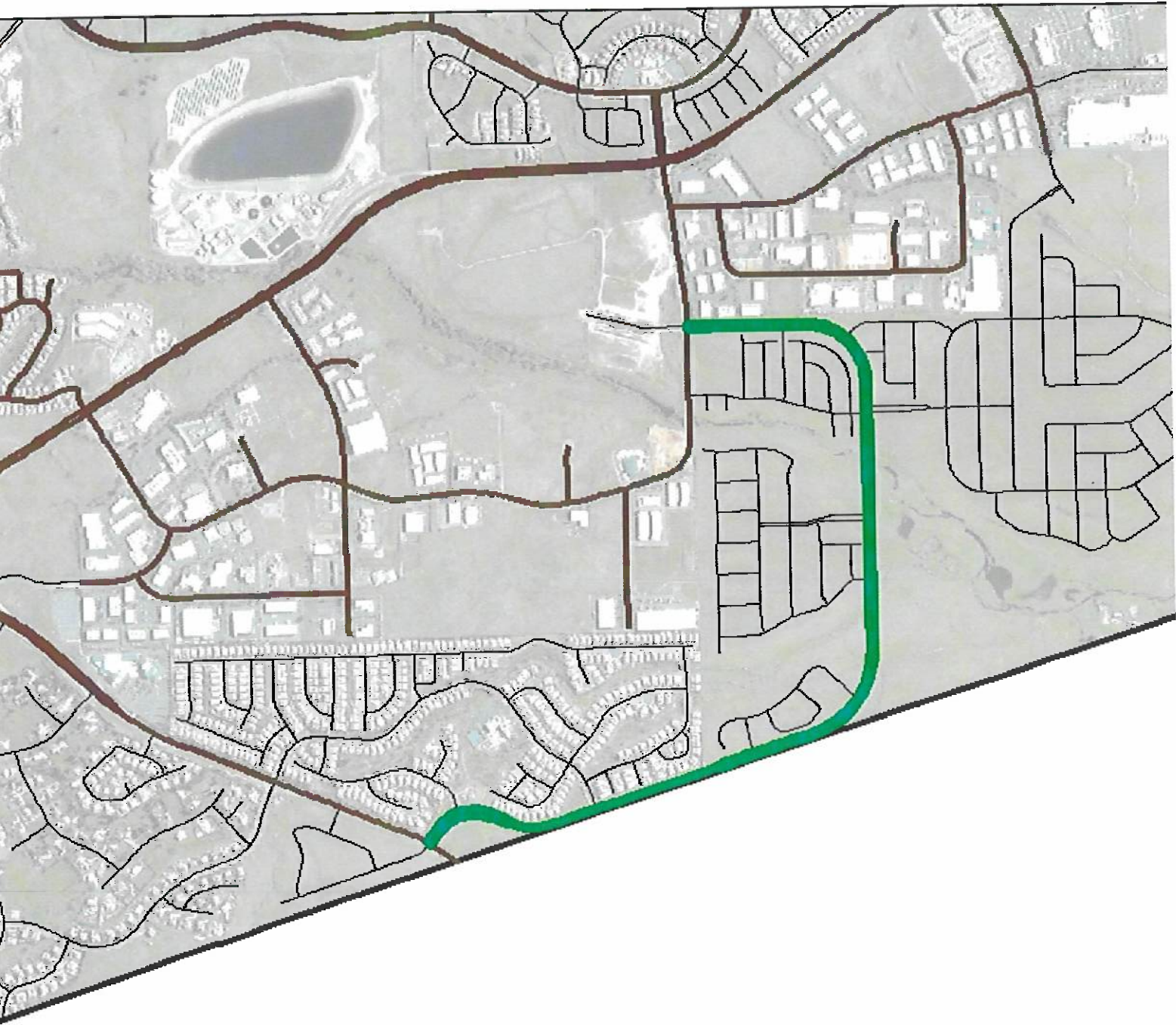
10/29/24
Date

Attachments:

Vicinity Map (1 page)

Photos (2 pages)

Speed Surveys (2 pages)



**CARSON CROSSING DRIVE
MP 0.62
LOOKING NORTH**



**CARSON CROSSING DRIVE
MP 0.84
LOOKING EAST**



MISSION CANYON RD SOUTH to DE LA VINA DR

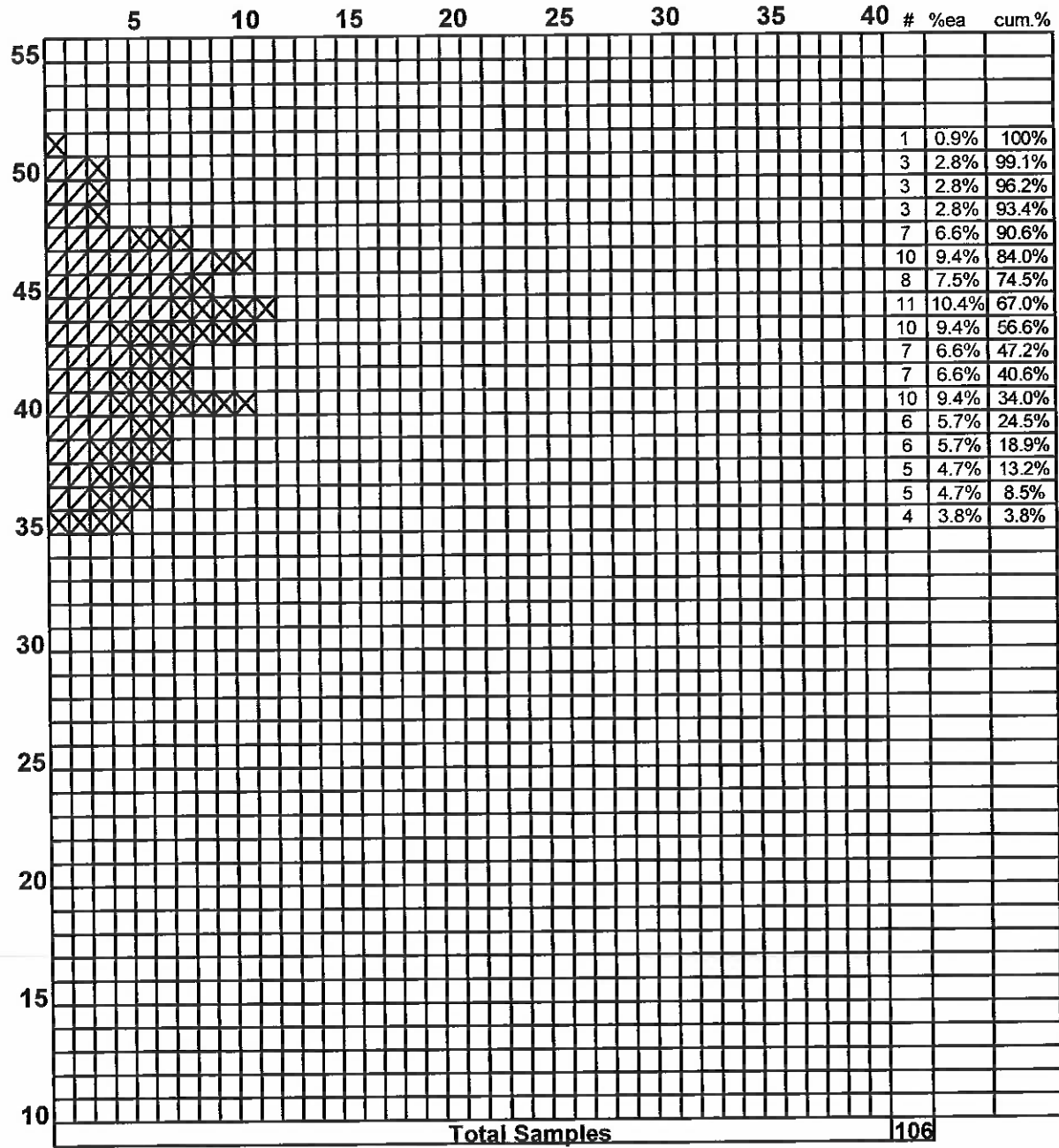
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**County of El Dorado
Transportation Division**

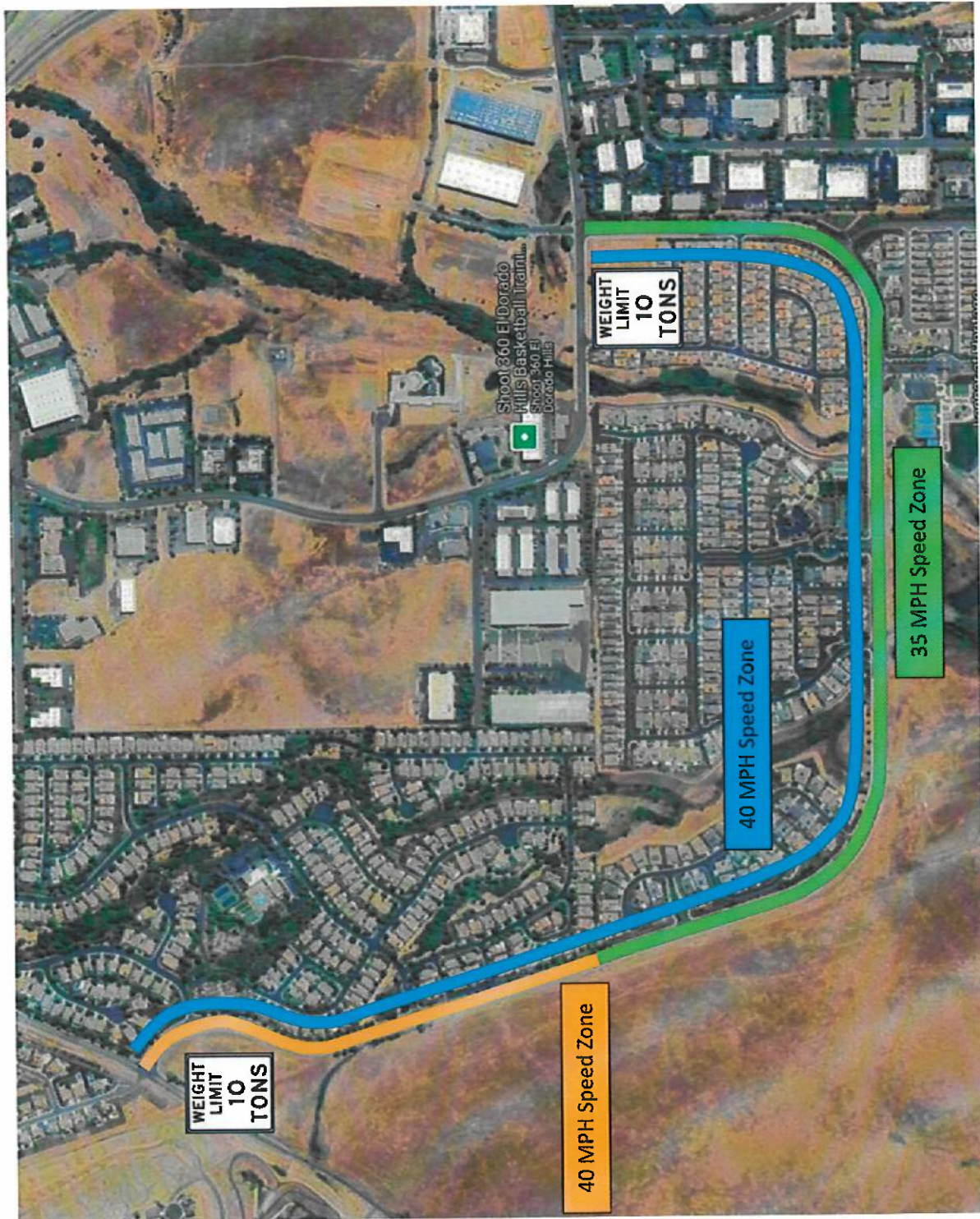
CARSON CROSSING DR MP MP 0.62

MISSION CANYON DR NORTH to MISSION CANYON DR SOUTH

X=West /=East



<u>47</u>	<u>6/28/2023</u>	12:10
<u>43</u>	<u>Clear</u>	13:00
<u>38</u>	Good	55
<u>38-47</u>	<u>M. BASTIAN</u>	
<u>82</u>	TWO PEDESTRIANS AND NO BIKES	
<u>77.4%</u>		





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APPROVED BY:


Rafael Martinez, TE, Director
El Dorado County Department of Transportation

on

10/29/24

Date

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**CARSON CROSSING DRIVE
MP 0.62
LOOKING NORTH**



