

Lerma, Alex

From: Heathcoat, Alan
Sent: Wednesday, May 25, 2022 9:01 AM
To: Lerma, Alex
Subject: RE: ZON21-24 Rovey Farms Legacy Place
Attachments: ZON21-24 - Rovey Farms Rezone TIA 2nd Submittal (002).pdf

Attached approved TIA

Alan

From: Lerma, Alex <alerma@GLENDALEAZ.com>
Sent: Thursday, May 19, 2022 5:14 PM
To: Heathcoat, Alan <AHeathcoat@GLENDALEAZ.com>
Cc: Abbo, Tony <TAbbo@GLENDALEAZ.com>
Subject: ZON21-24 Rovey Farms Legacy Place

Alan/ Tony:

Checking on the status of Rovey Farms/ Legacy Place Traffic Impact Analysis second submittal. I'm trying to determine if the project will make it to the June P&Z meeting.



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1.0 EXECUTIVE SUMMARY

Hilgart Wilson retained United Civil Group to prepare a traffic impact study for the proposed Legacy Place Glendale development in Glendale, Arizona. Legacy Place Glendale encompasses approximately 120 acres and is located south of Northern Avenue and north of Frier Drive between 79th Avenue and 73rd Avenue. Planned as a residential community, Legacy Place Glendale will include 432 single-family dwelling units constructed over two phases.

The initial phase of development, referred to as Phase I, consists of approximately 276 single family homes that will be occupied by 2024. Phase II will follow with the construction of the remaining 156 single-family homes in year 2025. The Legacy Place Glendale Traffic Impact Study analyzes 2030 traffic conditions as the horizon years (5 years after full build out of the development).

Legacy Point, a mixed-use development north of Northern Avenue is being proposed within the vicinity of Legacy Place Glendale. This development includes residential and commercial uses. Legacy Point is planned as 482 single family detached units, 83 multifamily units and approximately 81,675 square feet of commercial development to be constructed in three phases. Forecasted traffic to be generated by Legacy Point was included within the background traffic conditions for Legacy Place Glendale.

Peoria Industrial is currently planned on approximately 150 acres of land. The site is located primarily on the west side of 75th Avenue from Olive Avenue south to the Las Palmaritas Drive alignment. The industrial site borders 79th Avenue south of Butler Avenue for approximately ¼ mile. Because site planning is in the preliminary phase for Peoria Industrial, the traffic generated by this site will be considered in the background traffic conditions for Legacy Place Glendale. To develop an estimate of the developable square footage, a FAR of 0.28 was used which equates to approximately 1,800,000 square feet of development. No site planning is available yet for this acreage; however, the site is included in year 2025 background traffic. Therefore, it is assumed that all the industrial development will be constructed and operational by 2025 for this TIA. Once site planning is complete, a TIA will need to be prepared for Peoria Industrial to identify and mitigate their traffic impacts.

The study area intersections of 71st Avenue/Northern Avenue, 73rd Avenue/Northern Avenue, 75th Avenue/Northern Avenue, 75th Avenue/Frier Drive, 73rd Avenue/Frier Drive and 75th Avenue/Orangewood Avenue currently operate at acceptable levels of service, LOS C or better, in the morning and evening peak hours using the 2021 existing condition traffic volumes and increasing the counts by a 15% COVID adjustment factor.

By 2030, the background LOS analysis shows that the study area intersections continue to operate at acceptable LOS with increased delay because traffic was increased and

known developments were accounted including known geometric improvements such as widening of Northern Avenue.

Comparing the 2030 background traffic LOS to the 2030 total traffic LOS, and including the proposed roadway improvements, the study area intersections and the site accesses operate at acceptable LOS during the morning and evening peak hours without a significant decline in the LOS. Therefore, with the roadway improvements recommended at the completion of the Legacy Place Glendale development, it is shown that LOS remains consistent between background and total traffic volumes.

1.1 Scope of the Legacy Place Glendale Traffic Impact Study

The scope of the traffic impact study, as coordinated with the City of Glendale, includes the evaluation of existing, future background, and future total traffic conditions for the roadways and intersections within the study area, as well as the proposed Legacy Place Glendale driveways along Northern Avenue, 75th Avenue, and 73rd Avenue. A review of the existing conditions includes the analysis of the 2021 collected traffic volumes increased by 15% as a COVID-19 adjustment factor. Within the 2021 analysis the existing intersection geometry is used as the base condition. The future background traffic conditions analyze horizon years 2024, 2025, and 2030 by incrementally increasing the traffic volumes within the study area by 2% per year. Trips are included that will be generated by Legacy Point and Peoria Industrial for horizon years 2024, 2025 and 2030 background analyses. Planned, known infrastructure improvements within the study area are included in the background. This analysis was conducted as a baseline in which to compare future traffic volumes and infrastructure recommendations. Lastly, the future total traffic conditions (including the traffic from Legacy Place Glendale) analysis examines the horizon year traffic volumes with the site proposed geometric roadway and intersection improvements. Therefore, the total traffic analysis demonstrates how the proposed improvements accommodate traffic growth within the study area.

The study area for this traffic impact study (Category I) was determined by the Glendale Transportation Department as per the *2015 Engineering Design and Construction Standards* coupled with the Maricopa County Department of Transportation (MCDOT) *Traffic Impact Study Manual* dated 2017. As agreed, the study area includes the site access driveways plus signal-controlled intersections within ¼ mile and/or major street intersections without signal control and driveways within 500 feet of the Legacy Place Glendale development.

1.2 Projected Traffic Volumes

1.2.1 Future Background Traffic Conditions and Findings

Future background traffic is defined as increased traffic volumes on the surrounding roadway network within the study area without the proposed development. The growth

rate assumptions and resulting future background traffic volumes within the study area for 2024, 2025, and 2030 were determined after discussions with the City of Glendale Transportation Department and the Legacy Place development team. The growth rate assumptions, derived from this traffic impact study, were based upon anticipated regional growth within the study area through the horizon year of the study. In addition to Legacy Place Glendale, regional growth is expected to contribute to the background traffic. As such, development of Legacy Point and Peoria Industrial is considered in the background traffic by the horizon year, 2024.

1.2.2 Legacy Place Glendale Site Traffic

Site traffic, based on 100% occupancy for each phase of development, equates to the total number of trips generated by Legacy Place Glendale distributed onto the roadway network. Based on the data calculated from the ITE Trip Generation Manual, on a typical weekday, after full buildout of the residential development, Legacy Place Glendale is forecasted to generate 4,074 daily trips, with 302 trips occurring in the morning peak hour and 406 trips occurring in the evening peak hour.

1.2.3 Future Total Traffic Conditions and Findings

Future total traffic conditions (including Legacy Place Glendale site generated traffic) are considered along the surrounding transportation system within the study area. As part of the traffic impact study, future total traffic volumes within the study area were evaluated for the 2024, 2025, and 2030 horizon years. This evaluation is used to determine roadway and intersection geometric improvements needed because of the proposed Legacy Place Glendale development.

1.3 Recommended Improvements

1.3.1 Future Background Traffic Conditions

In the future, the background conditions will be improved to support regional continued traffic growth throughout the area. Consistent with the recommendations in this traffic impact study, certain regional infrastructure projects are expected as part of the County's and City's future plans to provide for a more robust roadway network within the study area. This expanded roadway network is necessary to accommodate projected future traffic growth and regional development. In evaluating these potential future improvements, Legacy Place Glendale traffic impact study referenced the Northern Parkway Design Concept Report 2010, the Proposed Intersection Improvements at Northern Parkway/75th Avenue and the Northern Parkway Conceptual Solution from 91st Avenue to 75th Avenue dated January 2019. The regional roadway projects include the widening of Northern Avenue to a parkway from 91st Avenue to 75th Avenue identified in these documents which include widening Northern Avenue to a Parkway with its ultimate six-lane parkway configuration including raised medians. In

addition, the intersections of Northern Avenue/83rd Avenue and Northern Avenue/75th Avenue.

Northern Parkway. Of these future improvements, construction of the next phase of Northern Parkway from 91st Avenue to 75th Avenue is the most likely to occur within the next ten years and will have a significant impact on traffic patterns in the region. Today, Northern Avenue is the primary roadway that provides access to Legacy Place Glendale parcels that represent areas of future regional growth within the study area. Northern Parkway has been planned and designated as a regional roadway corridor and is intended to function as an east-west regional connector between Loop 303 and US 60 (Grand Avenue). As noted above, ultimately, Northern Avenue is planned to be expanded to a six-lane parkway from 91st Avenue to 75th Avenue. Northern Avenue and the future Northern Parkway are under jurisdiction of the City of Peoria.

Northern Parkway/75 Avenue. With the widening of Northern Parkway, intersection improvements are proposed. The concept includes exclusive dual left turn lanes, three through lanes with bike lanes and a dedicated right turn lane on the east- and westbound approaches. The north- and southbound approaches will match into the existing 75th Avenue geometry which consists of one exclusive left turn lane, one through lane and one shared through-right turn lane. This intersection is under the jurisdiction of the City of Peoria.

1.3.2 Future Total Traffic Conditions

With the development of Phase I, the right of way required to construct Northern Parkway should be preserved. 79th Avenue will be constructed south of Northern Avenue to access Legacy Place Glendale property. 79th Avenue will line up with the proposed 79th Avenue alignment into Legacy Point north of Northern Avenue. 79th Avenue south of Northern Avenue will be the primary collector roadway within the Legacy Place Glendale property and will transition east to 75th Avenue. This configuration will allow for site circulation while providing local access and naturally provide neighborhood traffic calming measures as the roadway meanders through the neighborhood. 79th Avenue should be constructed per the City of Glendale's collector standards G-304 Collector Section C-2 with 60 feet of right of way. At the Northern Avenue/79th Avenue intersection an exclusive left-turn lane is recommended for the northbound approach. A dedicated right turn lanes should be constructed on Northern Avenue for eastbound traffic at Access A; 75th Avenue for southbound traffic at Access B and 75th Avenue northbound traffic at Access C.

Based on the projected future total traffic volumes, a new traffic signal is anticipated to be warranted at Northern Avenue/79th Avenue with the completion of Phase II. However, prior to installation of a signal, actual traffic volumes should be collected, and a traffic signal study should be performed to confirm signal warrants are met.

According to the City of Glendale Engineering Design and Construction Standards, dedicated right turn lanes should be installed on Frier Drive at 75th Avenue for westbound traffic and on 75th Avenue at Northern Avenue for northbound traffic during Phase II of development.