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Right of way dedication needs to be addressed to be in line with Glendale Engineering standard G-322. Confirmation of development agreement with signal payments needs to be confirmed.

TRAFFIC IMPACT STUDY
Parkway 303 East
NEC of SR303L & Olive Avenue
Glendale, Arizona

August 22, 2022

PREPARED FOR
Property Reserve, Inc
51 South Main Street, Suite 301
Salt Lake City, Utah 84111

PREPARED BY



I. EXECUTIVE SUMMARY

United Civil Group (UCG) was retained by Property Reserve Inc to perform this Traffic Impact Study (TIS) for the planned Parkway 303 East Development located on the northeast corner of SR303L and Olive Avenue in Glendale, Arizona. The site consists of approximately 276.4 acres of agricultural land, Maricopa County Assessor's parcels (501-06-008C and 501-41-004A). The site will be developed as four warehouse buildings totaling approximately 4,381,272 square feet. It is assumed that the warehouse buildings will be constructed in one phase and occupied by year 2025.

Because the City of Glendale follows MCDOT traffic impact standards, this TIS has been performed in general conformance with the *MCDOT Traffic Impact Study Manual* dated May 2017, and per scoping information provided by City of Glendale Transportation Department, locally accepted standards, and industry practice.

Per the *MCDOT Traffic Impact Study Manual*, this planned Parkway 303 East Development is characterized as an Analysis Category II, moderate development which generates 500 or more peak hour trips but fewer than 999 peak hour trips. As such, the study horizon years for this development are opening year, 2025, plus 5 years after opening, 2030. The minimum study area is defined as all site access driveways and all signal-controlled intersections within ½ mile and/or major street intersections without signal control and driveways within ½ mile.

Within these parameters and based on discussions with the City of Glendale staff, the intersections of Cotton Lane/Olive Avenue, Sarival Avenue/Peoria Avenue, Sarival Avenue/Olive Avenue, Sarival Avenue/Northern Parkway, and Reems Road/Olive Avenue are included within the study area.

A. Study Objectives

This study is intended to investigate the existing and future traffic conditions and identify any potential roadway improvements necessary to serve the proposed development. Major study objectives of this traffic report are as follows:

- Analyze the existing study area intersections and site accessibility for the development.
- Determine the site traffic volumes generated by the proposed development and their impacts on the surrounding study area and roadway network.
- Where applicable, recommend safety, intersection and/or roadway improvements, sufficient to meet the needs of the development and adjacent roadway network due to the additional site generated traffic volumes.

B. Conclusions and Recommendations

The site consists of approximately 276.4 acres of agricultural land, Maricopa County Assessor's parcels (501-06-008C and 501-41-004A). The site will be developed as four warehouse buildings with a total of approximately 4,381,272 square feet. It is assumed that the warehouses will be constructed and occupied by year 2025.

Five site driveways are planned for this development. The driveways will align to provide access to development on both the west and east sides of Sarival Avenue. The southern driveway, Access A, will be limited to right in/right out only due to its proximity to the intersection of Sarival Avenue/Olive Avenue, the required southbound left turn storage at Olive Avenue and the location of the railroad crossing north of Olive Avenue. The remaining four accesses are planned as full movement driveways and are spaced at least 500 feet apart, measured center of driveway to center of driveway.

The forecasted trip generation was calculated based on values presented within the 11th Edition of the ITE Trip Generation Manual. On a weekday, after full build-out of Parkway 303 East, the development is estimated to generate a total of 7,492 daily trips with 745 trips occurring in the morning peak hour and 789 trips occurring in the evening peak hour. According to the Trip Generation Manual, it is assumed that approximately 12 percent of the trips in the morning peak hour are heavy vehicles and 16 percent in the evening peak hour.

Right turn deceleration lanes will be required for the development at all the site accesses, Accesses A through E. The right turn lanes should be designed as 150 feet of storage with a 150-foot taper.

A two way left turn lane will be constructed on Sarival Avenue within the project boundary limits. The two way left turn lane is sufficient to accommodate left turn traffic into the site accesses, B through E.

Based on signal warrants, traffic signals will be warranted in the future at the intersections of Sarival Avenue/Peoria Avenue and Sarival Avenue/Olive Avenue by full buildout year 2025. Therefore, the developer should be responsible for 10% of the signal costs at the intersection of Sarival Avenue/Peoria Avenue and 50% of the signal costs at the intersection of Sarival Avenue/Olive Avenue.

Using the forecasted total traffic volumes for years 2025 and 2030, along with the recommended intersection improvements, the study area intersections and the proposed site accesses are anticipated to operate at acceptable levels of service, LOS C or better, during the morning and evening peak hours.

Proper intersection sight distance and sight triangles shall be provided and maintained at the site accesses and intersections of the proposed development to give drivers exiting the accesses a clear view of oncoming traffic. The landscape and hardscape within the sight triangles must not obstruct the driver's view of the adjacent travel lanes. To ensure adequate sight distances and sight distance triangles, AASHTO's *A Policy on Geometric Design of Highways and Streets* Section 9.5 should be followed as appropriate when designing the accesses and landscaping.

Based on the findings of this TIA, the following recommendations apply:

- Within the property boundary, construct Sarival Avenue to its ultimate section with 110 feet or right of way per the City of Glendale's Arterial Section A-1.
- Install new pad, gates, and safety devices to accommodate the roadway widening of Sarival Avenue under the direction of the AT&SF Railroad.
- Provide an exclusive left turn lane for southbound traffic on Sarival Avenue at Olive Avenue. The left turn lane should provide 150 feet of storage with a 100 foot opening. Depending upon the intersection geometrics, the left turn lane may be required to be split (additional length) to avoid vehicles stopped over the tracks.
- Limit Access A to a right in/right out only with a raised driveway island.

- Construct right turn deceleration lanes on Sarival Avenue at the site accesses A through E in the northbound and southbound directions. Each right turn lane should provide 150 feet of storage with a 150-foot taper.
- Contribute an in-lieu payment of 10% of the cost of traffic signal design and installation at the intersection of Sarival Avenue/Peoria Avenue.
- Contribute an in-lieu payment of 50% of the cost of traffic signal design and installation at the intersection of Sarival Avenue/Olive Avenue. This signal may include train pre-emption to enhance safety at the intersection.