(Parent) Project Number: D21-00004
Project Name: Tri-City Psy Development
Project Planner: Scott Nightingale

Application Review Committee
Division Comments

Development Services Department
300 N. Coast Hwy, Oceanside, CA 92054 | (760) 435-4373

To be filled out by Project Planner

Project/property address and/or APN: 4002 Vista Way

Project description:. Tri-City Psychiatric Development @ 4002 Vista Way

To be filled out by ARC Division Reviewer

☐ 1st ☒ 2nd ☐ 3rd ☐ 4th **Review**

Staff member: Scott Nightingale

Phone number: 760-435-3526

E-mail: snightingale@oceansideca.org

1/21/2022

RESPONSES IN RED

☐ **Approved w/Conditions**
☐ **Returned for Corrections – 15 Days**
☒ **Returned for Corrections – 30 Days**
(include attachments/forms on TRAKiT, if applicable):

December 1, 2021

Subject: Application Review Committee (ARC), **Second** Submittal for the Tri-City Psychiatric Development @ 4002 Vista Way (D21-00004 & CUP21-00004); APN: 166-010-43, 31

Dear Interested Parties,

The City of Oceanside Application Review Committee (ARC) has conducted a preliminary review of your project plans consisting of the following planning application:

Development Plan (D21-00004) and Conditional Use Permit (CUP21-00004)

As part of the Committees review, the members evaluated the application for completeness pursuant to Government Code Section 65943 to determine whether any additional information needs to be submitted in order to determine your projects compliance with the City's General Plan, Zoning Ordinance, and other regulatory documents. At this time, the Committee has determined that the project remains incomplete. Additional information regarding the proposed use is needed in order to

continue processing the subject application. Staff has listed the comments below, or has enclosed them as attachments for your consideration and incorporation into revised plans.

PLANNING:

1. (Repeat Comment) The project must demonstrate compliance with Articles 3047 to 3050 for Renewable Energy Facilities, EV parking and charging, Urban Forestry and TDM. ARTICLE 30 SITE REGS (oceanside.ca.us)

   Per Article 3048, The City's EV reserved of 15% of the parking requirement must be shown on the plans and described in the project description. In addition, 50% of those required 15% EV reserved spaces must be EV equipped and this must be described in the project description and shown on the site plan. Response: EV parking spaces and charging facilities are found on sheet C1012, A0051 & E0051. Scope added to project description on sheet G0001.

   Will the project provide solar panels or solar equipped? Please provide compliance with the California Green Building code and Article 3047 of the Zoning Ordinance.
   Response: Solar panels not applicable due to fewer number of residential units and building is a health care facility (not required per T24).

If you have any questions, please feel free to contact Scott Nightingale, (760) 435-3526, snightingale@ci.oceanside.ca.us

FIRE DEPARTMENT:

Fire Department Comments:

1. Fire Department Master Plan must be submitted in hard copy (2) to the Oceanside Fire Department for review prior to grading plan submittal. Response: 2 hard copies will be submitted to Fire Department. (C1012, A0052, A0101, E0301)
2. Hydrants required within 400' of all exterior walls of the structure.
   Response: Hydrants are within 400' of exterior walls, see A0052 for location.
3. Note if hydrants will be public or private. If private, a looped system is required.
   Response: Hydrants are a private loop system, refer to C1012.
3. Fire sprinklers required per 2016 NFPA 13 standards.
   Response: Building will be sprinklered, see F-Series sheets.
3. Fire sprinklers must have a dedicated fire line to the building.
   Response: Dedicated line provided, see C1012.
4. Fire alarm system required per 2016 NFPA 72.
   Response: Fire alarm system provided per 2016 NFPA 72.
5. Dedicated FACP room in main lobby required.
   Response: FACP has been added, see sheet A0101 & E0301.
6. Dedicated fire riser room.
   Response: Fire rise room has been added, see sheet A0101.

7. Driveway off of Waring Rd. must not exceed 12% grade.
   Response: Grades are shown on sheet C1008, max slope presently indicated is 10%.
8. Bottom of driveway must not exceed 8 degrees for approach and departures.
   Response: Grades are shown on sheet C1008, rise of driveway matches the crown of the road.
9. Hose pull distance must be within 150' of all exterior walls of the structure. This is measured from an approved fire access roadway on an approved route around the building and not as the crow flies. Response: Hose pull is compliant from the Emergency Access Driveway, see A0052
10. Show gate details. Gates must be provided with proper signage for fire department access.
    Response: Gate details on A0054 & A0055. Signage for fire department access shown on A0052.
11. Gates must be provided with Opti-com for emergency access.
    Response: Opti-com at gates will be provided by successful contractor. Refer to General note 2/A0052.
12. Knox key switches required on all vehicle access gates. Gates that are manually operated must have Knox Padlocks. Response: All gates are manually operated and will have Knox Padlocks, see A0051 & A0052
13. Knox box required at main entrance.
    Response: Knox box has been provided at entrance of building, see A0101.
14. Fire department hammerhead must meet our minimum standards per our Fire Master Plan.
    Response: Fire Dept. turnaround and striping is shown on sheet C1013.
16. A minimum of 5 feet required around the structure for emergency access.
    Response: Aggregate walking trail along the western facade of the building has been provided.
17. Smoke and carbon monoxide detectors are required per 2019 California Fire Code.
    Response: Added CM detector to Mechanical room.
18. Prior to delivery of combustible materials or start of combustible construction, the approved, permanent water supply (fire hydrants) must be installed, tested and placed in service prior to delivery of combustible materials or start of combustible construction.
    Response: Added general note #3 on A0051.
19. Fire extinguishers are required and shall be included on the plans submitted for plan check.
    Response: Fire extinguishers added on sheet A0101.
20. Addresses must be clearly visible and legible from Vista Way. Project may need an address board at main entrance. Response: Tri-City Medical to provide signage on existing marquee on Vista Way entrance. Added general note on A0051 & G0009.
21. The building must support adequate radio coverage operating on the 800MHz Countywide Communication System. When tested, if the 800MHz signal strength readings (RSSI) fall below 65 in any portion of the building, either above or below grade as measured by an 800 MHz portable radio, the purchase and installation of one or more bidirectional amplifier radio coverage enhancers is required. Response: Confirmed – provided by Tri-City Medical Center. Will be part of the existing system already in place. Added general note on A0051 & G0009.
22. Pre-Con meeting required prior to combustible materials dropped on site.
    Response: Added general note to A0051.
23. Knox box required at main entrance.
    Response: Knox box is located on A0051, A0052, and A0101.

24. Fire lane stripping and signage must comply with the Oceanside Fire Department Master Plan. Response: Fire Dept. turnaround and striping is shown on sheet C1013, details provided on sheet C1020.

Plans must be fully assembled if the set contains more than one sheet. To check plan review status, please call (760) 435-4101.

If you have any questions regarding the Fire Comments please contact Time Rise @: trise@oceansideca.org or via phone at 760-435-4101.

Traffic:

Traffic Study Comments

See attached comments
If you have any questions regarding the Traffic Comments please contact Tam Tran @: ttran@oceansideca.org or via phone at 760-435-5115.

ENGINEERING DIVISION:

See attached comments
If you have any questions regarding this review please do not hesitate to contact me.
Michael F. Strizic
760-435-3564, mstrizic@oceansideca.org

Water Utilities Department:

See attached comments
If you have any questions regarding this review please do not hesitate to contact me, Bryan Kallebaugh, bkallenbaugh@oceansideca.org

Solid Waste:

1. Plans are approved on the condition that the designated bins within the architectural plans reflect all three streams of service (landfill, recycling, and organics).
Response: Confirmed, 3 bins will be provided for landfill, recycling, and organics.
2. The City of Oceanside reserves the right to review program and services levels and request increases if deemed necessary. The City of Oceanside Municipal Code Chapter 13 requires that Oceanside residents, businesses and multifamily projects are to separate all recyclable material from other solid waste. Additionally, the State of California regulations requires all California businesses participate in Mandatory Recycling (AB 341) and Mandatory Commercial Organics Recycling (AB 1826 & SB 1383) as outlined in the Oceanside Solid Waste code. Response: Understood.

If you have any questions regarding this review please do not hesitate to contact me, Annika Andersen, Aandersen@oceansideca.org

Landscaping: SEE PAGES 14-17 FOR RESPONSES TO COMMENTS
Repeat Comments not addressed
From: Harry Grove

Subject: 1st Submittal Landscape Comments - D21-00004 - 1 Story Psychiatric Hospital Facility - 032321
Landscape
In reviewing this Entitlement Project the following comments are directed solely for the review of the landscape portion of the submittal. After reviewing the entitlement submittal package a full set of landscape working drawings were submitted but there is no sheet titled Conceptual Landscape Plan (CLP). This entitlement package will be required to provide a dedicated (separate) Conceptual Landscape Plan (CLP) showing the entire landscaping of the proposed project including the public R.O.W. along Waring Road. Please remove the working drawings from the plan set I received and modify sheets LP1.01 thru LP1.04 to be a single Conceptual Landscape Plan (CLP). The revised CLP shall contain the following items below found to be incomplete at the time of initial landscape review of the current submittal date stamped February 24, 2021.

1) Base Conceptual Landscape Plan (CLP) Information

a) Please locate all drainage swales on the CLP.
b) Show all existing trees that are to remain to be "Protected in Place" (where applicable on the interior perimeter and public parkways) by clearly labeling with tree/ palm name (both botanical and Common names) and size with diameter at breast height (DBH) size or brown trunk height (BTH) for palms. Diameter at breast height is measured 54-inches above finished grade. This may require a tree survey, schedule of tree replacement, or other mitigation requirements.
c) The trees that are going to be called out to be "Protected in Place" need to contain language to support the action of protecting the trees in place. Such language may include but not limited to: no mechanical grading to cause a change of grade or elevation around the base of trees or within the drip line of the trees, no mechanical equipment or trenching within the drip line of the trees to avoid disturbance of the root system, and no excessive pruning or equipment around the canopy to cause injury to branches, trunk and compaction of roots. In addition, please note that if the existing trees are damaged or destroyed by construction activities that the trees are to be replaced in kind and of the same size diameter. Call out and show all language on the CLP.
d) On the CLP please provide the bio-filtration basin(s) proposed. If applicable, please make sure these basins are called out on the CLP and shown as planted.
e) If all the items required for this CLP are too large to provide on one 24" x 36" sheet please feel free to use more 24" x 36" sheets as needed.
2) Property Lines, Sight Distances, Utility Lines/ Easements
a) Clearly show and call out all property lines, line of sight distances, all utility lines as well as utility, water, sewer, gas and storm drain easements. Please diagrammatically clarify all of these lines with a call out on the CLP. In addition, all easements shall be designated with dimension lines and sight lines (where applicable) and shall be drawn on the CLP.
3) Notes – Please add the following as notes if they are not currently found on the CLP.

Please contact Harry Grove at hgrove@oceansideca.org if you have any questions.

Division: Building
☒ 1st ☐ 2nd ☐ 3rd ☐ 4th Review

(Parent) Project Number:D21-00004
Project Name: 4002 Vista Way
Project Planner: SCOTT NIGHTINGALE

Application Review Committee
Division Comments- Traffic

Development Services Department
300 N. Coast Hwy, Oceanside, CA 92054 | (760) 435-4373

To be filled out by Project Planner

Project/property address and/or APN: 4002 Vista Way

Project description: Psychiatric Health Facility

To be filled out by ARC Division Reviewer

☐ 1st ☒ 2nd ☐ 3rd ☐ 4th **Review**

Staff member: Tam Tran

Phone number: 760-435-5115

E-mail: TTran@oceansideca.org

☐ **Approved w/Conditions**
☐ **Returned for Corrections – 15 Days**
☒ **Returned for Corrections – 30 Days**
(include attachments/forms on TRAKiT, if applicable):

Traffic Study Comments: SEE PAGES 18-112 FOR REVISED TRAFFIC REPORT

1. Executive Summary and Introduction missing project detail. Please see the traffic study for 712 Segaze (Mix Use Development) and use the same format for the Executive Summary and Introduction. Response: Executive summary (Page i) from Seagaze used for Executive Summary and Introduction (Page 1, section 1) format as suggested.
2. Number all pages including pages with figures. Response: All pages including figures are numbered.
3. Show all phases on Synchro sheet. Response: Appendices D & E now show Synchro phases.
4. Append NCTD Bus schedule to appendix. Response: Appendix F includes the NCTD Bus Schedules
5. In the traffic study, please use either project or traffic impact instead of project effect. Response: The word "Effect" has been replaced by "Impact" throughout the report.
6. Section 5.0 W. Vista Way: Please see Circulation Element on the correct road description and number of lanes. Vista way is not a 6 lanes Secondary Arterial. Response: Description of W. Vista Way (page 10, section 5) has been revised and is consistent with Circulation Element.

Division:
☐ 1st ☒ 2nd ☐ 3rd ☐ 4th Review

7. Section 5: Thunder Drive: note that sidewalks on this street are about ~ 6'. Also, please note that there is a bus stop on Thunder Drive. Revisions to Thunder Drive description have been made (Page 10, section 5).

Planning Comments:

1) Shall provide an ADA ramp on the north and south side of the driveway that is off of Waring Road. Response: Ramps are shown on sheet C1010.
2) Shall provide ADA access to the site from Waring Road. Response: A sidewalk from the building to the frontage is provided. The sidewalk slope is expected to be greater than max slope requirements due to the elevation difference between the building and Waring Road.
3) For the "EV" parking spaces, is there a two foot overhang? If not, the spaces will need to be 18 feet deep. Response: Ramps are shown on sheet C1010.
4) All regular parking stalls shall meet standards and be 8.5 ft wide and 18 ft deep. Response: Current stalls generally exceed this standard.
5) Provide dimensions for hatched areas in parking lot. Response: Dimensions are provided on sheet C1010.
6) Why is this whole area gated off? Is there a gate on both drive aisles on the south end of the project site? Why is there a gate off of Waring Road? Can that be the main access to these offices? Response: To be able to provide secure parking for staff and visitors. Gate from Waring Road is for Fire Department Access ONLY (pursuant to Fire Deparment commentary). This will not be utilized for offices - access is only from Vista Way entrance.
7) Page C1010: There is not note for "P18". Response: P18 has been removed from this sheet.
8) Provide corner sight visibility for the driveway off of Waring Road (from a point 15 back from face of curb). And make sure sight triangle standards are met per Oceanside Engineering Manual T-1. Response: Public improvements will be permitted as part of a separate public improvement plan - ROWP21-0874. These plans have been submitted separately to the City of Oceanside.
9) Page C1010: Note on this page on what standards the driveway will be constructed to with. On page C1019, Oceanside's M-10 is called out. However, please use SDRS G-14E and there shall be ADA ramps on both sides of the driveway. Response: Noted, will revise and provide update.
10) All gate widths shall be a minimum of 24 ft. Response: Gate widths have been revised to provide 24'.
11) There should not be a parking spot in front of a garbage enclosure. Response: Parking space in front of trash area has been removed.
12) Page C1010: Call out location of bus stop and then note page that bus stop details are located. Show bus stop in relation to sidewalk and curb face. Also, show more clearly the sidewalk that exists on Waring Road. Response: See response to comment 8. Added ROWP21-0874 to plan.
13) Show cross section of Waring Road from ROW to ROW. Response: See response to comment 8. Cross section provided in Public Works submittal ROWP21-0874 (separate plan set).

Division:
☐ 1st ☒ 2nd ☐ 3rd ☐ 4th Review

November 9, 2021

Application Name: Tri City Medical Center Psychiatric Health Facility

Application Number: D21-00004

Project Description: Psychiatric Health Facility

Engineering Review (2nd. submittal)

Comply with the following comments:

(Grading Plan)

- Provide Legal Description on title sheet of civil plan.
  Response: Legal description is on sheet C1001.
- Provide APN numbers and owners names of adjacent lots. Response: APN of subject property is indicated on sheet C1004/C1005, APNs and names of owners has been provided as a separate exhibit.
- Provide street section of Waring Road with dimensions and labeling of the public right of way.
  Response: Street improvements and their sections will be provided as a separate permit.
- Provide name, address, and phone number of surveyor and applicant on the civil sheets of the plan set.
  Response: Surveyor information has been added to sheet C1002.
- Provide date survey was performed on the civil sheets of the plan set.
  Response: Surveyor information has been added to sheet C1002.
- Provide a basis of bearings for the shown survey on the civil sheets of the plan set. The information provided in the response letter is benchmark information and not the requested basis of bearings. Please consult with your surveyor for more details.
  Response: Bases of Bearing information has been added to sheet C1001.
- Provide Sight distance triangles per section 400 of the Caltrans Highway Design Manual and City of Oceanside Standard Drawing T-1 for the drive entrance at Waring Rd.
  Response: Street improvements and their sections will be provided as a separate permit.
- Provide all metes and bounds information along the shown property lines.
  Response: This information is included in the existing conditions plans, sheets
- Provide curb radius information for the drive entrance at Waring Road.
  Response: Street improvements and their sections will be provided as a separate permit.
- Provide curb radius for proposed curbs within drive aisles. Curb radii should be labeled on the civil sheets of the plan set. Provide a line and curve table if necessary.
  Response: Curb radii have been added.
- Provide a preliminary estimate of earthwork quantities as an independent note on the title sheet on the civil plan set.
  Response: Earthwork quantities are provided on sheet C1002 as note 15.
- Provide gross/net acreage/square footage of lot(s). This should be placed as an independent note on the title sheet of the civil plan set.
  Response: Table has been added to sheet C1001.
- Provide finished grade, top of wall, and bottom of wall elevations for al proposed walls.
  Response: Wall designs will be done by the wall manufacturer as a deferred submittal.
- Provide site specific FEMA information including map and panel no. as an individual note on the title sheet of the civil plan set.
  Response: Wall designs will be done by the wall manufacturer as a deferred submittal.
- Confirm that the rates of grade and geometrics of the existing pedestrian ramps at the drive entrance to Waring Road meet the current ADA requirements. If they do not meet

the current ADA requirements they will need to be reconstructed in accordance with the San Diego County Region Standards.

Response: There are no existing ramps in this location. New acc. curb ramps are provided and detailed on sheet C1018 & C1019.

- Provide a San Diego County Regional Standard for the proposed drive way. A City of Oceanside Standard Driveway may be implemented, however ADA pedestrian ramps are still required.

Response: Planning comment 9 requested SDRS G-14E detail be to the extent the site conditions will allow.

- Clearly identify the location of the ADA path of travel within the drive area in the northerly portion of the parking area where they are located along the eastern façade of the building. Provide rates of grade to show ADA compliancy.

Response: Grades are shown on sheet C1008. Slopes and ADA path of travel can be provided as an exhibit, if desired.

(SWQMP)

- Submit a SWQMP for review. The City of Oceanside is the governing agency for the submittal and review of the SWQMP.

Response: SWQMP has been provided.

(Drainage Study)

- Submit a drainage study for review.

Response: Drainage Study has been provided.

If you have any questions regarding this review please do not hesitate to contact me.

Michael Strizic

760-435-3564

mstrizic@oceansideca.org

Water Utilities Project Comments & Conditions

Date: November 22, 2021

Planner: Scott Nightingale

From: Bryan Kallenbaugh

RE: 4002 Vista Way – Tri-City Psychiatric Hospital - Submittal #2
D21-00004, CUP21-00002

STATUS: REVISE AND RESUBMIT

The following comment(s) shall be addressed to deem the entitlement application complete.

1. The proposed 3-inch domestic meter shall not be connected to the private on-site fire loop, but shall be connected to the public 8-inch water main in Waring Road. The current Utility Plan (Sheet C1012) shows a connection to the private fire loop. Please note that water meters 3" and larger are required to be installed in a vault per City Standard Drawing W-10. Please show the vault on the Utility Plan.
   Response: W-13 detail has been referenced and shown on the utility plan.
2. The current plan proposes that the new facility will share irrigation and sewer services with the Tri-City Medical Center. In order for services to be shared the new facility must be on the same lot as the Medical Center. Therefore, a lot merger must be recorded prior to final approval of the improvement plans in order for services to be shared.
   Response: Note added to utility plan.

The development plan shall reflect all requested comments above in next resubmittal for review and approval by the Water Utilities Department prior to the Planning Commission's consideration.

General Conditions:

3. For developments requiring new water service or increased water service to a property, the landowner must enter into an agreement with the City providing for landowner's assignment of any rights to divert or extract local groundwater supplies for the benefit of the property to receive new or increased water service, in return for water service from the City, upon such terms as may be provided by the Water Utilities Director.
   Response: Note added to utility plan.
4. All existing active and non-active groundwater wells must be shown on conceptual, grading, and improvement plans.
   Response: Groundwater wells were not identified or found as part of the project survey.
5. The developer will be responsible for developing all water and sewer utilities necessary to develop the property. Any relocation of water and/or sewer utilities is the responsibility of the developer and shall be done by an approved licensed contractor at the developer's expense.
   Response: This is understood.
6. All Water and Wastewater construction shall conform to the most recent edition of the *Water, Sewer, and Recycled Water Design and Construction Manual* or as approved by the Water Utilities Director.
   Response: This is outlined as note 1 on civil sheet 2 "Required Notes for Water System Design Plans"
7. The property owner shall maintain private water and wastewater utilities located on private property.
   Response: This is understood.

8. Water services and sewer laterals constructed in existing right-of-way locations are to be constructed by an approved and licensed contractor at developer's expense.
Response: This is understood.

9. The current plan proposes that the new facility will share irrigation and sewer services with the Tri-City Medical Center. In order for services to be shared the new facility must be on the same lot as the Medical Center. Therefore, a lot merger must be recorded prior to final approval of the improvement plans in order for services to be shared.
Response: Sewer service is to be provided separately from the adjacent property. Irrigation is anticipated to be shared, a written agreement between the two lots is anticipated.

10. A separate irrigation meter with an approved backflow prevention device will be required to serve landscaped areas if the lot merger is not completed. An address assignment will need to be completed for the meter, and can be processed through the City Planning Department.
Response: A dedicated fire service connection and loop has been provided as required.

11. Buildings requiring an NFPA 13 or NFPA 13R automatic sprinkler system for fire protection shall have a dedicated fire service connection to a public water main with a double check detector backflow assembly. Location of the backflow assembly must be approved by Fire Department.
Response: A dedicated fire service connection and loop has been provided as required.

12. Private on-site fire hydrants shall be served by a private fire main that is looped on-site with two connections to an existing public water main. Each connection shall have a double check detector assembly for backflow protection. Size-on-size hot taps are not acceptable and cut-in tees shall have gate valves on all three ends.
Response: A dedicated fire service connection and loop has been provided as required.

13. Hot tap connections will not be allowed for size on size connections, and 6-inch connections to an 8-inch water main. The connection shall be a cut-in tee with three valves for each end of the tee. Provide a connection detail on the improvement plans for all cut-in tee connections.
Response: Detail of valves has been provided, cut-in is illustrated on the utility plan C1012.

The following conditions shall be met prior to the approval of engineering design plans.

14. Any water and/or sewer improvements required to develop the proposed property will need to be included in the improvement plans and designed in accordance with the *Water, Sewer, and Recycled Water Design and Construction Manual.*
Response: Sewer main is intended to be permitted separately.

15. All public water and/or sewer facilities not located within the public right-of-way shall be provided with easements sized according to the *Water, Sewer, and Recycled Water Design and Construction Manual.* Easements shall be constructed for all weather access.
Response: Public system has been removed from the scope of this project.

16. No trees, structures or building overhang shall be located within any water or wastewater utility easement.
Response: Public system has been removed from the scope of this project.

17. All lots with a finish pad elevation located below the elevation of the next upstream manhole cover of the public sewer shall be protected from backflow of sewage by installing and maintaining an approved type backwater valve, per the latest adopted California Plumbing Code.
Response: There is no upstream manhole for this project, no backflow device is anticipated.

18. Per City of Oceanside Ordinance No. 14-OR0565-1, the developer shall pay a recycled water impact fee since the proposed project is not within 75 feet of a recycled water main. The impact fee shall be established by submitting a formal letter requesting the City to determine this fee, which is based on 75% of the design and construction cost to construct a recycled water line fronting the property in Waring Road.
Response: This is understood.

19. An inspection manhole for commercial waste as described by the *Water, Sewer, and Recycled Water Design and Construction Manual*, shall be on each building sewer lateral immediately behind the property line and the location shall be called out on the approved engineering plans. Response: An inspection manhole has been indicated on the plans and is called out as "cleanout 1". Detail is included on sheet C1015 to match city standard sewer lateral (S-3).

20. A Grease Interceptor, as required per City of Oceanside Ordinance 07-OR0021-1 & 18-OR0021-1 relating to food service establishments shall be on each building sewer when deemed necessary in an appropriate outside location and shall be maintained by the property owner. The grease interceptor shall be shown on Engineering Plans with reference to Building Plans for design and detail. Response: Food preparation will not occur within this facility. Food is prepared in the Tri-City Medical Center Dietary Unit.

21. Connections to a public sewer main with a 6-inch or larger sewer lateral will require a new sewer manhole for connection to main per Section 3.3 of *Water, Sewer, and Recycled Water Design and Construction Manual*.
Response: A sewer manhole is indicated on sheet C1012.

22. Connection to an existing sewer manhole will require rehabilitation of the manhole per City standards. Rehabilitation may include, but not be limited to, re-channeling of the manhole base, surface preparation and coating the interior of the manhole, and replacing the manhole cone with a 36" opening and double ring manhole frame and lid.
Response: Project will connect to a main permitted as part of a separate submittal ROWP21-0874.

23. Provide stationing and offsets for existing and proposed water service connections and sewer laterals on plans. Response: Project does not anticipate stationing form of horizontal control, if desired this can be provided as an exhibit.

24. Any unused water services or sewer laterals by the proposed development or redevelopment, shall be abandoned in accordance with Water Utilities requirements.
Response: Not applicable.

The following conditions of approval shall be met prior to building permit issuance.

25. Show location and size of proposed water meter(s) on site plan of building plans. Show waterline from proposed meter to connection point to building.
Response: Provided - see Utility Plan

26. Show location and size of proposed sewer lateral(s) from property line or connection to sewer main to connection point at building.
Response: Provided - see Utility Plan

27. Provide a fixture unit count table and supply demand estimate per the latest adopted California Plumbing Code (Appendix A) to size the water meter(s) and service line(s).

28. Provide drainage fixture unit count per the latest adopted California Plumbing Code to size sewer lateral for property.
Response: Sewer lateral appropriately sized pursuant to fixture count

29. If a Grease Interceptor is required per City of Oceanside Ordinance 07-OR0021-1, then building plans must show sizing calculations per the latest California Plumbing Code, the location, the make and model, and plumbing schematic showing the required appurtenances at each building sewer lateral.
Response: Not applicable - no food preparation.

30. Water and Wastewater buy-in fees and the San Diego County Water Authority Fees are to be paid to the City at the time of Building Permit issuance per City Code Section 32B.7.
Response: Understood.

Date to Planning: 11/17/21
To Planner: Scott Nightingale
From: Harry Grove

Subject: 2nd Submittal Landscape Comments - D21-00004 - 1 Story Psychiatric Hospital Facility – 111721

Response from the applicant has stated that "All items below are under County of San Diego Jurisdiction and will receive approval by County of San Diego. No City of Oceanside Building Department/ Landscape submittal." If this is NOT true due to the project location and Oceanside jurisdictional oversight, please resubmit a CLP with the following information below. – 2nd Request.

Landscape

In reviewing this Entitlement Project the following comments are directed solely for the review of the landscape portion of the submittal. After reviewing the entitlement submittal package a full set of landscape working drawings were submitted but there is no sheet titled Conceptual Landscape Plan (CLP). This entitlement package will be required to provide a dedicated (separate) Conceptual Landscape Plan (CLP) showing the entire landscaping of the proposed project including the public R.O.W. along Waring Road. Please remove the working drawings from the plan set I received and modify sheets LP1.01 thru LP1.04 to be a single Conceptual Landscape Plan (CLP). The revised CLP shall contain the following items below found to be incomplete at the time of initial landscape review of the current submittal date stamped February 24, 2021.

1) Base Conceptual Landscape Plan (CLP) Information
   GroundLevel - CLP Document developed and submitted 1/20/2022
   a) Please locate all drainage swales on the CLP.
      GroundLevel – Drainage swales called out on plans
   b) Show all existing trees that are to remain to be "Protected in Place" (where applicable on the interior perimeter and public parkways) by clearly labeling with tree/ palm name (both botanical and Common names) and size with diameter at breast height (DBH) size or brown trunk height (BTH) for palms. Diameter at breast height is measured 54-inches above finished grade. This may require a tree survey, schedule of tree replacement, or other mitigation requirements.
      GroundLevel – Existing trees and shrubs within the RW called out. All other existing plant material to be removed
   c) The trees that are going to be called out to be "Protected in Place" need to contain language to support the action of protecting the trees in place. Such language may include but not limited to: no mechanical grading to cause a change of grade or elevation around the base of trees or within the drip line of the trees, no mechanical equipment or trenching within the drip line of the trees to avoid disturbance of the root system, and no excessive pruning or equipment around the canopy to cause injury to branches, trunk and compaction of roots. In addition, please note that if the existing trees are damaged or destroyed by construction activities that the trees are to be replaced in kind and of the same size diameter. Call out and show all language on the CLP.

GroundLevel – Note added to plans

d) On the CLP please provide the bio-filtration basin(s) proposed. If applicable, please make sure these basins are called out on the CLP and shown as planted.
GroundLevel – Bio-filtration basins called out on plans

e) If all the items required for this CLP are too large to provide on one 24" x 36" sheet please feel free to use more 24" x 36" sheets as needed.
GroundLevel – Two 24x36 plans provided for the CLP

2) Property Lines, Sight Distances, Utility Lines/ Easements
   a) Clearly show and call out all property lines, line of sight distances, all utility lines as well as utility, water, sewer, gas and storm drain easements. Please diagrammatically clarify all of these lines with a call out on the CLP. In addition, all easements shall be designated with dimension lines and sight lines (where applicable) and shall be drawn on the CLP.
   GroundLevel – All information called out on plans
3) Notes – Please add the following as notes if they are not currently found on the CLP.
   GroundLevel – All notes provided on plans
   a) Final landscape plans shall accurately show placement of trees, shrubs, and groundcovers.
   b) Landscape Architect shall be aware of utility, sewer, storm drain easement and place planting locations accordingly to meet City of Oceanside requirements.
   c) All required landscape areas shall be maintained by owner or as stated in any legal document such as but not limited to a lease agreement. The landscape areas shall be maintained per City of Oceanside requirements.
   d) Typical irrigation note to be added onto the CLP such as but not limited to:
   An automatic irrigation system shall be installed to provide coverage for all planting areas shown on the plan. Low volume equipment shall provide sufficient water for plant growth with a minimum water loss due to water run-off. Irrigation systems shall use high quality, automatic control valves, controllers and other necessary irrigation equipment. All components shall be of non-corrosive material. All drip systems shall be adequately filtered and regulated per the manufacturer's recommended design parameters. All irrigation improvements shall follow the City of Oceanside Guidelines and Water Conservation Ordinance.
   e) Typical planting note to be added onto the CLP such as but not limited to:
   The selection of plant material is based on cultural, aesthetic, and maintenance considerations. All planting areas shall be prepared with appropriate soil amendments, fertilizers, and appropriate supplements based upon a soils report from an agricultural suitability soil sample taken from the site. Ground covers or bark mulch shall fill in between the shrubs to shield the soil from the sun, evapotransporation and run-off. All the flower and shrub beds shall be mulched to a 3" depth to help conserve water, lower the soil temperature and reduce weed growth. The shrubs shall be allowed to grow in their natural forms. All landscape improvements shall follow the City of Oceanside Guidelines.
   f) The current general notes below refer to the placement of trees and their distances from hardscape and other utilities/ structures. Please show the City of Oceanside's current tree planting distances/ spacing on the CLP and space proposed trees accordingly.
   <u>STREET TREES AND OTHER TREES SHALL BE SPACED:</u>

1. 8 feet (previously 3 feet) from transformers, cable, and pull boxes.
2. 5 feet from mailboxes
3. 5 feet from fire hydrants (all sides)
4. 10 feet from centerline (previously 7 feet) of all utility lines (without easement) (sewer, water, storm drains, double check detectors, air relief valves and gas)
5. 10 feet from easement boundaries (sewer, water, storm drains, access or other utilities)
6. 10 feet from driveways (unless a line of sight is determined by the Traffic Division to be otherwise)
7. 10 feet from traffic and directional signs
8. 15 feet (minimum) from streetlights, other utility poles, (determined by specifications)
9. Street trees shall be planted 3' outside right-of-way if the right-of-way does not allow space, subject to the City Engineer's approval.
10. Line of sight at arterials, collector and local streets shall be reviewed and determined by Traffic Engineer. A minimum of twenty-five feet (25') from street intersection or as approved by the Traffic Engineer.
11. Minimum fifteen feet (15') streetlight and stop sign or clearance determined by specifications.
12. Screen all utilities according to specific agency requirements.

g) Root barriers shall be installed adjacent to all paving surfaces where a paving surface is located within 6 feet of a tree trunk on site (private) and within 10 feet of a tree trunk in the right-of-way (public). Root barriers shall extend 5 feet in each direction from the centerline of the trunk, for a total distance of 10 feet. Root barriers shall be a minimum 24 inches in depth. Installing a root barrier around the tree's root ball is unacceptable.

h) Fire Notes

Include the following Fire notes on the CLP:

1. Landscape Improvement Plan set and installation are required to implement approved Fire Dept. regulations, codes, and standards at the time of project approval.
2. All fire hydrants, double check detectors, post indicating valves, and fire department connections shall be provided with a 3-foot clearance around all fire apparatuses.
3. All trees at maturity shall meet a horizontal clearance along all roadways from curb to curb. Horizontal roadway clearance for a one-story building is 28-feet wide.
4. All trees at maturity shall meet a vertical clearance of 14-feet from the top of the roadway to the lowest branches.

4) Fences, Gates, Walls, Retaining Walls, and Plantable Walls

GroundLevel – All information called out on plans.

a) A conceptual detail of all proposed fences, gates, walls, retaining walls, and plantable walls (where applicable) showing specifically layout and height shall be shown on the CLP.

Site keystone wall detail provided on sheet L1.1. Chain-link fence, decorative fence, and gates, per Architectural plans

b) Obtain planning division approval for these items in the conditions or application stage prior to 1st submittal of working drawings.
c) Proposed walls are to be constructed to represent the same design of the proposed building.
d) Please show all existing and/or proposed fences, gates, walls, retaining walls, and plantable walls with a symbol and callout on the CLP.
e) Clearly designate on plan all existing fences, walls, and retaining walls, on the CLP to be protected in place including all items in the Public R.O.W.

5) Trash Enclosure

GroundLevel – Trash enclosure callout provided on plans. See architectural plans for design and details

a) Please either show on the CLP the design for the trash enclosure(s) or provide with a note on the CLP stating how the trash is to be stored and collected for the proposed project.

To bring the landscape portion of the application to a "complete" status, the Conceptual Landscape Plan (CLP) shall be corrected, updated, or supplemented as more particularly detailed for each applicable item in the following list above.

LINSCOTT LAW & GREENSPAN
engineers

LOCAL TRANSPORTATION ASSESSMENT

TRI-CITY HOSPITAL

Oceanside, California
December 22, 2021

LLG Ref. 3-21-3448

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EXECUTIVE SUMMARY

Linscott, Law & Greenspan, Engineers (LLG) has prepared the following Local Transportation Assessment (LTA) to determine and evaluate the potential impacts to the local roadway system due to the proposed Tri-City Hospital project, consistent with the City of Oceanside *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment*, August 2020. This City document provides guidance for the preparation of LTAs to identify any off-site infrastructure improvements in the project vicinity that may be triggered with the development of the project as well as to analyze site access and circulation and evaluate the local multi-model network available to serve to project.

The Project proposes the construction of a 13,400 SF, 16-bed psychiatric facility. Vehicular access to the proposed new building of the site is proposed via the existing Tri-City Hospital access on Vista Way. The existing medical center is primarily accessible via Vista Way and Thunder Drive. Pedestrian access will be provided,

Pedestrian access is available via the main entrance on Vista Way and also Thunder Drive.

The Project is calculated to generate 320 daily trips with 26 trips during the AM peak hour (18 inbound/ 8 outbound trips) and 32 trips during PM peak hour (13 inbound/ 19 outbound trips).

The LTA study area includes three intersections. The analysis determines the transportation impacts of the Project under existing conditions.

Per the City of Oceanside's thresholds for the determination of the need for roadway improvements, and the analysis methodology presented in this report, roadway improvements are not recommended since all study area intersections are calculated to operate at LOS C or better in the Existing and Exiting + Project conditions.

The Project is consistent with the City's adopted General Plan and generates 320 ADT, less than the 1,000 ADT threshold. The Project is also located in a low-VMT generating area identified on the most recent SANDAG SB 743 VMT Screening map. The Project is presumed to have a less than significant CEQA / VMT impact. Therefore, a Transportation VMT Analysis is screened out and was therefore not prepared for this Project.

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LOCAL TRANSPORTATION ASSESSMENT

TRI-CITY HOSPITAL

Oceanside, California
October 12, 2021

1.0 INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has prepared this Local Transportation Assessment (LTA) to assess the potential impacts associated with the proposed Tri-City Medical Center Expansion project (Project) in the City of Oceanside. The Project site is located on the east side of Waring Road between College Boulevard and Camarillo Avenue on a vacant lot within the existing Tri-City Medical Center in the City of Oceanside. The Project proposes the construction of a 13,400 SF, 16-bed psychiatric facility. This report addresses the potential transportation impacts from the proposed Project.

The following sections are included in this report:

- Project Description
- CEQA VMT Screening Process
- Local Transportation Assessment Methodology & Thresholds
- Existing Vehicular Conditions Description
- Analysis of Existing Conditions
- Project Trip Generation/Distribution/Assignment
- Analysis of Existing + Project Conditions
- Pedestrian, Transit and Bicycle Mobility
- Conclusions

2.0 PROJECT DESCRIPTION

The Project proposes the construction of a 13,400 SF, 16-bed psychiatric facility. The Project is consistent with the proposed General Plan and Zoning. The existing medical center is primarily accessible via Vista Way and Thunder Drive and provides 380 hospital beds, 59,940 SF of medical office uses and 21,535 SF of general office uses.

2.1 Site Location

The Project site is located on the east side of Waring Road between College Boulevard and Camarillo Avenue on a vacant lot within the existing Tri-City Medical Center in the City of Oceanside.

Figure 2–1 shows the Project's Vicinity Map and ***Figure 2-2*** shows a more detailed Project Area Map.

2.2 Site Access

The proposed new building will use the existing Tri-City Hospital access on Vista Way. An emergency access only is provided at Waring Road and no public access will be permitted. Pedestrian access is available via the main entrance on Vista Way and also Thunder Drive.

Figure 2–3 is the Proposed Conceptual Site Plan.

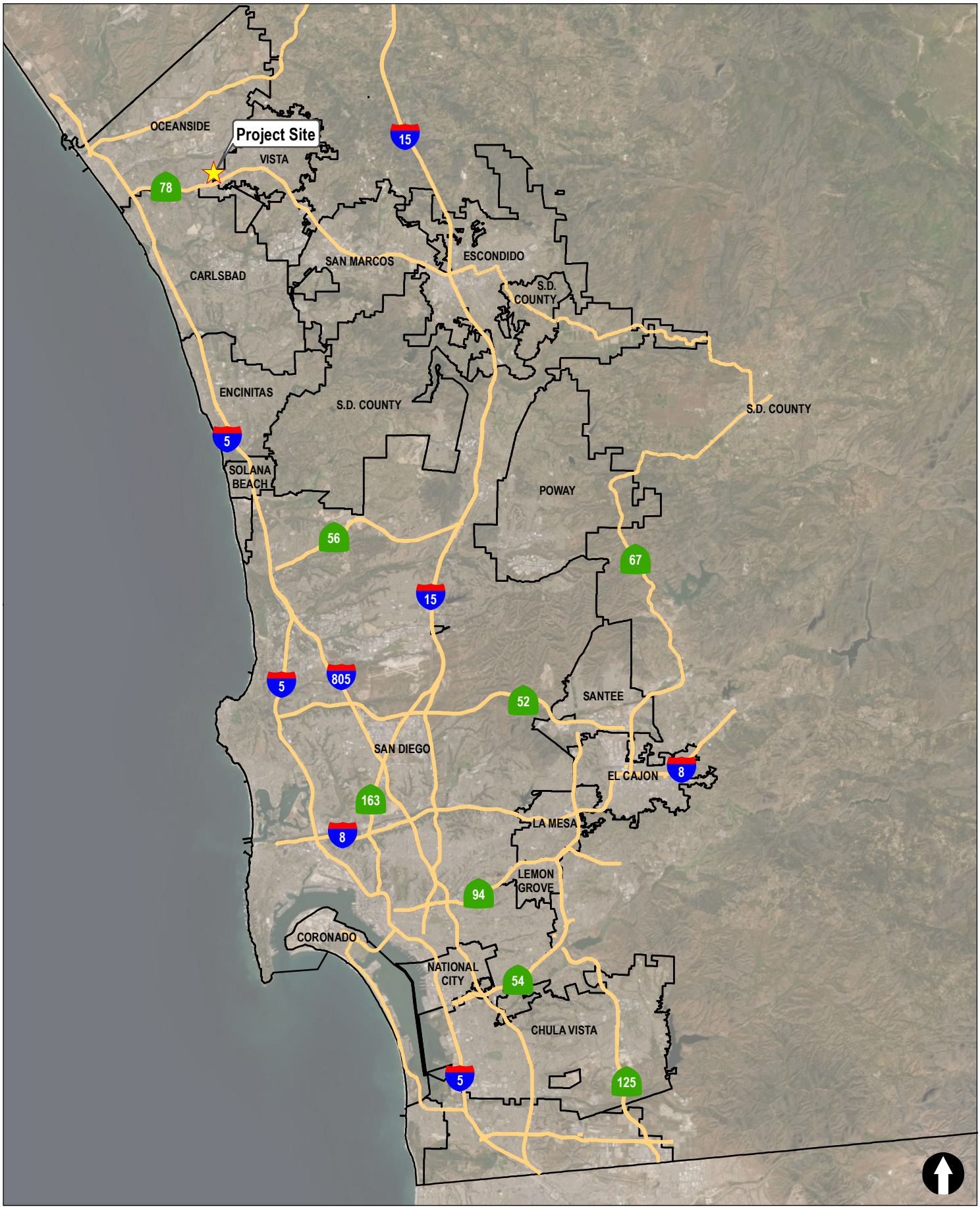

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Figure 2-1

Vicinity Map

Tri-City Hospital

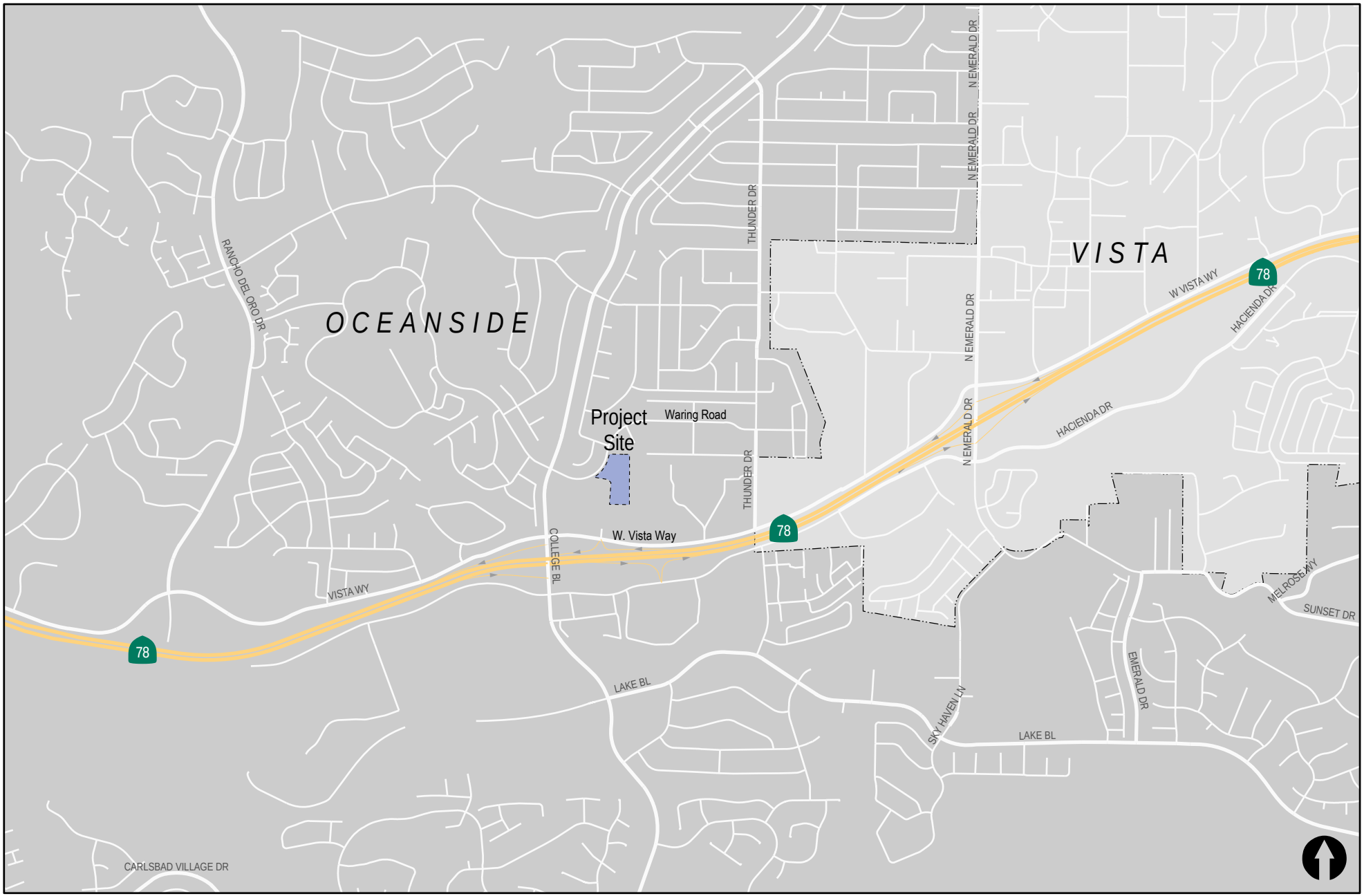

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Figure 2-2

Project Area Map

Tri-City Hospital

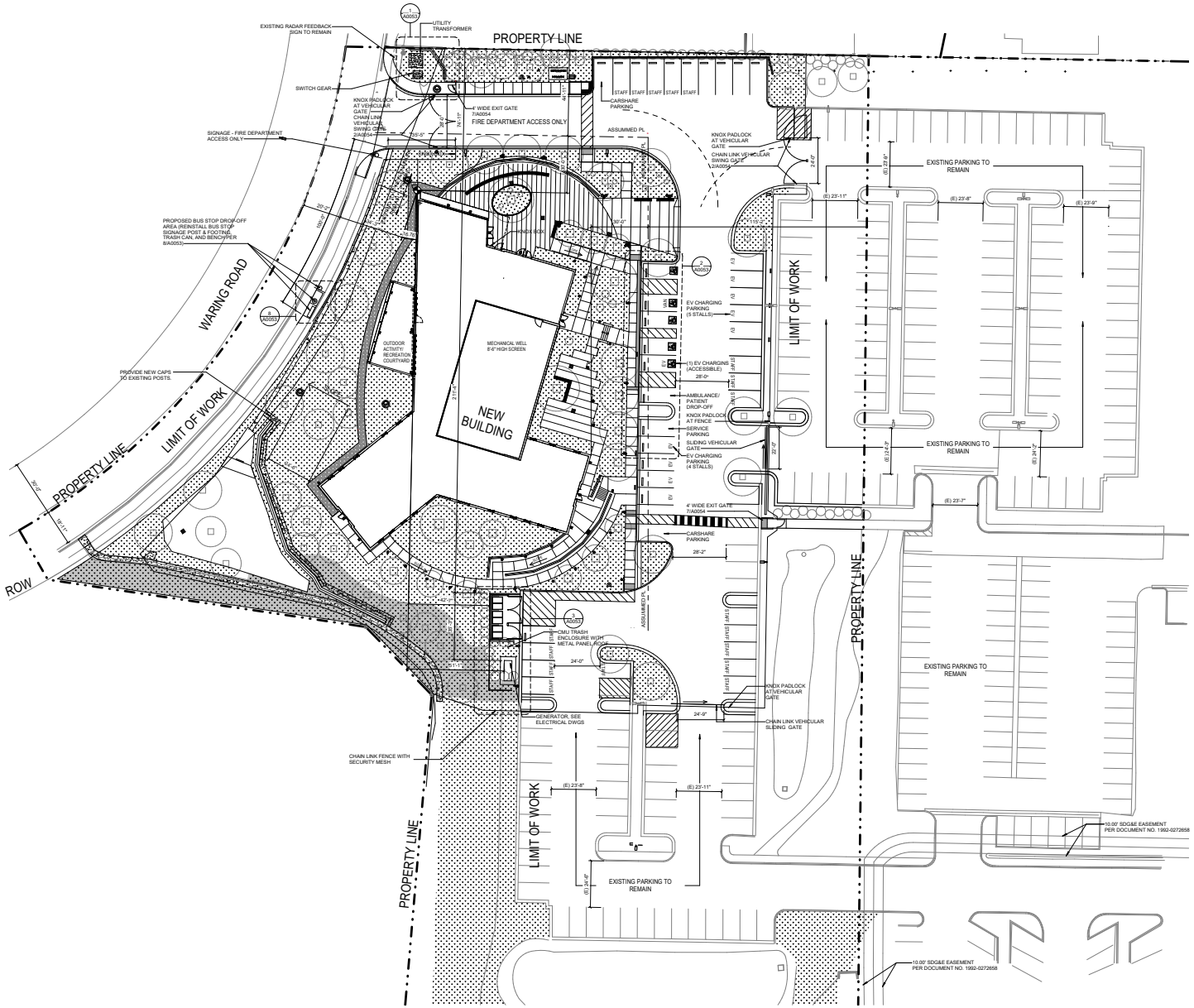

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Figure 2-3

Site Plan

TRI-CITY HOSPITAL

LINSCOTT LAW & GREENSPAN engineers

3.0 CEQA VMT ANALYSIS

An assessment was conducted to determine the impacts on Vehicle Miles Traveled (VMT) for the Project. This assessment utilizes methodologies presented within the Governor's Office of Planning and Research (OPR) Technical Advisory developed to assist with implementation of Senate Bill 743 (SB 743), which resulted in a shift in the measure of effectiveness for determining transportation impacts from Level of Service (LOS) and vehicular delay to VMT. VMT analyses are required in all California Environmental Quality Act (CEQA) documents as of July 1, 2020. This assessment follows the guidelines provided in the City of Oceanside *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment,* August 2020.

As seen in ***Table 3-1*** (Table 3 of the City of Oceanside *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment* (August 2020)). The Project is screened out from requiring a VMT analysis based on the following criteria:

1. Projects located in a low-VMT generating area identified on the most recent SANDAG SB 743 VMT Screening map.

   The Project is located in a Low-VMT generating area at 82.8 % of the Mean (see ***Appendix A***).

2. Projects generating less than 1,000 daily vehicle trips (if consistent with adopted General Plan).

   The Project is consistent with the adopted General Plan and generates 320 ADT, less than the 1,000 ADT threshold.

TABLE 3-1
SCREENED OUT PROJECTS

Project Type	Qualifies?
1. Projects located in a Transit Priority Areas (TPA) or Smart Growth Opportunity Area as identified in the most recent SANDAG San Diego Forward Regional Plan and is consistent with the General Plan at the time of project application. (1)(2)	
2. Projects located in a low-VMT generating area identified on the most recent SANDAG SB 743 VMT Screening map	The Project is located in a Low-VMT generating area at 82.8 % of the Mean (see *Appendix A*)
3. Locally serving K-12 schools	
4. Day care centers	
5. Local parks	
6. Locally serving retail uses less than 50,000 square feet, including: gas stations, banks, restaurants, grocery stores, and shopping centers	
7. Community institutions (Public libraries, fire stations, local government)	
8. Locally serving hotels (e.g. non-destination hotels, non-regionally serving)	
9. Student housing projects on or adjacent to college campuses	
10. Local serving community colleges that are consistent with the assumptions noted in the most recent SANDAG Regional Transportation Plan/Sustainable Communities Strategy	
11. Affordable housing projects [3]	
12. Assisted living facilities	
13. Senior housing (as defined by HUD)	
14. Transit projects	
15. Bike projects	
16. Pedestrian projects	
17. Safety improvement projects (e.g. RRFBs and high visibility crosswalks at uncontrolled locations, pedestrian count down timers, additionally projects identified through the Highway Safety Improvement Program)	
18. Safe Routes to School	
19. Projects generating less than 500 daily vehicle trips (if inconsistent with adopted General Plan)	
20. Projects generating less than 1,000 daily vehicle trips (if consistent with adopted General Plan)	Consistent with General Plan and generates 320 ADT.

Source:

Table 2 Screened out Projects, City of Oceanside Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment, August 2020.

Footnotes:

1. Projects located in a TPA must be able to access the transit station within a ½ mile walking distance or 6-minute walk continuously without discontinuity of sidewalk or obstructions to the route. Qualifying transit stops means a site containing an existing rail transit station served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (OPR, 2017). A high-quality transit corridor may also be considered if a corridor with fixed route bus service has service intervals no longer than 15 minutes during peak commute hours (OPR, 2017).
2. Smart Growth Opportunity Area Map is provided in Appendix B. The most recent version available shall be used.
3. If a project is a mix of affordable housing and market rate housing or unscreened use, only the affordable housing component would qualify as screened out. Additionally, any removal of affordable housing automatically requires CEQA VMT analysis.

4.0 LOCAL TRANSPORTATION ASSESSMENT METHODOLOGY & THRESHOLDS

A Project-Specific Local Transportation Assessment was prepared that analyzes automobile delay and LOS. The LOS analysis was conducted to identify Project impacts on the roadway operations in the Project study area and to recommend Project improvements to address noted deficiencies; however, the CEQA impact significance determination for the proposed Project is based only on VMT and not on LOS.

The proposed Project generates over 200 ADT but less than 1,000 ADT and is consistent with the City's adopted General Plan. Therefore, a Local Transportation Assessment (LTA) was prepared consistent with City guidelines.

4.1 Study Area

The following study area was developed based on the anticipated assignment of Project traffic and locations which will carry the most Project traffic, per City of Oceanside staff coordination and scoping meetings. The study area meets and exceeds the trip-based criteria from the City's guidelines, which state that:

- All signalized intersections and project driveways shall be analyzed if the project will add 50 or more new peak hour trips in either direction.
- All unsignalized intersections and project driveways shall be analyzed if the project will add 50 or more new peak hour trips in either direction.
- All freeway ramp intersections and signalized ramp meters shall be analyzed if the project all 20 or more new peak hour trips in either direction.

INTERSECTIONS

1. W. Vista Way / SR-78 WB Ramps (Home Depot Dwy)
2. W. Vista Way / Tri-City Hospital Driveway
3. W. Vista Way / Thunder Drive

4.2 Analysis Scenarios

This study includes analysis of the following scenarios:

- Existing Conditions
- Existing Conditions + Project

4.3 Analysis Methodology

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of Service provides an index to the operational qualities of a roadway segment or an intersection. Level of Service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating

conditions. Level of Service designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

4.3.1 *Intersections*

Intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapters 18, 19 and 20 of the *Highway Capacity Manual (HCM),* with the assistance of the *Synchro* (version 10) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection Level of Service (LOS).

4.4 Thresholds for the Determination of the Need for Roadway Improvements

The City of Oceanside uses the published SANTEC/ITE guidelines to establish thresholds and methodology for this Local Transportation Assessment (LTA). ***Table 4–1*** below indicates when a project's impact on the roadway system is considered to justify the need for roadway improvements. That is, if a project's traffic impact causes the values in this table to be exceeded, roadway improvements should be considered as follows on a case-by-case basis:

- Improvements should be consistent with the General Plan
- Improvements for transit, bike and pedestrian facilities should be given priority in Transit Priority Areas or Smart Growth Opportunity Areas as identified by SANDAG.
- Projects in Transit Priority Areas or Smart Growth Opportunity Areas as identified by SANDAG, that are consistent with the General Plan at the time of project application, should not be denied due to the inability to provide roadway improvements (i.e., existing right of way is constrained, etc.)

TABLE 4–1
CITY OF OCEANSIDE
DETERMINATION OF THE NEED FOR ROADWAY IMPROVEMENTS

Level of Service with Project [a]	Allowable Change Due to Project Impact	
	Roadway Segments	Intersections
	V/C	Delay (sec.)
E & F	0.02	2.0

Source: SANTEC/ITE *Guidelines for Traffic Impact Studies in the San Diego Region*, May 2019.

Footnotes:

a. All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume basis. The acceptable LOS for roadways and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions).

General Notes:

1. V/C = Volume to Capacity Ratio
2. Delay = Average stopped delay per vehicle measured in seconds for intersections.

5.0 EXISTING VEHICULAR CONDITIONS

Effective evaluation of the traffic impacts associated with the proposed Project requires an understanding of the existing transportation system within the project study area. ***Figure 5–1*** depicts the existing conditions, including intersection lane configurations and traffic control.

5.1 Existing Street Network

The following is a brief description of the existing roadway system in the project area. Roadway classifications are based on the City of Oceanside Circulation Element.

W. VISTA WAY

W. Vista Way is classified as a Secondary Collector in the City of Oceanside Circulation Element in the project vicinity. It is currently constructed as a four-lane undivided roadway with intermittent turning lanes between College Boulevard and Thunder Drive, with a curb-to-curb distance is about 85 feet. Between SR-78 westbound ramps and Thunder Drive, Vista way is built as a two-lane undivided roadway with two-way left-turn lane. With a curb-to-curb distance is about 60 feet. Sidewalks are provided on the north side of the roadway measuring about 6 feet. Bike lanes are provided on both sides of the roadway. Curbside parking is not permitted. Pedestrian push buttons are provided at intersections along Vista Way. The posted speed limit is 40 mph.

TRI-CITY MEDICAL

Tri-City Medical is a non-classified roadway in the City of Oceanside Circulation Element in the project vicinity. It is currently constructed as a four-lane divided roadway between Vista Way and Tri-City Hospital. The curb-to-curb distance is about 55 feet. Sidewalks are provided on both sides of the roadway measuring about 6 feet. Bike lanes are not provided. Curbside parking is not permitted. Pedestrian push buttons are provided at the W. Vista Way / Tri-City Medical intersection. There is no posted speed limit.

THUNDER DRIVE

Thunder Drive is classified as a Collector Road in the City of Oceanside Circulation Element in the project vicinity. It is currently constructed as a two-lane undivided roadway. The curb-to-curb distance is about 40 feet. Sidewalks are provided on both sides of the roadway measuring about 6 feet. Bike lanes are not provided. Curbside parking is permitted intermittently on both sides of the roadway. Pedestrian push buttons are provided at the Vista Way and Thunder Drive intersection. Bus stops for routes 302, 315, and 325 are present along Thunder Drive. The nearest bus stop (eastbound) at the project site is on Thunder Drive, approximately 260 feet north of Vista Way. The posted speed limit is 30 mph.

5.2 Existing Traffic Volumes

Counts were conducted at the following study area intersections on September 22, 2021.

1. SR 78 WB Ramps / W. Vista Way (Home Depot Driveway)

2. Tri-City Driveway / W. Vista Way
3. Thunder Drive / W. Vista Way

Appendix B contains the Manual count sheets.

5.2.1 *Determining the Covid Factor*

Due to the current Covid situation, traffic counts conducted in 2021 do not reflect the normal traffic volumes. Hence, research was conducted to identify historical traffic volume counts in the Project study area. However, historical roadway segment traffic volumes are not available in the Project vicinity. Therefore, historical traffic volumes on SR 78 were compared and it was determined that the Pre-Covid traffic volumes from 2019 are generally 5% higher than the during Covid volumes in 2021. Thus the 2021 counts were increased by an average of 5% in order to replicate pre-pandemic traffic volumes.

TABLE 5-1
DETERMINING THE COVID FACTOR

Segment	Aug-19			Aug-21			Difference	
	EB	WB	Total	EB	WB	Total	Amount	Percent
SR 78								
West of College Blvd	56,255	57,898	114,153	53,429	55,000	108,429	5,724	5.01%
College Blvd to Emerald Dr	56,888	59,223	116,111	55,191	56,601	111,792	4,319	3.72%
East of Emerald Dr	56,386	64,743	121,129	53,054	61,545	114,599	6,530	5.39%
Average Difference								**4.71%**
Use								**5%**

5.2.2 *Existing Volumes Used in the Analysis*

The 2021 intersections volumes were updated for the "Covid" impact by applying the 5% Covid factor to the volumes in all movements at each intersection.

Figure 5–2 shows the Existing Traffic Volumes adjusted for Covid and used in the analysis. ***Appendix C*** contains the signal timing plans for the City of Oceanside signalized intersections.

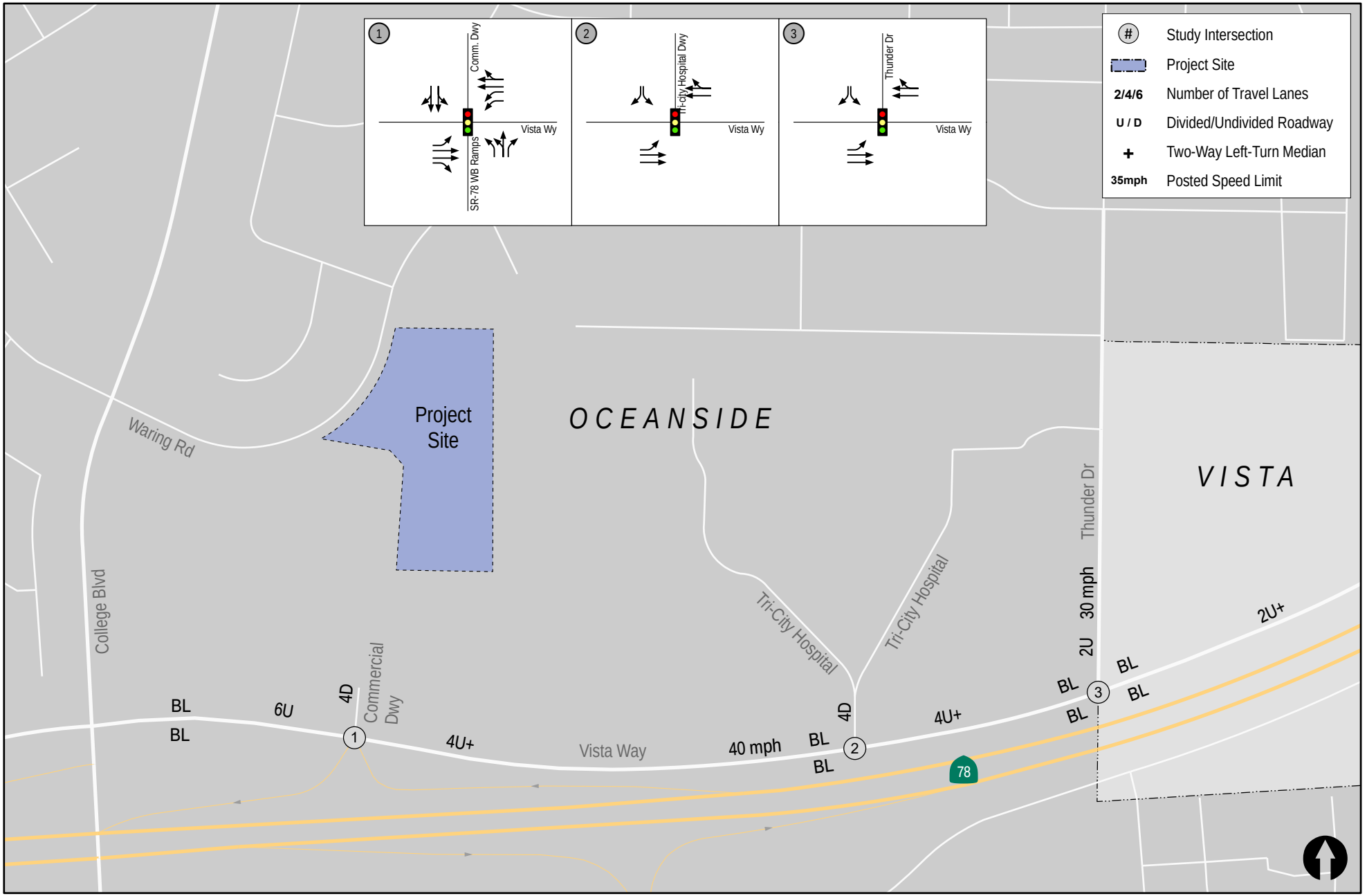

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Figure 5-1

Existing Conditions

Tri-City Hospital

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Figure 5-2

Existing Traffic Volumes

Tri-City Hospital

6.0 ANALYSIS OF EXISTING CONDITIONS

6.1 Peak Hour Intersection Analysis

Table 6–1 summarizes the peak hour intersection operations under Existing Conditions in the study area. As shown, the study area intersections are calculated to currently operate acceptably at LOS C or better during the AM and PM peak hours.

Appendix D contains the Existing Conditions intersection analysis worksheets.

TABLE 6–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Delay [a]	LOS [b]
1. W. Vista Way / SR-78 WB Ramps (Home Depot Dwy)	Signal	AM	33.7	C
		PM	30.1	C
2. W. Vista Way / Tri-City Hospital Dwy	Signal	AM	16.9	B
		PM	17.0	B
3. W. Vista Way / Thunder Dr	Signal	AM	20.9	C
		PM	18.3	B

Footnotes:
a. Average delay expressed in seconds per vehicle.
b. Level of Service.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

7.0 TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

7.1 Trip Generation

Trip generation rates were obtained from the (Not So) *Brief guide of Vehicular Traffic Generation Rates for the San Diego Region* (April 2002) by SANDAG. The "Hospital - General" trip rate per bed was used to estimate the Project trip generation.

Table 7–1 summarizes the trip generation for the Project. As shown in *Table 7–1*, the Project is calculated to generate 320 daily trips with 26 trips during the AM peak hour (18 inbound/ 8 outbound trips) and 32 trips during PM peak hour (13 inbound/ 19 outbound trips).

7.2 Trip Distribution and Assignment

Project traffic was distributed to the street system based on existing traffic patterns in the area, the Project's proximity to freeways and arterials and residences.

It is assumed that all project traffic will utilize the Vista Way / Hospital Driveway intersection.

Figure 7–1 shows the distribution of the Project trips. ***Figure 7–2*** shows the Project traffic volumes. ***Figure 7-3*** shows the Existing + Project traffic volumes.

TABLE 7–1
PROJECT TRIP GENERATION

Land Use	Quantity	Trip Rate [a]	ADT	AM Peak Hour					PM Peak Hour				
				% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
Hospital	16 Beds	20 / Bed	320	8%	70:30	18	8	26	10%	40:60	13	19	32

Footnote:

a. Rates are based on SANDAG's *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002.

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Date: 10/6/2021

Figure 7-1

Project Traffic Distribution

Tri-City Hospital

N:\3448\Figures
Date: 10/6/2021

Figure 7-2

Project Traffic Volumes

Tri-City Hospital

N:\3448\Figures
Date: 10/6/2021

Figure 7-3

Existing + Project Traffic Volumes

Tri-City Hospital

8.0 ANALYSIS OF EXISTING + PROJECT CONDITIONS

8.1 Peak Hour Intersection Analysis

Table 8–1 summarizes the peak hour intersection operations under Existing + Project conditions in the study area. As shown in *Table 8-1*, with the addition of Project traffic, all study area intersections are calculated to continue to operate at LOS C or better.

Based on the City of Oceanside's traffic thresholds and methodology summarized in *Section 4*, roadway improvements are not required since all intersections are calculated to operate at the acceptable LOS C or better.

Appendix E contains the Existing + Project intersection analysis worksheets.

TABLE 8–1
EXISTING + PROJECT INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing with Project		Delay Δ [c]	Improvement Required?
			Delay [a]	LOS [b]	Delay	LOS		
1. W. Vista Way / SR-78 WB Ramps (Home Depot Dwy)	Signal	AM	33.7	C	33.9	C	0.2	No
		PM	30.1	C	30.2	C	0.1	No
2. W. Vista Way / Tri-City Hospital Dwy	Signal	AM	16.9	B	17.6	B	0.7	No
		PM	17.0	B	18.0	B	1.0	No
3. W. Vista Way / Thunder Dr	Signal	AM	20.9	C	21.0	C	0.1	No
		PM	18.3	B	18.4	B	0.1	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes the increase in delay due to Project.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

9.0 PEDESTRIAN, TRANSIT AND BICYCLE MOBILITY

9.1 Pedestrian Conditions

Sidewalks are provided on both sides Tri-City Medical and Thunder Drive and on the north side of Vista Way. The closest pedestrian crossing is at the Vista Way / Thunder Drive intersection. This intersection is about 630 feet east of the Tri City Hospital Driveway. Pedestrian crosswalks are provided at the College Boulevard / Vista Way intersection allowing all pedestrians to cross north-south and east-west. This intersection is about 1,900 feet west of the Tri City Hospital Driveway. Pedestrians are not permitted to cross Vista Way at the Tri City Hospital Driveway.

9.1.1 *Existing Bicycle Conditions*

Class II bike lanes are provided along Vista Way.

9.1.2 *Future Bicycle Improvements/Plans*

Based on the City of Oceanside Bicycle Master Plan, there are no planned bicycle facility improvements within the project vicinity.

9.2 Existing Transit Conditions

Transit service within the City of Oceanside and City of Vista is provided by North County Transit District (NCTD). Bus routes 302, 315 and 325 serve the project area.

Stops at the above routes are located along Vista Way and Thunder Drive. The nearest bus stop (westbound) at the project site is on Vista Way, approximately 175 feet west of Tri-City Medical. The nearest bus stop (eastbound) at the project site is on Thunder Drive, approximately 260 feet north of Vista Way.

Route 302

Route 302 begins at Vista Transit Center and ends at Oceanside Transit Center or vice versa. There are 41-42 stops along this route. It operates from approximately 4 AM to 11 PM on Tuesdays through Fridays. It operates from approximately 6 AM to 11 PM on Saturdays through Mondays. Services are at 45-minute frequencies.

Route 315/325

Route 315/325 begins at College Boulevard Station to Carlsbad Village Station or vice versa. There are 39-43 stops along this route. It operates from approximately 6 AM to 5 PM on Tuesdays through Fridays. It operates from approximately 10:30 AM to 6 PM on Mondays and Saturdays. Route 325 is not operational on Sundays. Route 315 is operational on Sundays. Services are 50-minute frequencies. Stops at the above routes are located along Vista Way and Thunder Drive. The nearest bus stop (westbound) at the project site is on Vista Way, approximately 175 feet west of Tri-City Medical. The nearest bus stop (eastbound) at the project site is on Thunder Drive, approximately 260 feet north of Vista Way.

10.0 CONCLUSIONS

A Transportation VMT CEQA Analysis is not required based on the City of Oceanside *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment,* August 2020. The Project is presumed to have a less than significant CEQA / VMT impact. Based on the City's traffic thresholds and methodology summarized in *Section 4*, and the analysis presented in this report, roadway capacity improvements are not required since the increase in Project related delay does not exceed the allowable thresholds.

LINSCOTT
LAW &
GREENSPAN
engineers

TECHNICAL APPENDICES
TRI-CITY HOSPITAL
Oceanside, California
December 22, 2021

LLG Ref. 3-21-3448

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APPENDICES

APPENDIX

A. VMT Screening Map

B. Intersection Count Sheets

C. Signal Timing Plans

D. Peak Hour Intersection Analysis Worksheets – Existing

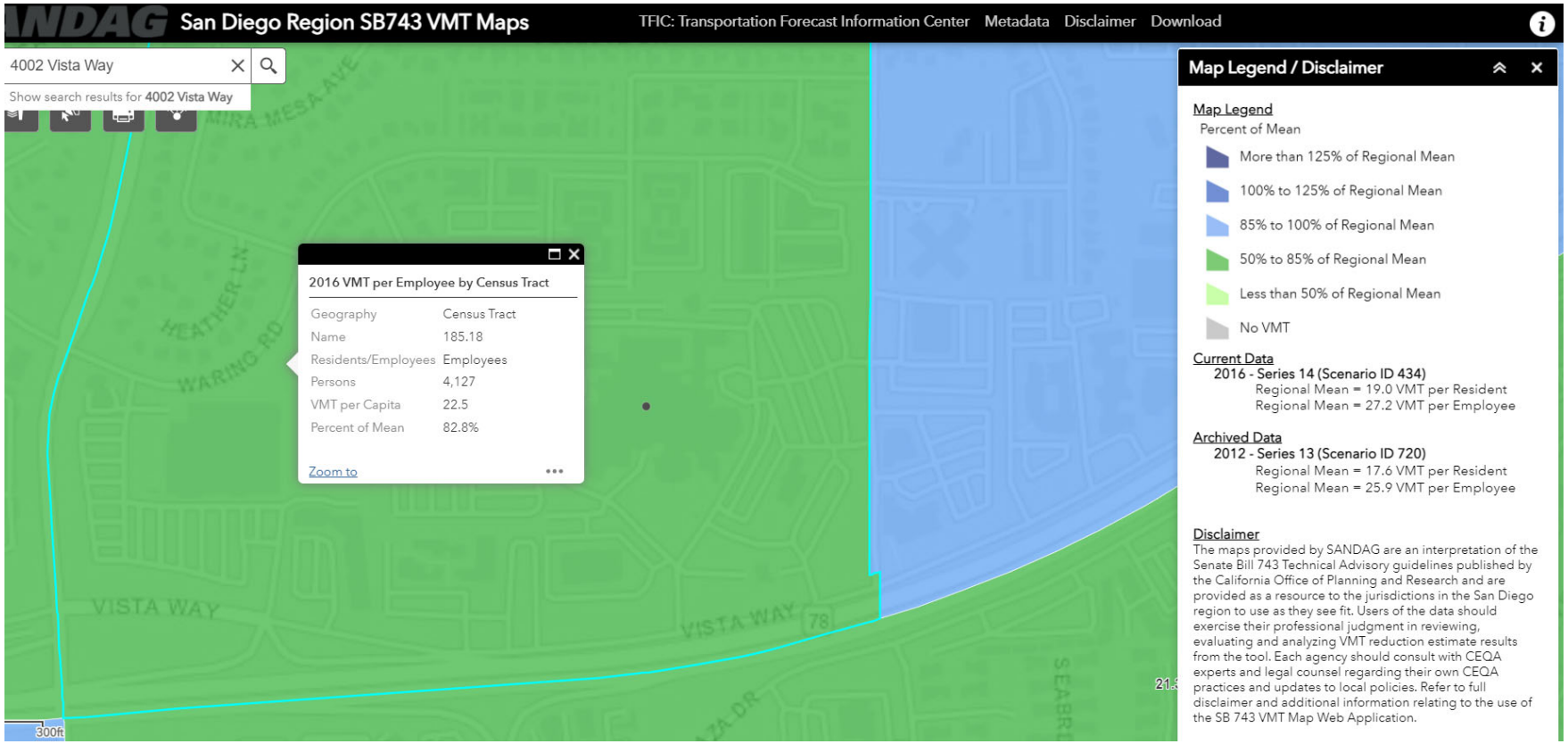
E. Peak Hour Intersection Analysis Worksheets – Existing + Project

F. NCTD Bus Schedules

APPENDIX A

VMT SCREENING MAP

VMT For 4002 Vista Way – Tri City Hospital



APPENDIX B

INTERSECTION COUNT SHEETS

Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#01	File Name:	ITM-21-057-01
Intersection:	W. Vista Way / SR-78 WB Ramps – Home Depot Driveway	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Home Depo Drwy Southbound			West Vista Way Westbound			SR-78 WB Ramps Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	12	23	7	28	45	7	84	27	24	22	50	69	398
7:15	8	14	11	35	47	4	142	27	25	19	76	60	468
7:30	13	19	17	52	71	7	180	19	29	24	72	68	571
7:45	20	14	13	58	71	6	191	16	49	24	113	79	654
8:00	16	15	14	69	90	7	158	17	36	24	97	87	630
8:15	15	17	23	70	125	11	168	18	18	29	116	54	664
8:30	16	12	15	29	50	15	134	16	25	29	93	68	502
8:45	10	15	21	28	50	7	158	17	17	40	104	61	528
Total	110	129	121	369	549	64	1215	157	223	211	721	546	4415
Approach%	30.6	35.8	33.6	37.6	55.9	6.5	76.2	9.8	14.0	14.3	48.8	36.9	
Total%	2.5	2.9	2.7	8.4	12.4	1.4	27.5	3.6	5.1	4.8	16.3	12.4	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	64	65	67	249	357	31	697	70	132	101	398	288	2,519
Approach%	32.7	33.2	34.2	39.1	56.0	4.9	77.5	7.8	14.7	12.8	50.6	36.6	
Total%	2.5	2.6	2.7	9.9	14.2	1.2	27.7	2.8	5.2	4.0	15.8	11.4	
PHF			0.89			0.77			0.88			0.91	0.95

PM	Home Depo Drwy Southbound			West Vista Way Westbound			SR-78 WB Ramps Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	17	21	20	57	70	11	161	20	11	29	72	87	576
16:15	18	14	15	49	86	7	150	10	12	33	90	87	571
16:30	14	26	12	51	76	7	146	16	5	32	70	77	532
16:45	19	17	16	40	67	6	182	16	7	27	80	88	565
17:00	16	5	6	38	60	8	186	14	4	24	75	97	533
17:15	12	5	4	38	58	8	186	20	7	27	74	91	530
17:30	21	8	18	36	65	8	202	14	9	24	66	82	553
17:45	19	14	21	27	51	10	155	11	8	28	67	76	487
Total	136	110	112	336	533	65	1368	121	63	224	594	685	4347
Approach%	38.0	30.7	31.3	36.0	57.1	7.0	88.1	7.8	4.1	14.9	39.5	45.6	
Total%	3.1	2.5	2.6	7.7	12.3	1.5	31.5	2.8	1.4	5.2	13.7	15.8	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	68	78	63	197	299	31	639	62	35	121	312	339	2,244
Approach%	32.5	37.3	30.1	37.4	56.7	5.9	86.8	8.4	4.8	15.7	40.4	43.9	
Total%	3.0	3.5	2.8	8.8	13.3	1.4	28.5	2.8	1.6	5.4	13.9	15.1	
PHF			0.90			0.93			0.90			0.92	0.97

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

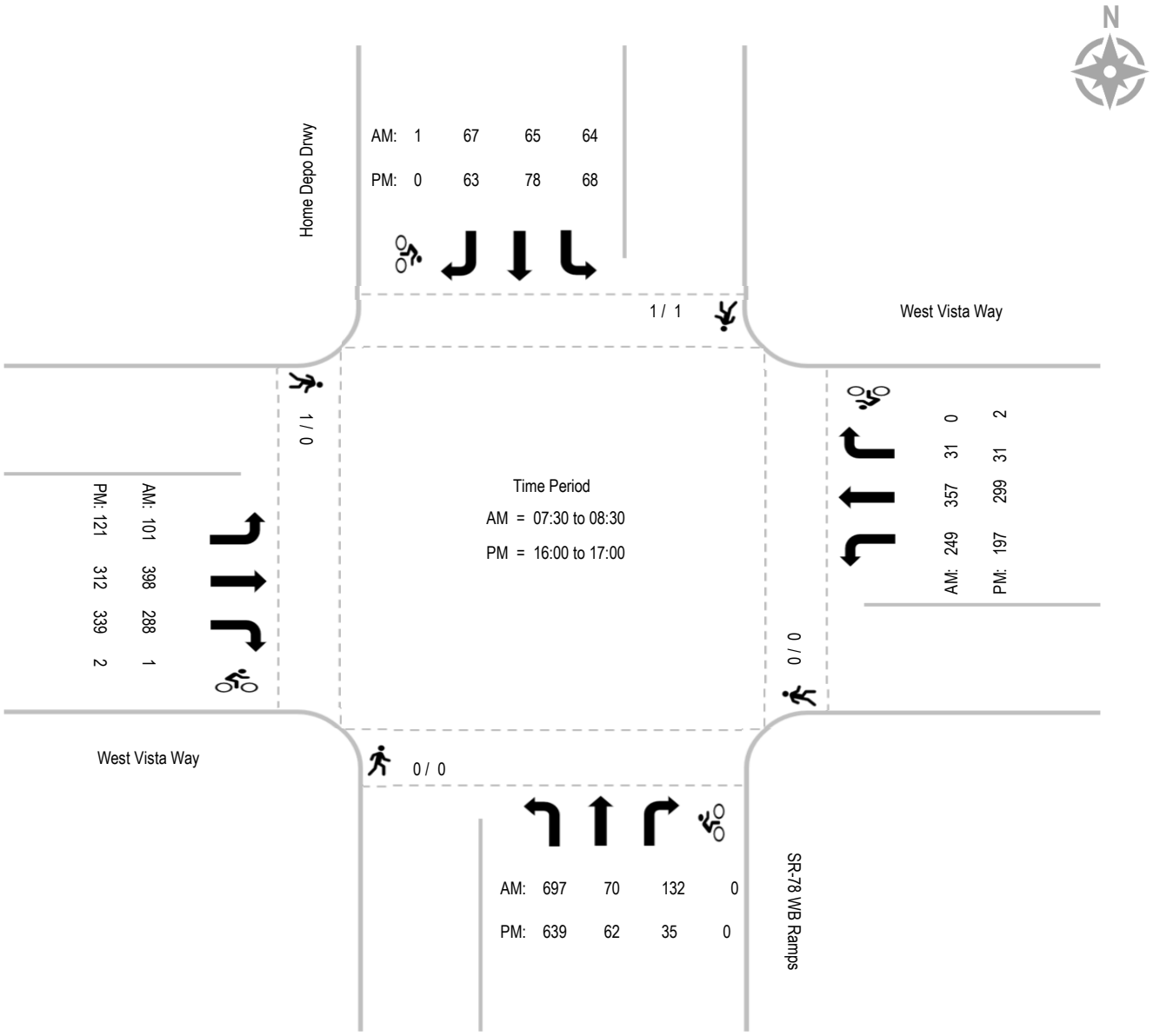
Location:	#01	File Name:	ITM-21-057-01
Intersection:	W. Vista Way / SR-78 WB Ramps – Home Depot Driveway	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Home Depo Drwy Southbound				West Vista Way Westbound				SR-78 WB Ramps Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Ped Total	1				0				0				1				2	
Bike Total		0	0	1		0	0	0		0	0	0		0	1	0		2

PM	Home Depo Drwy Southbound				West Vista Way Westbound				SR-78 WB Ramps Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
17:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Ped Total	1				0				0				0				1	
Bike Total		0	0	0		0	2	0		0	0	0		0	2	0		4

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#01	File Name: ITM-21-057-01
	Intersection:	W. Vista Way / SR-78 WB Ramps – Home Depot Driveway	Project: LLG Ref. 3--21-3448
	Date of Count:	Wednesday, September 22, 2021	Tri-City Hospital Oceanside



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#02	File Name:	ITM-21-057-02
Intersection:	W. Vista Way - Tri-City Hospital Driveway	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Tri-City Hospital Drwy Southbound			West Vista Way Westbound			- Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	5	0	8	0	81	7	0	0	0	30	54	0	185
7:15	13	0	12	0	82	12	0	0	0	37	80	0	236
7:30	18	0	30	0	108	2	0	0	0	27	73	0	258
7:45	3	0	17	0	119	9	0	0	0	43	147	0	338
8:00	4	0	12	0	159	5	0	0	0	24	134	0	338
8:15	5	0	7	0	186	8	0	0	0	22	107	0	335
8:30	4	0	9	0	99	5	0	0	0	35	114	0	266
8:45	5	0	11	0	72	4	0	0	0	26	102	0	220
Total	57	0	106	0	906	52	0	0	0	244	811	0	2176
Approach%	35.0	-	65.0	-	94.6	5.4	-	-	-	23.1	76.9	-	
Total%	2.6	-	4.9	-	41.6	2.4	-	-	-	11.2	37.3	-	

AM Intersection Peak Hour: **07:45 to 08:45**

Volume	16	-	45	-	563	27	-	-	-	124	502	-	1,277
Approach%	26.2	-	73.8	-	95.4	4.6	-	-	-	19.8	80.2	-	
Total%	1.3	-	3.5	-	44.1	2.1	-	-	-	9.7	39.3	-	
PHF			0.76			0.76			#DIV/0!			0.82	0.94

PM	Tri-City Hospital Drwy Southbound			West Vista Way Westbound			- Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	17	0	35	0	97	0	0	0	0	9	111	0	269
16:15	7	0	25	0	100	4	0	0	0	7	99	0	242
16:30	20	0	33	0	99	1	0	0	0	13	108	0	274
16:45	11	0	20	0	99	1	0	0	0	3	100	0	234
17:00	8	0	27	0	117	2	0	0	0	10	89	0	253
17:15	8	0	11	0	87	0	0	0	0	8	101	0	215
17:30	8	0	17	0	88	1	0	0	0	6	102	0	222
17:45	6	0	10	0	62	10	0	0	0	12	90	0	190
Total	85	0	178	0	749	19	0	0	0	68	800	0	1899
Approach%	32.3	-	67.7	-	97.5	2.5	-	-	-	7.8	92.2	-	
Total%	4.5	-	9.4	-	39.4	1.0	-	-	-	3.6	42.1	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	55	-	113	-	395	6	-	-	-	32	418	-	1,019
Approach%	32.7	-	67.3	-	98.5	1.5	-	-	-	7.1	92.9	-	
Total%	5.4	-	11.1	-	38.8	0.6	-	-	-	3.1	41.0	-	
PHF			0.79			0.96			#DIV/0!			0.93	0.93

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

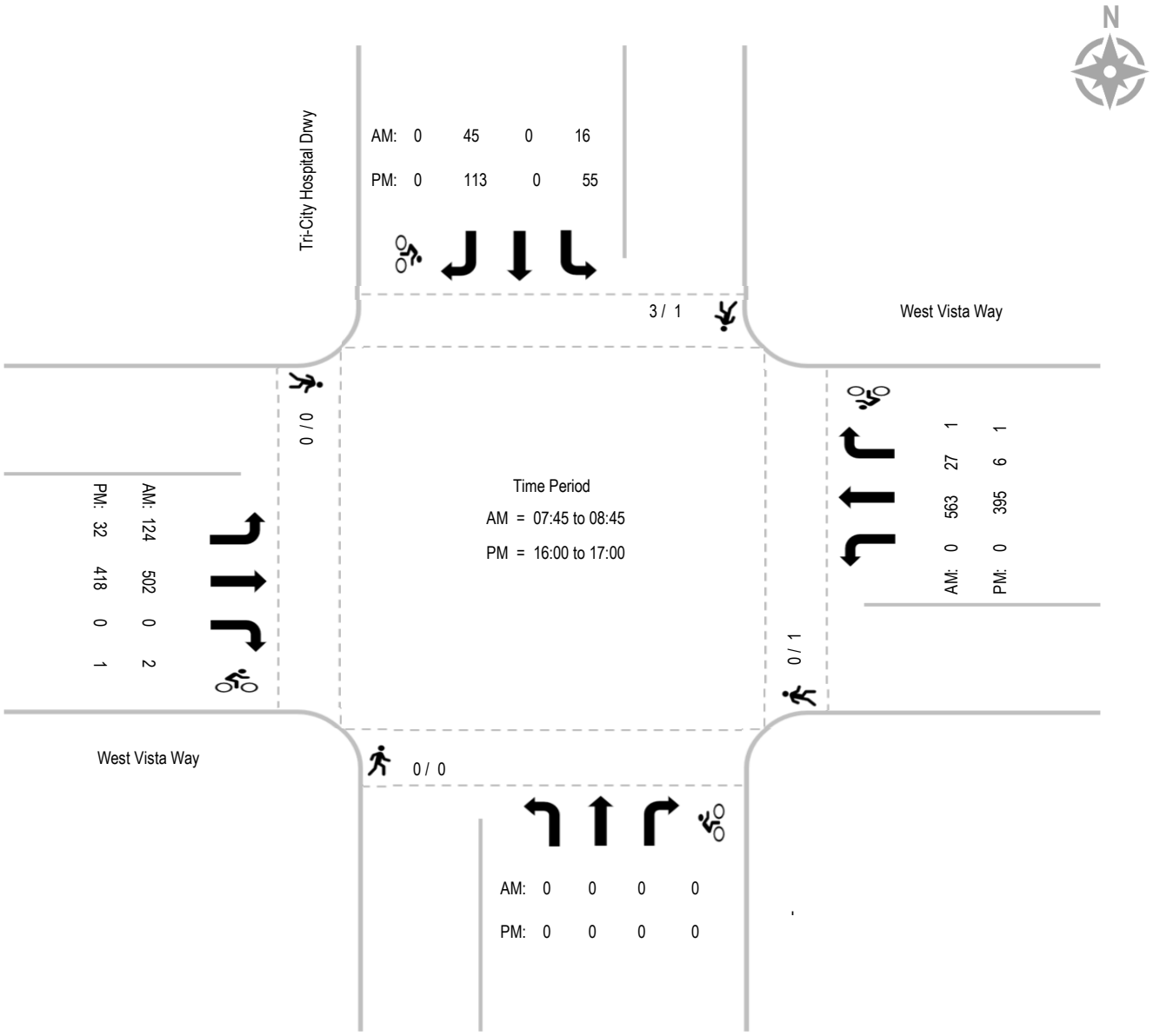
Location:	#02	File Name:	ITM-21-057-02
Intersection:	W. Vista Way - Tri-City Hospital Driveway	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Tri-City Hospital Drwy Southbound				West Vista Way Westbound				- Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
7:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Ped Total	3				0				0				0				3	
Bike Total		0	0	0		0	1	0		0	0	0		1	1	0		3

PM	Tri-City Hospital Drwy Southbound				West Vista Way Westbound				- Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
17:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Ped Total	1				1				0				0				2	
Bike Total		0	0	0		0	1	0		0	0	0		0	1	0		2

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#02	File Name: ITM-21-057-02
	Intersection:	W. Vista Way - Tri-City Hospital Driveway	Project: LLG Ref. 3--21-3448
	Date of Count:	Wednesday, September 22, 2021	Tri-City Hospital Oceanside



Intersection Turning Movement - Peak Hour Vehicle Count

LINSCOTT LAW & GREENSPAN engineers

Location:	#03	File Name:	ITM-21-057-03
Intersection:	W. Vista Way / Thunder Drive	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Thunder Drive Southbound			West Vista Way Westbound			- Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
7:00	39	0	35	0	50	16	0	0	0	27	34	0	201
7:15	36	0	37	0	58	22	0	0	0	23	64	0	240
7:30	64	0	48	0	61	28	0	0	0	20	66	0	287
7:45	70	0	50	0	81	38	0	0	0	46	109	0	394
8:00	74	0	60	0	107	67	0	0	0	43	102	0	453
8:15	42	0	83	0	108	39	0	0	0	26	79	0	377
8:30	32	0	27	0	76	28	0	0	0	37	81	0	281
8:45	27	0	16	0	55	40	0	0	0	30	77	0	245
Total	384	0	356	0	596	278	0	0	0	252	612	0	2478
Approach%	51.9	-	48.1	-	68.2	31.8	-	-	-	29.2	70.8	-	
Total%	15.5	-	14.4	-	24.1	11.2	-	-	-	10.2	24.7	-	

AM Intersection Peak Hour: **07:30 to 08:30**

Volume	250	-	241	-	357	172	-	-	-	135	356	-	1,511
Approach%	50.9	-	49.1	-	67.5	32.5	-	-	-	27.5	72.5	-	
Total%	16.5	-	15.9	-	23.6	11.4	-	-	-	8.9	23.6	-	
PHF			0.92			0.76			#DIV/0!			0.79	0.83

PM	Thunder Drive Southbound			West Vista Way Westbound			- Northbound			West Vista Way Eastbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	38	0	44	0	50	37	0	0	0	30	105	0	304
16:15	37	0	33	0	69	31	0	0	0	23	92	0	285
16:30	44	0	33	0	65	16	0	0	0	27	87	0	272
16:45	36	0	32	0	66	17	0	0	0	32	82	0	265
17:00	40	0	42	0	75	26	0	0	0	30	72	0	285
17:15	29	0	31	0	56	21	0	0	0	24	80	0	241
17:30	22	0	35	0	59	15	0	0	0	19	96	0	246
17:45	23	0	17	0	42	22	0	0	0	21	79	0	204
Total	269	0	267	0	482	185	0	0	0	206	693	0	2102
Approach%	50.2	-	49.8	-	72.3	27.7	-	-	-	22.9	77.1	-	
Total%	12.8	-	12.7	-	22.9	8.8	-	-	-	9.8	33.0	-	

PM Intersection Peak Hour: **16:00 to 17:00**

Volume	155	-	142	-	250	101	-	-	-	112	366	-	1,126
Approach%	52.2	-	47.8	-	71.2	28.8	-	-	-	23.4	76.6	-	
Total%	13.8	-	12.6	-	22.2	9.0	-	-	-	9.9	32.5	-	
PHF			0.91			0.88			#DIV/0!			0.89	0.93

Intersection Turning Movement - Bicycle & Pedestrian Count

LINSCOTT LAW & GREENSPAN engineers

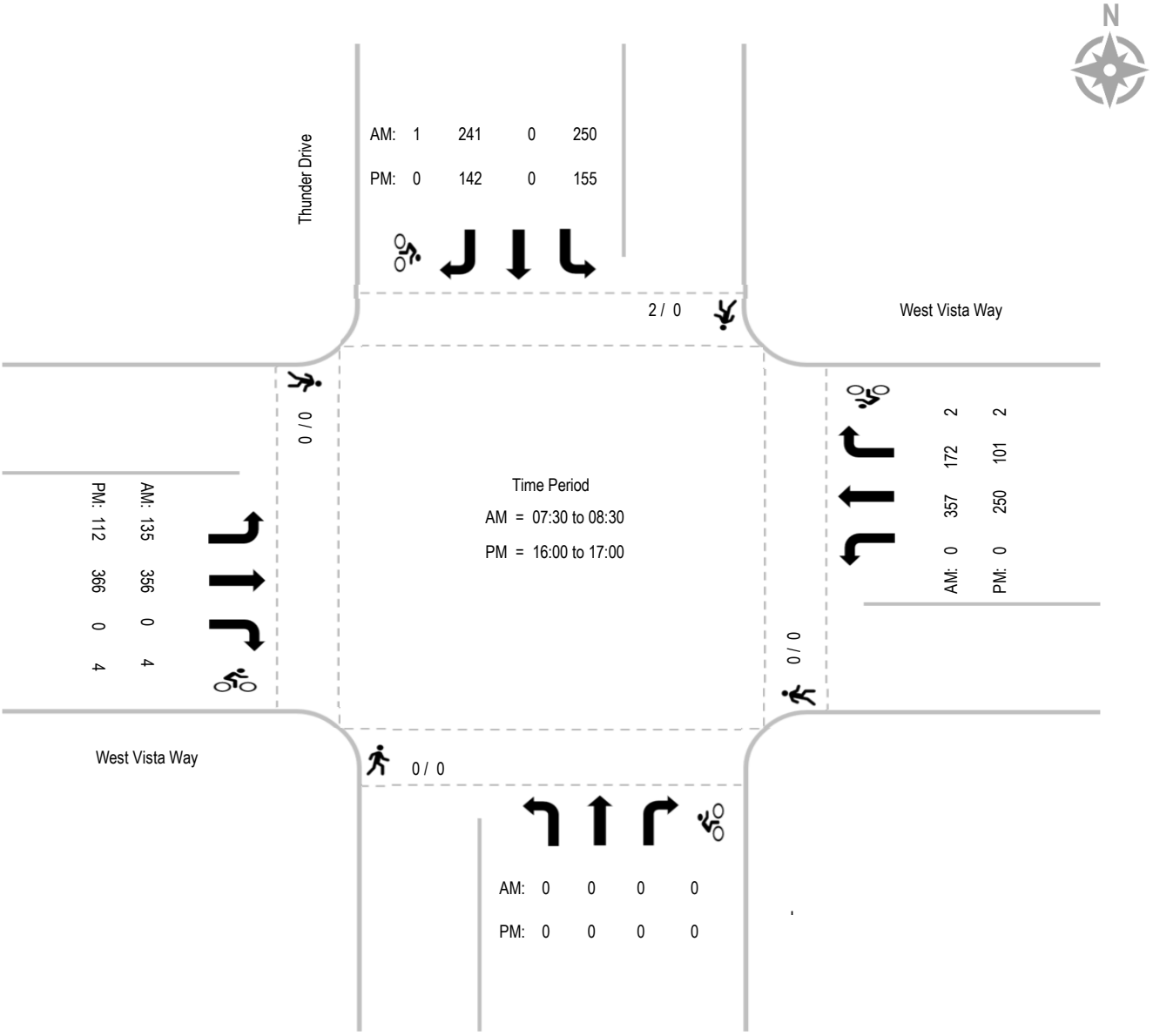
Location:	#03	File Name:	ITM-21-057-03
Intersection:	W. Vista Way / Thunder Drive	Project:	LLG Ref. 3--21-3448
Date of Count:	Wednesday, September 22, 2021		Tri-City Hospital Oceanside

AM	Thunder Drive Southbound				West Vista Way Westbound				- Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	3
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Ped Total	2				0				0				0				2	
Bike Total		0	0	1		0	0	2		0	0	0		0	4	0		7

PM	Thunder Drive Southbound				West Vista Way Westbound				- Northbound				West Vista Way Eastbound				Totals	
	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	B-Left	B-Thru	B-Right	Ped	Bicycle
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
17:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Ped Total	0				0				0				0				0	
Bike Total		0	0	0		0	2	0		0	0	0		0	4	0		6

Intersection Turning Movement - Peak Hour Summary

LINSCOTT LAW & GREENSPAN engineers	Location:	#03	File Name: ITM-21-057-03
	Intersection:	W. Vista Way / Thunder Drive	Project: LLG Ref. 3--21-3448
	Date of Count:	Wednesday, September 22, 2021	Tri-City Hospital Oceanside



APPENDIX C

SIGNAL TIMING PLANS

INTERSECTION: Vista Way & Tri-City Medical

Group Assignment: **NONE**
Field Master Assignment: **NONE**
System Reference Number: **180**

N/S Street Name: **Tri-City Medical**
E/W Street Name: **Vista Way**

Last Database Change: **1/22/2018 10:35**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	19	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	176	<C+0+3>
QuicNet Channel	Serial:COM19:	(QuicNet)

Communication Addresses

Manual Plan		<C+A+1>
Manual Offset		<C+B+1>

Manual Selection

Max Initial	30	<F+0+E>
Red Revert	2.0	<F+0+F>
All Red Start	5.0	<F+C+0>

Start / Revert Times

Row	Column Numbers —> / Phase Names —>	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	0	0	0	0	7	0	7
1	Ped FDW	0	0	0	0	0	20	0	10
2	Min Green	3	8	3	6	5	8	3	7
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.2
5	Veh Extension	0.5	4.0	0.5	3.0	2.5	4.0	0.5	3.5
6	Max Gap	0.5	6.0	0.5	3.0	2.5	6.0	0.5	5.0
7	Min Gap	0.5	2.5	0.5	3.0	2.5	2.5	0.5	2.0
8	Max Limit	17	40	17	20	30	40	17	40
9	Max Limit 2	30	40	30	30	30	40	30	70
A	- - - - - -	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1
D	Reduce Every	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.8	3.0	3.6	4.1	4.8	3.0	4.0
F	Red Clear	0.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 1 <F Page>

Row	E	
	RR-1 Delay	0
	RR-1 Clear	5
	EV-A Delay	0
	EV-A Clear	5
	EV-B Delay	0
	EV-B Clear	5
	EV-C Delay	0
	EV-C Clear	5
	EV-D Delay	0
	EV-D Clear	1
	RR-2 Delay	0
	RR-2 Clear	10
	View EV Delay	- - -
	View EV Clear	- - -
	View RR Delay	- - -
	View RR Clear	- - -

Preempt Timing

Row	F	
0	Permit	_2_456__
1	Red Lock	_____
2	Yellow Lock	_____
3	Min Recall	_2___6__
4	Ped Recall	_____
5	*View Set Peds*	- - - - -
6	Rest In Walk	_____
7	Red Rest	_____
8	Dual Entry	_2___6__
9	Max Recall	_____
A	Soft Recall	_____
B	Max 2	_____
C	Cond. Service	_____
D	Man Cntrl Calls	_____
E	Yellow Start	___4____
F	First Phases	_2___6__

Phase Functions <F Page>

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

(* = Coordination Recall)

Row	Column Numbers ---->	Plan 1	2	3	4	5	6	7	8	9	Row
0	Plan Name ---->										0
1	Cycle Length	100	100	100	100	100	100	100	100	100	1
2	Phase 1 - ForceOff	65	65	65	65	65	65	65	65	65	2
3	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	3
4	Phase 3 - ForceOff	25	25	25	25	25	25	25	25	25	4
5	Phase 4 - ForceOff	40	40	40	40	40	40	40	40	40	5
6	Phase 5 - ForceOff	65	65	65	65	65	65	65	65	65	6
7	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	7
8	Phase 7 - ForceOff	25	25	25	25	25	25	25	25	25	8
9	Phase 8 - ForceOff	40	40	40	40	40	40	40	40	40	9
A	Ring Offset	0	0	0	0	0	0	0	0	0	A
B	Offset 1	0	0	0	0	0	0	0	0	0	B
C	Offset 2	0	0	0	0	0	0	0	0	0	C
D	Offset 3	0	0	0	0	0	0	0	0	0	D
E	Permissive	12	12	12	12	12	12	12	12	0	E
F	Hold Release	255	255	255	255	255	255	255	255	0	F
	Zone Offset	0	0	0	0	0	0	0	0	0	

Coordination <C Page>

Row		E	Row
0			0
1	Plan 1 - Sync	2 6	1
2	Plan 2 - Sync	2 6	2
3	Plan 3 - Sync	2 6	3
4	Plan 4 - Sync	2 6	4
5	Plan 5 - Sync	2 6	5
6	Plan 6 - Sync	2 6	6
7	Plan 7 - Sync	2 6	7
8	Plan 8 - Sync	2 6	8
9	Plan 9 - Sync	2 6	9
A	Coord Ped *		A
B	NEMA Hold		B
C			C
D			D
E			E
F			F

Sync Phases <C Page>

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 4
F	IC Select (Interconnect)	2

Configuration <E Page>

	F
RR Overlap A - Phases	
RR Overlap B - Phases	
RR Overlap C - Phases	
RR Overlap D - Phases	
Ped 2P	
Ped 6P	6
Ped 4P	
Ped 8P	
Yellow Flash Phases	
Overlap A - Phases	
Overlap B - Phases	
Overlap C - Phases	
Overlap D - Phases	
Restricted Phases	
Assign 5 Outputs	

Configuration <E Page>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 =
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

Assign 5 Outputs
(Ped Loadswitch Yellows)
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Force-Off Adjust	0

Coord Force-Off Adjust for Ped Service <C+D+F>

Transition Type	0

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Row		F	Row
0	Free Lag	2 4 6 8	0
1	Plan 1 - Lag	2 4 6 8	1
2	Plan 2 - Lag	2 4 6 8	2
3	Plan 3 - Lag	2 4 6 8	3
4	Plan 4 - Lag	2 4 6 8	4
5	Plan 5 - Lag	2 4 6 8	5
6	Plan 6 - Lag	2 4 6 8	6
7	Plan 7 - Lag	2 4 6 8	7
8	Plan 8 - Lag	2 4 6 8	8
9	Plan 9 - Lag	2 4 6 8	9
A	Coord Max *		A
B	Coord Lag *		B
C			C
D			D
E			E
F			F

Lag Phases <C Page>

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination
<9 Key with C+D+9=0>

Time	Funct.	Day of Week	Column F Phases/Bits
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		

TOD Function
<7 Key>

<D Page>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 1
TOD Coordination
<9 Key with C+D+9=1>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 2
TOD Coordination
<9 Key with C+D+9=2>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 3
TOD Coordination
<9 Key with C+D+9=3>

Time	Plan	Offset	Day of Week	Row
00 : 00	0	0		0
00 : 00	0	0		1
00 : 00	0	0		2
00 : 00	0	0		3
00 : 00	0	0		4
00 : 00	0	0		5
00 : 00	0	0		6
00 : 00	0	0		7
00 : 00	0	0		8
00 : 00	0	0		9
00 : 00	0	0		A
00 : 00	0	0		B
00 : 00	0	0		C
00 : 00	0	0		D
00 : 00	0	0		E
00 : 00	0	0		F

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row		Day	Year	Month	Day of Week
A	Holiday # 1 Date	0	0	0	
B	Holiday # 2 Date	0	0	0	
C	Holiday # 3 Date	0	0	0	

Holiday Dates
<8 Key>

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	0.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	10.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	0.0	0.0		I-6U	3
8	0.0	0.0		I-6L	7
9	0.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	0.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	0.0	0.0		J-5	15
7	0.0	0.0		J-6U	4
8	0.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Note: Initialized data is for all detectors to be active (ie, all flag bits set). A Detector which is "not flagged", will not be active as a Phase Detector, and WILL NOT call or extend its associated phase. It will still function as a System Detector.

Row		0 Detector Number
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (minutes)	5	<D+A+E>
Max OFF (minutes)	60	<D+A+F>

Detector Failure Monitor

Phase Number	0	<F+C+1>
Time Before Yellow	0.0	<F+C+3>

Advance Warning Beacon - Sign 1

Phase Number	0	<F+D+1>
Time Before Yellow	0.0	<F+D+3>

Advance Warning Beacon - Sign 2

Long Failure	0.0	<F+0+6>
Short Failure	0.0	<F+0+7>

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	10	0	10	0	10	0	10
2	Min Green	3	7	3	7	3	7	3	7
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	1.2
5	Veh Extension	0.5	3.5	0.5	3.5	0.5	3.5	0.5	3.5
6	Max Gap	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0
7	Min Gap	0.5	2.0	0.5	2.0	0.5	2.0	0.5	2.0
8	Max Limit	17	40	17	40	17	40	17	40
9	Max Limit 2	30	70	30	70	30	70	30	70
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
F	Red Clear	0.0	0.5	0.0	1.0	0.0	0.5	0.0	1.0

Phase Timing - Bank 2 <F Page>

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	10	0	10	0	10	0	10
2	Min Green	3	7	3	7	3	7	3	7
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Added Initial	0.0	1.2	0.0	1.2	0.0	1.2	0.0	1.2
5	Veh Extension	0.5	3.5	0.5	3.5	0.5	3.5	0.5	3.5
6	Max Gap	0.5	5.0	0.5	5.0	0.5	5.0	0.5	5.0
7	Min Gap	0.5	2.0	0.5	2.0	0.5	2.0	0.5	2.0
8	Max Limit	17	40	17	40	17	40	17	40
9	Max Limit 2	30	70	30	70	30	70	30	70
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
F	Red Clear	0.0	0.5	0.0	1.0	0.0	0.5	0.0	1.0

Phase Timing - Bank 3 <F Page>

Row		7 Time	8 Dwell	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0	Delay Only --->	0	---	---	---	---	---	---	---	---
1		0	0							
2		0	0							
3		0	0							
4		0	0							
5		0	0							
6		0	0							
7		0	0							
8		0	0							
9	Limited Service	0	0							
A	Int. --->	---	0							
B		0	0							
C		0	0							
D		0	0							
E		0	0							
F		0	0							

Row

<--- Limited Service Interval (Set Dwell = 255)

Special Event Schedule <C Page with F+9+F=22>

INTERSECTION: Vista Way & Thunder

Group Assignment: **NONE**
Field Master Assignment: **NONE**
System Reference Number: **105**

N/S Street Name: **Not Assigned**
E/W Street Name: **Not Assigned**

Last Database Change: **1/22/2018 10:36**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Drop Number	18	<C+0+0>
Zone Number		<C+0+1>
Area Number	1	<C+0+2>
Area Address	105	<C+0+3>
QuicNet Channel	Serial:COM19:	(QuicNet)

Communication Addresses

Manual Plan		<C+A+1>
Manual Offset		<C+B+1>

Manual Selection

Max Initial	30	<F+0+E>
Red Revert	2.0	<F+0+F>
All Red Start	5.0	<F+C+0>

Start / Revert Times

Row	Column Numbers ----> / Phase Names ---->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	0	0	7	0	7	0	7
1	Ped FDW	0	0	0	17	0	14	0	17
2	Min Green	3	8	3	6	5	8	3	4
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
5	Veh Extension	2.5	4.0	0.5	3.0	2.5	4.0	0.5	3.0
6	Max Gap	2.5	6.0	0.5	3.0	2.5	6.0	0.5	3.0
7	Min Gap	2.5	2.5	0.5	3.0	2.5	2.5	0.5	3.0
8	Max Limit	20	40	17	30	30	40	17	25
9	Max Limit 2	20	40	30	30	30	40	30	25
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
E	Yellow Change	3.0	4.8	3.0	3.6	4.1	4.8	3.0	3.0
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 1 <F Page>

Row	E	
0	RR-1 Delay	0
1	RR-1 Clear	10
2	EV-A Delay	0
3	EV-A Clear	5
4	EV-B Delay	0
5	EV-B Clear	5
6	EV-C Delay	0
7	EV-C Clear	5
8	EV-D Delay	0
9	EV-D Clear	0
A	RR-2 Delay	0
B	RR-2 Clear	10
C	*View EV Delay*	---
D	*View EV Clear*	---
E	*View RR Delay*	---
F	*View RR Clear*	---

Preempt Timing

Row	F	
0	Permit	_2_456__
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	
5	*View Set Peds*	-----
6	Rest In Walk	
7	Red Rest	
8	Dual Entry	_2___6__
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	___4____
F	First Phases	_2___6__

Phase Functions <F Page>

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Row	Column Numbers --->	Plan 1	2	3	4	5	6	7	8	9	Row
	Plan Name --->										
0	Cycle Length	100	100	100	100	100	100	100	100	100	0
1	Phase 1 - ForceOff	55	60	60	63	60	61	65	65	65	1
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	2
3	Phase 3 - ForceOff	20	15	20	25	20	25	25	25	25	3
4	Phase 4 - ForceOff	40	40	40	40	40	40	40	40	40	4
5	Phase 5 - ForceOff	55	60	60	61	60	63	65	65	65	5
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	6
7	Phase 7 - ForceOff	20	15	20	25	20	25	25	25	25	7
8	Phase 8 - ForceOff	40	40	40	40	40	40	40	40	40	8
9	Ring Offset	0	0	0	0	0	0	0	0	0	9
A	Offset 1	0	0	0	0	0	0	0	0	0	A
B	Offset 2	0	0	0	0	0	0	0	0	0	B
C	Offset 3	0	0	0	0	0	0	0	0	0	C
D	Permissive	12	12	12	12	12	12	12	12	0	D
E	Hold Release	255	255	255	255	255	255	255	255	0	E
F	Zone Offset	0	0	0	0	0	0	0	0	0	F

Coordination <C Page>

(* = Coordination Recall)

	E	Row
		0
Plan 1 - Sync	2 6	1
Plan 2 - Sync	2 6	2
Plan 3 - Sync	2 6	3
Plan 4 - Sync	2 6	4
Plan 5 - Sync	2 6	5
Plan 6 - Sync	2 6	6
Plan 7 - Sync	2 6	7
Plan 8 - Sync	2 6	8
Plan 9 - Sync	2 6	9
Coord Ped *		A
NEMA Hold		B
		C
		D
		E
		F

Sync Phases <C Page>

Row	Column Numbers --->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	2

Configuration <E Page>

	F
RR Overlap A - Phases	
RR Overlap B - Phases	
RR Overlap C - Phases	
RR Overlap D - Phases	
Ped 2P	
Ped 6P	6
Ped 4P	4
Ped 8P	
Yellow Flash Phases	
Overlap A - Phases	
Overlap B - Phases	
Overlap C - Phases	
Overlap D - Phases	
Restricted Phases	
Assign 5 Outputs	

Configuration <E Page>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 =
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

Assign 5 Outputs
(Ped Loadswitch Yellows)
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Force-Off Adjust	0

Coord Force-Off Adjust for Ped Service <C+D+F>

Transition Type	0

TBC Transition <C+D+D>

Transition Type
0 = Shortway
Non-zero = Lengthen

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

	F	Row
Free Lag	2 4 6 8	0
Plan 1 - Lag	2 4 6 8	1
Plan 2 - Lag	2 4 6 8	2
Plan 3 - Lag	2 4 6 8	3
Plan 4 - Lag	2 4 6 8	4
Plan 5 - Lag	2 4 6 8	5
Plan 6 - Lag	2 4 6 8	6
Plan 7 - Lag	2 4 6 8	7
Plan 8 - Lag	2 4 6 8	8
Plan 9 - Lag	2 4 6 8	9
Coord Max *		A
Coord Lag *		B
		C
		D
		E
		F

Lag Phases <C Page>

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination
<9 Key with C+D+9=0>

Time	Funct.	Day of Week	Column F Phases/Bits
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		

TOD Function
<7 Key>

<D Page>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 1
TOD Coordination
<9 Key with C+D+9=1>

Time	Plan	Offset	Day of Week
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday # 2
TOD Coordination
<9 Key with C+D+9=2>

Time	Plan	Offset	Day of Week	Row
00 : 00	0	0		0
00 : 00	0	0		1
00 : 00	0	0		2
00 : 00	0	0		3
00 : 00	0	0		4
00 : 00	0	0		5
00 : 00	0	0		6
00 : 00	0	0		7
00 : 00	0	0		8
00 : 00	0	0		9
00 : 00	0	0		A
00 : 00	0	0		B
00 : 00	0	0		C
00 : 00	0	0		D
00 : 00	0	0		E
00 : 00	0	0		F

Holiday # 3
TOD Coordination
<9 Key with C+D+9=3>

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row		Day	Year	Month	Day of Week
A	Holiday # 1 Date	0	0	0	
B	Holiday # 2 Date	0	0	0	
C	Holiday # 3 Date	0	0	0	

Holiday Dates
<8 Key>

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		I-1	14
1	2.0	0.0		I-2U	1
2	0.0	0.0		I-2L	5
3	0.0	0.0		I-3U	21
4	0.0	0.0		I-3L	25
5	2.0	0.0		I-4	9
6	0.0	0.0		I-5	16
7	0.0	0.0		I-6U	3
8	0.0	0.0		I-6L	7
9	10.0	0.0		I-7U	23
A	0.0	0.0		I-7L	27
B	0.0	0.0		I-8	11
C	0.0	0.0		I-9U	18
D	0.0	0.0		I-9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		J-1	13
1	0.0	0.0		J-2U	2
2	0.0	0.0		J-2L	6
3	2.0	0.0		J-3U	22
4	0.0	0.0		J-3L	26
5	0.0	0.0		J-4	10
6	2.0	0.0		J-5	15
7	0.0	0.0		J-6U	4
8	12.0	0.0		J-6L	8
9	0.0	0.0		J-7U	24
A	0.0	0.0		J-7L	28
B	0.0	0.0		J-8	12
C	0.0	0.0		J-9U	17
D	0.0	0.0		J-9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Note: Initialized data is for all detectors to be active (ie, all flag bits set). A Detector which is "not flagged", will not be active as a Phase Detector, and WILL NOT call or extend its associated phase. It will still function as a System Detector.

Row		0 Detector Number
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (minutes)	5	<D+A+E>
Max OFF (minutes)	60	<D+A+F>

Detector Failure Monitor

Phase Number	0	<F+C+1>
Time Before Yellow	0.0	<F+C+3>

Advance Warning Beacon - Sign 1

Phase Number	0	<F+D+1>
Time Before Yellow	0.0	<F+D+3>

Advance Warning Beacon - Sign 2

Long Failure	0.0	<F+0+6>
Short Failure	0.0	<F+0+7>

Power Cycle Correction (Default = 0.5)

Disable Parity	0	<D+B+0>

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	0	0	7	0	7	0	7
1	Ped FDW	0	0	0	17	0	14	0	17
2	Min Green	3	6	3	4	3	6	3	4
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
5	Veh Extension	2.5	4.0	0.5	3.0	2.5	4.0	0.5	3.0
6	Max Gap	2.5	6.0	0.5	3.0	2.5	6.0	0.5	3.0
7	Min Gap	2.5	2.5	0.5	3.0	2.5	2.5	0.5	3.0
8	Max Limit	20	40	17	30	30	40	17	25
9	Max Limit 2	20	40	30	30	30	40	30	25
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
E	Yellow Change	3.0	4.3	3.0	3.6	3.6	4.3	3.0	3.0
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 2 <F Page>

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	0	0	7	0	7	0	7
1	Ped FDW	0	0	0	17	0	14	0	17
2	Min Green	3	6	3	4	3	6	3	4
3	Type 3 Limit	0	99	0	0	0	99	0	0
4	Added Initial	0.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
5	Veh Extension	2.5	4.0	0.5	3.0	2.5	4.0	0.5	3.0
6	Max Gap	2.5	6.0	0.5	3.0	2.5	6.0	0.5	3.0
7	Min Gap	2.5	2.5	0.5	3.0	2.5	2.5	0.5	3.0
8	Max Limit	20	40	17	30	30	40	17	25
9	Max Limit 2	20	40	30	30	30	40	30	25
A	------	0	0	0	0	0	0	0	0
B	Call To Phase	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0
D	Reduce Every	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
E	Yellow Change	3.0	4.3	3.0	3.6	3.6	4.3	3.0	3.0
F	Red Clear	1.0	1.0	0.0	1.0	1.0	1.0	0.0	1.0

Phase Timing - Bank 3 <F Page>

Row		7 Time	8 Dwell	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0	Delay Only --->	0	---	---	---	---	---	---	---	---
1		0	0							
2		0	0							
3		0	0							
4		0	0							
5		0	0							
6		0	0							
7		0	0							
8		0	0							
9	Limited Service	0	0							
A	Int. --->	---	0							
B		0	0							
C		0	0							
D		0	0							
E		0	0							
F		0	0							

Special Event Schedule <C Page with F+9+F=22>

<--- **Limited Service Interval** (Set Dwell = 255)

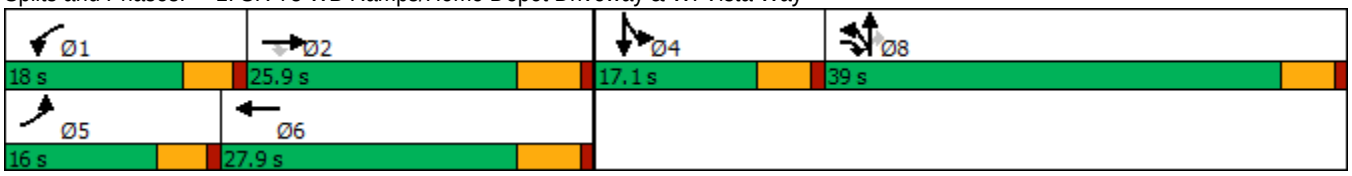
APPENDIX D

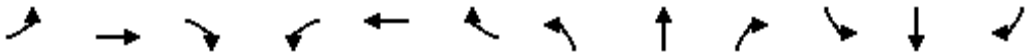
PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – EXISTING

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Configurations									
Traffic Volume (vph)	106	418	302	261	375	732	74	139	68
Future Volume (vph)	106	418	302	261	375	732	74	139	68
Turn Type	Prot	NA	pm+ov	Prot	NA	Split	NA	Perm	NA
Protected Phases	5	2	8	1	6	8	8		4
Permitted Phases			2					8	
Detector Phase	5	2	8	1	6	8	8	8	4
Switch Phase									
Minimum Initial (s)	11.0	13.0	5.0	5.0	7.0	5.0	5.0	5.0	12.0
Minimum Split (s)	15.7	18.8	10.1	9.7	26.8	10.1	10.1	10.1	17.1
Total Split (s)	16.0	25.9	39.0	18.0	27.9	39.0	39.0	39.0	17.1
Total Split (%)	16.0%	25.9%	39.0%	18.0%	27.9%	39.0%	39.0%	39.0%	17.1%
Yellow Time (s)	3.7	4.8	4.1	3.7	4.8	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	5.8	5.1	4.7	5.8	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag		Lead	Lag				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				
Recall Mode	None	Max	None	None	None	None	None	None	None
Act Effct Green (s)	11.2	20.2	51.8	12.7	21.7	30.9	30.9	30.9	12.0
Actuated g/C Ratio	0.12	0.21	0.54	0.13	0.22	0.32	0.32	0.32	0.12
v/c Ratio	0.57	0.62	0.35	0.75	0.67	0.85	0.84	0.26	0.49
Control Delay	53.2	39.8	3.2	52.5	39.2	47.2	46.0	5.1	30.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.2	39.8	3.2	52.5	39.2	47.2	46.0	5.1	30.7
LOS	D	D	A	D	D	D	D	A	C
Approach Delay		28.1			44.4		40.5		30.7
Approach LOS		C			D		D		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 96.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 37.2	Intersection LOS: D
Intersection Capacity Utilization 71.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: SR-78 WB Ramps/Home Depot Driveway & W. Vista Way





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	418	302	261	375	33	732	74	139	67	68	70
Future Volume (veh/h)	106	418	302	261	375	33	732	74	139	67	68	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	459	332	339	487	43	892	0	158	75	76	79
Peak Hour Factor	0.91	0.91	0.91	0.77	0.77	0.77	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	791	807	420	752	66	1048	0	453	146	149	156
Arrive On Green	0.12	0.22	0.22	0.12	0.23	0.23	0.29	0.00	0.29	0.13	0.13	0.13
Sat Flow, veh/h	1781	3554	1530	3456	3286	289	3563	0	1538	1099	1121	1179
Grp Volume(v), veh/h	116	459	332	339	262	268	892	0	158	124	0	106
Grp Sat Flow(s),veh/h/ln	1781	1777	1530	1728	1777	1798	1781	0	1538	1815	0	1585
Q Serve(g_s), s	5.6	10.4	12.1	8.6	12.1	12.2	21.3	0.0	7.3	5.7	0.0	5.6
Cycle Q Clear(g_c), s	5.6	10.4	12.1	8.6	12.1	12.2	21.3	0.0	7.3	5.7	0.0	5.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	0.61		0.74
Lane Grp Cap(c), veh/h	205	791	807	420	407	411	1048	0	453	241	0	210
V/C Ratio(X)	0.57	0.58	0.41	0.81	0.65	0.65	0.85	0.00	0.35	0.51	0.00	0.51
Avail Cap(c_a), veh/h	223	791	807	509	435	440	1338	0	578	241	0	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.8	31.3	13.5	38.6	31.5	31.5	30.0	0.0	25.1	36.5	0.0	36.4
Incr Delay (d2), s/veh	2.8	3.1	1.6	7.9	3.0	3.1	4.4	0.0	0.5	1.9	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.7	7.4	4.1	5.4	5.5	9.5	0.0	2.7	2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	34.4	15.0	46.5	34.5	34.6	34.4	0.0	25.5	38.3	0.0	38.3
LnGrp LOS	D	C	B	D	C	C	C	A	C	D	A	D
Approach Vol, veh/h		907			869			1050			230	
Approach Delay, s/veh		28.1			39.2			33.1			38.3	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	25.9		17.1	15.1	26.5		31.7				
Change Period (Y+Rc), s	* 4.7	5.8		5.1	* 4.7	5.8		5.1				
Max Green Setting (Gmax), s	* 13	20.1		12.0	* 11	22.1		33.9				
Max Q Clear Time (g_c+I1), s	10.6	14.1		7.7	7.6	14.2		23.3				
Green Ext Time (p_c), s	0.3	2.2		0.5	0.1	2.0		3.3				

Intersection Summary			
HCM 6th Ctrl Delay		33.7	
HCM 6th LOS		C	

Notes

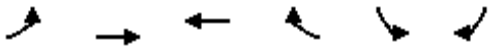
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	130	527	591	17	47
Future Volume (vph)	130	527	591	17	47
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	5	2	6	4	5
Permitted Phases					4
Detector Phase	5	2	6	4	5
Switch Phase					
Minimum Initial (s)	5.0	8.0	8.0	6.0	5.0
Minimum Split (s)	10.1	13.8	32.8	10.6	10.1
Total Split (s)	30.0	86.0	56.0	14.0	30.0
Total Split (%)	30.0%	86.0%	56.0%	14.0%	30.0%
Yellow Time (s)	4.1	4.8	4.8	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.8	5.8	4.6	5.1
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Max	C-Max	None	None
Act Effct Green (s)	13.8	92.6	70.2	7.0	16.8
Actuated g/C Ratio	0.14	0.93	0.70	0.07	0.17
v/c Ratio	0.65	0.20	0.33	0.18	0.20
Control Delay	52.8	1.2	5.4	46.7	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.8	1.2	5.4	46.7	8.2
LOS	D	A	A	D	A
Approach Delay		11.4	5.4	18.3	
Approach LOS		B	A	B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 8.9	Intersection LOS: A
Intersection Capacity Utilization 47.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: W. Vista Way & Tri-City Medical



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	527	591	28	17	47
Future Volume (veh/h)	130	527	591	28	17	47
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	643	778	37	22	62
Peak Hour Factor	0.82	0.82	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	193	2992	2352	112	97	258
Arrive On Green	0.11	0.84	0.23	0.23	0.05	0.05
Sat Flow, veh/h	1781	3647	3541	164	1781	1585
Grp Volume(v), veh/h	159	643	401	414	22	62
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1834	1781	1585
Q Serve(g_s), s	8.7	3.5	18.9	18.9	1.2	3.4
Cycle Q Clear(g_c), s	8.7	3.5	18.9	18.9	1.2	3.4
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	193	2992	1212	1252	97	258
V/C Ratio(X)	0.82	0.21	0.33	0.33	0.23	0.24
Avail Cap(c_a), veh/h	444	2992	1212	1252	167	321
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.90	0.90	1.00	1.00
Uniform Delay (d), s/veh	43.6	1.5	19.6	19.6	45.3	36.5
Incr Delay (d2), s/veh	5.4	0.1	0.7	0.6	1.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.7	9.1	9.4	0.6	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.0	1.7	20.3	20.3	46.5	37.0
LnGrp LOS	D	A	C	C	D	D
Approach Vol, veh/h		802	815		84	
Approach Delay, s/veh		11.0	20.3		39.4	
Approach LOS		B	C		D	

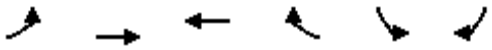
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		90.0		10.0	16.0	74.0
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		80.2		9.4	24.9	50.2
Max Q Clear Time (g_c+I1), s		5.5		5.4	10.7	20.9
Green Ext Time (p_c), s		7.8		0.1	0.3	8.4

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Lane Group	EBL	EBT	WBT	SBL	SBR	Ø7
Lane Configurations						
Traffic Volume (vph)	142	374	375	263	253	
Future Volume (vph)	142	374	375	263	253	
Turn Type	Prot	NA	NA	Prot	pm+ov	
Protected Phases	5	2	6	4	5	7
Permitted Phases					7	
Detector Phase	5	2	6	4	5	
Switch Phase						
Minimum Initial (s)	5.0	8.0	8.0	6.0	5.0	3.0
Minimum Split (s)	10.1	13.8	26.8	28.6	10.1	6.0
Total Split (s)	26.0	66.0	40.0	34.0	26.0	34.0
Total Split (%)	26.0%	66.0%	40.0%	34.0%	26.0%	34%
Yellow Time (s)	4.1	4.8	4.8	3.6	4.1	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.8	5.8	4.6	5.1	
Lead/Lag	Lead		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes	
Recall Mode	None	C-Max	C-Max	None	None	None
Act Effct Green (s)	14.9	68.3	48.2	21.3	35.8	
Actuated g/C Ratio	0.15	0.68	0.48	0.21	0.36	
v/c Ratio	0.68	0.20	0.45	0.76	0.42	
Control Delay	51.3	6.1	17.6	49.5	9.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	51.3	6.1	17.6	49.5	9.4	
LOS	D	A	B	D	A	
Approach Delay		18.6	17.6	29.8		
Approach LOS		B	B	C		

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 21.5	Intersection LOS: C
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: W. Vista Way & Thunder Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	142	374	375	181	263	253
Future Volume (veh/h)	142	374	375	181	263	253
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	180	473	493	238	286	275
Peak Hour Factor	0.79	0.79	0.76	0.76	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	2508	1233	591	339	489
Arrive On Green	0.24	1.00	0.54	0.54	0.19	0.19
Sat Flow, veh/h	1781	3647	2391	1102	1781	1585
Grp Volume(v), veh/h	180	473	380	351	286	275
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1623	1781	1585
Q Serve(g_s), s	9.7	0.0	12.6	12.8	15.5	14.5
Cycle Q Clear(g_c), s	9.7	0.0	12.6	12.8	15.5	14.5
Prop In Lane	1.00			0.68	1.00	1.00
Lane Grp Cap(c), veh/h	211	2508	953	871	339	489
V/C Ratio(X)	0.85	0.19	0.40	0.40	0.84	0.56
Avail Cap(c_a), veh/h	372	2508	953	871	524	653
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	13.7	13.7	39.1	28.9
Incr Delay (d2), s/veh	7.2	0.2	1.2	1.4	7.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.1	5.2	4.8	7.4	13.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.5	0.2	14.9	15.1	46.5	29.9
LnGrp LOS	D	A	B	B	D	C
Approach Vol, veh/h		653	731		561	
Approach Delay, s/veh		12.4	15.0		38.4	
Approach LOS		B	B		D	

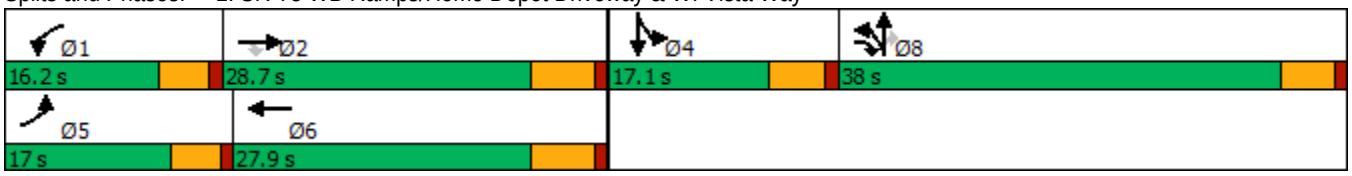
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.4		23.6	16.9	59.5
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		60.2		29.4	20.9	34.2
Max Q Clear Time (g_c+I1), s		2.0		17.5	11.7	14.8
Green Ext Time (p_c), s		5.3		1.5	0.2	6.4

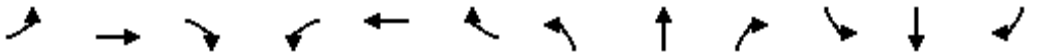
Intersection Summary	
HCM 6th Ctrl Delay	20.9
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Configurations									
Traffic Volume (vph)	127	328	356	207	314	671	65	37	82
Future Volume (vph)	127	328	356	207	314	671	65	37	82
Turn Type	Prot	NA	pm+ov	Prot	NA	Split	NA	Perm	NA
Protected Phases	5	2	8	1	6	8	8		4
Permitted Phases			2					8	
Detector Phase	5	2	8	1	6	8	8	8	4
Switch Phase									
Minimum Initial (s)	11.0	13.0	5.0	5.0	7.0	5.0	5.0	5.0	12.0
Minimum Split (s)	15.7	18.8	10.1	9.7	26.8	10.1	10.1	10.1	17.1
Total Split (s)	17.0	28.7	38.0	16.2	27.9	38.0	38.0	38.0	17.1
Total Split (%)	17.0%	28.7%	38.0%	16.2%	27.9%	38.0%	38.0%	38.0%	17.1%
Yellow Time (s)	3.7	4.8	4.1	3.7	4.8	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	5.8	5.1	4.7	5.8	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag		Lead	Lag				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				
Recall Mode	None	Max	None	None	None	None	None	None	None
Act Effct Green (s)	11.8	23.0	52.1	10.5	21.7	28.3	28.3	28.3	12.1
Actuated g/C Ratio	0.12	0.24	0.55	0.11	0.23	0.30	0.30	0.30	0.13
v/c Ratio	0.63	0.41	0.41	0.59	0.47	0.82	0.80	0.07	0.52
Control Delay	54.4	33.1	3.9	47.8	33.7	44.9	43.8	0.3	35.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.4	33.1	3.9	47.8	33.7	44.9	43.8	0.3	35.5
LOS	D	C	A	D	C	D	D	A	D
Approach Delay		23.6			39.0		42.2		35.5
Approach LOS		C			D		D		D

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 94.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 34.5	Intersection LOS: C
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: SR-78 WB Ramps/Home Depot Driveway & W. Vista Way





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	328	356	207	314	33	671	65	37	71	82	66
Future Volume (veh/h)	127	328	356	207	314	33	671	65	37	71	82	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	357	387	223	338	35	797	0	41	79	91	73
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	944	831	307	748	77	951	0	410	153	178	146
Arrive On Green	0.12	0.27	0.27	0.09	0.23	0.23	0.27	0.00	0.27	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1535	3456	3232	332	3563	0	1536	1100	1285	1049
Grp Volume(v), veh/h	138	357	387	223	184	189	797	0	41	130	0	113
Grp Sat Flow(s),veh/h/ln	1781	1777	1535	1728	1777	1787	1781	0	1536	1815	0	1618
Q Serve(g_s), s	6.4	7.1	13.6	5.4	7.7	7.8	18.2	0.0	1.7	5.7	0.0	5.6
Cycle Q Clear(g_c), s	6.4	7.1	13.6	5.4	7.7	7.8	18.2	0.0	1.7	5.7	0.0	5.6
Prop In Lane	1.00		1.00	1.00		0.19	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	219	944	831	307	411	414	951	0	410	252	0	225
V/C Ratio(X)	0.63	0.38	0.47	0.73	0.45	0.46	0.84	0.00	0.10	0.52	0.00	0.50
Avail Cap(c_a), veh/h	254	944	831	461	455	458	1359	0	586	253	0	225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.0	25.9	12.6	38.3	28.4	28.5	29.9	0.0	23.8	34.5	0.0	34.4
Incr Delay (d2), s/veh	3.9	1.2	1.9	3.3	0.8	0.8	3.3	0.0	0.1	1.8	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.1	8.0	2.4	3.3	3.4	8.0	0.0	0.6	2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	27.0	14.5	41.6	29.2	29.3	33.2	0.0	23.9	36.3	0.0	36.1
LnGrp LOS	D	C	B	D	C	C	C	A	C	D	A	D
Approach Vol, veh/h		882			596			838			243	
Approach Delay, s/veh		23.5			33.8			32.7			36.2	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	28.7		17.1	15.3	25.8		28.1				
Change Period (Y+Rc), s	* 4.7	5.8		5.1	* 4.7	5.8		5.1				
Max Green Setting (Gmax), s	* 12	22.9		12.0	* 12	22.1		32.9				
Max Q Clear Time (g_c+I1), s	7.4	15.6		7.7	8.4	9.8		20.2				
Green Ext Time (p_c), s	0.3	2.3		0.5	0.1	1.7		2.8				

Intersection Summary		
HCM 6th Ctrl Delay		30.1
HCM 6th LOS		C

Notes

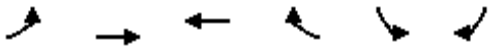
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	34	439	415	58	119
Future Volume (vph)	34	439	415	58	119
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	5	2	6	4	5
Permitted Phases					4
Detector Phase	5	2	6	4	5
Switch Phase					
Minimum Initial (s)	5.0	8.0	8.0	6.0	5.0
Minimum Split (s)	10.1	13.8	32.8	10.6	10.1
Total Split (s)	26.0	76.0	50.0	24.0	26.0
Total Split (%)	26.0%	76.0%	50.0%	24.0%	26.0%
Yellow Time (s)	4.1	4.8	4.8	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.8	5.8	4.6	5.1
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Max	C-Max	None	None
Act Effct Green (s)	7.1	83.4	70.0	9.5	15.0
Actuated g/C Ratio	0.07	0.83	0.70	0.10	0.15
v/c Ratio	0.30	0.16	0.18	0.43	0.42
Control Delay	49.4	2.4	3.6	49.9	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	2.4	3.6	49.9	8.6
LOS	D	A	A	D	A
Approach Delay		5.8	3.6	22.1	
Approach LOS		A	A	C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 8.1	Intersection LOS: A
Intersection Capacity Utilization 41.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: W. Vista Way & Tri-City Medical



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	439	415	6	58	119
Future Volume (veh/h)	34	439	415	6	58	119
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	472	432	6	73	151
Peak Hour Factor	0.93	0.93	0.96	0.96	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	57	2779	2507	35	203	231
Arrive On Green	0.03	0.78	0.23	0.23	0.11	0.11
Sat Flow, veh/h	1781	3647	3680	50	1781	1585
Grp Volume(v), veh/h	37	472	214	224	73	151
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1859	1781	1585
Q Serve(g_s), s	2.1	3.3	9.6	9.7	3.8	9.0
Cycle Q Clear(g_c), s	2.1	3.3	9.6	9.7	3.8	9.0
Prop In Lane	1.00			0.03	1.00	1.00
Lane Grp Cap(c), veh/h	57	2779	1242	1300	203	231
V/C Ratio(X)	0.65	0.17	0.17	0.17	0.36	0.65
Avail Cap(c_a), veh/h	372	2779	1242	1300	346	358
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	47.8	2.7	15.3	15.3	40.9	40.3
Incr Delay (d2), s/veh	8.2	0.1	0.3	0.3	1.1	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.9	4.4	4.7	1.7	8.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	56.0	2.9	15.6	15.6	42.0	43.4
LnGrp LOS	E	A	B	B	D	D
Approach Vol, veh/h		509	438		224	
Approach Delay, s/veh		6.7	15.6		42.9	
Approach LOS		A	B		D	

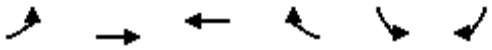
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		84.0		16.0	8.3	75.7
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		70.2		19.4	20.9	44.2
Max Q Clear Time (g_c+I1), s		5.3		11.0	4.1	11.7
Green Ext Time (p_c), s		5.3		0.4	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

Lane Group	EBL	EBT	WBT	SBL	SBR	Ø7
Lane Configurations						
Traffic Volume (vph)	118	384	263	163	149	
Future Volume (vph)	118	384	263	163	149	
Turn Type	Prot	NA	NA	Prot	pm+ov	
Protected Phases	5	2	6	4	5	7
Permitted Phases					7	
Detector Phase	5	2	6	4	5	
Switch Phase						
Minimum Initial (s)	5.0	8.0	8.0	6.0	5.0	3.0
Minimum Split (s)	10.1	13.8	26.8	28.6	10.1	6.0
Total Split (s)	27.0	64.0	37.0	36.0	27.0	36.0
Total Split (%)	27.0%	64.0%	37.0%	36.0%	27.0%	36%
Yellow Time (s)	4.1	4.8	4.8	3.6	4.1	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.8	5.8	4.6	5.1	
Lead/Lag	Lead		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes	
Recall Mode	None	C-Max	C-Max	None	None	None
Act Effct Green (s)	12.3	73.6	56.2	16.0	27.8	
Actuated g/C Ratio	0.12	0.74	0.56	0.16	0.28	
v/c Ratio	0.61	0.17	0.22	0.63	0.30	
Control Delay	58.7	3.9	11.1	48.5	4.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	58.7	3.9	11.1	48.5	4.3	
LOS	E	A	B	D	A	
Approach Delay		16.9	11.1	27.3		
Approach LOS		B	B	C		

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 49.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: W. Vista Way & Thunder Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	118	384	263	106	163	149
Future Volume (veh/h)	118	384	263	106	163	149
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	133	431	299	120	179	164
Peak Hour Factor	0.89	0.89	0.88	0.88	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	163	2731	1546	604	227	347
Arrive On Green	0.18	1.00	0.63	0.63	0.13	0.13
Sat Flow, veh/h	1781	3647	2563	965	1781	1585
Grp Volume(v), veh/h	133	431	213	206	179	164
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1657	1781	1585
Q Serve(g_s), s	7.2	0.0	5.1	5.3	9.7	9.0
Cycle Q Clear(g_c), s	7.2	0.0	5.1	5.3	9.7	9.0
Prop In Lane	1.00			0.58	1.00	1.00
Lane Grp Cap(c), veh/h	163	2731	1113	1038	227	347
V/C Ratio(X)	0.82	0.16	0.19	0.20	0.79	0.47
Avail Cap(c_a), veh/h	390	2731	1113	1038	559	642
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	7.9	8.0	42.3	34.0
Incr Delay (d2), s/veh	7.3	0.1	0.4	0.4	6.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	1.9	1.9	4.6	8.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	47.3	0.1	8.3	8.4	48.3	35.0
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		564	419		343	
Approach Delay, s/veh		11.3	8.4		41.9	
Approach LOS		B	A		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.6		17.4	14.2	68.4
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		58.2		31.4	21.9	31.2
Max Q Clear Time (g_c+I1), s		2.0		11.7	9.2	7.3
Green Ext Time (p_c), s		4.7		1.0	0.2	3.7

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

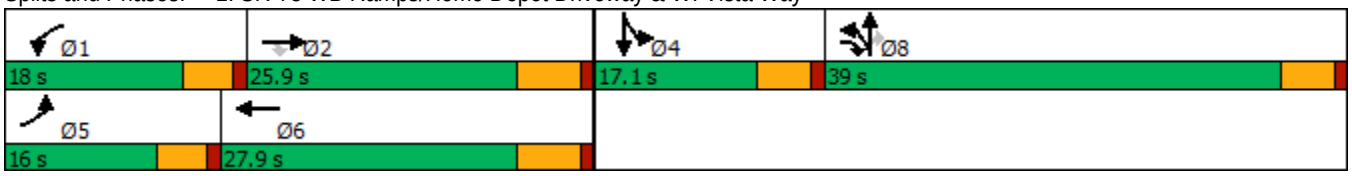
APPENDIX E

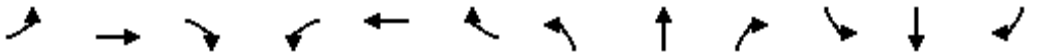
PEAK HOUR INTERSECTION ANALYSIS WORKSHEETS – EXISTING + PROJECT

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Configurations									
Traffic Volume (vph)	106	428	302	263	379	732	74	143	68
Future Volume (vph)	106	428	302	263	379	732	74	143	68
Turn Type	Prot	NA	pm+ov	Prot	NA	Split	NA	Perm	NA
Protected Phases	5	2	8	1	6	8	8		4
Permitted Phases			2					8	
Detector Phase	5	2	8	1	6	8	8	8	4
Switch Phase									
Minimum Initial (s)	11.0	13.0	5.0	5.0	7.0	5.0	5.0	5.0	12.0
Minimum Split (s)	15.7	18.8	10.1	9.7	26.8	10.1	10.1	10.1	17.1
Total Split (s)	16.0	25.9	39.0	18.0	27.9	39.0	39.0	39.0	17.1
Total Split (%)	16.0%	25.9%	39.0%	18.0%	27.9%	39.0%	39.0%	39.0%	17.1%
Yellow Time (s)	3.7	4.8	4.1	3.7	4.8	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	5.8	5.1	4.7	5.8	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag		Lead	Lag				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				
Recall Mode	None	Max	None	None	None	None	None	None	None
Act Effct Green (s)	11.2	20.2	51.8	12.7	21.7	30.9	30.9	30.9	12.0
Actuated g/C Ratio	0.12	0.21	0.54	0.13	0.22	0.32	0.32	0.32	0.12
v/c Ratio	0.57	0.64	0.35	0.76	0.68	0.85	0.84	0.27	0.49
Control Delay	53.2	40.2	3.2	52.8	39.4	47.1	45.9	5.1	30.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.2	40.2	3.2	52.8	39.4	47.1	45.9	5.1	30.7
LOS	D	D	A	D	D	D	D	A	C
Approach Delay		28.5			44.6		40.3		30.7
Approach LOS		C			D		D		C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 96.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 37.3	Intersection LOS: D
Intersection Capacity Utilization 71.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: SR-78 WB Ramps/Home Depot Driveway & W. Vista Way





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	428	302	263	379	33	732	74	143	67	68	70
Future Volume (veh/h)	106	428	302	263	379	33	732	74	143	67	68	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	116	470	332	342	492	43	892	0	162	75	76	79
Peak Hour Factor	0.91	0.91	0.91	0.77	0.77	0.77	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	790	806	422	755	66	1048	0	453	145	148	156
Arrive On Green	0.12	0.22	0.22	0.12	0.23	0.23	0.29	0.00	0.29	0.13	0.13	0.13
Sat Flow, veh/h	1781	3554	1530	3456	3289	286	3563	0	1538	1099	1121	1179
Grp Volume(v), veh/h	116	470	332	342	265	270	892	0	162	124	0	106
Grp Sat Flow(s),veh/h/ln	1781	1777	1530	1728	1777	1798	1781	0	1538	1815	0	1584
Q Serve(g_s), s	5.6	10.7	12.1	8.7	12.2	12.3	21.3	0.0	7.5	5.7	0.0	5.6
Cycle Q Clear(g_c), s	5.6	10.7	12.1	8.7	12.2	12.3	21.3	0.0	7.5	5.7	0.0	5.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	0.61		0.74
Lane Grp Cap(c), veh/h	205	790	806	422	408	413	1048	0	453	240	0	210
V/C Ratio(X)	0.57	0.59	0.41	0.81	0.65	0.65	0.85	0.00	0.36	0.52	0.00	0.51
Avail Cap(c_a), veh/h	223	790	806	508	434	440	1336	0	577	241	0	210
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.9	31.5	13.5	38.7	31.5	31.6	30.0	0.0	25.2	36.5	0.0	36.5
Incr Delay (d2), s/veh	2.8	3.3	1.6	8.1	3.1	3.2	4.4	0.0	0.5	1.9	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.9	7.4	4.1	5.5	5.6	9.5	0.0	2.7	2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.7	34.8	15.0	46.7	34.7	34.8	34.5	0.0	25.6	38.4	0.0	38.4
LnGrp LOS	D	C	B	D	C	C	C	A	C	D	A	D
Approach Vol, veh/h		918			877			1054			230	
Approach Delay, s/veh		28.4			39.4			33.1			38.4	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	25.9		17.1	15.1	26.5		31.7				
Change Period (Y+Rc), s	* 4.7	5.8		5.1	* 4.7	5.8		5.1				
Max Green Setting (Gmax), s	* 13	20.1		12.0	* 11	22.1		33.9				
Max Q Clear Time (g_c+I1), s	10.7	14.1		7.7	7.6	14.3		23.3				
Green Ext Time (p_c), s	0.3	2.3		0.5	0.1	2.0		3.3				

Intersection Summary		
HCM 6th Ctrl Delay		33.9
HCM 6th LOS		C

Notes

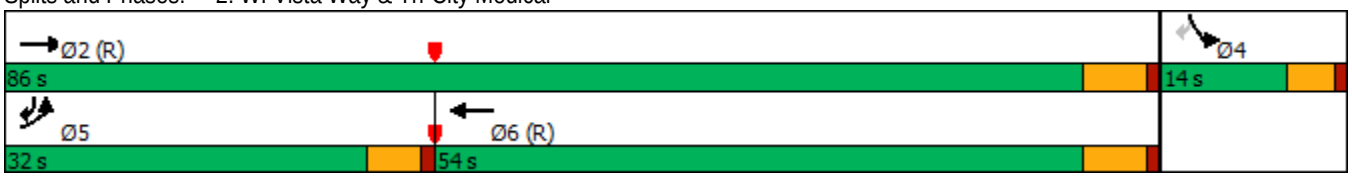
User approved volume balancing among the lanes for turning movement.

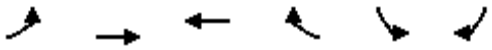
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	144	527	591	19	53
Future Volume (vph)	144	527	591	19	53
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	5	2	6	4	5
Permitted Phases					4
Detector Phase	5	2	6	4	5
Switch Phase					
Minimum Initial (s)	5.0	8.0	8.0	6.0	5.0
Minimum Split (s)	10.1	13.8	32.8	10.6	10.1
Total Split (s)	32.0	86.0	54.0	14.0	32.0
Total Split (%)	32.0%	86.0%	54.0%	14.0%	32.0%
Yellow Time (s)	4.1	4.8	4.8	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.8	5.8	4.6	5.1
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Max	C-Max	None	None
Act Effct Green (s)	14.8	92.5	69.1	7.1	17.9
Actuated g/C Ratio	0.15	0.92	0.69	0.07	0.18
v/c Ratio	0.67	0.20	0.34	0.20	0.21
Control Delay	52.6	1.2	5.5	47.0	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.6	1.2	5.5	47.0	7.5
LOS	D	A	A	D	A
Approach Delay		12.3	5.5	17.9	
Approach LOS		B	A	B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 48.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: W. Vista Way & Tri-City Medical





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	144	527	591	33	19	53
Future Volume (veh/h)	144	527	591	33	19	53
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	643	778	43	25	70
Peak Hour Factor	0.82	0.82	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	2986	2291	127	99	276
Arrive On Green	0.12	0.84	0.22	0.22	0.06	0.06
Sat Flow, veh/h	1781	3647	3510	189	1781	1585
Grp Volume(v), veh/h	176	643	404	417	25	70
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1829	1781	1585
Q Serve(g_s), s	9.7	3.5	19.2	19.2	1.3	3.8
Cycle Q Clear(g_c), s	9.7	3.5	19.2	19.2	1.3	3.8
Prop In Lane	1.00			0.10	1.00	1.00
Lane Grp Cap(c), veh/h	211	2986	1192	1226	99	276
V/C Ratio(X)	0.83	0.22	0.34	0.34	0.25	0.25
Avail Cap(c_a), veh/h	479	2986	1192	1226	167	337
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.90	0.90	1.00	1.00
Uniform Delay (d), s/veh	43.1	1.6	20.3	20.3	45.2	35.7
Incr Delay (d2), s/veh	5.2	0.1	0.7	0.7	1.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.7	9.3	9.6	0.6	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.3	1.7	21.0	21.0	46.5	36.1
LnGrp LOS	D	A	C	C	D	D
Approach Vol, veh/h		819	821		95	
Approach Delay, s/veh		11.7	21.0		38.9	
Approach LOS		B	C		D	

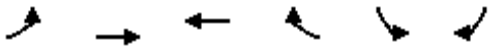
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		89.8		10.2	17.0	72.9
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		80.2		9.4	26.9	48.2
Max Q Clear Time (g_c+I1), s		5.5		5.8	11.7	21.2
Green Ext Time (p_c), s		7.8		0.1	0.3	8.2

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Lane Group	EBL	EBT	WBT	SBL	SBR	Ø7
Lane Configurations						
Traffic Volume (vph)	142	376	379	263	254	
Future Volume (vph)	142	376	379	263	254	
Turn Type	Prot	NA	NA	Prot	pm+ov	
Protected Phases	5	2	6	4	5	7
Permitted Phases					7	
Detector Phase	5	2	6	4	5	
Switch Phase						
Minimum Initial (s)	5.0	8.0	8.0	6.0	5.0	3.0
Minimum Split (s)	10.1	13.8	26.8	28.6	10.1	6.0
Total Split (s)	26.0	67.0	41.0	33.0	26.0	33.0
Total Split (%)	26.0%	67.0%	41.0%	33.0%	26.0%	33%
Yellow Time (s)	4.1	4.8	4.8	3.6	4.1	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.8	5.8	4.6	5.1	
Lead/Lag	Lead		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes	
Recall Mode	None	C-Max	C-Max	None	None	None
Act Effct Green (s)	14.9	68.3	48.3	21.3	35.7	
Actuated g/C Ratio	0.15	0.68	0.48	0.21	0.36	
v/c Ratio	0.68	0.20	0.45	0.76	0.42	
Control Delay	50.7	6.0	17.7	49.6	9.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.7	6.0	17.7	49.6	9.1	
LOS	D	A	B	D	A	
Approach Delay		18.3	17.7	29.7		
Approach LOS		B	B	C		

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 21.3	Intersection LOS: C
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: W. Vista Way & Thunder Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	142	376	379	181	263	254
Future Volume (veh/h)	142	376	379	181	263	254
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	180	476	499	238	286	276
Peak Hour Factor	0.79	0.79	0.76	0.76	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	211	2510	1239	588	338	488
Arrive On Green	0.24	1.00	0.54	0.54	0.19	0.19
Sat Flow, veh/h	1781	3647	2401	1094	1781	1585
Grp Volume(v), veh/h	180	476	383	354	286	276
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1625	1781	1585
Q Serve(g_s), s	9.7	0.0	12.7	12.9	15.5	14.6
Cycle Q Clear(g_c), s	9.7	0.0	12.7	12.9	15.5	14.6
Prop In Lane	1.00			0.67	1.00	1.00
Lane Grp Cap(c), veh/h	211	2510	954	873	338	488
V/C Ratio(X)	0.85	0.19	0.40	0.41	0.85	0.57
Avail Cap(c_a), veh/h	372	2510	954	873	506	638
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	13.7	13.7	39.1	29.0
Incr Delay (d2), s/veh	7.2	0.2	1.3	1.4	8.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.1	5.2	4.9	7.5	13.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.5	0.2	14.9	15.1	47.4	30.0
LnGrp LOS	D	A	B	B	D	C
Approach Vol, veh/h		656	737		562	
Approach Delay, s/veh		12.3	15.0		38.9	
Approach LOS		B	B		D	

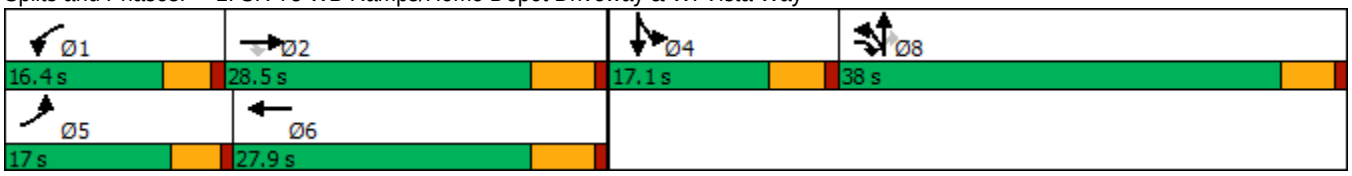
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.4		23.6	16.9	59.5
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		61.2		28.4	20.9	35.2
Max Q Clear Time (g_c+I1), s		2.0		17.5	11.7	14.9
Green Ext Time (p_c), s		5.3		1.5	0.2	6.6

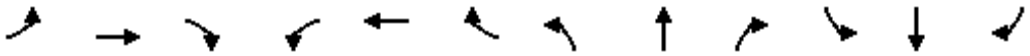
Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBT
Lane Configurations									
Traffic Volume (vph)	127	335	356	213	323	671	65	40	82
Future Volume (vph)	127	335	356	213	323	671	65	40	82
Turn Type	Prot	NA	pm+ov	Prot	NA	Split	NA	Perm	NA
Protected Phases	5	2	8	1	6	8	8		4
Permitted Phases			2					8	
Detector Phase	5	2	8	1	6	8	8	8	4
Switch Phase									
Minimum Initial (s)	11.0	13.0	5.0	5.0	7.0	5.0	5.0	5.0	12.0
Minimum Split (s)	15.7	18.8	10.1	9.7	26.8	10.1	10.1	10.1	17.1
Total Split (s)	17.0	28.5	38.0	16.4	27.9	38.0	38.0	38.0	17.1
Total Split (%)	17.0%	28.5%	38.0%	16.4%	27.9%	38.0%	38.0%	38.0%	17.1%
Yellow Time (s)	3.7	4.8	4.1	3.7	4.8	4.1	4.1	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	5.8	5.1	4.7	5.8	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag		Lead	Lag				
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				
Recall Mode	None	Max	None	None	None	None	None	None	None
Act Effct Green (s)	11.8	22.8	51.9	10.6	21.7	28.3	28.3	28.3	12.1
Actuated g/C Ratio	0.12	0.24	0.55	0.11	0.23	0.30	0.30	0.30	0.13
v/c Ratio	0.63	0.43	0.41	0.59	0.48	0.82	0.80	0.08	0.52
Control Delay	54.4	33.4	4.0	47.7	33.9	44.8	43.7	0.3	35.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.4	33.4	4.0	47.7	33.9	44.8	43.7	0.3	35.5
LOS	D	C	A	D	C	D	D	A	D
Approach Delay		23.9			39.1		42.0		35.5
Approach LOS		C			D		D		D

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 94.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 34.5	Intersection LOS: C
Intersection Capacity Utilization 68.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: SR-78 WB Ramps/Home Depot Driveway & W. Vista Way





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	335	356	213	323	33	671	65	40	71	82	66
Future Volume (veh/h)	127	335	356	213	323	33	671	65	40	71	82	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	364	387	229	347	35	797	0	44	79	91	73
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	936	828	313	749	75	951	0	410	153	178	146
Arrive On Green	0.12	0.26	0.26	0.09	0.23	0.23	0.27	0.00	0.27	0.14	0.14	0.14
Sat Flow, veh/h	1781	3554	1535	3456	3242	324	3563	0	1536	1100	1285	1049
Grp Volume(v), veh/h	138	364	387	229	189	193	797	0	44	130	0	113
Grp Sat Flow(s),veh/h/ln	1781	1777	1535	1728	1777	1789	1781	0	1536	1815	0	1618
Q Serve(g_s), s	6.3	7.2	13.6	5.6	7.9	8.0	18.2	0.0	1.9	5.7	0.0	5.5
Cycle Q Clear(g_c), s	6.3	7.2	13.6	5.6	7.9	8.0	18.2	0.0	1.9	5.7	0.0	5.5
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	0.61		0.65
Lane Grp Cap(c), veh/h	219	936	828	313	411	413	951	0	410	252	0	225
V/C Ratio(X)	0.63	0.39	0.47	0.73	0.46	0.47	0.84	0.00	0.11	0.52	0.00	0.50
Avail Cap(c_a), veh/h	254	936	828	469	456	459	1360	0	586	253	0	225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.9	26.1	12.7	38.2	28.5	28.6	29.8	0.0	23.8	34.4	0.0	34.3
Incr Delay (d2), s/veh	3.9	1.2	1.9	3.3	0.8	0.8	3.3	0.0	0.1	1.8	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	3.1	8.1	2.5	3.4	3.5	8.0	0.0	0.7	2.6	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	27.3	14.6	41.4	29.3	29.4	33.1	0.0	24.0	36.3	0.0	36.1
LnGrp LOS	D	C	B	D	C	C	C	A	C	D	A	D
Approach Vol, veh/h		889			611			841			243	
Approach Delay, s/veh		23.7			33.9			32.6			36.2	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	28.5		17.1	15.3	25.7		28.1				
Change Period (Y+Rc), s	* 4.7	5.8		5.1	* 4.7	5.8		5.1				
Max Green Setting (Gmax), s	* 12	22.7		12.0	* 12	22.1		32.9				
Max Q Clear Time (g_c+I1), s	7.6	15.6		7.7	8.3	10.0		20.2				
Green Ext Time (p_c), s	0.3	2.3		0.5	0.1	1.7		2.8				

Intersection Summary		
HCM 6th Ctrl Delay		30.2
HCM 6th LOS		C

Notes

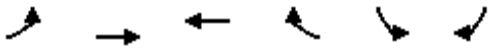
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	44	439	415	63	133
Future Volume (vph)	44	439	415	63	133
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	5	2	6	4	5
Permitted Phases					4
Detector Phase	5	2	6	4	5
Switch Phase					
Minimum Initial (s)	5.0	8.0	8.0	6.0	5.0
Minimum Split (s)	10.1	13.8	32.8	10.6	10.1
Total Split (s)	27.0	76.0	49.0	24.0	27.0
Total Split (%)	27.0%	76.0%	49.0%	24.0%	27.0%
Yellow Time (s)	4.1	4.8	4.8	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.8	5.8	4.6	5.1
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Max	C-Max	None	None
Act Effct Green (s)	7.6	83.0	69.1	9.9	15.9
Actuated g/C Ratio	0.08	0.83	0.69	0.10	0.16
v/c Ratio	0.35	0.16	0.18	0.46	0.43
Control Delay	50.2	2.5	5.5	50.2	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	50.2	2.5	5.5	50.2	8.2
LOS	D	A	A	D	A
Approach Delay		6.8	5.5	21.7	
Approach LOS		A	A	C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 9.4	Intersection LOS: A
Intersection Capacity Utilization 44.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: W. Vista Way & Tri-City Medical



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	44	439	415	9	63	133
Future Volume (veh/h)	44	439	415	9	63	133
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	472	432	9	80	168
Peak Hour Factor	0.93	0.93	0.96	0.96	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	65	2744	2435	51	221	254
Arrive On Green	0.04	0.77	0.23	0.23	0.12	0.12
Sat Flow, veh/h	1781	3647	3650	74	1781	1585
Grp Volume(v), veh/h	47	472	216	225	80	168
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1854	1781	1585
Q Serve(g_s), s	2.6	3.5	9.8	9.8	4.1	10.0
Cycle Q Clear(g_c), s	2.6	3.5	9.8	9.8	4.1	10.0
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	65	2744	1216	1269	221	254
V/C Ratio(X)	0.72	0.17	0.18	0.18	0.36	0.66
Avail Cap(c_a), veh/h	390	2744	1216	1269	346	365
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.98	0.98	1.00	1.00
Uniform Delay (d), s/veh	47.7	3.0	16.0	16.0	40.2	39.4
Incr Delay (d2), s/veh	10.0	0.1	0.3	0.3	1.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.0	4.5	4.7	1.9	8.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.7	3.1	16.3	16.3	41.2	42.4
LnGrp LOS	E	A	B	B	D	D
Approach Vol, veh/h		519	441		248	
Approach Delay, s/veh		8.1	16.3		42.0	
Approach LOS		A	B		D	

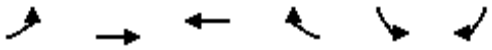
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		83.0		17.0	8.7	74.3
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		70.2		19.4	21.9	43.2
Max Q Clear Time (g_c+I1), s		5.5		12.0	4.6	11.8
Green Ext Time (p_c), s		5.3		0.5	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Lane Group	EBL	EBT	WBT	SBL	SBR	Ø7
Lane Configurations						
Traffic Volume (vph)	119	388	266	163	150	
Future Volume (vph)	119	388	266	163	150	
Turn Type	Prot	NA	NA	Prot	pm+ov	
Protected Phases	5	2	6	4	5	7
Permitted Phases					7	
Detector Phase	5	2	6	4	5	
Switch Phase						
Minimum Initial (s)	5.0	8.0	8.0	6.0	5.0	3.0
Minimum Split (s)	10.1	13.8	26.8	28.6	10.1	6.0
Total Split (s)	20.0	71.0	51.0	29.0	20.0	29.0
Total Split (%)	20.0%	71.0%	51.0%	29.0%	20.0%	29%
Yellow Time (s)	4.1	4.8	4.8	3.6	4.1	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.8	5.8	4.6	5.1	
Lead/Lag	Lead		Lag		Lead	
Lead-Lag Optimize?	Yes		Yes		Yes	
Recall Mode	None	C-Max	C-Max	None	None	None
Act Effct Green (s)	12.0	73.7	56.6	15.9	27.4	
Actuated g/C Ratio	0.12	0.74	0.57	0.16	0.27	
v/c Ratio	0.64	0.17	0.22	0.63	0.30	
Control Delay	49.0	4.0	10.3	48.7	4.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	49.0	4.0	10.3	48.7	4.5	
LOS	D	A	B	D	A	
Approach Delay		14.6	10.3	27.5		
Approach LOS		B	B	C		

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 16.5	Intersection LOS: B
Intersection Capacity Utilization 49.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: W. Vista Way & Thunder Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	119	388	266	106	163	150
Future Volume (veh/h)	119	388	266	106	163	150
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	134	436	302	120	179	165
Peak Hour Factor	0.89	0.89	0.88	0.88	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	163	2735	1554	601	225	345
Arrive On Green	0.18	1.00	0.63	0.63	0.13	0.13
Sat Flow, veh/h	1781	3647	2570	958	1781	1585
Grp Volume(v), veh/h	134	436	214	208	179	165
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1658	1781	1585
Q Serve(g_s), s	7.2	0.0	5.1	5.3	9.8	9.1
Cycle Q Clear(g_c), s	7.2	0.0	5.1	5.3	9.8	9.1
Prop In Lane	1.00			0.58	1.00	1.00
Lane Grp Cap(c), veh/h	163	2735	1115	1040	225	345
V/C Ratio(X)	0.82	0.16	0.19	0.20	0.80	0.48
Avail Cap(c_a), veh/h	265	2735	1115	1040	435	531
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	7.9	7.9	42.4	34.2
Incr Delay (d2), s/veh	7.9	0.1	0.4	0.4	6.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	1.9	1.9	4.6	8.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	48.0	0.1	8.3	8.4	48.7	35.2
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		570	422		344	
Approach Delay, s/veh		11.4	8.3		42.2	
Approach LOS		B	A		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.8		17.2	14.2	68.5
Change Period (Y+Rc), s		5.8		4.6	5.1	5.8
Max Green Setting (Gmax), s		65.2		24.4	14.9	45.2
Max Q Clear Time (g_c+I1), s		2.0		11.8	9.2	7.3
Green Ext Time (p_c), s		4.8		0.9	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

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

APPENDIX F

NCTD BUS SCHEDULES

302

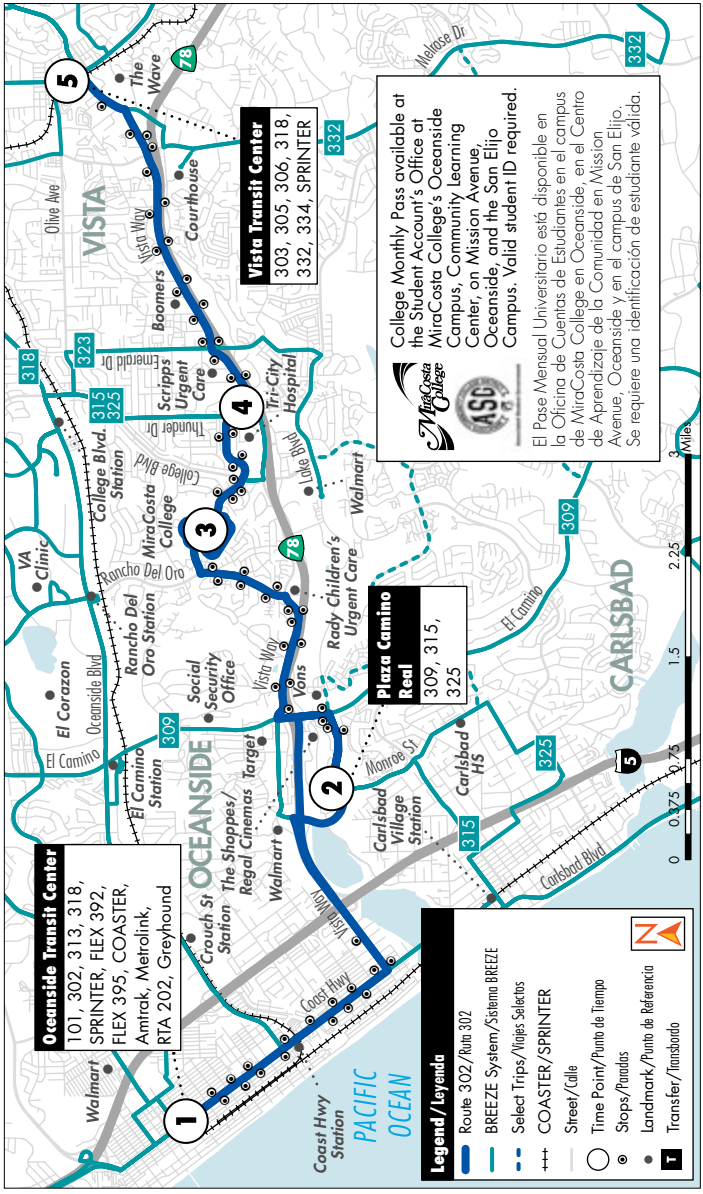
Oceanside to Vista via Vista Way

Oceanside a Vista vía Vista Way

M-F • SA • SU
L-V • SÁ • DO

Destinations/Destinos

- MiraCosta College
- Plaza Camino Real
- The Shoppes at Carlsbad
- Tri-City Medical Center
- Rady Children's Hospital
- Coast Hwy. SPRINTER Station
- Vista Community Clinic



302 Oceanside to Vista via Vista Way

Oceanside a Vista vía Vista Way

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday
Eastbound to Vista
Lunes a Viernes • Dirección hacia el este a Vista

Oceanside Transit Center	Plaza Camino Real Transit Center	MiraCosta College	Thunder Dr. & Vista Way	Vista Transit Center
1	**2**	**3**	**4**	**5**
4:39	4:52	5:03	5:10	5:21a
5:08	5:21	5:32	5:40	5:51
5:38	5:51	6:02	6:10	6:21
6:06	6:20	6:32	6:40	6:51
6:35	6:50	7:02	7:10	7:21
7:04	7:19	7:31	7:39	7:51
7:34	7:49	8:01	8:09	8:21
8:03	8:19	8:31	8:39	8:51
8:33	8:49	9:01	9:09	9:21
9:00	9:17	9:30	9:38	9:51
9:30	9:47	10:00	10:08	10:21
10:00	10:17	10:30	10:38	10:51
10:29	10:46	10:59	11:08	11:21
10:59	11:16	11:29	11:38	11:51
11:28	11:45	11:59	**12:08**	**12:21p**
11:42	**12:00**	**12:14**	**12:23**	**12:36**
11:57	**12:15**	**12:29**	**12:38**	**12:51**
12:12	**12:30**	**12:44**	**12:53**	**1:06**
12:27	**12:45**	**12:59**	**1:08**	**1:21**
12:42	**1:00**	**1:14**	**1:23**	**1:36**
12:56	**1:14**	**1:29**	**1:38**	**1:51**
1:10	**1:28**	**1:43**	**1:52**	**2:06**
1:25	**1:43**	**1:58**	**2:07**	**2:21**
1:40	**1:58**	**2:13**	**2:22**	**2:36**
1:55	**2:13**	**2:28**	**2:37**	**2:51**
2:06	**2:24**	**2:41**	**2:50**	**3:06**
2:21	**2:39**	**2:56**	**3:05**	**3:21**
2:36	**2:54**	**3:11**	**3:20**	**3:36**
2:51	**3:09**	**3:26**	**3:35**	**3:51**
3:06	**3:24**	**3:41**	**3:50**	**4:06**
3:21	**3:39**	**3:56**	**4:05**	**4:21**
3:36	**3:54**	**4:11**	**4:20**	**4:36**
3:51	**4:09**	**4:26**	**4:35**	**4:51**
4:06	**4:24**	**4:41**	**4:50**	**5:06**
4:21	**4:39**	**4:56**	**5:05**	**5:21**
4:37	**4:55**	**5:11**	**5:20**	**5:36**
4:52	**5:10**	**5:26**	**5:35**	**5:51**

302 Oceanside to Vista via Vista Way

Oceanside a Vista vía Vista Way

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday
Eastbound to Vista
Lunes a Viernes • Dirección hacia el este a Vista

Oceanside Transit Center	Plaza Camino Real Transit Center	MiraCosta College	Thunder Dr. & Vista Way	Vista Transit Center
1	**2**	**3**	**4**	**5**
5:12	5:30	5:45	5:54	6:06
5:28	5:46	6:01	6:10	6:21
6:01	6:18	6:33	6:40	6:51
6:34	6:51	7:05	7:12	7:21
7:05	7:21	7:35	7:42	7:51
7:36	7:52	8:05	8:12	8:21
8:06	8:22	8:35	8:42	8:51
8:37	8:52	9:05	9:12	9:21
9:08	9:23	9:35	9:42	9:51
9:38	9:53	10:05	10:12	10:21
10:10	10:24	10:36	10:42	10:51

302 Oceanside to Vista via Vista Way

Oceanside a Vista vía Vista Way

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday
Westbound to Oceanside
Lunes a Viernes • Dirección hacia el oeste a Oceanside

Vista Transit Center	Thunder Dr. & Vista Way	MiraCosta College	Plaza Camino Real Transit Center	Oceanside Transit Center
5	**4**	**3**	**2**	**1**
4:36	4:44	4:50	5:01	5:13a
5:06	5:14	5:21	5:32	5:44
5:36	5:44	5:52	6:03	6:16
6:06	6:15	6:23	6:34	6:49
6:36	6:45	6:54	7:05	7:20
7:06	7:16	7:25	7:37	7:53
7:36	7:46	7:55	8:07	8:23
8:06	8:16	8:25	8:37	8:54
8:36	8:46	8:55	9:07	9:24
9:06	9:16	9:25	9:38	9:56
9:36	9:46	9:55	10:08	10:26
10:06	10:16	10:25	10:38	10:57
10:36	10:46	10:55	11:09	11:28
11:06	11:16	11:25	11:39	11:58
11:36	11:46	11:55	**12:10**	**12:29p**
11:51	**12:01**	**12:10**	**12:25**	**12:44**
12:06	**12:16**	**12:25**	**12:40**	**12:59**
12:21	**12:31**	**12:40**	**12:55**	**1:14**
12:36	**12:46**	**12:55**	**1:10**	**1:29**
12:51	**1:01**	**1:10**	**1:25**	**1:44**
1:06	**1:16**	**1:25**	**1:40**	**1:59**
1:21	**1:31**	**1:40**	**1:55**	**2:14**
1:36	**1:46**	**1:55**	**2:10**	**2:29**
1:51	**2:01**	**2:10**	**2:25**	**2:44**
2:06	**2:17**	**2:26**	**2:41**	**3:00**
2:21	**2:32**	**2:41**	**2:56**	**3:15**
2:36	**2:47**	**2:56**	**3:13**	**3:32**
2:51	**3:02**	**3:11**	**3:28**	**3:47**
3:06	**3:17**	**3:26**	**3:42**	**4:01**
3:21	**3:32**	**3:41**	**3:57**	**4:16**
3:36	**3:47**	**3:56**	**4:12**	**4:31**
3:51	**4:02**	**4:11**	**4:27**	**4:46**
4:06	**4:17**	**4:25**	**4:41**	**5:00**
4:21	**4:32**	**4:40**	**4:56**	**5:15**
4:36	**4:47**	**4:55**	**5:11**	**5:30**
4:51	**5:02**	**5:10**	**5:26**	**5:45**
5:06	**5:17**	**5:25**	**5:40**	**5:58**

302 Oceanside to Vista via Vista Way

Oceanside a Vista vía Vista Way

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday
Westbound to Oceanside
Lunes a Viernes • Dirección hacia el oeste a Oceanside

Vista Transit Center	Thunder Dr. & Vista Way	MiraCosta College	Plaza Camino Real Transit Center	Oceanside Transit Center
5	**4**	**3**	**2**	**1**
5:21	5:32	5:40	5:55	6:13
5:36	5:47	5:55	6:10	6:28
6:06	6:17	6:25	6:38	6:55
6:36	6:47	6:55	7:08	7:25
7:06	7:16	7:24	7:37	7:53
7:36	7:46	7:54	8:07	8:23
8:06	8:15	8:23	8:36	8:51
8:36	8:45	8:53	9:05	9:20
9:06	9:15	9:23	9:35	9:50
9:36	9:44	9:51	10:03	10:18
10:06	10:14	10:21	10:32	10:46
10:36	10:44	10:51	11:01	11:15
11:06	11:14	11:20	11:30	11:42

302 Oceanside to Vista via Vista Way

Oceanside a Vista vía Vista Way

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Saturday & Sunday
Eastbound to Vista
Sábado y Domingo • Dirección hacia el este a Vista

Oceanside Transit Center	Plaza Camino Real Transit Center	MiraCosta College	Thunder Dr. & Vista Way	Vista Transit Center
1	**2**	**3**	**4**	**5**
5:11	5:24	5:34	5:39	5:51a
5:41	5:54	6:04	6:09	6:21
6:10	6:23	6:33	6:39	6:51
6:39	6:53	7:03	7:09	7:21
7:08	7:22	7:33	7:39	7:51
7:38	7:52	8:03	8:09	8:21
8:06	8:21	8:32	8:39	8:51
8:34	8:50	9:01	9:08	9:21
9:03	9:19	9:31	9:38	9:51
9:31	9:47	9:59	10:06	10:21
10:01	10:17	10:29	10:36	10:51
10:29	10:47	10:29	11:06	11:21
10:57	11:16	11:29	11:36	11:51
11:26	11:45	11:58	**12:06**	**12:21p**
11:56	**12:15**	**12:28**	**12:36**	**12:51**
12:26	**12:45**	**12:58**	**1:06**	**1:21**
12:56	**1:15**	**1:28**	**1:36**	**1:51**
1:26	**1:45**	**1:58**	**2:06**	**2:21**
1:55	**2:15**	**2:28**	**2:36**	**2:51**
2:25	**2:45**	**2:58**	**3:06**	**3:21**
2:55	**3:15**	**3:28**	**3:36**	**3:51**
3:25	**3:45**	**3:58**	**4:06**	**4:21**
3:56	**4:16**	**4:29**	**4:37**	**4:51**
4:27	**4:46**	**4:59**	**5:07**	**5:21**
4:57	**5:16**	**5:29**	**5:37**	**5:51**
5:27	**5:46**	**5:59**	**6:07**	**6:21**
5:59	**6:18**	**6:31**	**6:37**	**6:51**
6:30	**6:48**	**7:01**	**7:07**	**7:21**
7:03	**7:19**	**7:32**	**7:38**	**7:51**
7:33	**7:49**	**8:02**	**8:08**	**8:21**
8:04	**8:20**	**8:32**	**8:38**	**8:51**
8:34	**8:50**	**9:02**	**9:08**	**9:21**
9:05	**9:21**	**9:33**	**9:39**	**9:51**
10:05	**10:21**	**10:33**	**10:39**	**10:51**

302 Oceanside to Vista via Vista Way

Oceanside a Vista vía Vista Way

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Saturday & Sunday
Westbound to Oceanside
Sábado y Domingo • Dirección hacia el oeste a Oceanside

Vista Transit Center	Thunder Dr. & Vista Way	MiraCosta College	Plaza Camino Real Transit Center	Oceanside Transit Center
5	**4**	**3**	**2**	**1**
6:06	6:16	6:23	6:34	6:47a
6:36	6:46	6:53	7:04	7:17
7:06	7:16	7:23	7:34	7:48
7:36	7:46	7:53	8:04	8:18
8:06	8:16	8:23	8:35	8:50
8:36	8:46	8:53	9:05	9:20
9:06	9:16	9:23	9:36	9:52
9:36	9:46	9:53	10:06	10:22
10:06	10:16	10:23	10:37	10:54
10:36	10:47	10:54	11:08	11:25
11:06	11:17	11:24	11:38	11:56
11:36	11:47	11:54	**12:08**	**12:28p**
12:06	**12:17**	**12:24**	**12:39**	**1:01**
12:36	**12:47**	**12:54**	**1:09**	**1:31**
1:06	**1:17**	**1:24**	**1:38**	**2:00**
1:36	**1:47**	**1:54**	**2:08**	**2:28**
2:06	**2:17**	**2:24**	**2:38**	**2:57**
2:36	**2:47**	**2:54**	**3:08**	**3:27**
3:06	**3:17**	**3:24**	**3:38**	**3:56**
3:36	**3:46**	**3:53**	**4:07**	**4:25**
4:06	**4:16**	**4:23**	**4:37**	**4:55**
4:36	**4:46**	**4:53**	**5:07**	**5:25**
5:06	**5:16**	**5:23**	**5:37**	**5:54**
5:36	**5:46**	**5:53**	**6:07**	**6:24**
6:06	**6:17**	**6:24**	**6:37**	**6:53**
6:36	**6:47**	**6:54**	**7:07**	**7:23**
7:06	**7:16**	**7:23**	**7:36**	**7:52**
7:36	**7:46**	**7:53**	**8:06**	**8:22**
8:06	**8:16**	**8:23**	**8:36**	**8:51**
8:36	**8:46**	**8:52**	**9:04**	**9:18**
9:06	**9:16**	**9:22**	**9:34**	**9:48**
9:36	**9:45**	**9:51**	**10:03**	**10:17**
10:06	**10:15**	**10:21**	**10:32**	**10:45**
11:06	**11:15**	**11:21**	**11:32**	**11:45**

315/325

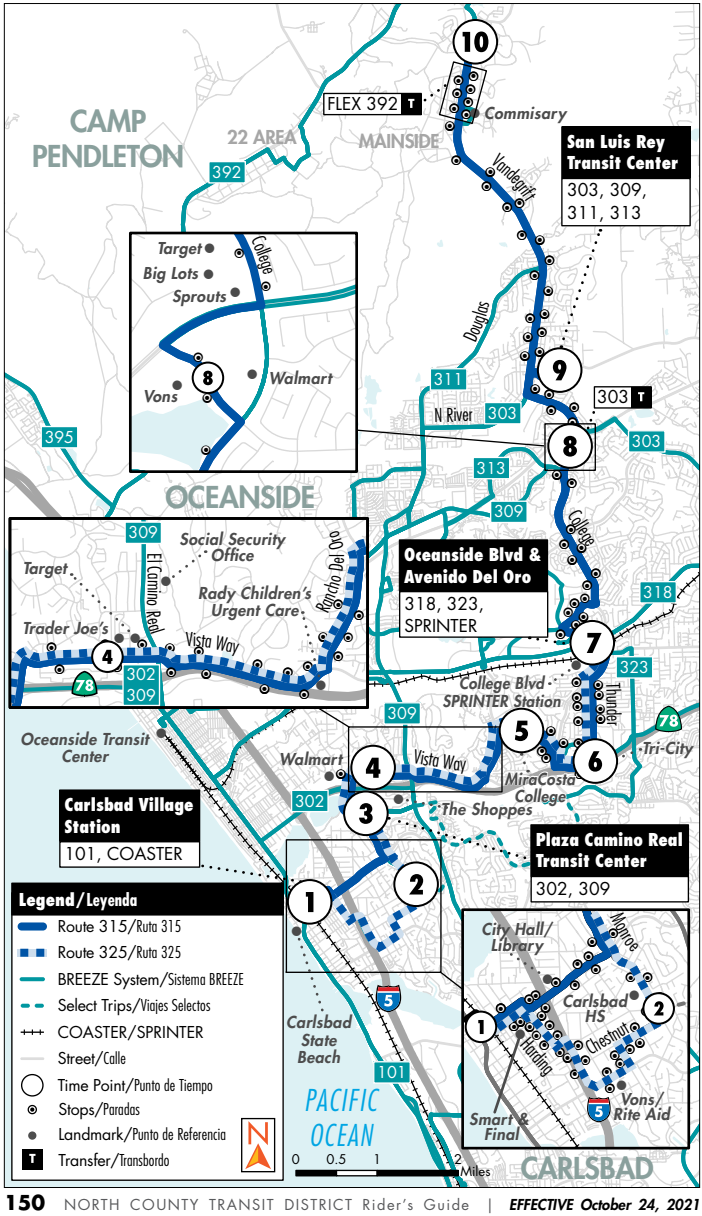
Carlsbad Village Station to 14 Area/ College Blvd. SPRINTER Station

Carlsbad Village Station a 14 Area/College Blvd. Estación de SPRINTER

M-F • SA • SU
L-V • SÁ • DO

M-F • SA
L-V • SÁ

Destinations/Destinos
- MiraCosta College
- Target
- Walmart
- Tri-City Medical Center
- The Shoppes at Carlsbad
- Carlsbad State Beach
- Camp Pendelton - Mainside



315/325

Carlsbad Village Station to 14 Area/ College Blvd. SPRINTER Station

Carlsbad Village Station a 14 Area/College Blvd. Estación de SPRINTER

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday
Northbound to 14 Area/College Blvd. SPRINTER Station
Lunes a Viernes • Dirección hacia el norte a 14 Area/College Blvd. Estación de SPRINTER

Route Ruta	Carlsbad Village Station	Chestnut & Monroe St. (Carlsbad HS)	Plaza Camino Real Transit Center	Vista Way & Via Esmarca	Mira Costa College	Thunder Dr. & Vista Way	Oceanside Bl. & Avenida Del Oro	Town Center North	San Luis Rey Transit Center	Vandegrift & 16th St.
	1	2	3	4	5	6	7	8	9	10
315	4:05	–	4:13	4:17	4:23	4:28	4:37	4:45	4:53	5:09a
315	5:02	–	5:11	5:15	5:22	5:28	5:37	5:45	5:54	6:11
315	5:58	–	6:07	6:11	6:18	6:24	6:34	6:42	6:51	7:08
325	6:14	6:27	6:33	6:37	6:45	6:52	7:04	–	–	–
315	6:51	–	7:03	7:07	7:15	7:22	7:34	7:44	7:53	8:10
325	7:10	7:26	7:33	7:37	7:45	7:52	8:04	–	–	–
315	7:48	–	8:00	8:06	8:15	8:22	8:34	8:44	8:53	9:10
325	8:06	8:23	8:30	8:35	8:44	8:51	9:04	–	–	–
315	8:48	–	9:00	9:06	9:15	9:22	9:34	9:44	9:53	10:10
325	9:06	9:23	9:30	9:36	9:45	9:52	10:04	–	–	–
315	9:48	–	10:00	10:06	10:15	10:22	10:34	10:44	10:53	11:10
325	10:06	10:23	10:30	10:36	10:45	10:52	11:04	–	–	–
315	10:45	–	10:59	11:05	11:14	11:21	11:34	11:44	11:53	**12:10p**
325	11:03	11:20	11:27	11:33	11:43	11:51	**12:04**	–	–	–
315	11:42	–	11:57	**12:03**	**12:13**	**12:21**	**12:34**	**12:44**	**12:53**	**1:10**
325	**12:02**	**12:19**	**12:27**	**12:33**	**12:43**	**12:51**	**1:04**	–	–	–
315	**12:42**	–	**12:57**	**1:03**	**1:13**	**1:21**	**1:34**	**1:44**	**1:53**	**2:10**
325	**1:02**	**1:19**	**1:27**	**1:33**	**1:43**	**1:51**	**2:04**	–	–	–
315	**1:40**	–	**1:55**	**2:01**	**2:11**	**2:19**	**2:32**	**2:45**	**2:54**	**3:11**
325	**2:00**	**2:17**	**2:25**	**2:31**	**2:41**	**2:49**	**3:02**	–	–	–

Route 325 Service
Servicio de la Ruta 325

All persons entering Camp Pendleton must have valid identification and are subject to search at any time.
Todas las personas que ingresen a Camp Pendleton deben tener una identificación válida y están sujetas a registros en cualquier momento.

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315/325

Carlsbad Village Station to 14 Area/ College Blvd. SPRINTER Station

Carlsbad Village Station a 14 Area/College Blvd. Estación de SPRINTER

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday
Northbound to 14 Area/College Blvd. SPRINTER Station
Lunes a Viernes • Dirección hacia el norte a 14 Area/College Blvd. Estación de SPRINTER

Route Ruta	Carlsbad Village Station	Chestnut & Monroe St. (Carlsbad HS)	Plaza Camino Real Transit Center	Vista Way & Via Esmarca	Mira Costa College	Thunder Dr. & Vista Way	Oceanside Bl. & Avenida Del Oro	Town Center North	San Luis Rey Transit Center	Vandegrift & 16th St.
	1	2	3	4	5	6	7	8	9	10
315	2:40	–	2:55	3:01	3:11	3:19	3:32	3:45	3:55	4:12
325	2:59	3:17	3:25	3:31	3:41	3:49	4:02	–	–	–
315	3:40	–	3:55	4:01	4:11	4:19	4:32	4:45	4:55	5:12
325	4:03	4:20	4:27	4:33	4:43	4:51	5:04	–	–	–
315	4:42	–	4:57	5:03	5:13	5:21	5:34	5:47	5:57	6:14
325	5:04	5:21	5:27	5:33	5:43	5:51	6:04	–	–	–
315	5:45	–	6:00	6:06	6:16	6:23	6:34	6:46	6:55	7:10
325	6:10	6:27	6:33	6:38	6:47	6:54	7:04	–	–	–
315	6:45	–	6:58	7:03	7:12	7:19	7:29	7:40	7:48	8:03
315	7:45	–	7:57	8:02	8:10	8:17	8:27	8:38	8:45	9:00
315	8:45	–	8:57	9:02	9:10	9:17	9:27	9:38	9:45	–

Route 325 Service
Servicio de la Ruta 325

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315/325

Carlsbad Village Station to 14 Area/ College Blvd. SPRINTER Station

Carlsbad Village Station a 14 Area/College Blvd. Estación de SPRINTER

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday
Southbound to Carlsbad Village Station
Lunes a Viernes • Dirección hacia el sur a la Estación Carlsbad Village

Route Ruta	Vandegrift & 16th St.	San Luis Rey Transit Center	Town Center North	Oceanside Bl. & Avenida Del Oro	Thunder Dr. & Vista Way	MiraCosta College	Vista Way & Via Esmarca	Plaza Camino Real Transit Center	Chestnut & Monroe St. (Carlsbad HS)	Carlsbad Village Station
	10	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
315	–	5:06	5:13	5:23	5:29	5:37	5:43	5:49	–	5:58a
315	5:22	5:36	5:43	5:53	5:59	6:08	6:14	6:20	–	6:29
325	–	–	–	6:23	6:30	6:40	6:46	6:52	6:58	7:09
315	6:20	6:34	6:43	6:53	7:00	7:10	7:16	7:22	–	7:32
325	–	–	–	7:23	7:30	7:40	7:47	7:55	8:00	8:14
315	7:16	7:31	7:41	7:53	8:00	8:10	8:17	8:24	–	8:34
325	–	–	–	8:23	8:31	8:41	8:48	8:56	9:00	9:13
315	8:16	8:31	8:41	8:53	9:01	9:11	9:18	9:26	–	9:36
325	–	–	–	9:23	9:31	9:41	9:48	9:56	10:00	10:13
315	9:16	9:31	9:41	9:53	10:01	10:11	10:18	10:26	–	10:36
325	–	–	–	10:23	10:31	10:41	10:48	10:56	11:01	11:14
315	10:16	10:31	10:41	10:53	11:01	11:11	11:18	11:26	–	11:36
325	–	–	–	11:23	11:31	11:41	11:49	11:57	**12:02**	**12:15p**
315	11:15	11:31	11:41	11:53	**12:01**	**12:11**	**12:18**	**12:26**	–	**12:36**
325	–	–	–	**12:23**	**12:31**	**12:41**	**12:49**	**12:57**	**1:02**	**1:15**
315	**12:15**	**12:31**	**12:41**	**12:53**	**1:01**	**1:11**	**1:19**	**1:27**	–	**1:37**
325	–	–	–	**1:23**	**1:31**	**1:41**	**1:49**	**1:58**	**2:04**	**2:19**
315	**1:13**	**1:31**	**1:41**	**1:53**	**2:01**	**2:11**	**2:19**	**2:28**	–	**2:38**
325	–	–	–	**2:23**	**2:31**	**2:42**	**2:50**	**2:59**	**3:04**	**3:21**
315	**2:12**	**2:30**	**2:41**	**2:53**	**3:01**	**3:12**	**3:20**	**3:29**	–	**3:39**

Route 325 Service
Servicio de la Ruta 325

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315/325

Carlsbad Village Station to 14 Area/ College Blvd. SPRINTER Station

Carlsbad Village Station a 14 Area/College Blvd. Estación de SPRINTER

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Monday - Friday
Southbound to Carlsbad Village Station
Lunes a Viernes • Dirección hacia el sur a la Estación Carlsbad Village

Route Ruta	Vandegrift & 16th St.	San Luis Rey Transit Center	Town Center North	Oceanside Bl. & Avenida Del Oro	Thunder Dr. & Vista Way	MiraCosta College	Vista Way & Via Esmarca	Plaza Camino Real Transit Center	Chestnut & Monroe St. (Carlsbad HS)	Carlsbad Village Station
	10	9	8	7	6	5	4	3	2	1
325	–	–	–	3:23	3:31	3:42	3:50	3:59	4:04	4:16
315	3:12	3:30	3:41	3:53	4:01	4:12	4:20	4:29	–	4:39
325	–	–	–	4:23	4:31	4:42	4:50	4:59	5:03	5:15
315	4:12	4:30	4:41	4:53	5:01	5:12	5:20	5:29	–	5:39
325	–	–	–	5:23	5:31	5:42	5:50	5:59	6:03	6:15
315	4:42	5:00	5:11	5:23	5:31	5:42	5:50	5:59	–	6:09
315	5:13	5:29	5:40	5:52	6:00	6:11	6:19	6:28	–	6:38
315	6:17	6:31	6:42	6:53	7:01	7:11	7:18	7:26	–	7:36
315	7:20	7:34	7:42	7:53	8:00	8:10	8:17	8:25	–	8:34
315	8:04	8:18	8:26	8:37	8:44	8:53	9:00	9:07	–	9:16

Route 325 Service
Servicio de la Ruta 325

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315/325

Carlsbad Village Station to 14 Area/ College Blvd. SPRINTER Station

Carlsbad Village Station a 14 Area/College Blvd. Estación de SPRINTER

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Saturday
Northbound to 14 Area/College Blvd. SPRINTER Station
Sábado • Dirección hacia el norte a 14 Area/College Blvd. Estación de SPRINTER

Route Ruta	Carlsbad Village Station	Chestnut & Monroe St. (Carlsbad HS)	Plaza Camino Real Transit Center	Vista Way & Via Esmarca	MiraCosta College	Thunder Dr. & Vista Way	Oceanside Bl. & Avenida Del Oro	Town Center North	San Luis Rey Transit Center	Vandegrift & 16th St.
	1	2	3	4	5	6	7	8	9	10
315	6:58	–	7:08	7:11	7:19	7:25	7:35	7:45	7:54	8:10a
315	7:56	–	8:07	8:11	8:19	8:25	8:35	8:46	8:55	9:11
315	8:55	–	9:06	9:11	9:19	9:25	9:35	9:46	9:55	10:11
315	9:52	–	10:04	10:09	10:17	10:25	10:35	10:46	10:55	11:11
325	10:22	10:37	10:43	10:48	10:56	11:04	11:14	–	–	–
315	10:51	–	11:04	11:09	11:17	11:25	11:35	11:46	11:55	**12:11p**
315	11:51	–	**12:04**	**12:09**	**12:17**	**12:25**	**12:35**	**12:46**	**12:55**	**1:11**
315	**12:51**	–	**1:04**	**1:09**	**1:17**	**1:25**	**1:35**	**1:46**	**1:55**	**2:11**
325	**1:10**	**1:26**	**1:34**	**1:39**	**1:47**	**1:55**	**2:05**	–	–	–
315	**1:51**	–	**2:04**	**2:09**	**2:17**	**2:25**	**2:35**	**2:46**	**2:55**	**3:11**
315	**2:51**	–	**3:04**	**3:09**	**3:17**	**3:25**	**3:35**	**3:46**	**3:55**	**4:11**
315	**3:49**	–	**4:03**	**4:09**	**4:17**	**4:25**	**4:35**	**4:46**	**4:55**	**5:11**
325	**4:09**	**4:25**	**4:33**	**4:39**	**4:47**	**4:55**	**5:05**	–	–	–
315	**4:49**	–	**5:03**	**5:09**	**5:17**	**5:25**	**5:35**	**5:47**	**5:56**	**6:12**
315	**5:51**	–	**6:04**	**6:10**	**6:18**	**6:25**	**6:35**	**6:47**	**6:56**	**7:12**
325	**7:22**	**7:38**	**7:46**	**7:51**	**7:59**	**8:06**	**8:16**	–	–	–
315	**6:53**	–	**7:05**	**7:10**	**7:18**	**7:25**	**7:35**	**7:47**	**7:56**	**8:12**
315	**7:53**	–	**8:05**	**8:10**	**8:18**	**8:25**	**8:35**	**8:46**	**8:55**	**9:10**
315	**8:53**	–	**9:05**	**9:10**	**9:18**	**9:25**	**9:35**	**9:46**	**9:55**	**10:10**

Route 325 Service
Servicio de la Ruta 325

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315/325

Carlsbad Village Station to 14 Area/ College Blvd. SPRINTER Station

Carlsbad Village Station a 14 Area/College Blvd. Estación de SPRINTER

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Saturday
Southbound to Carlsbad Village Station
Sábado • Dirección hacia el sur a la Estación Carlsbad Village

Route Ruta	Vandegrift & 16th St.	San Luis Rey Transit Center	Town Center North	Oceanside Bl. & Avenida Del Oro	Thunder Dr. & Vista Way	MiraCosta College	Vista Way & Via Esmarca	Plaza Camino Real Transit Center	Chestnut & Monroe St. (Carlsbad HS)	Carlsbad Village Station
	10	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
315	6:21	6:33	6:40	6:50	6:56	7:04	7:10	7:18	–	7:27a
315	7:20	7:33	7:40	7:50	7:57	8:05	8:12	8:20	–	8:30
325	–	–	–	8:28	8:35	8:43	8:50	8:59	9:03	9:15
315	8:20	8:33	8:40	8:50	8:57	9:05	9:12	9:21	–	9:31
315	9:18	9:32	9:40	9:50	9:57	10:05	10:12	10:22	–	10:32
315	10:16	10:30	10:39	10:50	10:57	11:05	11:12	11:23	–	11:33
325	–	–	–	11:25	11:32	11:41	11:49	**12:00**	**12:04**	**12:16p**
315	11:16	**11:30**	**11:39**	**11:50**	**11:57**	**12:06**	**12:14**	**12:25**	**–**	**12:36**
315	**12:16**	**12:30**	**12:39**	**12:50**	**12:57**	**1:06**	**1:14**	**1:25**	**–**	**1:36**
315	**1:16**	**1:30**	**1:39**	**1:50**	**1:57**	**2:06**	**2:14**	**2:25**	**–**	**2:36**
325	**–**	**–**	**–**	**2:26**	**2:33**	**2:42**	**2:50**	**3:01**	**3:05**	**3:16**
315	**2:16**	**2:30**	**2:39**	**2:50**	**2:57**	**3:06**	**3:14**	**3:25**	**–**	**3:36**
315	**3:16**	**3:30**	**3:39**	**3:50**	**3:57**	**4:06**	**4:14**	**4:25**	**–**	**4:36**
325	**4:16**	**4:30**	**4:39**	**4:50**	**4:57**	**5:06**	**5:14**	**5:25**	**–**	**5:36**
325	**–**	**–**	**–**	**5:27**	**5:34**	**5:43**	**5:51**	**6:01**	**6:05**	**6:16**
315	**5:16**	**5:30**	**5:39**	**5:50**	**5:57**	**6:06**	**6:14**	**6:24**	**–**	**6:35**
315	**6:17**	**6:30**	**6:39**	**6:50**	**6:57**	**7:04**	**7:12**	**7:22**	**–**	**7:32**
315	**7:18**	**7:31**	**7:39**	**7:50**	**7:57**	**8:04**	**8:10**	**8:20**	**–**	**8:30**
315	**8:19**	**8:32**	**8:39**	**8:50**	**8:57**	**9:04**	**9:10**	**9:20**	**–**	**9:30**

Route 325 Service
Servicio de la Ruta 325

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315 Carlsbad Village Station to 14 Area

Carlsbad Village Station a 14 Area

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Sunday
Northbound to 14 Area
Domingo • Dirección hacia el norte a 14 Area

Route Ruta	Carlsbad Village Station	Plaza Camino Real Transit Center	Vista Way & Via Esmarca	MiraCosta College	Thunder Dr. & Vista Way	Oceanside Bl. & Avenida Del Oro	Town Center North	San Luis Rey Transit Center	Vandegrift & 16th St.
	1	3	4	5	6	7	8	9	10
315	6:58	7:08	7:11	7:19	7:25	7:35	7:45	7:54	8:10a
315	7:56	8:07	8:11	8:19	8:25	8:35	8:46	8:55	9:11
315	8:55	9:06	9:11	9:19	9:25	9:35	9:46	9:55	10:11
315	9:52	10:04	10:09	10:17	10:25	10:35	10:46	10:55	11:11
315	10:51	11:04	11:09	11:17	11:25	11:35	11:46	11:55	**12:11p**
315	11:51	**12:04**	**12:09**	**12:17**	**12:25**	**12:35**	**12:46**	**12:55**	**1:11**
315	**12:51**	**1:04**	**1:09**	**1:17**	**1:25**	**1:35**	**1:46**	**1:55**	**2:11**
315	**1:51**	**2:04**	**2:09**	**2:17**	**2:25**	**2:35**	**2:46**	**2:55**	**3:11**
315	**2:51**	**3:04**	**3:09**	**3:17**	**3:25**	**3:35**	**3:46**	**3:55**	**4:11**
315	**3:49**	**4:03**	**4:09**	**4:17**	**4:25**	**4:35**	**4:46**	**4:55**	**5:11**
315	**4:49**	**5:03**	**5:09**	**5:17**	**5:25**	**5:35**	**5:47**	**5:56**	**6:12**
315	**5:51**	**6:04**	**6:10**	**6:18**	**6:25**	**6:35**	**6:47**	**6:56**	**7:12**
315	**6:53**	**7:05**	**7:10**	**7:18**	**7:25**	**7:35**	**7:47**	**7:56**	**8:12**
315	**7:53**	**8:05**	**8:10**	**8:18**	**8:25**	**8:35**	**8:46**	**8:55**	**9:10**
315	**8:53**	**9:05**	**9:10**	**9:18**	**9:25**	**9:35**	**9:46**	**9:55**	**10:10**

All persons entering Camp Pendleton must have valid identification and are subject to search at any time.
Todas las personas que ingresen a Camp Pendleton deben tener una identificación válida y están sujetas a registros en cualquier momento.

BE PREPARED: Base access subject to discretion of Camp Pendleton personnel. If passenger is declined access to the Base, it is the passenger's responsibility to be prepared to consider other transit options. For more information on *Traveling through Camp Pendleton,* see Rider's Guide index.

Esté listo: El acceso a la base es a discreción del personal de Camp Pendleton. Si un pasajero es negado el acceso a la base, es su responsabilidad encontrar otras opciones de transporte. Para obtener más información sobre cómo *viajar a través de Camp Pendleton,* refiérase al Índice de la Guía de Pasajeros.

315 Carlsbad Village Station to 14 Area

Carlsbad Village Station a 14 Area

See pg. 6 for Holiday schedules/Ver pág. 254 para obtener los horarios de días festivos

Sunday
Southbound to Carlsbad Village Station
Domingo • Dirección hacia el sur a la Estación Carlsbad Village

Route Ruta	Vandegrift & 16th St.	San Luis Rey Transit Center	Town Center North	Oceanside Bl. & Avenida Del Oro	Thunder Dr. & Vista Way	MiraCosta College	Vista Way & Via Esmarca	Plaza Camino Real Transit Center	Carlsbad Village Station
	10	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**1**
315	6:21	6:33	6:40	6:50	6:56	7:04	7:10	7:18	7:27a
315	7:20	7:33	7:40	7:50	7:57	8:05	8:12	8:20	8:30
315	8:20	8:33	8:40	8:50	8:57	9:05	9:12	9:21	9:31
315	9:18	9:32	9:40	9:50	9:57	10:05	10:12	10:22	10:32
315	10:16	10:30	10:39	10:50	10:57	11:05	11:12	11:23	11:33
315	11:16	11:30	11:39	11:50	11:57	**12:06**	**12:14**	**12:25**	**12:36p**
315	**12:16**	**12:30**	**12:39**	**12:50**	**12:57**	**1:06**	**1:14**	**1:25**	**1:36**
315	**1:16**	**1:30**	**1:39**	**1:50**	**1:57**	**2:06**	**2:14**	**2:25**	**2:36**
315	**2:16**	**2:30**	**2:39**	**2:50**	**2:57**	**3:06**	**3:14**	**3:25**	**3:36**
315	**3:16**	**3:30**	**3:39**	**3:50**	**3:57**	**4:06**	**4:14**	**4:25**	**4:36**
315	**4:16**	**4:30**	**4:39**	**4:50**	**4:57**	**5:06**	**5:14**	**5:25**	**5:36**
315	**5:16**	**5:30**	**5:39**	**5:50**	**5:57**	**6:06**	**6:14**	**6:24**	**6:35**
315	**6:17**	**6:30**	**6:39**	**6:50**	**6:57**	**7:04**	**7:12**	**7:22**	**7:32**
315	**7:18**	**7:31**	**7:39**	**7:50**	**7:57**	**8:04**	**8:10**	**8:20**	**8:30**
315	**8:19**	**8:32**	**8:39**	**8:50**	**8:57**	**9:04**	**9:10**	**9:20**	**9:30**

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