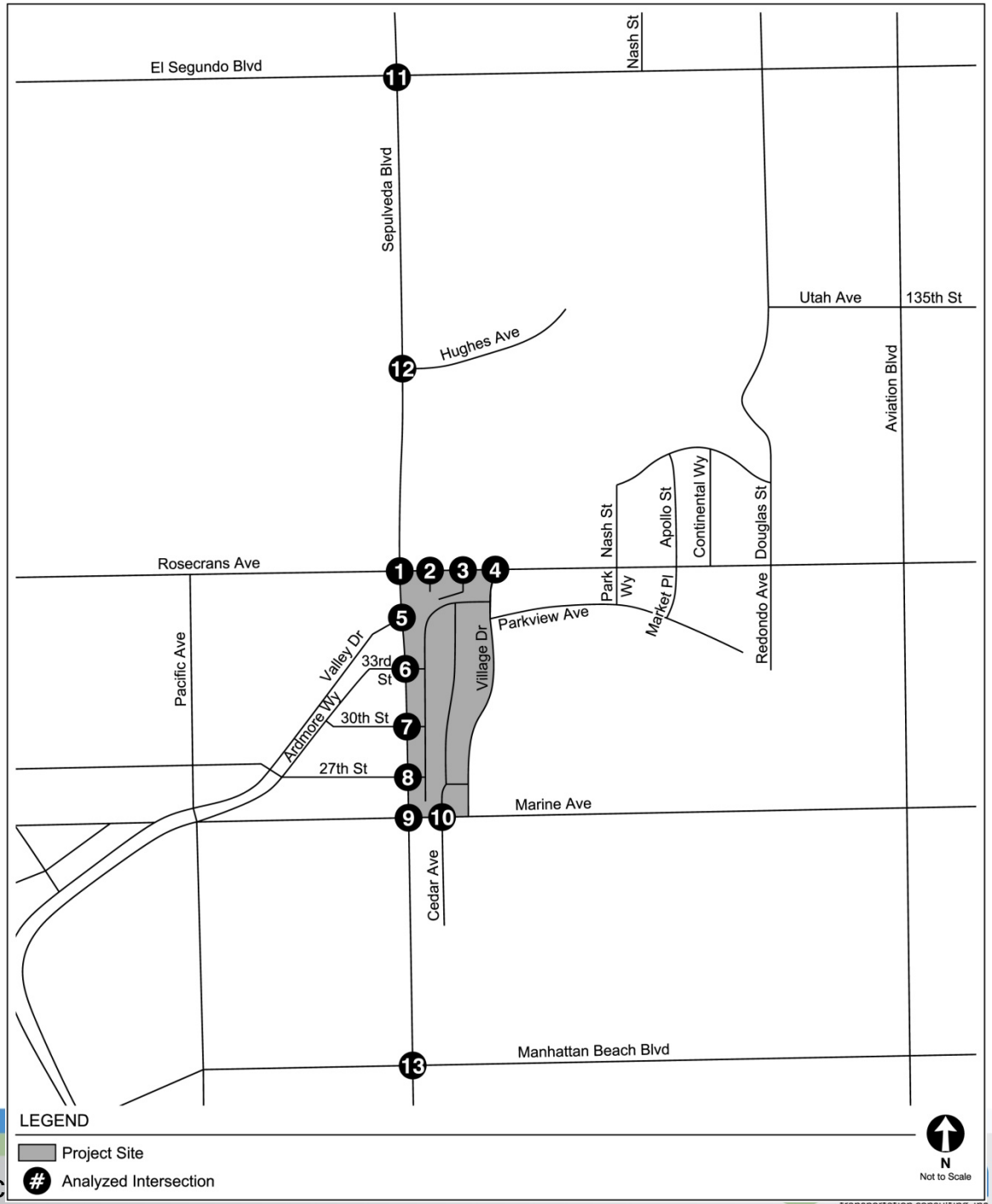
MANHATTAN VILLAGE ENHANCEMENT PROJECT

Traffic & Parking Analysis

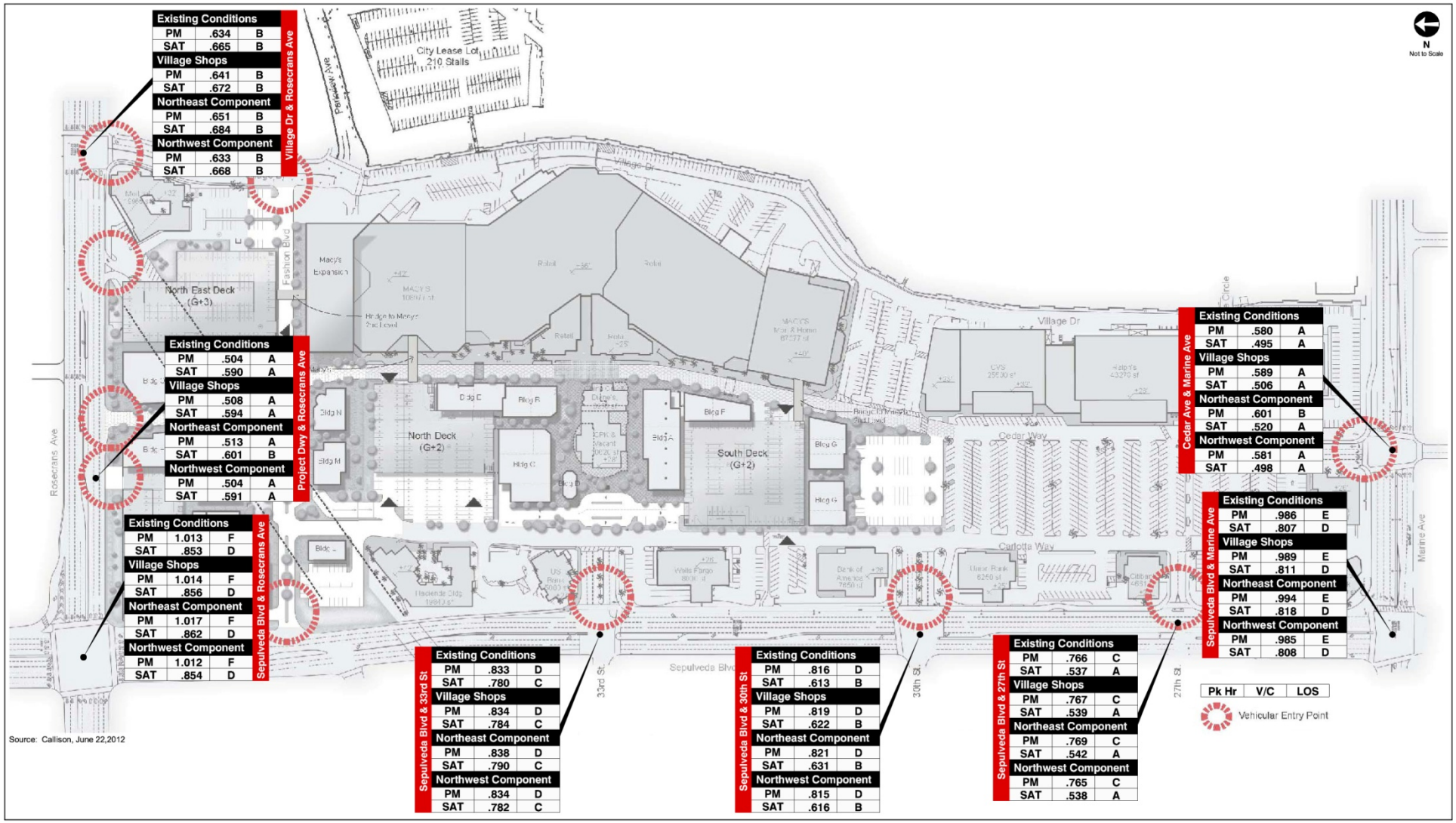
Manhattan Beach City Council

September 2013

Gibson transportation consulting, inc.

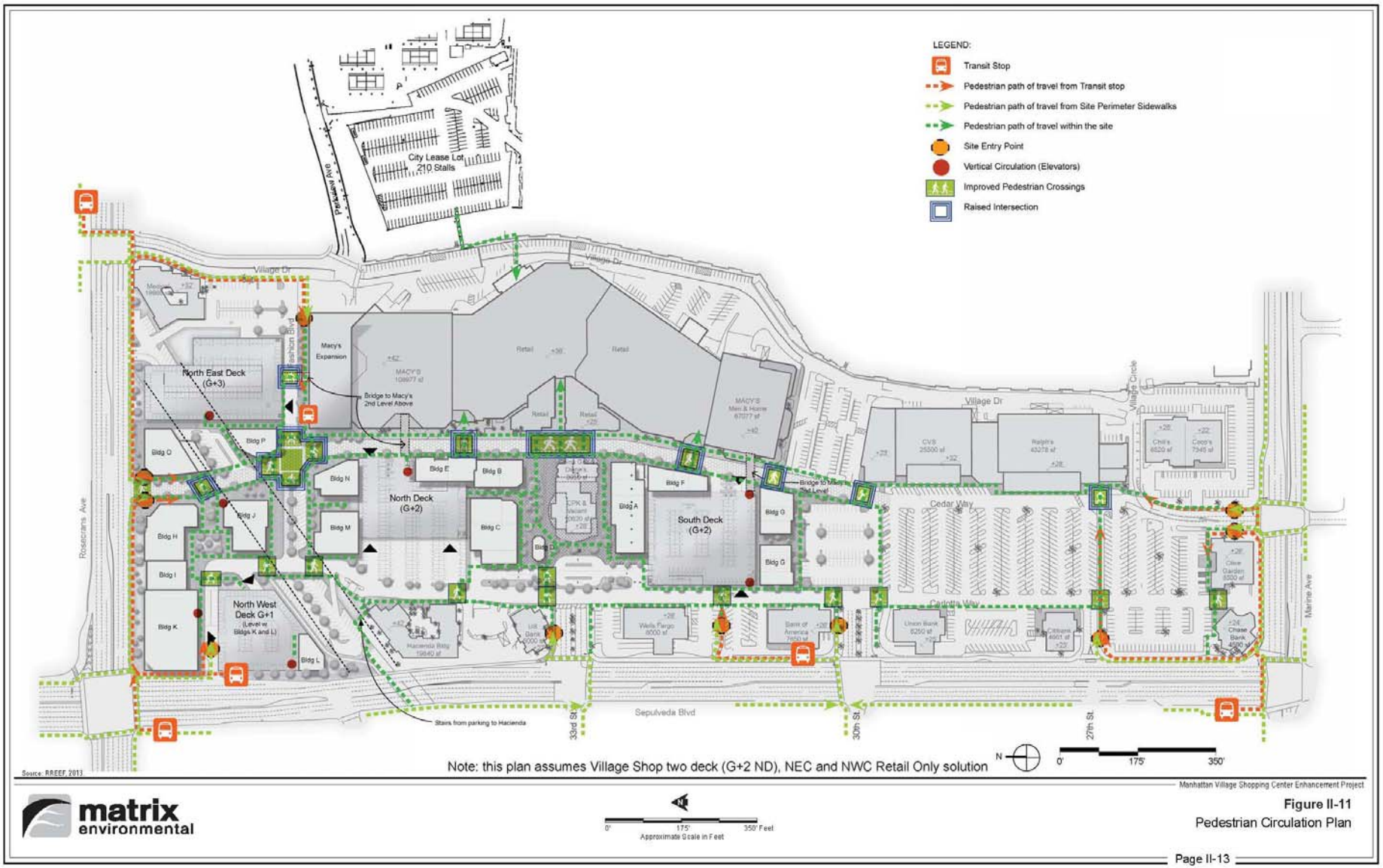

El Segundo Blvd
Nash St
Sepulveda Blvd
Utah Ave
135th St
Hughes Ave
Aviation Blvd
Rosecrans Ave
Nash St
Apollo St
Continental Wy
Douglas St
Park Wy
Market Pl
Redondo Ave
Parkview Ave
Pacific Ave
Valley Dr
33rd St
Village Dr
Ardmore Wy
30th St
27th St
Marine Ave
Cedar Ave
Manhattan Beach Blvd
1
2
3
4
5
6
7
8
9
10
11
12
13
LEGEND
Project Site
Analyzed Intersection
N
Not to Scale

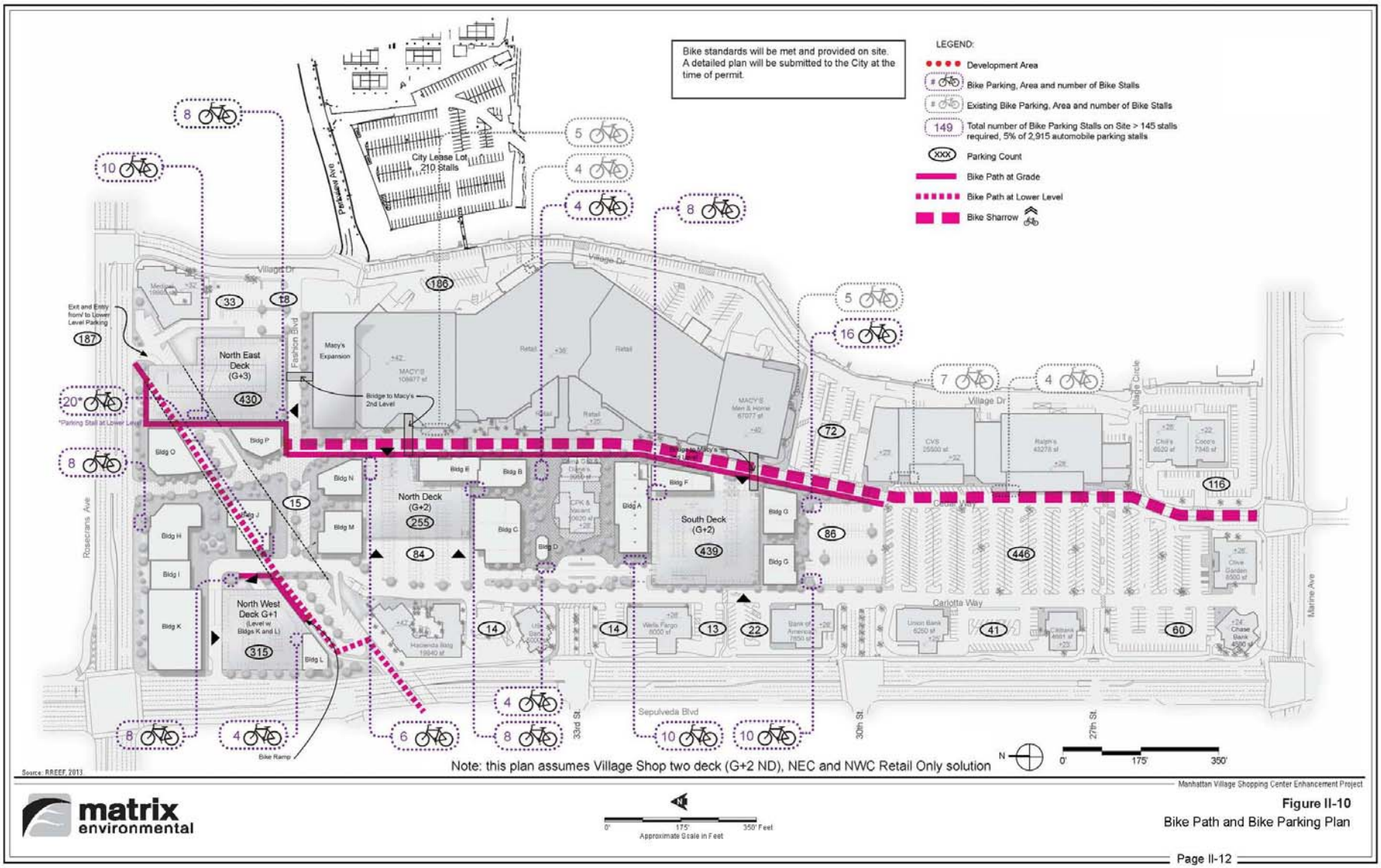
Intersection LOS Results

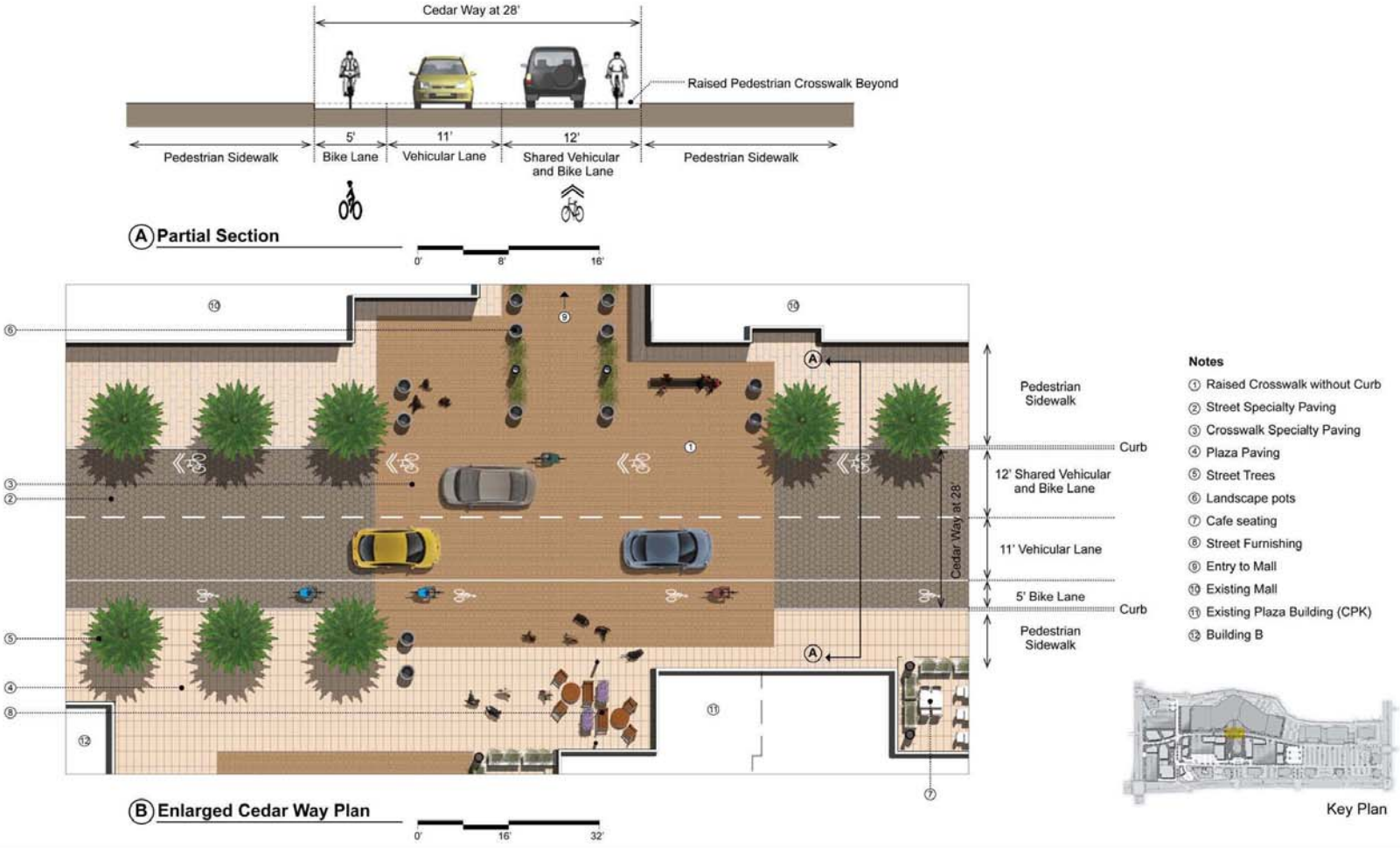


Project Improvements

- Dedicate ROW for Sepulveda Bridge Widening
- Rosecrans Deceleration Lane
- Cedar Way
- Veterans Pkwy Pedestrian and Bike Corridor
- Internal Circulation
- Construction Management Plan


LEGEND:
Transit Stop
Pedestrian path of travel from Transit stop
Pedestrian path of travel from Site Perimeter Sidewalks
Pedestrian path of travel within the site
Site Entry Point
Vertical Circulation (Elevators)
Improved Pedestrian Crossings
Raised Intersection
City Lease Lot
210 Stalls
Parkview Ave
Village Dr
Fashion Blvd
Macy's Expansion
Bridge to Macy's 2nd Level Above
North East Deck (G+3)
North Deck (G+2)
South Deck (G+2)
North West Deck G+1
(Level w Bldgs K and L)
Bridge to Macy's 2nd Level
Stairs from parking to Hacienda
Village Circle
Cedar Way
Rosecrans Ave
Sepulveda Blvd
33rd St
30th St
27th St
Marine Ave
Note: this plan assumes Village Shop two deck (G+2 ND), NEC and NWC Retail Only solution
N
0'
175'
350'
Source: RREEF, 2013
matrix environmental
Approximate Scale in Feet
Manhattan Village Shopping Center Enhancement Project
Figure II-11
Pedestrian Circulation Plan
Page II-13

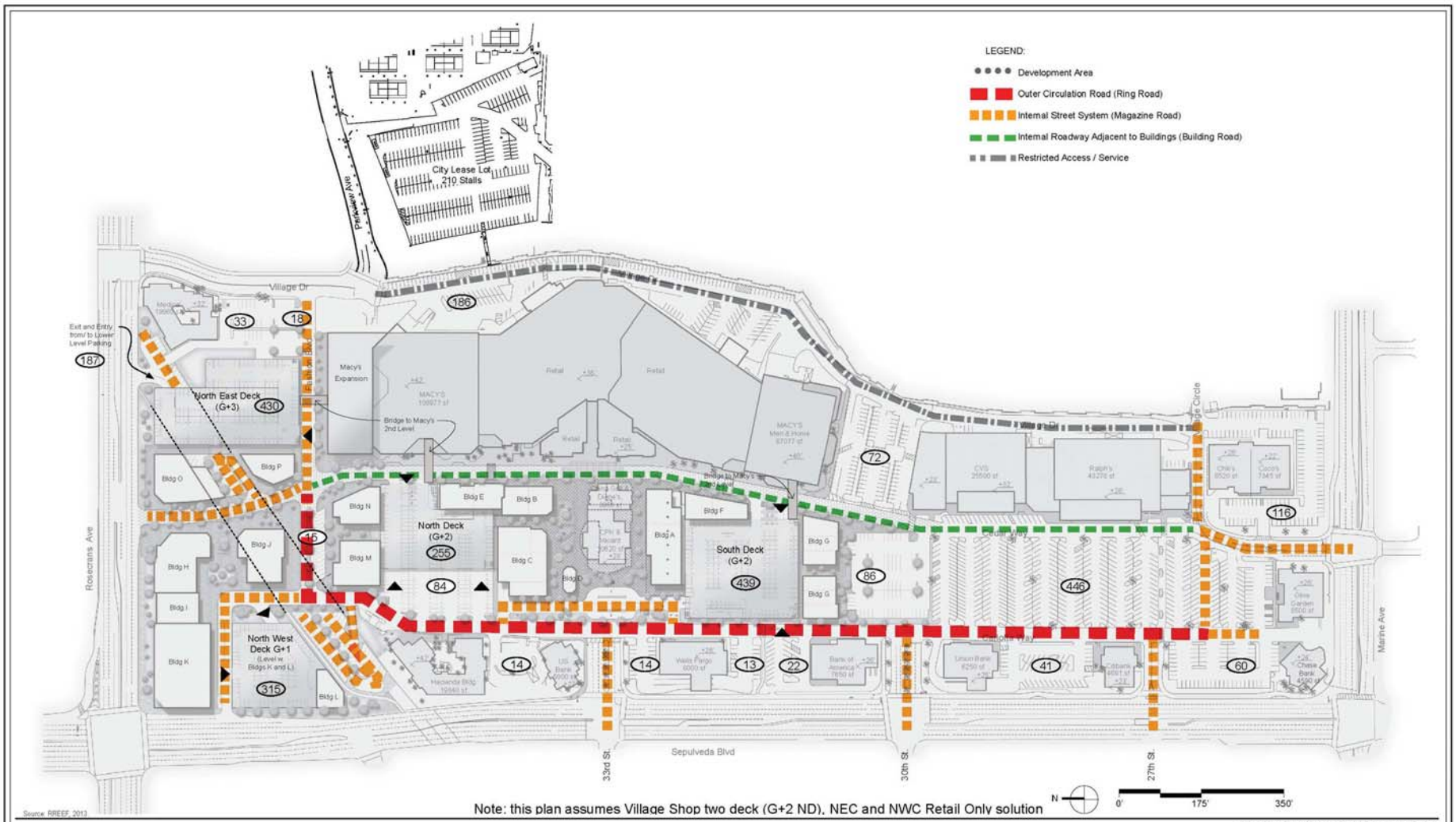

Bike standards will be met and provided on site. A detailed plan will be submitted to the City at the time of permit.
LEGEND:
Development Area
Bike Parking, Area and number of Bike Stalls
Existing Bike Parking, Area and number of Bike Stalls
149 Total number of Bike Parking Stalls on Site > 145 stalls required, 5% of 2,915 automobile parking stalls
XXX Parking Count
Bike Path at Grade
Bike Path at Lower Level
Bike Sharrow
City Lease Lot 210 Stalls
North East Deck (G+3)
430
North Deck (G+2)
255
84
South Deck (G+2)
439
North West Deck G+1
(Level w Bldgs K and L)
315
Macy's Expansion
Bridge to Macy's 2nd Level
Exit and Entry from/ to Lower Level Parking
187
*Parking Stall at Lower Level
Village Dr
Fashion Blvd
Rosecrans Ave
Parkside Ave
Village Circle
Marine Ave
Carlotta Way
Sepulveda Blvd
33rd St
30th St
27th St
Bike Ramp
446
Note: this plan assumes Village Shop two deck (G+2 ND), NEC and NWC Retail Only solution
N
0' 175' 350'
Source: RREEF, 2013
matrix environmental
0' 175' 350' Feet
Approximate Scale in Feet
Manhattan Village Shopping Center Enhancement Project
Figure II-10
Bike Path and Bike Parking Plan
Page II-12



Manhattan Village Shopping Center Enhancement Project

Figure II-13

Cedar Way Bike Path, Village Shops Component



Manhattan Village Shopping Center Enhancement Project

Figure II-14
Road Hierarchy Diagram

Traffic Analysis Summary

- **Tested Combinations of Project Components**
- **Finding: No Significant Intersection Impacts**
- **Defined Trip Equivalency Program**

Parking

- **National Standard: 4.5 spaces/1,000 sf**
- **Maintain 4.1 Spaces/1,000 sf Parking Ratio**
- **2,856 Spaces to 3,142 Spaces**
- **Holiday Parking Management Plan**
- **Tested Demand by Month During and After Construction**

1. HOW MUCH GROWTH IS CAUSED BY THE MVSC ENHANCEMENT PROJECT?

The number of net new Project trips is relatively small when compared to existing background traffic levels.

STREET USAGE
Existing plus Phases 1 + 2

	ADT	PM Peak Hour
• Sepulveda	66,240	5,300
• Rosecrans	35,750	3,220
• Marine	14,350	1,435
Total	166,340	9,955
MVSC Ph 1+2	715	176
Increase	**0.4%**	**1.8%**

PM PEAK HOUR INTERSECTION USAGE
Future w Phases 1 + 2

Sepulveda at	Volume	Shop Center			
		New	Tot	% New	% of Tot
• El Segundo	8,950	40	597	0.4	6.7
• Rosecrans	9,690	43	682	0.4	7.0
• Marine	7,275	77	949	1.1	13.0
• MB Blvd	7,204	40	597	0.6	8.3

CONCLUSIONS

Because of the Change in Land Uses:

- Project Represents a Small (<1%) Increase in Ambient Traffic Levels
- Project Generates the Same Number of Trips in the PM Peak Hour
- Project Needs More Parking Due to Increased Length of Stay

2. WHY DOES TRAFFIC NOT INCREASE IN THE PM PEAK HOUR?

We are replacing high activity land uses with less intense land uses.

EXAMPLE

	9,000 sf			9,000 sf
	7-11	Coffee / Donut Shop	Liquor Store	Restaurant
PM Peak Hour Trips	436			89
Parking Demand	12			90

EXAMPLE

Replacing high-activity land uses can

- **Decrease Traffic**
- **Increase Parking**

TRIP GENERATION RATES

(Trips/1,000 sf)		
	Daily	**PM Peak Hour**
Retail	34.4	3.35
Fry's	45.2	8.15
Cinema	107.2	4.74

Source: ITE *Trip Generation* manual

TRIP GENERATION

		Daily	PM Peak Hour
Existing	Retail	19,560	1,893
	Fry's	2,081	375
	Cinema	1,876	83
	Total	**23,517**	**2,351**
Proposed	**Retail**	**23,979**	**2,335**
	Difference	**462**	**-16**

3. PHASING

Does Project traffic work prior to Fry's closure?

SIGNIFICANT IMPACT CRITERIA

Level of Service	Change in V/C
D	0.02
E	0.01
F	0.01

IMPACTS BY CONSTRUCTION COMPONENT

Component	PM Peak Hour Trips	Sepulveda / Marine			Sepulveda / Rosecrans		
		LOS	Change in V/C	Significant Impact	LOS	Change in V/C	Significant Impact
I	147	E	0.003	NO	F	0.001	NO
I + II	176	**E**	**0.008**	**NO**	**F**	**0.004**	**NO**
I + II + III	-16	E	-0.001	NO	F	-0.001	NO

4. WHY MUST PARKING SUPPLY INCREASE?

We are replacing short-term parking demand with long-term parking demand.

PARKING DEMAND RATE

	Spaces/1,000 sf	Duration
Retail	4.1	90 minutes
Fry's	3.7	30 minutes
Cinema	19.8	120 minutes

PARKING SPACE USAGE

		Veh/Day	Duration	Vehicle Hours
Existing	Retail	9,780	1.5	14,670
	Fry's	1,040	0.5	520
	Cinema	938	2.0	1,876
		11,758		**17,066**
Proposed	**Retail**	**11,990**	**1.5**	**17,985**
			Difference	**919**

PARKING SUPPLY EFFECTS

$$\frac{\text{919 sp hours/day}}{\text{1.5 hours}} = \frac{\text{613 spaces/day}}{\text{3 veh/sp/day}} = \textbf{204 spaces needed}$$

5. WHAT IS THE PROJECT'S EFFECT ON NEARBY LOCAL RESIDENTIAL STREETS?

1. Congestion on Arterials

2. Project Traffic of >1,200 ADT

3. Parallel Local Street

Neighborhood Cut-Through

1. Congestion on Arterials

2. Project Traffic of >1,200 ADT

North	338 ADT	40 vph
South	338 ADT	40 vph

3. Parallel Local Street

Traffic and Parking Conclusions

- **Project does not Generate Significant Traffic or Parking Impacts**
- **Construction Scheduled to Meet Parking Demand**
- **Internal and External Circulation Improvements**