

**REGULAR MEETING
CITY OF RIALTO
TRANSPORTATION COMMISSION
AGENDA**

Civic Center
Council Chambers
150 South Palm Avenue
Rialto, CA 92376

Wednesday
July 6, 2016
6:00 p.m.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Works Department at (909) 421-7279. Notification 48-hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting [28 CFR 35.102-35.104 ADA Title II].

Members of the public are given an opportunity to speak on any listed agenda items. Please notify the Public Works Department if you wish to do so. All agendas are posted in the City Hall Administration Building (150 South Palm Avenue, Rialto, CA 92376) at least 72-hours in advance of the meeting. Copies of the staff reports relating to each item on the agenda are on file in the Public Works Department. Please call (909) 421-7279 to inquire about any items described on the agenda.

Based upon the open meeting laws (the Brown Act), additional items may be added to the agenda and acted upon by the Transportation Commission only if it is considered to be a "subsequent need" or "emergency item" and is added by a two-thirds vote. Matters raised under Oral Communications may not be acted upon at that meeting other than as provided above.

CALL TO ORDER

Time:

ROLL CALL

Present

Absent

Chairperson Dennis Barton

Vice-Chairperson Midge Zupanic

Commissioner Allan Kirst

Commissioner Stephanie Lewis

Commissioner Kelvin Moore

Commissioner John Plasencia

Commissioner Max Tidler

Mayor – Deborah Robertson

MOMENT OF SILENCE / INVOCATION

PLEDGE OF ALLEGIANCE

APPROVAL OF MINUTES

**MINUTES FROM THE JUNE 1, 2016 TRANSPORTATION COMMISSION
WILL BE PROVIDED FOR APPROVAL AT THE NEXT REGULARLY
SCHEDULED MEETING**

ORAL COMMUNICATIONS

Uncontrolled Crossing 2nd Report
(Gene Klatt, Lockwood Engineering)

ITEM 1

Action Item

Bloomington Avenue and Willow Avenue Focused TIA
(Gene Klatt, Lockwood Engineering)

ACTION

ITEM 2
Motion _____
Second _____
Vote _____

Action Item

Randall Avenue Apartments TIA
(Gene Klatt, Lockwood Engineering)

ACTION

ITEM 3
Motion _____
Second _____
Vote _____

Action Item

Prologis Park SR-210 Building 5 TIA
(Gene Klatt, Lockwood Engineering)

ACTION

ITEM 4
Motion _____
Second _____
Vote _____

Action Item

I-210 Logistic Center IV TIA
(Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer)

ACTION

ITEM 5
Motion _____
Second _____
Vote _____

Action Item

ENGINEER'S REPORT

ITEM 6

POLICE DEPARTMENT LIAISON REPORT

ITEM 7

RIALTO UNIFIED SCHOOL DISTRICT LIAISON REPORT

ITEM 8

FUTURE AGENDA ITEMS

ITEM 9

1. Discussion on Identifying a Plan for Improvements South of the I-10 Freeway
 2. Transportation Planning/Funding Major Improvements
 3. Cactus/I-10 Crossing
 4. Pepper Avenue Interchange Project
 5. Information on Regional Discussions
 6. Transportation Plan as it Relates to Active Transportation
 7. Metrolink Parking Lot Expansion Project
 8. Local Fees for Transportation Improvements
 9. Omnitrans Transit Design Guidelines Project Update
-

FUTURE AGENDA ITEMS CONTINUED

ITEM 9

10. Signal Prioritization Plan
11. Future Improvements to Riverside Avenue, Sierra Avenue and the 1-15 Junction
12. Riverside Avenue Bridge Widening Over the UPRR
13. Uncontrolled Crosswalks
14. Discussion of Updating Bike Paths
15. Possible Park-N-Ride for Pepper Avenue Interchange

COMMISSIONER REPORTS

ITEM 10

ADJOURNMENT

Motion _____
Second _____
Vote _____
Time _____

ATTACHMENTS/HANDOUTS

1. Staff Report – Uncontrolled Crosswalk 2nd Report
2. Staff Report – Bloomington-Willow Focused TIA
3. Staff Report – Randall Avenue Apartments TIA
4. Staff Report – Prologis Park SR-210 Building 5 TIA
5. Staff Report – I-210 Logistic Center IV TIA

CITY STAFF

Robert G. Eisenbeisz, P.E. Public Works Director/City Engineer
Corporal Ron Russo, Rialto Police Department
Azzam Jabsheh, Traffic Engineer
Michele Aguirre, Commission Clerk

CITY OF RIALTO

TRANSPORTATION COMMISSION STAFF REPORT For Commission Meeting of July, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert Eisenbeisz Director of Public Works City Engineer
SUBJECT:	Uncontrolled Crossing Report and Implementation Second Report After Posting of Locations.
DATE:	June 13, 2016

BACKGROUND:

In 2014 Willdan Engineering (Willdan), as part of On-Call Traffic Engineering Services, prepared an evaluation of uncontrolled marked pedestrian crosswalks at various locations. The report considered 41 locations in the analysis. Some crosswalks served schools that no longer existed at that location, some served uses that were no longer apparent and all locations had one or more issues such as lack of disabled access, no advance signing, high accident rates, high traffic volumes, high speed or very wide multiple lane crossings. The overall objective was to improve pedestrian safety and encourage crossings in the correct and safest locations.

The study was based on the US Department of Transportation study "Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations", the California MUTCD guidelines and sound engineering judgment. The US DOT study had concluded, "adding marked crosswalks alone (i.e. with no engineering, enforcement or education) is not expected to reduce pedestrian crashes" so some of the marked uncontrolled crosswalks were providing no benefit and may in fact create a false sense of security in the eyes of the public. In general, the study and guidelines recommends that at uncontrolled locations, marked crosswalks should not be installed on multi-lane roads (4 or more lanes) where volume exceeds 12,000 vehicles per day (15,000 vehicles per day if there is a raised median to provide refuge). They are also not recommended on 2 lane roads where volumes exceed 10,000 vehicles per day or where speeds exceed 40 miles per hour.

The Commission first considered the report during the January 7, 2015 meeting and the Commission requested additional data and information. The Commission again considered the item at their March 4, 2015 meeting. The Commission expressed concerns over some of the listed crosswalks and the need to insure coordination with schools, parents and other agencies. The Commission also expressed a desire that findings be made to support removals and to insure coordination on those crosswalks that were joint jurisdictional in nature. The matter was referred back to staff for further action at the March 2015 meeting. At the March 2016 meeting, the full report was considered and the Commission recommended removal of crosswalks at 18 locations. State law requires posting and a comment period of 30 days prior to action to remove an existing marked crosswalk. The 18 recommended locations were posted with the last posted crosswalk completing its 30 day review period on June 11, 2016.

The City did receive a total of 6 comments from the Community. Three comments on the crossing at Riverside and Third, 2 on Pomona at Cactus and one on Ramona at Willow. The typical comment was that removal of the crosswalk would impair safety and/or increase accidents (see attached for record of contact). The callers were advised that the action was not being considered lightly and that removal was being done to increase safety as well as meet the needs of the community.

ANALYSIS/DISCUSSION:

On April 30, 2015 there was a Public Outreach meeting at Kucera Middle School at 6:00 PM. City staff, the consultant and School District staff from facilities planning and traffic safety were in attendance but no parent or citizen attended nor did anyone file any written concerns. By State law, all locations recommended for crosswalk removal are required to be posted and the public given an opportunity to make comments 30 days prior to any action being taken. The 18 recommended locations were posted and the 30 day period was over on June 11, 2016.

In the staff summary, consideration was given to pedestrian safety, collision rates, school locations and walking routes, joint jurisdictional issues, physical obstacles preventing improvement, existing improvements, removal costs, usage, traffic volume and community benefit/enhancement. The Staff recommendations had eighteen (18) locations for removal, four (4) for additional improvement upgrades, and ten (10) that require disabled access improvements. The eighteen locations (18) and the discussion of why removal was recommended are shown below:

- ***Alder/Sunrise Avenues #5*** crosswalk may serve as a school crossing for students at Kucera Middle School. This crosswalk may also serve residents east of Alder Avenue to access Fergusson Park.

Recommendation: REMOVE. Alder is a major arterial but in this section has a low volume (3-4 thousand ADT). Crossing volume is extremely low at (2) in a two hour window.

- ***Cactus/Pomona Avenues #8*** crosswalk may serve as a school crossing for students at Ruth Grimes Elementary School and Baca Middle School. The nearest crosswalk to the south is approx. 700-ft at the signalized intersection of Cactus Avenue and Valley Boulevard.

Recommendation: REMOVE. High vehicle speed (45 mph), multi-lane roadway, low pedestrian usage (14 in two hours) and high collision rate. Safer route available.

- ***Eucalyptus/Virginia Avenues #14*** crosswalk may serve as a school crossing for students at Frisbie Middle School.

Recommendation: REMOVE. This location is on a 40 mph low volume street (3581 ADT). It lacks handicapped ramps on both sides is 275 feet south of a more direct access to the school. It is approximately 100 feet south of a primary school access roadway and bus bay.

- ***Lilac/Chaparral Avenues #15*** crosswalk may serve as a school crossing for students at Preston Elementary and Hugh Banks Elementary it is not marked as school crossing and quite distant from both schools.

Recommendation: REMOVE. This location is on a 40 mph low volume street (1571 ADT). It lacks handicapped ramps on the west side of Lilac. The west side of Lilac and both side of Chaparral west of Lilac lack sidewalks. It is also low usage (11 in one hour).

- **Lilac/Heather Avenues #18** crosswalk may serve as a school crossing for students at Preston Elementary and Hugh Banks Elementary.

Recommendation: REMOVE. This location is on a 40 mph low volume street (1571 ADT). It lacks handicapped ramps on the east and west side of Lilac and the west side of Lilac is county area. It is also low usage (11 in one hour).

- **Lilac Avenue/McKinley Street #19** crosswalk may serve residents who wish to enter Bud Bender Park. Off-set intersection

Recommendation: REMOVE. High speed location (45 mph), high collision rate double expected rate, low usage with 10 pedestrians and 3 bikes in two hours.

- **Locust Avenue/Casa Grande Street #20** crosswalk may serve as a school crossing for students at Kucera Middle School.

Recommendation: REMOVE. High traffic volume near 12,000 ADT. There are no sidewalks or handicapped ramps or path of travel. Locust is a designated truck route. Usage was 32 in 1.5 hours. Kucera middle school is 0.53 miles and Carter high school is 0.90 miles from the crossing.

- **Merrill/Maple Avenues #23** crosswalk may serve as a school crossing for students at Maple Elementary School.

Recommendation: REMOVE. High speed (45 mph). Volume is 7729 ADT. There are no sidewalks on Maple north of Merrill or along the north side of Merrill. There are no handicapped ramps at crossing location. High collision rate at 14 times expected rate. Maple dead ends 1220 feet north of Merrill. Usage is 24 in one hour.

- **Rialto Avenue/Orange Street (2) #24** The nearest crosswalk to the west is approx. 300-ft at an all-way stop controlled intersection at Rialto and Palm Avenues. The nearest crosswalk to east is approx. 300-ft at the signalized intersection of Rialto and Riverside Avenues.

Recommendation: REMOVE. High accident rate. Crosswalks do not line up with handicapped ramps. Access to Metro Link station is along Palm. Safer crossings exist.

- **Riverside Avenue/Second Street (2) #25** crosswalk serves a few businesses north of the Downtown area.

Recommendation: REMOVE. High volume street (22-28K ADT). High accident rate. Wide multi-lane but median lacks handicapped ramps to provide refuge. Low usage (31 in two hours between two crosswalks).

- **Riverside Avenue/Third Street (2) #26** crosswalk serves a few businesses north of the Downtown area.

Recommendation: REMOVE. High volume street (22-28K). High accident rate. Wide multi-lane but median lacks handicapped ramps to provide refuge. Low usage (23 in two hours between two crosswalks).

- **Riverside Avenue/N. Metrolink Track #28** non-intersection crosswalk may serve limited number of businesses and northbound bus stop on the east of Riverside Avenue with access to the Metrolink Station.

Recommendation: REMOVE. High volume street (22-28K). Wide multi-lane but lacks median to provide refuge. Is located within the railroad crossing area (90 feet from railroad crossing arms) and at street widening/narrowing (72' to 122'). Low usage (5 in two hours).

- **Willow Avenue/Cemetery #35** mid-block crosswalk once served as a crossing for access to Rialto Middle school (relocated) and now to Margaret Todd Park/Johnson Center Guy.

Recommendation: REMOVE. This is a mid-block crosswalk with low usage (25 in two hours) that no longer serves as a school crossing. It lacks handicapped ramps and the gate to access Margaret Todd appears to be controlled access.

- **Willow/Chaparral Avenues (2) #36** crosswalk may serve as a school crossing for students at Preston Elementary.

Recommendation: REMOVE the northerly crossing of Willow. This location is on a 30 mph low volume street (2409 ADT). It lacks handicapped ramps on the east side of Willow. It also has a high collision rate. Southerly crosswalk is on improvement list.

- **Willow Avenue/Ramona Drive #38** crosswalk serves residents to access the Market on the east side of Willow. The nearest crosswalk to the south is approx. 400-ft at the signalized intersection of Willow and Foothill Boulevard.

Recommendation: REMOVE. Traffic volume 7500 ADT and the crossing lacks handicapped ramps on the east side as well as any direct access to the Market. Usage is low (17 in two hours). It is 170 feet south of a widening/narrowing (40' to 64 feet) transition and 380 feet north of a safer traffic signal crossing.

- **Willow Avenue/Third Street #39** crosswalk served as a school crossing for Rialto Middle school (relocated) and access to the Margaret Todd Park/Community Center although no gate presently allows access.

Recommendation: REMOVE. School is relocated and there is no direct access to Margaret Todd Park. The location lacks handicapped ramp on the east side. The crossing has low volume (13 in two hours) and a higher than expected collision rate.

- **Willow Avenue/Wilson Street #40** crosswalk may serve mobile home park residents. Pedestrian crossing is often between cars stopped to turn left into mobile home park southbound traffic is not at an intersection. Not on direct path of travel to any destination or service.

Recommendation: REMOVE. The location lacks handicapped ramp on the west side of Willow and location conflicts with fire hydrant and meters. The crossing has

low volume (10 in one hour). Willow is 40 mph with 6286 ADT. Access to Curtis Elementary is along Merrill which is signal controlled and marked school crossing.

- **Willow Avenue/Winchester #41** crosswalk may serve as a school crossing for Eisenhower High School.

Recommendation: REMOVE. The location lacks handicapped ramps on sides and is not at an intersection but rather a school access driveway. The crossing has a higher than expected collision rate. Willow is 40 mph and low volume (4694 ADT)

RECOMMENDATION

The City directed the review of 41 selected locations of uncontrolled marked crosswalks. There has been a public outreach meeting and notification to the School District. Per state law, any crosswalks recommended for removal shall be posted for a minimum of 30 days prior to any removal action which has now been completed.

The Commission should open the meeting for input from the public and provide a means to express concerns and consider such input. After public input is received, the Commission should make a recommendation to the City Council that the above noted locations of uncontrolled crosswalks be removed and pavement markings, signs and other notifications be removed along with the painted crosswalks.

The Commission may also conclude that the recommended removals are locations with higher than expected collision rates, very low usage and/or lacking other improvements. Marked crosswalks alone do not provide any additional safety (per the U.S. Dot study and others) and may give a false sense of security to pedestrians. All intersections are considered pedestrian crossing, marked or not, and removal of existing crosswalks does not thereby prevent crossing.

Attachment: Summary of responses received

CITY OF RIALTO

TRANSPORTATION COMMISSION STAFF REPORT For Commission Meeting of July 6, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer
SUBJECT:	Focused Traffic Impact Analysis – Bloomington Avenue & Willow Avenue Project, Southwest Corner of Bloomington Avenue at Willow Avenue – 29 Single Family Homes.
DATE:	May 17, 2016

BACKGROUND:

The project is located at the southwest corner of Bloomington Avenue and Willow Avenue as shown on **Attachment 1**.

The Project proposes construction of 29 single-family homes on 4.59 acres. The proposed facility will have a single main access point to Willow Avenue to serve a private street system within the development. The access is approximately 275 feet south of Alru Street. This makes the driveway approximately 637 feet south of Bloomington Avenue. The site plan is included as **Attachment 2**. The driveway is approximately 40 feet wide and has a 6-foot median. The entrance is proposed to be gated with the gates approximately 40 feet back from the street.

The trip impacts were estimated using standard ITE rates. The trip impacts using standard single-family rates are shown on **Table 3**, which is included as **Attachment 3**, and the project generates 276 daily trips with 22 AM peak hour trips and 29 PM peak hour trips.

The traffic and intersection counts are provided in Appendix C and were collected in January of 2016. Based on the original scoping agreement, this project did not meet the 50-trip threshold at intersections that would trigger a full TIA. However, because the totals were close to the threshold and the intersection of Willow Avenue at Randall Avenue (both collector streets) is stop controlled, a focused study was recommended. The focused study would look at the intersections both the north and south end of Willow Avenue to see if there would be impacts from this development in combination with background growth and other known projects in the area (cumulative growth). The north intersection of Bloomington Avenue and Willow Avenue is a traffic signal. Speed limits are 35 mph for Willow Avenue and 50 mph for Bloomington Avenue. Traffic count data indicates that Willow Avenue currently carries approximately 4,900 vehicles per day and has a current capacity of 12,499 vehicles per day. **Table 9 of the TIA**, which is included as **Attachment 4**, shows that total cumulative conditions with the project Willow Avenue will increase to 7,500 vehicles per day and remain at better the LOS D. **Table 10**, which is included as **Attachment 5**, looks at the intersections and shows Bloomington Avenue at Willow Avenue at LOS B, the project driveway at LOS B and Willow Avenue at Randall Avenue at LOS C in the AM peak hour and LOS B in the PM peak hour.

The project will be required to complete street improvements along Bloomington Avenue. The intersection of Bloomington Avenue and Willow Avenue is at the ultimate width but the remaining

project frontage west of Willow Avenue does require widening and sidewalk improvements, which are conditions upon the development.

ANALYSIS/DISCUSSION:

The project alone did not generate sufficient peak hour trips to require a full TIA. However, a focused study was conducted to analyze the impacts of the project and growth in the area at intersections north and south of the development. The focused study did not conduct signal warrants analysis because analysis indicated both intersections operated at no less than LOS C and generally at LOS B.

The focused study indicated all streets and intersection would operate at LOS C or better in all conditions and that payment of normal Development Impact Fees for traffic would suffice for this project.

Conclusion

The scoping agreement was completed January 4, 2016 and the focused TIA submitted April 20, 2016. The project generates traffic under the threshold for a full TIA and the focused TIA requested has analyzed the two closest intersections. The conclusions of the TIA are that the project will not create any LOS below the level of C at any intersection or along Willow Avenue. The focused study also considered the driveway locations as it related to other streets along Willow Avenue and again found not conflicts.

Payment of normal traffic related DIF fees are deemed adequate for this project and no off-site improvements are needed beyond required street improvements as a part of development.

RECOMMENDATIONS:

Staff requests that the Transportation Commission:

- Accept the Focused Traffic Impact Analysis and its conclusions as complete.
- Make recommendations to the City Council that the project be approved.

Attachments:

- 1) Project Location Map
- 2) Site Plan
- 3) Project Trip Generation
- 4) Cumulative Conditions Roadway Segment Capacity Analysis
- 5) Cumulative Conditions Intersection Delay and Level of Service

Figure 1
Project Location Map

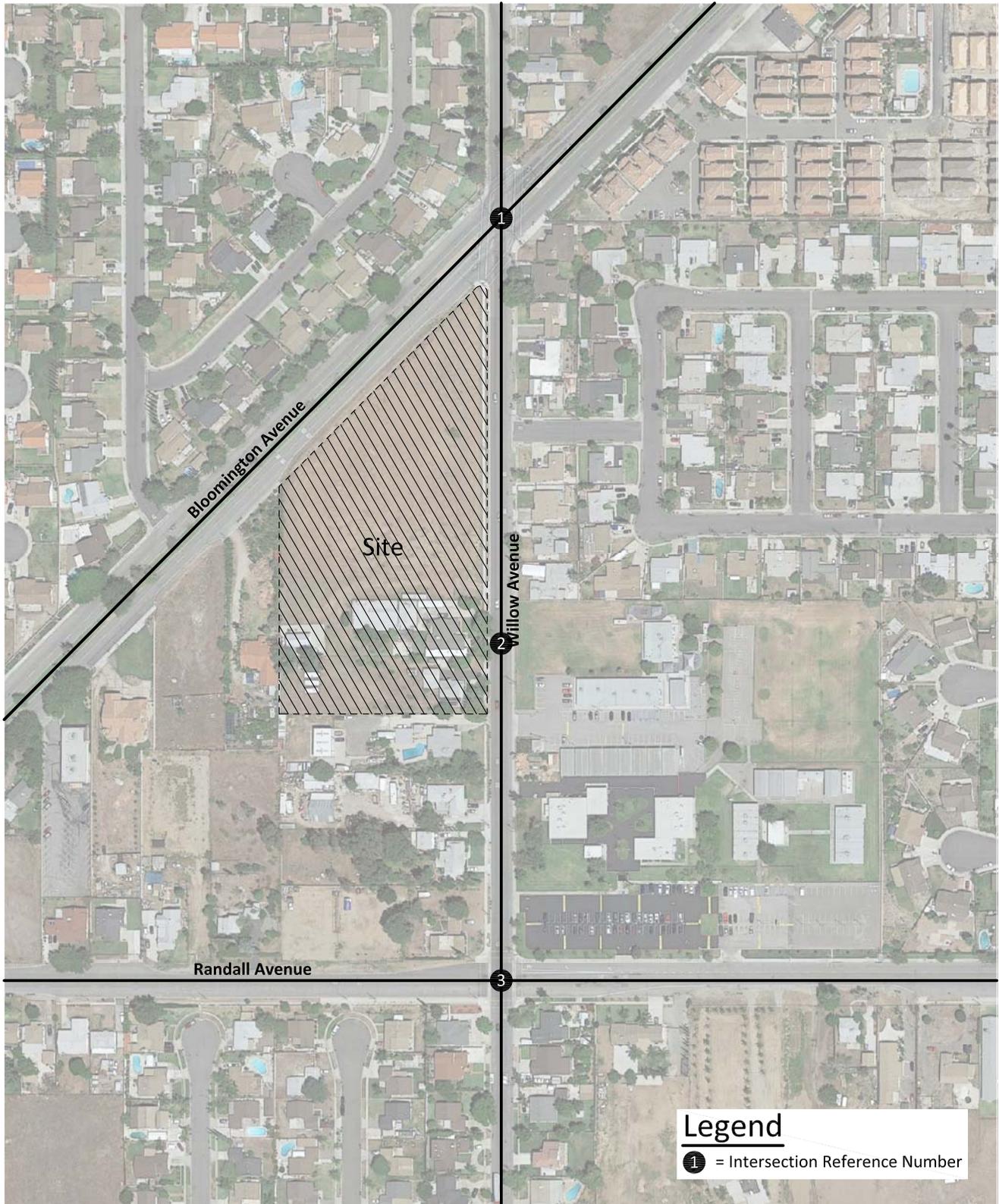


Figure 2
Site Plan

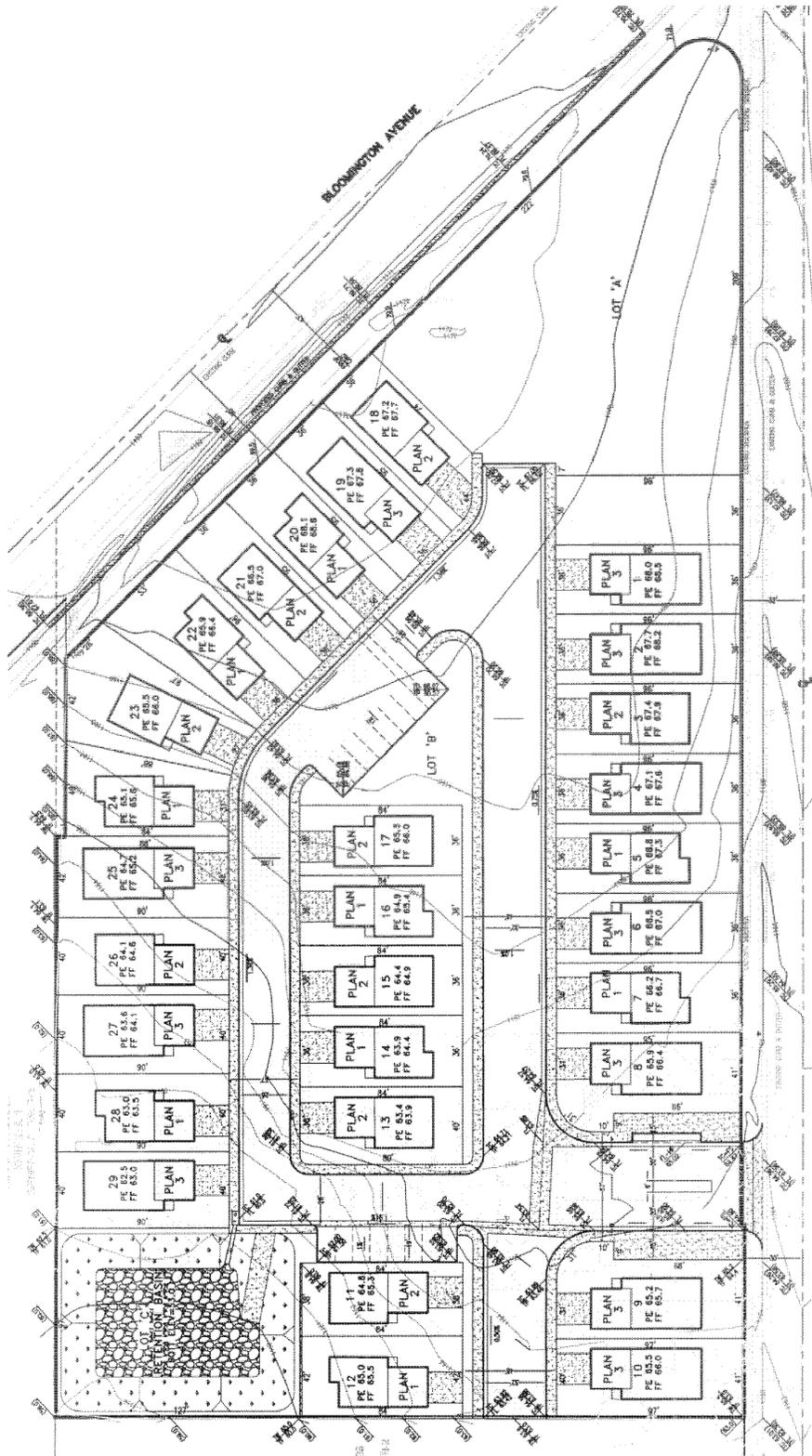


Table 3
Project Trip Generation¹

Land Use	Quantity	Units ²	Peak Hour						Daily
			Morning			Evening			
			Inbound	Outbound	Total	Inbound	Outbound	Total	
<u>Trip Generation Rates</u>									
Single-Family Detached Residential		DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52
<u>Trips Generated</u>									
Single-Family Detached Residential	29	DU	6	16	22	18	11	29	276

¹ Source: Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012, Land Use Category 210.

² DU = Dwelling Units.

Table 9

Cumulative Conditions Roadway Segment Capacity Analysis

Roadway	Jurisdiction	Segment		Number of Lanes ¹	Capacity for LOS D	Average Daily Traffic Volume ²	LOS D or Better?
		From	To				
Willow Avenue	Rialto	Bloomington Avenue	Randall Avenue	2U	12,499	7,500	Yes

¹ Based on existing conditions.

² In Passenger Car Equivalents (PCEs)

Table 10

Cumulative Conditions Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control ³	Intersection Approach Lanes ¹												Peak Hour Delay-LOS ²		
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening	
			L	T	R	L	T	R	L	T	R	L	T	R			
Willow Avenue (NS) at:																	
Bloomington Avenue (EW) - #1	Rialto	TS	0	1	0	0	1	0	1	2	d	1	1.5	0.5	13.6-B	14.6-B	
Project Access (EW) - #2	Rialto	CSS	0.5	0.5	0	0	0.5	0.5	0.5	0	0.5	0	0	0	12.7-B	13.4-B	
Randall Avenue (EW) - #3	Rialto	AWS	0	1	0	0	1	0	0.5	0.5	d	0.5	0.5	1	18.7-C	14.7-B	

¹ When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; d = De Facto Right Turn; **BOLD** = Improvement

² Delay and level of service has been calculated using the following analysis software: Vistro, Version 4.00-00.

³ TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop

CITY OF RIALTO

TRANSPORTATION COMMISSION STAFF REPORT For Commission Meeting of July 6, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer
SUBJECT:	Focused Traffic Impact Analysis – Randall Avenue Apartments, South Side of Randall Avenue between Riverside Avenue and Willow Avenue.
DATE:	June 1, 2016

BACKGROUND:

The project is located on the south side of Randall Avenue between Riverside Avenue and Willow Avenue across from Milor High School as shown on **Figure 1-1**, which is included as **Attachment 1**.

The Project proposes construction of 69 Apartments on 4.7 acres that are currently occupied by two single-family homes. The proposed facility will have a single main access point to Randall Avenue to serve a private access system within the development. The access is approximately 500 feet east of Willow Avenue. This makes the driveway approximately 800 feet west of Riverside Avenue. The site plan is shown on **Figure 1-2** which is included as **Attachment 2**. The driveway as shown is approximately 66 feet wide and has a 14-foot median. The entrance is proposed to be gated with the gates approximately 80 feet back from the street. A median break allows a turnaround before entering the gate section of the property. Only emergency access will be provided from Alice Street to the south so all traffic will be using the single access to Randall Avenue.

The trip impacts were estimated using standard ITE rates. The trip impacts using standard apartment rates are shown on **Table 4-1**, included as **Attachment 3**, and the project generates 453 daily trips with 35 AM peak hour trips and 43 PM peak hour trips. The analysis did not take credit for the two existing single-family homes.

The traffic and intersection counts are provided in Appendix B and were collected in April of 2016. Based on the original scoping agreement, this project did not meet the 50-trip threshold at intersections that would trigger a full TIA. However, because the totals were close to the threshold and the intersection of Willow Avenue at Randall Avenue (both collector streets) is stop controlled, a focused study was recommended. The focused study would look at the intersections both the east and west end of Randall Avenue to see if there would be impacts from this development in combination with background growth and other known projects in the area (cumulative growth). The east intersection of Riverside Avenue and Randall Avenue is a traffic signal. The speed limit is 35 mph for Randall Avenue. Traffic count data indicates that Willow Avenue currently carries approximately 4,900 vehicles per day and has a current capacity of 12,499 vehicles per day. Randall Avenue carries approximately 5600 vehicles per day and has a capacity of 12,499. **Table 5-1**, which is included as **Attachment 4**, shows that total

cumulative conditions with the project for the intersections affected with none falling below LOS C.

The project will be required to complete street improvements along Randall Avenue. The project intersection driveway along Randall Avenue will be subject to size limitations imposed by the DRC during the review of the project. Sidewalk will be complete near the project but sections will still be missing east of the site on the south side of Randall Avenue.

ANALYSIS/DISCUSSION:

The project alone did not generate sufficient peak hour trips to require a full TIA. However, a focused study was conducted to analyze the impacts of the project and growth in the area at intersections east and west of the development. The focused study did conduct signal warrants analysis for the intersection of Randall Avenue at Willow Avenue and determined that signal warrants were not met.

The focused study indicated all streets and intersection would operate at LOS C or better in all conditions and that payment of normal Development Impact Fees for traffic would suffice for this project.

Conclusion

The scoping agreement was completed April 18, 2016 and the focused TIA submitted May 31, 2016. The project generates traffic under the threshold for a full TIA and the focused TIA requested has analyzed the two closest intersections. The conclusions of the TIA are that the project will not create any LOS below the level of C at any intersection or along Randall Avenue.

Payment of normal traffic related DIF fees are deemed adequate for this project and no off-site improvements are needed beyond required street improvements as a part of development.

RECOMMENDATIONS:

Staff requests that the Transportation Commission:

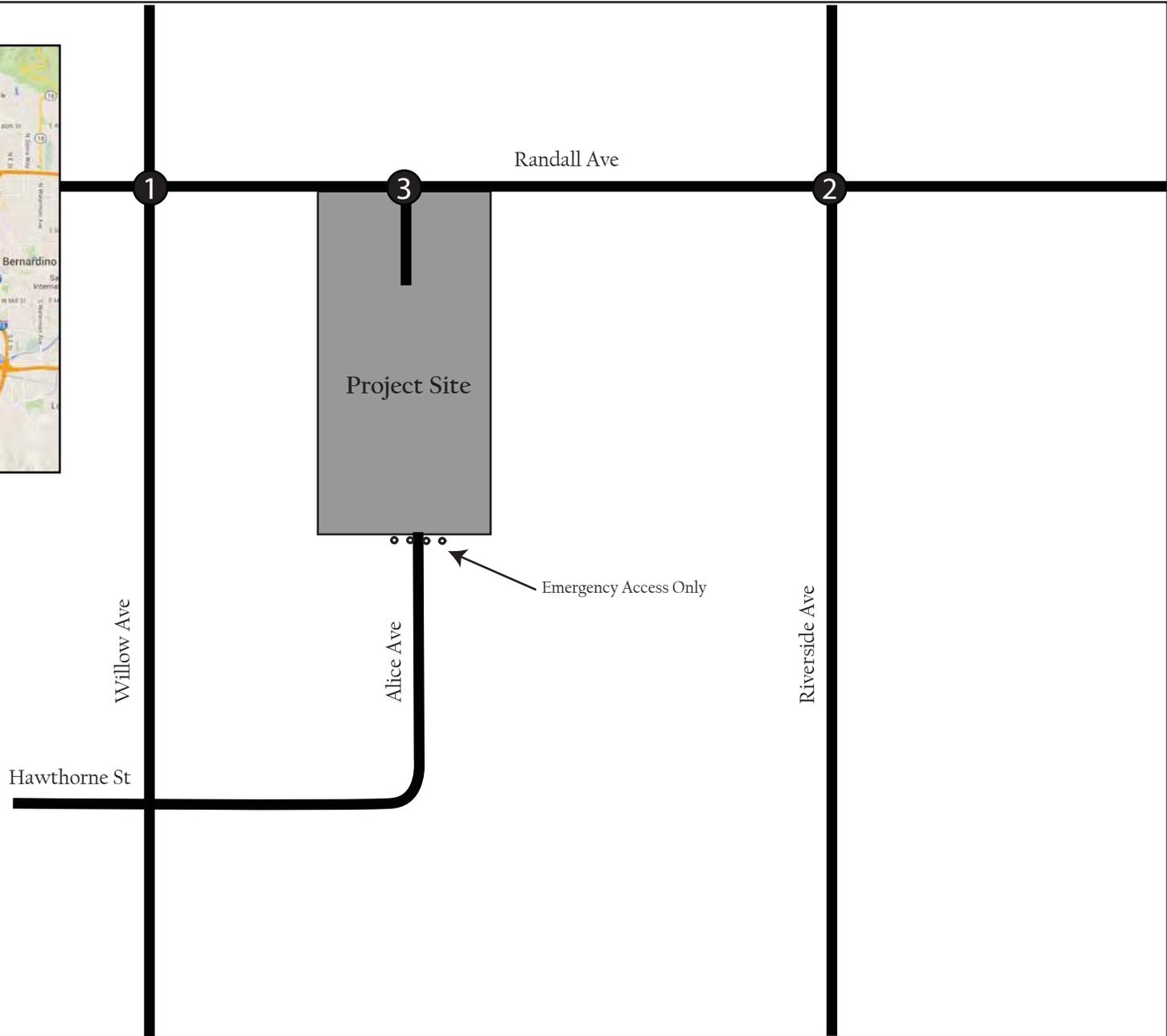
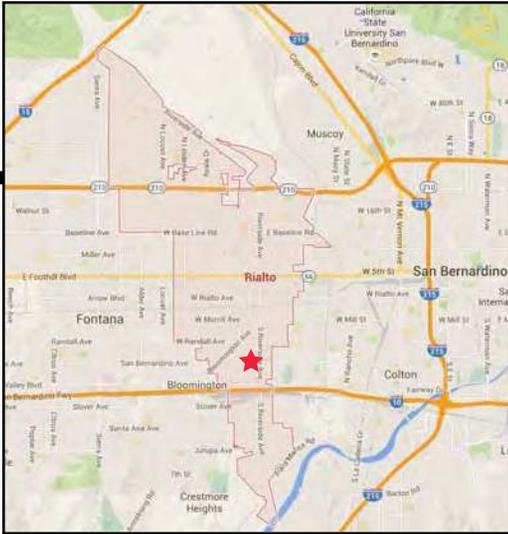
- Accept the Focused Traffic Impact Analysis and its conclusions as complete.

- Make recommendations to the City Council that the project be approved.

Attachments:

- 1) Project Study Area
- 2) Site Plan
- 3) Weekly Trip Generation Summary
- 4) Existing Plus Project Weekday Peak Hour Intersection LOS Summary

Regional Vicinity Map



Randall Avenue Apartments

Figure I-1
Project Study Area

APPLICANT / OWNER
 EMAAR ENTERPRISES
 1231 W. CACTUS AVE, SUITE D
 RIALTO, CA 92376
CONTACT: SHARREFF AWAD
 CELL: (909) 519-1355
 EMAIL: shawad@emaaar.com

DESIGNER
 DIXI DESIGN
 761 W. MARIPOSA DR.
 RIALTO CA, 92376
 CONTACT: LUIS SERVENO
 CELL: (909) 489-5563
 EMAIL: lser141@gmail.com

PROJECT ADDRESS:
 205 W. RANDALL AVE
 RIALTO CA, 92376.

APN: 0132-031-13-0000

LEGAL DESCRIPTION
 S1/4 AND W/4 CD 5 B L 2 1/4 S 1/4 LOT 2, 39 AC

BUILDING DATA:

TOTAL LOT AREA = 203,497.50 SQFT.
 BUILDING "A"
 4 UNIT FIRST FLOOR + 4 UNIT SECOND FLOOR = 8 UNIT
 8 UNIT + 4 = 12 UNITS
 BUILDING "B"
 6 UNIT FIRST FLOOR (3 BEDROOM) = 6 UNIT
 6 UNIT SECOND FLOOR (2 BEDROOM) = 6 UNIT
 12 x 3 = 36 UNITS

TOTAL UNITS = 68 UNITS

BUILDING	2 BED UNIT		1 LOCK SQ FT		3 BED UNIT		1 1/2 LOCK SQ FT		FOOTPRINT	TOTAL BUILDING
	1ST FLOOR	2ND FLOOR	1ST FLOOR	2ND FLOOR	1ST FLOOR	2ND FLOOR	1ST FLOOR	2ND FLOOR		
BUILDING "A"	4	4	2	2	4	4	4	4	4,260 SQ FT	8,536 SQ FT
BUILDING "B"									4,720 SQ FT	13,884 SQ FT

TOTAL OPEN AREA REQUIRED = 400.00 SQFT X 68 UNITS = 27,200.00 SQFT.
 TOTAL OPEN AREA PROVIDED = 49,311.27 SQ.FT.

PARKING ANALYSIS

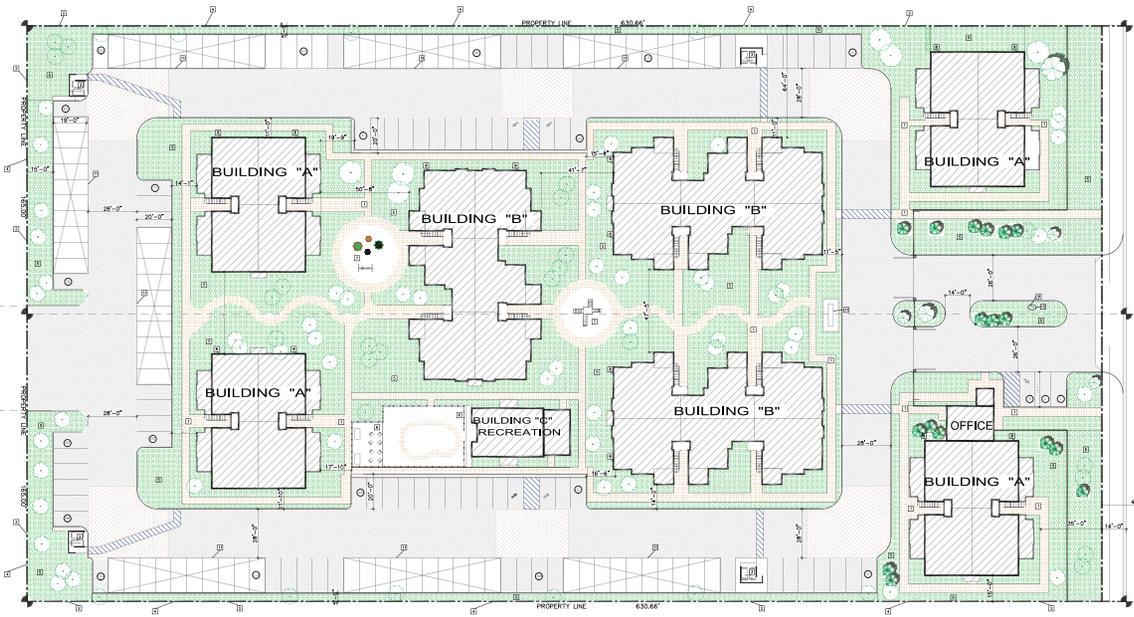
2 PER UNIT	REQUIRED	PROVIDE
	136	136
17	25	
TOTAL PARKING	153	161
ADA PARKING	4	5

KEYNOTES

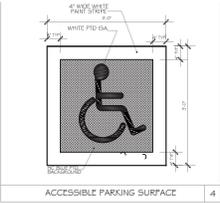
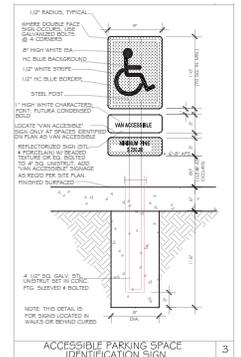
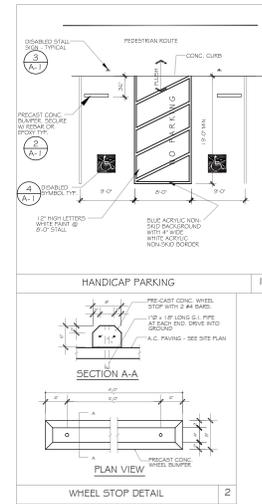
- MIN. 4'-0" WIDE PATH OF TRAVEL FROM PUBLIC WAY TO FRONT DOOR.
 PROVIDE 4" WIDE PAINTED BLUE STRIPES AT 3'-0" O.C. WHERE PATH OF TRAVEL CROSSES PARKING LOT AREAS.
- PROPERTY LINE
- NEW REFUSE ENCLOSURE PER CITY STANDARDS, UNDER SEPARATE PERMIT.
- 6'-0" HIGH DECORATIVE MASONRY WALL WITH MORTAR CAP. (TAN, SPLIT FACE ONE SIDE - FACING PROJECT OR BOTH SIDES WHEN BOTH SIDES ARE VISIBLE FROM THE PUBLIC "RIGHT OF WAY".
- LANDSCAPE AREA (SEE LANDSCAPE PLAN)
- OPEN LAWN AREA
- STATIONARY MULTIPLE PLAY EQUIPMENT
- SITE LIGHTING, WALL MOUNT FIXTURE.
- ELECTRONIC VEHICULAR GATE BOX
- KNOX BOX
- MAIL BOX
- CARPOOL

NOTE:

- BUILDING ADDRESS SHALL BE PROVIDED ON THE BUILDING IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET PER CBC SECTION 501.2.
- NEW PARKING LOT LIGHTING WITH HOODING DEVICE TO PREVENT LIGHT SPILLAGE ONTO ADJACENT PROPERTY.
- ALL ABOVEGROUND UTILITIES AND OVERHEAD UTILITY LINE AREA TO BE UNDERGROUND.
 KNOX BOX OR SWITCH WILL BE INSTALLED AT ANY PROPOSED GATES.



SITE PLAN
 SCALE 1/30" = 1'-0"



DIXI DESIGN
 BUILDING DESIGN
 761 W. MARIPOSA DR. RIALTO CA 92376
 CREATIVE DEVELOPMENT & QUALITY
 (909) 546-5563

REVISIONS

NO.	DESCRIPTION

SUBMITTAL

SCOTT CHAPMAN
 APARTMENT BUILDING
 COMPLEX
 68 UNITS
 APN: 0132-031-13-0000

EMAAAR ENTERPRISE
 205 W. RANDALL AVE
 RIALTO CA, 92376

PROPOSED
 SITE PLAN

SHEET No.
A-1

SCALE
 AS SHOWN

DATE
 12/15



Randall Avenue Apartments

Figure 1-2
 Site Plan

Table 4-1
Weekday Trip Generation Summary

TRIP GENERATION RATES										
Land Use	ITE Code	Weekday Daily		AM PEAK			PM PEAK			
				Rate	In:Out Ratio		Rate	In:Out Ratio		
Single Family House	210	9.52	trips / du	0.75	0.25 : 0.75		1.00	0.63 : 0.37		
Apartment	220	6.65	trips / du	0.51	0.20 : 0.80		0.62	0.65 : 0.35		
TRIP GENERATION CALCULATIONS										
Land Use	ITE Code	Amount		ADT	AM PEAK			PM PEAK		
					In	Out	Total	In	Out	Total
Proposed Project										
Apartment	220	68	du	453	7	28	35	27	16	43
<i>Trip Credit</i>										
Single Family House	210	2	du	20	1	1	2	1	1	2
Net New Trips (Proposed - Existing)				433	6	27	33	26	15	41

Notes:

du: dwelling unit

The trip rates for the project's land uses are based on the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition*.

4.3 Project Trip Distribution

Based on existing travel patterns in the study area and on logical connections to regional facilities, the following list shows the assumed project trip distribution for the proposed project:

- 20 percent to/from the north
 - 10 percent via Willow Avenue
 - 10 percent via Riverside Avenue
- 50 percent to/from the south
 - 40 percent via Willow Avenue
 - 10 percent via Riverside Avenue
- 15 percent to/from the east via Randall Avenue
- 15 percent to/from the west via Randall Avenue

Figure 4-1 displays the assumed project trip distribution through the study intersections.

4.4 Project Trip Assignment

Based on the project trip generation and distribution, the peak-hour trips were assigned to the intersections in the study area. Figure 4-2 illustrates the weekday project trip assignment.

Table 5-1
Existing Plus Project Weekday Peak Hour Intersection LOS Summary

#	Intersection	Traffic Control	Peak Hour	Existing Conditions		Existing Conditions Plus Project		Δ in Delay
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	
1	Willow Ave & Randall Ave	AWSC	AM	12.7	B	13.3	B	0.6
			PM	9.9	A	10.1	B	0.2
2	Riverside Ave & Randall Ave	Signal	AM	28.6	C	29.0	C	0.4
			PM	23.4	C	23.7	C	0.3
9	Proj Dwy & Randall Ave	OWSC	AM	DNE		11.0	B	11.0
			PM			10.3	B	10.3

Notes:

DNE: Does not exist

Signal: Traffic signal, AWSC: All-Way Stopped Control, OWSC: One-Way Stopped Control

(a) Delays are reported as the average control delay for the entire intersection at signalized intersections and the worst movement at unsignalized intersections.

(b) LOS calculations are based on the methodology outlined in the 2000 *Highway Capacity Manual* (HCM) and performed using Synchro 8.

5.3 Signal Warrant Analysis

The peak-hour signal warrant analysis was performed at the Willow Avenue & Randall Avenue intersection for the Existing Plus Project scenario. Table 5-2 summarizes the results of the signal warrant analysis. As shown in the table, a traffic signal is not warranted using the peak-hour traffic volume criteria.

Appendix D contains the calculations for the signal warrant analysis.

Table 5-2
Existing Weekday Peak Hour Intersection LOS Summary

#	Intersection	Peak Hour	Met Warrant? (a)
1	Willow Ave & Randall Ave	AM	No
		PM	No

Notes:

(a) The signal warrant analysis was performed using the criteria outlined in Chapter 4C of the *CA MUTCD 2014* for Warrant 3, Peak-Hour.

CITY OF RIALTO

TRANSPORTATION COMMISSION STAFF REPORT For Commission Meeting of July 6, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer
SUBJECT:	Traffic Impact Analysis – Prologis Park SR-210 Building 5 Project Along the East Side of Tamarind Avenue south of Walnut Avenue.
DATE:	May 25, 2016

BACKGROUND:

The proposed Prologis Park SR-210 Building 5 Warehouse (Project) is located along the east side of Tamarind Avenue south of Walnut Avenue within the Renaissance Specific Plan. The **Project Location Map** is included at **Attachment 1**.

The Project proposes the construction of a 384,893 square foot warehouse distribution facility including internal office area.

The site will have two driveways onto Tamarind Avenue. All driveways will be full movement driveways. Passenger vehicles and trucks may use any driveway. The driveways are proposed as 50 foot wide. The **Site Plan** is included as **Attachment 2**. A substantial portion of the passenger vehicle parking is located within the truck loading dock area. While the truck loading dock area is 180 feet in width, 69 feet will be taken up with passenger vehicle parking spaces for over ½ of the loading docks. This leaves a 111-foot drive aisle/dock loading space for the trucks and limits on-site truck/trailer parking.

The trip impacts were estimated using standard warehouse rates. **Table 3** from the report, included as **Attachment 3**, shows the trip impacts using standard warehouse rates and percentages of trucks per the Rialto Traffic Policy. Total daily trips are estimated at 2,297 PCE with the AM/PM peak hour being 197/206 PCE trips.

PCE conversion of trucks by axels is as contained in the CMP.

The traffic and intersection counts were collected in January and August of 2015, which is between 10-17 months old. Within the analysis, traffic numbers were “lifted” from the Renaissance Specific Plan Amendment. Additionally, signal coordination factors were applied to the interchange intersections. While this did change impacts, the overall change in fair share contributions was less than \$6,000. The City project to widen Alder Avenue from Base Line Road to Renaissance Parkway impacted traffic and made obtaining valid and/or more current traffic counts difficult. Classification counts are also from January of 2015 (18 months old). Traffic projections are imprecise at best and it appears a good faith effort was made to accurately project impacts and be consistent with other studies.

Analysis of the opening year (2017) plus cumulative projects indicated operational concerns at the following intersections:

- #3 – Tamarind Avenue at Base Line Road
- #4 – Alder Avenue at SR-210 Westbound Ramp

- #5 – Alder Avenue at SR-210 Eastbound Ramp
- #6 – Alder Avenue at Renaissance Parkway
- #7 – Alder Avenue at Walnut Avenue
- #8 – Alder Avenue at Base Line Road

All intersections operate at unacceptable level of service by 2035. Intersection #3 is identified as meeting signal warrants at existing traffic levels. It is also noted on Table 23 as being funded by the Nexus study (40% level).

All roadway segments operate at LOS D or better. Both Alder Avenue and Ayala Drive will be completed as 4-lane roadways prior to opening year and these improvements were considered in the overall impact. Base Line Road east of Alder Avenue is being constructed with another warehouse project that should be complete prior to opening of this project. Base Line Road west of Alder Avenue has no immediate plans for widening.

ANALYSIS/DISCUSSION:

This analysis is based on standard warehouse rates and the City truck splits. The TIA analyzed existing and forecast peak hour intersection operations to determine potential impacts on peak hour level of service. It used 10-17 month old traffic counts (January 2015) and lifted traffic numbers and coordination factors from the Renaissance Specific Plan Amendment. Recommended improvements at the I-210 ramps at Alder Avenue are consistent with recommendations from previous studies. The improvements at the ramps would require Caltrans approval. Widening of Alder Avenue from Base Line Road to Renaissance Parkway is under construction and will be complete prior to project opening date. Widening of Ayala Drive from Base Line Road to Renaissance Parkway has been awarded and construction should begin in the near future with completion prior to project opening. This project will be responsible for improvements adjacent to the site.

The project does show controlled truck access and there is a small waiting area on-site before encountering any gates. The control gates are at the entrance to the truck dock area and will affect passenger vehicle parking located in the dock area. As dock area access requires a turn after entering the site, the storage area will be limited to a single truck at each end of the dock area if the gates remain closed. Turning radius appears to be adequate but is very short and passenger vehicles may use the same driveways.

Table 23, included as **Attachment 4**, provides a summary of intersection improvements and cost estimates, descriptions of the improvements and existing funding sources for the impacted locations.

The TIA Mitigation Measures for intersection improvements are also shown in **Table 23**. Improvements for roadway segments are shown in **Table 25**, which is included as **Attachment 5**. The tables also present data on other funding sources, which are offsets to the fair share computations.

The report proposes to pay fair share of improvements as listed below and as shown in **Table 24 and 25**, which is included as **Attachment 5**.

- Pay fair share of eastbound thru lane and restriping on Base Line Road at Tamarind Avenue estimated at 0.8% or \$80.00
- Pay fair share of improvements at Alder Avenue and SR-210 westbound at 3% or \$10,727

- Pay fair share of improvements at Alder Avenue and SR-210 eastbound at 5.1% or \$14,325
 - Pay fair share of Alder Avenue at Renaissance Parkway 5.3% or \$15,221
 - Pay fair share of Alder Avenue at Walnut Avenue at 11.2% or \$1,120
 - Pay fair share of Alder Avenue at Base Line Road at 0.9% or \$3,280
 - Pay fair share of Alder Avenue segment improvements \$50,420
 - Pay fair share of Base Line Road segment improvements \$5,375
- The total fair share payments for intersections and segments totals \$100,548**

These fair share estimates are based on the amount of traffic this project adds to the total projected 2035 traffic.

Conclusion

The first version of the TIA for this project was provided to staff on January 25, 2016. Staff reviewed the draft TIA and has provided comments on its contents. On April 4, 2016, a revised TIA was provided and was reviewed with comments provided. On May 17, 2016 a third TIA was submitted, was reviewed and comments provided.

This project will complete roadway improvements adjacent to the project site. Widening of Alder Avenue to four lanes will be complete prior to the opening of this project. Widening of Ayala Drive from Base Line Road to Renaissance Parkway will also be complete prior to opening of this project. It is anticipated that widening of Base Line Road east of Alder Avenue will also be completed prior to opening year. Several other projects within the Renaissance Specific Plan area have obligations to fair share contributions to improvements at Alder Avenue and the SR-210 and for improvements at Alder Avenue/Renaissance Parkway listed in this TIA.

The project appears to be consistent with zoning and the specific plan and required improvements will be in place prior to opening. Mitigation is to the level required by the City.

RECOMMENDATIONS:

Staff requests that the Transportation Commission:

- Set final conditions and recommendations related to approval.
- Accept the proposed fair share calculations.
- Recommend approval to the City Council.

Attachments:

- 1) Project Location Map
- 2) Site Plan
- 3) Project Trip Generation
- 4) Summary of Intersection Improvements
- 5) Roadway Segment Improvements, Costs and Fair Share Contribution & Project Fair Share Intersection Traffic Contribution
- 6) Review Comments

Figure 1
Project Location Map

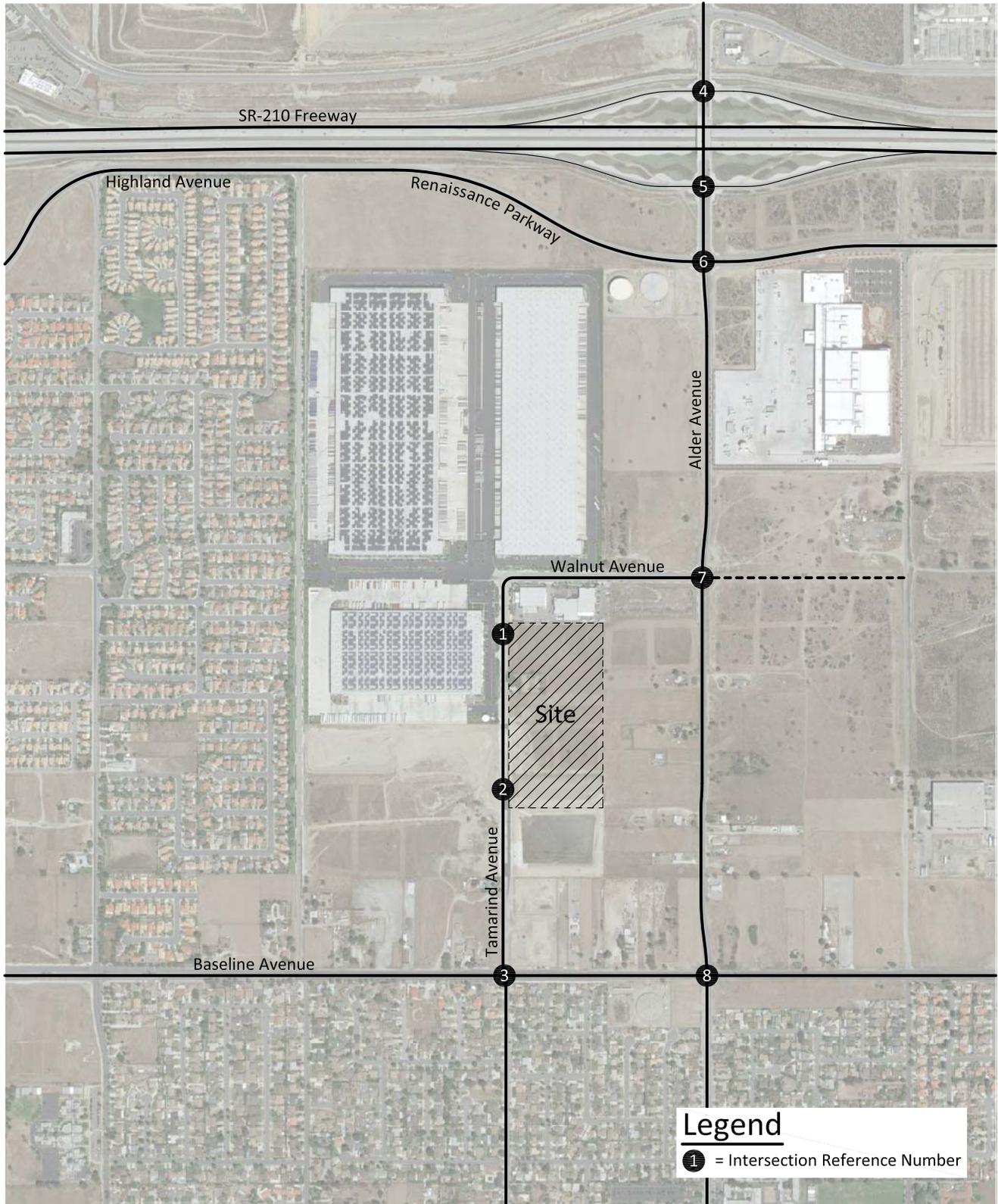


Figure 2
Site Plan

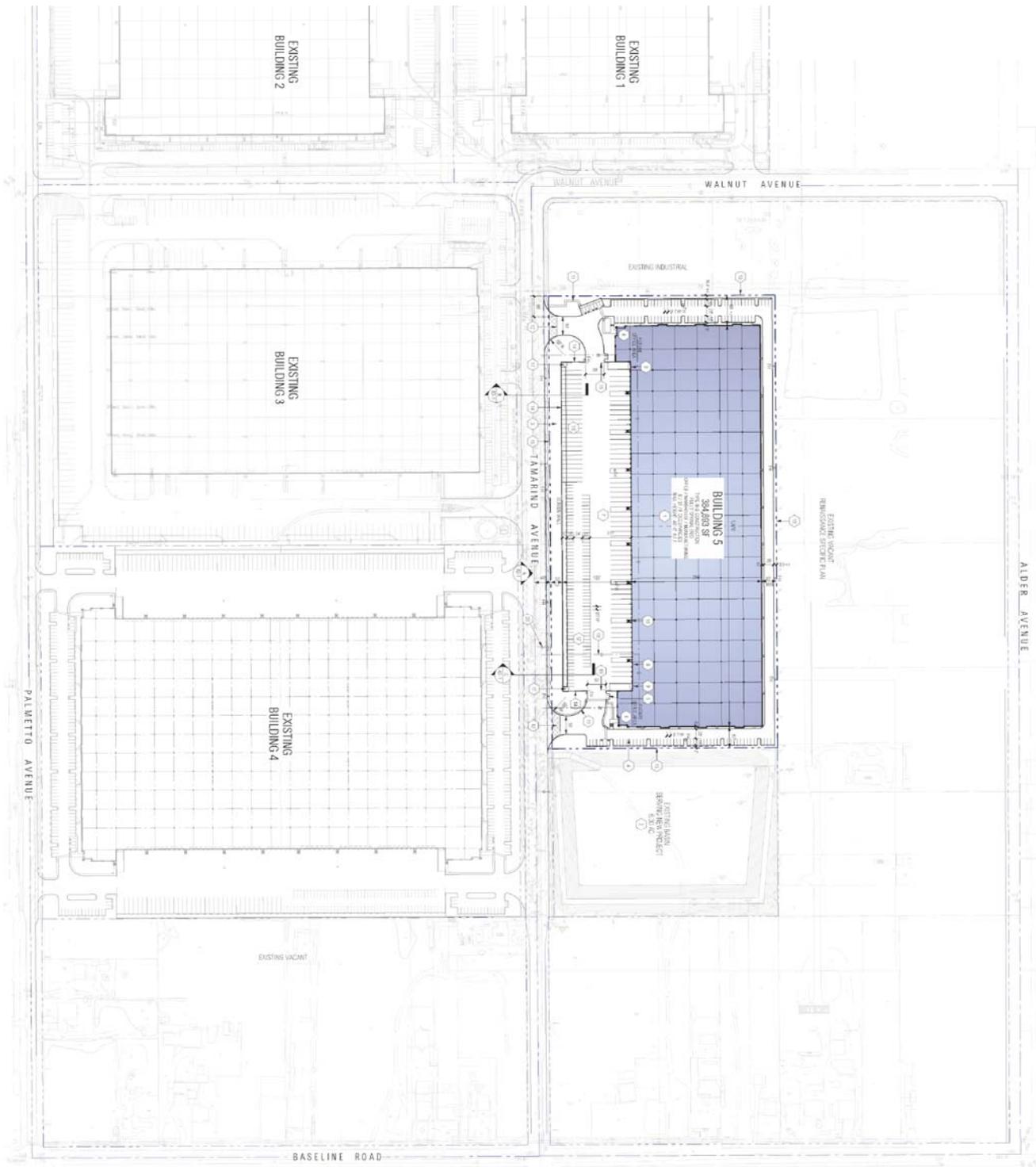


Table 3
Project Trip Generation¹

Descriptor	Quantity	Units ²	Type of Vehicle					Total
			Passenger Car	2 Axle Truck	3 Axle Truck	4+ Axle Truck	Total Trucks	
Land Use: Warehouse	384,893	TSF	60.0%	0.8%	11.2%	28.0%	40.0%	100%
Traffic Generation Rates in trips per TSF								
Daily			2.136	0.029	0.399	0.997	1.424	3.56
Morning Peak Hour			0.180	0.002	0.034	0.084	0.120	0.30
Evening Peak Hour			0.192	0.003	0.036	0.090	0.128	0.32
Traffic Generation in Vehicles								
Daily			822	11	153	384	548	1,370
Morning Peak Hour								
Inbound			55	1	10	26	37	92
Outbound			15	-	3	7	10	25
Total			70	1	13	33	47	117
Evening Peak Hour								
Inbound			18	-	3	9	12	30
Outbound			55	1	10	26	37	92
Total			73	1	13	35	49	122
Passenger Car Equivalent's (PCE'S) Factor ³								
			1.00	1.50	2.00	3.00		
Traffic Generation in PCE's								
Daily			822	17	306	1,152	1,475	2,297
Morning Peak Hour								
Inbound			55	2	20	78	100	155
Outbound			15	-	6	21	27	42
Total			70	2	26	99	127	197
Evening Peak Hour								
Inbound			18	-	6	27	33	51
Outbound			55	2	20	78	100	155
Total			73	2	26	105	133	206

¹ Source: Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, 2012, Land Use Code 150 and City of Rialto, Traffic Impact Analysis Report Guidelines and Requirements, December 2013.

² TSF = Thousand Square Feet

³ Passenger Car Equivalent factors are recommended by City of Rialto.

Table 23

Summary of Intersection Improvements and Costs

Intersection	Jurisdiction	Improvement	Total Cost	Included in Renaissance Specific Plan Fee Program	Unfunded Cost
Tamarind Avenue (NS) at: Baseline Avenue (EW) - #3	Rialto/ Fontana	Install Traffic Signal	Nexus ¹	-	Nexus ¹
		Construct Additional EB Through Lane	Nexus ¹	-	Nexus ¹
		Restripe to create SB Right Turn Lane and SB Through/Left Turn Lane	\$ 10,000	-	\$ 10,000
Alder Avenue (NS) at: SR-210 Freeway WB Ramps (EW) - #4	Caltrans ²	Restripe to Provide Additional NB Left Turn Lane	\$ 125,000	\$29,875	\$ 95,125
		Restripe to Provide Additional WB Left Turn Lane and WB Through/Right Turn Lane	\$ 125,000	\$29,875	\$ 95,125
		Widen Approach OC to Provide Two Dedicated SB Right Turn Lanes	\$ 197,184	\$29,875	\$ 167,309
SR-210 Freeway EB Ramps (EW) - #5	Caltrans ²	Construct EB Left Turn Lane	\$ 125,000	-	\$ 125,000
		Restripe EB Through/Left Turn Lane to Left/Through/Right Lane	\$ 125,000	\$94,125	\$ 30,875
		Restripe to Provide Additional SB Left Turn Lane	\$ 125,000	-	\$ 125,000
Renaissance Parkway (EW) - #6	Rialto	Construct Additional SB Left Turn Lane	\$ 72,898	-	\$ 72,898
		Construct Additional EB Left Turn Lane	\$ 72,898	-	\$ 72,898
		Restripe Existing SB Right Turn Lane to Through Lane	Nexus ¹	-	Nexus ¹
		Construct SB Right Turn Lane	\$ 72,898	-	\$ 72,898
Walnut Avenue (EW) -#7	Rialto	Construct WB Right Turn Lane and Modify Signal Phasing to Include WB Right Turn Overlap	\$ 182,245	\$113,750	\$ 68,495
		Construct Additional NB Through Lane	Nexus ¹	-	Nexus ¹
		Construct Additional SB Through Lane	Nexus ¹	-	Nexus ¹
Baseline Avenue (EW) -#8	Rialto/ Fontana	Restripe to Provide Additional EB Left Turn Lane	\$ 10,000	-	\$ 10,000
		Construct Additional NB Through Lane	Nexus ¹	-	Nexus ¹
		Construct Additional SB Through Lane	Nexus ¹	-	Nexus ¹
Baseline Avenue (EW) - #8	Rialto/ Fontana	Construct Additional EB Through Lane	Nexus ¹	-	Nexus ¹
		Construct Additional WB Through Lane	Nexus ¹	-	Nexus ¹
		Construct Additional NB Left Turn Lane	\$ 72,898	-	\$ 72,898
		Construct Additional SB Left Turn Lane	Nexus ¹	-	Nexus ¹
		Construct Additional WB Left Turn Lane	\$ 72,898	-	\$ 72,898
		Construct Additional EB Left Turn Lane	\$ 72,898	-	\$ 72,898
		Construct NB Right Turn Lane	\$ 72,898	-	\$ 72,898
		Construct EB Right Turn Lane	\$ 72,898	-	\$ 72,898
		Construct WB Right Turn Lane	Nexus ¹	-	Nexus ¹
		Total			\$ 1,607,613

¹ Improvement included within the 2011 San Bernardino Associated Governments (SANBAG) [Development Mitigation Nexus Study](#). Project applicant shall make the Development Impact Fee (DIF) payments to the City of Rialto upon issuance of building permit. The City of Rialto shall coordinate with SANBAG to ensure that the improvements are completed prior to 2035.

² Project applicant shall make fair share payments for these improvements to the City of Rialto. The City of Rialto shall coordinate with the California Department of Transportation to ensure that the improvements are completed by 2035.

Table 25

Roadway Segment Improvements, Cost, and Fair Share Contribution

Roadway	Jurisdiction	Segment		Miles	Added Lanes	Per Lane Per Mile Cost ¹	Total Cost	Included in SANBAG Nexus Study	Unfunded Cost	Project Fair Share	
		From	To							Percentage	Cost
Alder Avenue	Rialto	SR-210 Freeway	Renaissance Parkway	0.08	4	\$ 1,457,960	\$ 466,547	\$ -	\$ 466,547	5.4%	\$ 25,123
	Rialto	Renaissance Parkway	Walnut Avenue	0.40	4	\$ 1,457,960	\$ 2,332,736	\$ 2,044,444	\$ 288,292	8.7%	\$ 25,072
	Rialto	Walnut Avenue	Baseline Avenue	0.50	2	\$ 1,457,960	\$ 1,457,960	\$ 2,555,556	\$ -	1.6%	\$ -
	Fontana	Baseline Avenue	South of Baseline Avenue	0.06	2	\$ 1,457,960	\$ 174,955	\$ 162,240	\$ 12,715	1.8%	\$ 225
Baseline Avenue	Rialto/Fontana	West of Tamarind Avenue	Tamarind Avenue	0.25	2	\$ 1,457,960	\$ 728,980	\$ 750,000	\$ -	0.5%	\$ -
	Rialto/Fontana	Tamarind Avenue	Alder Avenue	0.16	4	\$ 1,457,960	\$ 933,094	\$ 480,000	\$ 432,074	0.4%	\$ 1,593
	Rialto/Fontana	Alder Avenue	East of Alder Avenue	0.09	3	\$ 1,457,960	\$ 393,649	\$ 270,000	\$ 123,649	0.4%	\$ -
	Rialto/Fontana	Alder Avenue	East of Alder Avenue	0.50	3	\$ 1,457,960	\$ 2,186,940	\$ 1,500,000	\$ 686,940	0.6%	\$ 3,782
Total							\$ 8,674,862		\$ 2,010,218		\$ 55,795

¹ Source: Renaissance Specific Plan Amendment Traffic Impact Analysis, LSA, December 3, 2015.

Table 24

Project Fair Share Intersection Traffic Contribution

Intersection	Jurisdiction	Total Cost	Peak Hour	Existing Traffic	Year 2035 (Buildout) with Project Traffic	Project Traffic	Total New Traffic	Project % of New Traffic	Project Cost Share
Tamarind Avenue (NS) at: Baseline Avenue (EW) - #3	Rialto/Fontana	\$ 10,000	Morning Evening	1,245 1,101	3,144 3,844	16 18	1,899 2,743	0.8% 0.7%	\$ 80
Alder Avenue (NS) at: SR-210 Freeway WB Ramps (EW) - #4	Caltrans ¹	\$ 357,559	Morning Evening	1,770 1,660	4,312 5,027	75 88	2,542 3,367	3.0% 2.6%	\$ 10,727
SR-210 Freeway EB Ramps (EW) - #5	Caltrans ¹	\$ 280,875	Morning Evening	1,721 1,786	4,846 5,380	159 167	3,125 3,594	5.1% 4.6%	\$ 14,325
Renaissance Parkway (EW) - #6	Rialto	\$ 287,189	Morning Evening	1,738 1,658	4,790 6,199	163 171	3,052 4,541	5.3% 3.8%	\$ 15,221
Walnut Avenue (EW) - #7	Rialto	\$ 10,000	Morning Evening	1,338 1,353	2,960 3,358	181 190	1,622 2,005	11.2% 9.5%	\$ 1,120
Baseline Avenue (EW) - #8	Rialto/Fontana	\$ 364,490	Morning Evening	2,389 2,291	5,126 6,192	24 26	2,737 3,901	0.9% 0.7%	\$ 3,280
Total		\$ 1,310,113							\$ 44,673

¹ Project applicant shall make fair share payments for these improvements to the City of Rialto. The City of Rialto shall coordinate with the California Department of Transportation to ensure that the improvements are completed by 2035.

February 2, 2016

Kunzman Associates, Inc.

1111 Town & Country Road, Suite 34

Orange, CA 92868

Attn: Chris Pylant

RE: Rialto Warehouse Development Prologis Park SR-210 Building 5 Project – East side of Tamarind north of Baseline – Proposed Traffic Impact Analysis Comments and Observations on Report Date December 2015

Mr. Pylant,

We have made a review of your firms TIA submitted January 14, 2016 on the above subject and offer the following comments for your consideration:

1. A quick check with the Planning Department indicates the project has not yet been to the Development Review Committee. While this does not affect the TIA, the developer needs to be aware that approving a larger building does not entitle them to construct such a building if they cannot meet the requirements of the Planning Department with respect to landscaping, setback, building undulations etc.
2. It appears the traffic counts at intersection 4 and 5 (Alder at the I-210 ramps in Appendix C) are over one year old (1-14-15). With Alder presently closed, it will not be possible to obtain current counts reflective of normal operations. Figure 6 and 7 appears to be based on these older counts. The City has studies with counts that show higher peak hour numbers than presented in this report. The Commission is aware of the other reports and may question the lower values for turning movements and impacts. It may also affect the fair share percentages to your disadvantage.
3. ADT for existing traffic shown in Figure 5 appears to follow comments on page 12 section B for existing volumes being adjusted by factoring. However, City does have actual counts taken March of 2015 from another local study that show in excess of 1,000 more trips along Alder between Walnut and Renaissance than your projections.
4. The above referenced study also has higher intersection counts than shown in your figures 6 and 7 for the peak hour movements at intersection. This may be related to your counts being taken in August when school is not in session whereas the previous study was done during a time school was in session.
5. Figure 13 page 25 is correct for the City of Rialto General Plan but fails to account for additional bikeways contained in the Renaissance Specific Plan (page 3-15 of the Renaissance Specific Plan). Both Walnut and Alder are shown as bikeways. Typical sections within the plan indicate Alder has striped on-street bikeways.
6. Table 4 page 42, lacks a map showing the location of the projects and has insufficient information to accurately locate projects. It is unknown when this information was obtained but there are additional projects that will likely be on line before 2017. Two separate trucking

yards on north locust, warehouses on the northeast and northwest corner of Walnut at Alder, Spiral mill pipe facility at Locust/Casmalia (northwest corner), Monster beverage warehouse (1.2 million square feet), hotel/fuel/food (northwest corner Alder/Renaissance), reuse of Solo Cup as Amazon distribution center. Perhaps some are in your listing but it is not clear which if any are being accounted for in your analysis.

7. Page 35 in discussion of 2035 build out analysis, we can offer no alternate method but do note that allocation based on current peak hour approach and departure numbers may not be entirely reflective of what is happening or likely traffic patterns. It will likely underestimate volumes at several intersections and omit several new intersections from consideration. As the Renaissance Specific Plan continues to build, it is redirecting traffic into and out of the area quite differently than current intersection approach volumes would indicate. Much of the area remains undeveloped or under development from what was vacant land or airport property that generated very little traffic. Also note that new roadways are constructed or under construction that will clearly change current traffic circulation and intersection volumes.
8. Table 8 on page 46 appears to have some issues. Consider Baseline between Tamarind and Alder. Figure 5 page 17 indicates existing traffic at 11,800. Two years of ambient growth should yield 12,276. This leaves only 624 trips ADT in this segment for all the proposed growth and development yet to occur. It seems low and more or less ignores that again per Figure 5, ADT on both the east and west side of this segment, traffic volumes are higher. Tamarind south is basically a residential street that ends more or less at Rialto Ave.
9. On many tables, there has been a factoring of capacity for segment analysis. Consider Table 10 page 48 in which Alder from Renaissance to Walnut is recommended for 5 lanes divided by means of factoring. In particular, a northbound extra lane is suggested. Is it not reasonable to assume that all the northbound traffic eventually returns southbound? If so, would the southbound not also require an extra lane? Assuming the majority of the traffic is based on growth and development rather than simply ambient growth, the development both attracts and generates the outbound traffic. The adjacent property owners see asymmetrical roadways as “unfair” in development costs and right of way acquisitions. To simply average ADT over all available lanes is not a reasonable solution or recommendation. Specific auxiliary turn lanes are a reasonable recommendation. With regard to through lanes it appears to ignore the fact that the recommended extra lane normally does not switch travel direction for inbound to outbound during the peak hours.
10. Figures 34 and 36 page 69 and 71 at intersection 7, seem to show no change in the eastbound leg of Walnut. This is noted because the left turn movement is projected at 247 in the PM peak hour which exceeds the 200 per hour threshold established by the City and would require a second left turn lane to accommodate this movement. It appears this may be needed by the opening year.
11. Page 77 Table 17 for Alder at Renaissance Parkway, the construction of a NB right turn lane is listed as a Nexus project. Reference is made to the 2011 list. The most current list is 2013 and while Alder and Renaissance are listed project, it is for 4 lanes on Alder and 4 lanes on Renaissance. No provisions exist for a dedicated right turn lane within the funding.
12. Page 77 Table 17 for Alder at Walnut. Westbound right turn lane is not within the Renaissance Specific Plan improvements. Unfortunately, west of Alder, Walnut is 64 feet curb to curb in an 88-foot right of way. East of Alder Walnut is only 40 feet between curbs in a 64-foot right of way. If additional lanes are needed, they should be identified and funding will need to come from development in the area.

13. Page 77 intersection #8 suggests a westbound right turn lane is within the Nexus study. The nexus study only provides for four thru lanes and does not include a dedicated right turn lane. Again, if needed, funding should be identified and fair share contributions made. As you may be aware, Alder between Baseline and Renaissance is currently under construction for the four lanes. In addition, Baseline from Laurel to Alder will be improved to two westbound lanes with the #2 lane becoming an exclusive right turn lane at Alder until Baseline west of Alder is widened (two lanes westbound in Renaissance and 3 lanes outside Renaissance and within Fontana).
14. Table 18 will require modification based on changes in table 17.
15. The City is working with Caltrans for improvements affecting the ramps and for striping changes on the Alder Ave. overcrossing of the I-210. It is yet unclear if signal split phasing or other timing changes will be allowed as is a lane or shoulder width exception to create required additional lanes. Should those negotiations fail and the bridge require widening; the total costs will be considerably higher as will the fair share.
16. It is unclear in the summary of improvement costs if the costs listed for additional lanes includes relocation of curb, gutter, sidewalk and signals as well as right of way or if it only covers pavement and striping. A little more detail is required to determine if additional right of way will be required and if all costs are included in the estimates. As an example, the Transportation Commission has been told the proposed trap right turn lane for Alder at eastbound I-210 is estimated at \$250,000 including the right of way, curb gutter sidewalk work, signal and pavement/pavement markings.

Overall, the TIA is reasonably complete and with a few modifications based on the above will be ready for presentation to the Transportation Commission. The Transportation Commission does require a full 30-day review after staff has completed its review and agenda preparations. The commission meets only once per month on the first Wednesday of the month. We can discuss further if needed and feel free to contact me by phone or e-mail. Once modifications are made, submit for continued action.

Cordially,

Gene R. Klatt

Consultant Engineer – Contract Staff

City of Rialto

909 421 4942

April 18, 2016

Kunzman Associates, Inc.

1111 Town & Country Road, Suite 34

Orange, CA 92868

Attn: Chris Pylant

RE: Rialto Warehouse Development Prologis Park SR-210 Building 5 Project – East side of Tamarind north of Baseline – Proposed Traffic Impact Analysis Comments and Observations on Report Resubmitted April 4, 2016

Mr. Pylant,

The revised TIA was submitted but did not contain any responses to the first review and seems to have changed format is several locations. In fact, the conclusions and entire evaluation has been redone. It is not so much a revised TIA as it is a completely new TIA with different assumptions and count numbers. Much of the text has been modified and the table and figures no longer match the first TIA. Most of the data within the tables has changed in both improvements and conclusions. We have made a review of your firms revised TIA submitted April 4, 2016 on the above subject and offer the following comments for your consideration:

1. A quick check with the Planning Department indicates the project has been for a preliminary review at Development Review Committee on February 10, 2016. While this does not affect the TIA, the developer needs to be aware that approving a larger building does not entitle them to construct such a building if they cannot meet the requirements of the Planning Department with respect to landscaping, setback, building undulations etc.
2. Page 5, existing plus project intersections, Alder at Baseline #8 is listed but #4 SR-210 at WB freeway ramps is no longer shown as in the first TIA. Why?
3. In the first TIA, the roadway segment on Alder between Renaissance and Walnut was listed as unacceptable for the existing plus project. In the resubmittal, it is not listed (page 5 item 2). Again, why?
4. Page 6 section 3 in the first TIA, Alder between Walnut and Baseline was included as deficient; it is deleted in the resubmittal. Again, why?
5. Page 6, section 3, intersections. In the first TIA, Alder at SR-210 WB ramps #4 was included but is omitted in the revisions. Why? In addition, Tamarind at Baseline #3 has been added in the revisions but was not included in the first TIA.
6. Page 6, section 4, now includes Alder from SR-210 to Renaissance Parkway and Baseline from what appears to be Tamarind to east of Alder (actual location difficult to determine).
7. Page 6, section 4 intersections. In the first TIA, these included #4, #5, #6, #7 and #8. However, in the revised TIA, it only includes #3 (new), #4 and #8. Again, what changed?
8. Page 10, section 2, Off-site improvements at intersection #4 says install traffic signal. However, a signal already exists. Intersection #4 is the westbound on ramp so there is no

eastbound thru lane. At the same intersection, it calls for a restripe for a SB right (it exists) and a SB thru/left but a left will be the wrong direction onto the westbound off ramp.

9. Page 10, section 2, intersection #5 it calls for a left, left/thru/right and dedicated right. Only two lanes exist on the ramp so is the project to add additional lanes on the ramp? The existing dedicated right turn lane does not have sufficient room for truck at present, how will dual right turns address truck turns when the current middle lane already is unable to make the right turn without crossing the painted median?
10. Page 11, lists entirely different recommendations than the first TIA. What new or different issues caused such a major change?
11. Page 16 D. traffic signal warrant analysis. It is stated that warrant #3 was used but it seems a strict reading of warrant #3 does not apply at Baseline and Tamarind. Were any of the other warrants checked?
12. Page 18, Table 1. Please check capacity. In the first TIA, the numbers were correct per City policy however, they seem to be incorrect in the resubmittal.
13. Page 19, Table 2 is very much changed from the first TIA with the majority of intersections along Alder much improved in overall delay. What changed?
14. Changes are noted in Figure 5 with most volumes being reduced except at the freeway interchange where they are higher by several thousand vehicles per day.
15. Page 36 Figure 17, Alder north of Renaissance should be 1.9. It was in the first TIA and NOM is less than 50 so if Alder south of Renaissance is 1.9 and less than 50 turn onto Renaissance east, the continuing northbound will still round to 1.9.
16. Page 43 section C in the first TIA, the intersection of Alder at the WB ramps with SR-210 #4 was listed but in the revised TIA they are not mentioned.
17. Page 44 subsection 3 see comment above.
18. Page 45 section 4 lists only intersections #3, #4, and #8 whereas the previous TIA also listed #5, #6 and #7. This seems a rather significant change.
19. On page 47 subsection 6 the previous TIA listed intersection #7 (Alder at Walnut) yet this one does not and there should be no change on Walnut numbers except to increase.
20. Page 51, Table 5 the capacity numbers appear to be incorrect.
21. Same comment as above for Table 6, Table 7, Table 8, Table 9, Table 10 and Table 11.
22. Table 11 page 58 compared to Table 11 page 49 in the first TIA seems to show different delay for existing plus project. However, Figure 5, page 21 in the revised and page 17 in the first TIA seem to show higher counts near the freeway and a major reduction along Walnut west of Alder, which does not equate to the changes in delay.
23. Comparing Table 15 new to Table 13 old shows similar results.
24. Figure 14 page 30 is incorrect for the Renaissance Specific Plan (page 3-15 of the Renaissance Specific Plan). Baseline is not a bike route on either plan. Ayala, Lieske and Fitzgerald likewise are not bikeways in the 2010 approved Specific Plan
25. Table 4 page 50, should reference the map showing the location of the projects which is now in appendix F. This is mentioned in the text on page 40 but the table is on page 50 and has no reference to the map. There are also additional projects that will likely be on line before 2017. Two separate trucking yards on north locust, warehouses on the northeast and northwest corner of Walnut at Alder, Spiral mill pipe facility at Locust/Casmalia (northwest corner), Monster beverage warehouse (1.2 million square feet), hotel/fuel/food (northwest corner Alder/Renaissance), reuse of Solo Cup as Amazon distribution center. Information listed

seems to be drawn from December 3, 2015 LSA report. However, as noted above, much has been added and more is added each day.

26. Figures 36 and 40 page 84 and 88 at intersection 7, have changed from figure 34 and 36 in the old report. While the first TIA projected 247 left turns at this intersection, it is now projecting 167 and 191. This seems odd, as this project will be adding traffic. We understand you have used projections from the LSA specific plan update but it seems to imply that the existing traffic is somehow disappearing. That is, existing counts are discarded in favor of projected counts. It also is based on nearby projects that have not been included such as the Amazon Distribution Center. This is noted because the left turn movement was projected at 247 in the PM peak hour which exceeds the 200 per hour threshold established by the City and would require a second left turn lane to accommodate this movement. Figure 40 is still projecting 191, which is very close to the 200 number that would require the dual left turn pocket. It appears this may be needed by the opening year.
27. Page 77 Table 17 for Alder at Renaissance Parkway #6, the construction of a NB right turn lane was listed in the old TIA. Table 23 page 95 in the new TIA no longer lists this as an improvement. In fact, the table is more or less completely different from what was contained in the first TIA.
28. It also appears from Table 23 that at Alder and Renaissance, \$72,898 has been allocated for a southbound right turn lane as the existing right turn lane is converted to a thru lane and a second southbound left turn lane is to be installed. Would not these extra lanes require right of way? There is no mention of additional right of way for the new southbound right turn lane.
29. Page 95 Table 23 for Alder at Walnut. A second eastbound left turn lane may not fit within existing curb separation. Unfortunately, west of Alder, Walnut is 64 feet curb to curb in an 88-foot right of way. East of Alder Walnut is only 40 feet between curbs in a 64-foot right of way. If additional lanes are needed, they should be identified and funding will need to come from development in the area. It is anticipated that eastbound will need dual lefts, one thru and one right turn lane as well as two westbound lanes. Again, what if any provision is made for additional right of way and removal/reconstruction of the improvements?
30. The City is working with Caltrans for improvements affecting the ramps and for striping changes on the Alder Ave. overcrossing of the I-210. It is yet unclear if signal split phasing or other timing changes will be allowed as is a lane or shoulder width exception to create required additional lanes. Should those negotiations fail and the bridge require widening; the total costs will be considerably higher as will the fair share.
31. It is unclear in the summary of improvement costs if the costs listed for additional lanes includes relocation of curb, gutter, sidewalk and signals as well as right of way or if it only covers pavement and striping. A little more detail is required to determine if additional right of way will be required and if all costs are included in the estimates. As an example, the Transportation Commission has been told the proposed trap right turn lane for Alder at eastbound I-210 is estimated at \$250,000 including the right of way, curb gutter sidewalk work, signal and pavement/pavement markings.

Overall, it appears the TIA was recalculated and changed substantially from the first submittal. There was no response to the first set of observations and no indication of what changes were made within the original documents or what conclusions were changed or why. The above comments and

questions address what changes the City discovered in the revised document but may or may not reflect all of the changes that have been made. If you can provide responses to the above and describe what other changes that have been made between the two documents, we can perhaps proceed with a presentation to the Transportation Commission. The Transportation Commission does require a full 30-day review **after** staff has completed its review and agenda preparations. The commission meets only once per month on the first Wednesday of the month. We can discuss further if needed and feel free to contact me by phone or e-mail. Once modifications are made, submit for continued action.

Cordially,

Gene R. Klatt

Consultant Engineer – Contract Staff

City of Rialto

909 421 4942

May 24, 2016

Kunzman Associates, Inc.

1111 Town & Country Road, Suite 34

Orange, CA 92868

Attn: Chris Pylant

RE: Rialto Warehouse Development Prologis Park SR-210 Building 5 Project – East side of Tamarind north of Baseline – Proposed Traffic Impact Analysis Comments and Observations on Report Resubmitted May 17, 2016

Mr. Pylant,

The revised third TIA was submitted and again seems to have changed format in several locations. It is not so much a revised TIA as it is a completely new TIA with different assumptions and count numbers. Much of the text has been modified and the table and figures no longer match the second TIA. Most of the data within the tables has changed in both improvements and conclusions. We have made a review of your firm's revised TIA submitted May 17, 2016 on the above subject and offer the following comments for your consideration:

1. A quick check with the Planning Department indicates the project has been for a preliminary review at Development Review Committee on February 10, 2016. While this does not affect the TIA, the developer needs to be aware that approving a larger building does not entitle them to construct such a building if they cannot meet the requirements of the Planning Department with respect to landscaping, setback, building undulations etc.
2. There seems to have been a misunderstanding concerning the use of the Renaissance Specific Plan Amendment data. While the Transportation Commission accepted the TIA for the amendment, it is only a part of the overall Specific Plan Amendment, which has not been approved. In addition, the TIA was a program level document, not a project level document. In response to the original questions from the City, it has been stated that traffic volumes were lifted from the RSPA TIA along with traffic signal coordination factors and applied to the interchange ramp intersections as well as other intersections and segments. This resulted in lesser impacts at several locations, both intersections and segments. What was discussed was that the Commission has seen different numbers (typically higher) and that even the RSPA had higher numbers than presented in the first two TIA's for this project at several locations. The direction was to use the highest numbers available, which would represent the worst-case conditions. We apologize if that was not made completely clear in discussions.
3. It is further stated in the response memo that mitigations have been selected to be consistent with the RSPATIA. Please understand that the RSPA TIA was a program level document that relied on underlying land use to estimate potential future impacts. As projects develop in the area, the FAR's change, the land use may change to any of the permitted uses, there may be increases in FAR's based on special improvements being selected and other changes in the traffic generated. The project specific TIA is designed to address these in a much more

precise manner and to further refine the required improvements. Rather than using acreage as a basis, the actual size of the building is used to project traffic. Therefore using the RSPATIA as the basis for proposed or required improvements may be both inaccurate and incorrect once a project specific TIA is available.

4. In the response memo, the response given for comment 9 is that the TIA calls for Alder to be widened to 8 lanes. It is assumed that this refers to the footnote 3 in Table 11 on page 60 along with the 8D designation. This is far from clear in the text of the TIA. It is also noted that in the tables, Alder is 8 lanes divided to Renaissance, 6 lanes divided to Walnut and 4 lanes divided to Baseline and 2 lanes divided south of Baseline. Normally, lane losses and not considered in such short reaches as the transition to fewer lanes increases congestion. Additionally, the same original question still applies. The off-site improvements are listed as construct a left turn, convert the existing left thru/left to a thru/left/right and retain the existing right (the lane remains) as you propose constructing a third lane on the eastbound off-ramp. The \$250,000 is listed for reconfiguring existing lanes and a southbound left turn lane (\$125,000 each). Widening and construction new lanes on the ramp and on Alder south of the SR-210 near the ramps may well exceed the \$125,000.
5. Page 52, just before the tables begin, it appears that the Year 2035 with Project section has been dropped from the report and is not in the text which begins again on page 97.
6. Response to comment 26 states that City staff directed the use of RSPATIA numbers. In the discussion of comment 2 above, it is explained that there must have been a misunderstanding on what was said. There is a difference between program level analysis and project level analysis and a wholesale substitution of a less accurate traffic projection should never be assumed.
7. Response to comment 27 again suggests that a program level traffic projection would supersede a project level analysis and that mitigations would be determined from the RSPATIA, which is presently only a portion of the EIR of an unapproved amendment.
8. Response to comment 28 again suggests that a broad look at the funding done in the RSPATIA would identify things that may only become apparent with a project level document. The funding in the RSPATIA is not collected from anyone, it is funding that is collected at the project level and serves only as an indication of the approximate magnitude of improvements needed.
9. Response to comment 31 again attempts to rely on the RSPATIA. As discussed in the first set of questions, a project specific TIA established the \$250,000 for a dedicated right turn lane at the interchange and did include necessary right of way, signal relocation, design, coordination with Caltrans, permits and all costs associated with the proposed improvement. The RSPATIA never attempted that level of cost estimation.
10. What conversion table was used to obtain LOS from V/C ratios? For example, table 11 in the first report had V/C=1.37 and LOS F while in the third report in the same table, the V/C increased to 1.59 yet the LOS is listed as E. With improvements, the second TIA had V/C = 0.69 for LOS E but in the third TIA at the same location, the V/C = 0.79 yet the LOS now is C. Clearly, a different V/C conversion is being used. Please provide the table and justification for the change.

Overall, it appears the TIA was recalculated and changed significantly from the second submittal based on assumptions made using the RSPATIA. The above comments address what changes the City discovered in the revised document but may or may not reflect all of the changes that have been made. It is noted that the difference between the second and third TIA mitigation costs are relatively

close in overall costs. It would appear that perhaps some of the original impacts may indeed remain but the City realizes that traffic projections are not very precise and actual traffic impacts may be far worse than or perhaps not as bad as projections. With that in mind, we can proceed with a presentation to the Transportation Commission. The Transportation Commission does require a full 30-day review **after** staff has completed its review and agenda preparations. The commission meets only once per month on the first Wednesday of the month. Please prepare 10 copies, both print and electronic and submit. We can provide them to the Transportation Commissioners at their June meeting for review and discussion at the July meeting. In the meantime, we can address the above issues as necessary.

Cordially,

Gene R. Klatt

Consultant Engineer – Contract Staff

City of Rialto

909 421 4942

CITY OF RIALTO

TRANSPORTATION COMMISSION STAFF REPORT For Commission Meeting of July 6, 2016

TO:	Chair and Members of the Transportation Commission
FROM:	Robert G. Eisenbeisz, P.E., Public Works Director/City Engineer
SUBJECT:	Traffic Impact Analysis – I-210 Logistic Center IV Warehouse Project At the Northeast corner of Alder and Walnut Avenues.
DATE:	June 6, 2016

BACKGROUND:

The proposed I-210 Logistic Center IV Warehouse (Project) is located at the northeast corner of Alder Avenue and Walnut Avenue within the Renaissance Specific Plan. The **Vicinity Map** is included as **Attachment 1**.

The Project proposes the construction of a 431,265 square foot warehouse distribution facility including internal office area.

The site will have two right in/right out driveways onto Alder Avenue, two full access driveways onto Laurel Avenue and one full access driveway onto Walnut Avenue. As proposed, the northerly driveways onto Alder Avenue and Laurel Avenue will be truck driveways. Passenger vehicles may use any driveway. The driveways are proposed as 50 foot for the northerly truck driveway on Laurel Avenue, 40-foot for the northerly truck driveway onto Alder Avenue and 30-foot for all remaining driveways. The **Site Plan** is included as **Attachment 2**. The passenger car driveway onto Walnut Avenue provides access for southbound Alder Avenue passenger car traffic.

The trip impacts were estimated using standard warehouse rates. **Table 3 – Summary of Project Trip Generation**, included as **Attachment 3**, shows the trip impacts using standard warehouse rates and percentages of trucks per the Rialto Traffic Policy. Total daily trips are estimated at 2,573 PCE with the AM/PM peak hour being 216/231 PCE trips.

PCE conversion of trucks by axels is as contained in the CMP.

The traffic and intersection counts were collected in March of 2015, which is 16 months old. Within the analysis, traffic numbers were adjusted from the March 2015 counts by adding 2% per year. The City project to widen Alder Avenue from Base Line Road to Renaissance Parkway impacted traffic and made obtaining valid and/or more current traffic counts difficult. Classification counts are from October 2015 (9 months old). Traffic projections are imprecise at best and it appears a good faith effort was made to accurately project impacts and be consistent with other studies.

Analysis of the opening year (2017) plus cumulative projects is shown on **Table 11 – Summary of Intersection Operation**, included as **Attachment 4**, and indicated operational concerns at the following intersections:

- #1 – Alder Avenue at SR-210 Westbound Ramp

- #2 – Alder Avenue at SR-210 Eastbound Ramp
- #3 – Alder Avenue at Renaissance Parkway
- #5 – Alder Avenue at Base Line Road

All roadway segments operate at LOS D or better. Both Alder Avenue and Ayala Drive will be completed as 4-lane roadways prior to opening year and these improvements were considered in the overall impact. Base Line Road east of Alder Avenue is being constructed with another warehouse project that should be complete prior to opening of this project. Base Line Road west of Alder Avenue has no immediate plans for widening.

ANALYSIS/DISCUSSION:

This analysis is based on standard warehouse rates and the City truck splits. The TIA analyzed existing and forecast peak hour intersection operations to determine potential impacts on peak hour level of service. It used 16 month old traffic counts (March 2015) and adjusted traffic count numbers by addition of 2% growth per year from the date of counts. Recommended improvements at the SR-210 ramps at Alder Avenue are partially consistent with recommendations from previous studies. That is, they recommend improvements on the westbound off-ramp that is consistent with other studies but fail to mention the dual northbound left to the westbound on-ramp. It also fails to mention the improvements to the eastbound off-ramps. It also fails to mention improvement at Ayala Drive and SR-210 ramps that would appear to be needed based on **Figure 19 – Opening Year 2017 Cumulative Plus Project Traffic Volumes**, included as **Attachment 5**, and the projected traffic by 2017. The improvements at the ramps would require Caltrans approval. Widening of Alder Avenue from Base Line Road to Renaissance Parkway is under construction and will be complete prior to project opening date. Widening of Ayala Drive from Base Line Road to Renaissance Parkway has been awarded and construction has begun with completion prior to project opening. This project will be responsible for improvements adjacent to the site.

The project does show controlled truck access and there is a small waiting area on-site before encountering any gates. The control gates are at the entrance to the truck dock area and appears to provide for 4 trucks waiting on-site in front of the gates. It appears the primary truck entrance will be from Laurel Avenue with the primary exit onto Alder Avenue.

Table 15 – Traffic Impact Mitigation Fair Share Cost, included as **Attachment 6**, provides a summary of cost estimates. Descriptions of the improvements is on **Page 49 and 50, included as Attachment 7**. It should be noted that this report was completed and submitted prior to the presentation on the SR-210/Alder Avenue interchange that was made at the June 1, 2016 Transportation Commission meeting. The recommended improvements are not in accordance with previous studies for what is required at both Alder Avenue and Ayala Drive interchanges with SR-210 and fails to mention additional improvements at Alder Avenue/Renaissance Parkway and Alder Avenue/Base Line Road. Notes in recommendations for intersections #1, #2, and #3 all indicate the mitigations will not bring the intersections to LOS D or better. The notation does indicate that the proposed improvements should improve LOS sufficient only to off-set project induced lowering of LOS.

The report proposes to pay fair share of improvements as listed below and as shown in **Table 14 and 15** included as **Attachment 8**.

- Pay fair share of improvements at Alder Avenue and I-210 westbound at 4.8% or \$2,400
- Pay fair share of improvements at Alder Avenue and I-210 eastbound at 7.8% or \$15,598
- Pay fair share of Alder Avenue at Renaissance Parkway 7.6% or \$1,910

- Pay fair share of Alder Avenue at Base Line Road at 3.3% or \$3,601

The total fair share payments for intersections and segments totals \$23,509.

These fair share estimates are based on only the listed improvements which do not address all the concerns at the intersections. The fair share amount is based on the amount of traffic this project adds to the total projected 2035 traffic.

Conclusion

The first version of the TIA for this Project was provided to staff on April 27, 2016. Staff reviewed the draft TIA and has provided comments on its contents. On May 18, 2016, a revised TIA was provided and was reviewed with comments provided. On May 31, 2016 a third TIA was submitted, was reviewed and comments provided.

This project will complete roadway improvements adjacent to the project site. Widening of Alder Avenue to four lanes will be complete prior to the opening of this project. Widening of Ayala Drive from Base Line Road to Renaissance Parkway will also be complete prior to opening of this project. It is anticipated that widening of Base Line Road east of Alder Avenue will also be completed prior to opening year. Several other projects within the Renaissance Specific Plan area have obligations to fair share contributions to improvements at Alder Avenue and the SR-210 and for improvements at Alder Avenue/ Renaissance Parkway listed in this TIA. This TIA did not list all required improvements nor does it submit a fair share calculation for all necessary improvements.

The project is consistent with zoning and the specific plan and required improvements will be in place prior to opening. Mitigation is not to the level required by the City.

RECOMMENDATIONS:

Staff requests that the Transportation Commission:

- Set final conditions and recommendations related to approval.
- Accept the proposed fair share calculations.
- Recommend approval to the City Council.

Attachments

- 1) Vicinity Map
- 2) Site Plan
- 3) Summary of Project Trip Generation
- 4) Summary of Intersection Operation Cumulative Plus Project
- 5) Opening Year 2017 Cumulative Plus Project Traffic Volumes
- 6) Traffic Impact Mitigation Fair Share Cost
- 7) Mitigation Measures
- 8) Summary of Project Fair Share for Mitigation Measures & Traffic Impact Mitigation Fair Share Cost
- 9) Comments



NOT TO SCALE

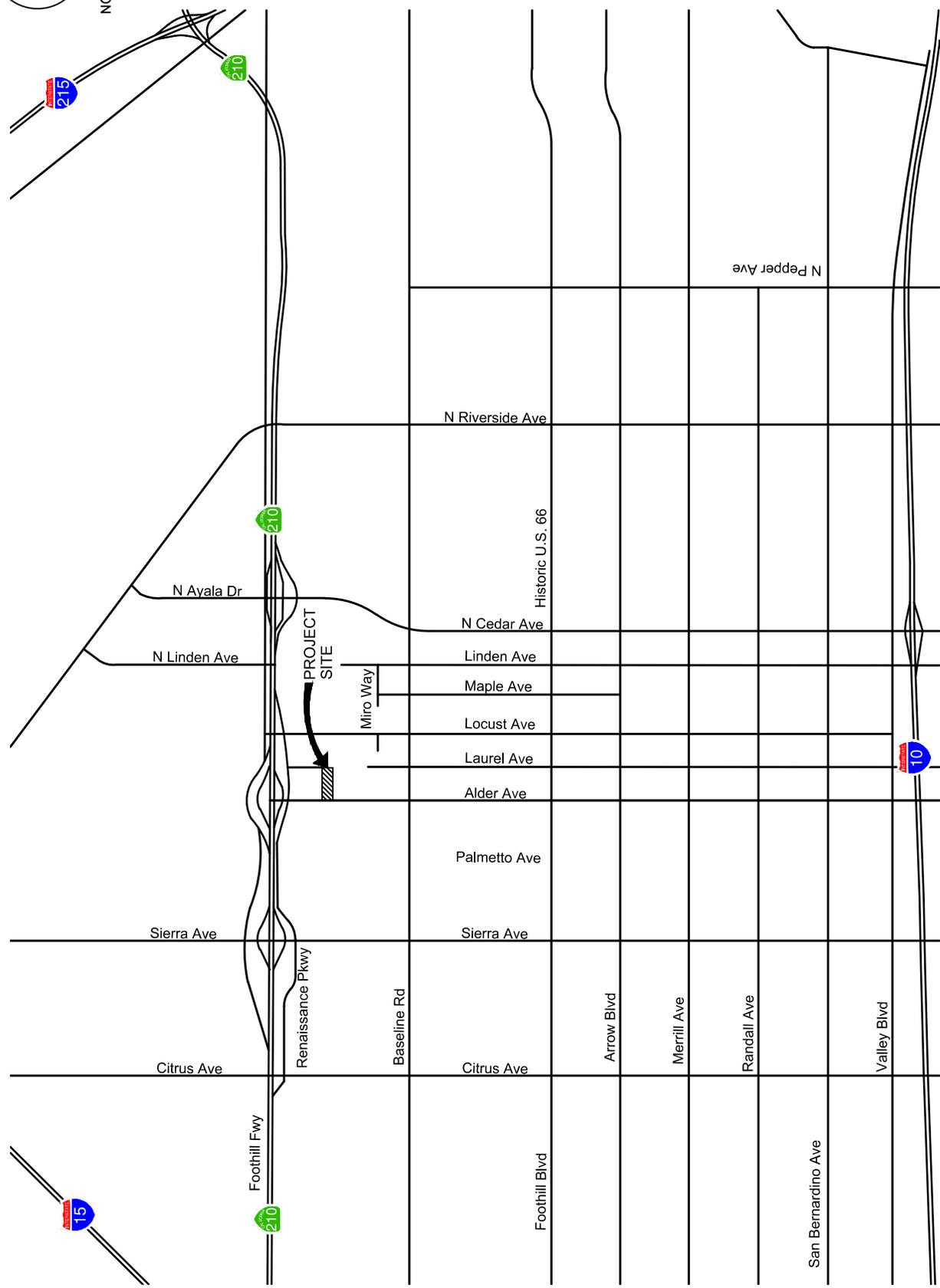


FIGURE 1
VICINITY MAP



NOT TO SCALE

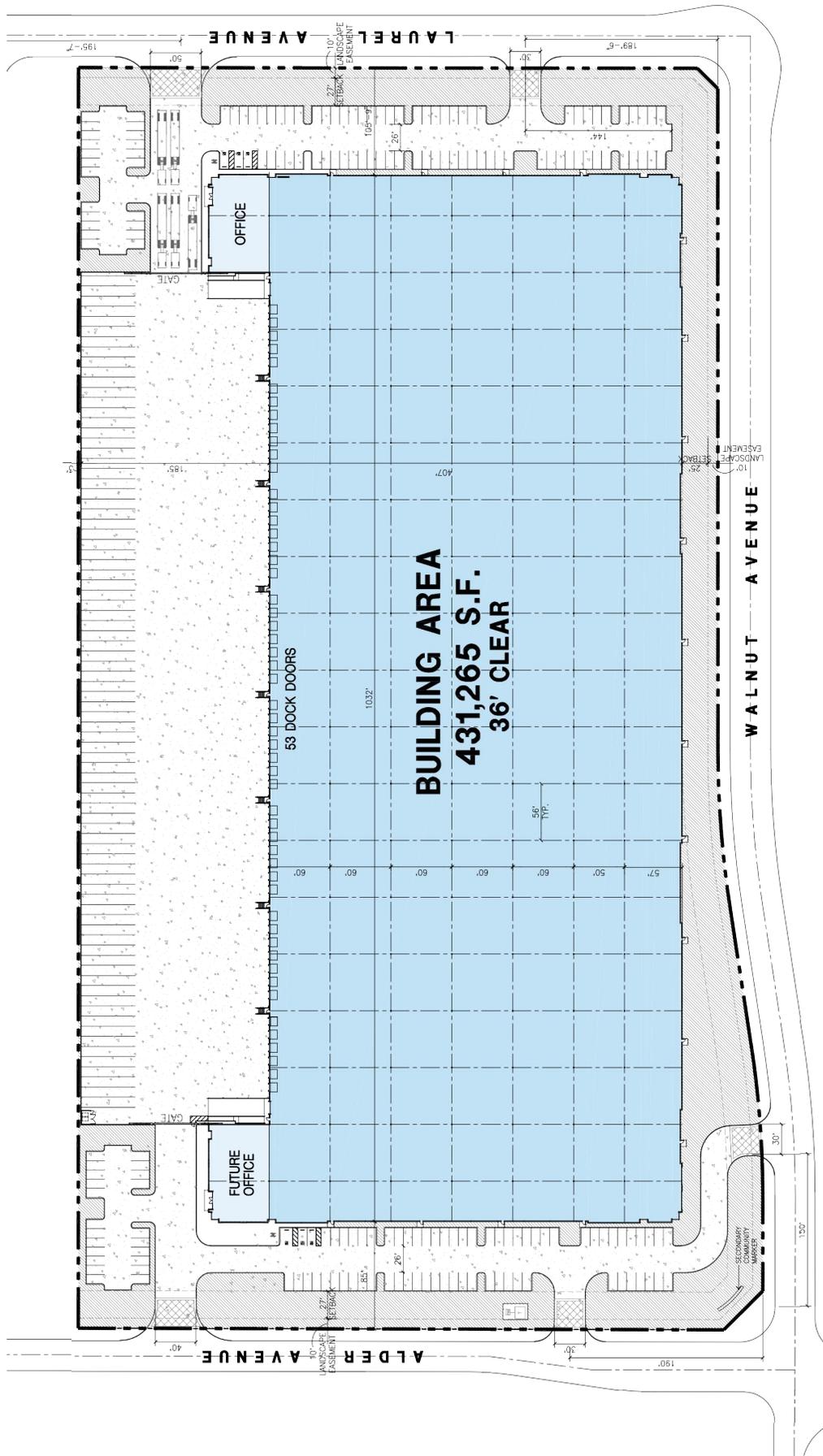


FIGURE 2
SITE PLAN
SOURCE: HFA Architecture

TABLE 3
SUMMARY OF PROJECT TRIP GENERATION
I-210 LOGISTICS CENTER IV

TRIP GENERATION RATES ¹

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	150	KSF	3,560	0.237	0.063	0.300	0.080	0.240	0.320

PROJECT TRIP GENERATION

Project Land Use		Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Warehousing		431.265	KSF	1,535	102	27	129	35	104	139
Passenger Vehicles	60.00%			921	61	16	77	21	62	83
Trucks	40.00%			614	41	11	52	14	42	56

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

Vehicle Type	Vehicle Mix ²	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	60.0%	921	1.0	921	61	16	77	21	62	83
2-Axle Trucks	0.8%	12	1.5	18	1	0	1	0	1	1
3-Axle Trucks	11.2%	172	2.0	344	23	6	29	8	23	31
4+ Axle Trucks	28.0%	430	3.0	1,290	86	23	109	29	87	116
Total Truck PCE Trips				1,652	110	29	139	37	111	148
Total Project PCE Trips				2,573	171	45	216	58	173	231

¹ Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition

² Source: City of Rialto Traffic Impact Analysis Report Guidelines and Requirements, December, 2013

PCE = Passenger Car Equivalent

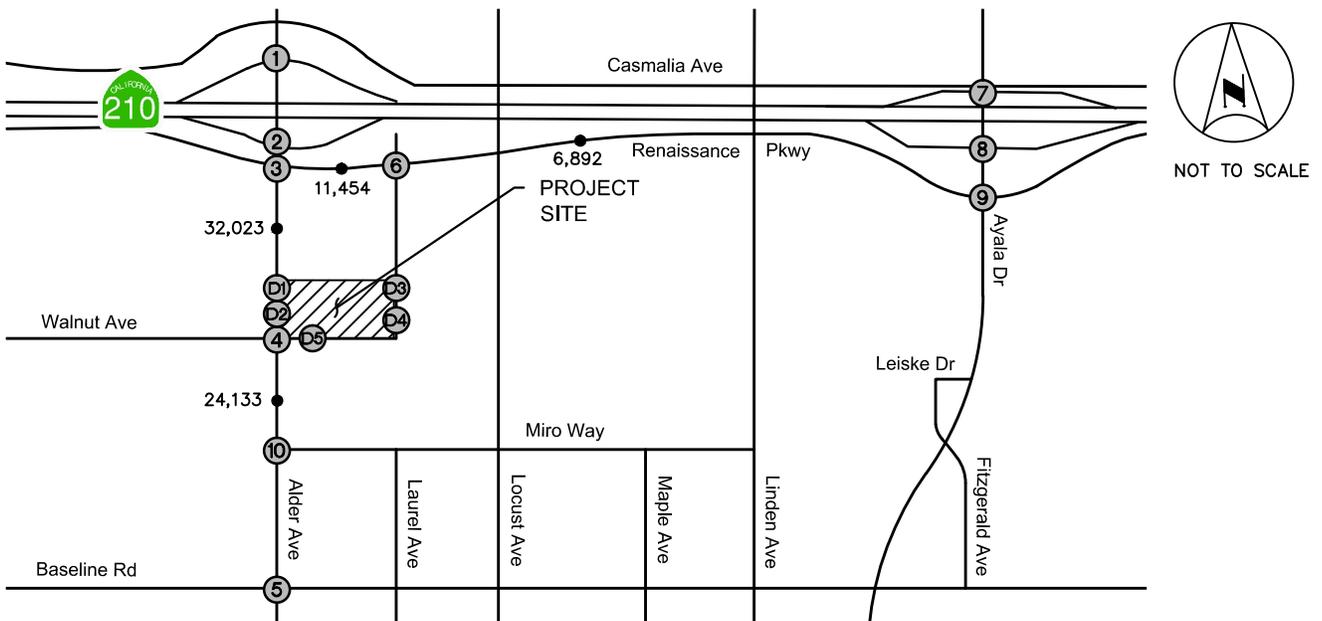
KSF = Thousand Square Feet

TABLE 11
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2017 CUMULATIVE PLUS PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Impact	Impact Sig?	Without Project		With Project		Project Impact	Impact Sig?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	Alder Avenue at SR-210 Westbound Ramps	S	157.9	F	176.2	F	18.3	Yes	279.5	F	305.2	F	25.7	Yes
2	Alder Avenue at SR-210 Eastbound Ramps	S	169.9	F	187.8	F	17.9	Yes	225.4	F	260.7	F	35.3	Yes
3	Alder Avenue at Renaissance Parkway	S	182.6	F	195.4	F	12.8	Yes	72.1	E	87.1	F	15.0	Yes
4	Alder Avenue at Walnut Avenue	S	49.2	D	53.1	D	3.9	No	22.7	C	28.4	C	5.7	No
5	Alder Avenue at Baseline Road	S	94.8	F	96.9	F	2.1	Yes	63.2	E	65.5	E	2.3	Yes
6	Laurel Avenue at Renaissance Parkway	S	4.4	A	5.4	A	1.0	No	4.7	A	5.8	A	1.1	No
7	Ayala Drive at SR-210 Westbound Ramps	S	31.2	C	31.3	C	0.1	No	17.6	B	17.6	B	0.0	No
8	Ayala Drive at SR-210 Eastbound Ramps	S	11.9	B	11.9	B	0.0	No	41.5	D	42.0	D	0.5	No
9	Ayala Drive at Renaissance Parkway	S	20.6	C	20.6	C	0.0	No	23.9	C	24.1	C	0.2	No
10	Alder Avenue at Miro Way	S	6.7	A	6.9	A	0.2	No	7.9	A	7.9	A	0.0	No
D1	Alder Avenue at North Driveway	U	N/A	-	16.2	C	N/A	-	N/A	-	20.5	C	N/A	-
D2	Alder Avenue at South Driveway	U	N/A	-	16.2	C	N/A	-	N/A	-	16.0	C	N/A	-
D3	Laurel Avenue at North Driveway	U	N/A	-	10.0	A	N/A	-	N/A	-	9.3	A	N/A	-
D4	Laurel Avenue at South Driveway	U	N/A	-	9.7	A	N/A	-	N/A	-	9.3	A	N/A	-
D5	Walnut Avenue Driveway	U	N/A	-	9.1	A	N/A	-	N/A	-	9.2	A	N/A	-

Notes:

- Bold and shaded values indicate intersections operating at LOS E or F, or indicate a significant impact to the intersection per City standards.
- Delay values are based on the methodology outlined in the 2010 Highway Capacity Manual.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst movement.



1. Alder Ave at SR-210 WB Ramps	2. Alder Ave at SR-210 EB Ramps	3. Alder Ave at Renaissance Pkwy	4. Alder Ave at Walnut Ave	5. Alder Ave at Baseline Rd
6. Laurel Ave at Renaissance Pkwy	7. Ayala Dr at SR-210 WB Ramps	8. Ayala Dr at SR-210 EB Ramps	9. Ayala Dr at Renaissance Pkwy	10. Alder Ave at Miro Way
D1. Alder Ave at North Driveway	D2. Alder Avenue at South Driveway	D3. Laurel Avenue at North Driveway	D4. Laurel Avenue at South Driveway	D5. Walnut Avenue Driveway

LEGEND:

- = Study Intersection
- = Future Road
- = Average Daily Traffic Volume
- XXXX = Average Daily Traffic Volume
- XX/YY = AM/PM Peak Hour Turning Movement Volumes

FIGURE 19
OPENING YEAR 2017 CUMULATIVE PLUS PROJECT
TRAFFIC VOLUMES



TABLE 15
TRAFFIC IMPACT MITIGATION FAIR SHARE COST TABLE

Alder Avenue at SR-210 WB Ramps (Included in Renaissance Specific Plan Fee Program)	Unit Cost	Quantity	Total
Restripe WB shared T/R lane to shared L/T/R lane	\$ 50,000	1	\$ 50,000
Project Fair Share percentage ¹			4.8%
Project Cost			\$ 2,400
Alder Avenue at SR-210 EB Ramps (Include in Renaissance Specific Plan Fee Program)			
Add Dedicated NB Right-Turn Lane	\$ 200,000	1	\$ 200,000
Project Fair Share percentage ¹			7.8%
Project Cost			\$ 15,598
Alder Avenue at Renaissance Parkway (Included in Renaissance Specific Plan Fee Program)			
Convert SB Right-Turn Lane to Shared Thru-Right Lane	\$ 25,000	1	\$ 25,000
Project Fair Share percentage ¹			7.6%
Project Cost			\$ 1,910
Alder Avenue at Baseline Road (Included in the DIF, subject to reimbursement)			
Provide 2nd WB Through Lane	\$ 108,800	1	\$ 108,800
Project Fair Share percentage ¹			3.3%
Project Cost			\$ 3,601
Total Project Cost			\$ 23,509
¹ Higher of AM or PM project fair share percentage			

IV. MITIGATION MEASURES

A. Intersection Improvements

Based on the impact criteria in the City's *Traffic Impact Analysis Report Guidelines and Requirements* (Exhibit F), the project-related impact would be considered significant at the following intersections, and project mitigation is required:

- #1 – Alder Avenue at SR-210 Westbound Ramps
- #2 – Alder Avenue at SR-210 Eastbound Ramps
- #3 – Alder Avenue at Renaissance Parkway
- #5 – Alder Avenue at Baseline Road

Implementation of the following improvement would mitigate the project impact:

#1 – Alder Avenue at SR-210 Westbound Ramps: Re-stripe the westbound approach to change the combined through/right lane to a combined left/through/right lane, to better accommodate the higher westbound left-turn volume. Although the intersection would continue to operate at LOS F, this re-striping would provide an improvement in overall intersection delay, and would more than offset the project-related incremental delay. The project will contribute on a fair-share basis to this improvement.

- *Note:* The City is currently in discussions with Caltrans regarding potential future improvement options, including the possibility of restriping the southbound approach on Alder Avenue to provide a second southbound right-turn lane; or restriping the northbound approach to provide a second northbound left-turn lane. In either case, modifications to the on-ramp would most likely be required, in order to be able to continue to accommodate the carpool-only lane on the ramp, which would require continued discussion and coordination with Caltrans.
- *Note:* The analysis for the interchange assumed no right-turn-on-red adjustments, for a more conservative analysis. To the extent that some southbound right-turning vehicles are able to turn on red during the westbound green phase, the overall delay at the intersection would be reduced accordingly.

#2 – Alder Avenue at SR-210 Eastbound Ramps: Add a dedicated northbound right-turn lane. Although the intersection would continue to operate at an unacceptable Level of Service, the addition of a dedicated northbound right-turn lane would improve the overall intersection delay. The project will contribute on a fair-share basis to this improvement.

- *Note:* As noted above, no right-turn-on-red adjustments were assumed for northbound right-turning vehicles.

#3 – Alder Avenue at Renaissance Parkway: Convert the southbound right-turn lane to a shared through-right lane. Alder Avenue is currently under construction to be improved to four lanes between Renaissance Parkway and Baseline Road by Opening Year 2017. As a result, the southbound departure will be wide enough to accommodate an additional southbound through lane. Although the intersection would continue to operate at an unacceptable Level of Service in the both peak hours, the improvement would reduce the overall intersection delay and would improve the intersection operation to LOS E in both peak hours, and would more than offset the project-related incremental delay. The project will contribute a fair-share basis to this improvement.

#5 – Alder Avenue at Baseline Road: Provide a second westbound through lane on Baseline Road. *Note:* This improvement has been conditioned on the Logistics III project on the northeast corner of the intersection of Baseline Road and Alder Avenue. In the short-term, until full improvements are in place, the improved area along the north side of Baseline Road will be configured as an exclusive westbound right-turn lane. When the northwest corner of the intersection develops, the westbound right-turn lane will be converted to a second westbound through lane.

A summary of the intersection operation before and after implementation of these mitigation measures is provided on Table 13. The project fair share proportion of the improvements are shown on Table 14, and the estimated costs of the proposed improvements, as derived from the Renaissance Specific Plan fee program, the Citywide Development Impact Fee Program, and the Congestion Management Program (CMP) Appendix G, are shown on Table 15.

B. Roadway Improvements

Not Applicable.

C. Significant Impacts – Other Improvements

Not Applicable

TABLE 14
SUMMARY OF PROJECT FAIR SHARE FOR MITIGATION MEASURES

Intersection	AM Peak Hour						PM Peak Hour				
	Total Volume		Total Growth	Project Trips	%age	Total Project Trips	Total Volume		Total Growth	Total Project Trips	%age
	2016	2017					2016	2017			
	2016	2017	2016	2017	2016	2017	2016	2017			
Alder Avenue at SR-210 WB Ramps	1,882	3,549	1,667	80	4.8%	1,774	3,743	1,969	86	4.4%	
Alder Avenue at SR-210 EB Ramps	1,778	4,055	2,277	160	7.0%	1,839	4,070	2,231	174	7.8%	
Alder Avenue at Renaissance Parkway	1,679	3,827	2,148	164	7.6%	1,615	3,945	2,330	178	7.6%	
Alder Avenue at Baseline Road	2133	3024	891	28	3.1%	1953	2950	997	33	3.3%	

TABLE 15
TRAFFIC IMPACT MITIGATION FAIR SHARE COST TABLE

Alder Avenue at SR-210 WB Ramps (Included in Renaissance Specific Plan Fee Program)	Unit Cost	Quantity	Total
Restripe WB shared T/R lane to shared L/T/R lane	\$ 50,000	1	\$ 50,000
Project Fair Share percentage ¹			4.8%
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Alder Avenue at Baseline Road (Included in the DIF, subject to reimbursement)			
Provide 2nd WB Through Lane	\$ 108,800	1	\$ 108,800
Project Fair Share percentage ¹			3.3%
Project Cost			\$ 3,601
Total Project Cost			\$ 23,509
¹ Higher of AM or PM project fair share percentage			

May 25, 2016

Kimley-Horn And Associates, Inc.

765 The City Drive, Suite 200

Orange, CA 92868

Attn: Serine Ciandella

RE: Rialto Warehouse Development I-210 Logistics Center IV Project – Northeast corner of Alder and Walnut – Proposed Traffic Impact Analysis Comments and Observations on Report Date May 2016

Ms. Ciandella,

We have made a review of your firms TIA submitted May 17, 2016 on the above subject and offer the following comments for your consideration:

1. A quick check with the Planning Department suggests that the project has been to a preliminary DRC review. While this does not affect the TIA, the developer needs to be aware that approving a larger building does not entitle them to construct such a building if they cannot meet the requirements of the Planning Department with respect to landscaping, setback, building undulations etc.
2. Page 1 section B, Laurel Ave. bounds the project on the east and Walnut exists and bounds the property on the south. There is no vacant land east; the other side of Laurel is the Medline facility. Walnut is constructed and the Niagara facility is south of Walnut.
3. Page 14 in the description of Baseline, no bikeways are shown or proposed in the existing Specific Plan or in the proposed Amendment. No bikeway is shown in the City General Plan.
4. How is LOS being determined on Page 44 Table 10? Is it based on delay or V/C ratio? If on V/C, what V/C ratios are being used to determine LOS? The question arises for the first location for Alder between Renaissance and Walnut. Projected traffic is 30,904 and capacity is 32,999. This places V/C at 0.938, which typically would be LOS E, yet the chart indicates LOS as D or better.
5. On page 62 in the Appendix section D-1, the information in the summary indicates one location with V/C= .715 with delay of 16.1 and LOS B while in the same table another location with V/C = .714 with delay of 30.4 and LOS C. The last line has a V/C of 1.076 a delay of 2.9 with LOS A. Understanding that item 4 is segment and item 5 is intersection may lead to different criteria but segment analysis would seem to relate V/C directly to LOS and not switch to delay.
6. Page 48 in Table 12 the capacity of the segment is 32,999 and the projected volume is 32,023, which is a V/C of 0.97, yet it is saying the segment operates at LOS D or better. This seems a bit unexpected.
7. While the revised TIA was submitted 5-17-16, there was not an attached Appendix so we assume the appendix is unchanged from 4-27-16.

Overall, the TIA is reasonably complete and with a few answers to the above will be ready for presentation to the Transportation Commission. We can discuss further if needed and feel free to contact me. Once modifications are made, submit 10 print and 10 electronic copies for continued action. The copies must be here before the June 1 meeting.

Cordially,

Gene R. Klatt

Consultant Engineer – Contract Staff

City of Rialto

Panattoni Logistics IV TIA – Review Comments and Responses

Comment #	Comment	Response
1	A quick check with the Planning Department suggests that the project has been to a preliminary DRC review. While this does not affect the TIA, the developer needs to be aware that approving a larger building does not entitle them to construct such a building if they cannot meet the requirements of the Planning Department with respect to landscaping, setback, building undulations etc.	Acknowledged. The comment will be relayed to the Applicant.
2	Page 1 section B, Laurel Ave. bounds the project on the east and Walnut exists and bounds the property on the south. There is no vacant land east; the other side of Laurel is the Medline facility. Walnut is constructed and the Niagara facility is south of Walnut.	The description of the project site and its boundaries has been modified.
3	Page 14 in the description of Baseline, no bikeways are shown or proposed in the existing Specific Plan or in the proposed Amendment. No bikeway is shown in the City General Plan.	The description of Baseline Road has been modified to remove reference to a bike lane.
4	How is LOS being determined on Page 44 Table 10? Is it based on delay or V/C ratio? If on V/C, what V/C ratios are being used to determine LOS? The question arises for the first location for Alder between Renaissance and Walnut. Projected traffic is 30,904 and capacity is 32,999. This places V/C at 0.938, which typically would be LOS E, yet the chart indicates LOS as D or better.	<p>This comment is referring to the daily roadway segment analysis. This compares the average daily traffic (ADT) volume to the LOS D capacity of the roadway, which is based on Exhibit D of the City's <i>Traffic Impact Analysis Report Guidelines and Requirements</i>, and is also shown on page 7 of the TIA.</p> <p>There is no V/C calculation for roadways, since Exhibit D does not provide a maximum capacity value for roadway segments. The roadway analysis simply compares the ADT volume to the LOS D capacity, and reports whether or not the ADT is within (lower than) that capacity.</p>

Panattoni Logistics IV TIA – Review Comments and Responses

Comment #	Comment	Response
5	<p>On page 62 in the Appendix section D-1, the information in the summary indicates one location with V/C= .715 with delay of 16.1 and LOS B while in the same table another location with V/C = .714 with delay of 30.4 and LOS C. The last line has a V/C of 1.076 a delay of 2.9 with LOS A.</p> <p>Understanding that item 4 is segment and item 5 is intersection may lead to different criteria but segment analysis would seem to relate V/C directly to LOS and not switch to delay.</p>	<p>This comment is referring to the intersection summary table for Existing Conditions. The intersection analysis is based on the Highway Capacity Manual (HCM) 2010 methodology, as required by the City's <i>Traffic Impact Analysis Report Guidelines and Requirements</i>. The HCM methodology reports both a V/C ratio and overall intersection delay, but the Level of Service is based on the delay value. It is not unusual for HCM to report dissimilar results between V/C and delay. V/C is a more simplistic calculation based on volume compared to capacity (which is dependent solely on number of lanes). Delay is a much more complex calculation, based on volumes, lanes, signal timing, signal phasing, and cycle length.</p> <p>As discussed in response 4, the roadway segment analysis is based on comparing the ADT volume to the LOS D capacity of the roadway, and not on V/C or delay.</p>
6	<p>Page 48 in Table 12 the capacity of the segment is 32,999 and the projected volume is 32,023, which is a V/C of 0.97, yet it is saying the segment operates at LOS D or better. This seems a bit unexpected</p>	<p>See Comment 4</p>
7	<p>While the revised TIA was submitted 5-17-16, there was not an attached Appendix so we assume the appendix is unchanged from 4-27-16.</p>	<p>The only pages of the appendices that changed are the With Project intersection worksheets. The differences are minor, such that the Level of Service results and findings of the study did not change. A complete appendix is included with this revised submittal.</p>
	<p>Overall, the TIA is reasonably complete and with a few answers to the above will be ready for presentation to the Transportation Commission. We can discuss further if needed and feel free to contact me. Once modifications are made, submit 10 print and 10 electronic copies for continued action. The copies must be here before the June 1 meeting.</p>	<p>The attached submittal includes the modifications noted in this comment matrix. 10 hard bound copies and 10 disks will be delivered to the City before the June 1 meeting.</p>

From: [Gene Klatt](#)
To: ["Serine.Ciandella@kimley-horn.com"](mailto:Serine.Ciandella@kimley-horn.com)
Subject: Fairshare costs for SR-210 at Alder
Date: Monday, June 06, 2016 12:13:47 PM
Attachments: [SR-210 improvement costs 6-6-16.pdf](#)

Serine,

Monster was approved at the June 1 meeting and I know much of the same improvements appear on many of the projects contributing to SR-210 at Alder. However, in going thru the Panattoni IV project, the same improvements and costs are listed as appeared in the Monster TIA. However, another traffic consultant has submitted for a warehouse in the area and has different costs and different improvements based on very similar intersection projections.

I have attached their fair share calculation worksheets. It appears that in the recommendations for Monster as well as Panattoni, the northbound to westbound SR-210 left turn lane and on-ramp improvements have been left out of the mix. Also, the eastbound ramps, in particular the off-ramp is missing improvements as well. Because of the presentation at the June 1 Commission meeting, your firm may want to revisit the impacts and costs. It is very likely that the Panattoni IV will be going at the same time as the other warehouse and the Commission may well ask why such a difference. In particular, their Table 23 has additional improvements and costs based on adjusted SANBAG estimates and costs that are in line with others for the area. Figure 19 in the TIA would seem to support the northbound dual left for westbound SR-210, the improvements to the eastbound SR-210 off-ramp and on-ramp and dual left turns for southbound Alder at Renaissance. At Baseline, dual southbound left turn lanes also appear to be needed. In looking deeper, it appears that Ayala at the SR-210 is also in need of dedicated right turn lanes, dual left and right on the ramps for westbound and dedicated right turn lanes for the eastbound on-ramp.

After you have had a chance to review, the TIA can be modified or we can discuss further. Not much we can do with Monster at this point but it appears the same error/oversight occurred in that project as well.

Gene R. Klatt
Consultant Engineer - Contract Staff
City of Rialto
gklatt@rialtoca.gov