

May 8, 2019

**TECHNICAL MEMORANDUM**

Ms. Sheila Amparo, PE  
Project Manager  
BKF Engineers  
4675 MacArthur Court, Suite 400  
Newport Beach, CA 92660

**Subject: Parking Analysis of Mines Avenue in the City of Pico Rivera**

Dear Ms. Amparo:

This purpose of this technical memorandum is to analyze the impact to the existing parking occupancy due to the proposed construction of the Pico Rivera Regional Bikeway. Included in the analysis will be alternative solutions for temporary parking during the above-mentioned construction project.

**Existing Conditions:**

The proposed Pico Rivera Regional Bikeway Project will take place on Mines Avenue in the City of Pico Rivera. The study corridor limits are along Mines Avenue from Paramount Boulevard to the San Gabriel River Path and is approximately 6,000 feet in length. Mines Avenue is an east-west corridor with one lane in each direction. The area surrounding Mines Avenue is mainly residential with the exception of the intersection of Mines Avenue and Rosemead Boulevard which consists of commercial businesses, Smith Park, and the Pico Rivera Library. This section of Mines Avenue has public parking the entire length of the corridor and includes parallel parking from Paramount Boulevard to Rosemead Boulevard and Lindsey Avenue to Cord Avenue, and angled parking from Rosemead Boulevard to Lindsay Avenue and Cord Avenue to the San Gabriel River Path. The parking along the corridor is mainly used for the residences in the area and their guests. The dwelling units in this area on average occupy 2 spaces each. The existing parking occupancy data for Mines Avenue were conducted by Counts Unlimited on Thursday April 25<sup>th</sup>, 2019 every half hour for a 12-hour period from 5:00pm to 5:00am. The total number of spaces on Mines Avenue, within the project area, is approximately 446 spaces with a variance of roughly 5-10 spaces due to residents utilizing the available space for parallel parking. A summary of the sections of the corridor with the lowest occupancy and the highest occupancy can be seen below in Tables 1 and 2. The remaining sections have an average of 50% or less occupancy at any given time.

**Table 1: Lowest Occupancy Parking on Mines Avenue**

| <b>Segment</b>                           | <b>Time</b>      | <b>% Occupied</b> |
|--|------------------|-------------------|
| 1. Paramount Boulevard to Paramount Lane | 12:00am – 5:00am | 0%                |
| 2. Paramount Lane to Calico Avenue       | 5:00pm – 5:00am  | 0% - 50%          |
| 3. Calico Avenue to Rosemead Boulevard   | 5:00pm – 5:00am  | 20% - 60%         |

**Table 2: Highest Occupancy Parking on Mines Avenue**

| <b>Segment</b>                      | <b>Time</b>      | <b>% Occupied</b> |
|-------------------------------------|------------------|-------------------|
| 1. Passons Boulevard to Cord Avenue | 5:00pm – 5:00am  | 70% - 90%         |
| 2. Cord Avenue to Rimbank Avenue    | 5:00pm – 11:30pm | 65% - 100%        |

**Proposed Conditions:**

The proposed construction of the Pico Rivera Regional Bikeway along Mines Avenue consists of reconstructing the corridor to allow for a Class IV Bikeway with a bio-swale barrier to collect and clean the initial rain runoff of the road and to separate the bike path from the adjacent traffic. The bikeway is designed to run along the center of the road with the bio-swales running along each side of the bike path. The bio-swale will be curbed on both sides creating a raised median. The future roadway geometry also includes one through lane in each direction. The proposed through lanes vary between a 11.5 foot width when traveling through the angled parking sections and 14 foot width through the parallel parking sections. Both angled and parallel parking will be available along the right-side curbs of each through lane. The proposed parking along Mines Avenue calculates to a total of 399 available parking spaces, and was measured using a 30° angled parking and 28 feet per vehicle for parallel parking. The Mines Avenue study corridor is approximately 6,000 feet and the construction of the project is expected to be completed in three segments of 2,000 feet each.

**Temporary Parking:**

During construction the contractor will have the task of directing residents to available parking in other areas of the neighborhood. After considering the planned phases of construction, there will be approximately 4,000 feet of Mines Avenue that will not be under construction at any given time. One solution for temporary parking is to direct traffic to the unaffected sections of the corridor to utilize the unoccupied parking spaces in these areas. Based on the sample of existing counts collected on Mines Avenue there is no time when all spaces were occupied and the parking needs can be absorbed by the remaining sections of the project area. Another temporary parking solution is to direct traffic onto the surrounding streets where on-street parking is less impacted due to their use of existing driveways and



garages. During construction the Contractor should coordinate with the City to utilize any available parking at Smith Park for the Mines Avenue resident overflow parking.

**Conclusion:**

The existing parking conditions of Mines Avenue within the study limits have only one section mentioned above in Table 2 (Cord Avenue – Rimbank Avenue) that reaches 100% occupancy. Therefore, during construction the remaining sections of the street not under construction should be able to accommodate residents affected by the construction. With the Contractor and the City providing public outreach notifying residents of the need to park in the non-construction areas, along with the proper signage during the Pico Rivera Bikeway construction, temporary parking facilities will be available.

Furthermore, post construction parking conditions based on calculations of 30° angled parking and 28 foot length per vehicle parallel parking result in 399 parking spaces available versus the existing 446 parking spaces available. The result is a net loss of 47 parking spaces for Mines Avenue after construction of the Pico Rivera Regional Bikeway Project. See Table 3 below for a summary of net loss or gain per section of the study corridor.

**Table 3: Existing and Proposed Parking Spaces on Mines Avenue**

| Segment                                      | Existing Parking Spaces<br>= 446 |            | Proposed Parking Spaces<br>= 399 |            | Loss/Gain = -47 |           |
|--|----------------------------------|------------|----------------------------------|------------|-----------------|-----------|
|  | Eastbound                        | Westbound  | Eastbound                        | Westbound  | Eastbound       | Westbound |
| 1. Paramount Boulevard to Rosemead Boulevard | 51                               | 49         | 59                               | 54         | 8               | 5         |
| 2. Rosemead Boulevard to Passons Boulevard   | 103                              | 67         | 73                               | 79         | -30             | 12        |
| 3. Passons Boulevard to Rimbank Avenue       | 91                               | 85         | 72                               | 62         | -19             | -23       |
| <b>Total</b>                                 | <b>245</b>                       | <b>201</b> | <b>204</b>                       | <b>195</b> | <b>-41</b>      | <b>-6</b> |

If you have questions regarding this memorandum, please call me directly at (714) 799-1700 ext. 100.

Sincerely,

**W.G. Zimmerman Engineering, Inc.**

Bill Zimmerman, PE, TE, PTOE  
President



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