67 FLATS & JUNIPER SQUARE

Planned Area Development

ZON22-04

+/- 29.78 Gross Acres
Located at the Northwest Corner of 67th Avenue & Maryland Avenue

First Submittal:	March 16, 2022
Second Submittal:	June 27, 2022
Third Submittal:	August 22, 2022
City Council Adopted:	

Planned Area Development Disclaimer

A Planned Area Development ("PAD") is intended to be a stand-alone set of zoning regulations for a particular project. Provisions not specifically regulated by the PAD are governed by the City of Glendale ("City") Zoning Ordinance. A PAD includes substantial background information to illustrate the intent of the development. However, these purpose and intent statements are not necessarily requirements to be enforced by the City. The PAD only modifies zoning ordinance regulations to fit the unique character of the project, site characteristics, and location. It does not modify other City Codes or requirements. Additional public hearings may be necessary, such as, but not limited to, right-of-way abandonments.

This PAD will provide the set of regulatory zoning provisions designed to guide the implementation of the overall development plan through the City of Glendale development review and permit process. The provisions provided within this PAD shall apply to all property within the PAD project boundary. The zoning and development standards provided herein shall amend the various noted provisions of the City of Glendale Zoning Ordinance (as adopted and periodically amended). In the event of a conflict between a use, a development standard, or a described development procedure between the City of Glendale Zoning Ordinance and the PAD, the PAD shall prevail.

Principals & Development Team

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Section 1. Overview / Purpose & Intent

Juniper Square and 67 Flats, the proposed new residential developments located in Glendale, AZ will be owned and managed by Dominium—one of the nation's largest and most innovative development companies focused on workforce and senior housing communities. Dominium's proven approach is to focus on meeting the needs of any given community by fulfilling a need for housing while also providing excellent living experience for its residents. Dominium takes pride in designing architecturally beautiful communities with high-quality finishes and amenities and providing excellent customer service that create long-term value for its residents, cities, and its financial stakeholders. Dominium's superior reputation is built on a 50-year track record in developing and managing residential rental communities, and by 2025, the company expects to be the country's pre-eminent private developer, owner, and property manager of workforce and senior housing.

Dominium looks forward to being a Glendale property owner and neighbor while providing two (2) desperately needed, quality rental communities to the neighborhood, the adjacent Glendale Centerline Overlay District, and the City of Glendale at large.

The *67 Flats and Juniper Square PAD* proposes to rezone approximately 29.78 gross acres (26.75 net acres) of vacant/agricultural land located at the northwest corner of 67th Avenue and Maryland Avenue, specifically 6504 North 67th Avenue (the "Property"), from R-4 Multiple Residence **to** Planned Area Development ("PAD"). See below **Aerial Map** for reference. The purpose of this PAD is to facilitate the development of two (2) high-quality, senior and family-oriented multifamily residential communities on the Property. The two (2) integrated communities have been designed with an emphasis on the living experience for each demographic highlighting walkability and the pedestrian experience, connectivity to transit, quality/interesting architecture along with appropriate building scale, and a visually interesting streetscape.

Specifically, the *67 Flats and Juniper Square PAD* proposes to develop a 605-unit multifamily residential community, comprised of 221 age-restricted, independent senior living units for adults 55 years and older and 384 multifamily residential units. See below the **Proposed Conceptual Site / Landscape Plan** for reference.

Juniper Square, the senior living community, will be developed as two, 4-story buildings wrapping an expansive courtyard that includes a pool, spa, and engaging indoor amenities

that include a clubhouse, a salon, a movie theater, a library, a card and craft room, and a fitness center along with other active and passive open spaces and amenities for residents. 67 Flats, the family-oriented multifamily residential units, is planned as a series of 3-story buildings, in a gated setting, designed around community amenities such as a clubhouse, community pool, spa, indoor amenities that include open spaces and fitness/play areas that encourage an active and healthy lifestyle for adults and children. The *67 Flats and Juniper Square PAD* includes specific design guidelines and development standards that take their cue from urban design principles and address the relationship between the buildings' facades, form, and scale and the public realm.

Goals & Objectives. The goals and objectives of the *67 Flats and Juniper Square PAD* include:

- Activate a vacant, underutilized property with a multifamily residential development at an appropriate density adjacent to two (2) major roadways.
- Provide attainable housing opportunities that support a variety of demographics through all stages of life.
- Provide enhanced pedestrian amenities, including shade, landscape, street furniture, and way finding signage that promote pedestrian activity through a more vibrant, comfortable environment.
- Encourage architecture and design guidelines that create a unique sense of place.
- Provide usable active and passive open spaces.
- Promote development standards that allow for transit-oriented development.
- Increase the economic vitality of the area as well as supporting the surrounding commercial and service uses with complementary high density residential development.

Section 2. Existing Site Conditions

The Property is a rectangular configuration comprised of approximately 29.78 gross acres of land immediately bounded by 69th Avenue, a local roadway to the west, Maryland Avenue, a major collector roadway to the south, 67th Avenue, a minor arterial roadway to the east, and Summerhill Place, three-story apartments to the north. **See Exhibit 1: Land Use Map**. The Property is comprised of three (3) parcels, Maricopa County Assessor Parcel Numbers: 144-05-008A, 144-05-009A and 144-05-010C. The Property is generally flat and does not include any significant topographical or natural features and is currently vacant/agricultural use. The Property is approximately a half-mile south of Glendale Avenue, 1.4 miles west of U.S. 60 / Grand Avenue, and 3.5 miles east of the Loop 101 freeway.

The Property has direct access to both 67th and Maryland Avenues. The adjacency to these roads is an especially important feature for an attainable housing community because

automobile ownership is typically lower and multimodal uses are important for mobility (e.g., walking, biking, buses, rideshare, etc.). Specifically, the Valley Metro bus route 67 is immediately accessible directly north of the Property and across 67th Avenue at the southeast corner of the Property. There are total of 46 Valley Metro Bus Stops within approximately one mile of the Site, 18 of which are within ¼ mile of the Site. **See Exhibit 2: Valley Metro Bus Stops.** The Site is ideally positioned to capitalize on safe and convenient public transit access.

The surrounding development and existing land uses at 67th Avenue and Maryland Avenue include the Park at Westgate Apartments at the southwest corner (zoned R-4), the West Glendale Baptist Church at the southeast corner (zoned R-4), and the Dollar Dealz store at the northeast corner (zoned C-2).

There are also one and two-story single-family homes bordering the west side of the Property. The proposed conceptual site plan considers the surrounding context and includes specific design measures to address appropriate vehicle and pedestrian access, building/landscape setbacks, open space/amenities, and height of buildings. For instance, the project provides no vehicular access drives onto 69th Avenue to provide a sensitive design transition to the single family homes to the west as well as a landscape.

The proposed multifamily residential housing development is consistent with the existing land use fabric, and along with the senior living, provides a nice mix of uses onsite and fills a need in the area. Moreover, it will provide a compatible, transitional buffer to the single-family homes to the west and provide needed housing/street/landscaping improvements within this area of Glendale.

Section 3. Land Use Plan & Conceptual Site Plan

a. Conceptual Site Plan

The proposed conceptual site plan for the Property calls for two (2) separate residential communities on the Property. These include a 221-unit senior living community and a 384-unit family-oriented multifamily community. The communities will be cohesively developed through an integrated site plan. **See Exhibit 3: Conceptual Site Plan** and **Exhibit 4: Conceptual Landscape Plan.**

> ***Senior Living Community (Juniper Square).*** An age-restricted independent senior living community is proposed in the southeast quadrant of the Property, on approximately 8.22 net acres, with frontage along N. 67th Avenue and W. Maryland Avenue. The senior living community will include 221 dwelling units in two, 4-story buildings.
>
> - 66 one-bedroom units
> - 131 two-bedroom units
> - 24 three-bedroom units

Family-Oriented Multifamily Residential Community (67 Flats). A family-oriented multifamily residential community is proposed on the western approximately 18.53 net acres of the Property with primary frontage along both W. Maryland Avenue and secondary frontage along N. 67th Avenue. The family-oriented community will include 384 dwelling units within a series of fourteen 3-story buildings. Dwelling units will be comprised of one-, two-, and three-bedroom configurations. Seven buildings are along the southern border of the existing Summerhill Place 3-story apartments, buffered by a 10' landscape setback and drive aisle. Additionally, two buildings front along W. Maryland Avenue. Resident parking is available all along the perimeter of 67 Flats, with additional parking islands located north of the multi-use area and west of Juniper Square.

- 12 one-bedroom units
- 204 two-bedroom units
- 168 three-bedroom units

The *67 Flats and Juniper Square PAD* gives specific attention to the building façade, which includes the placement of "heavier" materials with larger grain textures at the bottom of the façade, with "lighter" materials at the top. The ground and second floor building materials and finishes include plank lap siding, smooth face CMU, and metal, with an emphasis on fine-grained scale and texture. Additionally, the façade integrates into the existing context of the area by breaking up the volume of the overall building, proportions, and height into a series of small sub-volumes through the "pushing and pulling" of the façade plane and by creating the appearance of a grouping of small structures through the use of textures, materials, details, colors, and other architectural elements. This façade is also expressed in other ways which help to establish an appropriate scale in relation to the context, including a rhythm and pattern of windows and defining the position of each floor through horizontal expression lines, awnings, and balconies. See illustrative examples below and **Exhibit 5**: **Conceptual Renderings.**

Amenities will be strategically located in courtyard settings and are typically planned to include a clubhouse, pool and spa, ramada, fire table/pit, barbeque area, and turf open space areas. For example, Juniper Square will provide several indoor amenities, such as: a clubhouse, a salon, a movie theater, a library, a card and craft room, and a fitness center.

Pedestrian pathways are provided throughout the site with multiple pedestrian corridors established to the public streetscape and adjacent properties. Guest parking is provided throughout with gated access for the residents, employees, and their guests. More specifically, access to the senior living facility will occur off N. 67th Avenue. A gated access drive is provided off of W. Maryland Avenue in the southwest portion of Juniper Square.

A Traffic Impact Study and Parking Master Plan have been completed and provided with this *67 Flats and Juniper Square PAD*. **See Appendices A & B**. The Traffic Impact Study's findings show that the proposed development compliments the surrounding traffic patterns and will have minimal impact on the surrounding urban area. Albeit with any new development/changes within urban infill areas traffic increases and traffic patterns change, which traffic adjustments may be needed. With that said, mitigation of traffic movements can be assisted via adjustments to the traffic signals timing along with the growth/use of Smart Traffic Solutions (i.e., digital solutions) as well as with building a decel lane as warranted.

With regards to the Parking Master Plan, the objective was to establish that the 735 multifamily parking spaces and 318 senior living parking spaces (i.e., a total of 1,053 parking spaces) onsite are appropriate for these two (2) types of users. Below is the table from the Parking Master Plan showing the City of Glendale's parking requirements.

Table 1 – City of Glendale Parking Requirement

Use	Rate				Quantity	Units	Parking Stalls
Multi-family	1.5	Per	each 1 Bedroom	Dwelling Unit	12	Dwelling Units	18
	2	Per	each 2+ Bedroom	Dwelling Unit	372	Dwelling Units	744
	1	Per	3	Dwelling Units	384	Dwelling Units	128
67 Flats - Total							**890**
Retirement/Senior Housing/ Convalescent/Nursing/Congregate Care Home	0.4	Per	each Dwelling Unit		221	Dwelling Units	89
Juniper Square - Total							**89**

Pursuant to the traffic report, which is based on reviews of both the technical data, the Urban Land Institute (ULI) publication Shared Parking, 3rd Edition, and comparable developments within the area, the proposed 67 Flats 735 parking spaces and the proposed Juniper Square with 318 parking spaces will provide sufficient parking. Moreover, the availability of multimodal uses (e.g., walking, biking, buses, rideshare, etc.) with this existing urban area assists with mobility and limits the need for an automobile.

Section 4. PAD Findings

A. Encourage residential development to provide a mixture of housing types and design.

The intent is to rezone the Property to PAD to allow for more housing opportunities within the City Glendale. The proposed increased building height and parking deviations, previously noted, as well as other minor development deviations are consistent in size and scope with the surrounding area. Specifically, the 67 Flats portion of the Property has a density of 19.11 du/gross acre and the Juniper Square portion has a density of 22.81 du/gross acre. When considered separately, the density of the 67 Flats portion of the Property is in conformance with the existing General Plan land use designation, however, the density of the Juniper Square portion slightly exceeds the allowable density under the current General Plan. Thus, a Minor General Plan Amendment application (Companion Case Number GPA22-04) has been submitted to change the land use designation of approximate 14.894 gross acres (13.084 net acres) of the eastern portion along 67th Avenue of the Property from High Density Residential: 12.0 – 20.0 du/ac (HDR 20) **to** High Density Residential 20.0 – 30.0 du/ac (HDR 30) in order to address the density as well as to provide a reasonable/logical transition/buffer.

The proposed overall development plan will provide 605 homes to this market that is desperately short of housing diversity. The PAD's flexible design/development standards make this a better living experience for seniors and families, i.e., lower walking distances, indoor/outdoor amenities, open space, buffers, etc. creating the need for some development deviations. Moreover, the *67 Flats and Juniper Square PAD* provides a better overall design solution addressing the existing opportunities and constraints associated with building within a fully developed environment; for example, by increasing height slightly allows for more open space/amenities/buffers from single-family homes than would typically be allowed under the standard R-4 zoning district for families and their children.

B. Encourage innovative development or development concepts for all land use types to provide a greater variety and intensity of uses.

This provision of the PAD recognizes the need for a "greater … intensity" of uses. Residents are the key to bringing energy to areas of the City which lack investment. Moreover, housing options for seniors and families be located in close proximity to public transit (i.e., buses), can help mobility for residents and increased ridership for transit). The PAD zoning standards meet many of the R-4 development standards with only a few slight modifications to fit within this urban infill Property.

C. Provide a process which relates the urban design and scale of project to the unique characteristics of the site.

The *67 Flats and Juniper Square PAD* will accommodate the urban design and appropriate scale of the unique characteristics of the Property through vertically integrated buildings which require height allowances that only the PAD can provide. Deemphasizing the role of the automobile, by eliminating unnecessary parking, will further the urban design of the site and create a more walkable and transit-oriented design footprint.

D. Require the nature and intensity of development to be supported by adequate utilities, transportation, drainage, and common open spaces to serve the development and to minimize impact on existing or future adjacent development.

The *67 Flats and Juniper Square PAD* will "plug-in" to the existing built infrastructure, utilities, transportation, and meet their onsite drainage and open space needs without impact to their surrounding neighboring properties. Most importantly, the activation of this Property with a residential use will attract new residents, improve safety, encourage new investments in the area, and ultimately generate a tax base for the City of Glendale through increased spending in local businesses.

Section 5. Permitted Uses

Permitted Uses, **Temporary Uses**, and **Accessory Uses** shall comply with R-4 zoning district.

Section 6. Development Standards

Development Standards. The following development standards serve as the framework for the Project and support the level of intensity and building form that best integrates this community with surrounding area, while facilitating an urban, pedestrian-supported development adjacent to existing multifamily apartments and roadways.

Standard	Existing (R-4) Development Standards	Juniper Square (Senior Living) Proposed Development Standards	67 Flats (Family Apartments) Proposed Development Standards
Minimum Net Lot Area:	6,000 SF	6,000 SF	6,000 SF
Minimum Width:	60 feet	60 feet	60 feet
Minimum Depth:	94 feet	94 feet	94 feet
Density and Number of Dwelling Units:	20 units per gross acres 596 units	22.81 du/gross acres 221 units (605 units maximum for the overall site)	19.11 du/gross acres 384 units (605 units maximum for the overall site)
Combined Parcel Density:		20.31 du/gross acres	
Internal Building/Landscape Setbacks:		Building and landscape setbacks from internal property lines within the approved overall conceptual site plan shall not apply. Any shared easements shall be dully recorded and provided to staff upon request.	
Building Height: (the vertical distance measured from the finished grade level to the highest level of the building):	30 feet, two story maximum for principal buildings	4-story or 52'-6" maximum	3-story or 40'-0" maximum
Minimum Perimeter Setback:	20 feet, increase 1 foot to 1-foot ratio for buildings over 20 feet	20'-0"	20'-0" (38'-0" reqd. by ordinance except Building 1 with 20'-0" setback at east property line)
Front:	20', Setbacks increase 1 foot to 1-foot ratio for buildings over 20 feet.	20'-0" (67th Avenue)	20'-0" (Maryland)

Standard	Existing (R-4) Development Standards	Juniper Square (Senior Living) Proposed Development Standards	67 Flats (Family Apartments) Proposed Development Standards
Street Sides:	20', Setbacks increase 1 foot to 1-foot ratio for buildings over 20 feet.	20'-0"* (Maryland Avenue)	20'-0" (69th Avenue) 20'-0" (67th Avenue) ***Exception:** School bus stop shelter shall be allowed within 5' of the property line and outside any vehicular visibility triangles. Review and approval by the City.
Side:	20', Setbacks increase 1 foot to 1-foot ratio for buildings over 20 feet.	20'-0" feet (North Property Line)	20'-0" (East Property Line)
Rear:	20', Setbacks increase 1 foot to 1-foot ratio for buildings over 20 feet.	49 feet (West Property Line)	38 feet (North Property Line)
Accessory Building Setbacks:	Per Section 7.301 of the Glendale Zoning Ordinance	Per Section 7.301 of the Glendale Zoning Ordinance	Per Section 7.301 of the Glendale Zoning Ordinance
Setback Exceptions:	Carport/canopy roofs may encroach up to 2-feet into required setbacks.		
Private Open Space:	100 SF per dwelling unit	Minimum of 60 SF per dwelling unit	**Minimums:** One Bedroom: 60 SF Two Bedroom: 80 SF Three Bedroom: 85 SF
Public Open Space:	30% exclusive of parking areas	32.3% exclusive of parking areas	30.4% exclusive of parking areas
Lot Coverage:	50% Maximum	29.2% Provided* ***Excludes** parking canopies/carports.	27.7% provided* ***Excludes** parking canopies/carports

Standard	Existing (R-4) Development Standards	Juniper Square (Senior Living) Proposed Development Standards	67 Flats (Family Apartments) Proposed Development Standards
Parking:	**<u>Multi-family Parking:</u>** •Studio or 1 Bedroom: 1 space per unit •2 or more Bedrooms: 2 spaces per unit •1 Designated guest space for every 3 units **<u>Senior Parking:</u>** 0.40 space per unit	---- 0.53 per dwelling unit	1.61 per dwelling unit
Parking Spaces:	10’ x 20’	9’ x 20’	9’ x 20’
Walls:	6’ on property lines	6’-0” masonry screen wall @ shared property boundaries. 3’-0” parking masonry screen wall with 3’-0” view fence over the masonry screen wall adjacent to public rights-of-way. Optional up to 6’-0” view fencing allowed at locations without parking adjacent to public rights-of-way and not adjacent to shared property boundaries.	6’-0” masonry screen wall @ shared property boundaries. 3’-0” parking masonry screen wall with 3’-0” view fence over the masonry screen wall adjacent to public rights-of-way. Optional up to 6’-0” view fencing allowed at locations without parking adjacent to public rights-of-way and not adjacent to shared property boundaries.

Standard	Existing (R-4) Development Standards	Juniper Square (Senior Living) Proposed Development Standards	67 Flats (Family Apartments) Proposed Development Standards
Parking Garages, Canopies/Carports:	Garages are encouraged. Complexes larger than 150 dwelling units are required to provide garages for 25% of the required parking.	No garages required. Parking canopies/carports shall be provided.***** *** Exception for Solar Covered Parking:** To encourage energy sustainability and shade, the use of solar energy collectors for the purpose of providing energy may be provided with or as a part of the installation of parking canopies. The required landscape islands and landscaping requirements within the parking area shall not be required to facilitate the installation and use of solar covered parking canopies. Additionally, solar canopies shall be able to project 2' into the landscape setbacks and requirements to accommodate such canopies.	No garages required. Parking canopies/carports shall be provided.***** **Exception for Solar Covered Parking:** To encourage energy sustainability and shade, the use of solar energy collectors for the purpose of providing energy may be provided with or as a part of the installation of parking canopies. The required landscape islands and landscaping requirements within the parking area shall not be required to facilitate the installation and use of solar covered parking canopies. Additionally, solar canopies shall be able to project 2' into the landscape setbacks and requirements to accommodate such canopies.
Patios:	75 sq. ft. Minimum	**Minimum** of 60 SF per dwelling unit.***** *** Depending on unit size.**	**Minimums:** One Bedroom: 60 SF Two Bedroom: 80 SF Three Bedroom: 85 SF

Standard	Existing (R-4) Development Standards	Juniper Square (Senior Living) Proposed Development Standards	67 Flats (Family Apartments) Proposed Development Standards
Minor Amendments:	A minor amendment to the PAD shall constitute a deviation that decreases of any of the following: required setbacks, landscaping, or open space and any increases in lot coverage, buildings/walls/fencing heights due to grade changes, architectural embellishments, and/or for screening purposes by no more than 10%. A minor amendment to the PAD shall be reviewed by all affected City departments and agencies and shall be approved administratively.		

Section 7. Signs Standards

Signage will conform to the City of Glendale's Sign Ordinance.

Section 8. Vehicular Circulation, Parking & Connectivity

Vehicular Circulation & Parking. Primary vehicular access to both communities will be provided to Juniper Square along N. 67th Avenue, and to 67 Flats along W. Maryland Avenue.

Upon arrival, residents and guests will be greeted by a landscaped boulevard-type entryway leading to a roundabout that serves as an entry focal point. The entryway and roundabout will be finished with enhanced hardscape, such as colored and/or stamped concrete or pavers, along with community and wayfinding signage. Second points of gated, vehicular access are provided along W. Maryland Avenue for Juniper Square (in the southwest portion of the development) and along N. 67th Avenue for 67 Flats (in the northeast portion of the overall Property). The primary and secondary vehicular access drives connect guests to visitor parking planned adjacent to the family-oriented residential community clubhouse and the senior living community lobby/leasing office. Parking, which includes a total of 1,049 spaces between the communities, will be surface or covered surface parking spaces.

Section 9. Utilities and Services

Public Utilities and Services Table	
Utility	Provider
Water	City of Glendale
Sewer	City of Glendale
Gas	Southwest Gas
Communications	Cox Communications
Refuse	City of Glendale
Law Enforcement	City of Glendale
Fire and Emergency Medical Services	City of Glendale
Electric	SRP
Telephone	Cox Communications

Section 10. Phasing

The two (2) communities may be constructed in various development phases, depending on market conditions and Property/site constraints. Plans for each phase, if necessary, will be submitted to the city for review to ensure proper and orderly development.

Section 11. Conclusion

The City of Glendale has invested significant infrastructure resources towards encouraging and providing a sustainable, stable, and long-term residential component throughout the City as well as retail/commercial, employment, recreational, and transportation components. The proposed *67 Flats and Juniper Square PAD* urban infill residential development will capitalize on and broaden the residential types and living opportunities offered within this immediate area as well as support existing retail/new businesses. Moreover, this proposed development will be catalyst for additional sustainable and appropriate development/redevelopment in the immediate area, in the Glendale Centerline Overlay District, and beyond in whatever form that may take (i.e., residential, retail, office, retail, etc.).

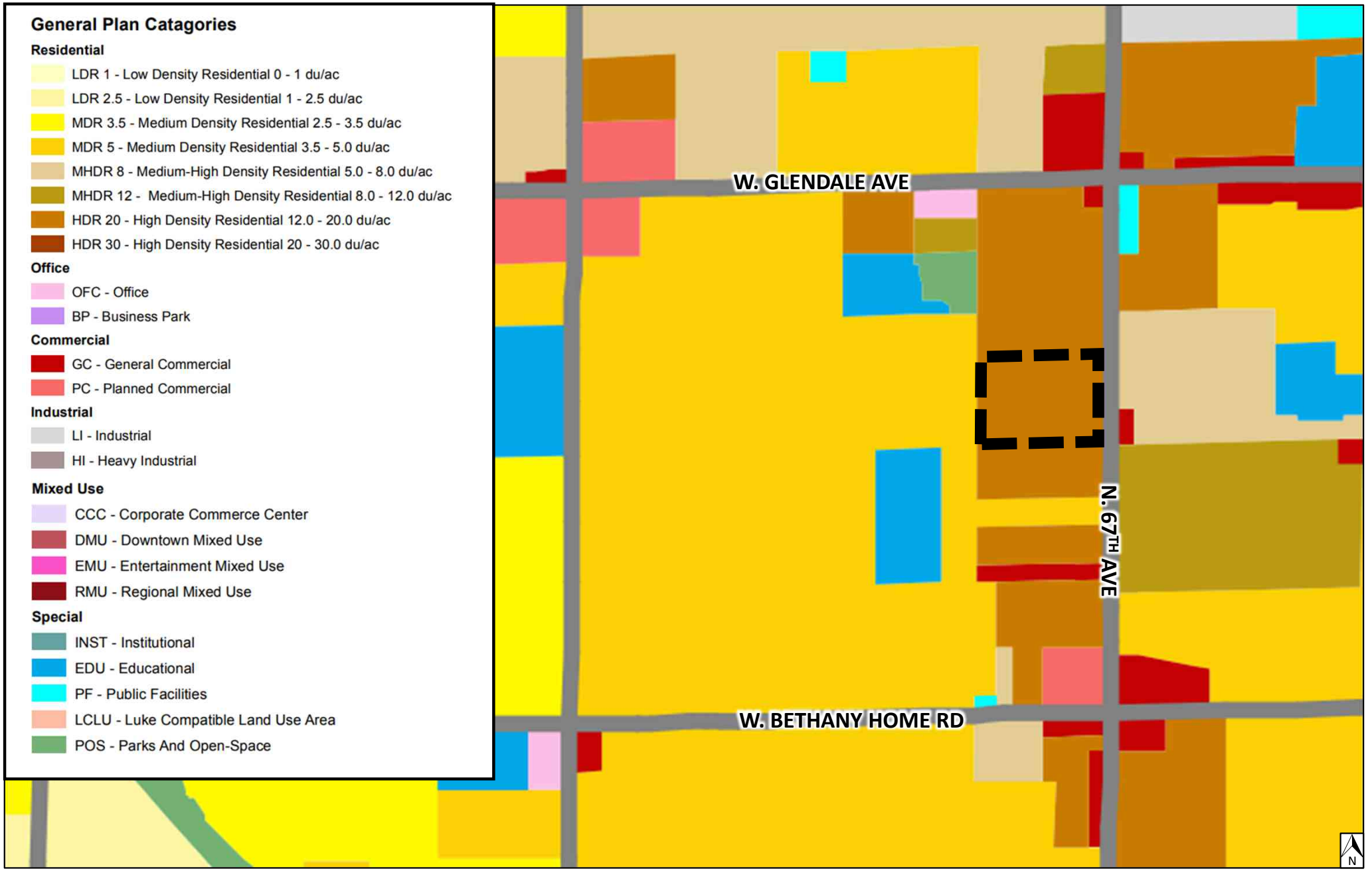
The proposed *67 Flats and Juniper Square PAD* will facilitate a new mixed residential rental development meeting the community's needs within the City of Glendale. Dominium is

excited to bring this mixed housing development to this vacant, urban infill site. By removing a vacant/agricultural site (i.e., also an attractive nuisance) and replacing it with needed family/senior residential housing will help transform the neighborhood and provide accessible homes so desired. In summation, this proposed development will fulfill both the needs of the City of Glendale and the immediate area in many ways (i.e., new development, new housing type, reinvestment, quality, increased revenue, and greater security). The proposed development standards within the *67 Flats and Juniper Square PAD* along with design will provide a buffer and transition that mitigates any potential impacts to the existing built environment.

Exhibits

Exhibit 1
Land Use Map

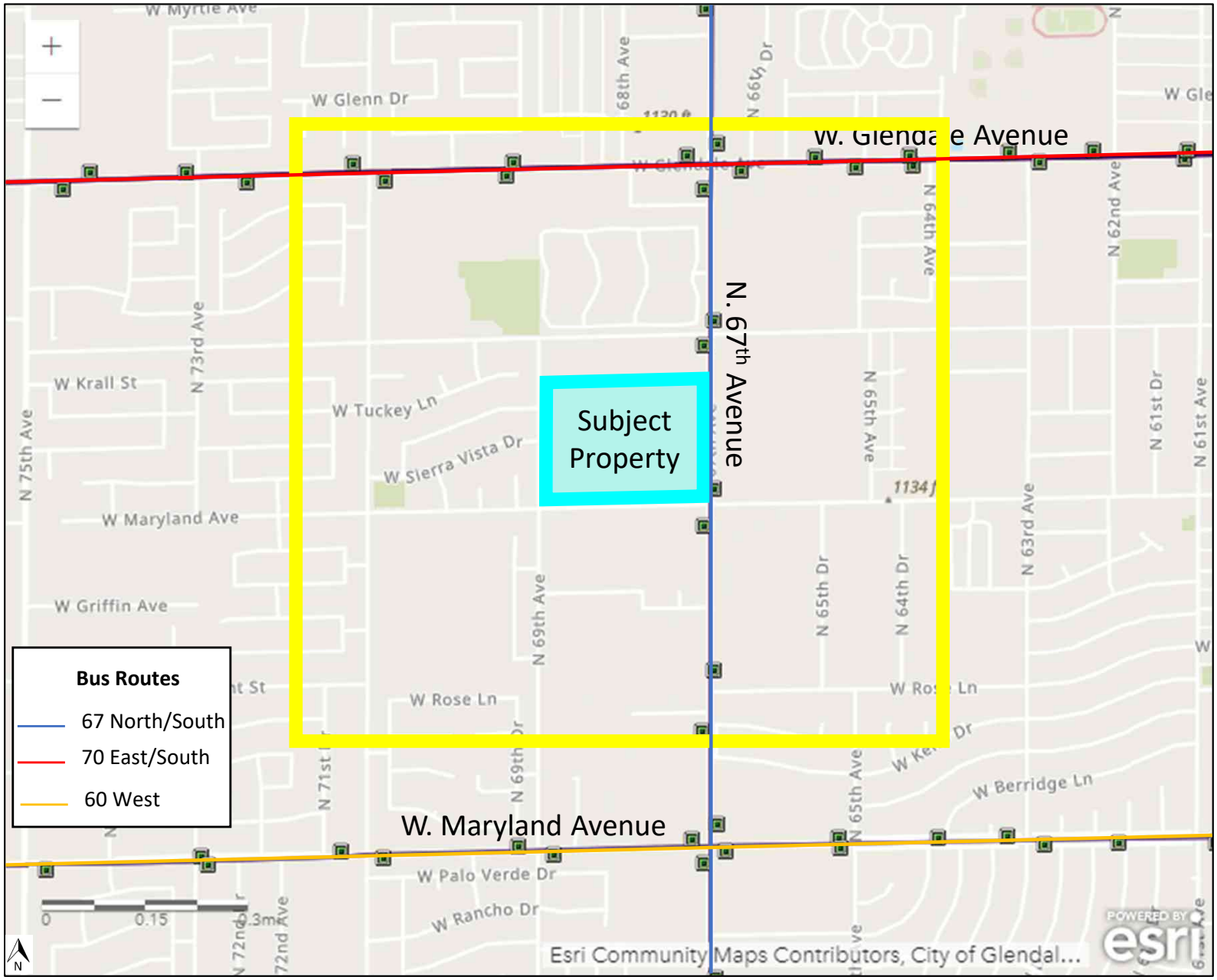
General Plan Land Use Map



Juniper Square and 67 Flats Project Site

Exhibit 2
Valley Metro Bus Stops

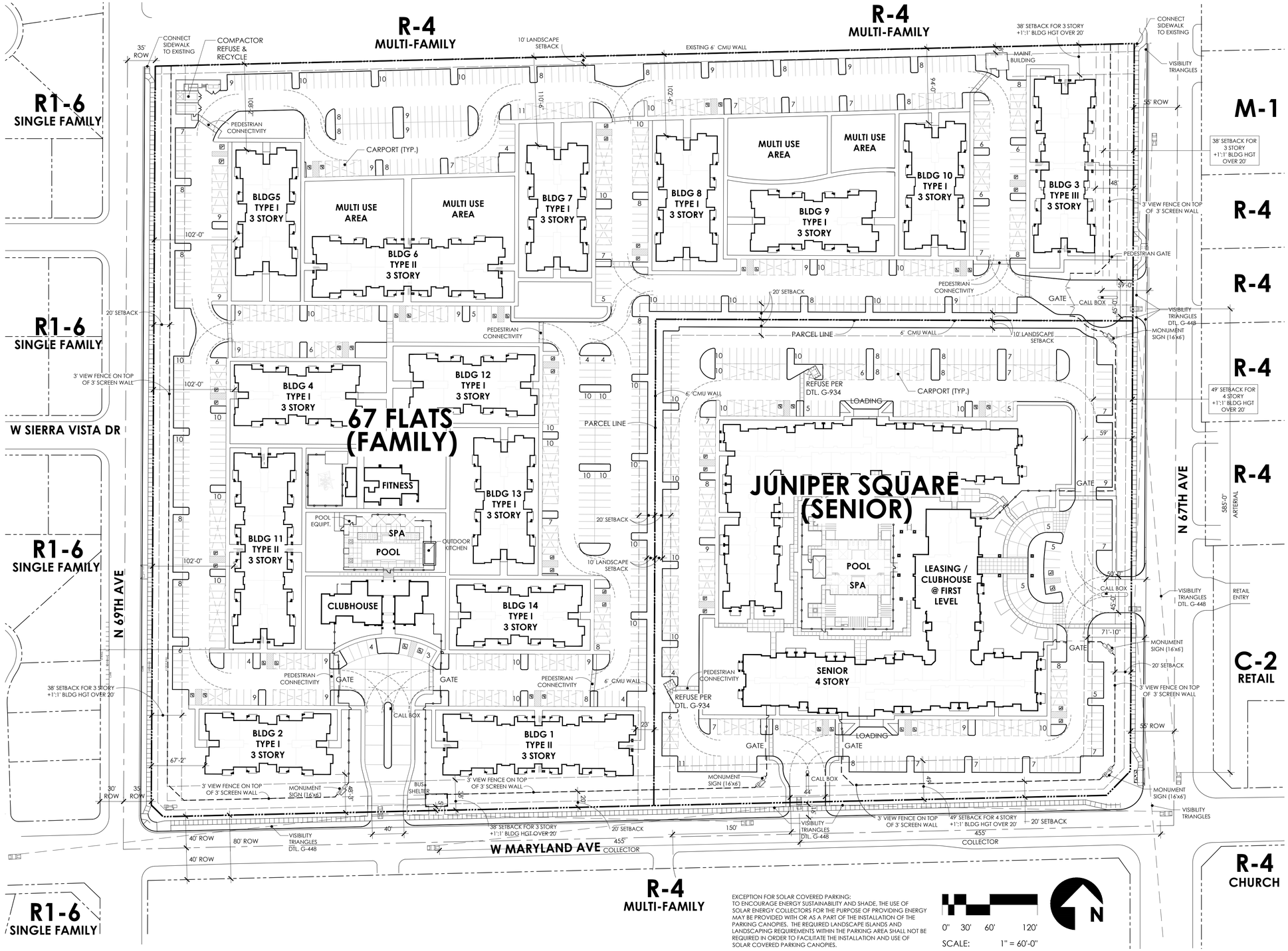
Bus Stops Within +/- 1 Mile and ¼ Mile of the Subject Property



Valley Metro Bus Stop

¼ Mile Boundary

Exhibit 3
Conceptual Site Plan



EXCEPTION FOR SOLAR COVERED PARKING:
TO ENCOURAGE ENERGY SUSTAINABILITY AND SHADE, THE USE OF SOLAR ENERGY COLLECTORS FOR THE PURPOSE OF PROVIDING ENERGY MAY BE PROVIDED WITH OR AS A PART OF THE INSTALLATION OF THE PARKING CANOPIES. THE REQUIRED LANDSCAPE ISLANDS AND LANDSCAPING REQUIREMENTS WITHIN THE PARKING AREA SHALL NOT BE REQUIRED IN ORDER TO FACILITATE THE INSTALLATION AND USE OF SOLAR COVERED PARKING CANOPIES.

SITE DATA

SITE AREA:

PARCEL	NET	GROSS
67 FLATS	±18.50 ACRES (±805,923 SF)	±20.09 ACRES (±875,141 SF)
JUNIPER SQUARE	±8.36 ACRES (±364,000 SF)	±9.69 ACRES (±422,276 SF)
TOTAL	**±26.86 ACRES (±1,169,923 SF)**	**± 29.78 ACRES (±1,297,417 SF)**

NOTE 1: GROSS & NET AREAS TO BE VERIFIED BY OWNER'S CIVIL ENGINEER AND/OR SURVEYOR.
NOTE 2: NET AREA EXCLUDED THE DEDICATION OF 35' HALF-ROW ON 69th AVENUE ON THE EAST SIDE.

ZONING:
EXISTING: R-4
PROPOSED: PAD (R-4)

HEIGHT:
MAXIMUM ALLOWED: 2-STORY OR 30'
PROPOSED:
67 FLATS (FAMILY – MULTI-FAMILY) 3 STORIES (40')
JUNIPER SQUARE (SENIOR LIVING) 4 STORIES (52'-6")

UNIT MIX:

•*FAMILY APARTMENT*:

UNIT TYPE	NO.	%
A-1 BEDROOM/1 BATH	12 D.U.	3.0%.
B-2 BEDROOM/2 BATH	204 D.U.	53.0%.
C-3 BEDROOM/2 BATH	168 D.U.	44.0%.
TOTAL	**384 D.U.**	**100%**

•*SENIOR LIVING*:

UNIT TYPE	NO.	%
1 BEDROOM/1 BATH	66 D.U.	30%.
2 BEDROOM/2 BATH	131 D.U.	59%.
3 BEDROOM/2 BATH	24 D.U.	11%.
TOTAL	**221 D.U.**	**100%**

DENSITY:

•*FAMILY APARTMENTS*:
DENSITY ALLOWED: 20 D.U./GROSS ACRE
DENSITY PROVIDED: 19.11 D.U./GROSS ACRE (384 D.U. ÷ ±20.09 GROSS AC)

•*SENIOR LIVING*:
SENIOR LIVING:
DENSITY ALLOWED: 20 D.U./GROSS ACRE
DENSITY PROVIDED: 22.81 D.U./GROSS ACRE (221 D.U. ÷ ±9.69 GROSS AC.)

•OVERALL SITE: 20.31 D.U./GROSS ACRE (605 D.U. ÷ ±29.78 GROSS AC.)

REQUIRED PARKING:

•GENERAL PARKING DIMENSIONS:
PARKING SPACE 9' x 20'
AISLE WIDTH 26'+

•*FAMILY APARTMENTS*:

1 – BEDROOM (1.00 P.S./D.U. x 12 D.U.)	12 P.S.
2 – BEDROOM (2.00 P.S./D.U. x 204 D.U.)	408 P.S.
3 – BEDROOM (2.00 P.S./D.U. x 168 D.U.)	336 P.S.
GUEST PARKING (1.00 P.S./3 D.U.)	128 P.S.
TOTAL REQUIRED PARKING	**884 P.S. (2.30 P.S./D.U.)**

•*SENIOR LIVING*:

221 D.U. x 0.4 P.S.	89 P.S.
GUEST PARKING (1.00 P.S./3 D.U.)	74 P.S.
TOTAL REQUIRED PARKING	**163 P.S. (0.74 P.S./D.U.)**

PROVIDED PARKING:

•*67 FLATS*:

SURFACE	503 P.S.
COVERED SURFACE	232 P.S.
TOTAL FAMILY PROVIDED	**735 P.S. (1.91 P.S./D.U.)**

•*JUNIPER SQUARE*:

SURFACE PARKING:	184 P.S.
COVERED PARKING:	134 P.S.
TOTAL SENIOR LIVING PROVIDED	**318 P.S. (1.42 P.S./D.U.)**

OPEN SPACE:

•*67 FLATS*:
REQUIRED: 30% x NET AREA (±805,923 SF) = ±241,777 SF
PROVIDED: 32.0% (±258,465 SF)

•*JUNIPER SQUARE*:
REQUIRED: 30% x NET AREA (±364,000 SF) = ±109,200 SF
PROVIDED: 30.0% (±108,941 SF)

LOT COVERAGE:

•*67 FLATS*:
REQUIRED: 50% MAXIMUM
PROVIDED: 27.7%

•*JUNIPER SQUARE*:
REQUIRED: 50% MAXIMUM
PROVIDED: 29.2%

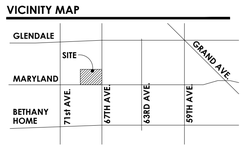
SETBACKS:

PERIMETER SETBACK – 20'

ASSUMPTIONS:

1. THE PROPERTY IS SHOWN FOR REFERENCE AND PLANNING PURPOSES ONLY.
2. ASSUMES THE SITE'S RETENTION WILL BE SURFACE AND/OR UNDERGROUND BASINS.
3. ASSUMES BOTH SITES WILL BE GATED.
4. ASSUMES ANY EASEMENTS RUNNING ACROSS THE SITE CAN BE RELOCATED OR ABANDONED

VICINITY MAP



TODD + ASSOCIATES
602-952-8280 / TODDASSOC.COM
21-2052-02

DOMINIUM

FAMILY LIVING — SENIOR LIVING

67 Flats & Juniper Square

Glendale, AZ

REZONING RESUBMITTAL

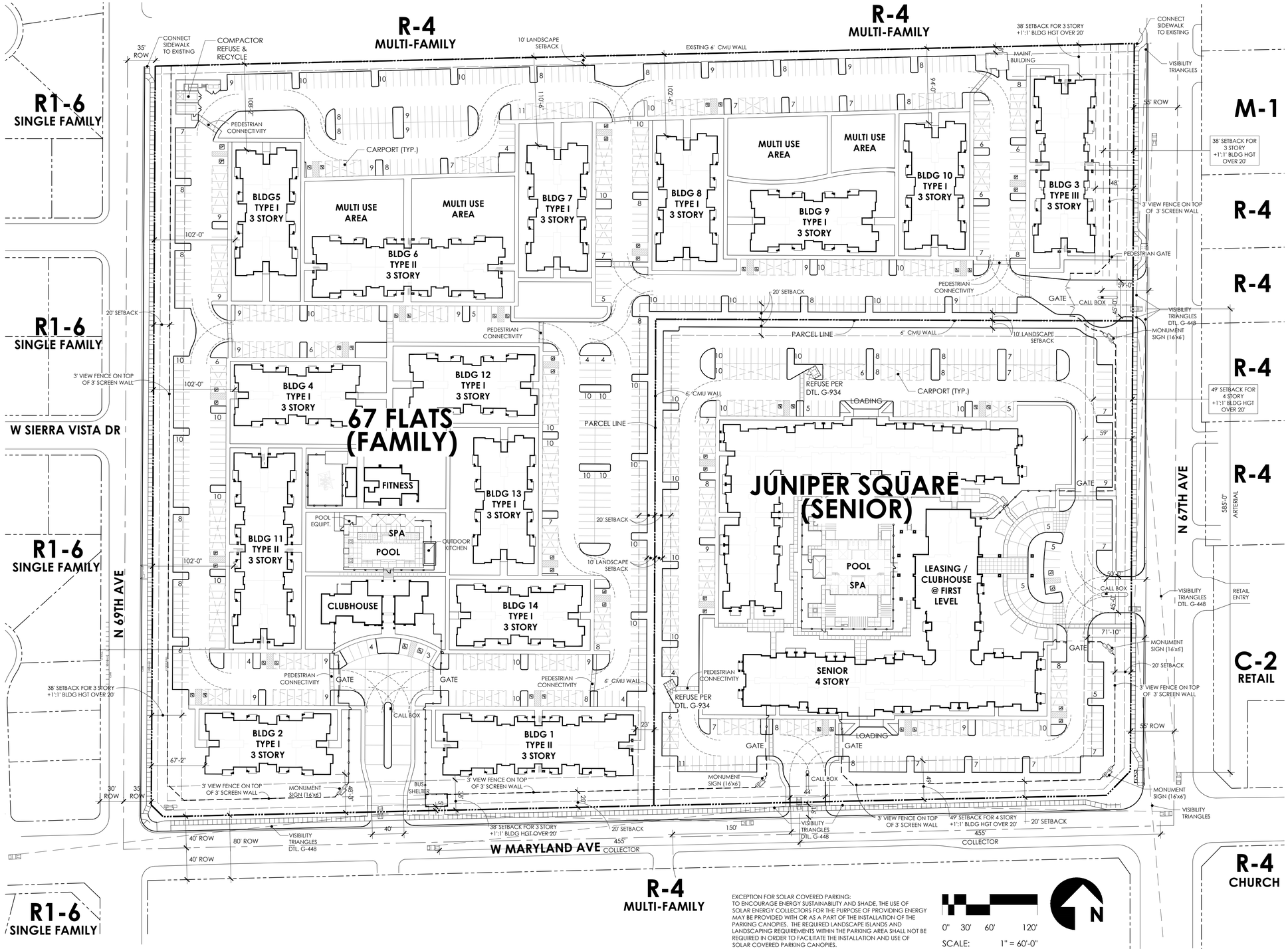
AUGUST 19, 2022

REGISTERED ARCHITECT
CERTIFICATE NO.
13467
GARY D. TODD
08/22/22
Date Signed
ARIZONA, U.S.A.

CONCEPTUAL MASTER DEVELOPMENT SITE PLAN

Preliminary Not For Construction

A.01



SITE DATA

SITE AREA:

PARCEL	NET	GROSS
67 FLATS	±18.50 ACRES (±805,923 SF)	±20.09 ACRES (±875,141 SF)
JUNIPER SQUARE	±8.36 ACRES (±364,000 SF)	±9.69 ACRES (±422,276 SF)
TOTAL	**±26.86 ACRES (±1,169,923 SF)**	**± 29.78 ACRES (±1,297,417 SF)**

NOTE 1: GROSS & NET AREAS TO BE VERIFIED BY OWNER'S CIVIL ENGINEER AND/OR SURVEYOR.
NOTE 2: NET AREA EXCLUDED THE DEDICATION OF 35' HALF-ROW ON 69th AVENUE ON THE EAST SIDE.

ZONING:
EXISTING: R-4
PROPOSED: PAD (R-4)

HEIGHT:
MAXIMUM ALLOWED: 2-STORY OR 30'
PROPOSED:
67 FLATS (FAMILY – MULTI-FAMILY) 3 STORIES (40')
JUNIPER SQUARE (SENIOR LIVING) 4 STORIES (52'-6")

UNIT MIX:

•*FAMILY APARTMENT:*

UNIT TYPE	NO.	%
A-1 BEDROOM/1 BATH	12 D.U.	3.0%.
B-2 BEDROOM/2 BATH	204 D.U.	53.0%.
C-3 BEDROOM/2 BATH	168 D.U.	44.0%.
TOTAL	**384 D.U.**	**100%**

•*SENIOR LIVING:*

UNIT TYPE	NO.	%
1 BEDROOM/1 BATH	66 D.U.	30%.
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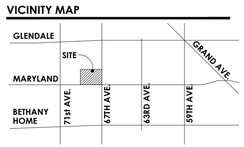

TODD + ASSOCIATES
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21-2052-02

DOMINIUM

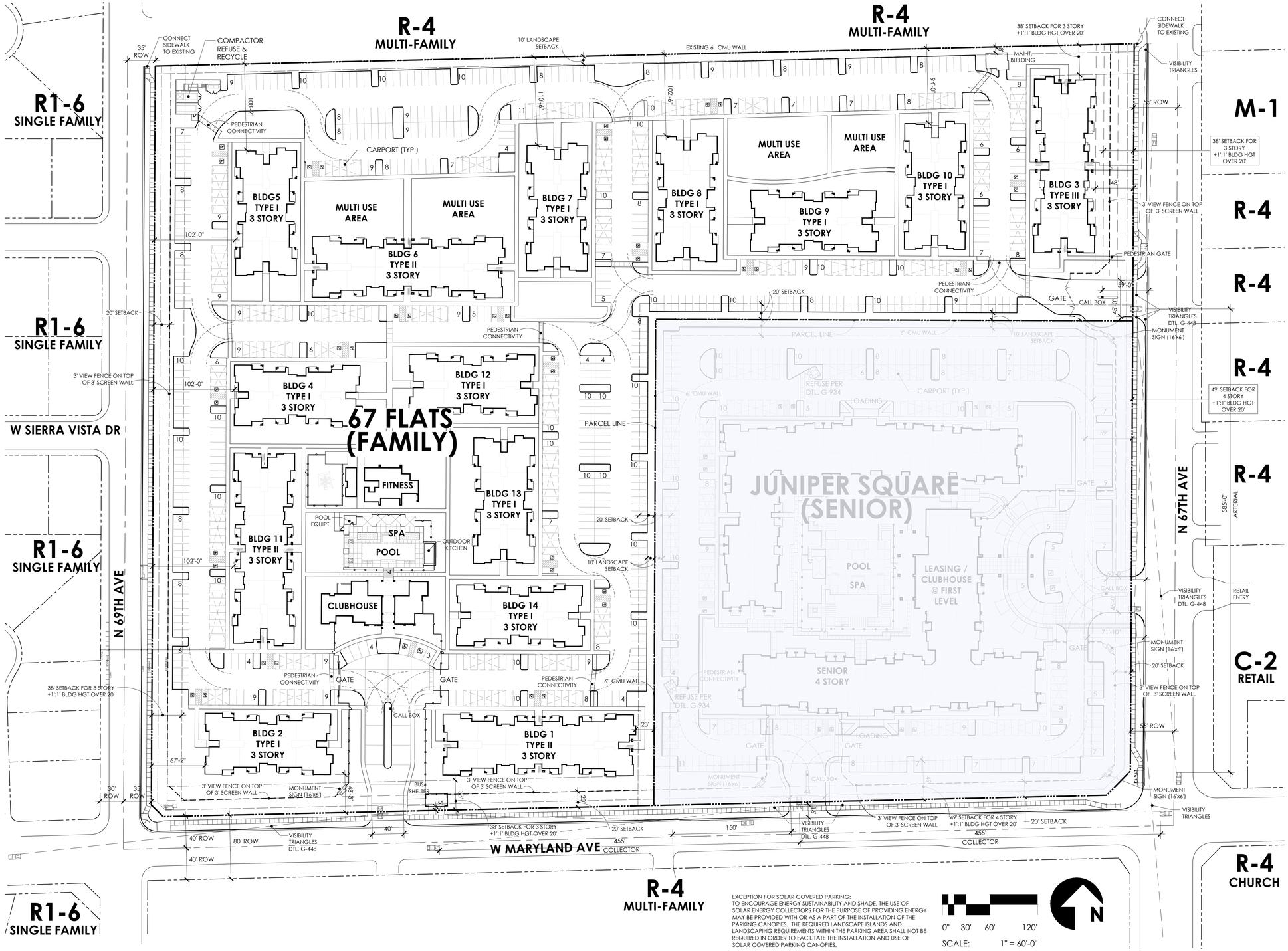
FAMILY LIVING **67 Flats** & **Juniper Square** SENIOR LIVING
Glendale, AZ
REZONING RESUBMITTAL
AUGUST 19, 2022

REGISTERED ARCHITECT
CERTIFICATE NO.
13467
GARY D.
TODD
08/22/22
Date Signed
ARIZONA, U.S.A.

CONCEPTUAL SITE PLAN

Preliminary Not For Construction

A.04



EXCEPTION FOR SOLAR COVERED PARKING:
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0' 30' 60' 120'
SCALE: 1" = 60'-0"

SITE DATA

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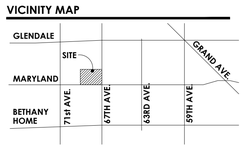


TODD + ASSOCIATES
602-952-8280 / TODDASSOC.COM
21-2052-02

DOMINIUM

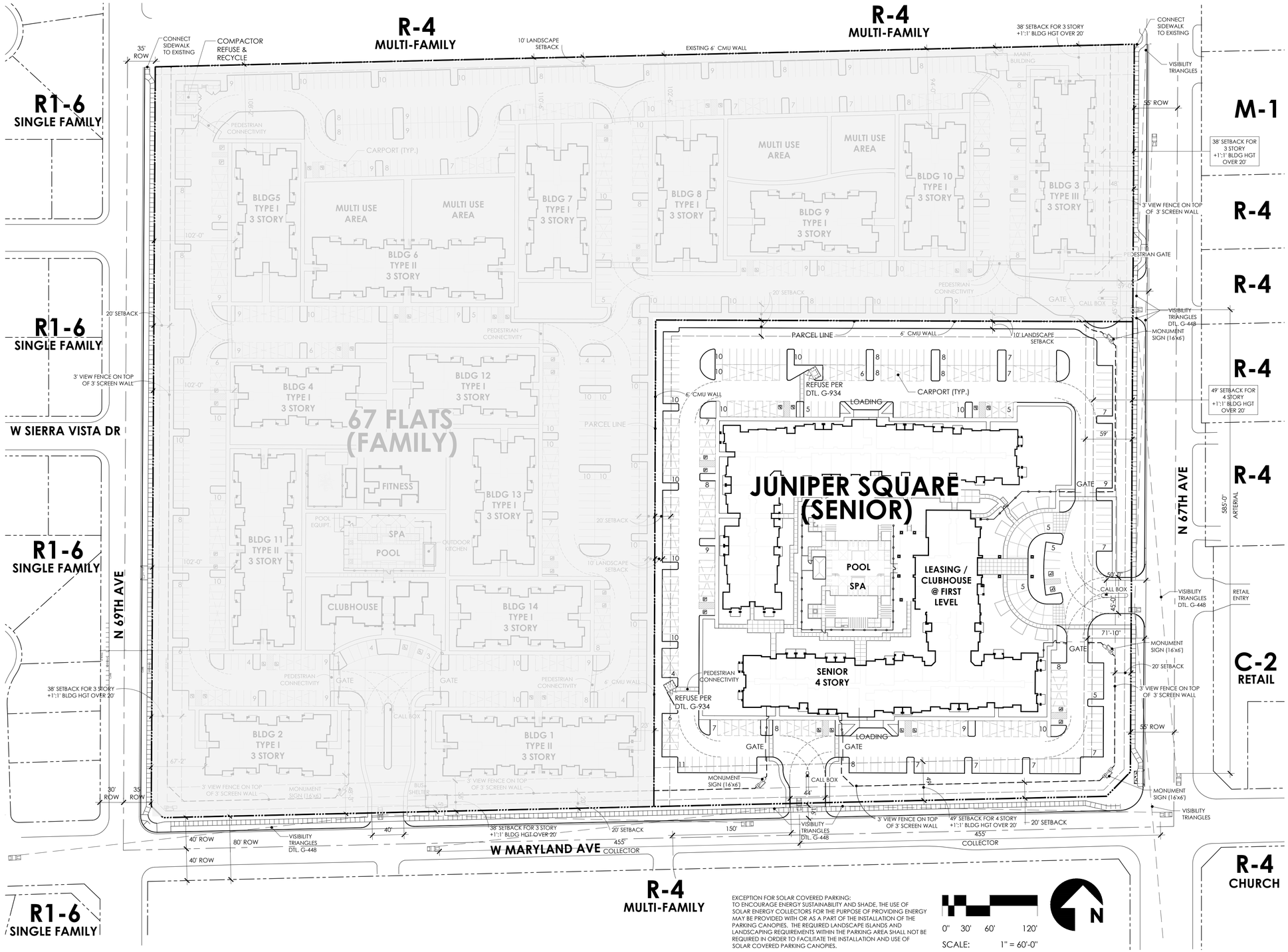
FAMILY LIVING — SENIOR LIVING
67 Flats & Juniper Square
Glendale, AZ
REZONING RESUBMITTAL
AUGUST 19, 2022

REGISTERED ARCHITECT
CERTIFICATE NO.
13467
GARY D. TODD
08/22/22
Date Signed
ARIZONA, U.S.A.

67 FLATS CONCEPTUAL SITE PLAN

Preliminary Not For Construction

A.06



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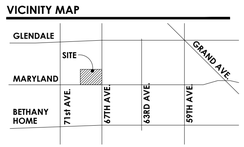

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21-2052-02

DOMINIUM

FAMILY LIVING — SENIOR LIVING

67 Flats & Juniper Square

Glendale, AZ

REZONING RESUBMITTAL

AUGUST 19, 2022

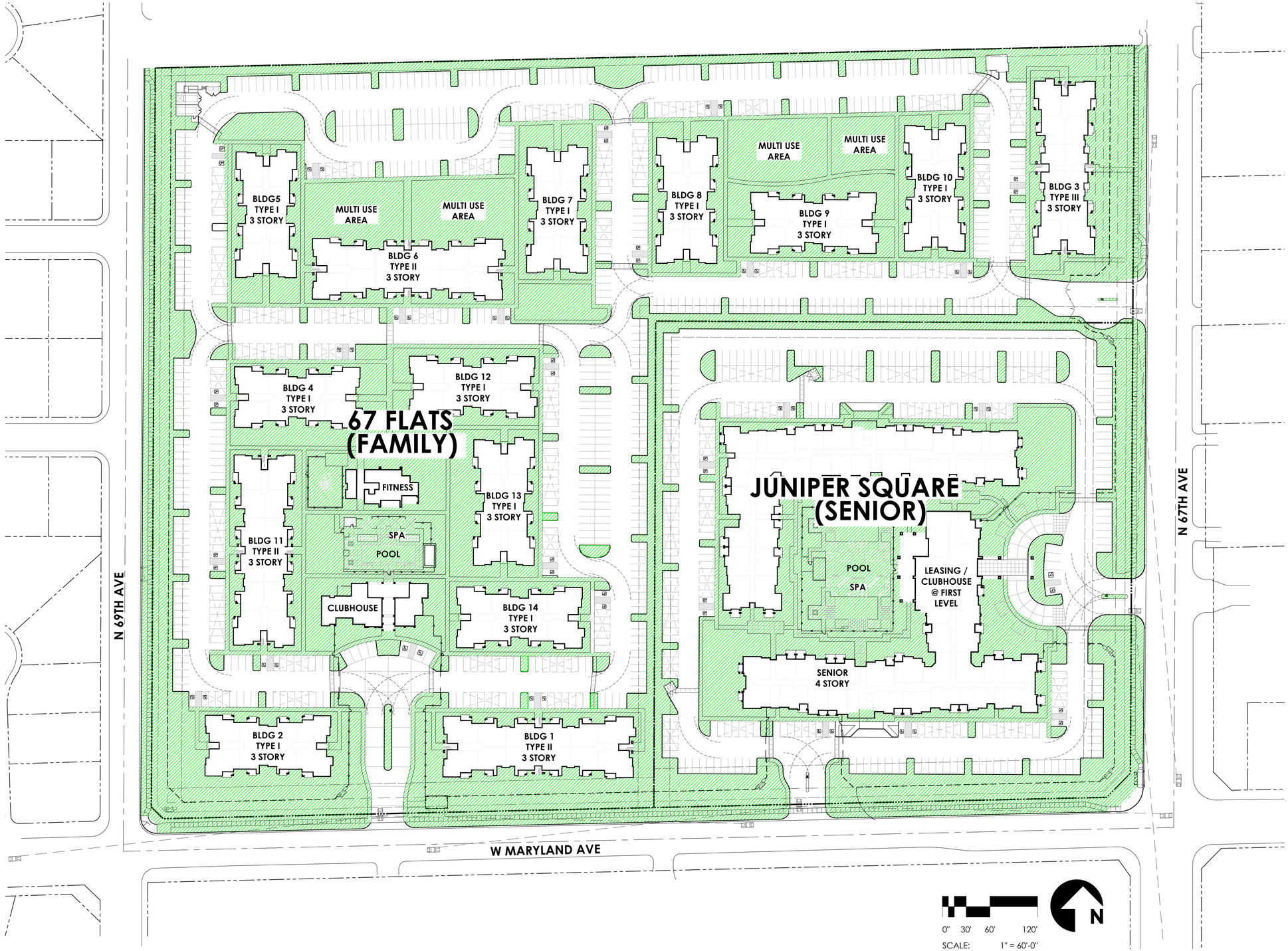
REGISTERED ARCHITECT CERTIFICATE NO. 13467 GARY D. TODD 08/22/22 Date Signed ARIZONA U.S.A.

JUNIPER SQUARE
CONCEPTUAL SITE PLAN

Preliminary Not For Construction

A.07

Exhibit 4
Conceptual Landscape Plan



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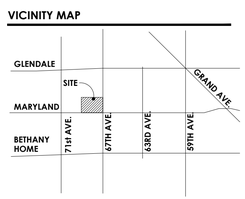
OPEN SPACE &
LANDSCAPE AREA

VICINITY MAP



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OPEN SPACE
SITE PLAN

Preliminary Not For Construction

A.03.1

MASTER PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	CAL.	QTY.	SIZE(ft x w) *tree - Install Size	EMITTERS
TREES (LARGE)						
	ACACIA ANEURA	MULGA TREE 15'x15'	15 GAL.	29	6'x3'	3 -XBT-20-6, 36 GPH
	PROSOPIS HYBRID 'LESLIE ROY'	LESLIE ROY MESQUITE / 30'X25'	15 Gal.	25	5'x3'	3 -XBT-20-6, 36 GPH
	CITRUS SPECIES	CITRUS x 'ROBERTSON' 12'x15'	36" B&B	0	8'x6'	3 -XTB-20-6, 36 GPH
	EUCALYPTUS PAPUANA	GHOST GUM 35'x30'	36" B&B	6	6'x5'	3 -XBT-20-6, 36 GPH
	PARKINSONIA 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE 25'x25'	48" BOX	12	9'x4'	
	FRAXINUS VELUTINA 'FANTEX'	FANTEX ASH 25'x25'	24" BOX	23	9'x4'	3 -XBT-20-6, 36 GPH
	PISTACIA X 'RED PUSH'	RED PUSH PISTACHE 30'x40'	24" Box	55	9'x6'	4 -XBT-20-6, 36 GPH
	QUERCUS VIRGIANA 'CATHEDERAL OAK'	CATHEDERAL LIVE OAK 40'x60'	24" BOX	52	9'X4'	3 -XBT-20-6, 36 GPH
TREES (SMALL)						
	CAESALPINIA SIERRA SUN	MEXICAN BIRD OF PARADISE 1'** 10'x10'		23	5'x3' Multi	3 -XBT-20-6, 36 GPH
	CHITALPA X TASHKANTENSIS 'PINK DAWN'	CHITALPA TREE 20'x25'	2"	32	8'x5' Std.	3 -XBT-20-6, 36 GPH
	CORDIA BOISSIERI	TEXAS OLIVE	2"	37	5'x3' Multi	3 -XBT-20-6, 36 GPH
	PISTACIA LENTISCUS	MASTIC TREE 15'x20'	2"	16	8'x5' Std.	3 -XBT-20-6, 36 GPH
	SOPHORA SECUNDIFLORA	TEXAS MOUNTAIN LAUREL 15'x15'	1"	7	5'x3'Multi	3 -XBT-20-6, 36 GPH
PALMS						
	CHAMAEROPS HUMILIS	MEDITERRANEAN PALM	15 G/36" 10			2 -XBT-10PC., 2 GPH
	PHOENIX DACTYLIFERA	DATE PALM	25 T.F., 0		-	BUBBLERS
SHRUBS					*Shrub - Mature Size	
	BOUGAINVILLEA 'BARBARA KARST'	BARBARA KARST BOUG.	5 GAL.	106	5'h x 6'w	1 -XBT-10PC., 1 GPH
	BOUGAINVILLA X ROSENKA	ROSENKA BOUGAINVILLEA	5 GAL.	114	3'h x 4'w	2 -XBT-10PC, 2 GPH
	CAESALPINIA PULCHERRIMA	RED BIRD OF PARADISE	5 GAL.	2	8'h x 10'w	1 -XBT-10PC, 1 GPH
	CARISSA MACROCARPA 'TUTTLE'	TUTTLE NATAL PLUM	5 GAL.	106	3'h x 4'w	2 -XBT-10PC., 2 GPH
	FICUS NITIDA COLUMNS	INDIAN LAUREL COLUMNS	15 GAL.	159	3'h x 4'w	2 -XBT-10PC., 2 GPH
	LEUCOPHYLLUM 'LYNN'S LEGACY'	HYBRID TEXAS SAGE	5 GAL.	171	5'h x 5'w	1 -XBT-10PC., 1 GPH
	MUHLENBERGIA RIGENS	DEER GRASS	5 GAL.	137	3'h x3'w	1 -XBT-10PC., 1 GPH
	MUHLENBERGIA LINDHEIMERI	AUTUMN GLOW GRASS	5 GAL.	0	3'h x3'w	1 -XBT-10PC., 1 GPH
	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	5 GAL.	0	3'h x3'w	1 -XBT-10PC., 1 GPH
	OLEA EUROPAEA 'LITTLE OLLIE'	DWARF OLIVE	5 GAL.	83	3'h x3'w	1 -XBT-10PC., 1 GPH
	ROSA SPP. 'ICEBERG'	WHITE ICEBERG SHRUB	5 GAL.	32	3'h x4'w	1 -XBT-10PC., 1 GPH
	RUELLIA BRITONIANA 'KATIE'	BLUE DWARF RUELLIA	5 GAL.	49	4'h x 6'w	1 -XBT-10PC., 1 GPH
	RUELLIA PENINSULARIS	BAJA RUELLIA	5 GAL.	81	4'h x 6'w	1 -XBT-10PC., 1 GPH
	DODONAEA VISCOSA	HOP BUSH	5 GAL.	18	15'h x10'w	1 -XBT-10PC., 1 GPH
	TECOMA X 'CRIMSON FLARE'	CRIMSON FLARE ESPERANZA	5 GAL.	0	6'h x6'w	1 -XBT-10PC., 1 GPH
	TECOMA X 'SIERRA APRICOT'	SIERRA APRICOT TECOMA	5 GAL.	0	3'h x4'w	1 -XBT-10PC., 1 GPH
	TECOMA STANS 'GOLD STAR'	GOLD STAR TECOMA	5 GAL.	94	5'h x5'w	1 -XBT-10PC., 1 GPH
	TECOMA X 'SOLAR FLARE'	SOLAR FLARE TECOMA	5 GAL.	119	6'h x6'w	1 -XBT-10PC., 1 GPH
	XYLOSMA CONGESTUM 'COMPACTA'	DWARF XYLOSMA	5 GAL.	8	4'h x5'w	1 -XBT-10PC., 1 GPH
ACCENTS						
	AGAVE PARRYI V. TRUNCATA	ARTICHOKE AGAVE	5 GAL.	30	18'h x 4'w	1 -XBT-10PC., 1 GPH
	ALOE X BLUE ELF	BLUE ELF ALOE	3 GAL.	18	18'H X 2'w	1 -XBT-10PC., 1 GPH
	ALOE BARBADENSIS	MEDICINAL ALOE	5 GAL.	0	2'h x 3'w	1 -XBT-10PC., 1 GPH
	AGAVE DESMETTIANA	SMOOTH AGAVE	5 GAL.	57	3'h x 3'w	1 -XBT-10PC., 1 GPH
	DASYLIRION QUADRANGULATUM	MEXICAN GRASS TREE	5 GAL.	0	5'h x 5'w	2 -XBT-10PC., 2 GPH
	EUPHORBIA TRUCALLI	FIRE STICKS	5 GAL.	51	4'h x4'w	1 -XBT-10PC., 1 GPH
	HESPERALOE FUNIFERA	GIANT YUCCA	5 GAL.	54	6'h x 6'w	1 -XBT-10PC., 1 GPH
	HESPERALOE PARVILORA	RED YUCCA	5 GAL.	56	3'h x 4'w	1 -XBT-10PC., 1 GPH
	PEDILANTHUS MACROCARPUS	LADY'S SLIPPER	5 GAL.	234	3'h x 3'w	1 -XBT-10PC., 1 GPH
	SANSEVIERIA TRIFASCIATA	MOTHER-IN-LAW TONGUE	5 GAL.	30	3'h x 4'w	1 -XBT-10PC., 1 GPH
	PORTULACARIA AFRA	ELEPHANT'S FOOD	5 GAL.	80	3'h x 4'w	
GROUNDCOVERS						
	CALLEISTEMON VIMINALIS 'LITTLE JOHN'	LITTLE JOHN BOTTLEBRUSH	5 GAL.	150	2'h x 2'w	1 -XBT-10PC., 1 GPH
	CARISSA GRANDIFLORA 'GREEN CARPET'	TUTTLE NATAL PLUM	5 GAL.	381	1'h x 4'w	2 -XBT-10PC., 2 GPH
	EREMOPHILA GLABRA 'MINGENEW GOLD,'	OUTBACK SUNRISE EMU	5 GAL.	218	18'h x6'w	1 -XBT-10PC., 2 GPH
	LANTANA 'DALLAS RED'	RED LANTANA	5 GAL.	94	4'h x 4'w	1 -XBT-10PC., 2 GPH
	LANTANA 'GOLD MOUND'	GOLD MOUND LANTANA	5 GAL.	378	2'h x 4'w	1 -XBT-10PC., 2 GPH
	LANTANA MONTEVIDENSIS	PURPLE LANTANA	5 GAL.	17	2'h x 3'w	1 -XBT-10PC., 1 GPH
	SPHAGNETICOLA TRILOBATA	YELLOW DOT	5 GAL.	58	18'h x 6'w	1 -XBT-10PC., 2 GPH
VINES						
	BIGNONIA CAPREOLATA	CROSSVINE	5 GAL.	8	8'h x 8'w	1 -XBT-10PC., 1 GPH
	BOUGAINVILLEA 'BARBARA KARST'	BOUGAINVILLEA VINE	5 GAL.	32	10'h x 10'w	1 -XBT-10PC., 1 GPH

GROUND PLANE

LANDSCAPE AREAS	DECOMPOSED GRANITE: 2" DEPTH OF 1/2" SCREENED 'APACHE GOLD'
SOD	CYNODON DACTYLON 'TIFF GREEN' 'TIFF GREEN' SOD TURF
NON-LIVING LANDSCAPE MATERIALS	COBBLE: 3"-8" COBBLESTONE / RIP RAP - LOCATION PER PLANS

SYNTHETIC TURF: "KID PLAY" BY ARTIFICIAL GRASS SUPERSTORE
ALTERNATE: NATURAL 'MIDIRON' BERMUDA SOD TURF

THE PROCESS OF THE DESIGN AND PREPARATION OF THESE CONCEPTUAL LANDSCAPE DOCUMENTS HAS BEEN TO COMPLY WITH ALL LOCAL AND COUNTY CODES AND REQUIREMENTS AND DESIGN STANDARDS.

TODD + ASSOCIATES
602-952-8280 / TODDASSOC.COM
21-2052-02

DOMINIUM

Residences @ NWC 67th & Maryland

Glendale, AZ

REZONING RESUBMITTAL

August 19, 2022

CONCEPTUAL LANDSCAPE PLAN

Preliminary Not For Construction

LICENSE EXPIRES 9/30/2022

L1.0

MASTER PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	CAL.	QTY.	SIZE(ft x w) *Tree - Install Size	EMITTERS
TREES (LARGE)						
	ACACIA ANEURA	MULGA TREE 15'x15'	15 GAL.	29	6'x3'	3 -XBT-20-6, 36 GPH
	PROSOPIS HYBRID 'LESLIE ROY'	LESLIE ROY MESQUITE / 30'X25'	15 Gal.	25	5'x3'	3 -XBT-20-6, 36 GPH
	CITRUS SPECIES	CITRUS x 'ROBERTSON' 12'x15'	36" B&B	0	8'x6'	3 -XTB-20-6, 36 GPH
	EUCALYPTUS PAPUANA	GHOST GUM 35'x30'	36" B&B	6	6'x5'	3 -XBT-20-6, 36 GPH
	PARKINSONIA 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE 25'x25'	48" BOX	12	9'x4'	
	FRAXINUS VELUTINA 'FANTEX'	FANTEX ASH 25'x25'	24" BOX	23	9'x4'	3 -XBT-20-6, 36 GPH
	PISTACIA X 'RED PUSH'	RED PUSH PISTACHE 30'x40'	24" Box	55	9'x6'	4 -XBT-20-6, 36 GPH
	QUERCUS VIRGIANA 'CATHEDERAL OAK'	CATHEDERAL LIVE OAK 40'x60'	24" BOX	52	9'X4'	3 -XBT-20-6, 36 GPH
TREES (SMALL)						
	CAESALPINIA SIERRA SUN	MEXICAN BIRD OF PARADISE 10'x10'	1"*	23	5'x3' Multi	3 -XBT-20-6, 36 GPH
	CHITALPA X TASHKANTENSIS 'PINK DAWN'	CHITALPA TREE 20'x25'	2"*	32	8'x5' Std.	3 -XBT-20-6, 36 GPH
	CORDIA BOISSIERI	TEXAS OLIVE	2"*	37	5'x3' Multi	3 -XBT-20-6, 36 GPH
	PISTACIA LENTISCUS	MASTIC TREE 15'x20'	2"*	16	8'x5' Std.	3 -XBT-20-6, 36 GPH
	SOPHORA SECUNDIFLORA	TEXAS MOUNTAIN LAUREL 15'x15'	1"*	7	5'x3'Multi	3 -XBT-20-6, 36 GPH
PALMS						
	CHAMAEROPS HUMILIS	MEDITERRANEAN PALM	15 G/36"	10		2 -XBT-10PC, 2 GPH
	PHOENIX DACTYLIFERA	DATE PALM	25 T.F.,	0	-	BUBBLERS
SHRUBS					*Shrub - Mature Size	
	BOUGAINVILLEA 'BARBARA KARST'	BARBARA KARST BOUG.	5 GAL.	106	5'h x 6'w	1 -XBT-10PC, 1 GPH
	BOUGAINVILLA X ROSENKA	ROSENKA BOUGAINVILLEA	5 GAL.	114	3'h x 4'w	2 -XBT-10PC, 2 GPH
	CAESALPINIA PULCHERRIMA	RED BIRD OF PARADISE	5 GAL.	2	8'h x 10'w	1 -XBT-10PC, 1 GPH
	CARISSA MACROCARPA 'TUTTLE'	TUTTLE NATAL PLUM	5 GAL.	106	3'h x 4'w	2 -XBT-10PC, 2 GPH
	FICUS NITIDA COLUMNS	INDIAN LAUREL COLUMNS	15 GAL.	159	3'h x 4'w	2 -XBT-10PC, 2 GPH
	LEUCOPHYLLUM 'LYNN'S LEGACY'	HYBRID TEXAS SAGE	5 GAL.	171	5'h x 5'w	1 -XBT-10PC, 1 GPH
	MUHLENBERGIA RIGENS	DEER GRASS	5 GAL.	137	3'h x3'w	1 -XBT-10PC, 1 GPH
	MUHLENBERGIA LINDHEIMERI	AUTUMN GLOW GRASS	5 GAL.	0	3'h x3'w	1 -XBT-10PC, 1 GPH
	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	5 GAL.	0	3'h x3'w	1 -XBT-10PC, 1 GPH
	OLEA EUROPAEA 'LITTLE OLLIE'	DWARF OLIVE	5 GAL.	83	3'h x3'w	1 -XBT-10PC, 1 GPH
	ROSA SPP. 'ICEBERG'	WHITE ICEBERG SHRUB	5 GAL.	32	3'h x4'w	1 -XBT-10PC, 1 GPH
	RUELLIA BRITONIANA 'KATIE'	BLUE DWARF RUELLIA	5 GAL.	49	4'h x 6'w	1 -XBT-10PC, 1 GPH
	RUELLIA PENINSULARIS	BAJA RUELLIA	5 GAL.	81	4'h x 6'w	1 -XBT-10PC, 1 GPH
	DODONAEA VISCOSA	HOP BUSH	5 GAL.	18	15'h x10'w	1 -XBT-10PC, 1 GPH
	TECOMA X 'CRIMSON FLARE''	CRIMSON FLARE ESPERANZA	5 GAL.	0	6'h x6'w	1 -XBT-10PC, 1 GPH
	TECOMA X 'SIERRA APRICOT'	SIERRA APRICOT TECOMA	5 GAL.	0	3'h x4'w	1 -XBT-10PC, 1 GPH
	TECOMA STANS 'GOLD STAR'	GOLD STAR TECOMA	5 GAL.	94	5'h x5'w	1 -XBT-10PC, 1 GPH
	TECOMA X 'SOLAR FLARE'	SOLAR FLARE TECOMA	5 GAL.	119	6'h x6'w	1 -XBT-10PC, 1 GPH
	XYLOSMA CONGESTUM 'COMPACTA'	DWARF XYLOSMA	5 GAL.	8	4'h x5'w	1 -XBT-10PC, 1 GPH
ACCENTS						
	AGAVE PARRYI V. TRUNCATA	ARTICHOKE AGAVE	5 GAL.	30	18'h x 4'w	1 -XBT-10PC, 1 GPH
	ALOE X BLUE ELF	BLUE ELF ALOE	3 GAL.	18	18'H X 2'w	1 -XBT-10PC, 1 GPH
	ALOE BARBADENSIS	MEDICINAL ALOE	5 GAL.	0	2'h x 3'w	1 -XBT-10PC, 1 GPH
	AGAVE DESMETTIANA	SMOOTH AGAVE	5 GAL.	57	3'h x 3'w	1 -XBT-10PC, 1 GPH
	DASYLIRION QUADRANGULATUM	MEXICAN GRASS TREE	5 GAL.	0	5'h x 5'w	2 -XBT-10PC, 2 GPH
	EUPHORBIA TRUCALLI	FIRE STICKS	5 GAL.	51	4'h x4'w	1 -XBT-10PC, 1 GPH
	HESPERALOE FUNIFERA	GIANT YUCCA	5 GAL.	54	6'h x 6'w	1 -XBT-10PC, 1 GPH
	HESPERALOE PARVILORA	RED YUCCA	5 GAL.	56	3'h x 4'w	1 -XBT-10PC, 1 GPH
	PEDILANTHUS MACROCARPUS	LADY'S SLIPPER	5 GAL.	234	3'h x 3'w	1 -XBT-10PC, 1 GPH
	SANSEVIERIA TRIFASCIATA	MOTHER-IN-LAW TONGUE	5 GAL.	30	3'h x 4'w	1 -XBT-10PC, 1 GPH
	PORTULACARIA AFRA	ELEPHANT'S FOOD	5 GAL.	80	3'h x 4'w	
GROUNDCOVERS						
	CALLIESTEMON VIMINALIS 'LITTLE JOHN'	LITTLE JOHN BOTTLEBRUSH	5 GAL.	150	2'h x 2'w	1 -XBT-10PC, 1 GPH
	CARISSA GRANDIFLORA 'GREEN CARPET'	TUTTLE NATAL PLUM	5 GAL.	381	3'h x 4'w	2 -XBT-10PC, 2 GPH
	EREMOPHILA GLABRA 'MINGENEW GOLD.'	OUTBACK SUNRISE EMU	5 GAL.	218	18'h x6'w	1 -XBT-10PC, 2 GPH
	LANTANA 'DALLAS RED'	RED LANTANA	5 GAL.	94	4'h x 4'w	1 -XBT-10PC, 2 GPH
	LANTANA 'GOLD MOUND'	GOLD MOUND LANTANA	5 GAL.	378	2'h x 4'w	1 -XBT-10PC, 2 GPH
	LANTANA MONTEVIDENSIS	PURPLE LANTANA	5 GAL.	17	2'h x 3'w	1 -XBT-10PC, 1 GPH
	SPHAGNETICOLA TRILOBATA	YELLOW DOT	5 GAL.	58	18'h x 6'w	1 -XBT-10PC, 2 GPH
VINES						
	BIGNONIA CAPREOLATA	CROSSVINE	5 GAL.	8	8'h x 8'w	1 -XBT-10PC, 1 GPH
	BOUGAINVILLEA 'BARBARA KARST'	BOUGAINVILLEA VINE	5 GAL.	32	10'h x 10'w	1 -XBT-10PC, 1 GPH

GROUND PLANE

MEDIACAPE ABOVE	DECOMPOSED GRANITE: 2" DEPTH OF 1/2" SCREENED 'APACHE GOLD'
TURF	CYNODON DACTYLON 'TIFF GREEN' *TIFF GREEN' SOD TURF*
ROCK COBBLE LOCATION	COBBLE: 3"-8" COBBLESTONE / RIP RAP - LOCATION PER PLANS

SYNTHETIC TURF: 'KID PLAY' BY ARTIFICIAL GRASS SUPERSTORE
ALTERNATE: NATURAL 'MIDIRON' BERMUDA SOD TURF

THE PROCESS OF THE DESIGN AND PREPARATION OF THESE CONCEPTUAL LANDSCAPE DOCUMENTS HAS BEEN TO COMPLY WITH ALL LOCAL AND COUNTY CODES AND REQUIREMENTS AND DESIGN STANDARDS.

TODD + ASSOCIATES
602-952-8280 / TODDASSOC.COM
21-2052-02

DOMINIUM

Residences @ NWC 67th & Maryland

Glendale, AZ

REZONING RESUBMITTAL

August 19, 2022

FAMILY CONCEPTUAL LANDSCAPE PLAN

Preliminary Not For Construction

23444
STEVEN D. VOORHEES
08/12/22
REGISTERED LANDSCAPE ARCHITECT
ARIZONA, U.S.A.

LICENSE EXPIRES 9/30/2022

L1.1

MASTER PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	CAL.	QTY.	SIZE(ft x w) *Tree - Install Size	EMITTERS
TREES (LARGE)						
	ACACIA ANEURA	MULGA TREE 15'x15'	15 GAL.	29	6'x3'	3 -XBT-20-6, 36 GPH
	PROSOPIS HYBRID 'LESLIE ROY'	LESLIE ROY MESQUITE / 30'X25'	15 Gal.	25	5'x3'	3 -XBT-20-6, 36 GPH
	CITRUS SPECIES	CITRUS x 'ROBERTSON' 12'x15'	36" B&B	0	8'x6'	3 -XTB-20-6, 36 GPH
	EUCALYPTUS PAPUANA	GHOST GUM 35'x30'	36" B&B	6	6'x5'	3 -XBT-20-6, 36 GPH
	PARKINSONIA 'DESERT MUSEUM'	DESERT MUSEUM PALO VERDE 25'x25'	48" BOX	12	9'x4'	
	FRAXINUS VELUTINA 'FANTEX'	FANTEX ASH 25'x25'	24" BOX	23	9'x4'	3 -XBT-20-6, 36 GPH
	PISTACIA X 'RED PUSH'	RED PUSH PISTACHE 30'x40'	24" Box	55	9'x6'	4 -XBT-20-6, 36 GPH
	QUERCUS VIRGIANA 'CATHEDERAL OAK'	CATHEDERAL LIVE OAK 40'x60'	24" BOX	52	9'X4'	3 -XBT-20-6, 36 GPH
TREES (SMALL)						
	CAESALPINIA SIERRA SUN	MEXICAN BIRD OF PARADISE 1'** 10'x10'		23	5'x3' Multi	3 -XBT-20-6, 36 GPH
	CHITALPA X TASHKANTENSIS 'PINK DAWN'	CHITALPA TREE 20'x25'	2"*	32	8'x5' Std.	3 -XBT-20-6, 36 GPH
	CORDIA BOISSIERI	TEXAS OLIVE	2"*	37	5'x3' Multi	3 -XBT-20-6, 36 GPH
	PISTACIA LENTISCUS	MASTIC TREE 15'x20'	2"*	16	8'x5' Std.	3 -XBT-20-6, 36 GPH
	SOPHORA SECUNDIFLORA	TEXAS MOUNTAIN LAUREL 15'x15'	1"*	7	5'x3'Multi	3 -XBT-20-6, 36 GPH
PALMS						
	CHAMAEROPS HUMILIS	MEDITERRANEAN PALM	15 G/36" 10			2 -XBT-10PC., 2 GPH
	PHOENIX DACTYLIFERA	DATE PALM	25 T.F., 0		-	BUBBLERS
SHRUBS					*Shrub - Mature Size	
	BOUGAINVILLEA 'BARBARA KARST'	BARBARA KARST BOUG.	5 GAL.	106	5'h x 6'w	1 -XBT-10PC., 1 GPH
	BOUGAINVILLA X ROSENKA	ROSENKA BOUGAINVILLEA	5 GAL.	114	3'h x 4'w	2 -XBT-10PC., 2 GPH
	CAESALPINIA PULCHERRIMA	RED BIRD OF PARADISE	5 GAL.	2	8'h x 10'w	1 -XBT-10PC., 1 GPH
	CARISSA MACROCARPA 'TUTTLE'	TUTTLE NATAL PLUM	5 GAL.	106	3'h x 4'w	2 -XBT-10PC., 2 GPH
	FICUS NITIDA 'COLUMNS'	INDIAN LAUREL COLUMNS	15 GAL.	159	3'h x 4'w	2 -XBT-10PC., 2 GPH
	LEUCOPHYLLUM 'LYNNS LEGACY'	HYBRID TEXAS SAGE	5 GAL.	171	5'h x 5'w	1 -XBT-10PC., 1 GPH
	MUHLENBERGIA RIGENS	DEER GRASS	5 GAL.	137	3'h x3'w	1 -XBT-10PC., 1 GPH
	MUHLENBERGIA LINDHEIMERI	AUTUMN GLOW GRASS	5 GAL.	0	3'h x3'w	1 -XBT-10PC., 1 GPH
	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	5 GAL.	0	3'h x3'w	1 -XBT-10PC., 1 GPH
	OLEA EUROPAEA 'LITTLE OLLIE'	DWARF OLIVE	5 GAL.	83	3'h x3'w	1 -XBT-10PC., 1 GPH
	ROSA SPP. 'ICEBERG'	WHITE ICEBERG SHRUB	5 GAL.	32	3'h x4'w	1 -XBT-10PC., 1 GPH
	RUELLIA BRITONIANA 'KATIE'	BLUE DWARF RUELLIA	5 GAL.	49	4'h x 6'w	1 -XBT-10PC., 1 GPH
	RUELLIA PENINSULARIS	BAJA RUELLIA	5 GAL.	81	4'h x 6'w	1 -XBT-10PC., 1 GPH
	DODONAEA VISCOSA	HOP BUSH	5 GAL.	18	15'h x10'w	1 -XBT-10PC., 1 GPH
	TECOMA X 'CRIMSON FLARE'	CRIMSON FLARE ESPERANZA	5 GAL.	0	6'h x6'w	1 -XBT-10PC., 1 GPH
	TECOMA X 'SIERRA APRICOT'	SIERRA APRICOT TECOMA	5 GAL.	0	3'h x4'w	1 -XBT-10PC., 1 GPH
	TECOMA STANS 'GOLD STAR'	GOLD STAR TECOMA	5 GAL.	94	5'h x5'w	1 -XBT-10PC., 1 GPH
	TECOMA X 'SOLAR FLARE'	SOLAR FLARE TECOMA	5 GAL.	119	6'h x6'w	1 -XBT-10PC., 1 GPH
	XYLOSMA CONGESTUM 'COMPACTA'	DWARF XYLOSMA	5 GAL.	8	4'h x5'w	1 -XBT-10PC., 1 GPH
ACCENTS						
	AGAVE PARRYI V. TRUNCATA	ARTICHOKE AGAVE	5 GAL.	30	18'h x 4'w	1 -XBT-10PC., 1 GPH
	ALOE X BLUE ELF. ALOE	BLUE ELF. ALOE	3 GAL.	18	18'H X 2'w	1 -XBT-10PC., 1 GPH
	ALOE BARBADENSIS	MEDICINAL ALOE	5 GAL.	0	2'h x 3'w	1 -XBT-10PC., 1 GPH
	AGAVE DESMETTIANA	SMOOTH AGAVE	5 GAL.	57	3'h x 3'w	1 -XBT-10PC., 1 GPH
	DASYLIRION QUADRANGULATUM	MEXICAN GRASS TREE	5 GAL.	0	5'h x 5'w	2 -XBT-10PC., 2 GPH
	EUPHORBIA TRUCALLI	FIRE STICKS	5 GAL.	51	4'h x4'w	1 -XBT-10PC., 1 GPH
	HESPERALOE FUNIFERA	GIANT YUCCA	5 GAL.	54	6'h x 6'w	1 -XBT-10PC., 1 GPH
	HESPERALOE PARVILORA	RED YUCCA	5 GAL.	56	3'h x 4'w	1 -XBT-10PC., 1 GPH
	PEDILANTHUS MACROCARPUS	LADY'S SLIPPER	5 GAL.	234	3'h x 3'w	1 -XBT-10PC., 1 GPH
	SANSEVERIA TRIFASCIATA	MOTHER-IN-LAW TONGUE	5 GAL.	30	3'h x 4'w	1 -XBT-10PC., 1 GPH
	PORTULACARIA AFRA	ELEPHANT'S FOOD	5 GAL.	80	3'h x 4'w	
GROUNDCOVERS						
	CALLEISTEMON VIMINALIS 'LITTLE JOHN'	LITTLE JOHN BOTTLEBRUSH	5 GAL.	150	2'h x 2'w	1 -XBT-10PC., 1 GPH
	CARISSA GRANDIFLORA 'GREEN CARPET'	TUTTLE NATAL PLUM	5 GAL.	381	3'h x 4'w	2 -XBT-10PC., 2 GPH
	EREMOPHILA GLABRA 'MINGENEW GOLD.'	OUTBACK SUNRISE EMU	5 GAL.	218	18'h x6'w	1 -XBT-10PC., 2 GPH
	LANTANA 'DALLAS RED'	RED LANTANA	5 GAL.	94	4'h x 4'w	1 -XBT-10PC., 2 GPH
	LANTANA 'GOLD MOUND'	GOLD MOUND LANTANA	5 GAL.	378	2'h x 4'w	1 -XBT-10PC., 2 GPH
	LANTANA MONTEVIDENSIS	PURPLE LANTANA	5 GAL.	17	2'h x 3'w	1 -XBT-10PC., 1 GPH
	SPHAGNETICOLA TRILOBATA	YELLOW DOT	5 GAL.	58	18'h x 6'w	1 -XBT-10PC., 2 GPH
VINES						
	BIGNONIA CAPREOLATA	CROSSVINE	5 GAL.	8	8'h x 8'w	1 -XBT-10PC., 1 GPH
	BOUGAINVILLEA 'BARBARA KARST'	BOUGAINVILLEA VINE	5 GAL.	32	10'h x 10'w	1 -XBT-10PC., 1 GPH

GROUND PLANE

MEDICAFE 4800	DECOMPOSED GRANITE: 2" DEPTH OF 1/2" SCREENED 'APACHE GOLD'
TURF	CYNODON DACTYLON 'TIFF GREEN' *TIFF GREEN* SOD TURF
RIP RAP/ COBBLESTONE	COBBLE: 3"-8" COBBLESTONE / RIP RAP - LOCATION PER PLANS

SYNTHETIC TURF: 'KID PLAY' BY ARTIFICIAL GRASS SUPERSTORE
ALTERNATE: NATURAL 'MIDIRON' BERMUDA SOD TURF

THE PROCESS OF THE DESIGN AND PREPARATION OF THESE CONCEPTUAL LANDSCAPE DOCUMENTS HAS BEEN TO COMPLY WITH ALL LOCAL AND COUNTY CODES AND REQUIREMENTS AND DESIGN STANDARDS.

TODD + ASSOCIATES
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21-2052-02

DOMINIUM

Residences @ NWC 67th & Maryland

Glendale, AZ

REZONING RESUBMITTAL

August 19, 2022

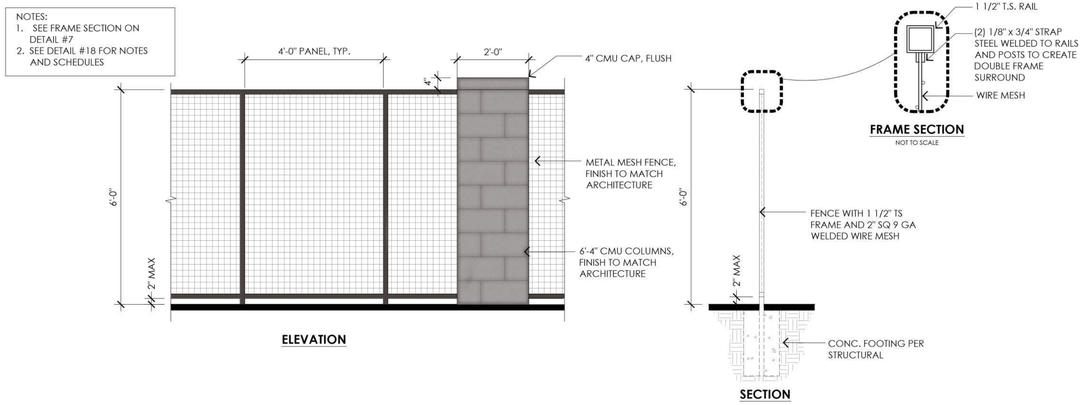
SENIOR CONCEPTUAL LANDSCAPE PLAN

Preliminary Not For Construction

23444 STEVEN D. VOORHEES 08/12/22 REGISTERED ARIZONA, U.S.A.

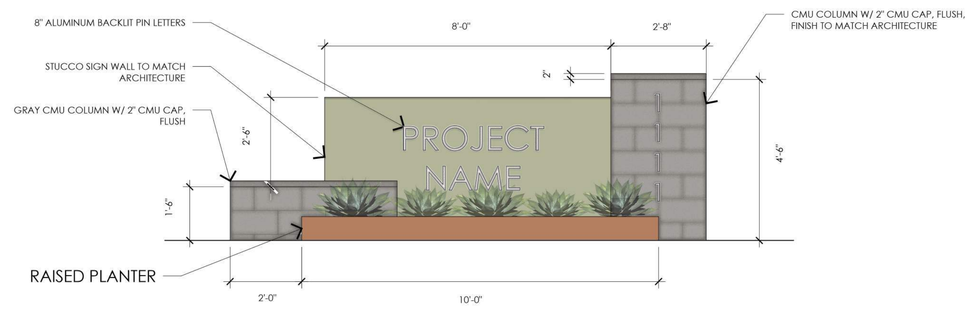
LICENSE EXPIRES 9/30/2022

L1.2



3 METAL MESH FENCE

SCALE: 1/2" = 1'-0"



4 ENTRY SIGNAGE

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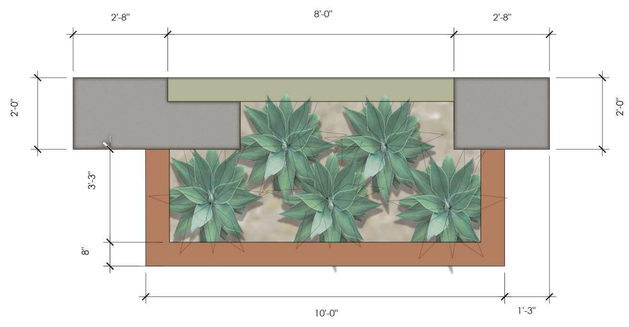

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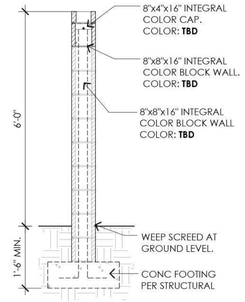
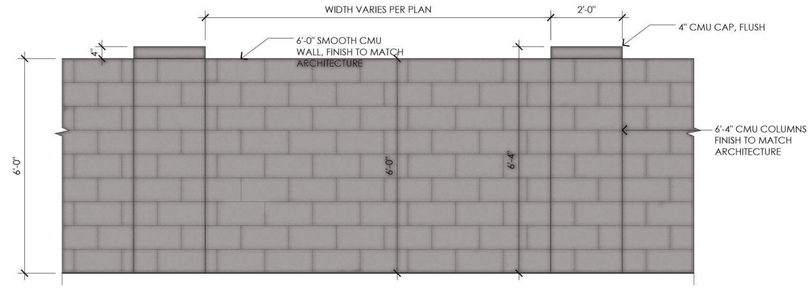
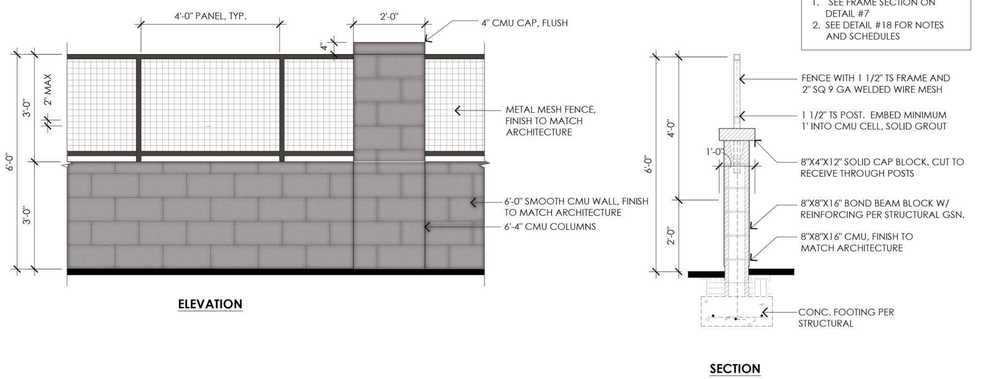
SCALE: 1/2"=1'-0





1 6'-0" CMU WALL

SCALE: 1/2"=1'-0



2 METAL MESH FENCE OVER CMU WALL

SCALE: 1/2" - 1'-0"

THE PROCESS OF THE DESIGN AND PREPARATION OF THESE CONCEPTUAL LANDSCAPE DOCUMENTS HAS BEEN TO COMPLY WITH ALL LOCAL AND COUNTY CODES AND REQUIREMENTS AND DESIGN STANDARDS.

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DOMINIUM

Residences @ NWC 67th & Maryland

Glendale, AZ

REZONING RESUBMITTAL

August 19, 2022

HARDSCAPE DETAILS

Preliminary Not For Construction

LICENSE EXPIRES 9/30/2022

L1.3

Exhibit 5
Conceptual Renderings

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21-2052-02

DOMINIUM

FAMILY LIVING
67 Flats & SENIOR LIVING **Juniper Square**
Glendale, AZ

DESIGN REVIEW RESUBMITTAL
June 17, 2022

REGISTERED ARCHITECT
CERTIFICATE NO.
13467
GARY D.
TODD
06/21/22
Date Signed
ARIZONA, U.S.A.

67 FLATS
ENTRY PERSPECTIVE

Preliminary Not For Construction

A.06

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DOMINIUM

FAMILY LIVING
67 Flats & SENIOR LIVING **Juniper Square**
Glendale, AZ

DESIGN REVIEW RESUBMITTAL

June 17, 2022

REGISTERED ARCHITECT
CERTIFICATE NO.
13467
GARY D.
TODD
06/21/22
Date Signed
ARIZONA, U.S.A.

67 FLATS

POOL COURTYARD - NIGHT VIEW

Preliminary Not For Construction

A.07

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DOMINIUM

FAMILY LIVING
67 Flats & Juniper Square
SENIOR LIVING

Glendale, AZ

DESIGN REVIEW RESUBMITTAL

June 17, 2022

REGISTERED ARCHITECT
CERTIFICATE No.
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GARY D.
TODD
06/21/22
Date Signed
ARIZONA U.S.A.

67 FLATS
COURTYARD PERSPECTIVE

Preliminary Not For Construction

A.08

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21-2052-02

DOMINIUM

FAMILY LIVING
67 Flats & Juniper Square
SENIOR LIVING

Glendale, AZ

DESIGN REVIEW RESUBMITTAL

June 17, 2022

REGISTERED ARCHITECT
CERTIFICATE NO.
13467
GARY D.
TODD
06/21/22
Date Signed
ARIZONA, USA

67 FLATS
PARKING PERSPECTIVE VIEW

Preliminary Not For Construction

A.09

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21-2052-02

DOMINIUM

FAMILY LIVING
67 Flats & Juniper Square
SENIOR LIVING

Glendale, AZ

DESIGN REVIEW RESUBMITTAL
June 17, 2022

REGISTERED ARCHITECT
CERTIFICATE NO.
13467
GARY D.
TODD
06/21/22
Date Signed
ARIZONA, USA

JUNIPER SQUARE
ENTRY PERSPECTIVE

Preliminary Not For Construction

A.31

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21-2052-02

DOMINIUM

FAMILY LIVING
67 Flats & **Juniper Square**
SENIOR LIVING
Glendale, AZ

DESIGN REVIEW RESUBMITTAL
June 17, 2022

REGISTERED ARCHITECT
CERTIFICATE NO.
13467
GARY D.
TODD
06/21/22
Date Signed
ARIZONA, USA

JUNIPER SQUARE
CORNER PERSPECTIVE

Preliminary Not For Construction

A.32

TODD + ASSOCIATES
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21-2052-02

DOMINIUM

FAMILY LIVING **67 Flats** & SENIOR LIVING **Juniper Square**
Glendale, AZ

DESIGN REVIEW RESUBMITTAL
June 17, 2022

REGISTERED ARCHITECT CERTIFICATE NO. 13467 GARY D. TODD 06/21/22 Date Signed ARIZONA, USA

JUNIPER SQUARE
SIDE VIEW PERSPECTIVE

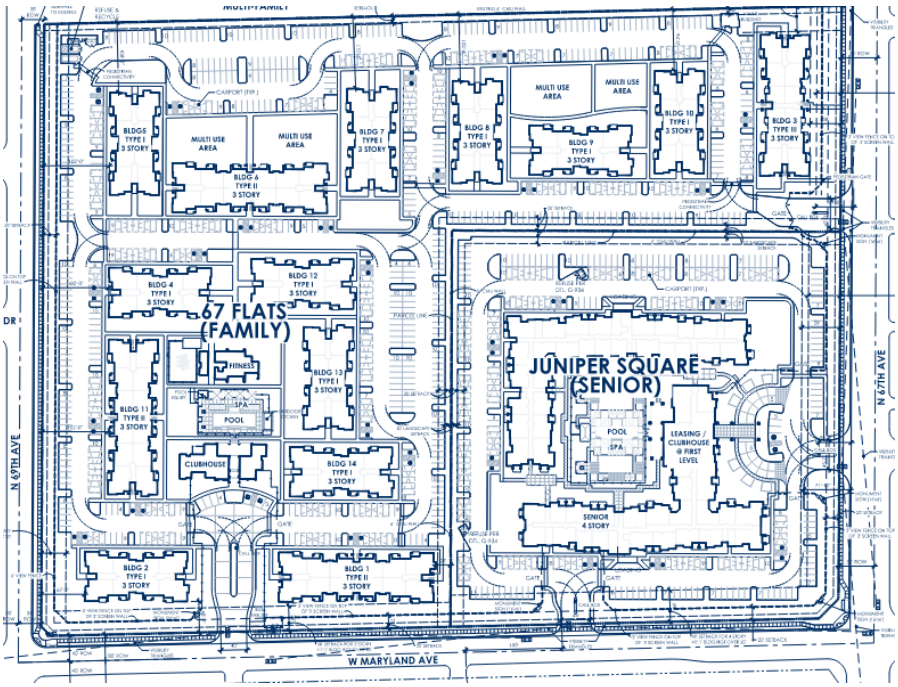
Preliminary Not For Construction

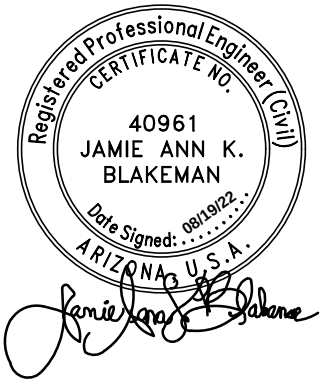
A.33

Appendix A
Traffic Impact Study

67 Flats & Juniper Square

Traffic Impact Study – Category I





Prepared for:

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Prepared by:

Lokahi

Lōkahi, LLC
10555 N. 114th Street, Suite 105
Scottsdale, AZ 85259

Project Number: 21.5281
August 19, 2022

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1. Introduction and Executive Summary

1.1. Purpose of Report and Study Objectives

Lōkahi, LLC (Lōkahi) was retained by Dominium to complete a Traffic Impact Study for the proposed 67 Flats (multi-family) and Juniper Square (senior living) developments. The proposed multi-family and senior family residential developments will be located on the northwest corner of 67th Avenue and Maryland Avenue in Glendale, Arizona.

The proposed development will include the following two (2) land uses:

67 Flats	Multi-Family	384 dwelling units *12 one-bedroom units* *204 two-bedroom units* *168 three-bedroom*
Juniper Square	Senior Living	221 dwelling units *66 one-bedroom units* *131 two-bedroom units* *24 three-bedroom*

See **Figure 2** and **Appendix A** for the proposed site plan.

The objective of this Traffic Impact Study is to analyze the traffic related impacts of the proposed development to the adjacent roadway network.

1.2. Executive Summary

This report presents the analyses and results of a traffic study prepared for the proposed 67 Flats and Juniper Square developments. The proposed development is anticipated to open in the year 2024.

This Traffic Impact Study includes:

- Level of service analysis for the existing conditions weekday AM and PM peak hours
- Trip Generation for the proposed development
- Level of service analysis for the build out year (2024) weekday AM and PM peak hours
- Level of service analysis for the build out year + 3-year (2027) weekday AM and PM peak hours
- Turn lane warrant analysis

The following intersections are included in this study:

- 69th Avenue and Ocotillo Road (1)
- 67th Avenue and Ocotillo Road (2)
- 67th Avenue and Driveway A (3)
- 67th Avenue and Driveway B (4)
- 69th Avenue and Maryland Avenue (5)
- Maryland Avenue and Driveway C (6)
- Maryland Avenue and Driveway D (7)
- 67th Avenue and Maryland Avenue (8)

Existing Conditions

The capacity and level of service for the study area intersection were evaluated for the existing conditions. All study area intersections operate with movements at a level of service (LOS) D or better with the exception of the following:

67th Avenue and Ocotillo Road (2)

- EB left AM and PM peak hours operates at LOS F
- EB shared through-right PM peak hour operates at LOS E
- WB left AM and PM peak hours operates at LOS F

Trip Generation

The trip generation for the proposed 67 Flats and Juniper Square developments was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 11th Edition.* ITE Land Use 220 – Multifamily Housing (Low-Rise) and 252 Senior Adult Housing – Attached were used to calculate the trips generated by the proposed development.

Trip Generation – Proposed Development

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Multifamily Housing (Low-Rise)	220	384	Dwelling Units	2,537	142	34	108	186	117	69
Senior Adult Housing - Multifamily	252	221	Dwelling Units	664	43	15	28	55	31	24
			Total	3,201	185	49	136	241	148	93

The proposed 67 Flats and Juniper Square developments is anticipated to generate a total of 3,201 weekday trips, with 185 AM peak hour trips and 241 PM peak hour trips.

Future Conditions

Year 2024 (build out) and Year 2027 (built out + 3 years) analyses were completed with the build out of the proposed 67 Flats and Juniper Square developments. Utilizing Maricopa Associations of Governments (MAG) socioeconomic projections, existing traffic volumes grown by an annual growth rate of 2.0% to determine the year 2024 and 2027 traffic volumes.

Year 2024

Capacity analysis was completed for both the AM and PM peak hours for the year 2024, with the build out of the proposed 67 Flats and Juniper Square developments. All movements at the study intersections operate at a LOS D or better, with the exception of:

67th Avenue and Ocotillo Road (2)

- EB left AM and PM peak hours operates at LOS F
- EB shared through-right PM peak hour operates at LOS F
- WB left AM and PM peak hours operates at LOS F
- WB shared through-right PM peak hour operates at LOS F

67th Avenue and Driveway B (4)

- EB left AM and PM peak hours operates at LOS F
- WB shared left-through-right PM peak hour operates at LOS E

Delays are typical during peak hours for minor-to-major turning movements, especially at stop-controlled intersections. Drivers familiar with the area often choose to use alternative routes during peak hours or drive at different times to avoid potential delay. The existing upstream signals will also help to provide gaps in traffic to allow for turns at these stop-controlled intersection. Therefore, improvements to mitigate LOS E and F at the above intersections are not recommended as part of this study.

Year 2027

Capacity analysis was completed for both the AM and PM peak hours for the year 2027, with the build out of the proposed 67 Flats and Juniper Square developments. The results of the year 2027 build capacity analysis reveal that the study intersections operate with a level of service (LOS) D or better, or are maintained at the year 2024 build level of service.

Turn Lane Warrant Analysis

Based on the MCDOT right turn lane warrant criteria, a right turn lane is warranted at Driveway A, and not warranted at Driveway B.
Additionally, a southbound right turn deceleration lane is not warranted at the intersection of 67th Avenue and Maryland Avenue (8).

Recommendations

- **67th Avenue and Driveway A (3)**
  Buildout of a full access driveway and a southbound right turn deceleration lane with 160 feet of storage and 100 feet of taper.

- **67th Avenue and Driveway B (4)**
  Buildout of a full access driveway

- **Maryland Avenue and Driveway C (6)**
  Buildout of a full access driveway

- **Maryland Avenue and Driveway D (7)**
  Buildout of a full access driveway

As with any new development and potential change in traffic patterns, the following is recommended:

- **Monitor and Adjust Signal Timing**
  Monitor traffic patterns in the area and if necessary, adjust nearby signal timing

2. Proposed Development

The study area is located in the City of Glendale, Arizona. The site is located on the northwest corner of 67th Avenue and Maryland Avenue. The proposed development is bordered by 69th Avenue to the west, 67th Avenue to the east, Summerhill Place Apartments to the north, and Maryland Avenue to the south. See **Figure 1** for a vicinity map.

The proposed development will include the following two (2) land uses:

67 Flats	Multi-Family	384 dwelling units *12 one-bedroom units* *204 two-bedroom units* *168 three-bedroom*
Juniper Square	Senior Living	221 dwelling units *66 one-bedroom units* *131 two-bedroom units* *24 three-bedroom*

The proposed development is anticipated to be completed by the year 2024. See **Figure 2** and **Appendix A** for the proposed site plan.

There are four (4) proposed access points to the proposed 67 Flats and Juniper Square developments, two (2) located along 67th Avenue and two (2) located along Maryland Avenue.

67th Avenue and Driveway A (3) is located approximately 600 feet north of Maryland Avenue and will be a full access driveway allowing all movement into and out of the proposed development.

67th Avenue and Driveway B (4) is located approximately 260 feet north of Maryland Avenue and will be a full access driveway allowing all movement into and out of the proposed development.

Maryland Avenue and Driveway C (6) is located approximately 300 feet east of 69th Avenue and will be a full access driveway allowing all movement into and out of the proposed development.

Maryland Avenue and Driveway D (7) is located approximately 860 feet east of 69th Avenue and will be a full access driveway allowing all movement into and out of the proposed development.

See **Figure 3** for the proposed study area.

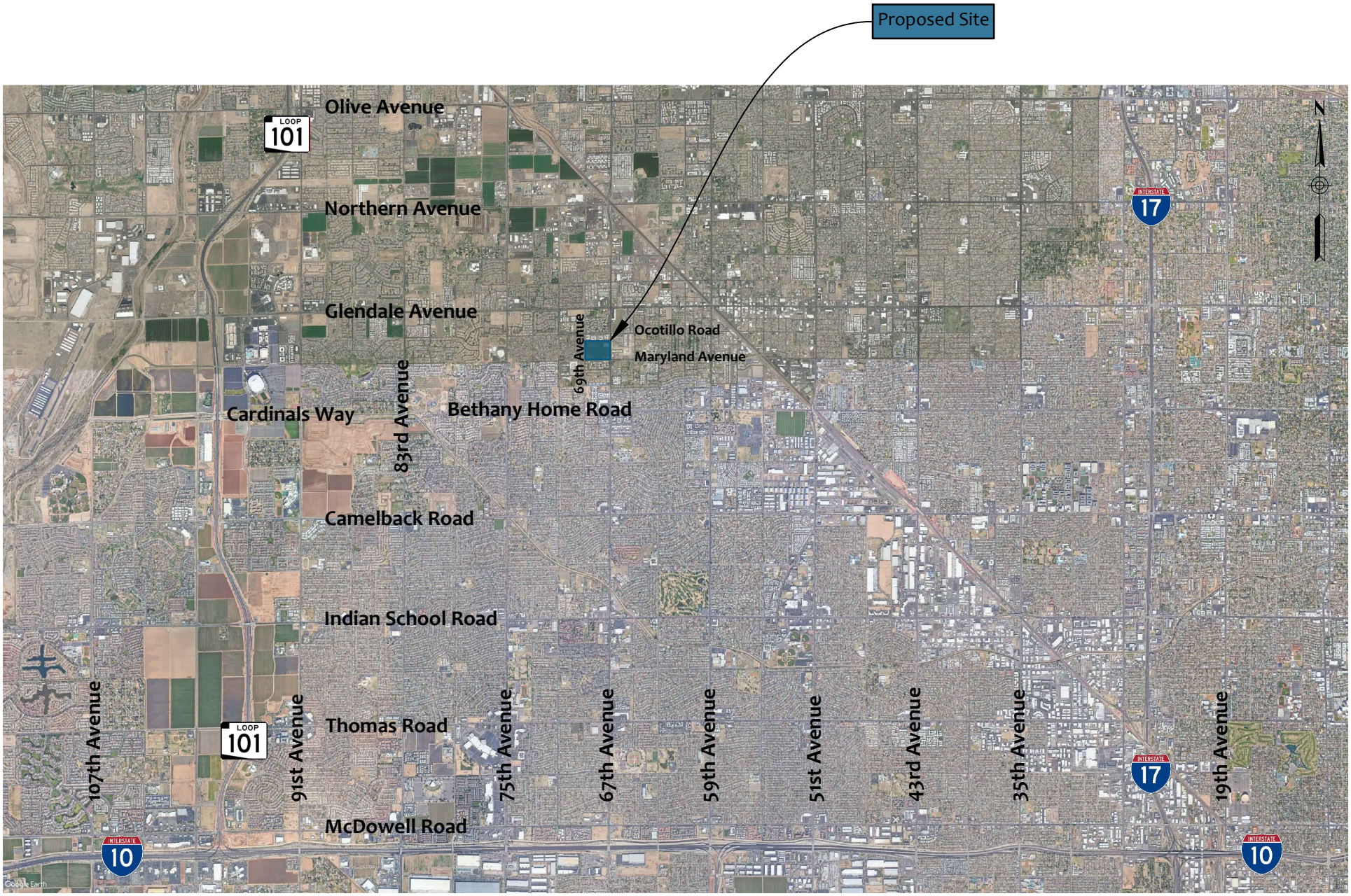


FIGURE 1 | VICINITY MAP

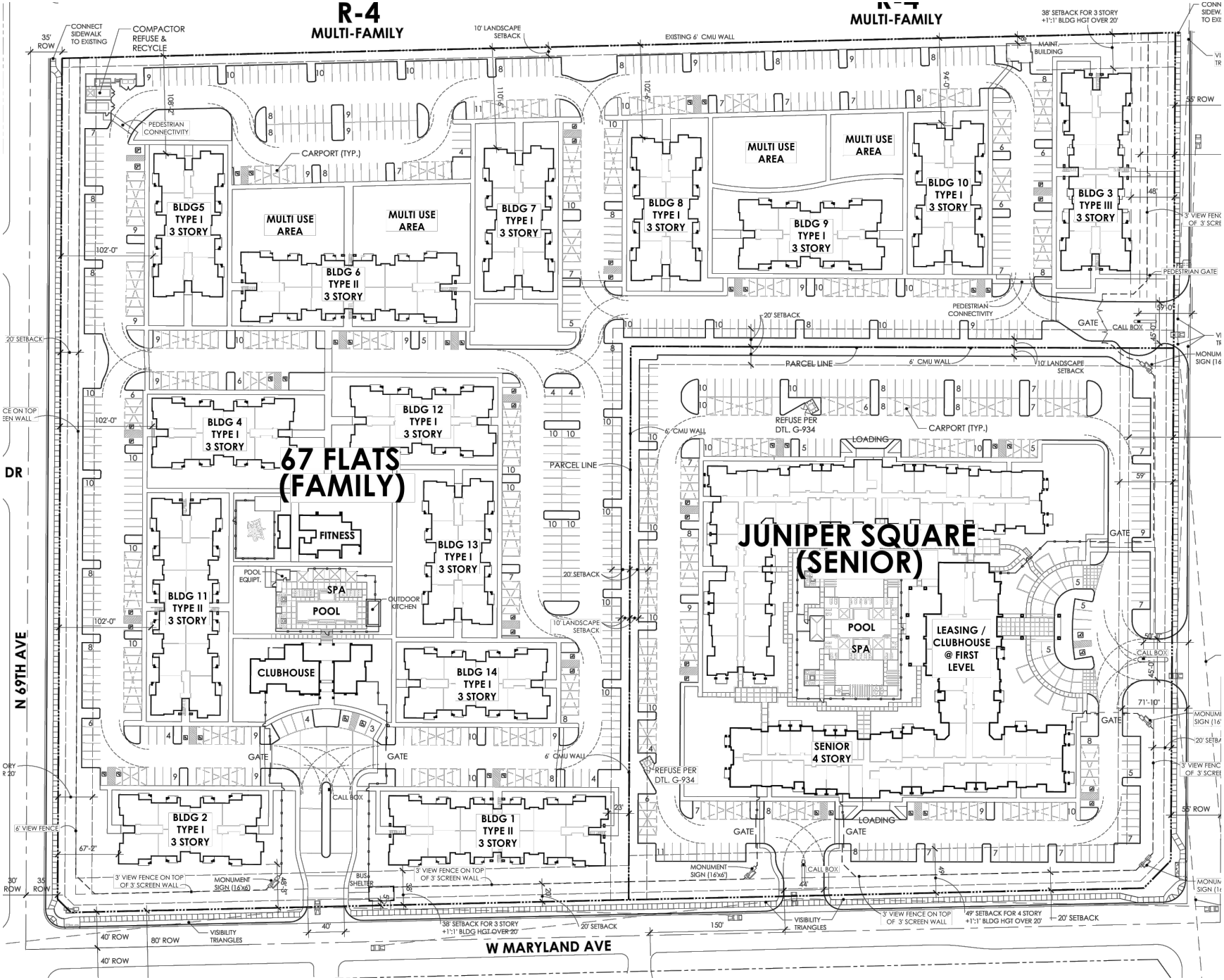


FIGURE 2 | SITE PLAN

Legend

X Intersection

FIGURE 3 | STUDY AREA

3. Area Conditions

The proposed development is bordered by 67th Avenue to the east, Maryland Avenue to the south, and 69th Avenue to the west. The Summerhill Place residential development borders to site to the north. Single- and multi-family residential developments generally surround the development.

Section 3.1 and **Section 3.2** provides detailed descriptions of the study roadway segments and intersections. See **Figure 3** for the proposed study area.

3.1. Study Roadway Segments

67th Avenue runs north-south and provides two (2) travel lanes in each direction of travel, with a center two-way left turn lane. There is a posted speed limit of 40 miles per hour (mph). Per the *City of Glendale's General Plan (Envision Glendale 2040),* dated September 2016, 67th Avenue is classified as an arterial roadway. Per the *City of Glendale's Arterial Counts 2020,* 67th Avenue has an Average Daily Traffic (ADT) of 25,900 vehicles per day (vpd), between Glendale Avenue and Bethany Home Road.

69th Avenue runs north-south and provides one (1) travel lane in each direction of travel. There is a posted speed limit of 25 mph. Per the *City of Glendale's General Plan (Envision Glendale 2040),* dated September 2016, Ocotillo Road is classified as a local roadway.

Ocotillo Road runs east-west and provides one (1) travel lane in each direction of travel. There is a posted speed limit of 25 mph. Per the *City of Glendale's General Plan (Envision Glendale 2040),* dated September 2016, Ocotillo Road is classified as a local roadway.

Maryland Avenue runs east-west and provides one (1) travel lane in each direction of travel. There is a posted speed limit of 25 mph. Per the *City of Glendale's General Plan (Envision Glendale 2040),* dated September 2016, Maryland Avenue is classified as a collector roadway.

3.2. Study Intersections

69th Avenue and Ocotillo Road (1) currently operates as a one-way stop-controlled T-intersection with stop control on the northbound approach. The eastbound approach provides one (1) shared through-right turn lane. The westbound approach provides one (1) shared left-through lane. The northbound approach provides one (1) shared left-right turn lane.

67th Avenue and Ocotillo Road (2) currently operates as a two-way stop-controlled intersection, with stop control on the eastbound and westbound approaches. The eastbound and westbound approaches provide one (1) dedicated left turn lane and one (1) shared through-right turn lane. The northbound and southbound approaches provide one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane.

69th Avenue and Maryland Avenue (5) currently operates as a two-way stop-controlled intersection, with stop control on the northbound and southbound approaches. Each of the four (4) approaches provide one (1) shared left-through-right turn lane.

67th Avenue and Maryland Avenue (8) currently operates as a signalized intersection. The eastbound and westbound approaches provide (1) dedicated left turn lane, one (1) through lane, and one (1) dedicated right turn lane. The northbound and southbound approaches provide one (1) dedicated left turn lane, one (1) through lane, and one (1) shared through-right turn lane.

3.3. Site Accessibility

Roadway System

State Route 101 (SR 101) is located within four (4) miles to the west, Interstate 17 (I-17) is located approximately five (5) miles to the east, and Grand Avenue can be accessed one and one-half (1.5) miles to the north and to the east. These routes provide regional access to the greater Phoenix Metropolitan Area, as well as the surrounding cities. The City of Glendale's street network is generally built as a one-mile grid system.

Pedestrian Facilities

Within the study area, sidewalks are provided along both sides of Ocotillo Road. Additionally, sidewalks are provided along the west side of 69th Avenue, the east side of 67th Avenue, and the south side of Maryland Avenue, within the study area adjacent to the proposed site. South of Maryland Avenue, 67th Avenue and 69th Avenue generally provide sidewalks on both sides of the roadway.

Bicycle Facilities

Bike lanes are currently provided along Maryland Avenue, adjacent to the proposed development and will remain.

Transit Facilities

Within the immediate study area, Valley Metro Route 67 operates north-south along 67th Avenue. Additionally, Valley Metro Route 60 and Route 70 operate along Bethany Home Road and Glendale Avenue, respectively.

4. Existing Conditions

4.1. Existing Land Use

According to Maricopa County Assessor's website, the proposed site will occupy three (3) existing parcels, 144-05-008A, 144-05-009A, and 144-05-010C. Currently, these three parcels are currently vacant agricultural land The three (3) existing parcels are zoned for R-4 uses. See **Appendix B** for detailed parcel information.

4.2. Existing Traffic Counts

A local data collection firm, All Traffic Data Services, was utilized to collect traffic counts. On Tuesday, December 7, 2021, turning movement counts were obtained from 7:00 to 9:00 am and from 4:00 to 6:00 pm at the following locations:

- 69th Avenue and Ocotillo Road (1)
- 67th Avenue and Ocotillo Road (2)
- 67th Avenue and Driveway B (4)
- 69th Avenue and Maryland Avenue (5)
- 67th Avenue and Maryland Avenue (8)

Additionally, on Tuesday, December 7, 2021, bi-directional tube counts for 24-hours in 15-minute intervals were collected along the following two (2) roadway segments:

- 67th Avenue, north of Maryland Avenue
- Maryland Avenue, west of 67th Avenue

The turning movement counts were then analyzed for the highest 1-hour within each time period. The following peak hours were analyzed throughout this study.

AM Peak Hour	7:15 am – 8:15 am
PM Peak Hour	4:00 pm – 5:00 pm

The Arizona Department of Transportation seasonal adjustment factors were used to adjust the traffic counts. The traffic volumes were adjusted based on the month and day the counts were taken. See **Appendix C** for detailed traffic count data.

See **Figure 4** for the existing weekday AM and PM peak hour traffic volumes.

4.3. Existing Capacity Analysis

The existing conditions capacity analysis was completed for the five (5) existing study intersections. The capacity and level of service for the study area intersections were evaluated using the methodology presented in the 6th *Edition of the Highway Capacity Manual*. Traffic analysis software, Synchro Version 11.0, was used to perform the analyses using the existing Peak Hour Factor (PHF) obtained from the traffic counts. Existing signal timing was obtained from the City of Glendale, see **Appendix D**.

Table 1 is from the 6th *Edition of the Highway Capacity Manual* Exhibit 19-8 and 20-2, which lists the Level of Service (LOS) thresholds for signalized and two-way stop-controlled intersections.

Table 1 – Level of Service Criteria

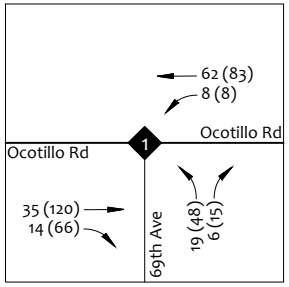
Level of Service (LOS)	Control Delay per Vehicle (s/veh)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10	0 - 10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

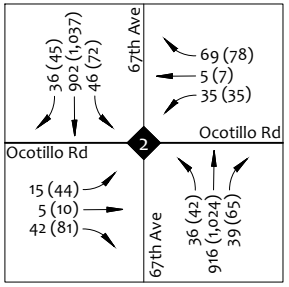
The results of the capacity analysis reveal that the existing study intersections operate with a level of service (LOS) D or better with the exception of the following:

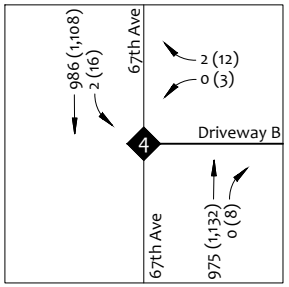
67th Avenue and Ocotillo Road (2)

- EB left AM and PM peak hours operates at LOS F
- EB shared through-right PM peak hour operates at LOS E
- WB left AM and PM peak hours operates at LOS F

See **Figure 5** for the existing AM and PM peak hour capacity analysis. The detailed weekday capacity analysis sheets can be found in **Appendix E.**

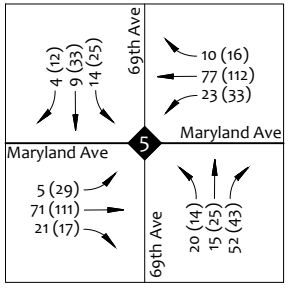


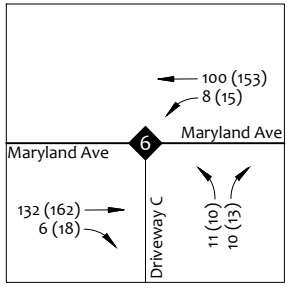




Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection





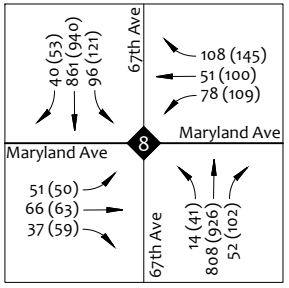
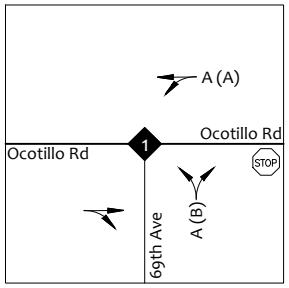
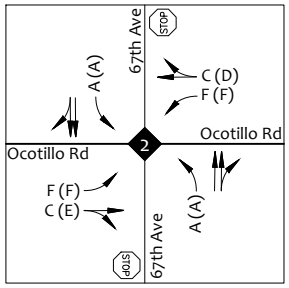
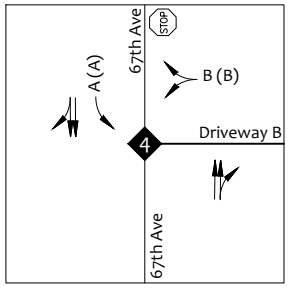


FIGURE 4 | EXISTING TRAFFIC VOLUMES

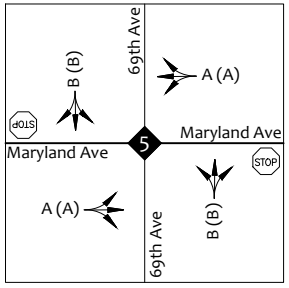


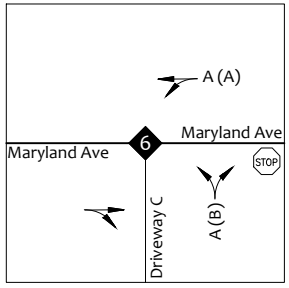




Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection
	Lane Configuration





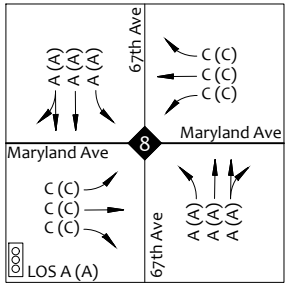


FIGURE 5 | EXISTING CAPACITY ANALYSIS

5. Projected Traffic

5.1. Trip Generation – Proposed Development

The trip generation for the proposed development was calculated utilizing the Institute of Transportation Engineers (ITE) publication entitled *Trip Generation, 11th Edition*. The ITE rates are based on studies that measured the trip generation characteristics for various types of land uses. The rates are expressed in terms of trips per unit of land use type. This publication is considered to be the standard for the transportation engineering profession.

The proposed development will include the following two (2) land uses:

67 Flats	Multi-Family	384 dwelling units *12 one-bedroom units* *204 two-bedroom units* *168 three-bedroom*
Juniper Square	Senior Living	221 dwelling units *66 one-bedroom units* *131 two-bedroom units* *24 three-bedroom*

Utilizing the ITE Land Use 220 – Multifamily Housing (Low-Rise) and 252 Senior Adult Housing – Attached, the total trip generation for the proposed Senior/Family Housing development was calculated. The total trip generation for the proposed development is shown in **Table 2** below. See **Appendix F** for detailed trip generation calculations.

Table 2 – Trip Generation – Proposed Development

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Multifamily Housing (Low-Rise)	220	384	Dwelling Units	2,537	142	34	108	186	117	69
Senior Adult Housing - Multifamily	252	221	Dwelling Units	664	43	15	28	55	31	24
			Total	3,201	185	49	136	241	148	93

The proposed 67 Flats and Juniper Square Developments is anticipated to generate a total of 3,201 weekday trips, with 185 AM peak hour trips and 241 PM peak hour trips.

5.2. Trip Distribution and Assignment

The trip distribution procedure determines the general pattern of travel for vehicles entering and leaving the proposed development. The trip distribution and trip assignment for the proposed 67 Flats and Juniper Square developments is based on the surrounding roadway network, permitted movements at the proposed site driveway, and probable routes. The trip distribution is shown in **Figure 6**.

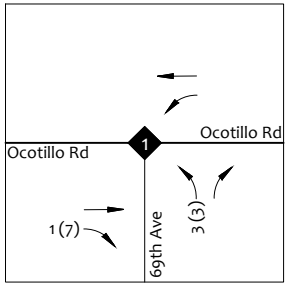
The site generated traffic volumes are shown in **Figure 7**.

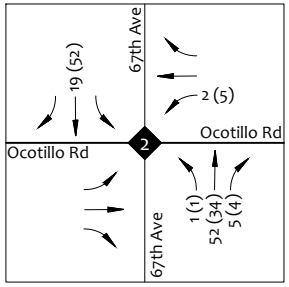
Legend

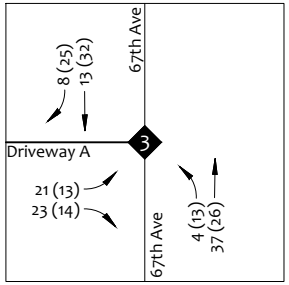
AM(PM) Inbound Trip Distribution Percentages

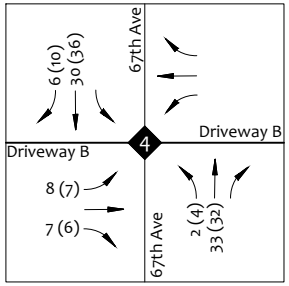
AM(PM) Outbound Trip Distribution Percentages

FIGURE 6 | TRIP DISTRIBUTION



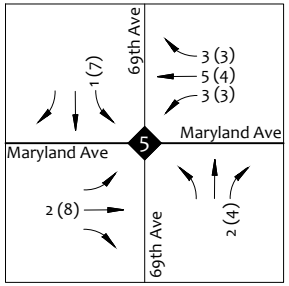


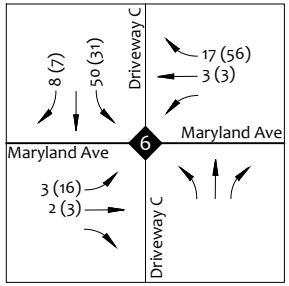


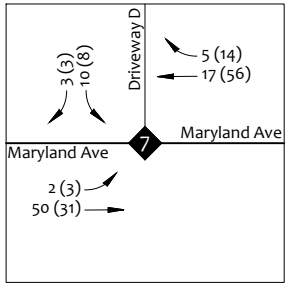


Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection







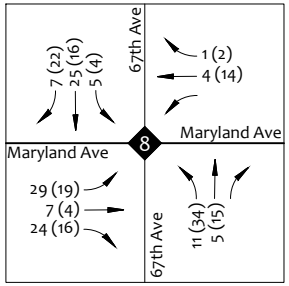


FIGURE 7 | SITE TRAFFIC VOLUMES

6. Future Conditions (Year 2024)

The proposed 67 Flats and Juniper Square developments is anticipated to be built out by the year 2024. This section analyzes the traffic related impacts of the proposed development on the surrounding roadway network in the year 2024.

6.1. Year 2024 Background Traffic Volumes

According to the 2019 Maricopa Association of Government (MAG) socioeconomic projections within the proposed study area, it is estimated that in the year 2040 the population within the Regional Analysis Zone (RAZ) will be approximately 27,041. MAG estimates that the 2018 population of the surrounding area to be 18,063. This results in an approximate annual growth rate of 1.85%. See **Appendix G**.

To be conservative, the annual growth rate of 2.0% was utilized to project the existing traffic volumes (**Figure 4**) through the year 2024. See **Figure 8** for the year 2024 background traffic volumes, which includes the growth of the existing counts.

6.2. Year 2024 Build Traffic Volumes

To determine year 2024 build traffic volumes, the site traffic volumes (**Figure 7**) were added to the year 2024 background traffic volumes (**Figure 8**). This represents year 2024 traffic volumes with the buildout of the proposed 67 Flats and Juniper Square developments. See **Figure 9** for the year 2024 build weekday AM and PM peak hour traffic volumes.

6.3. Year 2024 Build Capacity Analysis

The capacity and level of service for the study area intersections were evaluated for the year 2024 build traffic volumes. A PHF of 0.92 was utilized.

The results of the year 2024 build capacity analysis reveal that the study intersections operate with a level of service (LOS) D or better with the exception of the following:

67th Avenue and Ocotillo Road (2)

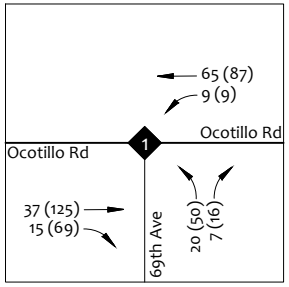
- EB left AM and PM peak hours operates at LOS F
- EB shared through-right PM peak hour operates at LOS F
- WB left AM and PM peak hours operates at LOS F
- WB shared through-right PM peak hour operates at LOS F

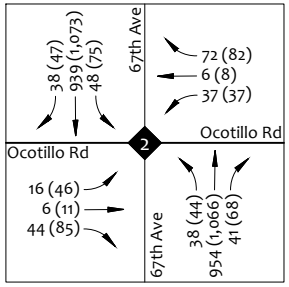
67th Avenue and Driveway B (4)

- EB left AM and PM peak hours operates at LOS F
- WB shared left-through-right PM peak hour operates at LOS E

Delays are typical during peak hours for minor-to-major turning movements, especially at stop-controlled intersections. Drivers familiar with the area often choose to use alternative routes during peak hours or drive at different times to avoid potential delay. Therefore, improvements to mitigate LOS E and F at the above intersections are not recommended as part of this study.

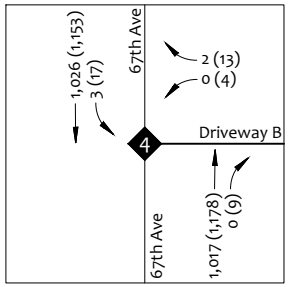
See **Figure 10** for the AM and PM peak hour year 2024 build capacity analysis. The detailed capacity analysis sheets can be found in **Appendix H**.

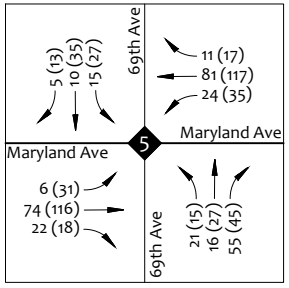


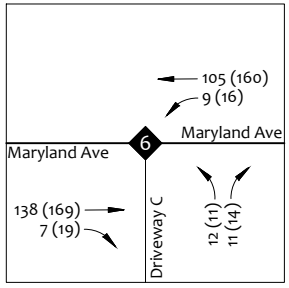


Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection







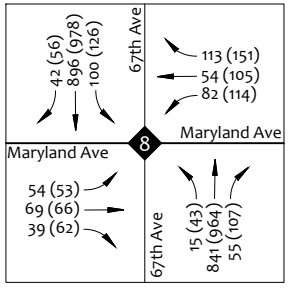
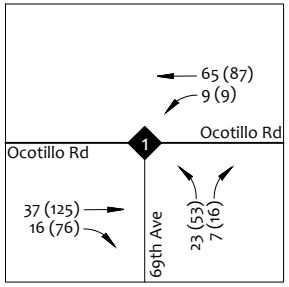
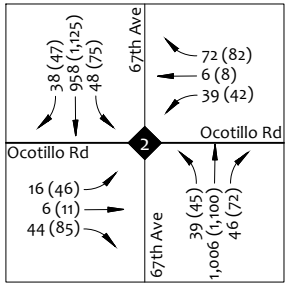
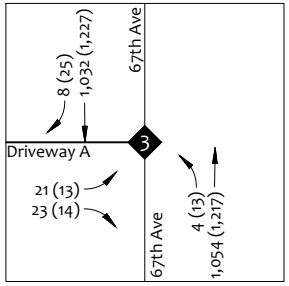
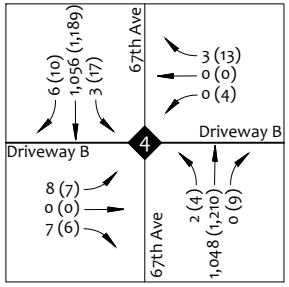


FIGURE 8 | YEAR 2024 BACKGROUND TRAFFIC VOLUMES



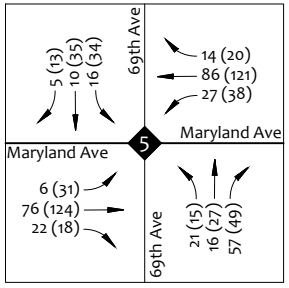


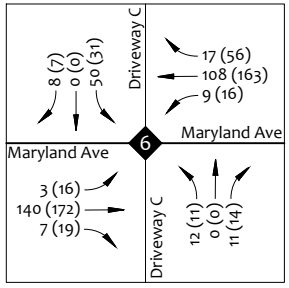


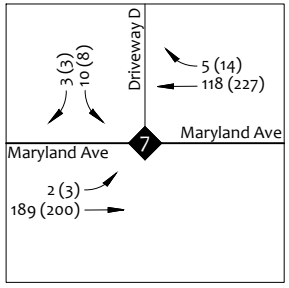


Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection







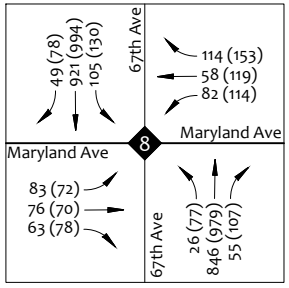
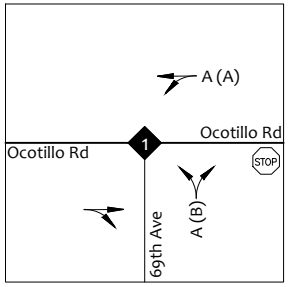
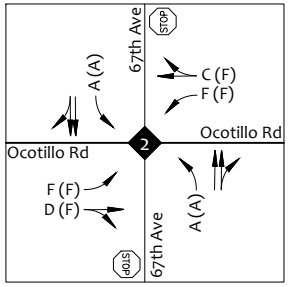
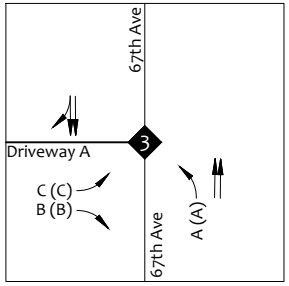
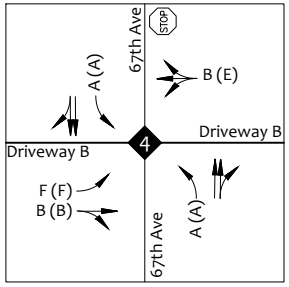


FIGURE 9 | YEAR 2024 BUILD TRAFFIC VOLUMES



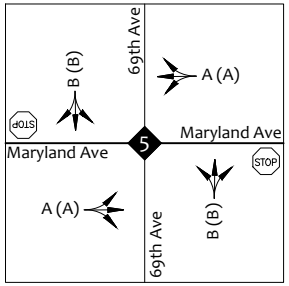


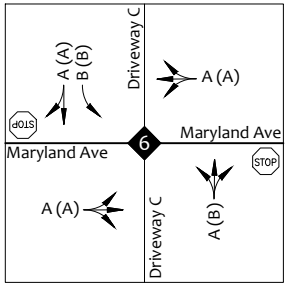


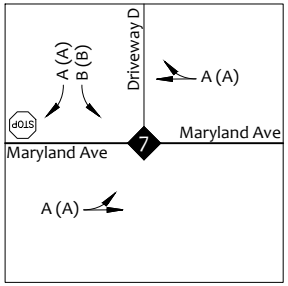


Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection
	Lane Configuration







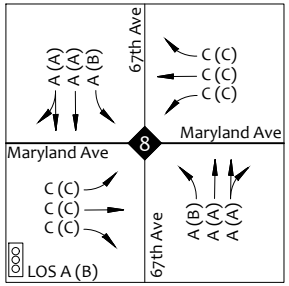


FIGURE 10 | YEAR 2024 BUILD CAPACITY ANALYSIS

7. Future Conditions (Year 2027)

This section analyzes the effects the proposed development will have on the surrounding roadway network during the year of 2027, which is 3 years after the build out of the proposed 67 Flats and Juniper Square developments.

7.1. Year 2027 Background Traffic Volumes

Similar to the year 2024 background traffic volumes described in detail in **Section 6.1**, a 2.0% annual growth rate is applied to all existing traffic volumes (**Figure 4**) through the year 2027.

The year 2027 background traffic volumes are shown in **Figure 11**, which includes the 2.0% annual growth rate.

7.2. Year 2027 Build Traffic Volumes

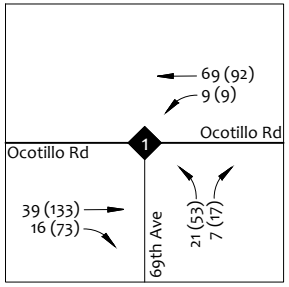
When the site traffic volumes (**Figure 7**) are added to the year 2027 background traffic volumes (**Figure 11**), the result is the year 2027 build traffic volumes. This represents the traffic volumes with the build out of the proposed development. The year 2027 build traffic volumes are shown in **Figure 12**.

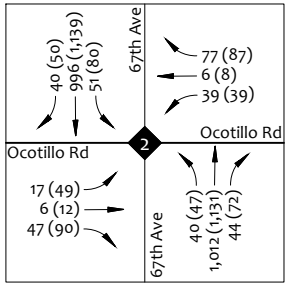
7.3. Year 2027 Build Capacity Analysis

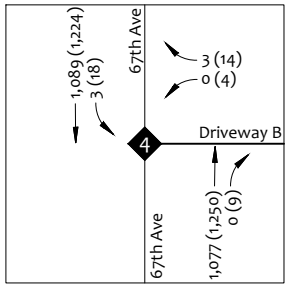
The capacity and level of service for the study area intersections were also evaluated for the year 2027 build traffic volumes. A Peak Hour Factors (PHF) of 0.92 was utilized.

The results of the year 2027 build capacity analysis reveal that the study intersections operate with a level of service (LOS) D or better, or are maintained at the year 2024 build level of service.

See **Figure 13** for the AM and PM peak hour year 2027 build capacity analysis. The detailed capacity analysis sheets can be found in **Appendix I**.

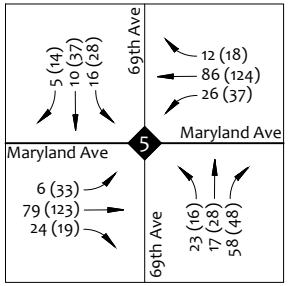


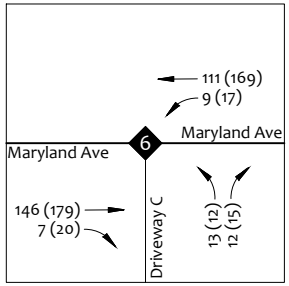




Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection





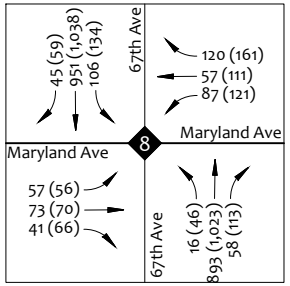
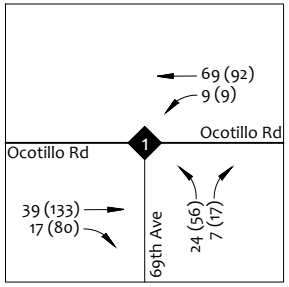
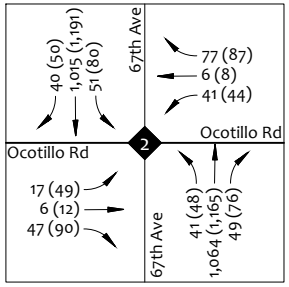
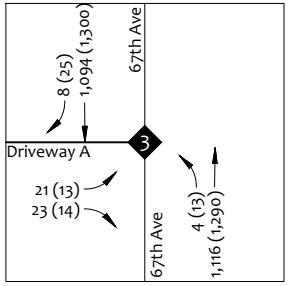
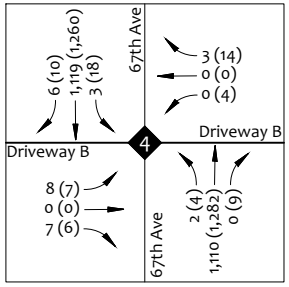


FIGURE 11 | YEAR 2027 BACKGROUND TRAFFIC VOLUMES



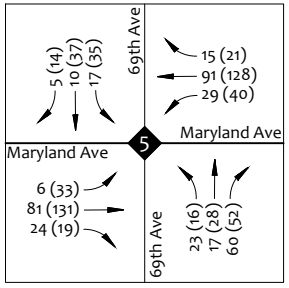


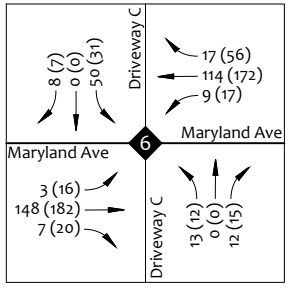


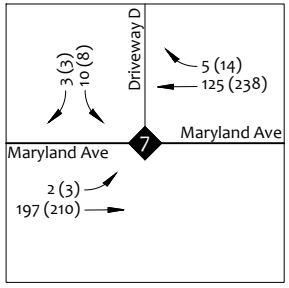


Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection







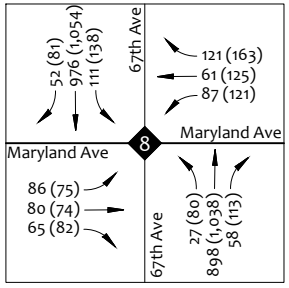
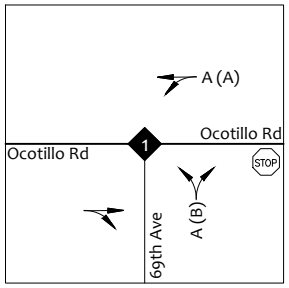
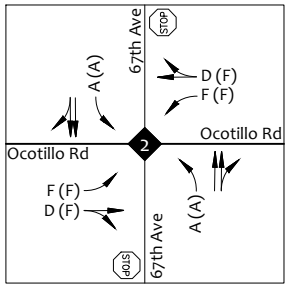
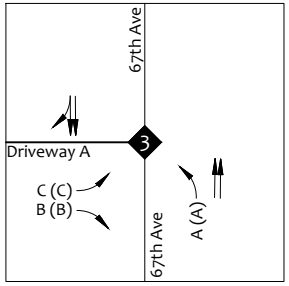
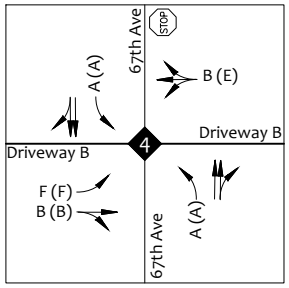


FIGURE 12 | YEAR 2027 BUILD TRAFFIC VOLUMES



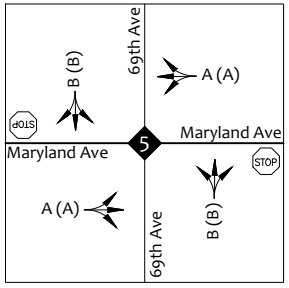


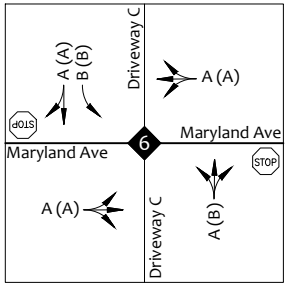


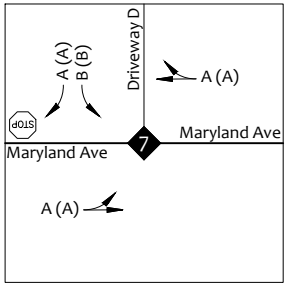


Legend

AM(PM)	Peak Hour Traffic Volumes
X	Intersection
	Lane Configuration







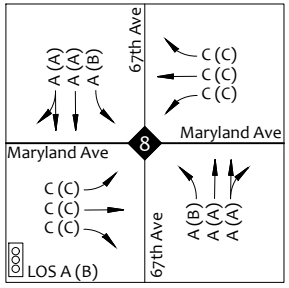


FIGURE 13 | YEAR 2027 BUILD CAPACITY ANALYSIS

8. Turn Lane Warrant Analysis

Turn lanes allow vehicles exiting a roadway to slow to a reduced speed to execute a turn without impeding the main flow of traffic. Based on future growth projections and trip generation calculations of the proposed development, the following sections utilize the *MCDOT Roadway Design Manual*, dated August 2021 to conduct the turn lane analysis.

The *MCDOT 2021 Roadway Design Manual* Section 7.15 (Auxiliary Lanes for Driveways) was utilized to determine the need for left and/or right turn deceleration lanes at the site driveways.

Right Turn Lane Warrant at Driveways

Section 7.15.1 entitled Right Turn Lanes provides the criteria for right turn lanes for driveways. A right turn lane to be provided at an intersection when:

- The outside lane has an expected volume of 250 vph or greater and the right turn volume is greater than 55 vph.
- Any three of the below criteria are met:
  a. At least 5,000 vehicle per day are using or are expected to be using the adjacent street.
  b. The roadway's posted speed limit is greater than 35 mph.
  c. At least 1,000 vehicles per day are using or are expected to use the driveway.
  d. At least 30 vehicles are expected to make right-turns into the driveway within a one-hour period.

Discussions with the City of Glendale, additional trip assignment calculations were conducted for the intersection of 67th Avenue and Driveway A (3). The total number of units north of Driveway A, was calculated. There are 192 units. See **Figure 14.**

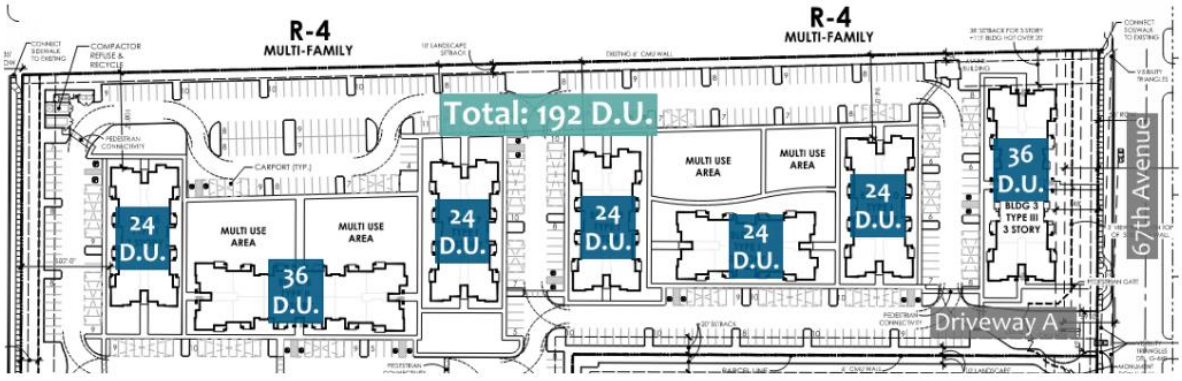


Figure 14 - Total Number of Units North of Driveway A

The trip generation for just these units were calculated, see **Table 3**.

Table 3 – Right Turn Lane Warrant Analysis

Land Use	ITE Code	Qty	Unit	Weekday	AM Peak Hour			PM Peak Hour		
				Total	Total	In	Out	Total	In	Out
Multifamily Housing (Low-Rise)	220	192	Dwelling Units	1,306	82	20	62	103	65	38

The highest number of inbound trips occur in the PM peak hour with 65 trips. Assuming all traffic coming from the north (See **Figure 6** for the Trip Distribution - 6% + 4% + 37% = 47%) destined to these 192 units would use Driveway A to turn right into the 67 Flats development results in a total of 31 southbound right turns during the PM peak hour. Criteria a. through d. listed above are all met for Driveway A.

The right turn lane warrant criteria was also applied to the year 2027 traffic volumes for Driveway B and is shown below in **Table 4**.

Table 4 – Right Turn Lane Warrant Analysis

Year	On	At	No. Thru Lanes	Speed Limit	Peak Hour	Right Turn			
						Direction	Right	Through	Warranted
2027	67th Avenue	Driveway A (3)	2	40	AM	SB	9	1,094	**YES**
					PM		31	1,300	
2027	67th Avenue	Driveway B (4)	2	40	AM	SB	6	1,119	**NO**
					PM		10	1,260	

As shown in **Table 4**, based on the MCDOT right turn lane warrant criteria, a right turn lane is warranted at Driveway A, while it is not warranted at Driveway B.

Left Turn Lane Warrant at Driveways

Section 7.15.2 entitled Left Turn Lanes provides the criteria for left turn lanes for driveways along arterials and collectors. Table 7.6 from the MCDOT Roadway Design Manual provides the left turn lane criteria, which is provided below:

TABLE 7.6: VOLUME WARRANTS FOR LEFT-TURN LANES				
Peak Hour Traffic Volume on the Roadway in the Advancing Direction	Minimum Peak Hour Left-turn Traffic Volume			
	# of through lanes per direction			
	1		2	
	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed
≤ 200	30	15	-	-
201-300	12	12	40	30
301-400	12	12	30	25
401-500	12	12	25	18
501-600	12	12	15	12
601-1000	12	12	10	8
1001+	12	8	10	8

Applying the above left turn lane warrant criteria to the year 2027 traffic volumes is show below in **Table 5**.

Table 5 – Left Turn Lane Warrant Analysis

Year	On	At	No. Thru Lanes	Speed Limit	Peak Hour	Direction	Through	Left	Warranted
2027	67th Avenue	Driveway A (3)	2	40	AM	NB	1,116	4	**YES**
					PM		1,290	13	
2027	67th Avenue	Driveway B (4)	2	40	AM	NB	1,110	2	**NO**
					PM		1,282	4	

As shown in **Table 5**, a northbound left turn lane is warranted at 67th Avenue and Driveway A (3). The existing center two-way left turn lane accommodates this movement and serves as an exclusive left turn lane.

Right Turn Lane (Southbound) at the Intersection of 67th Avenue and Maryland Avenue

The *MCDOT 2021 Roadway Design Manual* Section 6.1.6 (Intersection Lane Requirements) was utilized to determine the need for a southbound right turn deceleration lane at the intersection of 67th Avenue and Maryland Avenue.

Right Turn Lane Warrant at Intersections

Section 6.1.6 entitled Intersection Lane Requirements provides the criteria for right turn lanes for intersection. A right turn lane to be provided at an intersection when:

1. The roadway has 2 approach through lanes, a posted speed limit of 45 mph or greater, and an expected right-turn peak hour volume of 300 vph or greater
2. The roadway has 1 approach through lanes, a posted speed limit of 35 mph or greater, and an expected right-turn peak hour volume of 300 vph or greater
3. On any roadway where a traffic impact analysis indicated the LOS would be increased to a LOS of D or better with the addition of a right-turn lane.
4. In rural and developing urban area with higher speeds, a separate right turn lane may be required for lower right turn volumes.

Using the MCDOT criteria, the need for a southbound right turn lane at the intersection of 67th Avenue and Driveway A (3) was evaluated for the year 2027 build scenario as shown in **Table 6.**

Table 6 – Southbound Right Turn Lane – 67th Avenue and Maryland Avenue (8)

Year	On	At	No. Thru Lanes	Speed Limit	Peak Hour	Right Turn		
						Direction	Right (vph)	Warranted
2027	67th Avenue	Maryland Avenue	2	45	AM	SB	52	**NO**
					PM		81	

9. Recommendations & Conclusions

The proposed 67 Flats and Juniper Square developments is located on the northwest corner of 67th Avenue and Maryland Avenue in Glendale, Arizona.

The proposed development will include the following two (2) land uses:

67 Flats	Multi-Family	384 dwelling units *12 one-bedroom units* *204 two-bedroom units* *168 three-bedroom*
Juniper Square	Senior Living	221 dwelling units *66 one-bedroom units* *131 two-bedroom units* *24 three-bedroom*

The proposed 67 Flats and Juniper Square developments is anticipated to generate a total of 3,201 weekday trips, with 185 AM peak hour trips and 241 PM peak hour trips.

In summary and as included in the discussion and analyses throughout this report, the following are the recommended improvements:

Recommendations

- **67th Avenue and Driveway A (3)**
  Buildout of a full access driveway and a southbound right turn deceleration lane with 160 feet of storage and 100 feet of taper.

- **67th Avenue and Driveway B (4)**
  Buildout of a full access driveway

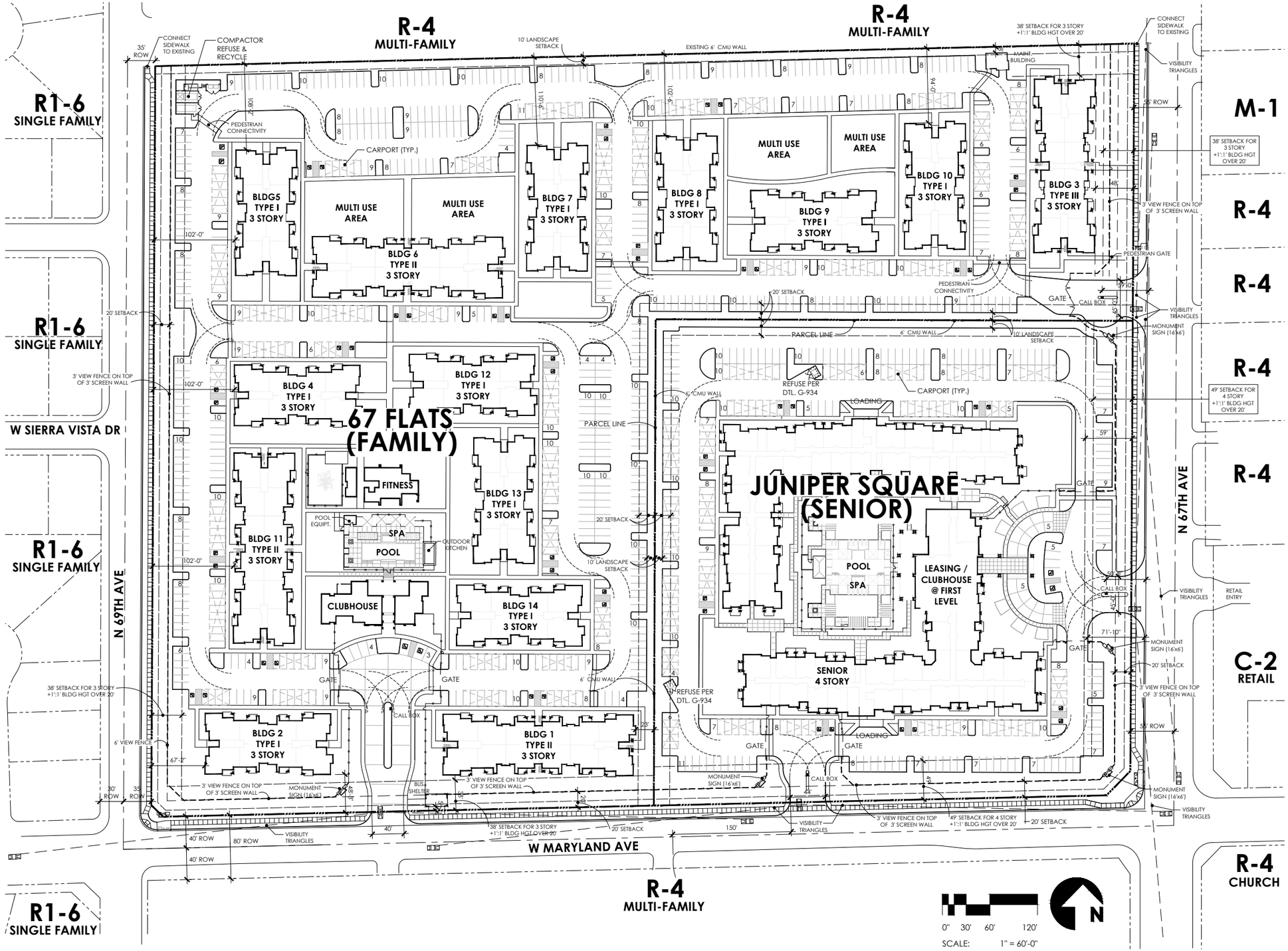
- **Maryland Avenue and Driveway C (6)**
  Buildout of a full access driveway

- **Maryland Avenue and Driveway D (7)**
  Buildout of a full access driveway

As with any new development and potential change in traffic patterns, the following is recommended:

- **Monitor and Adjust Signal Timing**
  Monitor traffic patterns in the area and if necessary adjust nearby signal timing

Appendix A – Proposed Site Plan



SITE DATA

SITE AREA:

PARCEL	NET	GROSS
67 FLATS	±18.50 ACRES (±805,923 SF)	±20.09 ACRES (±875,141 SF)
JUNIPER SQUARE	±8.36 ACRES (±364,000 SF)	±9.69 ACRES (±422,276 SF)
TOTAL	**±26.86 ACRES (±1,169,923 SF)**	**± 29.78 ACRES (±1,297,417 SF)**

NOTE 1: GROSS & NET AREAS TO BE VERIFIED BY OWNER'S CIVIL ENGINEER AND/OR SURVEYOR.
NOTE 2: NET AREA EXCLUDED THE DEDICATION OF 35' HALF-ROW ON 69th AVENUE ON THE EAST SIDE.

ZONING:
EXISTING: R-4
PROPOSED: PAD (R-4)

HEIGHT:
MAXIMUM ALLOWED: 2-STORY OR 30'
PROPOSED:
67 FLATS (FAMILY – MULTI-FAMILY) 3 STORIES (40')
JUNIPER SQUARE (SENIOR LIVING) 4 STORIES (52'-6")

UNIT MIX:

•*FAMILY APARTMENT*:

UNIT TYPE	NO.	%
A-1 BEDROOM/1 BATH	12 D.U.	3.0%.
B-2 BEDROOM/2 BATH	204 D.U.	53.0%.
C-3 BEDROOM/2 BATH	168 D.U.	44.0%.
TOTAL	**384 D.U.**	**100%**

•*SENIOR LIVING*:

UNIT TYPE	NO.	%
1 BEDROOM/1 BATH	66 D.U.	30%.
2 BEDROOM/2 BATH	131 D.U.	59%.
3 BEDROOM/2 BATH	24 D.U.	11%.
TOTAL	**221 D.U.**	**100%**

DENSITY:

•*FAMILY APARTMENTS*:
DENSITY ALLOWED: 20 D.U./GROSS ACRE
DENSITY PROVIDED: 19.11 D.U./GROSS ACRE (384 D.U. ÷ ±20.09 GROSS AC)

•*SENIOR LIVING*:
SENIOR LIVING:
DENSITY ALLOWED: 20 D.U./GROSS ACRE
DENSITY PROVIDED: 22.81 D.U./GROSS ACRE (221 D.U. ÷ ±9.69 GROSS AC.)

•OVERALL SITE: 20.31 D.U./GROSS ACRE (605 D.U. ÷ ±29.78 GROSS AC.)

REQUIRED PARKING:

•GENERAL PARKING DIMENSIONS:
PARKING SPACE 9' x 20'
AISLE WIDTH 26'+

•*FAMILY APARTMENTS*:

1 – BEDROOM (1.00 P.S./D.U. x 12 D.U.)	12 P.S.
2 – BEDROOM (2.00 P.S./D.U. x 204 D.U.)	408 P.S.
3 – BEDROOM (2.00 P.S./D.U. x 168 D.U.)	336 P.S.
GUEST PARKING (1.00 P.S./3 D.U.)	128 P.S.
TOTAL REQUIRED PARKING	**884 P.S. (2.30 P.S./D.U.)**

•*SENIOR LIVING*:

221 D.U. x 0.4 P.S.	89 P.S.
GUEST PARKING (1.00 P.S./3 D.U.)	74 P.S.
TOTAL REQUIRED PARKING	**163 P.S. (0.74 P.S./D.U.)**

PROVIDED PARKING:

•*67 FLATS*:

SURFACE	503 P.S.
COVERED SURFACE	232 P.S.
TOTAL FAMILY PROVIDED	**735 P.S. (1.91 P.S./D.U.)**

•*JUNIPER SQUARE*:

SURFACE PARKING:	184 P.S.
COVERED PARKING:	134 P.S.
TOTAL SENIOR LIVING PROVIDED	**318 P.S. (1.42 P.S./D.U.)**

OPEN SPACE:

•*67 FLATS*:
REQUIRED: 30% x NET AREA (±805,923 SF) = ±241,777 SF
PROVIDED: 32.0% (±258,465 SF)

•*JUNIPER SQUARE*:
REQUIRED: 30% x NET AREA (±364,000 SF) = ±109,200 SF
PROVIDED: 30.0% (±108,941 SF)

LOT COVERAGE:

•*67 FLATS*:
REQUIRED: 50% MAXIMUM
PROVIDED: 27.7%

•*JUNIPER SQUARE*:
REQUIRED: 50% MAXIMUM
PROVIDED: 29.2%

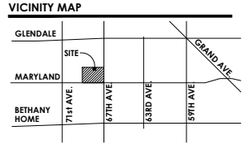
SETBACKS:

PERIMETER SETBACK – 20'
NOTE: BUILDING SETBACK INCREASE 1' TO 1' RATIO FOR BUILDINGS OVER 20'

ASSUMPTIONS:

1. THE PROPERTY IS SHOWN FOR REFERENCE AND PLANNING PURPOSES ONLY.
2. ASSUMES THE SITE'S RETENTION WILL BE SURFACE AND/OR UNDERGROUND BASINS.
3. ASSUMES BOTH SITES WILL BE GATED.
4. ASSUMES ANY EASEMENTS RUNNING ACROSS THE SITE CAN BE RELOCATED OR ABANDONED

VICINITY MAP



TODD + ASSOCIATES
602-952-8280 / TODDASSOC.COM
21-2052-02

DOMINIUM

FAMILY LIVING **67 Flats** & SENIOR LIVING **Juniper Square**
Glendale, AZ
REZONING RESUBMITTAL
JUNE 17, 2022

CONCEPTUAL SITE PLAN

Preliminary Not For Construction

A.04

Appendix B – Parcel Information

144-05-010C

Agriculture Parcel

This is a Agriculture parcel located at 6504 N 67TH AVE GLENDALE 85301. The current owner is 6504 N 67TH AVENUE LLC. Its current year full cash value is $263,050.

MAPS | PICTOMETRY | $ VIEW/PAY TAX BILL | DEED

OWNER | VALUATIONS | ADDITIONAL INFO | SKETCHES

MAP FERRET | SIMILAR PARCELS | REGISTER RENTAL | PRINT DETAILS

PROPERTY INFORMATION

6504 N 67TH AVE GLENDALE 85301

MCR #	
Description	S2 S2 NE4 EX W2 & EX S 40F & E 50F RDS
Lat/Long	33.531983 | -112.205339
Lot Size	787,129 sq ft.
Zoning	R-4
Lot #	
High School District	GLENDALE UNION #205
Elementary School District	GLENDALE ELEMENTARY SCHOOL DISTRICT
Local Jurisdiction	GLENDALE
S/T/R	12 2N 1E
Market Area/Neighborhood	17/002
Subdivision (0 Parcels)	

OWNER INFORMATION

6504 N 67TH AVENUE LLC

Mailing Address	4737 N PLACITA DE CONCHA, TUCSON, AZ 85745
Deed Number	080907780

Last Deed Date	10/21/2008
Sale Date	n/a
Sale Price	n/a

VALUATION INFORMATION

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our data sales.

The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL

Tax Year	2023	2022	2021	2020	2019
Full Cash Value	$263,050	$233,495	$217,730	$178,751	$163,703
Limited Value	$198,981	$189,506	$180,482	$171,888	$163,703
Legal Class	M	M	M	M	M
Description	MIXED LEGAL CLASS	MIXED LEGAL CLASS	MIXED LEGAL CLASS	MIXED LEGAL CLASS	MIXED LEGAL CLASS
Assessment Ratio	10.8%	10.8%	10.8%	10.6%	10.6%
Assessed LPV	$21,490	$20,467	$19,492	$18,220	$17,353
Property Use Code	4117	4117	4117	4117	4117
PU Description	AGRICULTURAL WITH IMPROVEMENTS	AGRICULTURAL WITH IMPROVEMENTS	AGRICULTURAL WITH IMPROVEMENTS	AGRICULTURAL WITH IMPROVEMENTS	AGRICULTURAL WITH IMPROVEMENTS
Tax Area Code	400700	400700	400700	400700	400700
Valuation Source	Notice	Notice	Notice	Notice	Notice

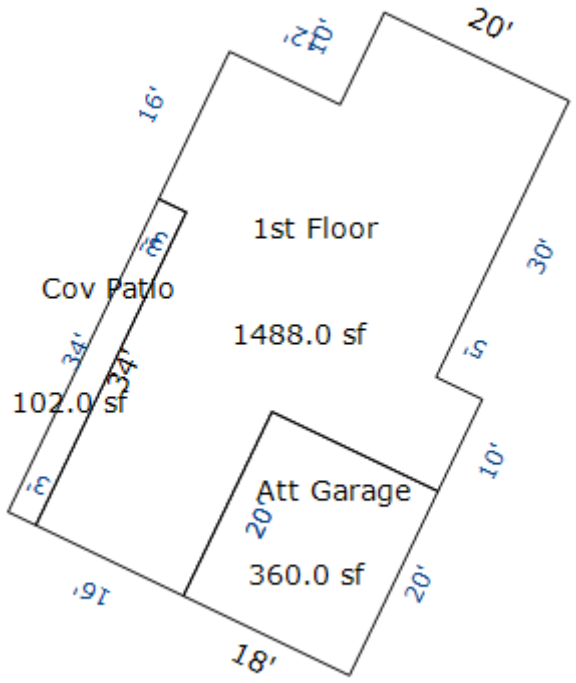
ADDITIONAL PROPERTY INFORMATION

Additional property data.

Description	Imp #	Occupancy	Rank	CCI	Age	Sq Ft.
Single-Family Residence	000101	351	2	C	66	1,488

BUILDING SKETCHES

Sketches that illustrate the external dimensions of a property.



MAP FERRET MAPS

Mapferret maps, also known as MapId maps, pdf maps, or output maps are now available here without having to search.

- **Parcel Maps (2)**
- **Book/Map Maps (4)**

CAUTION! USERS SHOULD INDEPENDENTLY RESEARCH AND VERIFY INFORMATION ON THIS WEBSITE BEFORE RELYING ON IT.

The Assessor's Office has compiled information on this website that it uses to identify, classify, and value real and personal property. Please contact the Maricopa County S.T.A.R. Center at (602) 506-3406 if you believe any information is incomplete, out of date, or incorrect so that appropriate corrections can be addressed. Please note that a statutory process is also available to correct errors pursuant to Arizona Revised Statutes 42-16254.

The Assessor does not guarantee that any information provided on this website is accurate, complete, or current. In many instances, the Assessor has gathered information from independent sources and made it available on this site, and the original information may have contained errors and omissions. Errors and omissions may also have occurred in the process of gathering, interpreting, and reporting the information. Information on the website is not updated in "real time". In addition, users are cautioned that the process used on this site to illustrate the boundaries of the adjacent parcels is not always consistent with the recorded documents for such parcels. The parcel boundaries depicted on this site are for illustrative purposes only, and the exact relationship of adjacent parcels should be independently researched and verified. The information provided on this site is not the equivalent of a title report or a real estate survey. Users should independently research, investigate and verify all information before relying on it or in the preparation of legal documents.

By using this website, you acknowledge having read the above and waive any right you may have to claim against Maricopa County, its officers, employees, and contractors arising out of my reliance on or the use of the information provided on this website.

144-05-008A

Agriculture Parcel

This is a Agriculture parcel located at . The current owner is 6504 N 67TH AVENUE LLC. Its current year full cash value is $8,339.

MAPS | PICTOMETRY | $ VIEW/PAY TAX BILL | DEED

OWNER | VALUATIONS | MAP FERRET | SIMILAR PARCELS

REGISTER RENTAL | PRINT DETAILS

PROPERTY INFORMATION

MCR #	
Description	S2 S2 N2 SE4 NE4 EX E 50F RD
Lat/Long	33.533053 | -112.205341
Lot Size	209,959 sq ft.
Zoning	R-4
Lot #	
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Subdivision (0 Parcels)	

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Tax Year	2023	2022	2021	2020	2019
Full Cash Value	$8,339	$8,194	$7,182	$6,555	$6,603
Limited Value	$6,907	$6,578	$6,265	$5,967	$5,683
Legal Class	2.R	2.R	2.R	2.R	2.R
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15.0%	15.0%	15.0%	15.0%	15.0%
Assessed LPV	$1,036	$987	$940	$895	$852
Property Use Code	4110	4110	4110	4110	4110
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	400700	400700	400700	400700	400700
Valuation Source	Notice	Notice	Notice	Notice	Notice

MAP FERRET MAPS

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- Parcel Maps (1)
- Book/Map Maps (4)

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144-05-009A

Agriculture Parcel

This is a Agriculture parcel located at 6504 N 67TH AVE GLENDALE 85301. The current owner is 6504 N 67TH AVENUE LLC. Its current year full cash value is $8,339.

MAPS | PICTOMETRY | $ VIEW/PAY TAX BILL | DEED

OWNER | VALUATIONS | SKETCHES | MAP FERRET

SIMILAR PARCELS | REGISTER RENTAL | PRINT DETAILS

PROPERTY INFORMATION

6504 N 67TH AVE GLENDALE 85301

MCR #	
Description	N2 S2 E2 N2 S2 NE4 EX E 50F RD
Lat/Long	33.533512 | -112.205327
Lot Size	209,959 sq ft.
Zoning	R-4
Lot #	
High School District	GLENDALE UNION #205
Elementary School District	GLENDALE ELEMENTARY SCHOOL DISTRICT
Local Jurisdiction	GLENDALE
S/T/R	12 2N 1E
Market Area/Neighborhood	17/002
Subdivision (0 Parcels)	

OWNER INFORMATION

6504 N 67TH AVENUE LLC

Mailing Address	4737 N PLACITA DE CONCHA, TUCSON, AZ 85745
Deed Number	080907780

Last Deed Date	10/21/2008
Sale Date	n/a
Sale Price	n/a

VALUATION INFORMATION

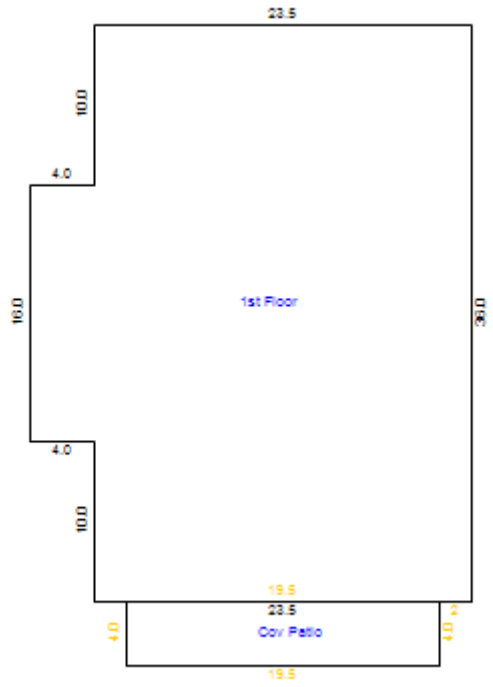
We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our data sales.

The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL

Tax Year	2023	2022	2021	2020	2019
Full Cash Value	$8,339	$8,194	$7,182	$6,555	$6,603
Limited Value	$6,907	$6,578	$6,265	$5,967	$5,683
Legal Class	2.R	2.R	2.R	2.R	2.R
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15.0%	15.0%	15.0%	15.0%	15.0%
Assessed LPV	$1,036	$987	$940	$895	$852
Property Use Code	4110	4110	4110	4110	4110
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	400700	400700	400700	400700	400700
Valuation Source	Notice	Notice	Notice	Notice	Notice

BUILDING SKETCHES

Sketches that illustrate the external dimensions of a property.



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▸ **Parcel Maps (1)**

▸ **Book/Map Maps (4)**

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144-05-010C

Agriculture Parcel

This is a Agriculture parcel located at 6504 N 67TH AVE GLENDALE 85301. The current owner is 6504 N 67TH AVENUE LLC. Its current year full cash value is $263,050.

MAPS | PICTOMETRY | $ VIEW/PAY TAX BILL | DEED

OWNER | VALUATIONS | ADDITIONAL INFO | SKETCHES

MAP FERRET | SIMILAR PARCELS | REGISTER RENTAL | PRINT DETAILS

PROPERTY INFORMATION

6504 N 67TH AVE GLENDALE 85301

MCR #	
Description	S2 S2 NE4 EX W2 & EX S 40F & E 50F RDS
Lat/Long	33.531983 | -112.205339
Lot Size	787,129 sq ft.
Zoning	R-4
Lot #	
High School District	GLENDALE UNION #205
Elementary School District	GLENDALE ELEMENTARY SCHOOL DISTRICT
Local Jurisdiction	GLENDALE
S/T/R	12 2N 1E
Market Area/Neighborhood	17/002
Subdivision (0 Parcels)	

OWNER INFORMATION

6504 N 67TH AVENUE LLC

Mailing Address	4737 N PLACITA DE CONCHA, TUCSON, AZ 85745
Deed Number	080907780

Last Deed Date	10/21/2008
Sale Date	n/a
Sale Price	n/a

VALUATION INFORMATION

We provide valuation information for the past 5 years. For mobile display, we only show 1 year of valuation information. Should you need more data, please look at our data sales.

The Valuation Information displayed below may not reflect the taxable value used on the tax bill due to any special valuation relief program. CLICK HERE TO PAY YOUR TAXES OR VIEW YOUR TAX BILL

Tax Year	2023	2022	2021	2020	2019
Full Cash Value	$263,050	$233,495	$217,730	$178,751	$163,703
Limited Value	$198,981	$189,506	$180,482	$171,888	$163,703
Legal Class	M	M	M	M	M
Description	MIXED LEGAL CLASS	MIXED LEGAL CLASS	MIXED LEGAL CLASS	MIXED LEGAL CLASS	MIXED LEGAL CLASS
Assessment Ratio	10.8%	10.8%	10.8%	10.6%	10.6%
Assessed LPV	$21,490	$20,467	$19,492	$18,220	$17,353
Property Use Code	4117	4117	4117	4117	4117
PU Description	AGRICULTURAL WITH IMPROVEMENTS	AGRICULTURAL WITH IMPROVEMENTS	AGRICULTURAL WITH IMPROVEMENTS	AGRICULTURAL WITH IMPROVEMENTS	AGRICULTURAL WITH IMPROVEMENTS
Tax Area Code	400700	400700	400700	400700	400700
Valuation Source	Notice	Notice	Notice	Notice	Notice

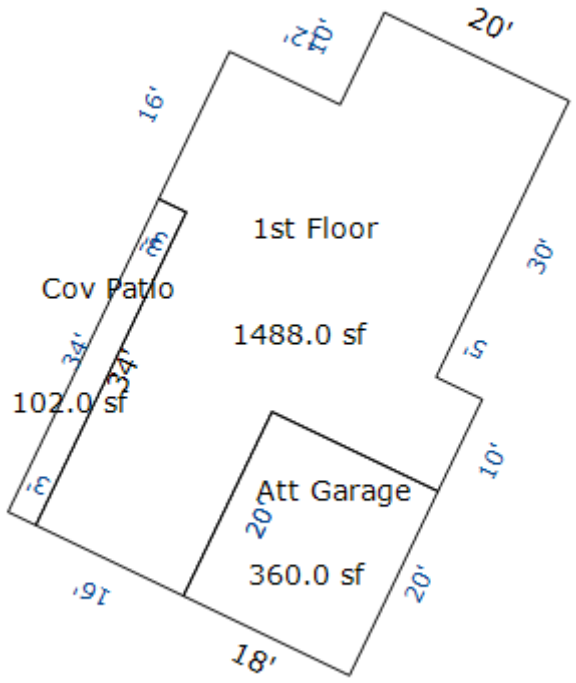
ADDITIONAL PROPERTY INFORMATION

Additional property data.

Description	Imp #	Occupancy	Rank	CCI	Age	Sq Ft.
Single-Family Residence	000101	351	2	C	66	1,488

BUILDING SKETCHES

Sketches that illustrate the external dimensions of a property.



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- **Parcel Maps (2)**
- **Book/Map Maps (4)**

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144-05-008A

Agriculture Parcel

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MAPS | PICTOMETRY | $ VIEW/PAY TAX BILL | DEED

OWNER | VALUATIONS | MAP FERRET | SIMILAR PARCELS

REGISTER RENTAL | PRINT DETAILS

PROPERTY INFORMATION

MCR #	
Description	S2 S2 N2 SE4 NE4 EX E 50F RD
Lat/Long	33.533053 | -112.205341
Lot Size	209,959 sq ft.
Zoning	R-4
Lot #	
High School District	GLENDALE UNION #205
Elementary School District	GLENDALE ELEMENTARY SCHOOL DISTRICT
Local Jurisdiction	GLENDALE
S/T/R	12 2N 1E
Market Area/Neighborhood	17/002
Subdivision (0 Parcels)	

OWNER INFORMATION

6504 N 67TH AVENUE LLC

Mailing Address	4737 N PLACITA DE CONCHA, TUCSON, AZ 85745
Deed Number	080907780

Last Deed Date	10/21/2008
Sale Date	n/a
Sale Price	n/a

VALUATION INFORMATION

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Tax Year	2023	2022	2021	2020	2019
Full Cash Value	$8,339	$8,194	$7,182	$6,555	$6,603
Limited Value	$6,907	$6,578	$6,265	$5,967	$5,683
Legal Class	2.R	2.R	2.R	2.R	2.R
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15.0%	15.0%	15.0%	15.0%	15.0%
Assessed LPV	$1,036	$987	$940	$895	$852
Property Use Code	4110	4110	4110	4110	4110
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	400700	400700	400700	400700	400700
Valuation Source	Notice	Notice	Notice	Notice	Notice

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MAPS | PICTOMETRY | $ VIEW/PAY TAX BILL | DEED

OWNER | VALUATIONS | SKETCHES | MAP FERRET

SIMILAR PARCELS | REGISTER RENTAL | PRINT DETAILS

PROPERTY INFORMATION

6504 N 67TH AVE GLENDALE 85301

MCR #	
Description	N2 S2 E2 N2 S2 NE4 EX E 50F RD
Lat/Long	33.533512 | -112.205327
Lot Size	209,959 sq ft.
Zoning	R-4
Lot #	
High School District	GLENDALE UNION #205
Elementary School District	GLENDALE ELEMENTARY SCHOOL DISTRICT
Local Jurisdiction	GLENDALE
S/T/R	12 2N 1E
Market Area/Neighborhood	17/002
Subdivision (0 Parcels)	

OWNER INFORMATION

6504 N 67TH AVENUE LLC

Mailing Address	4737 N PLACITA DE CONCHA, TUCSON, AZ 85745
Deed Number	080907780

Last Deed Date	10/21/2008
Sale Date	n/a
Sale Price	n/a

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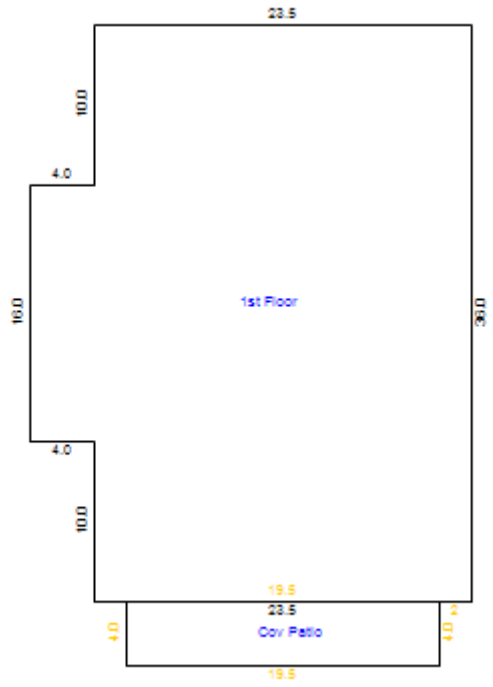
Limited Value	$6,907	$6,578	$6,265	$5,967	$5,683
Legal Class	2.R	2.R	2.R	2.R	2.R
Description	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P	AG / VACANT LAND / NON-PROFIT R/P
Assessment Ratio	15.0%	15.0%	15.0%	15.0%	15.0%
Assessed LPV	$1,036	$987	$940	$895	$852
Property Use Code	4110	4110	4110	4110	4110
PU Description	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL	AGRICULTURAL
Tax Area Code	400700	400700	400700	400700	400700
Valuation Source	Notice	Notice	Notice	Notice	Notice

BUILDING SKETCHES

Sketches that illustrate the external dimensions of a property.



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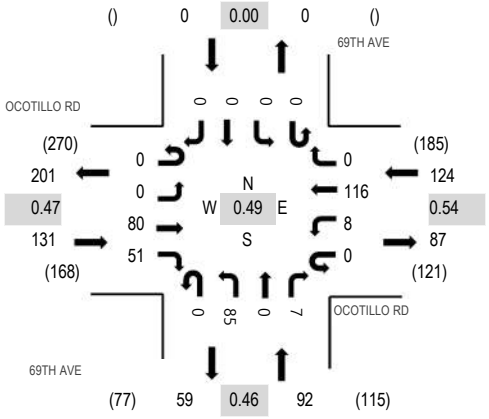
Appendix C – Traffic Count Data

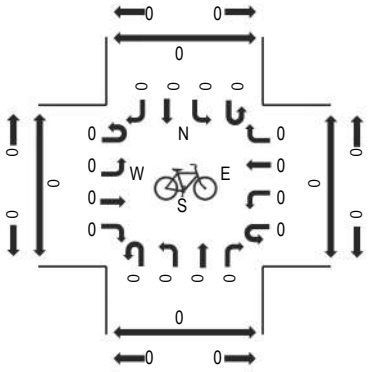
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 69TH AVE & OCOTILLO RD AM
Date: Tuesday, December 7, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

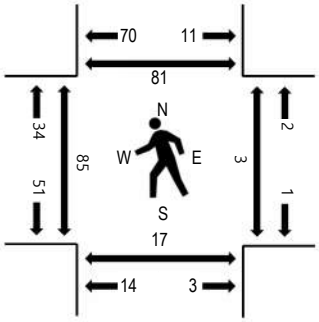
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

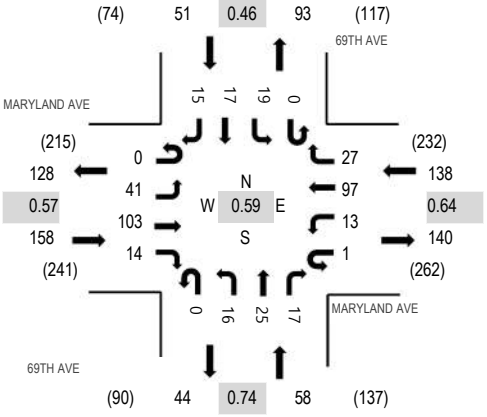
Traffic Counts - Motorized Vehicles

Interval Start Time	OCOTILLO RD Eastbound				OCOTILLO RD Westbound				69TH AVE Northbound				69TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	3	1	0	1	4	0	0	1	0	3	0	0	0	0	13	121	0	0	0	1
7:15 AM	0	0	4	1	0	0	8	0	0	0	0	2	0	0	0	0	15	135	1	0	0	4
7:30 AM	0	0	11	2	0	4	14	0	0	6	0	2	0	0	0	0	39	159	3	0	0	4
7:45 AM	0	0	8	7	0	2	28	0	0	8	0	1	0	0	0	0	54	225	1	0	0	0
8:00 AM	0	0	10	3	0	1	9	0	0	4	0	0	0	0	0	0	27	347	14	0	0	17
8:15 AM	0	0	6	2	0	0	21	0	0	9	0	1	0	0	0	0	39		22	3	4	24
8:30 AM	0	0	25	16	0	3	33	0	0	27	0	1	0	0	0	0	105		26	0	9	24
8:45 AM	0	0	39	30	0	4	53	0	0	45	0	5	0	0	0	0	176		23	0	4	16
Count Total	0	0	106	62	0	15	170	0	0	100	0	15	0	0	0	0	468		90	3	17	90
Peak Hour	0	0	80	51	0	8	116	0	0	85	0	7	0	0	0	0	347		85	3	17	81

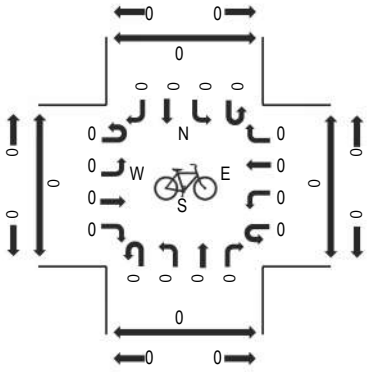
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 69TH AVE & MARYLAND AVE AM
Date: Tuesday, December 7, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

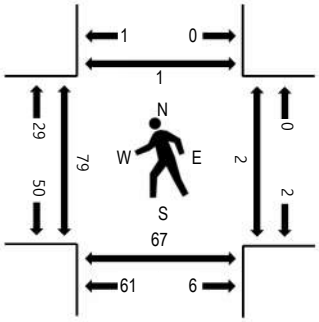
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARYLAND AVE Eastbound				MARYLAND AVE Westbound				69TH AVE Northbound				69TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	9	1	0	3	7	0	0	1	2	6	0	2	3	0	34	279	0	0	0	2
7:15 AM	0	0	18	3	0	5	15	4	0	2	0	13	0	1	1	0	62	304	0	0	1	1
7:30 AM	0	1	10	7	0	2	18	2	0	8	5	15	0	2	2	1	73	285	1	0	7	0
7:45 AM	0	1	26	7	0	9	28	1	0	5	8	14	0	6	3	2	110	344	0	0	1	0
8:00 AM	0	2	14	3	0	6	13	2	0	4	1	8	0	4	2	0	59	405	3	0	1	0
8:15 AM	0	2	10	1	0	0	17	6	0	1	2	1	0	2	1	0	43		22	0	14	0
8:30 AM	0	14	37	6	0	4	26	10	0	7	11	3	0	7	5	2	132		39	0	29	0
8:45 AM	0	23	42	4	1	3	41	9	0	4	11	5	0	6	9	13	171		15	2	23	1
Count Total	0	43	166	32	1	32	165	34	0	32	40	65	0	30	26	18	684		80	2	76	4
Peak Hour	0	41	103	14	1	13	97	27	0	16	25	17	0	19	17	15	405		79	2	67	1

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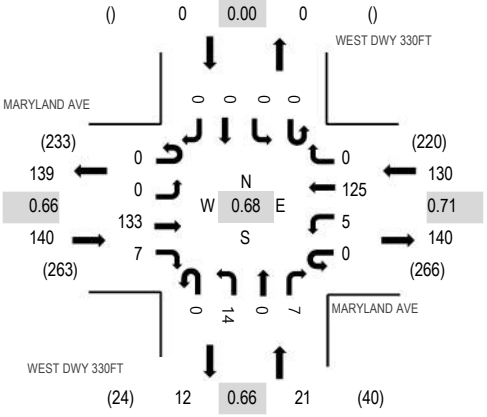
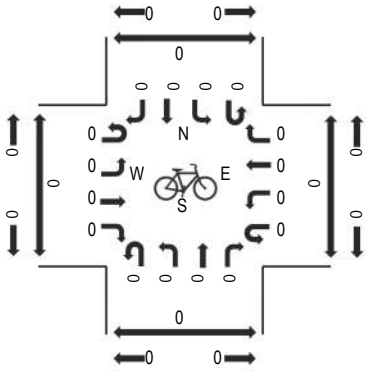
Location: 3 WEST DWY 330FT & MARYLAND AVE AM
Date: Tuesday, December 7, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

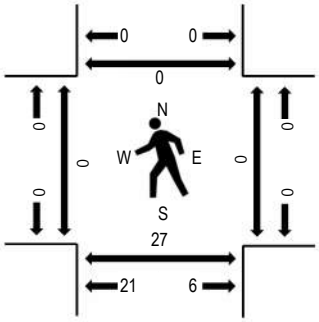
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARYLAND AVE Eastbound				MARYLAND AVE Westbound				WEST DWY 330FT Northbound				WEST DWY 330FT Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	14	2	0	1	9	0	0	0	0	4	0	0	0	0	30	232	1	0	2	2
7:15 AM	0	0	32	1	0	1	22	0	0	2	0	3	0	0	0	0	61	255	0	0	1	0
7:30 AM	0	0	26	1	0	2	21	0	0	4	0	3	0	0	0	0	57	235	0	0	4	0
7:45 AM	1	0	43	3	0	1	33	0	0	2	0	1	0	0	0	0	84	268	0	0	0	0
8:00 AM	0	0	26	0	0	3	20	0	0	2	0	2	0	0	0	0	53	291	0	0	0	0
8:15 AM	0	0	12	2	0	0	22	0	0	2	0	3	0	0	0	0	41		0	0	7	0
8:30 AM	0	0	46	1	0	1	38	0	0	4	0	0	0	0	0	0	90		0	0	13	0
8:45 AM	0	0	49	4	0	1	45	0	0	6	0	2	0	0	0	0	107		0	0	7	0
Count Total	1	0	248	14	0	10	210	0	0	22	0	18	0	0	0	0	523		1	0	34	2
Peak Hour	0	0	133	7	0	5	125	0	0	14	0	7	0	0	0	0	291		0	0	27	0

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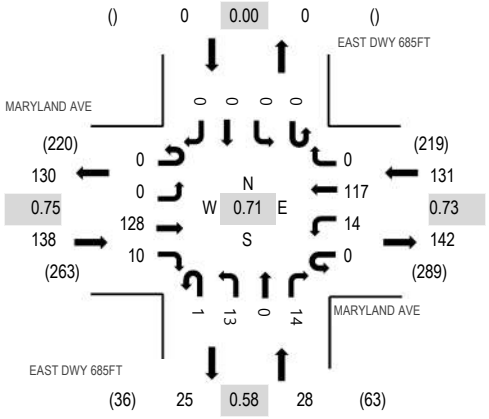
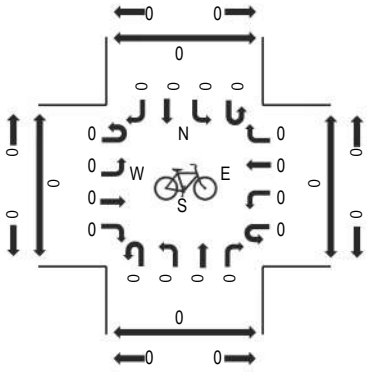
Location: 4 EAST DWY 685FT & MARYLAND AVE AM
Date: Tuesday, December 7, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

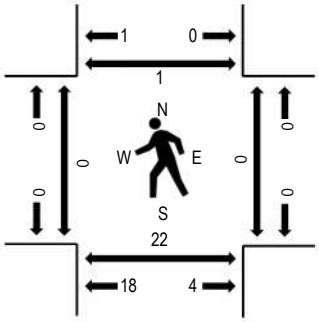
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARYLAND AVE Eastbound				MARYLAND AVE Westbound				EAST DWY 685FT Northbound				EAST DWY 685FT Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	18	0	0	1	10	0	0	0	0	5	0	0	0	0	34	248	0	0	0	2
7:15 AM	0	0	33	2	0	2	21	0	0	2	0	4	0	0	0	0	64	272	0	0	3	0
7:30 AM	0	0	29	0	0	1	21	0	0	3	0	6	0	0	0	0	60	253	0	0	1	0
7:45 AM	0	0	40	3	0	2	30	0	0	3	0	12	0	0	0	0	90	283	0	0	0	0
8:00 AM	0	0	26	3	0	3	21	0	1	2	0	2	0	0	0	0	58	297	0	0	1	1
8:15 AM	0	0	14	0	0	5	20	0	0	2	0	4	0	0	0	0	45		0	0	6	0
8:30 AM	0	0	41	4	0	3	34	0	0	5	0	3	0	0	0	0	90		0	0	9	0
8:45 AM	0	0	47	3	0	3	42	0	0	4	0	5	0	0	0	0	104		0	0	6	0
Count Total	0	0	248	15	0	20	199	0	1	21	0	41	0	0	0	0	545		0	0	26	3
Peak Hour	0	0	128	10	0	14	117	0	1	13	0	14	0	0	0	0	297		0	0	22	1

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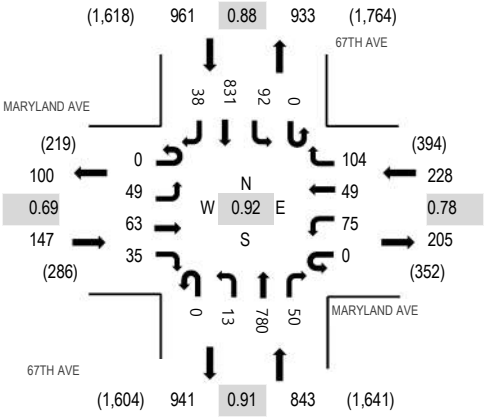
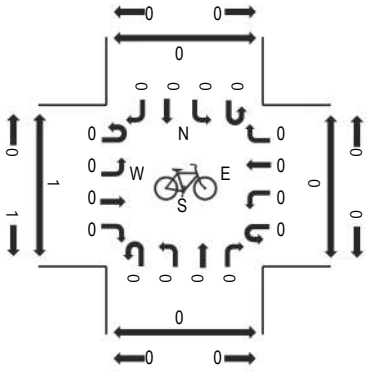
Location: 5 67TH AVE & MARYLAND AVE AM
Date: Tuesday, December 7, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

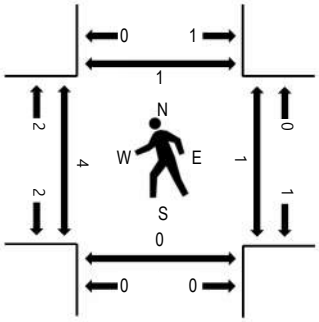
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARYLAND AVE Eastbound				MARYLAND AVE Westbound				67TH AVE Northbound				67TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	6	6	9	0	2	6	15	0	2	160	7	0	13	163	4	393	2,043	0	0	0	2
7:15 AM	0	13	13	10	0	15	6	20	0	5	171	11	0	20	181	4	469	2,179	0	0	0	0
7:30 AM	0	11	16	4	0	18	9	26	0	3	220	13	0	23	238	12	593	2,133	1	1	0	1
7:45 AM	0	17	19	17	0	18	22	33	0	3	204	14	0	26	205	10	588	2,008	1	0	0	0
8:00 AM	0	8	15	4	0	24	12	25	0	2	185	12	0	23	207	12	529	1,896	2	0	0	0
8:15 AM	0	8	8	8	0	14	5	19	0	6	185	13	0	12	136	9	423		1	1	0	0
8:30 AM	0	8	13	16	0	12	15	23	0	13	180	20	0	17	143	8	468		1	0	1	1
8:45 AM	0	16	20	21	0	8	16	31	0	21	180	11	0	7	131	14	476		0	1	0	0
Count Total	0	87	110	89	0	111	91	192	0	55	1,485	101	0	141	1,404	73	3,939		6	3	1	4
Peak Hour	0	49	63	35	0	75	49	104	0	13	780	50	0	92	831	38	2,179		4	1	0	1

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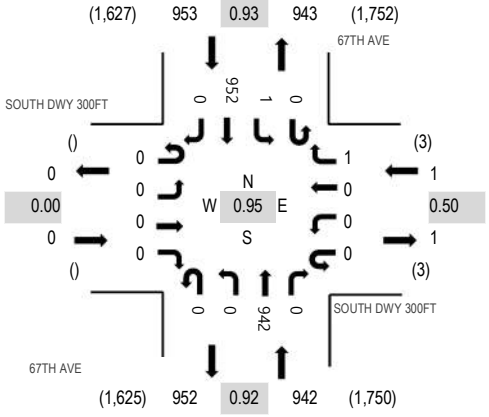
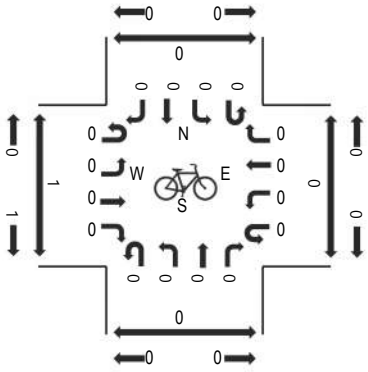
Location: 6 67TH AVE & SOUTH DWY 300FT AM
Date: Tuesday, December 7, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

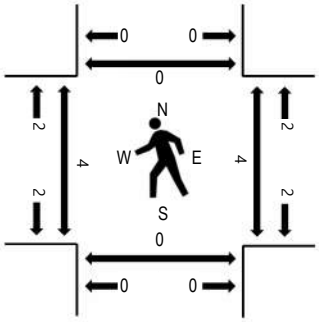
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SOUTH DWY 300FT Eastbound				SOUTH DWY 300FT Westbound				67TH AVE Northbound				67TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	0	0	0	0	0	168	0	0	0	173	0	341	1,808	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	231	0	0	0	242	0	473	1,896	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	240	0	0	1	255	0	497	1,810	0	3	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	255	0	0	0	242	0	497	1,670	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	216	0	0	0	213	0	429	1,572	2	1	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	227	0	0	0	160	0	387		1	1	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	195	1	0	1	159	0	357		0	2	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	217	0	0	0	181	0	399		0	1	0	0
Count Total	0	0	0	0	0	0	0	3	0	0	1,749	1	0	2	1,625	0	3,380		5	8	0	0
Peak Hour	0	0	0	0	0	0	0	1	0	0	942	0	0	1	952	0	1,896		4	4	0	0

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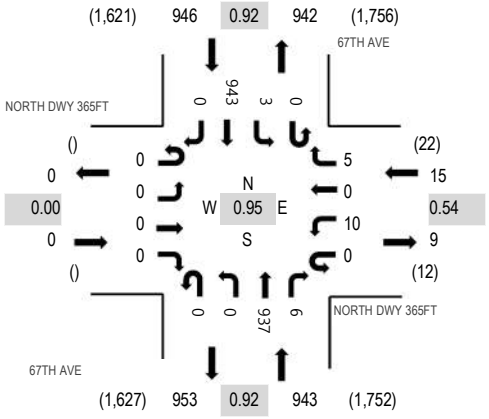
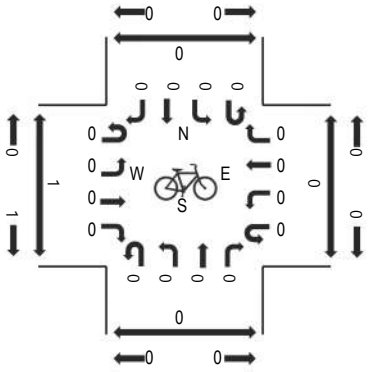
Location: 7 67TH AVE & NORTH DWY 365FT AM
Date: Tuesday, December 7, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

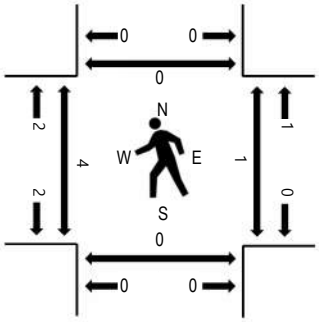
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NORTH DWY 365FT Eastbound				NORTH DWY 365FT Westbound				67TH AVE Northbound				67TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	1	0	1	0	0	168	0	0	0	172	0	342	1,815	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	231	0	0	1	241	0	474	1,904	1	0	0	0
7:30 AM	0	0	0	0	0	2	0	1	0	0	240	1	0	2	254	0	500	1,818	0	1	0	0
7:45 AM	0	0	0	0	0	5	0	2	0	0	252	3	0	0	237	0	499	1,676	1	0	0	0
8:00 AM	0	0	0	0	0	2	0	2	0	0	214	2	0	0	211	0	431	1,580	2	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	226	1	0	0	160	0	388		1	1	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	196	0	0	1	160	0	358		0	4	0	0
8:45 AM	0	0	0	0	0	0	0	3	0	0	218	0	0	1	181	0	403		0	2	0	0
Count Total	0	0	0	0	0	11	0	11	0	0	1,745	7	0	5	1,616	0	3,395		5	8	0	0
Peak Hour	0	0	0	0	0	10	0	5	0	0	937	6	0	3	943	0	1,904		4	1	0	0

ALL TRAFFIC DATA SERVICES
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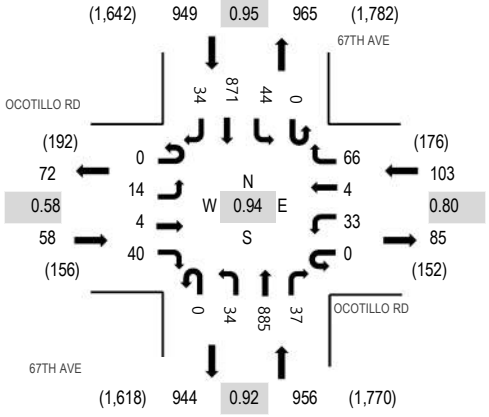
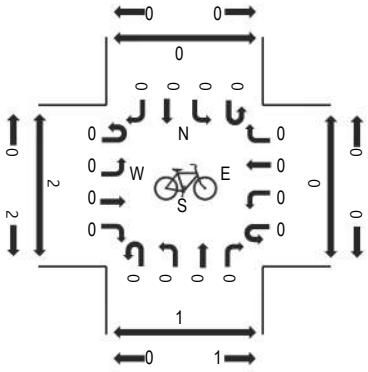
Location: 8 67TH AVE & OCOTILLO RD AM
Date: Tuesday, December 7, 2021
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

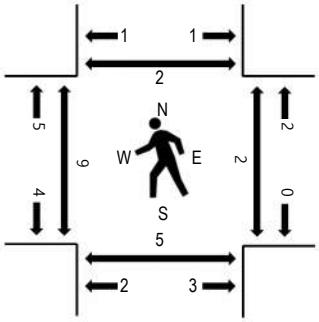
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	OCOTILLO RD Eastbound				OCOTILLO RD Westbound				67TH AVE Northbound				67TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	6	0	8	0	5	0	15	0	3	170	1	0	4	157	2	371	1,952	2	0	0	0
7:15 AM	0	4	0	10	0	8	1	11	0	2	215	5	0	13	223	4	496	2,066	4	2	1	1
7:30 AM	0	3	1	12	0	11	0	14	0	12	245	2	0	8	235	7	550	1,992	1	0	2	0
7:45 AM	0	2	1	9	0	5	3	18	0	13	221	17	0	10	224	12	535	1,853	3	0	2	0
8:00 AM	0	5	2	9	0	9	0	23	0	7	204	13	0	13	189	11	485	1,792	1	0	0	1
8:15 AM	0	5	0	9	0	6	3	9	0	13	204	7	0	14	143	9	422		1	1	0	0
8:30 AM	0	6	3	18	0	5	3	11	0	16	174	6	0	8	143	18	411		1	0	0	0
8:45 AM	0	18	6	19	0	2	5	9	0	26	190	4	0	14	159	22	474		0	1	0	2
Count Total	0	49	13	94	0	51	15	110	0	92	1,623	55	0	84	1,473	85	3,744		13	4	5	4
Peak Hour	0	14	4	40	0	33	4	66	0	34	885	37	0	44	871	34	2,066		9	2	5	2

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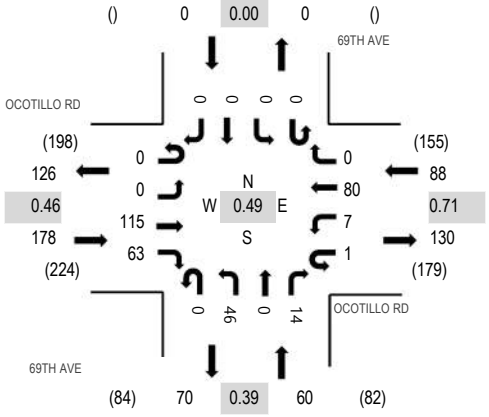
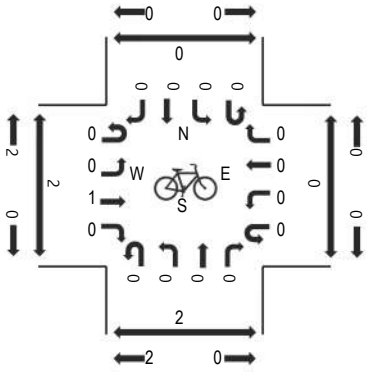
Location: 1 69TH AVE & OCOTILLO RD PM
Date: Tuesday, December 7, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

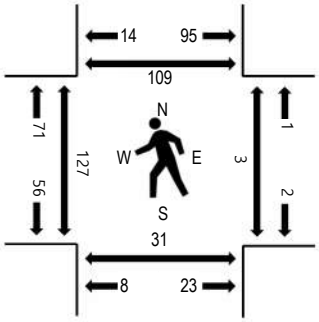
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	OCOTILLO RD Eastbound				OCOTILLO RD Westbound				69TH AVE Northbound				69TH AVE Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	50	46	0	0	31	0	0	29	0	9	0	0	0	0	165	326	93	0	21	62
4:15 PM	0	0	30	11	0	1	26	0	0	10	0	2	0	0	0	0	80	182	30	2	6	39
4:30 PM	0	0	25	4	1	2	6	0	0	5	0	3	0	0	0	0	46	138	0	0	0	5
4:45 PM	0	0	10	2	0	4	17	0	0	2	0	0	0	0	0	0	35	128	4	1	4	3
5:00 PM	0	0	3	1	0	4	6	0	0	5	0	2	0	0	0	0	21	135	3	0	0	3
5:15 PM	0	0	12	2	0	0	14	0	0	5	0	3	0	0	0	0	36		7	1	1	13
5:30 PM	0	0	12	2	0	3	16	0	0	1	0	2	0	0	0	0	36		8	0	0	3
5:45 PM	0	0	13	1	0	1	23	0	0	2	0	2	0	0	0	0	42		4	0	2	2
Count Total	0	0	155	69	1	15	139	0	0	59	0	23	0	0	0	0	461		149	4	34	130
Peak Hour	0	0	115	63	1	7	80	0	0	46	0	14	0	0	0	0	326		127	3	31	109

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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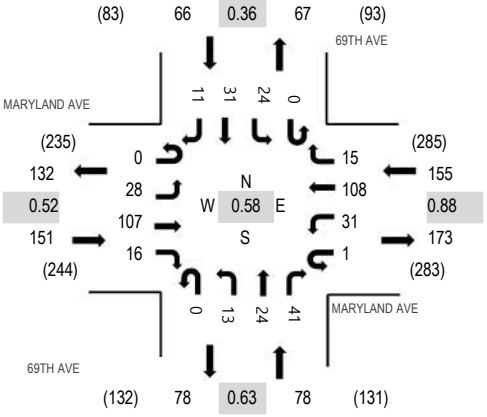
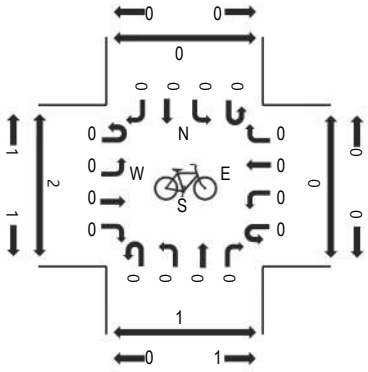
Location: 2 69TH AVE & MARYLAND AVE PM
Date: Tuesday, December 7, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

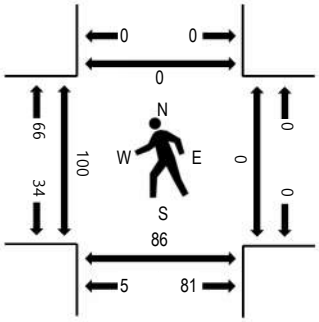
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARYLAND AVE Eastbound				MARYLAND AVE Westbound				69TH AVE Northbound				69TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	24	42	6	1	9	30	4	0	4	13	14	0	13	24	9	193	450	83	0	75	0
4:15 PM	0	3	21	6	0	10	25	2	0	4	6	12	0	4	5	1	99	352	16	0	6	0
4:30 PM	0	1	25	2	0	9	26	4	0	4	3	6	0	5	1	1	87	312	0	0	0	0
4:45 PM	0	0	19	2	0	3	27	5	0	1	2	9	0	2	1	0	71	300	1	0	5	0
5:00 PM	0	0	28	8	0	13	22	3	0	4	4	9	0	3	0	1	95	293	4	0	3	0
5:15 PM	0	3	15	3	0	6	14	4	0	4	3	4	0	0	3	0	59		7	3	6	2
5:30 PM	0	0	15	4	0	6	27	2	0	5	2	12	0	1	1	0	75		1	0	6	0
5:45 PM	0	0	13	4	0	5	24	4	0	1	1	4	0	6	1	1	64		2	0	0	0
Count Total	0	31	178	35	1	61	195	28	0	27	34	70	0	34	36	13	743		114	3	101	2
Peak Hour	0	28	107	16	1	31	108	15	0	13	24	41	0	24	31	11	450		100	0	86	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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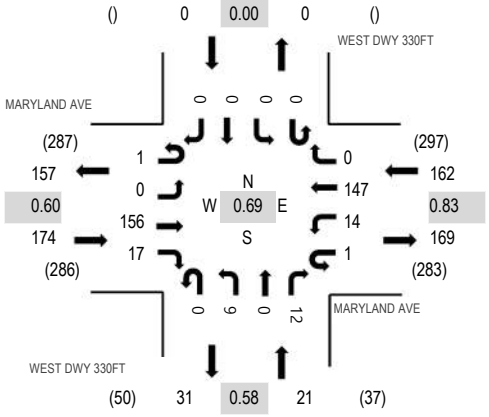
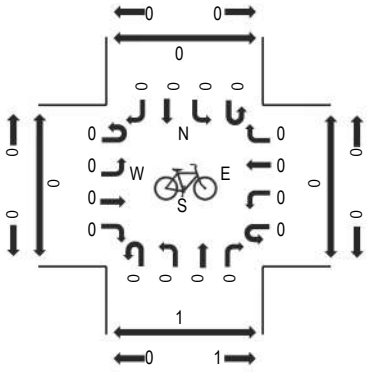
Location: 3 WEST DWY 330FT & MARYLAND AVE PM
Date: Tuesday, December 7, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

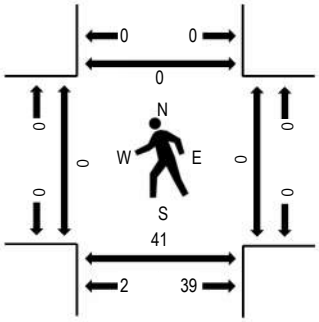
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARYLAND AVE Eastbound				MARYLAND AVE Westbound				WEST DWY 330FT Northbound				WEST DWY 330FT Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	1	0	62	9	1	5	43	0	0	2	0	7	0	0	0	0	130	357	0	0	33	0
4:15 PM	0	0	35	2	0	3	35	0	0	4	0	2	0	0	0	0	81	316	0	0	6	0
4:30 PM	0	0	33	2	0	3	35	0	0	2	0	3	0	0	0	0	78	286	0	0	0	0
4:45 PM	0	0	26	4	0	3	34	0	0	1	0	0	0	0	0	0	68	275	0	0	2	0
5:00 PM	0	0	37	4	0	5	36	0	0	2	0	5	0	0	0	0	89	263	0	0	3	2
5:15 PM	0	0	19	0	0	2	25	0	0	3	0	2	0	0	0	0	51		0	0	6	0
5:30 PM	0	0	26	3	0	3	32	0	0	0	0	3	0	0	0	0	67		0	0	6	0
5:45 PM	0	0	21	2	0	0	32	0	0	0	0	1	0	0	0	0	56		0	0	0	0
Count Total	1	0	259	26	1	24	272	0	0	14	0	23	0	0	0	0	620		0	0	56	2
Peak Hour	1	0	156	17	1	14	147	0	0	9	0	12	0	0	0	0	357		0	0	41	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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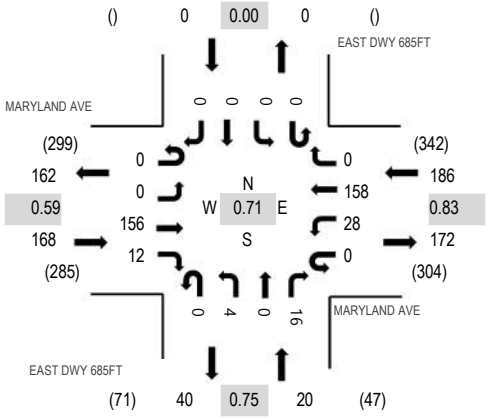
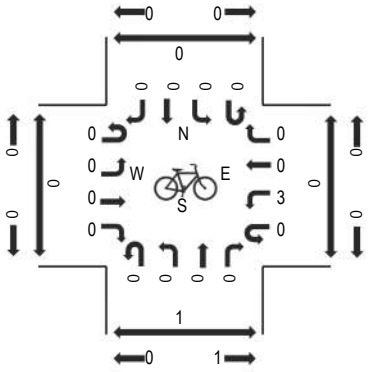
Location: 4 EAST DWY 685FT & MARYLAND AVE PM
Date: Tuesday, December 7, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

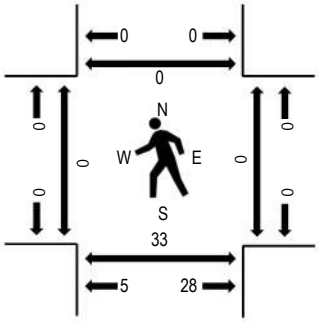
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

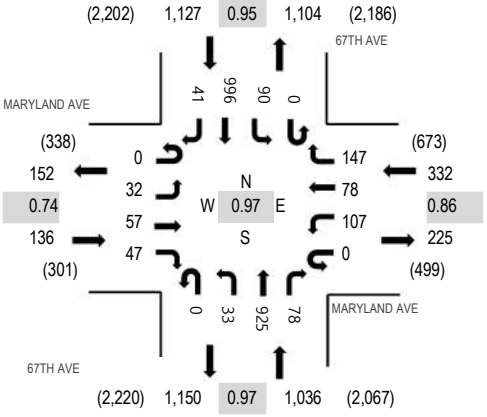
Traffic Counts - Motorized Vehicles

Interval Start Time	MARYLAND AVE Eastbound				MARYLAND AVE Westbound				EAST DWY 685FT Northbound				EAST DWY 685FT Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	67	4	0	9	47	0	0	1	0	3	0	0	0	0	131	374	0	0	21	0
4:15 PM	0	0	34	2	0	11	38	0	0	1	0	6	0	0	0	0	92	342	0	0	11	0
4:30 PM	0	0	31	2	0	4	37	0	0	1	0	5	0	0	0	0	80	303	0	0	0	0
4:45 PM	0	0	24	4	0	4	36	0	0	1	0	2	0	0	0	0	71	305	0	0	1	0
5:00 PM	0	0	40	3	0	7	40	0	0	2	0	7	0	0	0	0	99	300	0	0	8	2
5:15 PM	0	0	21	1	0	1	25	0	0	2	0	3	0	0	0	0	53		0	0	6	0
5:30 PM	0	0	27	2	1	7	36	0	0	0	0	9	0	0	0	0	82		0	0	6	0
5:45 PM	0	0	20	3	1	7	31	0	0	1	0	3	0	0	0	0	66		0	0	0	0
Count Total	0	0	264	21	2	50	290	0	0	9	0	38	0	0	0	0	674		0	0	53	2
Peak Hour	0	0	156	12	0	28	158	0	0	4	0	16	0	0	0	0	374		0	0	33	0

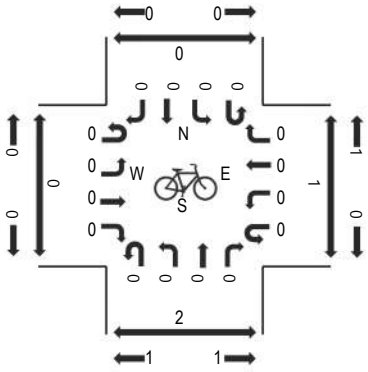
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 5 67TH AVE & MARYLAND AVE PM
Date: Tuesday, December 7, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:30 PM - 05:45 PM

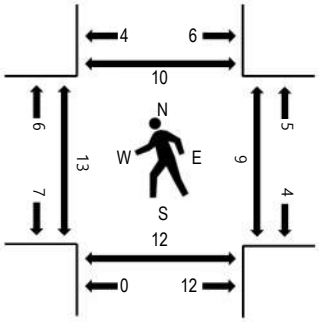
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	MARYLAND AVE Eastbound				MARYLAND AVE Westbound				67TH AVE Northbound				67TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	9	22	20	0	22	22	29	0	14	234	22	0	30	216	15	655	2,612	0	1	15	0
4:15 PM	0	20	17	19	0	32	31	40	0	5	202	29	0	25	255	13	688	2,620	2	1	9	0
4:30 PM	0	10	12	12	0	27	20	34	0	11	235	21	0	29	215	13	639	2,579	1	3	1	3
4:45 PM	0	9	9	6	0	24	23	37	0	9	223	26	0	32	222	10	630	2,619	4	2	1	1
5:00 PM	0	11	24	12	0	29	17	42	0	10	237	20	0	19	228	14	663	2,631	3	1	2	4
5:15 PM	0	6	11	10	0	23	15	41	0	3	224	17	0	31	259	7	647		7	2	0	2
5:30 PM	0	10	10	14	0	30	27	39	0	13	220	28	0	18	264	6	679		1	1	5	1
5:45 PM	0	5	12	11	0	25	19	25	0	7	244	13	0	22	245	14	642		2	5	5	3
Count Total	0	80	117	104	0	212	174	287	0	72	1,819	176	0	206	1,904	92	5,243		20	16	38	14
Peak Hour	0	32	57	47	0	107	78	147	0	33	925	78	0	90	996	41	2,631		13	9	12	10

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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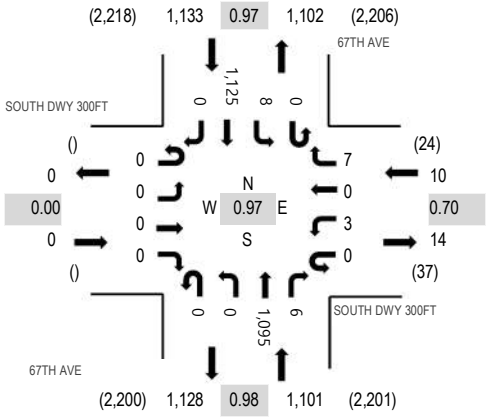
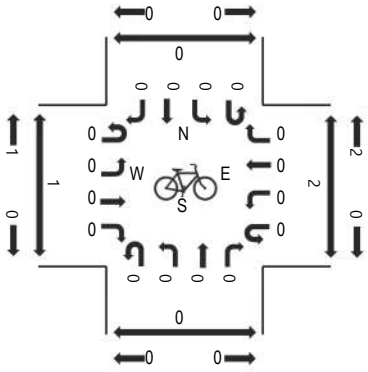
Location: 6 67TH AVE & SOUTH DWY 300FT PM
Date: Tuesday, December 7, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

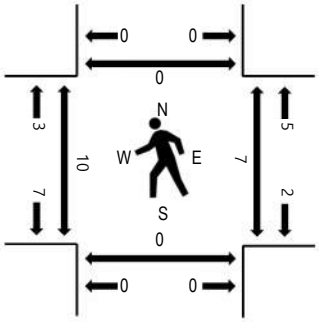
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

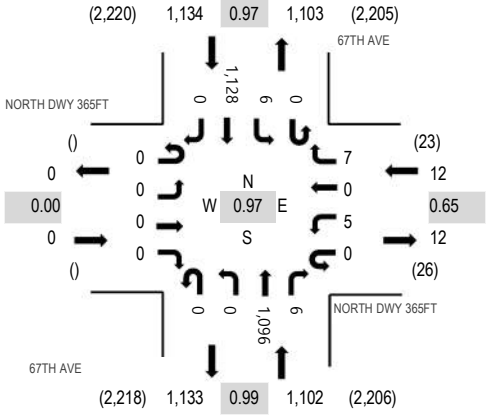
Traffic Counts - Motorized Vehicles

Interval Start Time	SOUTH DWY 300FT Eastbound				SOUTH DWY 300FT Westbound				67TH AVE Northbound				67TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	0	0	3	0	0	266	1	0	7	290	0	567	2,199	3	2	0	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	281	1	0	3	262	0	549	2,212	1	4	0	0
4:30 PM	0	0	0	0	0	2	0	3	0	0	264	2	0	3	276	0	550	2,219	2	5	0	0
4:45 PM	0	0	0	0	1	0	0	3	0	0	282	3	0	2	242	0	533	2,238	0	1	0	0
5:00 PM	0	0	0	0	0	0	0	2	0	0	283	4	0	4	287	0	580	2,244	4	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	277	1	0	0	277	0	556		5	3	0	0
5:30 PM	0	0	0	0	0	1	0	1	0	0	274	1	0	3	289	0	569		0	1	0	0
5:45 PM	0	0	0	0	0	2	0	3	0	0	261	0	0	1	272	0	539		1	3	0	0
Count Total	0	0	0	0	1	5	0	18	0	0	2,188	13	0	23	2,195	0	4,443		16	19	0	0
Peak Hour	0	0	0	0	0	3	0	7	0	0	1,095	6	0	8	1,125	0	2,244		10	7	0	0

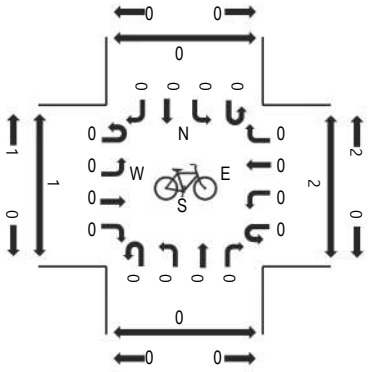
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 7 67TH AVE & NORTH DWY 365FT PM
Date: Tuesday, December 7, 2021
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

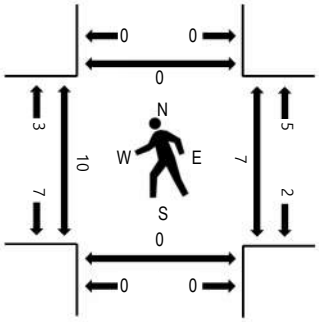
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NORTH DWY 365FT Eastbound				NORTH DWY 365FT Westbound				67TH AVE Northbound				67TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	0	0	0	0	0	2	0	0	268	1	0	1	297	0	569	2,201	3	2	0	0
4:15 PM	0	0	0	0	0	4	0	1	0	0	280	3	1	2	261	0	552	2,213	1	4	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	266	1	0	1	279	0	547	2,218	2	5	0	0
4:45 PM	0	0	0	0	0	1	0	3	0	0	281	4	0	1	243	0	533	2,239	0	1	0	0
5:00 PM	0	0	0	0	0	2	0	2	0	0	281	4	0	3	289	0	581	2,248	4	1	0	0
5:15 PM	0	0	0	0	0	2	0	1	0	0	278	0	0	1	275	0	557		5	2	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	274	1	0	0	292	0	568		0	1	0	0
5:45 PM	0	0	0	0	0	1	0	3	0	0	263	1	0	2	272	0	542		1	3	0	0
Count Total	0	0	0	0	0	10	0	13	0	0	2,191	15	1	11	2,208	0	4,449		16	19	0	0
Peak Hour	0	0	0	0	0	5	0	7	0	0	1,096	6	0	6	1,128	0	2,248		10	7	0	0

ALL TRAFFIC DATA SERVICES
(303) 216-2439
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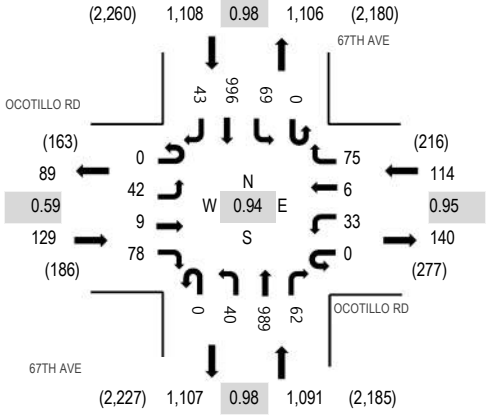
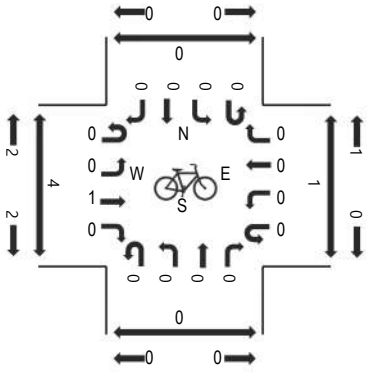
Location: 8 67TH AVE & OCOTILLO RD PM
Date: Tuesday, December 7, 2021
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

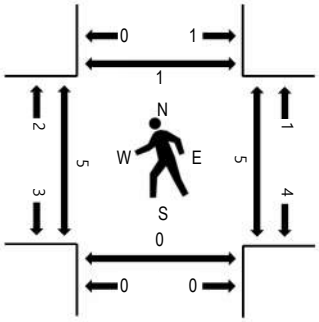
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

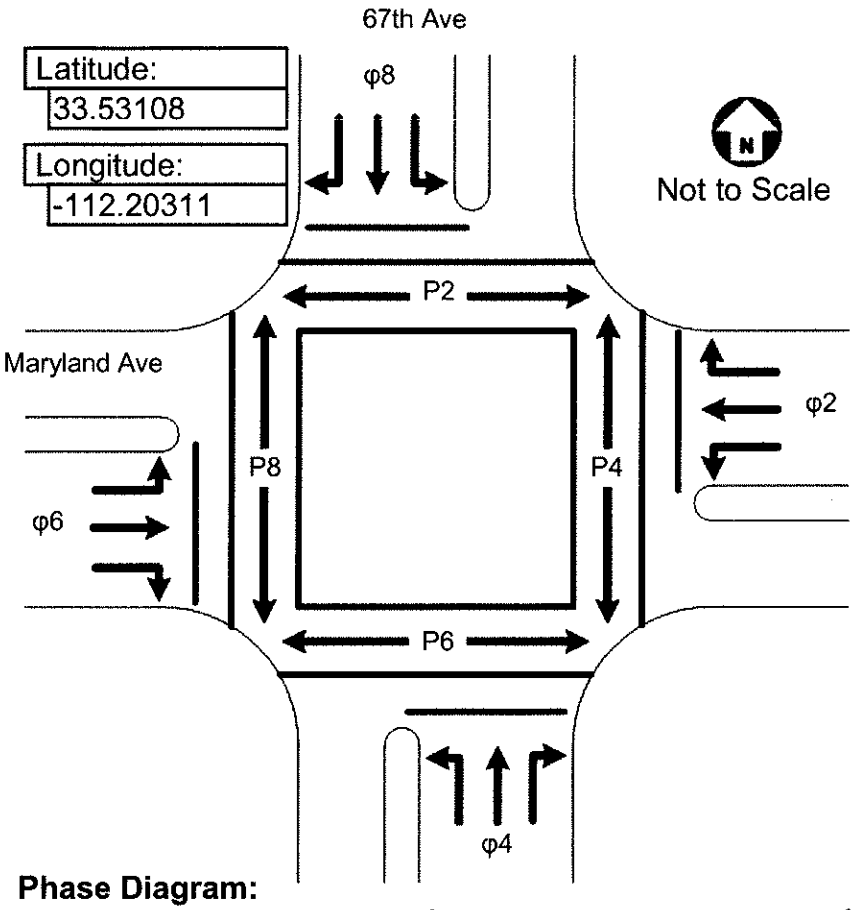
Interval Start Time	OCOTILLO RD Eastbound				OCOTILLO RD Westbound				67TH AVE Northbound				67TH AVE Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	17	2	36	0	9	1	17	0	8	239	20	0	21	262	20	652	2,442	0	0	0	0
4:15 PM	0	15	2	18	0	11	5	14	0	16	233	11	0	11	240	9	585	2,412	2	3	0	1
4:30 PM	0	7	5	16	0	7	0	23	0	6	257	19	0	17	253	7	617	2,430	1	2	0	0
4:45 PM	0	3	0	8	0	6	0	21	0	10	260	12	0	20	241	7	588	2,421	2	0	0	0
5:00 PM	0	5	0	8	0	6	1	19	0	5	268	16	0	20	264	10	622	2,405	4	0	4	1
5:15 PM	0	2	4	8	0	7	2	18	0	6	249	20	0	14	267	6	603		4	2	2	0
5:30 PM	0	3	0	12	0	12	0	16	0	10	249	16	0	17	259	14	608		2	0	0	0
5:45 PM	0	5	1	9	0	9	2	10	0	8	230	17	0	12	259	10	572		1	1	0	0
Count Total	0	57	14	115	0	67	11	138	0	69	1,985	131	0	132	2,045	83	4,847		16	8	6	2
Peak Hour	0	42	9	78	0	33	6	75	0	40	989	62	0	69	996	43	2,442		5	5	0	1

Appendix D – Existing Signal Timing

D

3250
67th Ave
Maryland Ave

06-Jul-20



Communications:

Comm Ch:	0
NTCIP:	1
IP:	192.168.111.130
Subnet:	255.255.255.0
Gateway:	192.168.111.1
Server:	172.23.12.5

Start-Up:

Start Phases:	4 & 8

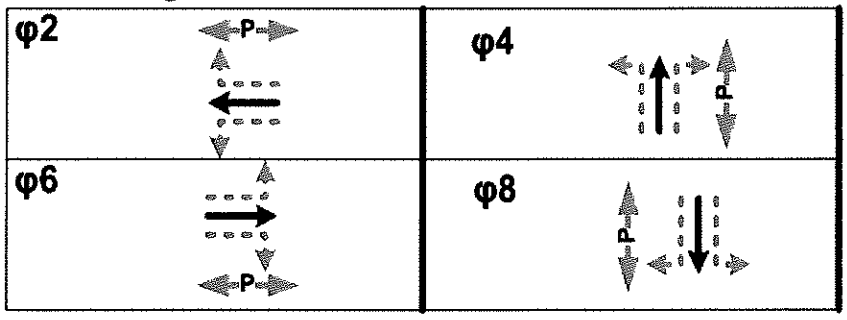
Flash Data:

Auto Flash:	Yellow-Red
Flash Start:	0:00
Flash Stop:	5:00
Enter Phases:	2 & 6
Yel. Flash Phs	4 & 8
Exit Phases:	4 & 8

Overlaps:

Overlap A:	
Overlap B:	
Overlap C:	
Overlap D:	

Phase Diagram:



Third Car Detection:

NB Left	No
SB Left	No
EB Left	No
WB Left	No

Date Signalized: 5/23/1984
Previous Update: 11/5/2018

Notes:

3250
67th Ave
Maryland Ave

06-Jul-20

Basic Timing Parameters

	Φ1	Φ2	Φ3	Φ4	Φ5	Φ6	Φ7	Φ8
Min Ini		8		20		8		20
Walk		7		7		7		7
Ped Clr		22		15		19		17
Veh Ext		4.0		2.0		4.0		2.0
Max I		15		40		15		40
Max II		20		45		20		45
Yel Clr		3.0		4.0		3.0		4.0
Red Clr		2.0		2.0		2.0		2.0
Max III								
Max Adj								
Dym Max								
Volume Density								
Sec/Act								
Max Ini.								
TBR								
TTR								
Min. Gap								

Basic Timing Functions

	Φ1	Φ2	Φ3	Φ4	Φ5	Φ6	Φ7	Φ8
Recall	None	None	None	Ped-Max	None	None	None	Ped-Max
Det. Lock								
Dual Entry		X		X		X		X
Simult Gap								

Pre-emption

Pre-emptor #	1	2	3	4	5	6
Direction						
Hold Phases						

Appendix E – Existing Capacity Analysis

E

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	14	8	62	19	6
Future Vol, veh/h	35	14	8	62	19	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	15	9	67	21	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	53	0	131	46
Stage 1	-	-	-	-	46	-
Stage 2	-	-	-	-	85	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1553	-	863	1023
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	938	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1553	-	858	1023
Mov Cap-2 Maneuver	-	-	-	-	858	-
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	932	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	893	-	-	1553	-
HCM Lane V/C Ratio	0.03	-	-	0.006	-
HCM Control Delay (s)	9.2	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	5	42	35	5	69	36	916	39	46	902	36
Future Vol, veh/h	15	5	42	35	5	69	36	916	39	46	902	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	85	-	-	85	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	5	44	37	5	73	38	964	41	48	949	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1625	2145	494	1634	2144	503	987	0	0	1005	0	0
Stage 1	1064	1064	-	1061	1061	-	-	-	-	-	-	-
Stage 2	561	1081	-	573	1083	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*68	48	*720	*67	48	*737	*1078	-	-	1042	-	-
Stage 1	*604	545	-	*570	525	-	-	-	-	-	-	-
Stage 2	*695	510	-	*679	530	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*52	44	*720	*54	44	*737	*1078	-	-	1042	-	-
Mov Cap-2 Maneuver	*52	44	-	*54	44	-	-	-	-	-	-	-
Stage 1	*583	520	-	*550	507	-	-	-	-	-	-	-
Stage 2	*598	492	-	*602	506	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	40.7	63.6	0.3	0.4
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	* 1078	-	-	52	273	54	357	1042	-	-
HCM Lane V/C Ratio	0.035	-	-	0.304	0.181	0.682	0.218	0.046	-	-
HCM Control Delay (s)	8.5	-	-	102	21.1	160.1	17.9	8.6	-	-
HCM Lane LOS	A	-	-	F	C	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.1	0.6	2.8	0.8	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	975	0	2	986
Future Vol, veh/h	0	2	975	0	2	986
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	1026	0	2	1038

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1549	513	0	0	1026	0
Stage 1	1026	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*105	*681	-	-	*1019	-
Stage 1	*643	-	-	-	-	-
Stage 2	*656	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	*105	*681	-	-	*1019	-
Mov Cap-2 Maneuver	*344	-	-	-	-	-
Stage 1	*643	-	-	-	-	-
Stage 2	*654	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	681	* 1019	-
HCM Lane V/C Ratio	-	-	0.003	0.002	-
HCM Control Delay (s)	-	-	10.3	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	71	21	23	77	10	20	15	52	14	9	4
Future Vol, veh/h	5	71	21	23	77	10	20	15	52	14	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	77	23	25	84	11	22	16	57	15	10	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	95	0	0	100	0	0	246	244	89	275	250	90
Stage 1	-	-	-	-	-	-	99	99	-	140	140	-
Stage 2	-	-	-	-	-	-	147	145	-	135	110	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1499	-	-	1493	-	-	708	658	969	677	653	968
Stage 1	-	-	-	-	-	-	907	813	-	863	781	-
Stage 2	-	-	-	-	-	-	856	777	-	868	804	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1499	-	-	1493	-	-	685	644	969	615	639	968
Mov Cap-2 Maneuver	-	-	-	-	-	-	685	644	-	615	639	-
Stage 1	-	-	-	-	-	-	903	810	-	860	767	-
Stage 2	-	-	-	-	-	-	826	763	-	798	801	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.6	10	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	820	1499	-	-	1493	-	-	659
HCM Lane V/C Ratio	0.115	0.004	-	-	0.017	-	-	0.045
HCM Control Delay (s)	10	7.4	0	-	7.5	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.1

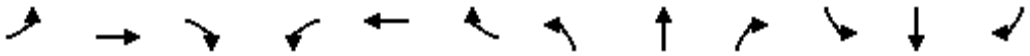
Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	132	6	8	100	11	10
Future Vol, veh/h	132	6	8	100	11	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	143	7	9	109	12	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	150	0	274	147
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	127	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1431	-	752	900
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %	-	-		-	1	
Mov Cap-1 Maneuver	-	-	1431	-	747	900
Mov Cap-2 Maneuver	-	-	-	-	747	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	924	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	813	-	-	1431	-
HCM Lane V/C Ratio	0.028	-	-	0.006	-
HCM Control Delay (s)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	66	37	78	51	108	14	808	52	96	861	40
Future Volume (veh/h)	51	66	37	78	51	108	14	808	52	96	861	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	69	39	82	54	114	15	851	55	101	906	42
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	272	230	275	272	230	446	2219	143	463	2264	105
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1217	1870	1585	1286	1870	1585	592	3389	219	615	3458	160
Grp Volume(v), veh/h	54	69	39	82	54	114	15	446	460	101	466	482
Grp Sat Flow(s),veh/h/ln	1217	1870	1585	1286	1870	1585	592	1777	1831	615	1777	1842
Q Serve(g_s), s	2.2	1.8	1.2	3.3	1.4	3.6	0.7	6.4	6.4	5.0	6.7	6.7
Cycle Q Clear(g_c), s	3.6	1.8	1.2	5.1	1.4	3.6	7.4	6.4	6.4	11.3	6.7	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.09
Lane Grp Cap(c), veh/h	277	272	230	275	272	230	446	1164	1199	463	1164	1206
V/C Ratio(X)	0.20	0.25	0.17	0.30	0.20	0.50	0.03	0.38	0.38	0.22	0.40	0.40
Avail Cap(c_a), veh/h	321	340	288	323	340	288	446	1164	1199	463	1164	1206
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	20.9	20.6	23.1	20.7	21.7	6.2	4.4	4.4	7.0	4.4	4.4
Incr Delay (d2), s/veh	0.5	0.7	0.5	0.9	0.5	2.3	0.1	1.0	0.9	1.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.4	1.0	0.6	1.4	0.1	1.5	1.5	0.6	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	21.6	21.1	24.0	21.2	24.0	6.3	5.3	5.3	8.1	5.5	5.4
LnGrp LOS	C	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		162			250			921			1049	
Approach Delay, s/veh		21.9			23.4			5.3			5.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.0		42.0		13.0		42.0				
Change Period (Y+Rc), s		5.0		6.0		5.0		6.0				
Max Green Setting (Gmax), s		10.0		34.0		10.0		34.0				
Max Q Clear Time (g_c+I1), s		7.1		9.4		5.6		13.3				
Green Ext Time (p_c), s		0.4		3.6		0.3		4.4				

Intersection Summary												
HCM 6th Ctrl Delay			8.5									
HCM 6th LOS			A									

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	66	8	83	48	15
Future Vol, veh/h	120	66	8	83	48	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	72	9	90	52	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	202	0	274	166
Stage 1	-	-	-	-	166	-
Stage 2	-	-	-	-	108	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1370	-	716	878
Stage 1	-	-	-	-	863	-
Stage 2	-	-	-	-	916	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1370	-	711	878
Mov Cap-2 Maneuver	-	-	-	-	711	-
Stage 1	-	-	-	-	863	-
Stage 2	-	-	-	-	910	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	745	-	-	1370	-
HCM Lane V/C Ratio	0.092	-	-	0.006	-
HCM Control Delay (s)	10.3	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	23.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	10	81	35	7	78	42	1024	65	72	1031	45
Future Vol, veh/h	44	10	81	35	7	78	42	1024	65	72	1031	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	85	-	-	85	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	11	85	37	7	82	44	1078	68	76	1085	47

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1892	2495	566	1900	2484	573	1132	0	0	1146	0	0
Stage 1	1261	1261	-	1200	1200	-	-	-	-	-	-	-
Stage 2	631	1234	-	700	1284	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*~ 43	29	*669	*42	29	*681	*1001	-	-	976	-	-
Stage 1	*493	460	-	*535	491	-	-	-	-	-	-	-
Stage 2	*642	466	-	*631	443	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 27	26	*669	*~ 23	26	*681	*1001	-	-	976	-	-
Mov Cap-2 Maneuver	*~ 27	26	-	*~ 23	26	-	-	-	-	-	-	-
Stage 1	*471	424	-	*511	470	-	-	-	-	-	-	-
Stage 2	*532	445	-	*495	409	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	245.3	214.8	0.3	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	* 1001	-	-	27	180	23	221	976	-	-
HCM Lane V/C Ratio	0.044	-	-	1.715	0.532	1.602	0.405	0.078	-	-
HCM Control Delay (s)	8.8	-	-	-$ 658.2	45.7	$ 659.1	31.9	9	-	-
HCM Lane LOS	A	-	-	F	E	F	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	5.5	2.7	4.7	1.8	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	12	1132	8	16	1108
Future Vol, veh/h	3	12	1132	8	16	1108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	13	1192	8	17	1166

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1813	600	0	0	1200	0
Stage 1	1196	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*70	*626	-	-	*936	-
Stage 1	*590	-	-	-	-	-
Stage 2	*608	-	-	-	-	-
Platoon blocked, %		1	-	-	1	-
Mov Cap-1 Maneuver	*69	*626	-	-	*936	-
Mov Cap-2 Maneuver	*302	-	-	-	-	-
Stage 1	*590	-	-	-	-	-
Stage 2	*597	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	515	* 936	-
HCM Lane V/C Ratio	-	-	0.031	0.018	-
HCM Control Delay (s)	-	-	12.2	8.9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	29	111	17	33	112	16	14	25	43	25	33	12
Future Vol, veh/h	29	111	17	33	112	16	14	25	43	25	33	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	121	18	36	122	17	15	27	47	27	36	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	139	0	0	139	0	0	421	405	130	434	406	131
Stage 1	-	-	-	-	-	-	194	194	-	203	203	-
Stage 2	-	-	-	-	-	-	227	211	-	231	203	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1445	-	-	1445	-	-	543	535	920	532	534	919
Stage 1	-	-	-	-	-	-	808	740	-	799	733	-
Stage 2	-	-	-	-	-	-	776	728	-	772	733	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1445	-	-	1445	-	-	487	508	920	466	507	919
Mov Cap-2 Maneuver	-	-	-	-	-	-	487	508	-	466	507	-
Stage 1	-	-	-	-	-	-	789	722	-	780	713	-
Stage 2	-	-	-	-	-	-	707	708	-	688	715	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	1.5	11.3	12.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	658	1445	-	-	1445	-	-	531
HCM Lane V/C Ratio	0.135	0.022	-	-	0.025	-	-	0.143
HCM Control Delay (s)	11.3	7.5	0	-	7.6	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	0.5

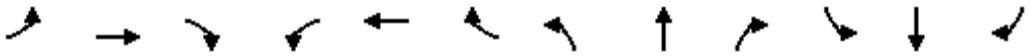
Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	162	18	15	153	10	13
Future Vol, veh/h	162	18	15	153	10	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	176	20	16	166	11	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	196	0	384	186
Stage 1	-	-	-	-	186	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1377	-	644	856
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	860	-
Platoon blocked, %	-	-		-	1	
Mov Cap-1 Maneuver	-	-	1377	-	635	856
Mov Cap-2 Maneuver	-	-	-	-	635	-
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	849	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	743	-	-	1377	-
HCM Lane V/C Ratio	0.034	-	-	0.012	-
HCM Control Delay (s)	10	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	63	59	109	100	145	41	926	102	121	940	53
Future Volume (veh/h)	50	63	59	109	100	145	41	926	102	121	940	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	66	62	115	105	153	43	975	107	127	989	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	300	254	295	300	254	397	2065	227	383	2186	124
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1121	1870	1585	1262	1870	1585	540	3229	354	521	3419	194
Grp Volume(v), veh/h	53	66	62	115	105	153	43	536	546	127	514	531
Grp Sat Flow(s),veh/h/ln	1121	1870	1585	1262	1870	1585	540	1777	1807	521	1777	1836
Q Serve(g_s), s	2.4	1.7	1.9	4.8	2.7	4.9	2.4	8.6	8.6	9.1	8.1	8.1
Cycle Q Clear(g_c), s	5.2	1.7	1.9	6.5	2.7	4.9	10.5	8.6	8.6	17.7	8.1	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.11
Lane Grp Cap(c), veh/h	255	300	254	295	300	254	397	1136	1155	383	1136	1174
V/C Ratio(X)	0.21	0.22	0.24	0.39	0.35	0.60	0.11	0.47	0.47	0.33	0.45	0.45
Avail Cap(c_a), veh/h	279	340	288	322	340	288	397	1136	1155	383	1136	1174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	20.1	20.2	22.9	20.5	21.4	7.7	5.1	5.1	9.7	5.0	5.0
Incr Delay (d2), s/veh	0.6	0.5	0.7	1.2	1.0	3.7	0.6	1.4	1.4	2.3	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.7	0.7	1.4	1.2	2.0	0.3	2.1	2.2	1.0	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	20.6	20.9	24.1	21.5	25.1	8.2	6.5	6.5	12.0	6.3	6.3
LnGrp LOS	C	C	C	C	C	C	A	A	A	B	A	A
Approach Vol, veh/h		181			373			1125			1172	
Approach Delay, s/veh		21.5			23.8			6.6			6.9	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.8		41.2		13.8		41.2				
Change Period (Y+Rc), s		5.0		6.0		5.0		6.0				
Max Green Setting (Gmax), s		10.0		34.0		10.0		34.0				
Max Q Clear Time (g_c+I1), s		8.5		12.5		7.2		19.7				
Green Ext Time (p_c), s		0.3		4.8		0.3		4.7				

Intersection Summary												
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			A									

Notes

User approved pedestrian interval to be less than phase max green.

Appendix F – Trip Generation

NWC 67th Avenue and Maryland

Completed: TG 10/26/2021
Checked: GT 1/31/2022

Trip Generation Calculations

220 Multifamily Housing (Low-Rise) (One to Three Levels)

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Multifamily Housing (Low-Rise)	220	384	Dwelling Units	6.74	50%	50%	0.40	24%	76%	0.51	63%	37%	2,588	1,294	1,294	154	37	117	196	123	73	Average
Multifamily Housing (Low-Rise)	220	384	Dwelling Units	2.46	50%	50%	0.13	24%	76%	0.08	63%	37%	945	473	472	50	12	38	31	20	11	Minimum
Multifamily Housing (Low-Rise)	220	384	Dwelling Units	12.50	50%	50%	0.73	24%	76%	1.04	63%	37%	4,800	2,400	2,400	280	67	213	399	251	148	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Multifamily Housing (Low-Rise)	**220**	**384**	**Dwelling Units**	**T=6.41(X)+75.31**	**50%**	**50%**	**T=0.31(X)+22.85**	**24%**	**76%**	**T=0.43(X)+20.55**	**63%**	**37%**	**2,537**	**1,269**	**1,268**	**142**	**34**	**108**	**186**	**117**	**69**	**Equation**

Multifamily Housing (Low-Rise)	Standard Deviation	1.79		0.12		0.15
	Number of Studies	22		49		59
	Average Size	229		249		241
	R^2	0.86		0.79		0.84

252 Senior Adult Housing - Multifamily

Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Rate	% In	% Out	Rate	% In	% Out	Rate	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Senior Adult Housing - Multifamily	252	221	Dwelling Units	3.24	50%	50%	0.20	34%	66%	0.25	56%	44%	716	358	358	44	15	29	55	31	24	Average
Senior Adult Housing - Multifamily	252	221	Dwelling Units	2.59	50%	50%	0.13	34%	66%	0.16	56%	44%	572	286	286	29	10	19	35	20	15	Minimum
Senior Adult Housing - Multifamily	252	221	Dwelling Units	4.79	50%	50%	0.27	34%	66%	0.36	56%	44%	1,059	530	529	60	20	40	80	45	35	Maximum
Land Use	ITE Code	Qty	Unit	Weekday			AM Peak Hour			PM Peak Hour			Weekday			AM Peak Hour			PM Peak Hour			
				Equation	% In	% Out	Equation	% In	% Out	Equation	% In	% Out	Total	In	Out	Total	In	Out	Total	In	Out	
Senior Adult Housing - Multifamily	**252**	**221**	**Dwelling Units**	**T=2.89(X)+24.82**	**50%**	**50%**	**T=0.19(X)+0.9**	**34%**	**66%**	**T=0.25(X)+0.07**	**56%**	**44%**	**664**	**332**	**332**	**43**	**15**	**28**	**55**	**31**	**24**	**Equation**

Senior Adult Housing - Multifamily	Standard Deviation	0.53		0.04		0.06
	Number of Studies	6		9		9
	Average Size	72		73		73
	R^2	0.99		0.85		0.84

Appendix G – MAG Socioeconomic Projections

G

Socioeconomic Projections

Population and Employment

by Municipal Planning Area, Jurisdiction, and Regional Analysis Zone

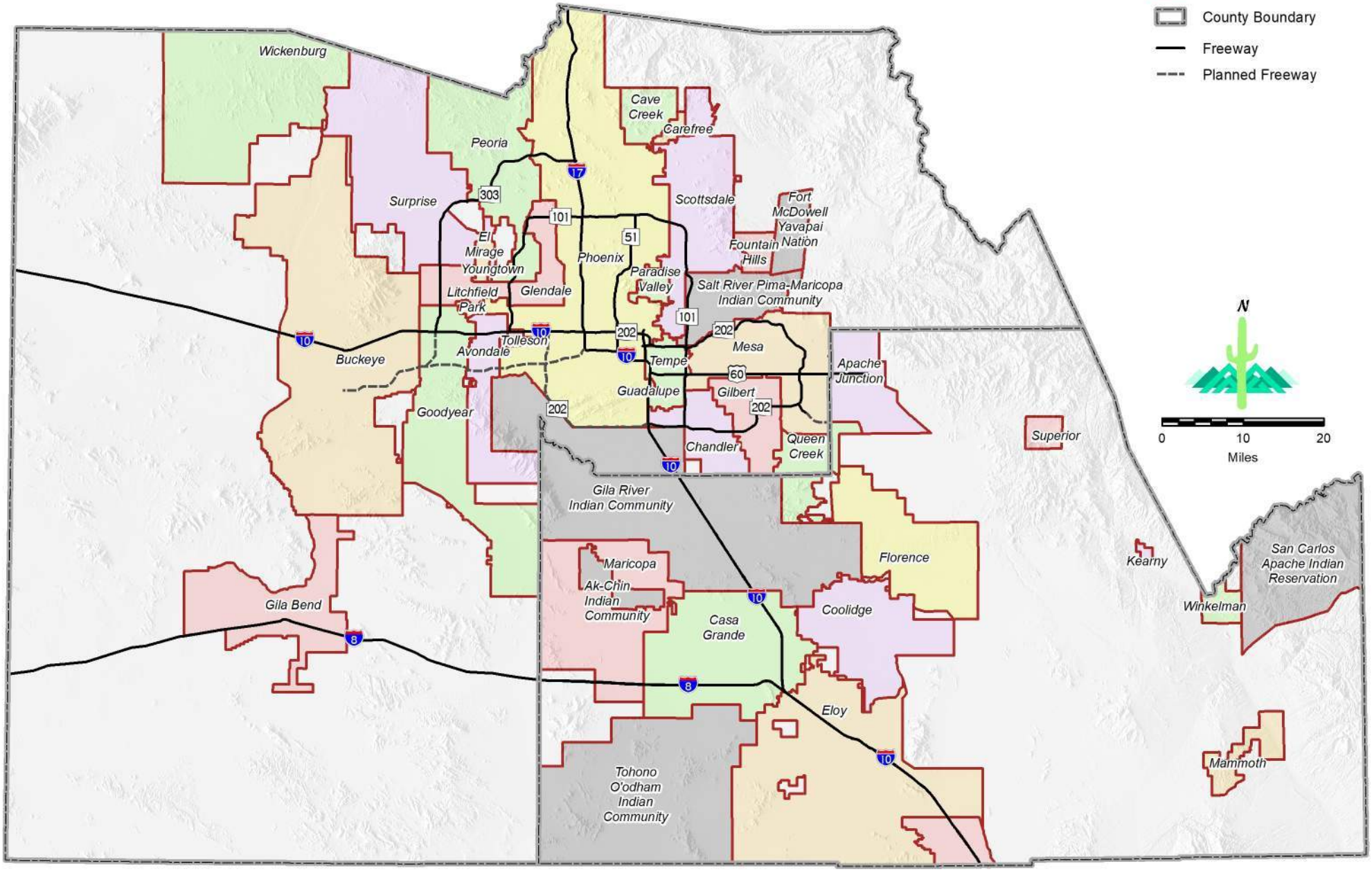
June 2019

MARICOPA ASSOCIATION of GOVERNMENTS

302 North 1st Avenue, Suite 300
Phoenix, Arizona 85003
(602) 254-6300

Municipal Planning Areas (MPA), 2019
Maricopa and Pinal Counties, Arizona

MARICOPA ASSOCIATION of GOVERNMENTS



Source: MAG and the MAG member agencies, CAG and the CAG member agencies

Date: May 2019

Maricopa Association of Governments
Table 1: Total Population by Municipal Planning Area
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

	Total Population					
Municipal Planning Area	**2018**	**2020**	**2030**	**2040**	**2050**	**2055**
Apache Junction	59,000	60,800	70,000	92,000	117,100	132,600
Avondale	84,200	86,700	101,800	111,900	119,000	122,100
Buckeye	89,000	97,700	186,600	305,400	409,900	459,300
Carefree	3,700	3,800	4,100	4,200	4,200	4,300
Cave Creek	5,900	6,000	6,500	7,000	7,200	7,300
Chandler	270,300	279,500	309,100	321,100	329,000	332,400
El Mirage	34,300	35,100	36,500	36,900	37,200	37,200
Florence	79,400	85,500	120,300	160,500	209,900	231,400
Fort McDowell Yavapai Native Nation	1,000	1,100	1,100	1,100	1,100	1,100
Fountain Hills	24,000	24,700	26,200	26,600	26,900	27,000
Gila Bend	2,500	2,700	3,700	3,700	3,900	4,200
Gila River Indian Native Nation	12,000	12,200	12,300	12,300	12,300	12,300
Gilbert	256,500	265,900	293,500	308,800	318,100	321,400
Glendale	272,200	279,100	306,400	323,400	333,200	338,800
Goodyear	87,300	92,100	140,300	192,200	228,600	247,900
Guadalupe	6,300	6,400	6,700	6,800	6,800	6,800
Litchfield Park	13,300	14,000	15,400	15,700	16,100	16,400
Maricopa	59,800	67,000	90,800	106,400	121,600	128,900
Mesa	533,400	552,800	607,500	649,400	680,000	690,300
Paradise Valley	14,000	14,100	14,700	15,100	15,200	15,300
Peoria	188,500	196,600	232,400	273,700	312,600	329,900
Phoenix	1,653,500	1,697,700	1,881,900	2,019,300	2,117,400	2,155,300
Queen Creek	58,700	65,000	90,900	109,000	120,900	128,500
Salt River Pima-Maricopa Native Nation	6,800	6,100	5,700	5,800	5,800	5,800
Scottsdale	245,500	253,800	281,900	299,400	311,400	316,700
Surprise	144,000	150,300	216,700	307,500	383,300	417,200
Tempe	185,300	190,000	217,100	247,000	272,400	282,200
Tolleson	7,000	7,100	8,600	10,300	11,400	11,800
Unicorporated Pinal County	66,800	68,600	79,100	93,700	110,800	122,700
Unincorporated Maricopa County	97,900	101,200	110,500	116,800	137,000	152,600
Wickenburg	8,200	8,500	9,400	9,500	9,800	10,000
Youngtown	6,600	6,800	7,300	7,700	7,800	7,800

Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

Maricopa Association of Governments
Table 2: Total Employment by Municipal Planning Area
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

	Total Employment					
Municipal Planning Area	**2018**	**2020**	**2030**	**2040**	**2050**	**2055**
Apache Junction	7,800	8,800	13,100	17,800	26,400	30,500
Avondale	22,400	23,200	30,400	36,200	42,800	45,400
Buckeye	21,600	26,900	42,900	64,500	98,000	128,900
Carefree	1,600	1,600	2,100	2,400	2,500	2,600
Cave Creek	2,200	2,400	2,700	2,900	3,000	3,200
Chandler	145,500	154,700	182,300	202,100	215,200	222,000
El Mirage	5,000	5,100	6,500	7,200	8,000	8,900
Florence	11,000	12,100	17,000	26,400	40,900	51,100
Fort McDowell Yavapai Native Nation	2,200	2,400	2,400	2,500	2,600	2,600
Fountain Hills	7,100	7,700	9,100	9,800	10,200	10,300
Gila Bend	900	900	1,200	1,300	1,500	1,700
Gila River Indian Native Nation	10,500	10,700	11,500	13,100	14,800	15,500
Gilbert	92,800	98,600	120,200	135,900	146,600	152,200
Glendale	103,800	111,400	134,000	153,100	168,900	175,900
Goodyear	35,900	37,200	50,600	69,000	92,600	102,500
Guadalupe	1,300	1,300	1,500	1,600	1,600	1,600
Litchfield Park	3,800	4,400	5,200	5,900	6,400	6,700
Maricopa	6,200	7,100	11,400	18,200	28,200	33,500
Mesa	197,200	205,900	249,000	296,000	333,700	351,000
Paradise Valley	6,300	6,300	6,800	7,100	7,500	7,700
Peoria	58,200	62,400	73,100	84,800	91,900	96,300
Phoenix	897,700	937,600	1,084,000	1,189,200	1,264,900	1,298,900
Queen Creek	15,500	16,400	19,900	24,000	28,900	31,100
Salt River Pima-Maricopa Native Nation	21,200	22,900	28,200	33,900	35,900	36,400
Scottsdale	197,200	207,400	235,500	252,000	261,700	267,000
Surprise	33,600	36,400	59,500	86,400	113,400	130,500
Tempe	190,000	200,500	231,200	257,700	280,000	290,900
Tolleson	17,700	18,300	21,200	23,900	26,000	26,700
Unicorporated Pinal County	3,500	3,900	6,000	8,900	13,500	17,800
Unincorporated Maricopa County	28,600	31,500	35,500	41,100	51,200	58,400
Wickenburg	4,400	4,600	5,200	5,600	6,000	6,200
Youngtown	1,500	1,800	2,200	2,700	2,800	3,100

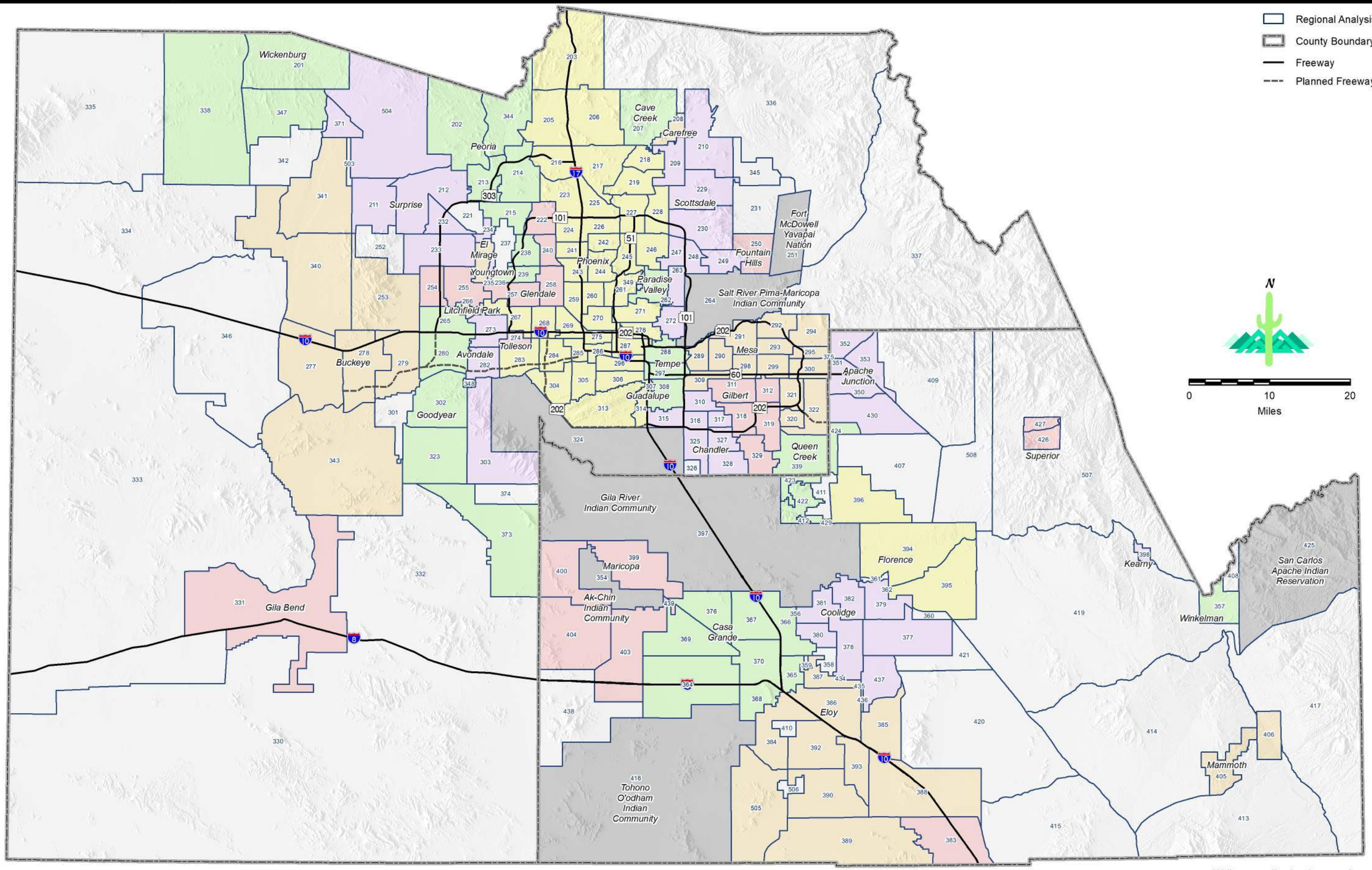
Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), June 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

Regional Analysis Zones (RAZ), 2019
Maricopa and Pinal Counties, Arizona

MARICOPA ASSOCIATION of GOVERNMENTS



Source: MAG and the MAG member agencies, CAG and the CAG member agencies

Date: May 2019

Maricopa Association of Governments
Table 4: Population by Regional Analysis Zone (RAZ) by MPA
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

RAZ	County	Total Population					
		2018	2020	2030	2040	2050	2055
Gilbert MPA							
311	**Maricopa County**	69,468	71,161	75,414	78,260	80,585	81,594
312	**Maricopa County**	33,647	34,815	38,530	39,308	40,045	40,262
318	**Maricopa County**	45,028	46,189	51,325	53,015	54,158	54,796
319	**Maricopa County**	68,863	71,824	78,215	83,385	85,822	86,425
329	**Maricopa County**	39,481	41,890	50,036	54,841	57,454	58,308
	Total	256,487	265,879	293,520	308,809	318,064	321,385
Glendale MPA							
222	**Maricopa County**	46,910	47,698	48,796	49,206	49,384	49,449
240	**Maricopa County**	42,310	43,162	45,339	45,891	46,063	46,176
254	**Maricopa County**	13,022	13,489	20,216	24,071	26,070	27,026
255	**Maricopa County**	18,063	18,672	24,066	27,041	28,332	28,777
257	**Maricopa County**	51,024	52,020	58,164	63,504	66,976	69,767
258	**Maricopa County**	100,829	104,044	109,853	113,699	116,389	117,596
	Total	272,158	279,085	306,434	323,412	333,214	338,791
Goodyear MPA							
265	**Maricopa County**	34,465	35,839	42,987	46,513	48,289	49,206
280	**Maricopa County**	37,602	39,877	59,146	72,505	80,624	83,806
302	**Maricopa County**	14,773	15,960	34,674	52,531	61,049	64,104
323	**Maricopa County**	303	308	3,388	20,507	38,433	50,299
373	**Maricopa County**	124	124	131	131	243	530
	Total	87,267	92,108	140,326	192,187	228,638	247,945
Guadalupe MPA							
307	**Maricopa County**	6,342	6,422	6,659	6,765	6,779	6,779
	Total	6,342	6,422	6,659	6,765	6,779	6,779
Litchfield Park MPA							
266	**Maricopa County**	13,263	13,965	15,398	15,692	16,141	16,408
	Total	13,263	13,965	15,398	15,692	16,141	16,408
Maricopa MPA							
399	**Pinal County**	52,310	59,346	80,116	88,466	97,145	101,546
400	**Pinal County**	2,485	2,528	2,575	2,575	2,575	2,575
403	**Pinal County**	1,541	1,545	4,219	11,464	18,018	20,896
404	**Pinal County**	3,433	3,537	3,901	3,901	3,906	3,906
	Total	59,769	66,956	90,811	106,406	121,644	128,923

Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), May 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

Maricopa Association of Governments
Table 5: Employment by Regional Analysis Zone (RAZ) by MPA
July 1, 2018 and Projections July 1, 2020 to July 1, 2055

		Total Employment					
RAZ	County	2018	2020	2030	2040	2050	2055
Gilbert MPA							
311	**Maricopa County**	35,190	37,754	44,986	48,701	51,554	52,795
312	**Maricopa County**	8,736	9,970	12,042	13,171	14,178	14,761
318	**Maricopa County**	28,231	31,209	39,313	46,051	50,312	52,149
319	**Maricopa County**	13,484	13,402	16,611	19,467	21,504	22,510
329	**Maricopa County**	7,127	6,240	7,201	8,542	9,040	9,955
	Total	92,768	98,575	120,153	135,932	146,588	152,170
Glendale MPA							
222	**Maricopa County**	23,182	24,358	27,080	28,920	29,868	30,267
240	**Maricopa County**	21,449	22,663	24,750	25,462	26,269	26,424
254	**Maricopa County**	1,085	1,570	3,495	6,538	9,168	9,708
255	**Maricopa County**	13,743	15,786	18,396	19,683	21,173	22,278
257	**Maricopa County**	16,724	18,078	25,599	33,996	40,928	44,502
258	**Maricopa County**	27,635	28,959	34,725	38,499	41,526	42,736
	Total	103,818	111,414	134,045	153,098	168,932	175,915
Goodyear MPA							
265	**Maricopa County**	16,215	16,286	19,476	22,636	25,120	26,105
280	**Maricopa County**	16,644	17,720	24,268	33,850	42,995	46,929
302	**Maricopa County**	2,983	3,059	5,047	5,326	7,573	10,200
323	**Maricopa County**	10	94	1,751	7,100	16,808	19,039
373	**Maricopa County**	84	84	103	111	123	254
	Total	35,936	37,243	50,645	69,023	92,619	102,527
Guadalupe MPA							
307	**Maricopa County**	1,270	1,281	1,465	1,566	1,622	1,584
	Total	1,270	1,281	1,465	1,566	1,622	1,584
Litchfield Park MPA							
266	**Maricopa County**	3,796	4,379	5,187	5,911	6,352	6,718
	Total	3,796	4,379	5,187	5,911	6,352	6,718
Maricopa MPA							
399	**Pinal County**	5,615	6,421	9,877	13,973	20,017	23,456
400	**Pinal County**	299	318	461	935	2,073	2,712
403	**Pinal County**	141	167	679	2,343	4,539	5,576
404	**Pinal County**	172	189	386	912	1,527	1,717
	Total	6,227	7,095	11,403	18,163	28,156	33,461

Notes: Numbers rounded to the nearest 100. These projections include both the Maricopa County and Pinal County portions for Apache Junction, Queen Creek, and the Gila River Indian Community. Peoria and Wickenburg include only the Maricopa County portion.

Source: Maricopa Association of Governments (MAG) Socioeconomic Projections of Population and Employment by Municipal Planning Area (MPA) and Regional Analysis Zone (RAZ), May 2019

For explanation of variables and complete notation on this series, please refer to the Notes and Caveats in Appendix A.

Appendix H – Year 2024 Build Capacity Analysis

H

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	37	16	9	65	23	7
Future Vol, veh/h	37	16	9	65	23	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	17	10	71	25	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	57	0	140	49
Stage 1	-	-	-	-	49	-
Stage 2	-	-	-	-	91	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1547	-	853	1020
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	933	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1547	-	847	1020
Mov Cap-2 Maneuver	-	-	-	-	847	-
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	926	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	882	-	-	1547	-
HCM Lane V/C Ratio	0.037	-	-	0.006	-
HCM Control Delay (s)	9.2	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	6	44	39	6	72	39	1006	46	48	958	38
Future Vol, veh/h	16	6	44	39	6	72	39	1006	46	48	958	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	85	-	-	85	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	6	46	41	6	76	41	1059	48	51	1008	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1745	2319	524	1774	2315	554	1048	0	0	1107	0	0
Stage 1	1130	1130	-	1165	1165	-	-	-	-	-	-	-
Stage 2	615	1189	-	609	1150	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*55	37	*695	*52	37	*681	*1039	-	-	*1019	-	-
Stage 1	*585	528	-	*576	519	-	-	-	-	-	-	-
Stage 2	*642	500	-	*655	512	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*39	34	*695	*~ 39	34	*681	*1039	-	-	*1019	-	-
Mov Cap-2 Maneuver	*39	34	-	*~ 39	34	-	-	-	-	-	-	-
Stage 1	*562	502	-	*554	499	-	-	-	-	-	-	-
Stage 2	*541	481	-	*574	486	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	58.6	121.9	0.3	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	* 1039	-	-	39	209	39	276	* 1019	-	-
HCM Lane V/C Ratio	0.04	-	-	0.432	0.252	1.053	0.297	0.05	-	-
HCM Control Delay (s)	8.6	-	-	154.6	27.9$	318.6	23.5	8.7	-	-
HCM Lane LOS	A	-	-	F	D	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.5	1	4.1	1.2	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	23	4	1054	1032	8
Future Vol, veh/h	21	23	4	1054	1032	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	75	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	24	4	1109	1086	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1653	547	1094	0	-	0
Stage 1	1090	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*89	*669	*1001	-	-	-
Stage 1	*632	-	-	-	-	-
Stage 2	*643	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	*89	*669	*1001	-	-	-
Mov Cap-2 Maneuver	*331	-	-	-	-	-
Stage 1	*629	-	-	-	-	-
Stage 2	*643	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 1001	-	331	669	-	-
HCM Lane V/C Ratio	0.004	-	0.067	0.036	-	-
HCM Control Delay (s)	8.6	-	16.7	10.6	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	7	0	0	3	2	1048	0	3	1056	6
Future Vol, veh/h	8	0	7	0	0	3	2	1048	0	3	1056	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	7	0	0	3	2	1103	0	3	1112	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1677	2228	559	1669	2231	552	1118	0	0	1103	0	0
Stage 1	1121	1121	-	1107	1107	-	-	-	-	-	-	-
Stage 2	556	1107	-	562	1124	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*62	*42	*644	*63	*42	*681	*963	-	-	*1019	-	-
Stage 1	*607	*532	-	*642	*563	-	-	-	-	-	-	-
Stage 2	*642	*563	-	*607	*532	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*62	*42	*644	*62	*42	*681	*963	-	-	*1019	-	-
Mov Cap-2 Maneuver	*62	*42	-	*62	*42	-	-	-	-	-	-	-
Stage 1	*606	*531	-	*641	*562	-	-	-	-	-	-	-
Stage 2	*638	*562	-	*598	*531	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	43.4	10.3	0	0
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 963	-	-	62	644	681	* 1019	-	-
HCM Lane V/C Ratio	0.002	-	-	0.136	0.011	0.005	0.003	-	-
HCM Control Delay (s)	8.7	-	-	72	10.7	10.3	8.5	-	-
HCM Lane LOS	A	-	-	F	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	76	22	27	86	14	21	16	57	16	10	5
Future Vol, veh/h	6	76	22	27	86	14	21	16	57	16	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	83	24	29	93	15	23	17	62	17	11	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	108	0	0	107	0	0	276	275	95	308	280	101
Stage 1	-	-	-	-	-	-	109	109	-	159	159	-
Stage 2	-	-	-	-	-	-	167	166	-	149	121	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1483	-	-	1484	-	-	676	632	962	644	628	954
Stage 1	-	-	-	-	-	-	896	805	-	843	766	-
Stage 2	-	-	-	-	-	-	835	761	-	854	796	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1483	-	-	1484	-	-	650	616	962	578	612	954
Mov Cap-2 Maneuver	-	-	-	-	-	-	650	616	-	578	612	-
Stage 1	-	-	-	-	-	-	892	801	-	839	750	-
Stage 2	-	-	-	-	-	-	801	745	-	778	792	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.6	10.2	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	800	1483	-	-	1484	-	-	629
HCM Lane V/C Ratio	0.128	0.004	-	-	0.02	-	-	0.054
HCM Control Delay (s)	10.2	7.4	0	-	7.5	0	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↱	
Traffic Vol, veh/h	3	140	7	9	108	17	12	0	11	50	0	8
Future Vol, veh/h	3	140	7	9	108	17	12	0	11	50	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	152	8	10	117	18	13	0	12	54	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	135	0	0	160	0	0	313	317	156	314	312	126
Stage 1	-	-	-	-	-	-	162	162	-	146	146	-
Stage 2	-	-	-	-	-	-	151	155	-	168	166	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1470	-	-	1419	-	-	683	625	890	681	630	982
Stage 1	-	-	-	-	-	-	840	764	-	904	799	-
Stage 2	-	-	-	-	-	-	898	791	-	834	761	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1470	-	-	1419	-	-	672	619	890	667	624	982
Mov Cap-2 Maneuver	-	-	-	-	-	-	672	619	-	667	624	-
Stage 1	-	-	-	-	-	-	838	762	-	902	792	-
Stage 2	-	-	-	-	-	-	883	785	-	821	759	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	9.9	10.6
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	761	1470	-	-	1419	-	-	667	982
HCM Lane V/C Ratio	0.033	0.002	-	-	0.007	-	-	0.081	0.009
HCM Control Delay (s)	9.9	7.5	0	-	7.6	0	-	10.9	8.7
HCM Lane LOS	A	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3	0

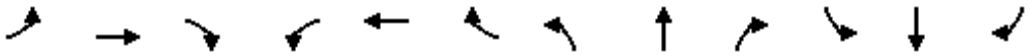
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	189	118	5	10	3
Future Vol, veh/h	2	189	118	5	10	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	205	128	5	11	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	133	0	-	0	340	131
Stage 1	-	-	-	-	131	-
Stage 2	-	-	-	-	209	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1473	-	-	-	686	976
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	826	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1473	-	-	-	684	976
Mov Cap-2 Maneuver	-	-	-	-	684	-
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	826	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1473	-	-	-	735
HCM Lane V/C Ratio	0.001	-	-	-	0.019
HCM Control Delay (s)	7.4	0	-	-	10
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	76	63	82	58	114	26	846	55	105	921	49
Future Volume (veh/h)	83	76	63	82	58	114	26	846	55	105	921	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	80	66	86	61	120	27	891	58	111	969	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	274	232	266	274	232	416	2213	144	444	2241	120
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1203	1870	1585	1242	1870	1585	552	3387	220	591	3430	184
Grp Volume(v), veh/h	87	80	66	86	61	120	27	467	482	111	502	519
Grp Sat Flow(s),veh/h/ln	1203	1870	1585	1242	1870	1585	552	1777	1831	591	1777	1837
Q Serve(g_s), s	3.8	2.1	2.0	3.6	1.6	3.8	1.4	6.8	6.8	6.0	7.5	7.5
Cycle Q Clear(g_c), s	5.4	2.1	2.0	5.7	1.6	3.8	8.9	6.8	6.8	12.8	7.5	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.10
Lane Grp Cap(c), veh/h	273	274	232	266	274	232	416	1161	1196	444	1161	1200
V/C Ratio(X)	0.32	0.29	0.28	0.32	0.22	0.52	0.06	0.40	0.40	0.25	0.43	0.43
Avail Cap(c_a), veh/h	315	340	288	309	340	288	416	1161	1196	444	1161	1200
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	20.9	20.9	23.5	20.7	21.7	6.7	4.5	4.5	7.5	4.6	4.6
Incr Delay (d2), s/veh	0.9	0.8	0.9	1.0	0.6	2.5	0.3	1.0	1.0	1.3	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.9	0.8	1.1	0.7	1.5	0.1	1.6	1.6	0.7	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	21.8	21.8	24.5	21.3	24.2	7.0	5.5	5.5	8.8	5.8	5.7
LnGrp LOS	C	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		233			267			976			1132	
Approach Delay, s/veh		22.6			23.6			5.6			6.1	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.1		41.9		13.1		41.9				
Change Period (Y+Rc), s		5.0		6.0		5.0		6.0				
Max Green Setting (Gmax), s		10.0		34.0		10.0		34.0				
Max Q Clear Time (g_c+I1), s		7.7		10.9		7.4		14.8				
Green Ext Time (p_c), s		0.3		3.9		0.3		4.8				

Intersection Summary												
HCM 6th Ctrl Delay			9.1									
HCM 6th LOS			A									

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	125	76	9	87	53	16
Future Vol, veh/h	125	76	9	87	53	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	136	83	10	95	58	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	219	0	293	178
Stage 1	-	-	-	-	178	-
Stage 2	-	-	-	-	115	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1350	-	698	865
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1350	-	692	865
Mov Cap-2 Maneuver	-	-	-	-	692	-
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	903	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	726	-	-	1350	-
HCM Lane V/C Ratio	0.103	-	-	0.007	-
HCM Control Delay (s)	10.5	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	55.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	11	85	42	8	82	45	1100	72	75	1125	47
Future Vol, veh/h	46	11	85	42	8	82	45	1100	72	75	1125	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	85	-	-	85	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	12	89	44	8	86	47	1158	76	79	1184	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2044	2695	617	2046	2681	617	1233	0	0	1234	0	0
Stage 1	1367	1367	-	1290	1290	-	-	-	-	-	-	-
Stage 2	677	1328	-	756	1391	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*~ 33	21	*618	*~ 33	22	*681	*925	-	-	867	-	-
Stage 1	*484	445	-	*441	426	-	-	-	-	-	-	-
Stage 2	*642	400	-	*583	427	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 17	18	*618	*~ 12	19	*681	*925	-	-	867	-	-
Mov Cap-2 Maneuver	*~ 17	18	-	*~ 12	19	-	-	-	-	-	-	-
Stage 1	*460	405	-	*419	404	-	-	-	-	-	-	-
Stage 2	*521	380	-	*440	388	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 486	$ 620.3	0.3	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	* 925	-	-	17	128	12	166	867	-	-
HCM Lane V/C Ratio	0.051	-	-	2.848	0.789	3.684	0.571	0.091	-	-
HCM Control Delay (s)	9.1	-	-	$ 1299.2	96.4	$ 1837.5	52.2	9.6	-	-
HCM Lane LOS	A	-	-	F	F	F	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	6.7	4.7	6.6	3	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	14	13	1217	1227	25
Future Vol, veh/h	13	14	13	1217	1227	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	75	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	15	14	1281	1292	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1974	659	1318	0	-	0
Stage 1	1305	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*54	*593	*887	-	-	-
Stage 1	*560	-	-	-	-	-
Stage 2	*590	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	*53	*593	*887	-	-	-
Mov Cap-2 Maneuver	*284	-	-	-	-	-
Stage 1	*551	-	-	-	-	-
Stage 2	*590	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.6	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 887	-	284	593	-	-
HCM Lane V/C Ratio	0.015	-	0.048	0.025	-	-
HCM Control Delay (s)	9.1	-	18.3	11.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	6	4	0	13	4	1210	9	17	1189	10
Future Vol, veh/h	7	0	6	4	0	13	4	1210	9	17	1189	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	6	4	0	14	4	1274	9	18	1252	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1939	2585	632	1949	2586	642	1263	0	0	1283	0	0
Stage 1	1294	1294	-	1287	1287	-	-	-	-	-	-	-
Stage 2	645	1291	-	662	1299	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*39	*25	*593	*39	*25	*626	*887	-	-	915	-	-
Stage 1	*559	*490	-	*564	*500	-	-	-	-	-	-	-
Stage 2	*590	*496	-	*559	*490	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*37	*24	*593	*38	*24	*626	*887	-	-	915	-	-
Mov Cap-2 Maneuver	*37	*24	-	*38	*24	-	-	-	-	-	-	-
Stage 1	*556	*480	-	*561	*497	-	-	-	-	-	-	-
Stage 2	*574	*494	-	*542	*480	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	72.5	35.7	0	0.1
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 887	-	-	37	593	135	915	-	-
HCM Lane V/C Ratio	0.005	-	-	0.199	0.011	0.133	0.02	-	-
HCM Control Delay (s)	9.1	-	-	125.1	11.1	35.7	9	-	-
HCM Lane LOS	A	-	-	F	B	E	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0	0.4	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	31	124	18	38	121	20	15	27	49	34	35	13
Future Vol, veh/h	31	124	18	38	121	20	15	27	49	34	35	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	135	20	41	132	22	16	29	53	37	38	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	154	0	0	155	0	0	464	449	145	479	448	143
Stage 1	-	-	-	-	-	-	213	213	-	225	225	-
Stage 2	-	-	-	-	-	-	251	236	-	254	223	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1426	-	-	1425	-	-	508	505	902	497	506	905
Stage 1	-	-	-	-	-	-	789	726	-	778	718	-
Stage 2	-	-	-	-	-	-	753	710	-	750	719	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1426	-	-	1425	-	-	449	476	902	426	477	905
Mov Cap-2 Maneuver	-	-	-	-	-	-	449	476	-	426	477	-
Stage 1	-	-	-	-	-	-	768	707	-	758	695	-
Stage 2	-	-	-	-	-	-	678	687	-	659	700	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	1.6	11.8	14
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	630	1426	-	-	1425	-	-	489
HCM Lane V/C Ratio	0.157	0.024	-	-	0.029	-	-	0.182
HCM Control Delay (s)	11.8	7.6	0	-	7.6	0	-	14
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.1	-	-	0.7

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↱	
Traffic Vol, veh/h	16	172	19	16	163	56	11	0	14	31	0	7
Future Vol, veh/h	16	172	19	16	163	56	11	0	14	31	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	187	21	17	177	61	12	0	15	34	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	238	0	0	208	0	0	478	504	198	481	484	208
Stage 1	-	-	-	-	-	-	232	232	-	242	242	-
Stage 2	-	-	-	-	-	-	246	272	-	239	242	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1354	-	-	1363	-	-	544	495	843	542	510	923
Stage 1	-	-	-	-	-	-	771	713	-	832	738	-
Stage 2	-	-	-	-	-	-	826	714	-	764	705	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1354	-	-	1363	-	-	528	481	843	520	496	923
Mov Cap-2 Maneuver	-	-	-	-	-	-	528	481	-	520	496	-
Stage 1	-	-	-	-	-	-	760	703	-	820	728	-
Stage 2	-	-	-	-	-	-	808	704	-	740	695	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.5	10.6	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	668	1354	-	-	1363	-	-	520	923
HCM Lane V/C Ratio	0.041	0.013	-	-	0.013	-	-	0.065	0.008
HCM Control Delay (s)	10.6	7.7	0	-	7.7	0	-	12.4	8.9
HCM Lane LOS	B	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2	0

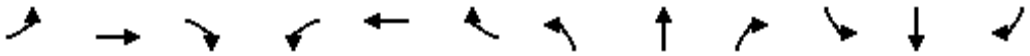
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	200	227	14	8	3
Future Vol, veh/h	3	200	227	14	8	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	217	247	15	9	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	262	0	-	0	478	255
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	223	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1323	-	-	-	581	862
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	814	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1323	-	-	-	579	862
Mov Cap-2 Maneuver	-	-	-	-	579	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	814	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1323	-	-	-	636
HCM Lane V/C Ratio	0.002	-	-	-	0.019
HCM Control Delay (s)	7.7	0	-	-	10.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	70	78	114	119	153	77	979	107	130	994	78
Future Volume (veh/h)	72	70	78	114	119	153	77	979	107	130	994	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	74	82	120	125	161	81	1031	113	137	1046	82
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	316	268	296	316	268	362	2039	223	356	2107	165
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1093	1870	1585	1231	1870	1585	499	3230	354	492	3338	262
Grp Volume(v), veh/h	76	74	82	120	125	161	81	567	577	137	557	571
Grp Sat Flow(s),veh/h/ln	1093	1870	1585	1231	1870	1585	499	1777	1807	492	1777	1823
Q Serve(g_s), s	3.7	1.9	2.5	5.1	3.3	5.2	5.7	9.5	9.5	11.5	9.3	9.3
Cycle Q Clear(g_c), s	6.9	1.9	2.5	7.0	3.3	5.2	15.0	9.5	9.5	21.0	9.3	9.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.14
Lane Grp Cap(c), veh/h	250	316	268	296	316	268	362	1122	1140	356	1122	1151
V/C Ratio(X)	0.30	0.23	0.31	0.40	0.40	0.60	0.22	0.51	0.51	0.38	0.50	0.50
Avail Cap(c_a), veh/h	265	340	288	313	340	288	362	1122	1140	356	1122	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	19.8	20.0	22.8	20.4	21.1	9.5	5.5	5.5	11.2	5.4	5.4
Incr Delay (d2), s/veh	1.0	0.5	0.9	1.3	1.1	3.9	1.4	1.6	1.6	3.1	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.8	0.9	1.5	1.4	2.1	0.6	2.4	2.4	1.2	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	20.3	21.0	24.1	21.5	25.0	10.9	7.1	7.1	14.3	7.0	7.0
LnGrp LOS	C	C	C	C	C	C	B	A	A	B	A	A
Approach Vol, veh/h		232			406			1225			1265	
Approach Delay, s/veh		21.9			23.7			7.4			7.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.3		40.7		14.3		40.7				
Change Period (Y+Rc), s		5.0		6.0		5.0		6.0				
Max Green Setting (Gmax), s		10.0		34.0		10.0		34.0				
Max Q Clear Time (g_c+I1), s		9.0		17.0		8.9		23.0				
Green Ext Time (p_c), s		0.3		5.2		0.1		4.6				

Intersection Summary												
HCM 6th Ctrl Delay			10.7									
HCM 6th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.

Appendix I – Year 2027 Build Capacity Analysis

I

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	39	17	9	69	24	7
Future Vol, veh/h	39	17	9	69	24	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	18	10	75	26	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	60	0	146	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	95	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1544	-	846	1017
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	929	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1544	-	840	1017
Mov Cap-2 Maneuver	-	-	-	-	840	-
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	922	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	874	-	-	1544	-
HCM Lane V/C Ratio	0.039	-	-	0.006	-
HCM Control Delay (s)	9.3	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	11.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	6	47	41	6	77	41	1064	49	51	1015	40
Future Vol, veh/h	17	6	47	41	6	77	41	1064	49	51	1015	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	85	-	-	85	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	6	49	43	6	81	43	1120	52	54	1068	42

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1846	2455	555	1877	2450	586	1110	0	0	1172	0	0
Stage 1	1197	1197	-	1232	1232	-	-	-	-	-	-	-
Stage 2	649	1258	-	645	1218	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*46	30	*669	*44	31	*681	*1001	-	-	942	-	-
Stage 1	*566	510	-	*499	467	-	-	-	-	-	-	-
Stage 2	*642	448	-	*631	493	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*31	27	*669	*~ 31	28	*681	*1001	-	-	942	-	-
Mov Cap-2 Maneuver	*31	27	-	*~ 31	28	-	-	-	-	-	-	-
Stage 1	*542	481	-	*478	447	-	-	-	-	-	-	-
Stage 2	*534	429	-	*544	465	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	79.8	180.7	0.3	0.4
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	* 1001	-	-	31	181	31	254	942	-	-
HCM Lane V/C Ratio	0.043	-	-	0.577	0.308	1.392	0.344	0.057	-	-
HCM Control Delay (s)	8.8	-	-	224	33.5$	493.2	26.4	9.1	-	-
HCM Lane LOS	A	-	-	F	D	F	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.9	1.2	4.9	1.5	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	23	4	1116	1094	8
Future Vol, veh/h	21	23	4	1116	1094	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	75	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	24	4	1175	1152	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1752	580	1160	0	-	0
Stage 1	1156	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*77	*644	*963	-	-	-
Stage 1	*608	-	-	-	-	-
Stage 2	*590	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	*77	*644	*963	-	-	-
Mov Cap-2 Maneuver	*308	-	-	-	-	-
Stage 1	*605	-	-	-	-	-
Stage 2	*590	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 963	-	308	644	-	-
HCM Lane V/C Ratio	0.004	-	0.072	0.038	-	-
HCM Control Delay (s)	8.8	-	17.6	10.8	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	7	0	0	3	2	1110	0	3	1119	6
Future Vol, veh/h	8	0	7	0	0	3	2	1110	0	3	1119	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	7	0	0	3	2	1168	0	3	1178	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1775	2359	592	1767	2362	584	1184	0	0	1168	0	0
Stage 1	1187	1187	-	1172	1172	-	-	-	-	-	-	-
Stage 2	588	1172	-	595	1190	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*52	*35	*618	*53	*35	*626	*925	-	-	*936	-	-
Stage 1	*583	*511	-	*590	*517	-	-	-	-	-	-	-
Stage 2	*590	*517	-	*583	*511	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*52	*35	*618	*52	*35	*626	*925	-	-	*936	-	-
Mov Cap-2 Maneuver	*52	*35	-	*52	*35	-	-	-	-	-	-	-
Stage 1	*582	*510	-	*589	*516	-	-	-	-	-	-	-
Stage 2	*586	*516	-	*574	*510	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	51.6	10.8	0	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 925	-	-	52	618	626	* 936	-	-
HCM Lane V/C Ratio	0.002	-	-	0.162	0.012	0.005	0.003	-	-
HCM Control Delay (s)	8.9	-	-	87.2	10.9	10.8	8.9	-	-
HCM Lane LOS	A	-	-	F	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	81	24	29	91	15	23	17	60	17	10	5
Future Vol, veh/h	6	81	24	29	91	15	23	17	60	17	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	88	26	32	99	16	25	18	65	18	11	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	115	0	0	114	0	0	294	294	101	328	299	107
Stage 1	-	-	-	-	-	-	115	115	-	171	171	-
Stage 2	-	-	-	-	-	-	179	179	-	157	128	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1474	-	-	1475	-	-	658	617	954	625	613	947
Stage 1	-	-	-	-	-	-	890	800	-	831	757	-
Stage 2	-	-	-	-	-	-	823	751	-	845	790	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1474	-	-	1475	-	-	632	600	954	556	596	947
Mov Cap-2 Maneuver	-	-	-	-	-	-	632	600	-	556	596	-
Stage 1	-	-	-	-	-	-	886	796	-	827	740	-
Stage 2	-	-	-	-	-	-	788	734	-	765	786	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.6	10.3	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	784	1474	-	-	1475	-	-	608
HCM Lane V/C Ratio	0.139	0.004	-	-	0.021	-	-	0.057
HCM Control Delay (s)	10.3	7.5	0	-	7.5	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↱	
Traffic Vol, veh/h	3	148	7	9	114	17	13	0	12	50	0	8
Future Vol, veh/h	3	148	7	9	114	17	13	0	12	50	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	161	8	10	124	18	14	0	13	54	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	142	0	0	169	0	0	329	333	165	331	328	133
Stage 1	-	-	-	-	-	-	171	171	-	153	153	-
Stage 2	-	-	-	-	-	-	158	162	-	178	175	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1461	-	-	1409	-	-	665	612	879	662	616	973
Stage 1	-	-	-	-	-	-	831	757	-	896	793	-
Stage 2	-	-	-	-	-	-	890	786	-	824	754	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1461	-	-	1409	-	-	654	606	879	648	610	973
Mov Cap-2 Maneuver	-	-	-	-	-	-	654	606	-	648	610	-
Stage 1	-	-	-	-	-	-	829	755	-	894	787	-
Stage 2	-	-	-	-	-	-	875	779	-	810	752	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.5	10	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	746	1461	-	-	1409	-	-	648	973
HCM Lane V/C Ratio	0.036	0.002	-	-	0.007	-	-	0.084	0.009
HCM Control Delay (s)	10	7.5	0	-	7.6	0	-	11.1	8.7
HCM Lane LOS	B	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3	0

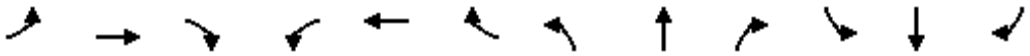
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	197	125	5	10	3
Future Vol, veh/h	2	197	125	5	10	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	214	136	5	11	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	141	0	-	0	357	139
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	218	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1462	-	-	-	669	966
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1462	-	-	-	667	966
Mov Cap-2 Maneuver	-	-	-	-	667	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	818	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1462	-	-	-	718
HCM Lane V/C Ratio	0.001	-	-	-	0.02
HCM Control Delay (s)	7.5	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	80	65	87	61	121	27	898	58	111	976	52
Future Volume (veh/h)	86	80	65	87	61	121	27	898	58	111	976	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	84	68	92	64	127	28	945	61	117	1027	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	286	242	271	286	242	390	2193	142	417	2220	119
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1192	1870	1585	1235	1870	1585	521	3389	219	560	3430	184
Grp Volume(v), veh/h	91	84	68	92	64	127	28	495	511	117	532	550
Grp Sat Flow(s),veh/h/ln	1192	1870	1585	1235	1870	1585	521	1777	1831	560	1777	1837
Q Serve(g_s), s	4.0	2.2	2.1	3.9	1.7	4.1	1.6	7.5	7.5	7.1	8.3	8.3
Cycle Q Clear(g_c), s	5.6	2.2	2.1	6.1	1.7	4.1	9.9	7.5	7.5	14.6	8.3	8.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.10
Lane Grp Cap(c), veh/h	277	286	242	271	286	242	390	1150	1185	417	1150	1189
V/C Ratio(X)	0.33	0.29	0.28	0.34	0.22	0.52	0.07	0.43	0.43	0.28	0.46	0.46
Avail Cap(c_a), veh/h	312	340	288	306	340	288	390	1150	1185	417	1150	1189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	20.7	20.6	23.4	20.4	21.5	7.4	4.7	4.7	8.3	4.9	4.9
Incr Delay (d2), s/veh	1.0	0.8	0.9	1.1	0.6	2.5	0.4	1.2	1.1	1.7	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.0	0.8	1.2	0.7	1.6	0.2	1.8	1.9	0.8	2.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	21.5	21.5	24.4	21.0	23.9	7.7	5.9	5.9	10.0	6.2	6.2
LnGrp LOS	C	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		243			283			1034			1199	
Approach Delay, s/veh		22.4			23.4			6.0			6.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.4		41.6		13.4		41.6				
Change Period (Y+Rc), s		5.0		6.0		5.0		6.0				
Max Green Setting (Gmax), s		10.0		34.0		10.0		34.0				
Max Q Clear Time (g_c+I1), s		8.1		11.9		7.6		16.6				
Green Ext Time (p_c), s		0.3		4.2		0.3		5.1				

Intersection Summary												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	133	80	9	92	56	17
Future Vol, veh/h	133	80	9	92	56	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	145	87	10	100	61	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	232	0	309	189
Stage 1	-	-	-	-	189	-
Stage 2	-	-	-	-	120	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1336	-	683	853
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	905	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1336	-	678	853
Mov Cap-2 Maneuver	-	-	-	-	678	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	898	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	10.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	712	-	-	1336	-
HCM Lane V/C Ratio	0.111	-	-	0.007	-
HCM Control Delay (s)	10.7	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	112

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	12	90	44	8	87	48	1165	76	80	1191	50
Future Vol, veh/h	49	12	90	44	8	87	48	1165	76	80	1191	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	85	-	-	85	-	-	85	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	13	95	46	8	92	51	1226	80	84	1254	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2168	2857	654	2170	2843	653	1307	0	0	1306	0	0
Stage 1	1449	1449	-	1368	1368	-	-	-	-	-	-	-
Stage 2	719	1408	-	802	1475	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*~ 26	17	*593	*~ 26	17	*626	*887	-	-	885	-	-
Stage 1	*448	416	-	*468	435	-	-	-	-	-	-	-
Stage 2	*590	406	-	*559	396	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*~ 11	15	*593	*~ 6	15	*626	*887	-	-	885	-	-
Mov Cap-2 Maneuver	*~ 11	15	-	*~ 6	15	-	-	-	-	-	-	-
Stage 1	*422	376	-	*441	410	-	-	-	-	-	-	-
Stage 2	*465	383	-	*411	359	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 868.2	$ 1384.2	0.3	0.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	* 887	-	-	11	107	6	141	885	-	-
HCM Lane V/C Ratio	0.057	-	-	4.689	1.003	7.719	0.709	0.095	-	-
HCM Control Delay (s)	9.3	-	-	$ 2336.8	162.3	$ 4207.3	76.6	9.5	-	-
HCM Lane LOS	A	-	-	F	F	F	F	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	7.6	6.4	7.4	4.1	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	14	13	1290	1300	25
Future Vol, veh/h	13	14	13	1290	1300	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	75	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	15	14	1358	1368	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2088	697	1394	0	-	0
Stage 1	1381	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	*45	*542	*811	-	-	-
Stage 1	*511	-	-	-	-	-
Stage 2	*538	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	*44	*542	*811	-	-	-
Mov Cap-2 Maneuver	*257	-	-	-	-	-
Stage 1	*503	-	-	-	-	-
Stage 2	*538	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.7	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 811	-	257	542	-	-
HCM Lane V/C Ratio	0.017	-	0.053	0.027	-	-
HCM Control Delay (s)	9.5	-	19.8	11.8	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	6	4	0	14	4	1282	9	18	1260	10
Future Vol, veh/h	7	0	6	4	0	14	4	1282	9	18	1260	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	0	6	4	0	15	4	1349	9	19	1326	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2053	2736	669	2063	2737	679	1337	0	0	1358	0	0
Stage 1	1370	1370	-	1362	1362	-	-	-	-	-	-	-
Stage 2	683	1366	-	701	1375	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*32	*20	*567	*32	*20	*570	*849	-	-	*853	-	-
Stage 1	*535	*469	-	*537	*471	-	-	-	-	-	-	-
Stage 2	*537	*471	-	*535	*469	-	-	-	-	-	-	-
Platoon blocked, %			1			1	1	-	-	1	-	-
Mov Cap-1 Maneuver	*31	*19	*567	*31	*19	*570	*849	-	-	*853	-	-
Mov Cap-2 Maneuver	*31	*19	-	*31	*19	-	-	-	-	-	-	-
Stage 1	*532	*459	-	*535	*469	-	-	-	-	-	-	-
Stage 2	*521	*469	-	*517	*459	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	88.3	41.6	0	0.1
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 849	-	-	31	567	117	* 853	-	-
HCM Lane V/C Ratio	0.005	-	-	0.238	0.011	0.162	0.022	-	-
HCM Control Delay (s)	9.3	-	-	154.2	11.4	41.6	9.3	-	-
HCM Lane LOS	A	-	-	F	B	E	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0	0.6	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	33	131	19	40	128	21	16	28	52	35	37	14
Future Vol, veh/h	33	131	19	40	128	21	16	28	52	35	37	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	142	21	43	139	23	17	30	57	38	40	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	162	0	0	163	0	0	489	473	153	505	472	151
Stage 1	-	-	-	-	-	-	225	225	-	237	237	-
Stage 2	-	-	-	-	-	-	264	248	-	268	235	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1417	-	-	1416	-	-	489	490	893	478	490	895
Stage 1	-	-	-	-	-	-	778	718	-	766	709	-
Stage 2	-	-	-	-	-	-	741	701	-	738	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1417	-	-	1416	-	-	428	461	893	406	461	895
Mov Cap-2 Maneuver	-	-	-	-	-	-	428	461	-	406	461	-
Stage 1	-	-	-	-	-	-	756	698	-	745	686	-
Stage 2	-	-	-	-	-	-	663	678	-	643	690	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	1.6	12.1	14.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	614	1417	-	-	1416	-	-	472
HCM Lane V/C Ratio	0.17	0.025	-	-	0.031	-	-	0.198
HCM Control Delay (s)	12.1	7.6	0	-	7.6	0	-	14.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.1	-	-	0.7

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕		↰	↕	
Traffic Vol, veh/h	16	182	20	17	172	56	12	0	15	31	0	7
Future Vol, veh/h	16	182	20	17	172	56	12	0	15	31	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	198	22	18	187	61	13	0	16	34	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	248	0	0	220	0	0	501	527	209	505	508	218
Stage 1	-	-	-	-	-	-	243	243	-	254	254	-
Stage 2	-	-	-	-	-	-	258	284	-	251	254	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1341	-	-	1349	-	-	523	479	831	520	493	909
Stage 1	-	-	-	-	-	-	761	705	-	818	728	-
Stage 2	-	-	-	-	-	-	813	704	-	753	697	-
Platoon blocked, %	1	-	-		-	-	1	1		1	1	1
Mov Cap-1 Maneuver	1341	-	-	1349	-	-	507	464	831	498	478	909
Mov Cap-2 Maneuver	-	-	-	-	-	-	507	464	-	498	478	-
Stage 1	-	-	-	-	-	-	750	695	-	806	717	-
Stage 2	-	-	-	-	-	-	793	693	-	728	687	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.5	10.8	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	647	1341	-	-	1349	-	-	498	909
HCM Lane V/C Ratio	0.045	0.013	-	-	0.014	-	-	0.068	0.008
HCM Control Delay (s)	10.8	7.7	0	-	7.7	0	-	12.8	9
HCM Lane LOS	B	A	A	-	A	A	-	B	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2	0

Intersection	
Int Delay, s/veh	0.3

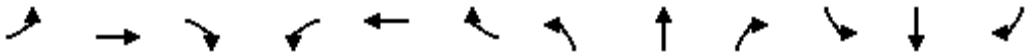
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	210	238	14	8	3
Future Vol, veh/h	3	210	238	14	8	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	228	259	15	9	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	274	0	-	0	501	267
Stage 1	-	-	-	-	267	-
Stage 2	-	-	-	-	234	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1326	-	-	-	*581	*888
Stage 1	-	-	-	-	*837	-
Stage 2	-	-	-	-	*805	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1326	-	-	-	*579	*888
Mov Cap-2 Maneuver	-	-	-	-	*579	-
Stage 1	-	-	-	-	*835	-
Stage 2	-	-	-	-	*805	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1326	-	-	-	640
HCM Lane V/C Ratio	0.002	-	-	-	0.019
HCM Control Delay (s)	7.7	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	74	82	121	125	163	80	1038	113	138	1054	81
Future Volume (veh/h)	75	74	82	121	125	163	80	1038	113	138	1054	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	78	86	127	132	172	84	1093	119	145	1109	85
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	327	277	301	327	277	337	2020	220	331	2091	160
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1075	1870	1585	1222	1870	1585	469	3232	352	461	3345	256
Grp Volume(v), veh/h	79	78	86	127	132	172	84	600	612	145	589	605
Grp Sat Flow(s),veh/h/ln	1075	1870	1585	1222	1870	1585	469	1777	1807	461	1777	1824
Q Serve(g_s), s	3.9	2.0	2.6	5.5	3.4	5.5	6.7	10.5	10.6	14.3	10.2	10.2
Cycle Q Clear(g_c), s	7.3	2.0	2.6	7.5	3.4	5.5	17.0	10.5	10.6	24.9	10.2	10.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.14
Lane Grp Cap(c), veh/h	252	327	277	301	327	277	337	1111	1130	331	1111	1140
V/C Ratio(X)	0.31	0.24	0.31	0.42	0.40	0.62	0.25	0.54	0.54	0.44	0.53	0.53
Avail Cap(c_a), veh/h	259	340	288	309	340	288	337	1111	1130	331	1111	1140
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	19.5	19.8	22.7	20.1	21.0	10.5	5.8	5.8	12.9	5.8	5.8
Incr Delay (d2), s/veh	1.0	0.5	0.9	1.3	1.1	4.6	1.8	1.9	1.9	4.2	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.9	1.0	1.6	1.5	2.3	0.7	2.8	2.8	1.5	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	20.1	20.7	24.1	21.3	25.6	12.3	7.7	7.7	17.1	7.6	7.6
LnGrp LOS	C	C	C	C	C	C	B	A	A	B	A	A
Approach Vol, veh/h		243			431			1296			1339	
Approach Delay, s/veh		21.7			23.8			8.0			8.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.6		40.4		14.6		40.4				
Change Period (Y+Rc), s		5.0		6.0		5.0		6.0				
Max Green Setting (Gmax), s		10.0		34.0		10.0		34.0				
Max Q Clear Time (g_c+I1), s		9.5		19.0		9.3		26.9				
Green Ext Time (p_c), s		0.2		5.3		0.1		3.7				

Intersection Summary												
HCM 6th Ctrl Delay			11.3									
HCM 6th LOS			B									

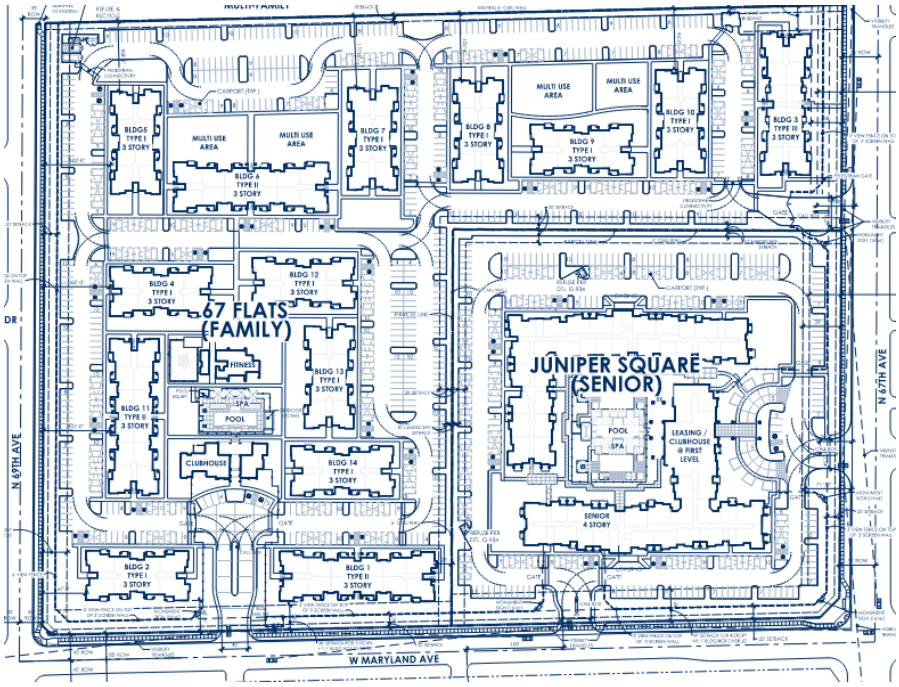
Notes

User approved pedestrian interval to be less than phase max green.

Appendix B
Parking Master Plan

67 Flats & Juniper Square

Parking Master Plan



Prepared for:

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Registered Professional Engineer (Civil)
CERTIFICATE NO.
51806
SHELLY A. SORENSEN
Date Signed: 06/17/22
ARIZONA, U.S.A.

Project Number: 21.5281
June 17, 2022

Prepared by:

Lōkahi, LLC
10555 N. 114th Street, Suite 105
Scottsdale, AZ 85259

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1. Introduction

Lōkahi, LLC (Lōkahi) was retained by Dominium to complete a Parking Master Plan for the proposed 67 Flats (multi-family) and Juniper Square (senior living) developments located in Glendale, Arizona. The proposed development will be located on the northwest corner of 67th Avenue and Maryland Avenue.

The overall proposed development is comprised of both multi-family and senior living land uses that will be separated by on-site walls and is not anticipated to have a shared access.

The proposed development will include the following two (2) land uses:

67 Flats	Multi-Family	384 dwelling units *12 one-bedroom units* *204 two-bedroom units* *168 three-bedroom units*
Juniper Square	Senior Living	221 dwelling units *66 one-bedroom units* *131 two-bedroom units* *24 three-bedroom units*

Scope of Study

The objective of this Parking Master Plan is to establish that the 735 multifamily parking stalls and 318 senior living parking stalls on-site will provide sufficient parking for the proposed development.

This Parking Master Plan calculates the number of parking spaces required for the proposed development based on the City of Glendale's Section 7.403 *Parking Requirements by Use,* ITE Parking Generation data, and ULI Shared Parking data.

Additionally, observations and data collection were performed at nearby multi-family and senior living developments to determine real-world parking demand in the vicinity area. Data collection occurred during the COVID-19 pandemic, when many companies were working from home and many people were unemployed. Therefore, the data that was collected would be conservative as residents would be working from home or unemployed. These observed parking demand rates were applied to the proposed development to determine the estimated parking demand on-site.

Surrounding Area

The study area is located in the City of Glendale, Arizona. The proposed development is bordered by 67th Avenue to the east, Maryland Avenue to the south, and 69th Avenue to the west. The Summerhill Place residential development borders to site to the north. Single- and multi-family residential developments generally surround the development.

State Route 101 (SR 101) is located within four (4) miles to the west, Interstate 17 (I-17) is located approximately five (5) miles to the east, and Grand Avenue can be accessed one and one-half (1.5) miles to the north and to the east. See **Figure 1** for a vicinity map.

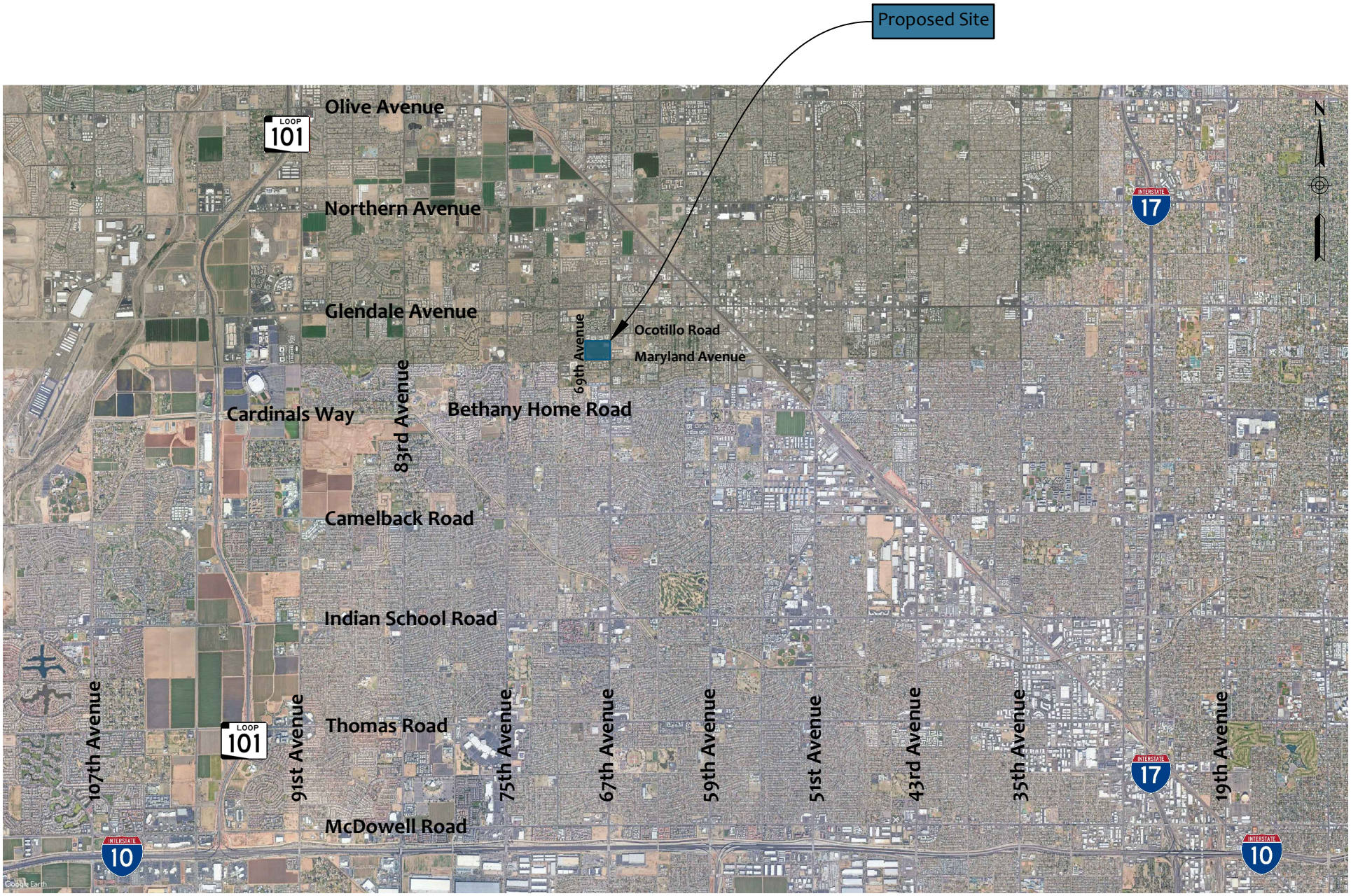


FIGURE 1 | VICINITY MAP

2. Proposed Development

The overall proposed development is comprised of both multi-family and senior living land uses that will be separated by on-site walls and is not anticipated to have a shared access.

The proposed development will include the following two (2) land uses:

67 Flats	Multi-Family	384 dwelling units *12 one-bedroom units* *204 two-bedroom units* *168 three-bedroom units*
Juniper Square	Senior Living	221 dwelling units *66 one-bedroom units* *131 two-bedroom units* *24 three-bedroom units*

There are four (4) proposed access points to the proposed 67 Flats and Juniper Square developments, two (2) located along 67th Avenue and two (2) located along Maryland Avenue.

See **Figure 2** and **Appendix A** for the detailed site plan.

Proposed Parking

The proposed 67 Flats and Juniper Square developments will provide the following number of parking stalls:

67 Flats	Multi-Family	735 parking stalls provided *503 surface parking stalls* *232 covered parking stalls*
Juniper Square	Senior Living	318 parking stalls provided *184 surface parking stalls* *134 covered parking stalls*

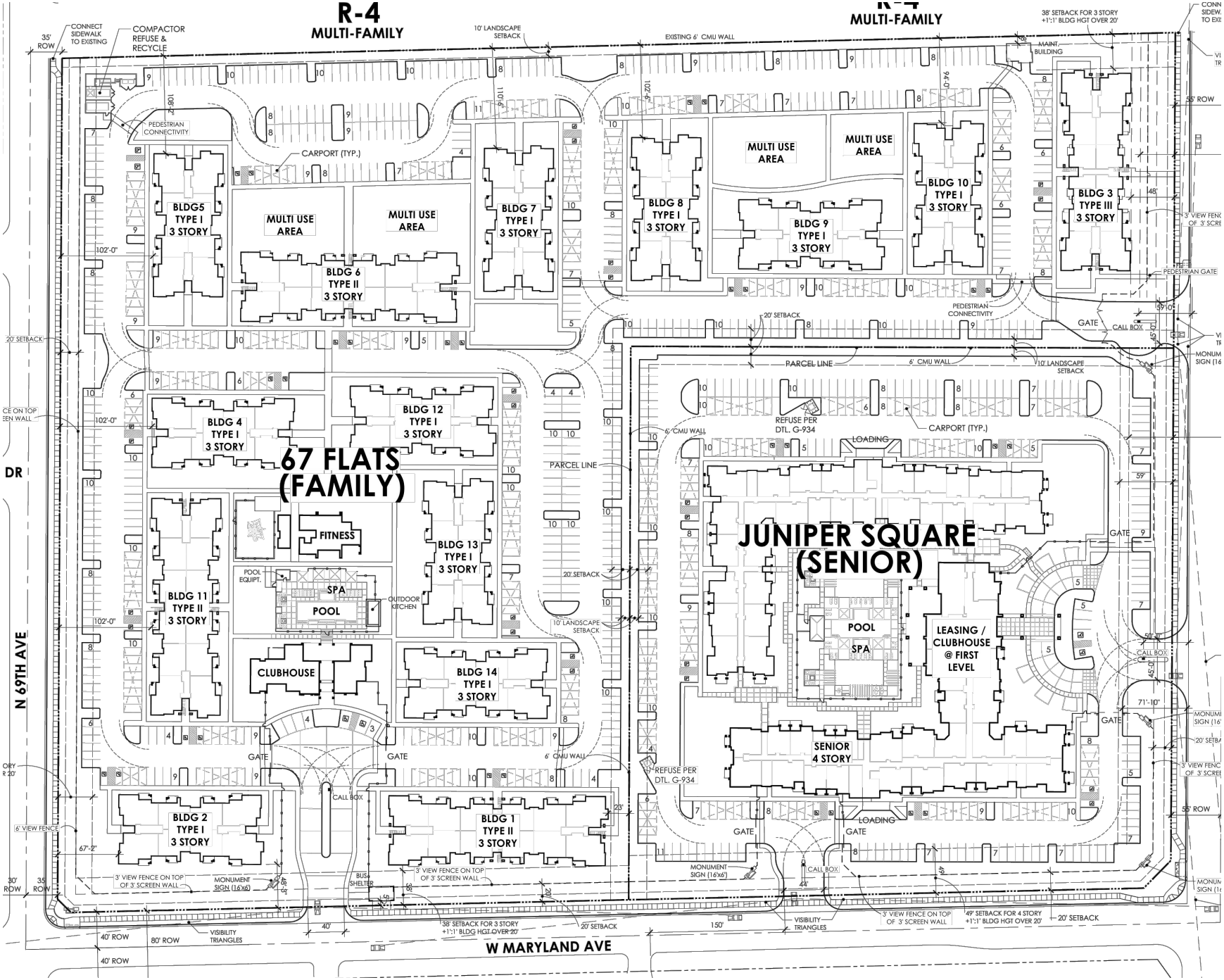


FIGURE 2 | SITE PLAN

3. City of Glendale Required Parking

Section 7.403 entitled *Parking Requirements by Use* of the *City of Glendale Code of Ordinance*, provides the general parking requirements. See **Appendix B**. The following categories and vehicle parking ratio minimums are relevant for the 67 Flats and Juniper Square development land uses:

67 Flats

Residential, Multi-family

- One-bedroom — 1 per dwelling unit
- Two or more bedrooms — 2 per dwelling unit
- Guest Parking — 1 per 3 dwelling units

Juniper Square

Senior Housing — 0.4 per dwelling unit

Applying these formulas to the proposed development results in the following parking requirement, see **Table 1**.

Table 1 – City of Glendale Parking Requirement

Use	Rate				Quantity	Units	Parking Stalls
Multi-family	1.5	Per	each 1 Bedroom	Dwelling Unit	12	Dwelling Units	18
	2	Per	each 2+ Bedroom	Dwelling Unit	372	Dwelling Units	744
	1	Per	3	Dwelling Units	384	Dwelling Units	128
67 Flats - Total							**890**
Retirement/Senior Housing/ Convalescent/Nursing/Congregate Care Home	0.4	Per	each Dwelling Unit		221	Dwelling Units	89
Juniper Square - Total							**89**

Therefore, based on the *City of Glendale Code of Ordinance*, there is a parking deficit of 155 (17.4%) for the 67 Flats multi-family development and a parking surplus of 229 (257.3%) parking stalls for the Juniper Square development.

4. ITE Parking Generation

The Institute of Transportation Engineers (ITE) publication titled *Parking Generation, 5th Edition* is utilized for estimating parking demand based on research and experiences of transportation engineering and planning professionals.

The land use categories that most closely represents the proposed development are the following:

- **Multi-family Housing (Mid-Rise) (Land Use 221)**
  Land Use 221 - Mid-rise multi-family housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and with between three and 10 levels (floors) of residence. The average weekday peak period parking demand for General Urban/Suburban site is 1.31 parking stalls per dwelling unit, and the 85th percentile peak period parking demand is 1.47 parking stalls per dwelling unit.

- **Senior Adult Housing - Attached (Land Use 252)**
  Land Use 252 - Senior adult housing consists of attached independent living developments, including retirement communities, age-restricted housing, and active adult communities. The average weekday peak period parking demand for General Urban/Suburban site is 0.61 parking stalls per dwelling unit, and the 85th percentile peak period parking demand is 0.67 parking stalls per dwelling unit.

The average weekday and 85th percentile ITE peak period parking demand calculations for General Urban/Suburban locations are presented below in **Table 2** and **Table 3**, respectively.

Table 2 – ITE Parking Demand (Average Rate)

Use	Weekday Rate	Quantity	Units	Parking Stalls
ITE Code 221 Multifamily Housing (Mid-Rise)	1.31 Per 1 Dwelling Unit	384	Dwelling Units	504
			67 Flats - Total	**504**
ITE Code 252 Senior Adult Housing - Attached	0.61 Per 1 Dwelling Unit	221	Dwelling Units	135
			Juniper Square - Total	**135**

Table 3 – ITE Parking Demand (85th Percentile Rate)

Use	Weekday Rate (85th Percentile)	Quantity	Units	Parking Stalls
ITE Code 221 Multifamily Housing (Mid-Rise)	1.47 Per 1 Dwelling Unit	384	Dwelling Units	565
			67 Flats - Total	**565**
ITE Code 252 Senior Adult Housing - Attached	0.67 Per 1 Dwelling Unit	221	Dwelling Units	149
			Juniper Square - Total	**149**

Based upon ITE Parking Generation, 5th Edition, the weekday average and 85th percentile parking demand for the 67 Flats multi-family development is 504 and 565 parking stalls, respectively. With 735 parking stalls provided, this represents a surplus of 231 (45.8%) and 170 (30.1%) parking stalls for the multi-family component of the proposed development, respectively.

Additionally, the weekday average and 85th percentile parking demand for the Juniper Square development is 135 and 149 parking stalls, respectively. With 318 parking stalls provided, this represents a surplus of 183 (135.6%) and 169 (113.4%) parking stalls for the Juniper Square development, respectively.

5. ULI Shared Parking

The *Urban Land Institute (ULI)* publication titled *Shared Parking, 3rd Edition* is an additional source for estimating parking demand based on research and experiences planners, government agencies, consultants, and engineers. Similar to the ITE Parking Generation publication, ULI's Shared Parking publication provides base parking demand ratios based on various land uses.

Weekday

The following categories and base weekday vehicle parking ratio minimums are relevant to the proposed development:

- Residential
  - Studio — 0.85 per dwelling unit
  - 1-Bedroom — 0.90 per dwelling unit
  - 2-Bedroom — 1.65 per dwelling unit
  - Visitor — 0.10 per dwelling unit
- Senior Housing
  - Resident — 0.30 per dwelling unit
  - Visitor — 0.55 per dwelling unit

Applying these rates to the proposed development results in the following parking requirements:

Table 4 – ULI Shared Parking – Weekday

Use		Weekday Rate			Quantity	Units	Parking Stalls
Residential	Residents	0.85	per	each Studio	12	Dwelling Units	11
		0.90	per	each 1 Bedroom	204		184
		1.65	per	each 2 Bedroom	168		278
	Visitor	0.10	per	each unit	384		39
67 Flats - Total							**512**
Senior Housing	Residents	0.30	Per	each unit	221	Dwelling Units	67
	Visitor	0.55	per	each unit	221		122
Juniper Square - Total							**189**

Weekend

The following categories and base weekend vehicle parking ratio minimums are relevant to the proposed development:

- Residential
  - Studio — 0.85 per dwelling unit
  - 1-Bedroom — 0.90 per dwelling unit
  - 2-Bedroom — 1.65 per dwelling unit
  - Visitor — 0.15 per dwelling unit
- Senior Housing
  - Resident — 0.30 per dwelling unit
  - Visitor — 0.42 per dwelling unit

Applying these rates to the proposed development results in the following parking requirements:

Table 5 – ULI Shared Parking – Weekend

Use		Weekday Rate			Quantity	Units	Parking Stalls
Residential	Residents	0.85	per	each Studio	12	Dwelling Units	11
		0.90	per	each 1 Bedroom	204		184
		1.65	per	each 2 Bedroom	168		278
	Visitor	0.15	per	each unit	384		58
67 Flats - Total							**531**
Senior Housing	Residents	0.30	Per	each unit	221	Dwelling Units	67
	Visitor	0.42	per	each unit	221		93
Juniper Square - Total							**160**

Based upon *ULI Shared Parking, 3rd Edition*, the weekday and weekend parking demand for the 67 Flats multi-family development is 512 and 531 parking stalls, respectively. With 735 parking stalls provided, this represents a surplus of 223 (43.6%) and 204 (38.4%) parking stalls for the multi-family component of the proposed development, respectively.

Additionally, the weekday and weekend parking demand for the Juniper Square development is 189 and 160 parking stalls, respectively. With 318 parking stalls provided, this represents a surplus of 129 (68.3%) and 158 (98.8%) parking stalls for the Juniper Square development, respectively.

6. 67 Flats - Comparable Nearby Developments

On November 30th, 2020 and July 12th, 13th, and 14th, 2021, observations and data collection efforts were performed by Dominium at nearby multi-family housing developments.

Multifamily Observations

Data collection efforts occurred between approximately 7:00pm and 10:00pm at the following multi-family developments:

- Encantada Canyon Trails
- Serafina Apartments
- Lunaire Apartments
- The MAXX 159
- Evolution at Estrella Falls
- Acero Estrella Commons
- Amiya
- Park Shadows
- Edgewater
- Newport Apartments
- Mountain View Apartments
- 1408 Casitas at Palm Valley
- Adiamo Palm Valley
- Desert Sage Apartments
- Town Center
- San Clemente
- Sky View Ranch
- Painted Trails
- San Tan Apartments
- Edge of Lyon's Gate
- Williams Gateway

A summary of the parking occupancy data collected at nearby multifamily developments is shown in **Table 6** below.

Table 6 – Multifamily Parking Occupancy Data Collection

Property	Address	City, State	Units	Unit Occupancy	Provided Parkings Stalls	Available Parking Stalls	Parking Occupancy	Ratio Occupied Stalls Per Available Units
Encantada Canyon Trails	16450 W Van Buren St	Goodyear, AZ 85338	226	-	417	135	68%	1.25
Serafina Apartments	15400 W Goodyear Blvd N	Goodyear, AZ 85338	268	95%	389	177	54%	0.79
Lunaire Apartments	949 S Goodyear Blvd E	Goodyear, AZ 85338	240	98%	400	190	53%	0.88
The MAXX 159	1711 N 159th Ave	Goodyear AZ, 85395	132	99%	211	68	68%	1.08
Evolution at Estrella Falls	15361 West Virginia Ave	Goodyear, AZ 85395	326	99%	527	167	68%	1.10
Acero Estrella Commons	15380 W Fillmore St	Goodyear, AZ 85338	352	96%	644	195	70%	1.28
Amiya	1830 N 145th Ave	Goodyear, AZ 85395	188	94%	211	68	68%	0.76
Park Shadows	620 N Litchfield Rd	Goodyear, AZ 85338	237	-	365	179	51%	0.78
Edgewater	102 South Fourth Ave	Avondale, AZ 85323	196	97%	300	89	70%	1.08
Newport Apartments	1333 N Dysart Road	Avondale, AZ 85323	204	95%	239	75	69%	0.80
Mountain View Apartments	333 East Van Buren St	Avondale, AZ 85323	150	97%	234	51	78%	1.22
1408 Casitas at Palm Valley	1408 North Central Ave	Avondale, AZ 85323	168	99%	266	70	74%	1.17
Adiamo Palm Valley	2100 N 145th Ave	Goodyear, AZ 85395	302	97%	593	169	72%	1.40
Desert Sage Apartments	1737 N Central Ave	Goodyear, AZ 85338	208	98%	300	187	38%	0.54
Town Center	22280 S 209th Way	Queen Creek, AZ 85142	176	99%	332	86	74%	1.40
San Clemente	7640 S Power Road	Gilbert, AZ 85297	336	99%	602	210	65%	1.17
Sky View Ranch	4632 E Germann	Gilbert, AZ 85297	232	98%	444	137	69%	1.32
Painted Trails	4255 E Pecos Road	Gilbert, AZ 85295	196	99%	352	70	80%	1.44
San Tan Apartments	2910 S Greenfield Road	Gilbert, AZ 85295	315	90%	546	39	93%	1.61
Edge at Lyon's Gate	3301 E Ray Road	Gilbert, AZ 85295	312	99%	508	121	76%	1.24
Williams Gateway	5850 S Power Road	Gilbert, AZ 85295	72	N/A	108	35	68%	1.01
						Average	**68%**	**1.11**
						Maximum	**93%**	**1.61**

During the time of the observations, 18 of the multifamily developments had a unit occupancy of 93% or higher, with an average parking occupancy of 68%. Additionally, on average there was 1.11 occupied parking stalls per available unit, with a maximum of 1.61 occupied parking stalls per available unit.

Applying the average and maximum observed parking ratios to the multi-family component of the proposed development is shown in **Table 7** and **Table 8**, respectively.

Table 7 – 67 Flats – Average Observed Parking Ratio

Use	Average Ratio Occupied Stalls Per Available Units	Quantity	Units	Parking Stalls
Multifamily	1.11 Per 1 Dwelling Unit	384	Dwelling Units	427
			67 Flats - Total	**427**

Table 8 – 67 Flats – Maximum Observed Parking Ratio

Use	Maximum Ratio Occupied Stalls Per Available Units	Quantity	Units	Parking Stalls
Multifamily	1.61 Per 1 Dwelling Unit	384	Dwelling Units	619
			67 Flats - Total	**619**

The results of the applying the **maximum** observed parking occupancy ratios to the proposed development results in 619 multifamily parking stalls. With 735 parking stalls provided by 67 Flats, this results in a surplus of 116 (18.7%) parking stalls.

7. Juniper Square - Comparable Nearby Developments

On July 12th and July 13th, 2021, observations and data collection efforts were performed by Dominium at nearby senior housing developments.

Senior Living Observations

Data collection efforts occurred between approximately 7:00pm and 8:00pm at the following five (5) senior living developments:

- Casa Pedro Ruiz
- Casa De Merced
- Avondale Haciendas
- Avondale Senior Village
- Estrella Estates

A summary of the parking occupancy data collected at nearby senior living developments is shown in **Table 9** below.

Table 9 – Senior Living Parking Occupancy Data Collection

Property	Address	City, State	Units	Unit Occupancy	Provided Parkings Stalls	Available Parking Stalls	Parking Occupancy	Ratio Occupied Stalls Per Available Units
Casa Pedro Ruiz	6327 W Fillmore St	Phoenix, AZ 85043	49	98%	77	51	34%	0.53
Casa De Merced	62 N 92nd Drive	Tolleson, AZ 85353	41	98%	40	32	20%	0.20
Avondale Haciendas	910 Dysart Rd	Avondale, AZ 85323	69	-	99	65	34%	0.49
Avondale Senior Village	10830 W Apache St Bldg 1	Avondale, AZ 85323	41	-	61	46	25%	0.37
Estrella Estates	14930 West Wigwam Blvd	Goodyear, AZ 85395	128	72%	89	60	33%	0.23
							Average	**0.36**
							Maximum	**0.53**

Two (2) senior living developments had a unit occupancy between 90% and 93%, at the time of the data collection. There was an average parking occupancy of approximately 29%. Additionally, the average and maximum observed ratio of occupied parking stalls per available unit was 0.36 and 0.53, respectively.

Applying the average and maximum observed parking ratios to the proposed Suncrest Vista development is shown in **Table 10** and **Table 11**, respectively.

Table 10 – Juniper Square – Average Observed Parking Ratio

Use	Average Ratio Occupied Stalls Per Available Units	Quantity	Units	Parking Stalls
Senior Housing	0.36 Per 1 Dwelling Unit	221	Dwelling Units	81
			Juniper Square - Total	**81**

Table 11 – Juniper Square – Maximum Observed Parking Ratio

Use	Maximum Ratio Occupied Stalls Per Available Units	Quantity	Units	Parking Stalls
Senior Housing	0.53 Per 1 Dwelling Unit	221	Dwelling Units	117
			Juniper Square - Total	**117**

The results of the applying the **maximum** observed parking occupancy ratios to the proposed Juniper Square development results in 117 parking stalls. With 318 parking stalls provided by Juniper Square, this results in a surplus of 201 (171.8%) parking stalls.

8. Recommendations & Conclusions

Through this Parking Master Plan, the proposed development is **requesting the approval to provide a total of 735 parking spaces on-site for the 67 Flats residential development and 318 parking stalls for the Juniper Square senior living development.**

The overall proposed development is comprised of both multi-family and senior living land uses that will be separated by on-site walls and is not anticipated to have a shared access.

City of Glendale Required Parking

Using the *Parking Requirements by Use* provided under Section 7.403, within the *City of Glendale Code of Ordinance*, parking requirement for the proposed development was calculated. This calculation results in a parking deficit of 155 (17.4%) for the 67 Flats multi-family development and a parking surplus of 229 (257.3%) parking stalls for the Juniper Square development.

ITE Parking Generation

Utilizing the *Institute of Transportation Engineers (ITE)* publication *Parking Generation, 5th Edition,* the parking demand for the proposed development was calculated. The weekday average and 85th percentile parking demand for the 67 Flats multi-family development is 504 and 565 parking stalls, respectively. With 735 parking stalls provided, this represents a surplus of 231 (45.8%) and 170 (30.1%) parking stalls for the multi-family component of the proposed development, respectively.

Similarly, the weekday average and 85th percentile parking demand for the Juniper Square development is 135 and 149 parking stalls, respectively. With 318 parking stalls provided, this represents a surplus of 183 (135.6%) and 169 (113.4%) parking stalls for the Juniper Square development, respectively.

ULI Shared Parking

Utilizing the *Urban Land Institute (ULI)* publication *Shared Parking, 3rd Edition,* the parking demand for the proposed development was calculated. The weekday and weekend parking demand for the 67 Flats multi-family development is 512 and 531 parking stalls, respectively. With 735 parking stalls provided, this represents a surplus of 223 (43.6%) and 204 (38.4%) parking stalls for the multi-family component of the proposed development, respectively.

Additionally, the weekday and weekend parking demand for the Juniper Square development is 189 and 160 parking stalls, respectively. With 318 parking stalls provided, this represents a surplus of 129 (68.3%) and 158 (98.8%) parking stalls for the Juniper Square development, respectively.

Comparable Nearby Developments

Dominium has a long history of managing and operating affordable housing projects in Arizona and across the country with 35,000 units currently under management. Observations and data collection were performed at nearby multi-family and senior living developments to determine real-world parking demand in the vicinity area. Data collection occurred during the COVID-19 pandemic, when many companies were working from home and many people were unemployed. Therefore, the data that was collected would be conservative as residents would be working from home or unemployed.

67 Flats – Comparable Nearby Developments

On November 30th, 2020, and July 12th, 13th, and 14th, 2021, observations and data collection were performed at nearby multi-family developments. Data collection efforts occurred between approximately 7:00pm and 10:00pm, as this is typically considered a time to be peak parking occupancy for residential developments. During the time of the observations, 18 of the multifamily developments had a unit occupancy of 93% or higher, with an average parking occupancy of 68%. Additionally, on average there was 1.11 occupied parking stalls per available unit, with a maximum of 1.61 occupied parking stalls per available unit

Applying the **maximum** observed parking occupancy ratios to the proposed development results in 619 multifamily parking stalls. With 735 parking stalls provided by 67 Flats, this results in a surplus of 116 (18.7%) parking stalls.

Juniper Square – Comparable Nearby Developments

On July 12th and July 13th, 2021, observations and data collection were performed at five (5) nearby senior-living developments. Data collection efforts were performed between approximately 7:00pm and 8:00pm, as this is typically considered a time to be peak parking occupancy for residential/senior living developments.

During the time of the observations, two (2) senior living developments had a unit occupancy between 90% and 93%, at the time of the data collection. There was an average parking occupancy of approximately 29%. Additionally, the average and maximum observed ratio of occupied parking stalls per available unit was 0.36 and 0.53, respectively.

Applying the **maximum** observed parking occupancy ratios to the proposed Juniper Square development results in 117 parking stalls. With 318 parking stalls provided by Juniper Square, this results in a surplus of 201 (171.8%) parking stalls.

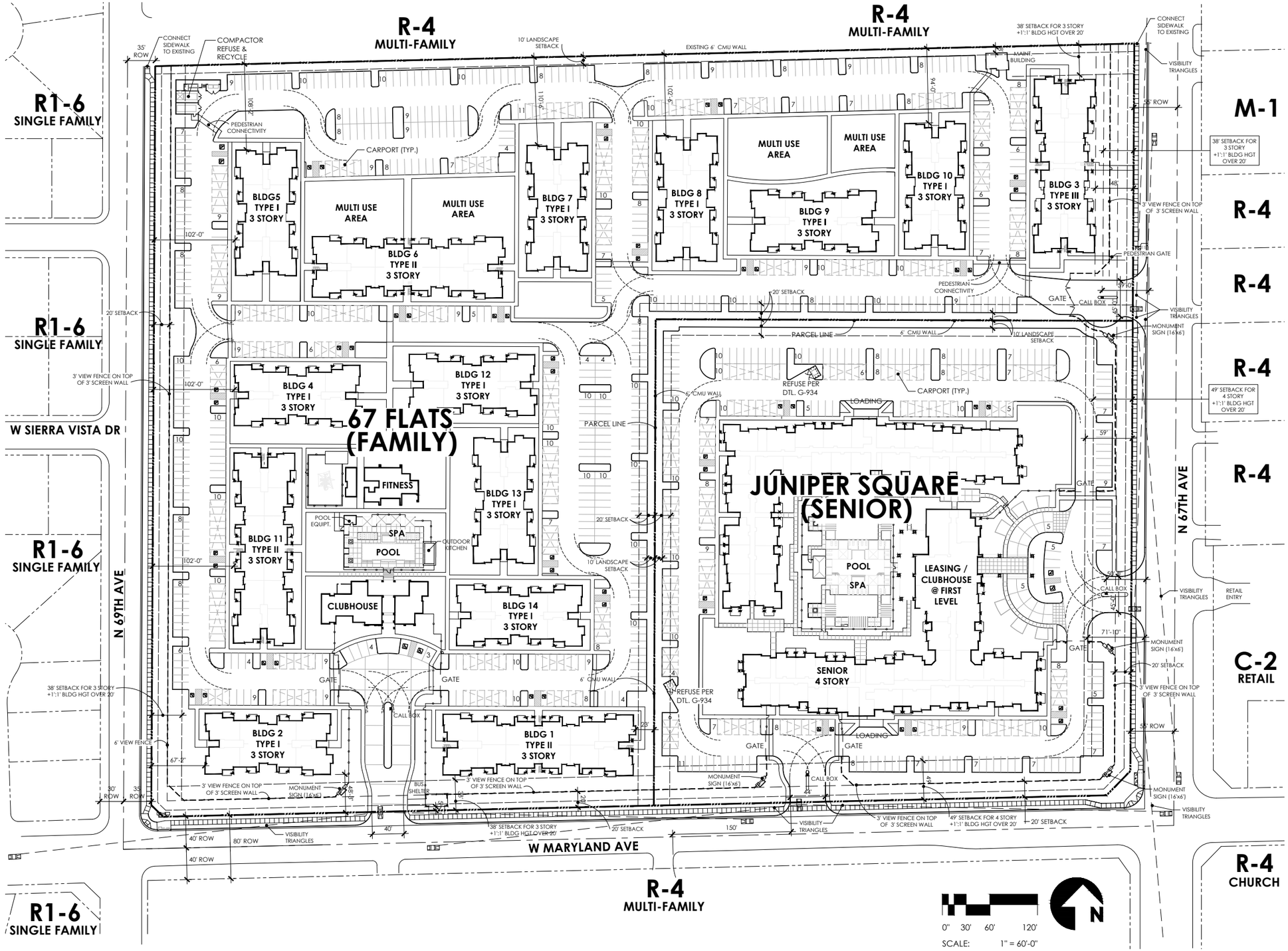
Parking Summary

	Reference Table	67 Flats Parking Stalls - 735 Stalls Provided	Juniper Square Parking Stalls - 318 Stalls Provided
City of Glendale Code			
Parking Requirement	1	890	89
ITE Parking Generation			
Weekday - Average	2	504	135
Weekday - 85th Percentile	3	565	149
ULI Shared Parking - Base Rates			
Weekday	4	512	189
Weekend	5	531	160
Comparable Nearby Developments			
Data Collection - Average	7 & 10	427	81
Data Collection - Maximum	8 & 11	619	117

In conclusion, the request by the proposed 67 Flats multi-family residential development to provide 735 multifamily on-site parking stalls will provide sufficient parking for this development.

Similarly, the request by the proposed Juniper Square senior living development to provide 318 senior living on-site parking stalls will provide sufficient parking for this development.

Appendix A – Proposed Site Plan



SITE DATA

SITE AREA:

PARCEL	NET	GROSS
67 FLATS	±18.50 ACRES (±805,923 SF)	±20.09 ACRES (±875,141 SF)
JUNIPER SQUARE	±8.36 ACRES (±364,000 SF)	±9.69 ACRES (±422,276 SF)
TOTAL	**±26.86 ACRES (±1,169,923 SF)**	**± 29.78 ACRES (±1,297,417 SF)**

NOTE 1: GROSS & NET AREAS TO BE VERIFIED BY OWNER'S CIVIL ENGINEER AND/OR SURVEYOR.
NOTE 2: NET AREA EXCLUDED THE DEDICATION OF 35' HALF-ROW ON 69th AVENUE ON THE EAST SIDE.

ZONING:
EXISTING: R-4
PROPOSED: PAD (R-4)

HEIGHT:
MAXIMUM ALLOWED: 2-STORY OR 30'
PROPOSED:
67 FLATS (FAMILY – MULTI-FAMILY) 3 STORIES (40')
JUNIPER SQUARE (SENIOR LIVING) 4 STORIES (52'-6")

UNIT MIX:

•*FAMILY APARTMENT*:

UNIT TYPE	NO.	%
A-1 BEDROOM/1 BATH	12 D.U.	3.0%.
B-2 BEDROOM/2 BATH	204 D.U.	53.0%.
C-3 BEDROOM/2 BATH	168 D.U.	44.0%.
TOTAL	**384 D.U.**	**100%**

•*SENIOR LIVING*:

UNIT TYPE	NO.	%
1 BEDROOM/1 BATH	66 D.U.	30%.
2 BEDROOM/2 BATH	131 D.U.	59%.
3 BEDROOM/2 BATH	24 D.U.	11%.
TOTAL	**221 D.U.**	**100%**

DENSITY:

•*FAMILY APARTMENTS*:
DENSITY ALLOWED: 20 D.U./GROSS ACRE
DENSITY PROVIDED: 19.11 D.U./GROSS ACRE (384 D.U. ÷ ±20.09 GROSS AC)

•*SENIOR LIVING*:
SENIOR LIVING:
DENSITY ALLOWED: 20 D.U./GROSS ACRE
DENSITY PROVIDED: 22.81 D.U./GROSS ACRE (221 D.U. ÷ ±9.69 GROSS AC.)

•OVERALL SITE: 20.31 D.U./GROSS ACRE (605 D.U. ÷ ±29.78 GROSS AC.)

REQUIRED PARKING:

•GENERAL PARKING DIMENSIONS:
PARKING SPACE 9' x 20'
AISLE WIDTH 26'+

•*FAMILY APARTMENTS*:

1 – BEDROOM (1.00 P.S./D.U. x 12 D.U.)	12 P.S.
2 – BEDROOM (2.00 P.S./D.U. x 204 D.U.)	408 P.S.
3 – BEDROOM (2.00 P.S./D.U. x 168 D.U.)	336 P.S.
GUEST PARKING (1.00 P.S./3 D.U.)	128 P.S.
TOTAL REQUIRED PARKING	**884 P.S. (2.30 P.S./D.U.)**

•*SENIOR LIVING*:

221 D.U. x 0.4 P.S.	89 P.S.
GUEST PARKING (1.00 P.S./3 D.U.)	74 P.S.
TOTAL REQUIRED PARKING	**163 P.S. (0.74 P.S./D.U.)**

PROVIDED PARKING:

•*67 FLATS*:

SURFACE	503 P.S.
COVERED SURFACE	232 P.S.
TOTAL FAMILY PROVIDED	**735 P.S. (1.91 P.S./D.U.)**

•*JUNIPER SQUARE*:

SURFACE PARKING:	184 P.S.
COVERED PARKING:	134 P.S.
TOTAL SENIOR LIVING PROVIDED	**318 P.S. (1.42 P.S./D.U.)**

OPEN SPACE:

•*67 FLATS*:
REQUIRED: 30% x NET AREA (±805,923 SF) = ±241,777 SF
PROVIDED: 32.0% (±258,465 SF)

•*JUNIPER SQUARE*:
REQUIRED: 30% x NET AREA (±364,000 SF) = ±109,200 SF
PROVIDED: 30.0% (±108,941 SF)

LOT COVERAGE:

•*67 FLATS*:
REQUIRED: 50% MAXIMUM
PROVIDED: 27.7%

•*JUNIPER SQUARE*:
REQUIRED: 50% MAXIMUM
PROVIDED: 29.2%

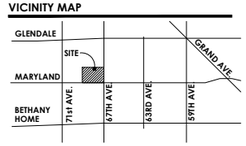
SETBACKS:

PERIMETER SETBACK – 20'
NOTE: BUILDING SETBACK INCREASE 1' TO 1' RATIO FOR BUILDINGS OVER 20'

ASSUMPTIONS:

1. THE PROPERTY IS SHOWN FOR REFERENCE AND PLANNING PURPOSES ONLY.
2. ASSUMES THE SITE'S RETENTION WILL BE SURFACE AND/OR UNDERGROUND BASINS.
3. ASSUMES BOTH SITES WILL BE GATED.
4. ASSUMES ANY EASEMENTS RUNNING ACROSS THE SITE CAN BE RELOCATED OR ABANDONED

VICINITY MAP



TODD + ASSOCIATES
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21-2052-02

DOMINIUM

FAMILY LIVING **67 Flats** & SENIOR LIVING **Juniper Square**
Glendale, AZ
REZONING RESUBMITTAL
JUNE 17, 2022

CONCEPTUAL SITE PLAN

Preliminary Not For Construction

A.04

Appendix B – Glendale Parking Requirements

7.403 - Parking Requirements by Use.

USE	MINIMUM # OF SPACES	MAXIMUM # OF SPACES
Auditorium, Stadium, Public Assembly, Private Clubs, Health Clubs, Theaters	1:100 sq. ft. or 1:5 seats	no maximum
Auto Repair	2 spaces per service bay; plus 1 space per every 250 sq. ft. of retail or office area.	no maximum
Banks, Financial Institutions	1:250 sq. ft.	1:200 sq. ft.
Barber Shop or Beauty Shop	1:100 sq. ft.	no maximum
Churches	1:5 seats or 90 lineal inches of pew space	no maximum
Cocktail Lounge	1:100 sq. ft.	no maximum
Home Furnishings, Major Appliances	1:500 sq. ft.	1:400 sq. ft.
Hospitals	1:bed	no maximum
Manufacturing/Assembly Wholesale/ Warehouse	1:600 sq. ft.	1:300 sq. ft.
Mixed Uses	To be determined by Planning Director.	
Motels/Hotels Restaurant/Bar Banquet/Meeting Rooms	1:room 1:200 sq. ft. 1:200 sq. ft.	no maximum no maximum no maximum

Office, General, Professional Medical/Dental	1:300 sq. ft. 1:150 sq. ft.	no maximum no maximum
Indoor Recreation Facility Amusement Center, Arcades Batting Cages Bowling Alley	 1:100 sq. ft. 1:cage 4:lane plus accessory uses if separate outside entrances are provided.	 no maximum no maximum no maximum
Outdoor Recreation Golf Driving Ranges Miniature Golf Courses Skating Rinks	1:tee space (10 lineal feet) 1:hole 1:200 sq. ft. 1:200 sq. ft.	no maximum no maximum no maximum no maximum
Regional Malls	1:225 sq. ft.	1:180 sq. ft.
Residential Single-family Multi-family Studio or 1 Bedroom 2 or more Bedrooms 1 Designated guest space for every 3 units.	 2:unit-1 covered 1 space 2 spaces	 no maximum no maximum no maximum no maximum
Restaurant-freestanding	1:100 sq. ft.	no maximum
Retail/Shopping Center (including up to 10% restaurant, health club, beauty shops...additional percentages calculated at rate for each use)	1:250 sq. ft.	1:200 sq. ft.

Retirement/Senior Housing/ Convalescent/Nursing/Congregate Care Home	.4:unit	no maximum
Schools		
Elementary	2:classroom or largest single public assembly area, whichever is greater.	no maximum
Jr. High	3:classroom or largest single public assembly area, whichever is greater.	no maximum
High School	7:classroom or largest single public assembly area, whichever is greater.	no maximum
College	10:classroom or largest single public assembly area, whichever is greater.	no maximum
Vocational/Technical	1:2 students	no maximum

(Ord. No. 1772, 6-23-93; Ord. No. 2028, § 1, 10-13-98)