

Technical Memorandum No.5

March 11, 2019

To:

Lily Toy

City of Redding Planning Division

Zach Stinger, EIT

Bruce Grove, SHN

Project:

Dignity Mercy Medical Center

Redding North State Pavilion

From:

Russ Wenham, PE, TE, PTOE

Ref/Job No.:

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CC:

J. Lofton Moore, Dignity Health

File No.:

C1966MEM009

Subject:

Potential Traffic Impacts and Mitigations for Mercy Oaks Alternative Project



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R.E. #TR 2494

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1. Introduction

Dignity Health has retained GHD to prepare a Technical Memorandum presenting a summary of the potential traffic impacts of the buildout of the *Mercy Oaks Alternative* to the Dignity Mercy Medical Center Redding North State Pavilion Traffic Impact Analysis Report (dated October 2018), herein "TIAR". This alternative assumes the proposed project is implemented at 100 Mercy Oaks Drive, Redding, California, which is directly accessed from College View Drive.

This alternate site is located east of Interstate 5, south of State Highway 299 and west of Old Oregon Trail. Regional access to the site is via State Route (SR) 299 to either the Churn Creek Road interchange to the west or to the Old Oregon Trail interchange to the east.

College View Drive parallels SR-299 and provides a linkage between Churn Creek Road and Old Oregon Trail. Additionally, Shasta View Drive intersects with College View Drive at the approximate mid-point between Churn Creek Road and Old Oregon Trail.

2. Mercy Oaks Alternative Project Trip Generation

The trip generation for the *Mercy Oaks Alternative Project* is the same as the trip generation presented in the TIAR.

Table 2.1 presents the trip generation rates for AM and PM peak hours for the *Mercy Oaks Alternative*.



Table 2.1: Alternative Trip Distribution

Land Use Category (ITE Code)	Unit ¹	Daily Trip Rate/Unit ²	AM Peak Total	Hour Trip	Rate/Unit Out %	PM Peak Total	Hour Trip	Rate/Unit Out %
Medical-Dental Office Building (720)	ksf	36.13	2.39	79%	21%	2.54	24%	76%
	Quantity	Daily	AM Peak Hour Trips			PM Peak Hour Trips		
Project Name	(Units)	Trips	Total	In	Out	Total	In	Out
Dignity Health Medical Center Redding	130	4,697	311	245	66	330	79	251
Net New Project Trips		4,697	311	245	66	330	79	251

Notes:

As presented in Table 2.1, the *Mercy Oaks Alternative* is projected to generate up to approximately 311 AM and 330 PM peak hour trips.

3. Potential Project Impacts

The potential project impacts can be identified based on other studies performed by GHD in the surrounding area and the trip generation presented above. The following are intersections that would likely be impacted by the proposed alternative, and potential mitigations:

College View Drive & Shasta View Drive

Mitigation: Install a traffic signal or roundabout

Old Oregon Trail & College View Drive

· Mitigation: Install a traffic signal or roundabout

Churn Creek Road & College View Drive

Mitigation: Add additional lanes

Hawley Road & SR 299 EB Ramps

Mitigation: Add additional lanes

Hawley Road & SR 299 WB Ramps

Mitigation: Install a traffic signal or roundabout

Churn Creek Road & Canby Road

Mitigation: Add additional lanes

In addition to the intersections listed above, Shasta View Drive could potentially have a mitigation south of College View Drive.

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^{1.} 1 ksf = 1,000 square feet

^{2.} Trip rates based on ITE Trip Generation Manual 9th edition average rates for Daily and AM Peak Hour conditions. Trip rates for PM Peak Hour were generated using driveway counts