TRANSPORTATION & CIRCULATION COMMISSION AGENDA

MEETING DATE: OCTOBER 4, 2021

TO: TRANSPORTATION & CIRCULATION COMMISSION

FROM: PUBLIC WORKS / TRAFFIC ENGINEERING DIVISION

SUBJECT: MALDEN AVENUE/ASH AVENUE NEIGHBORHOOD TRAFFIC SAFETY ENHANCEMENTS

SUMMARY

Consider a staff recommendation for the implementation of various traffic safety enhancements within the Malden Avenue/Ash Avenue neighborhood, bordered by; Valencia Drive to the north, Highland Avenue to the west; Hill Avenue to the south; and Harbor Boulevard to the east, as shown in Exhibits A & B (Attachments 1 & 2).

RECOMMENDATION

Concur with the traffic safety enhancement recommendations of the City Traffic Engineer and recommend approval of the following new stop controls to Council:

1. Installation of additional STOP controls at the following intersections, as outlined in Exhibit A:
    a. Tamarack Avenue & Rosslynn Avenue (southbound)
    b. Tamarack Avenue & Ash Avenue (northbound and southbound)
    c. Tamarack Avenue & Elm Avenue (eastbound)
    d. Malden Avenue & Elm Avenue (westbound)
    e. Malden Avenue & Rosslynn Avenue (northbound and southbound)
    f. Malden Avenue & Ash Avenue (northbound and southbound)

2. Installation of additional STOP controls at the following intersections, as outlined in Exhibit B:
    a. Tamarack Drive & Hill Avenue (southbound)
    b. Malden Avenue & Hill Avenue (southbound)
    c. Malden Avenue & Southgate Avenue (westbound)
    d. Malden Avenue & Knepp Avenue (eastbound and westbound)

DISCUSSION

Staff received complaints of elevated vehicle speeds on several streets within the Malden Avenue / Ash Avenue neighborhood. In response, staff determined that a comprehensive review of traffic controls and traffic operations in the greater neighborhood area was prudent. This review effort evaluated prevailing vehicle speeds, traffic volume counts, intersection sight visibility, pedestrian and bicycle activity, and traffic sign and pavement marking conditions. In addition, a 5-year historical accident analysis was conducted.

Highland Avenue has both posted 30mph speed limit signs with accompanying speed limit pavement markings and electronic “Radar Speed Feedback” signs in each direction. Valencia Drive has a prima facie speed limit of 25mph; however, the speed limit is not currently posted with signs. Although it isn’t required to post prima facie speed limits on residential streets, in order to heighten motorist awareness of the 25mph speed limit on Valencia Drive between the traffic signals at Harbor Boulevard and Highland Avenue, the City Traffic Engineer recommends installing 25mph speed limit signs with supplemental speed limit pavement markings on Valencia Drive as outlined in Exhibit A.

Results of the traffic volume and speed surveys conducted indicated that the streets within the neighborhood are experiencing traffic flows and speeds that are consistent with other similarly configured neighborhoods in the City. The 85th percentile speed is commonly referred to as being the highest reasonable and comfortable travel speed for prevailing conditions. Measured 85th percentile speeds within the neighborhood were generally found to be under the 25mph speed limit, except along a portion of Malden Avenue and along Hill Avenue where the 85th percentile speeds were 30mph and 26mph respectively. Measured traffic volumes on the streets within the neighborhood averaged between 389 and 694 vehicles per day, which is considered normal and reasonable for two-lane residential streets arranged in a grid pattern. Exhibits C-1 & C-2 (Attachments 3 & 4) outline the traffic volume and speed data gathered and are included for Commissioner reference.

In reviewing sight distance conditions at various intersections in the neighborhood, staff determined that there is generally sufficient motorist visibility of cross traffic to reasonably traverse the neighborhood streets. However, staff did observe instances where vehicles were parked within the curb return or too close to the corner as to impede motorist sight distance of conflicting traffic, pedestrians, and bicyclists. Some corners in the neighborhood already have red zones installed to better demark where motorists should not park thus addressing safety concerns at those locations. The City Traffic Engineer is recommending similar corner red zone treatments be installed at 23 additional corners within the neighborhood. The specific corners identified for the installation of new red zones to increase sight visibility are outlined in Exhibits D-1 & D-2 (Attachments 5 & 6) and are included for Commissioner reference.

Staff reviewed existing traffic and parking control signs within the neighborhood and found that they were generally in good condition, visible, and posted appropriately. In reviewing pedestrian and bicycle activity/safety, staff discovered that the neighborhood

experiences a significant amount of foot traffic. However, each of the neighborhood streets are equipped with sidewalks on both sides and access ramps are provided at intersections. Those intersections identified as being located on “Suggested Routes to School” have the new yellow continental-type crosswalk markings, along with the latest fluorescent yellow-green pedestrian crossing warning signs. Furthermore, the intersections of Harbor Boulevard & Valencia Avenue and Harbor Boulevard & Southgate Avenue have ladder-type crosswalk markings, which will be upgraded to the new continental-type crosswalk markings as a part of a future pavement rehabilitation project.

In observing physical conditions, traffic flow, and activity at the intersections within the neighborhood, staff observed that many motorists do not fully yield the right-of-way to through traffic at “T” intersections. Failure to yield increases the risk of a crash between vehicles, pedestrians, and cyclists. In recent years, the City has begun installing “STOP” controls on the discontinuous approaches at “T” intersections to positively assign right-of-way and enhance intersection safety. The City Traffic Engineer is recommending that the City apply this same “T” intersection “STOP” control installation practice within this neighborhood. This change in traffic controls will also provide for a more pedestrian and cyclist friendly environment for a neighborhood that already has significant walking and cycling activity occurring.

In addition to installing new stop controls at all uncontrolled “T” intersections, staff also evaluated motorist behavior at the traditional four-way intersections. As a result of staff observations of right-of-way violations, traffic speeds, and compromised visibility of pedestrians and conflicting traffic, the City Traffic Engineer recommends the upgrade of three two-way stop intersections to four-way stop intersections and the installation of one new two-way stop within the neighborhood. The four intersections recommended to receive additional stop controls are:

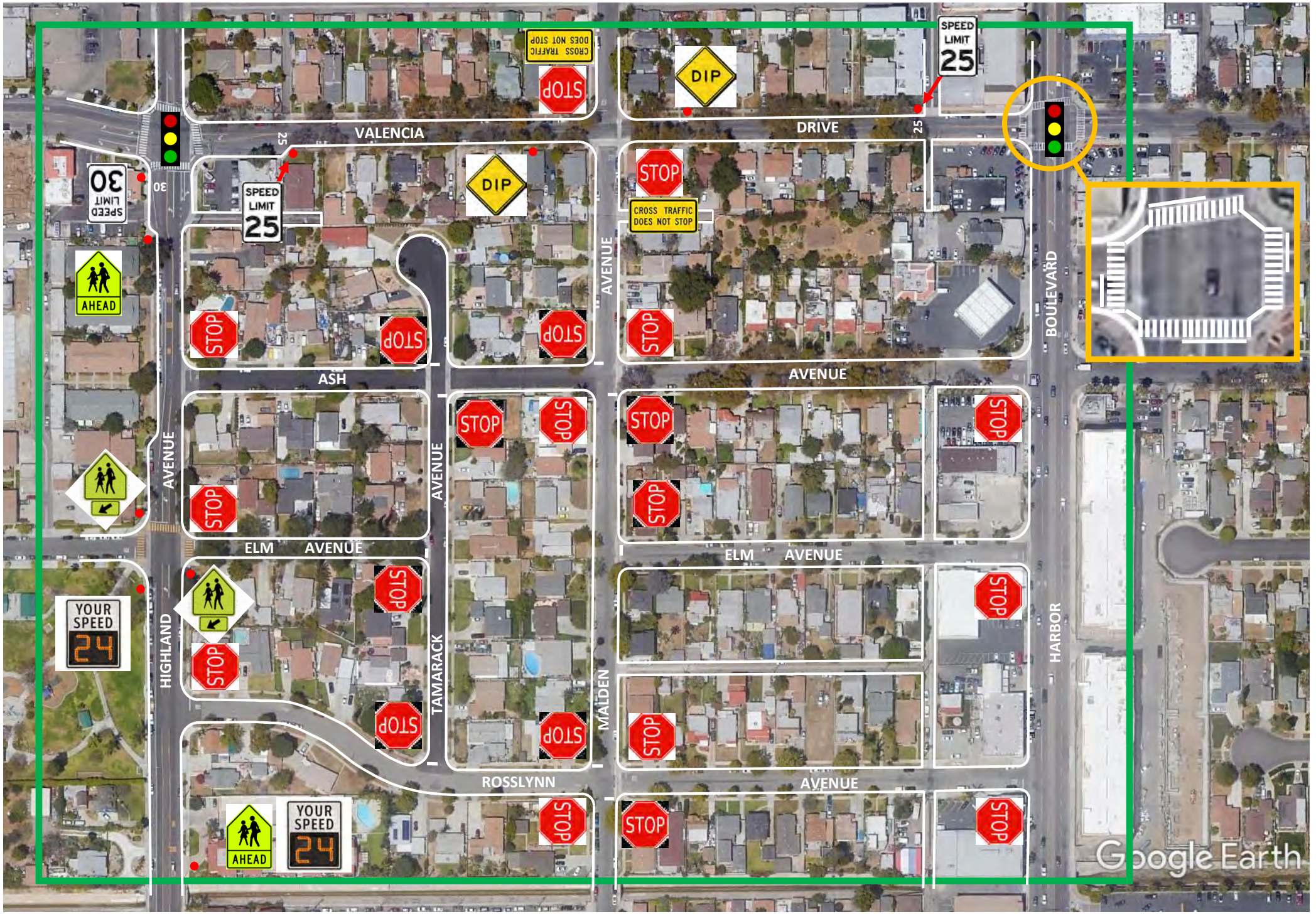
1. Malden Avenue & Ash Avenue (new four-way stop control)
2. Malden Avenue & Rosslynn Avenue (new four-way stop control)
3. Malden Avenue & Knepp Avenue (new four-way stop control)
4. Ash Avenue & Tamarack Avenue (new two-way stop control)

A review of collision records for the neighborhood did not reveal a pattern or specific concentration of crashes in one area that would suggest immediate action is required. However, the collision review did reveal that the neighborhood is experiencing a little more than one reported crash per month on average. The majority of those crashes occurring in the neighborhood involved errant vehicles striking parked cars. It is not always known why such crashes occur; however, in this case almost half of such parked car crashes involved motorists driving under the influence of drugs or alcohol. By adding the recommended additional stop controls and red zones, the traffic flow within the neighborhood should be calmed and become more regimented, which is likely to result in fewer parked car crashes and a better environment for walking and biking.

David Roseman
City Traffic Engineer

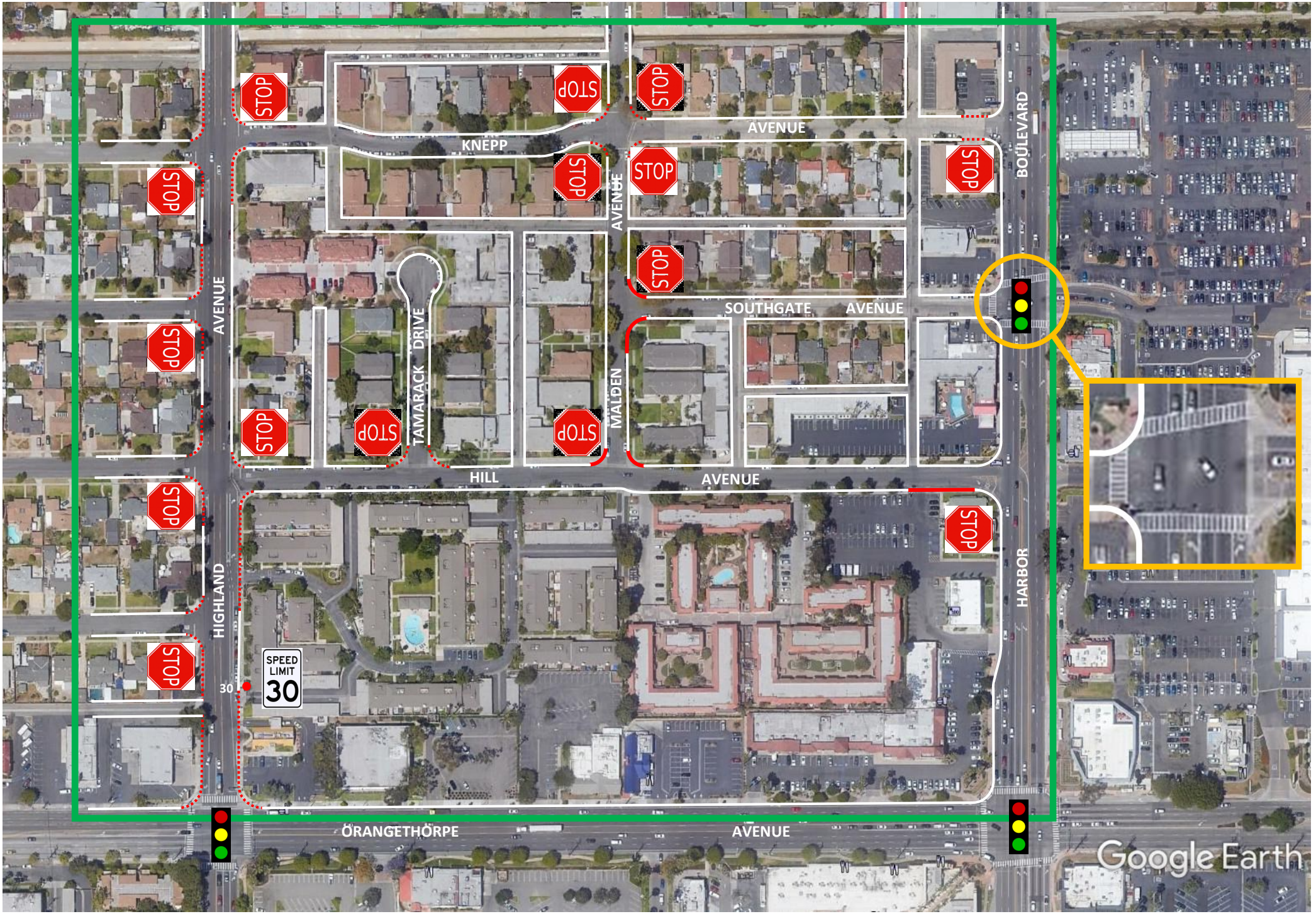
DR/DLangstaff:kn
Attachment 1 - Exhibit A, Upper Neighborhood Proposed Enhancements
Attachment 2 - Exhibit B, Lower Neighborhood Proposed Enhancements
Attachment 3 - Exhibit C-1, Upper Neighborhood Speed & Counts
Attachment 4 - Exhibit C-2, Lower Neighborhood Speed & Counts
Attachment 5 - Exhibit D-1, Upper Neighborhood Proposed Red Curb
Attachment 6 - Exhibit D-2, Lower Neighborhood Proposed Red Curb

cc: Commissioners
Police Traffic Bureau



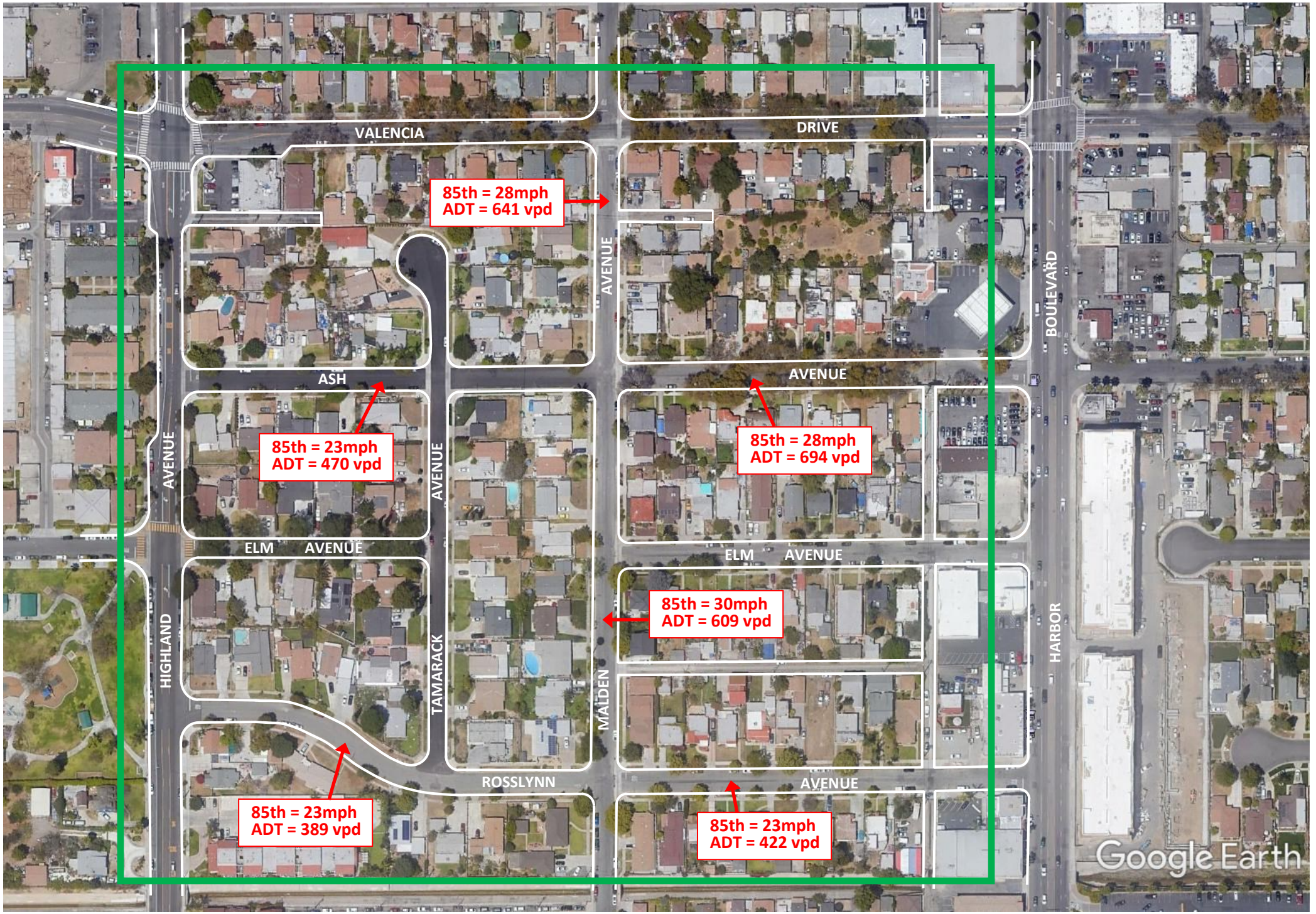
UPPER MALDEN AVENUE NEIGHBORHOOD ENHANCEMENT STUDY

Exhibit A



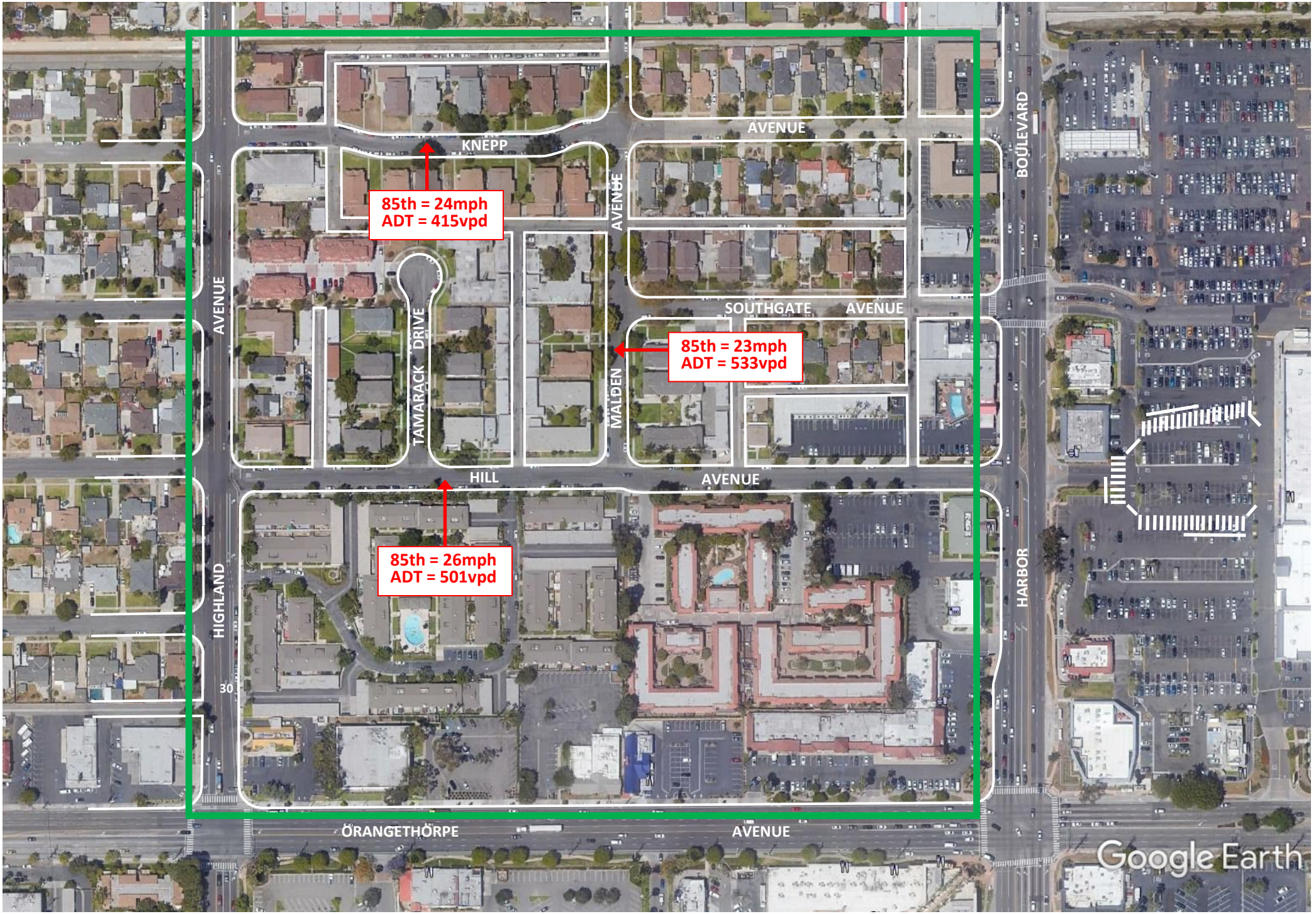
LOWER MALDEN AVENUE NEIGHBORHOOD ENHANCEMENT STUDY

Exhibit B



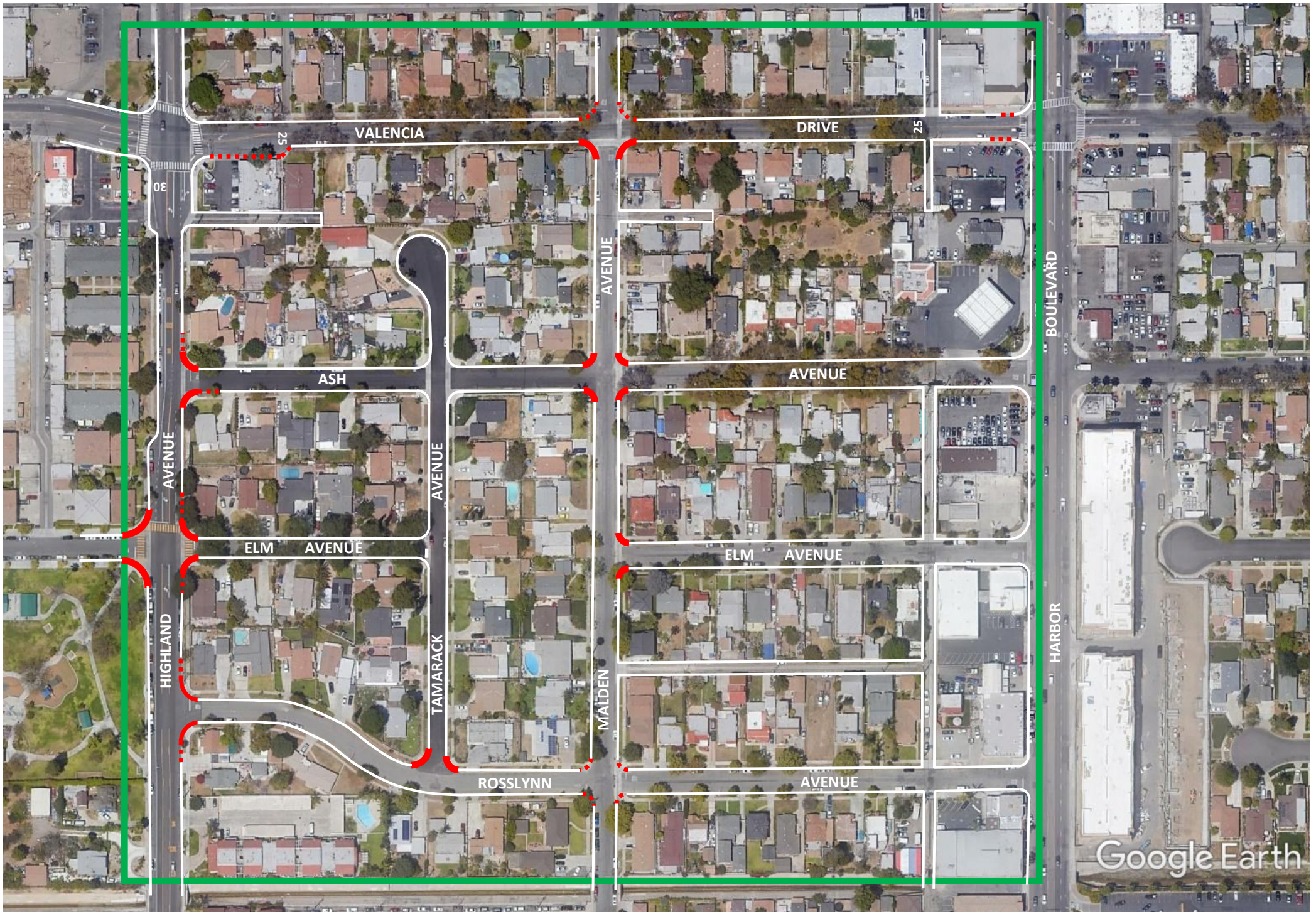
UPPER MALDEN AVENUE NEIGHBORHOOD ENHANCEMENT STUDY

Exhibit C-1



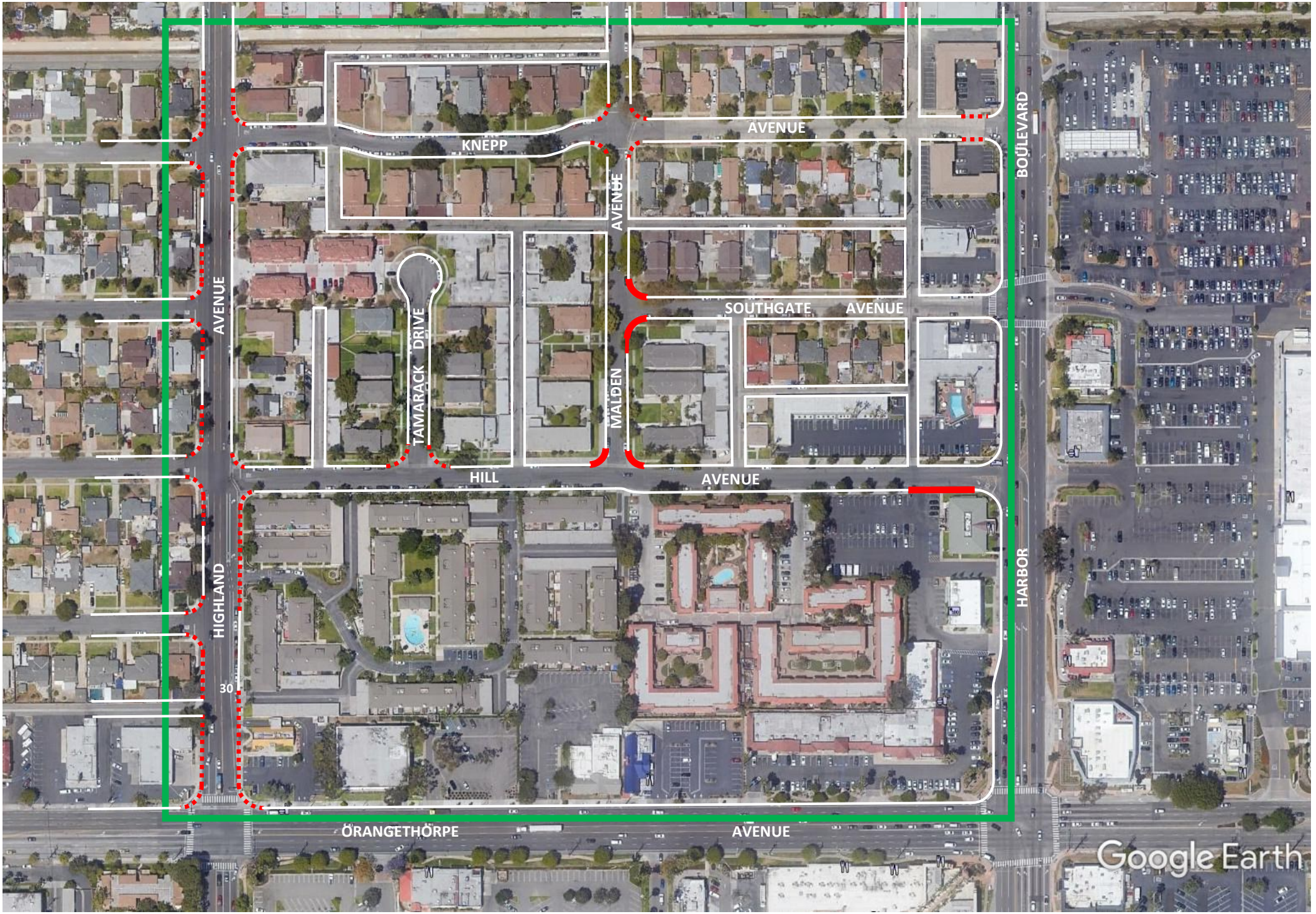
LOWER MALDEN AVENUE NEIGHBORHOOD - Speed & Volumes

Exhibit C-2



UPPER MALDEN AVENUE NEIGHBORHOOD - Proposed Red Curb

Exhibit D-1



LOWER MALDEN AVENUE NEIGHBORHOOD - Proposed Red Curb

Exhibit D-2