



Ofc: 1001 Dove St. | Suite 260 | Newport Beach, CA 92660  
Main: 260 E. Baker St. | Suite 200 | Costa Mesa, CA 92626  
[urbanxroads.com](http://urbanxroads.com)

July 31, 2019

Mr. Thomas Riggle  
TR DESIGN GROUP, INC.  
7179 Magnolia Avenue  
Riverside, CA 92504

**SUBJECT: PIVOT CHARTER SCHOOL CIRCULATION PATTERNS FOR DROP OFF AND PICK UP ACTIVITY**

Dear Mr. Thomas Riggle:

The purpose of this evaluation is to determine appropriate circulation patterns for teachers, visitors, and students interacting with the Pivot Charter School which is proposed to be located at 700 N. Main Street in the City of Corona.

As indicated by the Client, Pivot Charter School is a non-classroom-based charter school, where students engage in independent study and are not required to attend site-based offerings at the resource center. Rather, they can access curriculum via the internet and may only learn on-site for a limited number of days in a particular week.

This evaluation provides information regarding specific traffic inbound and outbound routes, drop off and pick up locations, and parking activity.

**ACTIVITY LEVELS**

The trips generated by the Project's change in land use were previously estimated in Pivot Charter School Trip Generation Assessment (Urban Crossroads, Inc., April 25, 2019), and are summarized below. Table 1 depicts the net change in trips generated by the Project, which results in 104 added trips in the AM peak hour, 3 fewer trips in the PM peak hour, and 18 added daily trips in comparison to a typical retail use.

**TABLE 1: PROJECT NET CHANGE IN TRIP GENERATION**

	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Existing Building Trips	3	2	5	8	9	17	165
Proposed Project Trips	58	51	109	5	9	14	183
<b>Net Change in Trips</b> (Proposed Project - Existing Site)	<b>55</b>	<b>49</b>	<b>104</b>	<b>(3)</b>	<b>0</b>	<b>(3)</b>	<b>18</b>

**EXHIBIT F**

Eight (8) staff will access the site via a designated parking area, rather than circulating in the student drop off / pick up area. The staff are anticipated to generate 8 inbound vehicles in the AM peak hour (prior to student arrivals), and 8 outbound vehicles in the afternoon.

For students, drop off times have been provided by the Client, with high school drop off time ranging from 8:30 am to 9:00 am, middle school drop off time ranging from 9:00 am to 9:30 am, and elementary school drop off time ranging from 9:30 am to 9:45 am.

Pick up times are similarly segmented, with high school pick up time ranging from 12:00 pm to 12:15 pm, middle school pick up time ranging from 12:15 pm to 12:30 pm, and elementary school pick up time ranging from 12:30 pm to 12:45 pm.

The maximum number of students for each grade level is 36 high school students, 24 middle school students, and 11 elementary school students. On a typical day, some of the 36 high school students may not study on-site (due to study-at-home or absence), and some would stay for after school clubs. A small portion of high school students would drive and park their own vehicle. The possibility of travel via mode other than automobile, along with shared rides with siblings or neighbors would further reduce high school student drop off / pick up vehicle trips.

Transit service is currently provided along Main Street and River Road via the Corona Cruiser blue line, and also by the Riverside Transit Authority (RTA). Corona Transit Center and the Corona Metrolink station are approximately 1 mile away. Transit service is reviewed and updated by governing agencies periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. Existing sidewalks are also available adjacent to the site.

In a given peak 15 minute period, a conservative estimate of approximately 25 vehicles arriving for student pick up activity would represent worst case conditions. Each pick up or drop off trip involves parking and exiting the vehicle, walking with the student to/from the school, potentially communicating with staff or other parents, entering the car, and maneuvering out of the parking space. This process is estimated to take 3 minutes to 5 minutes, so a conservative estimate of 5 minutes per vehicle is used. Assuming parked time of 5 minutes per vehicle, approximately 9 parking spaces could be utilized at the same time. The Client has indicated that at similar facilities, approximately 3 to 5 vehicles are engaged in pick up or drop off activity at any given time. Therefore, this estimate of 9 parked vehicles at the same time in the pick up / drop off area is conservative.

The proposed Project trip generation included in the Pivot Charter School trip generations assessment includes an inbound volume of 58 vehicles in the AM peak hour. If eight staff vehicles are excluded from the calculation, then approximately 50 vehicles are anticipated to engage in student drop off activity in the AM peak hour (which would result in an inbound and an outbound trip for each of the drop off vehicles). This estimate of 50 peak hour vehicles coincides with the estimate of approximately 25 vehicles for high school student drop off, 17 vehicles for middle school drop off and 8 vehicles for elementary school drop off.

How many cars  
will be in 15 mins.

## **TRAFFIC ROUTES, PARKING, AND DROP OFF / PICK UP LOCATIONS**

Access to Project site is provided primarily via two driveways at North Main Street, with secondary access to River Road. The northerly driveway on North Main Street is a full access driveway, with left turns allowed inbound and outbound. The southerly North Main Street driveway provides right turn only (inbound and outbound) access. The River Road driveway provides right or left inbound access, but outbound access is restricted to right turns only.

The Client has indicated that because staff parking will be utilized for several hours per day, staff will be encouraged to park in out-of-the-way spaces. In order to free up more desirable spaces that are located well for the commercial and restaurant properties that share the lot, school staff will park in the existing spaces located along the back side of Burlington, as shown on Exhibit 1.

School staff ingress / egress driving routes are also shown on Exhibit 1. School staff will then utilize the existing crosswalk to cross the drive aisle, then walk along existing commercial frontage sidewalks to Pivot Charter School.

For students who are dropped off and picked up by a parent, the student will wait inside of the building and parents will be required to physically pick them up from inside the school, rather than waiting outside. Circulation patterns which minimize vehicular and pedestrian conflicts near the main access, drive aisles, and parking lot are proposed to increase safety of the students.

Designated parking for pick up / drop off will be provided in the 6 parking spaces located east of the Pivot Charter School building, perpendicular to Main Street and three spaces located in front of Pivot Charter School, as shown on Exhibit 2. These parking spaces are located near to the school, but away from other businesses. The location of these parking spaces minimizes conflicts with other traffic, as the drive aisle leads to the back of the building.

As each student is walked to/from the school by their parent, parents need to pay attention to student safety in the parking lot. Parents engaged in picking up or dropping off students are expected to be aware of other students and their parents. Parents should be educated beforehand via registration material and school website information as to the pick up / drop off parking area and procedures.

Exhibit 2 also shows the potential inbound and outbound circulation patterns for arrivals and departures related to student pick up and drop off. Vehicles traveling southbound on North Main Street are anticipated to turn right at the southerly driveway, then make an immediate left into the pick up / drop off parking area. Vehicles traveling northbound on North Main Street will need to turn left at the northerly driveway, then turn left and travel through the drive aisles to get to the pick up / drop off parking area. If queues of left turning vehicles develop, storage exists within the existing northbound left turn bay.

Pedestrian striping may be desirable to draw attention to potential walking routes to / from parking areas. A new possible crosswalk connection is shown as an option from Pivot Charter School to the pick up / drop off area.

Visitors (other than student pick up / drop off) are expected to utilize the parking spaces located directly in front of Pivot Charter School. Two of the five parking spaces available directly in front of the school could be utilized by visitors, while the remaining three spaces at this location are estimated to be needed for drop off / pick up activity.

Exhibit 3 shows potential visitor parking spaces and ingress / egress routes. The inbound and outbound visitor traffic routes are similar to those used by parents picking up or dropping off their students at the start / end of the school day.

Students who drive themselves and park will be encouraged to utilize parking spaces located north of school as shown on Exhibit 4. Students who drive and park will access the northerly driveway via either a northbound left turn or a southbound right turn.

## CONCLUSIONS

During the peak 15 minute pick up time, it is anticipated that up to 15 parking spaces in the main area will be in use by Pivot Charter School (9 vehicles picking up students, 4 parked student vehicles, and 2 parked visitor vehicles). During the majority of the school operational hours, 6 of the 15 parking spaces are anticipated to be occupied. It is important to note that staff parking has been designated at a low utilization area behind Burlington.

Exhibit 5 shows on-site recommendations, which are summarized below:

- Possible striped pedestrian crosswalks at two key driveway locations are shown on Exhibit 5.
- Educate parents as to the preferred use of 6 parking stalls for parent drop off / pick up east of the school main entrance and 3 along the school frontage as indicated on Exhibit 2.
- Facilitate visitor use of parking spaces located along the front of Pivot Charter School, as shown on Exhibit 3.
- Promote staff parking in spaces located as shown on Exhibit 1.
- Encourage student parking as designated on Exhibit 4.
- Provide materials that document alternative travel modes in the area (transit, pedestrian, etc.).

The unique characteristics of a small charter school facilitate opportunities for staff to interact with parents. Communication to parents should be proactive, utilizing web messaging to disseminate information regarding the parking areas, circulation plan, drop off / pick up activity, etc.



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If you have any questions, please contact John Kain at (949) 336-5990 or Marlie Whiteman (949) 336-5991.

Respectfully submitted,

URBAN CROSSROADS, INC.



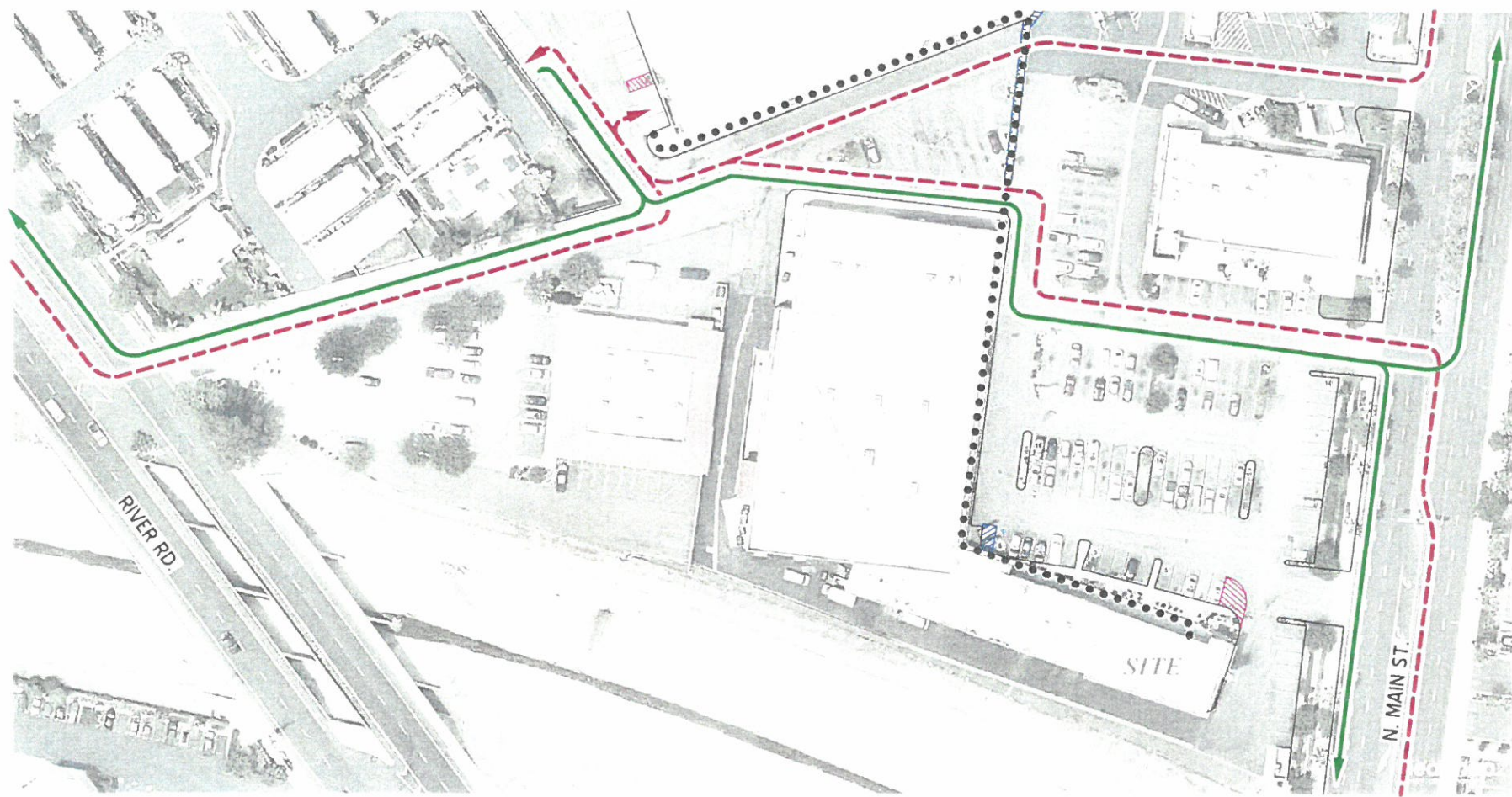
John Kain, AICP  
Principal

JN: 12538  
Attachments







Marlie Whiteman, PE  
Senior Associate

**EXHIBIT 1: ARRIVAL AND DEPARTURE ACCESS PATTERNS  
FOR SCHOOL STAFF PARKING**



**LEGEND:**

-  = INBOUND TRAFFIC FLOW
-  = OUTBOUND TRAFFIC FLOW
-  = STAFF PARKING SPACES
-  = 2-WAY PEDESTRIAN ROUTE





## EXHIBIT 2: ARRIVAL AND DEPARTURE ACCESS PATTERNS FOR STUDENT PICK-UP/DROP-OFF PARKING



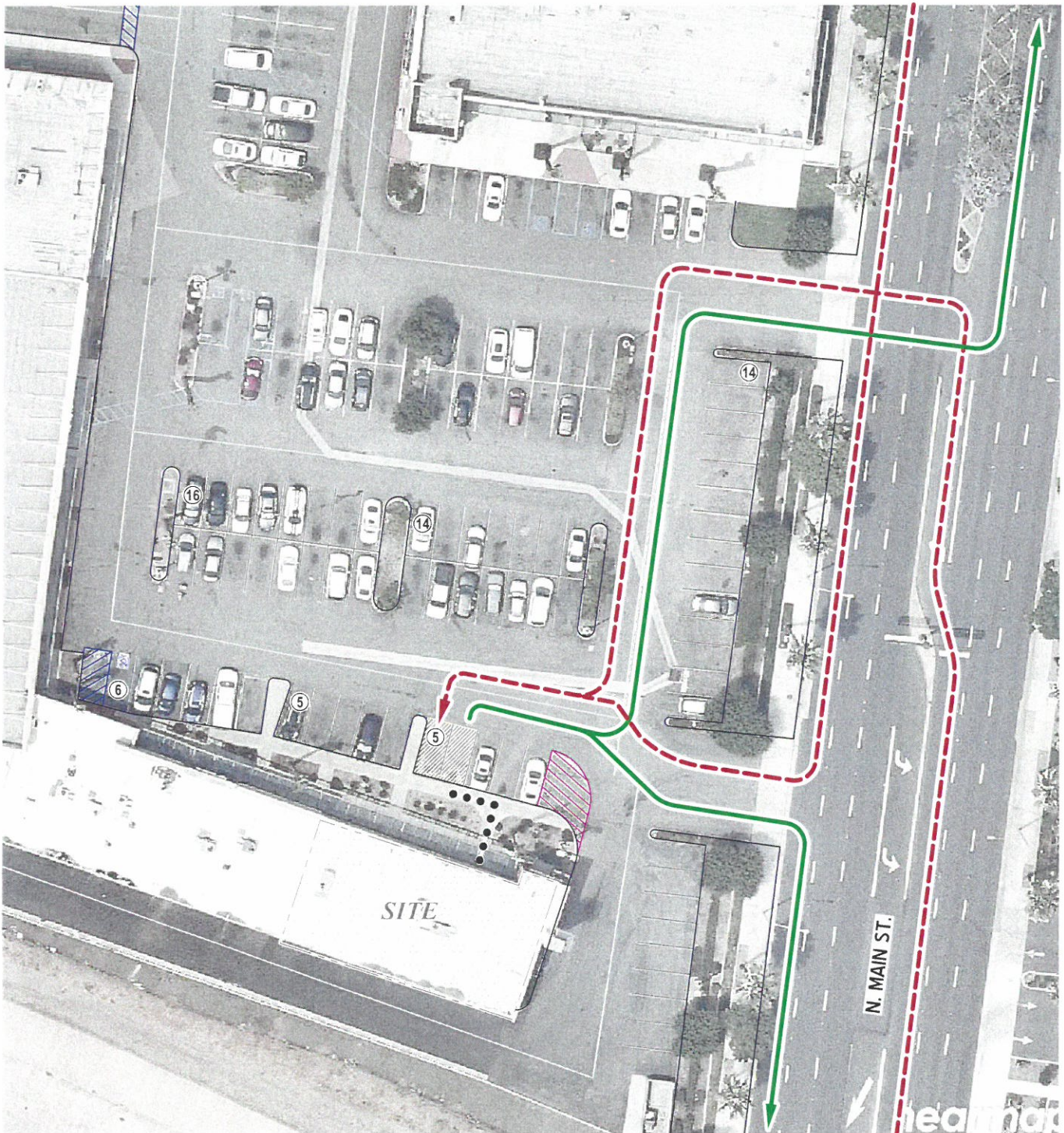
### LEGEND:

- = INBOUND TRAFFIC FLOW
- = OUTBOUND TRAFFIC FLOW
- = DROP-OFF/PICK-UP PARKING SPACES
- = 2-WAY PEDESTRIAN ROUTE





### EXHIBIT 3: ARRIVAL AND DEPARTURE ACCESS PATTERNS FOR VISITOR PARKING (OTHER THAN STUDENT PICK UP / DROP OFF)



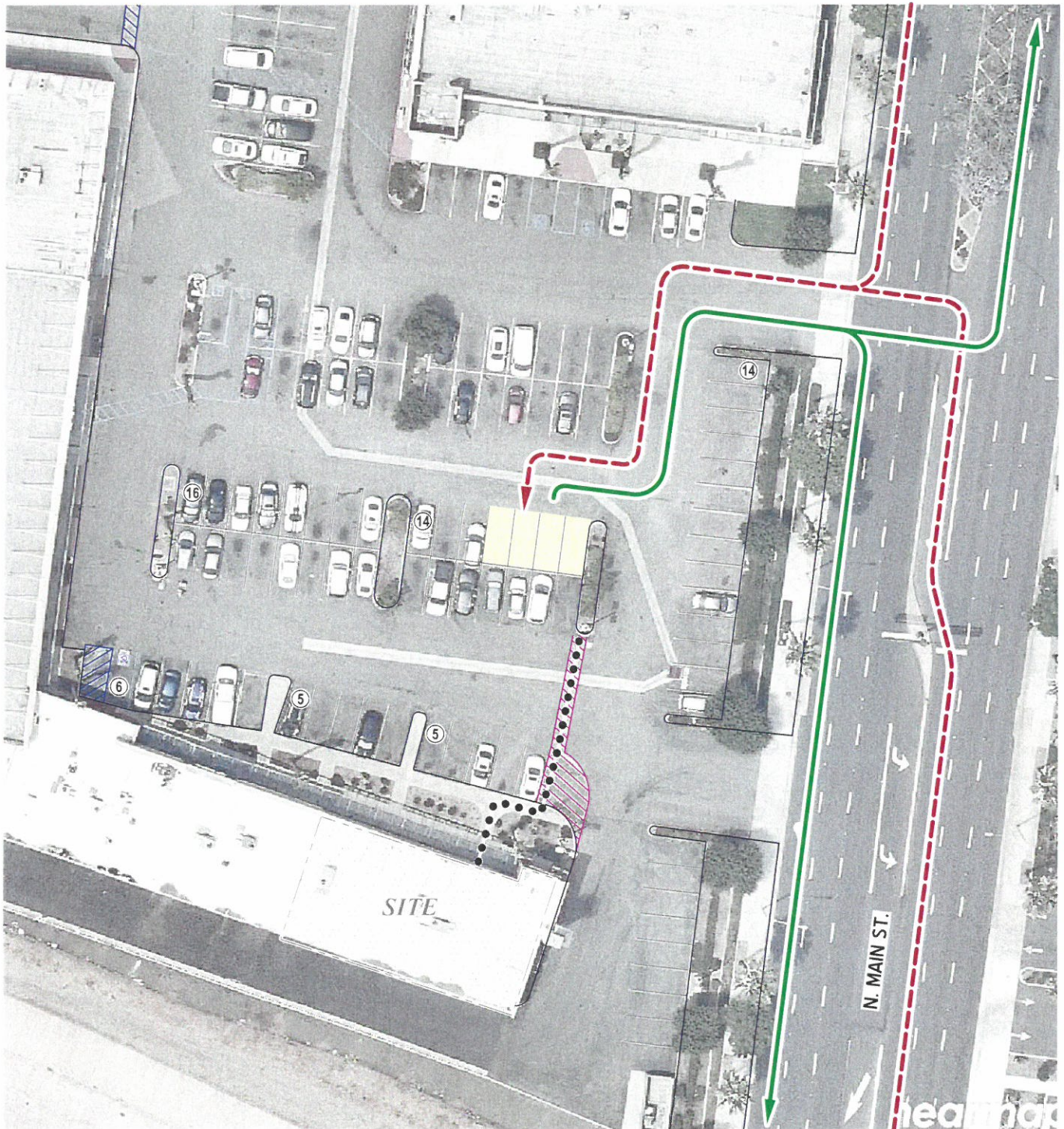
#### LEGEND:

- — — = INBOUND TRAFFIC FLOW
- — — = OUTBOUND TRAFFIC FLOW
- = VISITOR PARKING SPACES
- • • • = 2-WAY PEDESTRIAN ROUTE





# EXHIBIT 4: ARRIVAL AND DEPARTURE ACCESS PATTERNS FOR STUDENT PARKING



## LEGEND:

- = INBOUND TRAFFIC FLOW
- = OUTBOUND TRAFFIC FLOW
- = STUDENT PARKING SPACES
- = 2-WAY PEDESTRIAN ROUTE





## EXHIBIT 5: ON-SITE RECOMMENDATIONS

