

**EXHIBIT A
DRAFT CONDITIONS OF APPROVAL**

PDR-928 / 3590 & 3598 Stanley Boulevard and 3595 & 3597 Utah Street

Stanley Center – Four Commercial Buildings

January 12, 2011

SPECIAL CONDITIONS

Planning Division

1. The applicant shall pay traffic impact fees as determined by the traffic analysis by Fehr & Peers as reviewed and approved by the City Traffic Engineer. The applicant may be required to improve intersections based on the traffic analysis. Any design or improvement plans for intersections shall be submitted to the Traffic Division for review and approval prior to building permit issuance. The City Engineer and City Traffic Engineer may waive the requirements for those improvements and require an additional fair share cost that shall be a cost over and above the traffic impact fees, if required. The applicant shall pay all fees at the time of issuance of the first building permit on the site.
2. Prior to occupancy, the property owner/developer shall record cross ingress/egress access easements with 3550 Stanley Boulevard and 3001, 3121, and 3581 Bernal Avenue. Wording for the easements shall be submitted to the City Attorney for review and approval.
3. The applicant shall install yellow centerline striping for the driveway between the project (3590 Stanley and 3595 Utah Street) and existing development (3550 Stanley and 3581 Utah Street). The striping shall be shown on the plans submitted to the Building and Safety Division for plan check and shall be subject to review and approval by the City's Traffic Engineer.
4. Cross access easements and reciprocal parking agreements shall be created between the two subject properties. The easements and agreements shall be reviewed by the City Attorney and shall be recorded prior to issuance of an occupancy permit from the Building and Safety Division.
5. The project developer shall effectively screen from view all ducts, meters, air conditioning equipment, and any other mechanical equipment, whether on the structure, on the ground, or on the roof, with materials architecturally compatible with the building. Screening details shall be shown on the plans submitted for issuance of building permits, the adequacy of which shall be determined by the Director of Community Development. All required screening shall be provided prior to occupancy.

6. A Sign Design Review application for a comprehensive sign program for the tenant signage, including any monument signs, shall be submitted to the Planning Division for review and approval prior to sign installation.
7. A final landscape plan and irrigation plan shall be submitted to and approved by Director of Community Development as part of the building permit plans prior to issuance of a building permit. Said landscape plan shall be consistent with the approved landscape plan plus any conditions of approval, and shall be detailed in terms of species, location, size, quantities, and spacing for all plant materials. Plant species shall be of a drought tolerant nature with an irrigation system that maximizes water conservation throughout the development (e.g., drip system).
8. Restaurant tenants with cooking facilities shall be equipped at all times with filtering devices to minimize odors and fumes. Details of said devices shall be shown on the tenant improvement plans submitted for issuance of building permits and shall be subject to review and approval by the Director of Community Development and Chief Building Official prior to issuance of building permits for the tenant improvements.
9. The project developer shall install pedestrian-scale trash receptacles along the storefront areas of each building. The type and location of the receptacles shall be subject to the review and approval of the Director of Community Development prior to final inspection by the Building and Safety Division.
10. Wall uplighting is not approved as part of this project and shall be removed from the plans submitted to the Building and Safety Division for plan check.
11. Prior to issuance of a building permit, the applicant shall submit larger stucco and color samples of the buildings for review by the Planning Commission. The approved building materials and colors shall be stated on the building permit plans to the satisfaction of the Director of Community Development. Color and material substitutions shall not be allowed unless otherwise approved by the Director of Community Development.
12. Appliances and systems that meet Energy Star standards shall be installed as part of the project. The proposed appliance or system and how it adheres to the Energy Star standards shall be stated on the plans submitted for the issuance of a building permit.
13. The buildings with flat roofs shall have white cool roofs which are designed to reflect the heat of the sun away from the building, thus reducing its cooling load.

14. The applicant shall implement the following measures with the construction of the structures covered by this approval so that a roof-mounted photovoltaic system can be installed in the future:
 - a. Install electrical conduit and pull string from the roof/attic areas to the buildings' main electrical panels;
 - b. Engineer the roof trusses to handle an additional load as determined by a structural engineer to accommodate the additional weight of a prototypical photovoltaic system beyond that anticipated for roofing; and
 - c. Provide an area near the electrical panel for the "inverter" required to convert the direct current output from the photovoltaic panels to alternating current.
15. The project applicant or developer shall provide to the Planning Division with the building permit an estimate of the energy savings from the installation of solar roofs or other alternative energy measures with a goal of meeting 12.5 percent of the buildings' annual energy usage.
16. The project applicant or developer shall prepare a voluntary trip reduction plan of alternative transportation measures including, but not limited to, rideshare matching, subsidies/rewards, preferential parking, and carpooling/vanpooling, the means by which these measures will be marketed to the business employees, and the provision of reports to the City of Pleasanton of the performance of the trip reduction program. The trip reduction goal shall attempt to achieve a 15 percent reduction within five years of opening for business and then a 25 percent reduction within 10 years compared to "business as usual." The project applicant or developer shall work out the details of the program with the Planning Division and the City's Transportation Systems Management (TSM) Coordinator. The program shall be submitted to the Planning Division and the TSM Coordinator with the building permit application for review and approval before issuance of the first occupancy permit.
17. All trash and recycling refuse shall be contained completely within the approved trash and recycling enclosure(s). The materials and color of the enclosure shall match the buildings and the gates shall be corrugated metal or solid wood. The design of the enclosure (all four sides) shall be shown on the plans submitted for issuance of building permits. The design and location of the trash and recycling enclosure(s) shall be subject to the approval of the Director of Community Development. Trash and recycling containers shall be stored within the enclosure at all times, except when being unloaded. A recycling container(s) shall be provided within the enclosure. The recycling container(s) and enclosure shall be designed in a manner consistent with Pleasanton Garbage Service's recycling program in effect

at the time of building permit issuance. The recycling container(s) shall be shown on the plans submitted for the issuance of a building permit.

18. The project applicant or developer shall install water conservation devices in the buildings and landscape areas to the satisfaction of the Director of Community Development. The water conservation devices shall be stated on the building plans and the landscape plans submitted with the building permit.
19. Energy efficient lighting shall be installed as part of the project. The energy efficient lighting shall be shown on the plans submitted for the issuance of a building permit.
20. The project shall comply with the current City/Pleasanton Garbage Service recycling and composting programs.
21. There shall be no truck deliveries, parking lot sweeping, or garbage pick-up between the hours of 10:00 PM and 6:00 AM.

STANDARD CONDITIONS

Community Development Department

22. The project applicant/developer shall submit a refundable cash bond for hazard and erosion control. The amount of this bond will be determined by the Director of Community Development. The cash bond will be retained by the City until all the permanent landscaping is installed for the development, including individual lots, unless otherwise approved by the department.
23. The project developer shall submit a written dust control plan or procedure as part of the improvement plans.
24. The project developer shall pay any and all fees to which the property may be subject prior to issuance of permits. The type and amount of the fees shall be those in effect at the time the permit is issued.
25. If any prehistoric or historic artifacts, or other indication of cultural resources are found once the project construction is underway, all work must stop within 20 meters (66 feet) of the find. A qualified archaeologist shall be consulted for an immediate evaluation of the find prior to resuming groundbreaking construction activities within 20 meters of the find. If the find is determined to be an important archaeological resource, the resource shall be either avoided, if feasible, or recovered consistent with the requirements of Appendix K of the State CEQA Guidelines. In the event of discovery or recognition of any human remains in any on-site location, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the County coroner has determined, in

accordance with any law concerning investigation of the circumstances, the manner and cause of death and has made recommendations concerning treatment and dispositions of the human remains to the person responsible for the excavation, or to his/her authorized representative. A similar note shall appear on the improvement plans.

Planning Division

26. The proposed development shall be in substantial conformance to Exhibit B, dated "Received, December 7, 2010," on file with the Planning Division, except as modified by these conditions. Minor changes to the plans may be allowed subject to the approval of the Director of Community Development.
27. The design review approval shall lapse one year from the effective date of approval unless a building permit is obtained and construction diligently pursued, or the City has approved a time extension.
28. To the extent permitted by law, the project applicant shall defend (with counsel reasonable acceptable to the City), indemnify and hold harmless the City, its City Council, its officers, boards, commissions, employees and agents from and against any claim (including claims for attorneys fees), action, or proceeding brought by a third party against the indemnified parties and the applicant to attack, set aside, or void the approval of the project or any permit authorized hereby for the project, including (without limitation) reimbursing the City its attorneys fees and costs incurred in defense of the litigation. The City may, in its sole discretion, elect to defend any such action with attorneys of its choice.
29. All conditions of approval shall be attached to all permit plan sets submitted for review and approval, whether stapled to the plans or located on a separate plan sheet.
30. The project developer shall work with the Pleasanton Unified School District and the Director of Community Development to develop a program, in addition to the school impact fees required by State law and local ordinance, to off-set this project's long-term effect on school facility needs in Pleasanton.
31. The project shall achieve a minimum LEED™ "certified" level on the LEED Green Building Checklist at the time of building permit submittal. A final list of the green building measures shall be submitted in conjunction with the plans submitted for issuance of building permits and shall be subject to the review and approval by the Planning Division prior to issuance of building permits for the project.

Should the City adopt and/or amend the current Green Building Ordinance due to the State's CALGreen Building Code, the project shall be required to adhere to what

is in effect at the time of submitting plans to the Building and Safety Division for plan check. The project may be required to adhere to the basic CALGreen requirements and the City's current Green Building Ordinance.

The green building measures shall be shown on one of the first two pages of the plans submitted for issuance of a building permit. **Each point/credit/measure identified shall have a notation indicating the sheet the point can be found, and each sheet shall note where the point is located.** All proposed green building measures shall be shown throughout the plan set, as appropriate, as determined by the Director of Community Development.

A special inspection by from the Planning Division shall be coordinated with regards to landscaping, irrigation, and exterior materials. All of the green building measures indicated on the approved checklists shall be inspected and approved by either the City of Pleasanton, a third party rater, or the applicants shall provide written verification by the project engineer, architect, landscape architect, or designer.

32. Planning Division approval is required before any changes are implemented in site design, building design, grading, colors or materials, green building measures, landscape material, etc.
33. The project developer must provide to the Director of Community Development a building height certification performed by a licensed land surveyor or civil engineer. Said certification must allow for the installation of finished roof materials and the structures must meet the approved building height.
34. The building permit plan check package will be accepted for submittal only after completion of the 15-day appeal period, measured from the date of the approval letter, unless the project developer submits a signed statement acknowledging that the plan check fees may be forfeited in the event that the approval is overturned on appeal, or that the design is significantly changed as a result of the appeal. In no case will a building permit be issued prior to the expiration of the 15-day time-period.
35. All demolition and construction activities, inspections, plan checking, material delivery, staff assignment or coordination, etc., shall be limited to the hours of 8:00 a.m. to 5:00 p.m., Monday through Saturday. No construction shall be allowed on State or Federal Holidays or Sundays. The Director of Community Development may allow earlier "start times" or later "stop times" for specific construction activities, e.g., concrete pouring. All construction equipment must meet Department of Motor Vehicles (DMV) noise standards and shall be equipped with muffling devices. Prior to construction, the hours of construction shall be posted on site.

36. Campers, trailers, motor homes, or any other similar vehicle are not allowed on the construction site except when needed as sleeping quarters for a security guard.
37. A construction trailer shall be allowed to be placed on the project site for daily administration/coordination purposes during the construction period.
38. Portable toilets used during construction shall be kept as far as possible from existing residences and shall be emptied on a regular basis as necessary to prevent odor.
39. If a project has 20 or more parking spaces, the project shall at a minimum provide bicycle parking equivalent to 5% of the total number of automobile parking spaces. The maximum required bicycle parking spaces is 20.
40. Bicycle racks shall:
 - a. Be visible and accessible
 - b. Support the frame of the bicycle and not just one wheel
 - c. Allow the frame and one wheel to be locked to the rack
 - d. Allow the use of either a cable or U-shaped lock
 - e. Be securely anchored
 - f. Be usable by bikes with no kickstand
 - g. Be usable by a wide variety of sizes and types of bicycles.
41. All exterior lighting including landscape lighting shall be directed downward and designed or shielded so as to not shine onto neighboring properties. The project/building developer shall submit a final lighting plan, and include drawings and/or manufacturer's specification sheets showing the size and types of light fixtures proposed for the exterior of the buildings.

Landscaping Conditions

42. All trees used in landscaping shall be a minimum of fifteen (15) gallons in size and all shrubs shall be a minimum of five (5) gallons.
43. The project shall comply with the State of California's Model Water Efficient Landscape Ordinance. A licensed landscape architect shall verify the project's

compliance with the ordinance: 1) prior to the issuance of a building permit; and 2) prior to final inspection. The verification shall be provided to the Planning Division.

44. The project applicant or developer shall attempt to locate the transformers away from the project street frontages and away from the main driveway aisles. Such transformers shall be screened by landscaping. All transformers shall be shown on the plans submitted for issuance of building permits and shall be subject to approval by the Planning Division prior to issuance of building permits.
45. All backflow prevention devices, above ground irrigation controls, and above ground irrigation meters shall be located and screened to minimize their visual impacts. These devices with their proposed screening shall be shown on the landscaping and utility plans submitted with the building permit plans, clearly marked "above ground" or "below ground" on the plans, and shall be subject to the review and approval of the Planning Division prior to their installation. If above-ground, they shall be painted forest green or an equivalent dark-green color. Screens shall consist of berms, walls, or landscaping satisfactorily integrated into the landscape plan. Landscape screens shall include shrubbery designed by species and planting density to establish a complete screen within one year from the date of planting. Weather protection devices such as measures to protect pipes from freezing shall require approval by the Planning Division prior to use; at no time shall fabric or other material not designed and/or intended for this purpose be wrapped around or otherwise placed on these devices.
46. The project developer shall enter into an agreement with the City, approved by the City Attorney, which guarantees that all landscaping and open space areas included in this project will be maintained at all times in a manner consistent with the approved landscape plan for this development. Said agreement shall run with the land for the duration of the existence of the structures located on the subject property.
47. Six-inch vertical concrete curbs shall be installed between all paved and landscaped areas.
48. The project developer shall provide root control barriers and four inch perforated pipes for parking lot trees, street trees, and trees in planting areas less than ten feet in width, as determined necessary by the Director of Community Development at the time of review of the final landscape plans.
49. Before project final, all landscaping shall be installed, reviewed, and approved by the Planning Division
50. Prior to occupancy, the landscape architect or landscape designer shall certify in writing to the Director of Community Development that the landscaping has been

installed in accordance with the approved landscape and irrigation plans with respect to size, number, and species of plants and overall design concept.

Building and Safety Division

51. The project developer shall submit a pad elevation certification prepared by a licensed land surveyor or registered civil engineer to the Chief Building Official and Director of Community Development, certifying that the pad elevations and building locations (setbacks) are pursuant to the approved plans, prior to receiving a foundation inspection for the structures.
52. All retaining walls higher than four feet from the top of the wall to the bottom of the footway shall be constructed of reinforced concrete, masonry, or other material as approved by the Director of Community Development, or shall be an approved crib wall type. Calculations signed by a registered civil engineer shall accompany the wall plans.
53. At the time of building permit plan submittal, the project developer shall submit a final grading and drainage plan prepared by a licensed civil engineer depicting all final grades and on-site drainage control measures to prevent stormwater runoff onto adjoining properties.
54. Prior to issuance of building or demolition permits, the applicant shall submit a waste management plan to the Building and Safety Division. The plan shall include the estimated composition and quantities of waste to be generated and how the project developer intends to recycle at least 75 percent of the total job site construction and demolition waste measured by weight or volume. Proof of compliance shall be provided to the Chief Building Official prior to the issuance of a final building permit. During demolition and construction, the project developer shall mark all trash disposal bins “trash materials only” and all recycling bins “recycling materials only.” The project developer shall contact Pleasanton Garbage Service for the disposal of all waste from the site.

Engineering Division

55. A “Conditions of Approval” checklist shall be completed and attached to all plan checks submitted for approval indicating that all conditions have been satisfied.
56. The project developer shall comply with the recommendations of the project’s geotechnical consultant. The project developer’s geotechnical consultant shall review and approve all foundation, retaining wall, and drainage geotechnical aspects of the final development plans to ensure that the recommendations have been properly incorporated into the development. The consultant shall certify by writing on the plans or as otherwise acceptable to the City Engineer that the final

development plan is in conformance with the geotechnical report approved with the project.

57. The project developer shall arrange and pay for the geotechnical consultant to inspect and approve all foundation, retaining, and wall and drainage geotechnical aspects of project construction. The consultant shall be present on site during grading and excavation operations. The results of the inspections and the as-built conditions of the project shall be certified in writing by the geotechnical consultant for conformance to the approved plans and geotechnical report and submitted to the City Engineer for review and approval prior to occupancy.
58. The project developer shall grant an easement to the City over those parcels needed for public service easements (P.S.E.) and which are approved by the City Engineer, or other easements, which may be designated by the City Engineer.
59. The project developer shall construct vertical P.C.C. curbs and gutters within this development unless otherwise approved by the City Engineer. When the sidewalk is adjacent to the curb and gutter, they shall be poured monolithically.
60. The haul route for all materials to and from this development shall be approved by the City Engineer prior to the issuance of a permit.
61. All dry utilities (electric power distribution, gas distribution, communication service, Cable television, street lights and any required alarm systems) required to serve existing or new development shall be installed underground in conduit in a joint utility trench unless otherwise specifically approved by the City Engineer.
62. Any damage to existing street improvements during construction on the subject property shall be repaired to the satisfaction of the City Engineer at full expense to the project developer. This shall include slurry seal, overlay, or street reconstruction if deemed warranted by the City Engineer.
63. This approval does not guarantee the availability of sufficient water and/or sewer capacity to serve the project.
64. The project developer shall create drainage easements across the project for the benefit of the individual lots, subject to the review and approval of the City Engineer.
65. The project developer shall create utility easements across the project for the benefit of the individual lots, subject to the review and approval of the City Engineer.
66. There shall be no direct roof leaders connected to the street gutter or storm drain system, unless otherwise approved by the City Engineer.

67. The project developer and/or the project developer's contractor(s) shall obtain an encroachment permit from the City Engineer prior to moving any construction equipment onto the site.
68. The project developer shall submit a final grading and drainage plan prepared by a licensed civil engineer depicting all final grades and drainage control measures, including concrete-lined V-ditches, to protect all cut and fill slopes from surface water overflow. This plan shall be subject to the review and approval of the City Engineer prior to the issuance of a subdivision grading permit.
69. The project developer shall include erosion control measures on the final grading plan, subject to the approval of the City Engineer. The project developer is responsible for ensuring that the contractor is aware of such measures. All cut and fill slopes shall be revegetated and stabilized as soon as possible after completion of grading, in no case later than October 15. No grading shall occur between October 15 and April 15 unless approved erosion control measures are in place, subject to the approval of the City Engineer. Such measures shall be maintained until such time as permanent landscaping is in place.
70. Storm drainage swales, gutters, inlets, outfalls, and channels not within the area of a dedicated public street or public service easement approved by the City Engineer shall be privately maintained by the property owners or through an association approved by the City.
71. The project developer shall be responsible for the installation of the street lighting system serving the development. Street lights shall be LED unless otherwise specifically approved by the City. Approval for the number, location, and type of electroliers shall be subject to the review and approval of the City Engineer.
72. The applicant's engineer shall investigate the structural section of the existing streets fronting the development. If the structural section is not adequate for the anticipated traffic demand, the structural section of the roadway shall be increased, as determined by the City Engineer. If the street section is adequate the entire street frontage shall be slurry sealed, unless otherwise determined by the City Engineer.
73. All existing drainage swales that are filled shall have subdrains installed unless otherwise approved by the City Engineer and the developer's soils engineer. All subdrains shall have cleanouts installed at the beginning of the pipe. The end of the pipe shall terminate in a storm drain or other storm drain outfall, subject to the approval of the City Engineer. The applicant's engineer shall submit a final subdrain location map to the City Engineer prior to acceptance of the public improvements. It

shall be the responsibility of the developer to relocate a subdrain, if a subdrain is encountered. The City Attorney shall approve said notice.

74. All retaining walls along the street shall be placed behind the Public Service Easement (PSE), unless otherwise approved by the City Engineer.
75. A detailed grading and drainage plan prepared by a licensed Civil Engineer including all supporting information and design criteria (including but not limited to any peer review comments), storm drain treatment calculations, hydromodification worksheets, etc., shall be submitted as part of the improvement plans.
76. The minimum grade for the gutter flowline shall be set at one percent where practical, but not less than .75% unless otherwise approved by the City Engineer.
77. A water meter shall be provided to each lot of record within the development unless otherwise approved by the City Engineer. Each of the building's water service and the irrigation water service within the project shall be served with a separate water service from the City's water main in the street, including backflow device. The applicant may install the services from a manifold from a larger lateral crossing the public street. The exaction locations of the water services shall be shown on the improvement plans and to be approved by the City Engineer.
78. A sanitary sewer lateral with two-way cleanout (located at the back of the sidewalk or curb, whichever is applicable) shall be provided to each lot of record within the development unless otherwise approved by the City Engineer. The design of the on-site sanitary sewer system shall be modified such that that the size and slope of the sanitary sewer main maintain a minimum velocity of 2 feet per second unless otherwise approved by the City Engineer. A sanitary sewer lateral with sampling manhole shall be provided to building within the development unless otherwise approved by the City Engineer.
79. The developer shall deposit a bond with the City to ensure completion of any required off-site improvements. This bond shall be in a standard form approved by the City Attorney and shall be in an amount satisfactory to the City Engineer. The City Engineer may waive this requirement if the required improvements have been satisfactorily installed prior to approval of the map.

Livermore-Pleasanton Fire Department

80. The project developer shall keep the site free of fire hazards from the start of lumber construction until the final inspection.

81. Prior to any construction framing, the project developer shall provide adequate fire protection facilities, including, but not limited to a water supply and water flow in conformance to the City's Fire Department Standards able to suppress a major fire.
82. All fire sprinkler system water flow and control valves shall be complete and serviceable prior to final inspection. Prior to the occupancy of a building having a fire alarm system, the Fire Department shall test and witness the operation of the fire alarm system.
83. All commercial, industrial, and multi-family residential occupancies shall have valve tamper and water flow connected to an Underwriters Laboratory (UL) listed Central Station Service. Fire Department plan check includes specifications, monitoring certificate(s), installation certificate and alarm company U.L. certificate. Fire alarm control panel and remote annunciation shall be at location(s) approved by the Fire Prevention Bureau. All systems shall be point identified by individual device and annunciated by device type and point.
84. The proposed building(s) may have additional Fire Department requirements that can only be addressed by knowing the details of occupancy. These occupancy details shall be submitted to the Fire Department prior to submittal of construction plans to the Building and Safety Division. Details shall include but not be limited to the following:
 - a. Type of storage
 - b. Height of storage
 - c. Aisle spacing
 - d. Rack of bulk storage
 - e. Palletized storage
 - f. Type of occupancies within areas of the building(s)

Based on the information received, there may be additional requirements such as: smoke and heat venting, in-rack sprinklers, increases in sprinkler design criteria, draft curtains, etc.

85. The Fire Prevention Bureau reviews building/civil drawings for conceptual on-site fire mains and fire hydrant locations only. Plan check comments and approvals DO NOT INCLUDE:

- Installation of the on-site fire mains and fire hydrants. Specific installation drawings submitted by the licensed underground fire protection contractor shall be submitted to the Fire Prevention Bureau for approval.
- Backflow prevention or connections to the public water mains.

86. Electrical conduit shall be provided to each fire protection system control valve including all valve(s) at the water connections. The Livermore-Pleasanton Fire Department requires electronic supervision of all valves for automatic sprinkler systems and fire protection systems.

87. In industrial and commercial developments, fire hydrants shall be installed at spacing not greater than 300 feet. In residential development(s) hydrant spacing shall be at 400 feet.

88. On-site access ways and internal drives shall be designated as fire lanes and identified as such by red curb striping and posted with signs at locations approved by the Fire Department. Signs shall be according to state standards and read "No Parking - Fire Lane" and must be shown on the plans. The following schedule shall apply:

<u>Width</u>	<u>Requirements</u>
36 Feet or Greater	No Requirements
Between 28 and 36 Feet	Post one side
Between 20 and 28 feet	Post both sides
Less than 20 feet	Not permitted

<u>Aerial Ops - Width</u>	<u>Requirements</u>
42 Feet or Greater	No Requirements
Between 34 and 42 Feet	Post one side
Between 26 and 34 feet	Post both sides
Less than 26 feet	Not permitted

Where Fire Department vehicle access through or around a site involves changes in direction or curves, minimum-turning radius shall be as follows. Inside radius of 45 feet and outside radius of 55 feet shall be provided to facilitate fire truck turning radius for entry and exit from the site.

89. Dead-end access ways and internal drives shall not exceed 300 feet in length and shall terminate in turnaround no less than 100 feet in diameter or hammer-head (tee). Standards and options are available through the Fire Prevention Bureau.

90. Address numbers shall be installed on the front or primary entrance for all buildings. Minimum building address character size shall be 12" high by 1" stroke. If building is located greater than 50 feet from street frontage, character size shall be 16" high by 1 ½" stroke minimum. Where multiple access is provided, address or tenant space number shall be provided on each access and/or warehouse door and character size shall be no less than 4" high by ¾" stroke. In all cases address numerals shall be of contrasting background and clearly visible in accordance with the Livermore-Pleasanton Fire Department Premises Identification Standards. This may warrant field verification and adjustments based upon topography, landscaping or other obstructions, conditions of approval checklist shall be completed and attached to all plan checks submitted for approval indicating that all conditions have been satisfied.
91. The following items will be provided prior to any construction above the foundation or slab. NOTE: Periodic inspections will be made for compliance.
- a. Emergency vehicle access shall be provided to the site. If Public Works Improvements are part of the project to access the site, an emergency vehicle access plan shall be submitted for review and approval.
 - b. Site access shall be provided prior to any construction above the foundation or slab. Based on the Site Plan Approval the access shall be installed.
 - c. Emergency vehicle access shall be a minimum of 20 feet in width. A clear height free of obstructions (power, cable, telephone lines, tree limbs, etc.) shall be provided. This clearance shall be a minimum of 13 feet-6 inches. Inside turning radius of 45 feet and outside turning radius of 55 feet shall be provided.
 - d. Buildings or portions of buildings or facilities exceeding 30 feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with approved fire apparatus access roads capable of accommodating fire department aerial apparatus. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet in the immediate vicinity of any building or portion of building more than 30 feet (9144 mm) in height. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building.
 - e. Buildings or facilities exceeding 62,000 square feet of gross building area shall be provided with two separate and approved fire apparatus access roads. The roads shall be placed a distance apart equal to not less than one

half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

- f. If permanent access or site paving is not provided, the carrying capacity of the emergency vehicle access shall be 69,000 pounds under all weather conditions.
- g. Site staging area(s) shall be provided for materials and equipment. All staging areas shall be outside of the emergency vehicle access route shown on the approved plans.
- h. Where on-site fire hydrant(s) are required, they shall be installed, flushed and all valves open prior to any construction above the foundation or slab. This includes concrete tilt-up and masonry buildings.
- i. On-site fire hydrant(s) shall not be obstructed and shall be sufficiently above grade to have all hydrant valves and outlets accessible for emergency use.
- j. Prior to request for final inspection, all access roads, on-site access and fire hydrants shall be provided. All fire hydrants shall be acceptance inspected and tested to applicable City Public Works Standards.
- k. Where a project is phased as part of the development approved by the City, specific access, water supply and fire hydrant installations will be required as part of each phase. As needed a phasing plan with these improvements will be required.
- l. Where on-site grading/utility plans are submitted for review and approval prior to building construction drawings, emergency vehicle access routes, fire hydrant locations, material staging areas, etc. shall be provided.

CODE REQUIREMENTS

Applicants/Developers are responsible for complying with all applicable Federal, State, and City codes and regulations regardless of whether or not the requirements are part of this list. The following items are provided for the purpose of highlighting key requirements.

Planning Division

92. At no time shall balloons, banners, pennants, or other attention-getting devices be utilized on the site except as allowed by Section 18.96.060K of the Zoning Ordinance for grand openings or by Section 18.116.040 of the Zoning Ordinance if

approved as part of a temporary conditional use permit. At no time shall spot lighting be used in conjunction with such grand openings and/or promotional events.

93. All mechanical equipment shall be constructed in such a manner that noise emanating from it will not be perceptible beyond the property plane of the subject property in a normal environment for that zoning district.

Fire Department

94. The project developer shall post address numerals on the building so as to be plainly visible from all adjoining streets or driveways during both daylight and night time hours.

95. Automatic fire sprinklers shall be installed in all occupancies in accordance with City of Pleasanton Ordinance 1965. Installations shall conform to NFPA Pamphlet 13 for commercial occupancies NFPA 13D for residential occupancies and NFPA 13R for multifamily residential occupancies.

96. Fire alarm system shall be provided and installed in accordance with the 2007 CFC, the City of Pleasanton Ordinance 1965 and 2002 NFPA 72 - National Fire Alarm Code. Notification appliances and manual fire alarm boxes shall be provided in all areas consistent with the definition of a notification zone (notification zones coincide with the smoke and fire zones of a building). Shop drawings shall be submitted for permit issuance in compliance with 2007 CFC.

97. City of Pleasanton Ordinance 1965 requires that all new and existing occupancies be provided with an approved key box from the Knox Company as specified by the Fire Department. The applicant is responsible for obtaining approval for location and the number of boxes from the Fire Prevention Bureau. Information and application for Knox is available through their website or the Fire Prevention Bureau. Occupant shall be responsible for providing tenant space building access keys for insertion into the Knox Box prior to final inspection by the Fire Department. Keys shall have permanent marked tags identifying address and/or specific doors/areas accessible with said key.

98. Underground fire mains, fire hydrants and control valves shall be installed in conformance with the most recently adopted edition of NFPA Pamphlet 24, "Outside Protection".

- a. The underground pipeline contractor shall submit a minimum of three (3) sets of installation drawings to the Fire Department, Fire Prevention Bureau. The plans shall have the contractor's wet stamp indicating the California contractor license type, license number and must be signed. No underground pipeline inspections will be conducted prior to issuance of approved plans.

- b. All underground fire protection work shall require a California contractor's license type as follows: C-16, C-34, C-36 or A.
- c. All field-testing and inspection of piping joints shall be conducted prior to covering of any pipeline.

99. Dead-end fire service water mains shall not exceed 500 feet in length and/or have more than five Fire Department appliances* shall be looped around the site or building and have a minimum of two points of water supply or street connection. Zone valves shall be installed as recommended under NFPA, Pamphlet 24 and the Fire Marshal.

100. All construction shall conform to the requirements of the 2007 California Fire Code, City of Livermore Building Department and City of Pleasanton Ordinance 1965. All required permits shall be obtained.

Note: Fire Department appliances are classified as fire sprinkler system risers, fire hydrants and/or standpipes.

101. All buildings undergoing construction, alteration or demolition shall comply with Chapter 14 (2007 California Fire Code) pertaining to the use of any hazardous materials, flame- producing devices, asphalt/tar kettles, etc.

102. The building (s) covered by this approval shall conform to the requirements of the 2007 California Building Code, 2007 California Fire Code and the City of Pleasanton Ordinance #1965. If required plans and specifications for the automatic fire sprinkler system shall be submitted to the Livermore-Pleasanton Fire Department for review and approval prior to installation. The fire alarm system, including water flow and valve tamper, shall have plans and specifications submitted to Fire Prevention for review and approval prior to installation. All required inspections and witnessing of tests shall be completed prior to final inspection and occupancy of the building(s).

Building and Safety Division

103. The building covered by this approval shall be designed and constructed to meet Title 24 state energy requirements.

104. All building and/or structural plans must comply with all codes and ordinances in effect before the Building Division will issue permits.

105. The project developer shall submit a building survey and/or record of survey and a site development plan in accordance with the provisions of Chapter 18.68 of the

Municipal Code of the City of Pleasanton. These plans shall be approved by the Chief Building and Safety Official prior to the issuance of a building permit. The site development plan shall include all required information to design and construct site, grading, paving, drainage, and utilities.

106. All building and/or structural plans must comply with all codes and ordinances in effect before the Building Division will issue permits.
107. Any tenant improvement plans shall be submitted to the Building and Safety Division for review and approval.
108. The building permit plan check materials for the proposed tenant improvements will be accepted for submittal only after completion of the 15-day appeal period, measured from the date of approval, unless the applicant submits a signed statement acknowledging that the plan check fees may be forfeited in the event that the approval is overturned on appeal, or that the design and/or operation is significantly changed as a result of the appeal. In no case will a building permit be issued prior to the expiration of the 15-day time-period.

Urban Stormwater Conditions

109. The project shall comply with the “Alameda Countywide NPDES Permit #CAS0029831 and amendments to this permit” issued the by California Regional Water Quality Control Board, San Francisco Bay Region, a copy of which is available at the Community Development Department, Public Works/Engineering section at City offices, Alameda County Clean Water Program and at State Water Board

(http://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2003/february/02-19-03-12finalto.doc);

and

(http://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2007/march/alameda%20final%20order%20r2-2007-0025.pdf)

The project shall also comply with the “Construction General Permit” by the California Regional Water Quality Control Board, San Francisco Bay Region.

(http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml)

Design Requirements

110. The Permit design requirements include, but are not limited to, the following:

- a. Source control, sight design measures, and design and implementation of stormwater treatment measures are required when commercial, industrial or residential development creates and replaces 10,000 square feet or more of impervious surface, including roof area, streets and sidewalk.
- b. Hydro-modification standards are required when a new development or redevelopment project creates and replaces total impervious area of one acre or more.
- c. The Permit requires a proactive Diazinon pollutant reduction plan (aka Pesticide Plan) to reduce or substitute pesticide use with less toxic alternatives.
- d. The Permit requires complying with the Copper Pollutant Reduction Plan and the Mercury Pollutant Reduction Plan.

111. The following requirements shall be incorporated into the project:

- a. The project developer shall submit a final grading and drainage plan prepared by a licensed civil engineer depicting all final grades and on-site drainage control measures including bio-swales. Irrigated bio-swales shall be redesigned as needed to the satisfaction of the City Engineer to optimize the amount of the stormwater running off the paved surface that enters the bio-swale at its most upstream end. This plan shall be subject to the review and approval of the City Engineer prior to the issuance of any building permits.
- b. In addition to natural controls the project developer may be required to install a structural control, such as an oil/water separator, sand filter, or approved equal in the parking lot to intercept and pre-treat stormwater prior to reaching the storm drain. The design, locations, and a schedule for maintaining the separator shall be submitted to the City Engineer/Chief Building Official for review and approval prior to issuance of building permits. The structural control shall be cleaned at least twice a year: once immediately prior to October 15 and once in January.
- c. The project developer shall submit sizing design criteria to treat stormwater runoff and for hydromodification, if required, at the time of PUD plan submittal and an updated detailed copy of calculations with subsequent submittals.

- d. Landscaping shall be designed to minimize irrigation and runoff, promote surface infiltration where appropriate and acceptable to the project soils engineer, and minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.
 - 1. Structures shall be designed to prohibit the occurrence and entry of pests into buildings, thus minimizing the need for pesticides.
 - 2. Where feasible, landscaping shall be designed and operated to treat stormwater runoff. In areas that provide detention of water, plants that are tolerant of saturated soil conditions and prolonged exposure to water shall be specified. Soil shall be amended as required. (See planting guide line by Alameda County Clean Water Program.)
 - 3. Plant materials selected shall be appropriate to site specific characteristics such as soil type, topography, climate, amount and timing of sunlight, prevailing winds, rainfall, air movement, patterns of land use, ecological consistency and plant interactions to ensure successful establishment.
 - 4. Landscaping shall also comply with City of Pleasanton ordinances and policies regarding water conservation.
- e. Trash areas, dumpsters and recycling containers shall be enclosed and roofed to prevent water run-on to the area and runoff from the area and to contain litter and trash, so that it is not dispersed by the wind or runoff during waste removal. These areas shall not drain to the storm drain system, but to the sanitary sewer system and an area drain shall be installed in the enclosure area, providing a structural control such as an oil/water separator or sand filter. No other area shall drain into the trash enclosure; a ridge or a berm shall be constructed to prevent such drainage if found necessary by the City Engineer/Chief Building Official. A sign shall be posted prohibiting the dumping of hazardous materials into the sanitary sewer. The project developer shall notify the Dublin-San Ramon Services District (DSRSD) upon installation of the sanitary connection; a copy of this notification shall be provided to the Planning Department.
- f. All paved outdoor storage areas shall be designed to minimize pollutant runoff. Bulk materials stored outdoors that may contribute to the pollution of stormwater runoff must be covered as deemed appropriate by the City Engineer/Chief Building Official and as required by the State Water Board.
- g. All metal roofs, if used, shall be finished with rust-inhibitive paint.

- h. Roof drains shall discharge and drain away from the building foundation. Ten percent of the stormwater flow shall drain to landscaped area or to an unpaved area wherever practicable.

Construction Requirements

112. The Construction General Permit's construction requirements include, but are not limited to, the following:
113. Construction activities (including other land-disturbing activities) that disturb one acre or more (including smaller sites that are part of a larger common plan of development) are regulated under the NPDES stormwater program. Operators of regulated construction sites are required to develop and implement stormwater pollution prevention plans and to obtain a construction general permit (NOI) from the State Water Resources Control Board to discharge stormwater.

http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/finalconstpermit.pdf

Stormwater

114. The project developer shall submit a Stormwater Pollution Prevention Plan (SWPPP) for review by the City Engineer/Chief Building Official prior to issuance of building or engineering permits. A reviewed copy of the SWPPP shall be available at the project site until engineering and building permits have been signed off by the inspection departments and all work is complete. A site specific SWPPP must be combined with proper and timely installation of the BMPs, thorough and frequent inspections, maintenance, and documentation. Failure to comply with the reviewed construction SWPPP may result in the issuance of correction notices, citations or stop work orders.
115. The amendments to the SWPPP and all the inspection forms shall be completed and available at the site for inspection by the city, county or state staff.
116. The project developer is responsible for implementing the following Best Management Practices (BMPs). These, as well as any other applicable measure, shall be included in the SWPPP and implemented as approved by the City.
 - a. The project developer shall include erosion control/stormwater quality measures on the final grading plan which shall specifically address measures to prevent soil, dirt, and debris from entering the storm drain system. Such measures may include, but are not limited to, hydroseeding, hay bales, sandbags, and siltation fences and are subject to the review and approval of

- the City Engineer/Chief Building Official. If no grading plan is required, necessary erosion control/stormwater quality measures shall be shown on the site plan submitted for an on-site permit, subject to the review and approval of the Building and Safety Division. The project developer is responsible for ensuring that the contractor is aware of and implements such measures.
- b. All cut and fill slopes shall be revegetated and stabilized after completion of grading, but in no case later than October 15. Hydroseeding shall be accomplished before September 15 and irrigated with a temporary irrigation system to ensure that the grasses are established before October 15. No grading shall occur between October 15 and April 15 unless approved erosion control/stormwater quality measures are in place, subject to the approval of City Engineer/Chief Building Official. Such measures shall be maintained until such time as permanent landscaping is in place.
 - c. Gather all sorted construction debris on a regular basis and place it in the appropriate container for recycling; to be emptied at least on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater runoff pollution.
 - d. Remove all dirt, gravel, rubbish, refuse, and green waste from the street pavement and storm drains adjoining the site. Limit construction access routes onto the site and place gravel on them. Do not drive vehicles and equipment off paved or graveled areas during wet weather. Broom sweep the street pavement adjoining the project site on a daily basis. Scrape caked-on mud and dirt from these areas before sweeping.
 - e. Install filter materials (such as sandbags, filter fabric, etc.) at the storm drain inlet nearest the downstream side of the project site in order to retain any debris or dirt flowing in the storm drain system. Maintain and/or replace filter materials to ensure effectiveness and to prevent street flooding.
 - f. Create a contained and covered area on the site for the storage of cement, paints, oils, fertilizers, pesticides, or other materials used on the site that have the potential of being discharged into the storm drain system through being windblown or in the event of a material spill.
 - g. Never clean machinery, equipment, tools, brushes, or rinse containers into a street, gutter, or storm drain.
 - h. Ensure that concrete/gunite supply trucks or concrete/plaster operations do not discharge wash water into street, gutters, or storm drains.

- i. Equipment fueling area: Use off-site fueling stations as much as possible. Where on-site fueling occurs, use designated areas away from the storm drainage facility, use secondary containment and spill rags when fueling, discourage “topping off” of fuel tanks, place a stockpile of absorbent material where it will be readily accessible, and check vehicles and equipment regularly for leaking oils and fuels. Dispose rags and absorbent materials promptly and properly.
- j. Concrete wash area: Locate wash out areas away from the storm drains and open ditches, construct a temporary pit large enough to store the liquid and solid waste, clean pit by allowing concrete to set, breaking up the concrete, then recycling or disposing of properly.
- k. Equipment and vehicle maintenance area: Use off-site repair shop as much as possible. For on-site maintenance, use designated areas away from the storm drainage facility. Always use secondary containment and keep stockpile of cleanup materials nearby. Regularly inspect vehicles and equipment for leaks and repair quickly or remove from the project site. Train employees on spill cleanup procedures.

Operation Requirements

117. The Permit’s operation and maintenance requirements include but are not limited to the following: The operation and maintenance of treatment measures including but not limited to bio-swales, lawns, landscaped areas with deep-rooted plants, oil/water separator, filterra units, etc., requires completing, signing and recording an agreement with Alameda County recorder’s office in a format approved by the State and Alameda County.
118. All projects, unless otherwise determined by the City Engineer or Chief Building Official, shall enter into a recorded Stormwater Treatment Measures Inspection and Maintenance Agreement for ongoing maintenance and reporting of required stormwater measures. These measures may include, but are not limited to:
- a. A mechanism shall be created, such as a property owners’ association, to be responsible for maintaining all private streets, private utilities and other privately owned common areas and facilities on the site including stormwater treatment measures. These maintenance responsibilities shall include implementing the maintenance plan, which is attached to the Stormwater Treatment Measures Inspection and Maintenance Agreement. This document shall be reviewed by the City Attorney’s Office and recorded with the final map.

- b. On-site storm drain inlets clearly marked and maintained with the words “No Dumping – Drains to Bay.”
- c. Proper maintenance of landscaping, with minimal pesticide and fertilizer use.
- d. Ensure wastewater from vehicle and equipment washing operations is not discharged to the storm drain system.
- e. Ensure that no person shall dispose of, nor permit the disposal, directly or indirectly, of vehicle fluids, hazardous materials or rinse water from cleaning tools, equipment or parts into storm drains.
- f. Clean all on-site storm drains at least twice a year with one cleaning immediately prior to the rainy season. The City may require additional cleanings.
- g. Regularly but not less than once a month, sweep driveways, sidewalks and paved areas to minimize the accumulation of litter and debris. Corners and hard to reach areas shall be swept manually. Debris from pressure washing shall be trapped and collected to prevent entry into the storm drain system. Wastewater containing any soap, cleaning agent or degreaser shall not be discharged into the storm drain.
- h. Vegetated swales with grasses shall be mowed and clippings removed on a regular basis.

END

Architects

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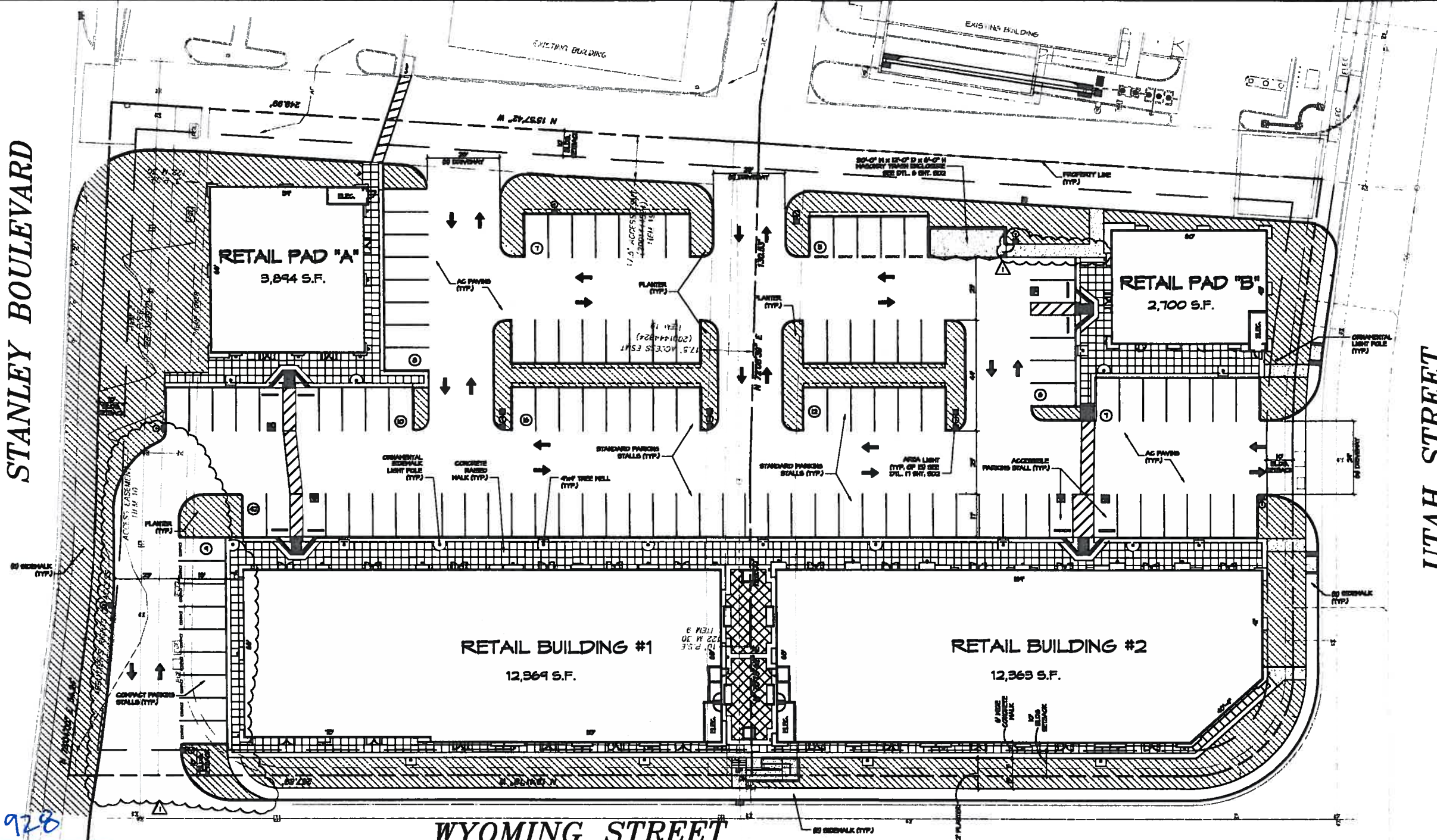
STANLEY CENTER
 RETAIL SHOPPING CENTER
 STANLEY BOULEVARD & WYOMING STREET
 PLEASANTON, CALIFORNIA

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STANLEY BOULEVARD

UTAH STREET

WYOMING STREET



PDR-928
 RECEIVED

DEC 07 2010
 CITY OF PLEASANTON
 PLANNING DIVISION

EXHIBIT B

1 SITE PLAN
 SCALE: 1" = 20'-0"



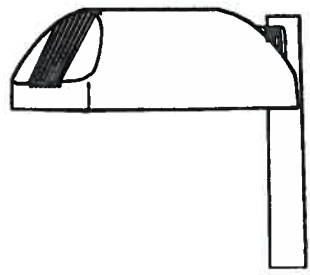
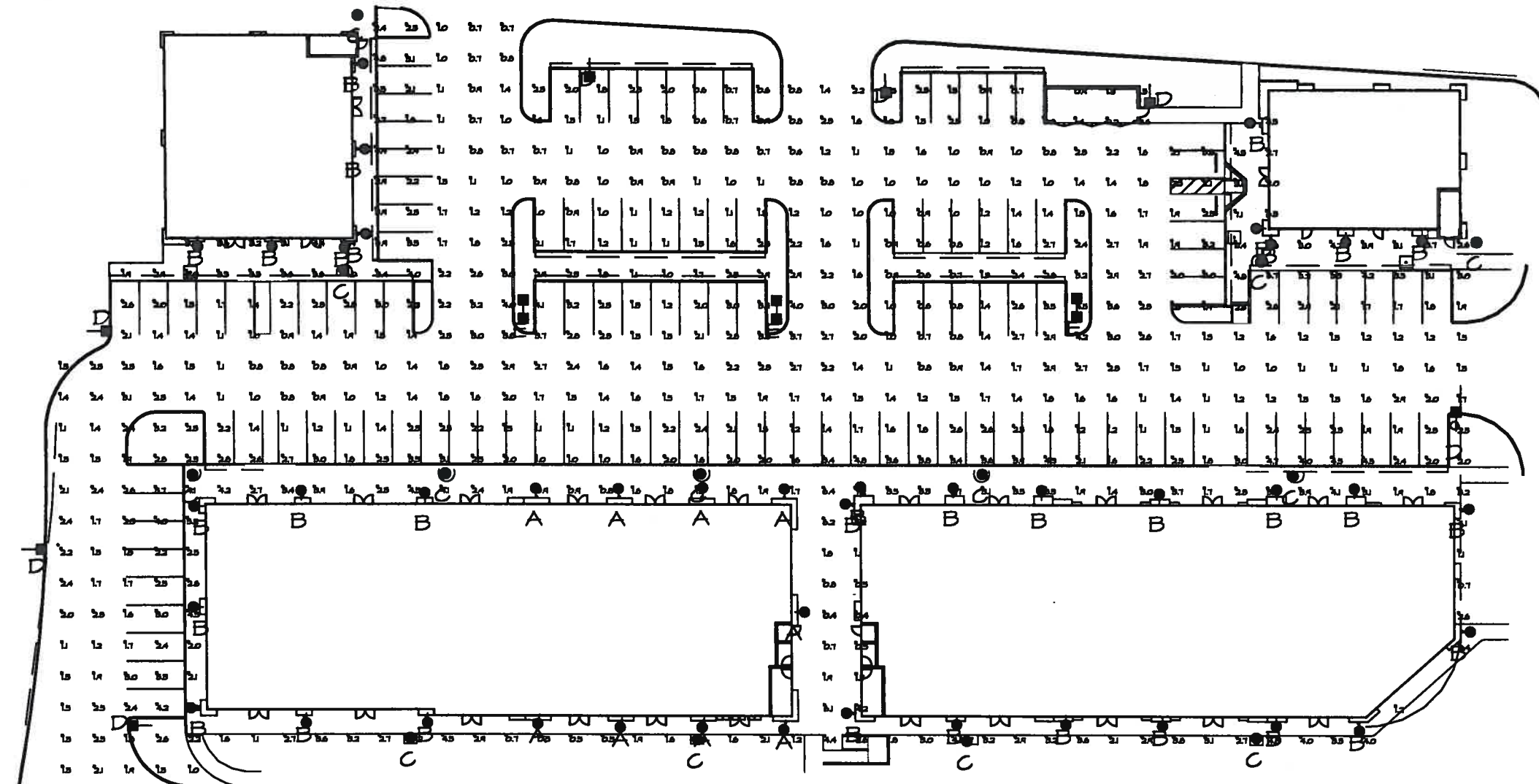
VICINITY MAP	SITE INFORMATION	SITE PLAN LEGEND	DRAWING INDEX
	<p>APN 446-0243-001 & 002 JURISDICTION: CITY OF PLEASANTON ZONING: PD-C REZONING: ADJACENT TO STREETS: 10 FEET REAR: 10 FEET SIDE: 0 FEET BARNS: REQUIREMENTS: 1 SPACE PER 500 S.F. 500 S.F. / 500 = 105 PARKING REQUIRED: 105 SPACES PARKING PROVIDED: 105 SPACES STANDARD PARKING STALLS (TYP): 105 COMPACT PARKING STALLS (TYP): 14 ACCESSIBLE PARKING STALLS (TYP): 2 VAN ACCESSIBLE PARKING STALLS (TYP): 2 SIDE COVERAGES: SITE: 88,841 S.F. (0.008) BUILDING: 25,729 S.F. (0.249) LANDSCAPING: 17,126 S.F. (0.162) IMPERVIOUS AREA: 81,977 S.F. (0.778)</p>	<p>NEW LANDSCAPING</p> <p>NEW CONCRETE PAVING</p> <p>4 FT. WIDE (MIN) ACCESSIBLE ROUTE OF TRAVEL. SHALL NOT EXCEED 5% SLOPE IN THE DIRECTION OF TRAVEL AND 2% CROSS SLOPE</p> <p>EXISTING TO REMAIN</p>	<p>SD1 SITE PLAN SD1-L SITE LIGHTING PLAN SD2 SITE DETAILS G-1 PRELIMINARY GRADING & DRAINAGE PLAN L-1 CONCEPTUAL LANDSCAPE PLAN A21 BUILDING #1- BUILDING ELEVATIONS A22 BUILDING #2- BUILDING ELEVATIONS A23 RETAIL PAD 'A' & 'B'- BUILDING ELEVATIONS A21 BUILDING #1- COLORED BUILDING ELEVATIONS A22 BUILDING #2- COLORED BUILDING ELEVATIONS A23 RETAIL PAD 'A' & 'B'- COLORED BUILDING ELEVATIONS</p>
<p>PROJECT TEAM</p> <p>ARCHITECT M I ARCHITECTS, INC. 2860 GAMBO DIABLO, SUITE 100 WALNUT CREEK, CA 94591 TEL: 925 297-1174 FAX: 925 449-2941 CELL: 925 878-4875 MR. NUTANNA BERNER, ARCHITECT</p> <p>DEVELOPER STANLEY CENTER, LLC P.O. BOX 1004 SAN JOSE, CA 95011 TEL: (408) 64-0443 FAX: - CELL: - MR. MICHAEL ANMAN</p>			<p>NO. DATE DESCRIPTION 1 08-04-10 SD1 PER PLANS DEPT. APPROVED</p>

NO. DATE DESCRIPTION
 1 08-04-10 SD1 PER PLANS DEPT. APPROVED

SCALE: AS NOTED DATE: 10-05-09

SD1

STANLEY BOULEVARD



CHALLENGER

UTAH STREET

WYOMING STREET

Title 24 Site Lighting
Lighting Zone 3

RETAIL SITE
7
PLEASANTON, CA
92911
12/8/2008

	Power Allowance				
	Area (ft ²)	(w/FC)	Ref. Table	Allowed Wattage	Wattage Utilized
Total Area	63,228.00				
General Site Illumination					
Buildings	0.00				
Drives	0.00	0.15	147-A	0.00	
Walkways	0.00	0.17	147-A	0.00	
Parking Area Hardscapes	63,228.00	0.15	147-A	9,483.90	
*Total - General Site Illumination				9,483.90	9,344.00

This calculation of outdoor power allowance is only an estimate. This information is provided as a courtesy and only includes wattage estimates for LED industrial products for the purpose of obtaining a Certificate of Compliance.
The engineer and architect must determine applicability of this estimate to any existing or future field conditions.

1 SITE LIGHTING PLAN
SCALE: 1" = 20'-0"



Illuminated Area Summary

Label	Area	Max	Ft	Avg/Ft	Min/Ft
PARKING AREA SURROUND	176	4.0	0.6	3.0	0.0

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Lenses	LLP	Description	Total Watts
1	8	B	SINGLE	8000	G.C.D	8000-PT-10-10-10	160
2	4	A	SINGLE	1300	G.C.D	1300-PT-10-10-10	40
3	1	C	SINGLE	1400	G.C.D	1400-PT-10-10-10	28
4	1	D	SINGLE	1300	G.C.D	1300-PT-10-10-10	26
5	1	E	DRIP	8000	G.C.D	8000-PT-10-10-10	160

Rev.	Date	By

LEI INDUSTRIES
LIGHTING PROPOSAL FOR
RETAIL CENTER
PLEASANTON, CA
DRAWN BY: LO-82811
DATE: 12-8-08



M I Architect, Inc.
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STANLEY CENTER
RETAIL SHOPPING CENTER
STANLEY BOULEVARD & WYOMING STREET
PLEASANTON, CALIFORNIA

PROJECT #: 08-205
DRAWN: LEI CHECKED: MB
SCALE: AS NOTED DATE: 12-8-08

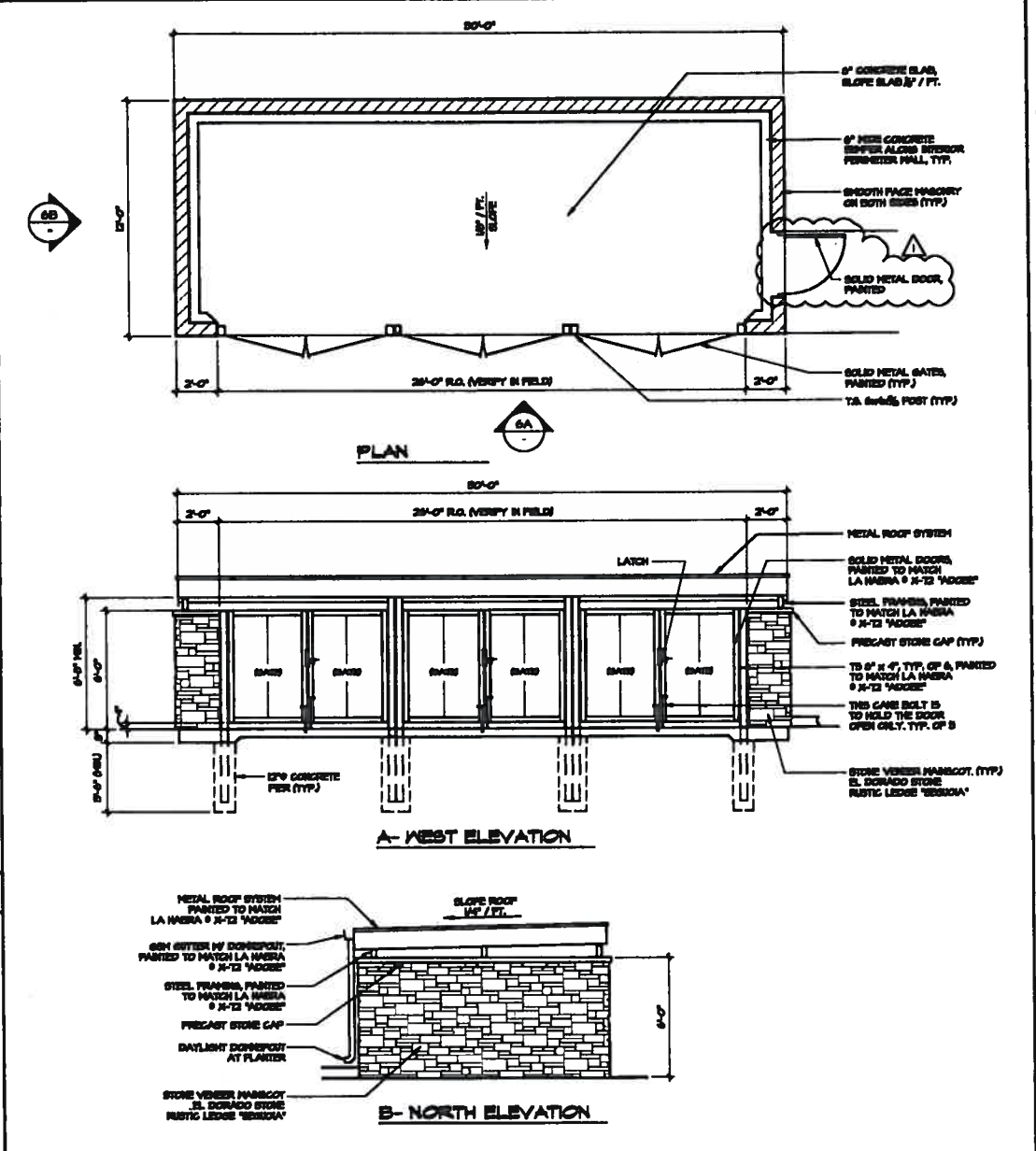
SD1-L

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and architect must determine applicability of the layout to existing or future field conditions.
 This lighting schedule represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps and other variable field conditions.

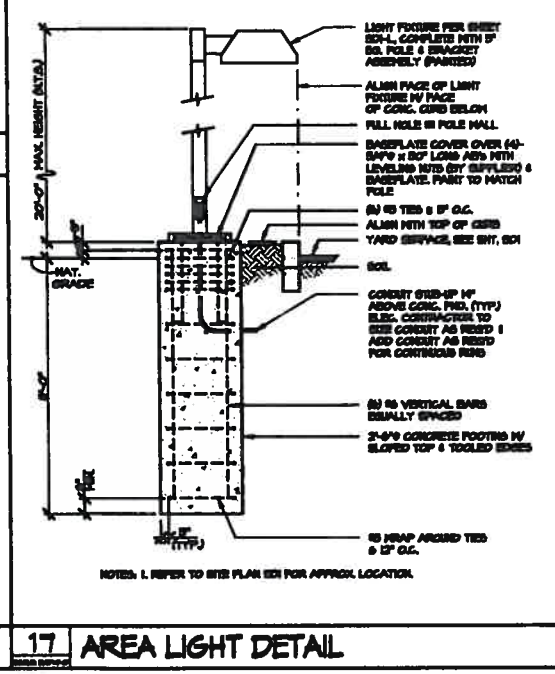


NO.	DATE	DESCRIPTION
1		ISSUED FOR CONSTRUCTION
2		ISSUED FOR PLAN CHECK
3	02-15-09	ISSUED FOR PLANS
4		
5		
6		
7		
8		
9		
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19		
20		

5 NOT USED NO SCALE	4 NOT USED NO SCALE	3 NOT USED NO SCALE
10 NOT USED NO SCALE	9 NOT USED NO SCALE	8 NOT USED NO SCALE
15 NOT USED NO SCALE	14 NOT USED NO SCALE	13 NOT USED NO SCALE
20 NOT USED NO SCALE	19 NOT USED NO SCALE	18 NOT USED NO SCALE



6 TRASH ENCLOSURE PLAN & ELEVATIONS



TENANT

SIGN AREA = 26 SQ. FT. INTERNALLY ILLUMINATED

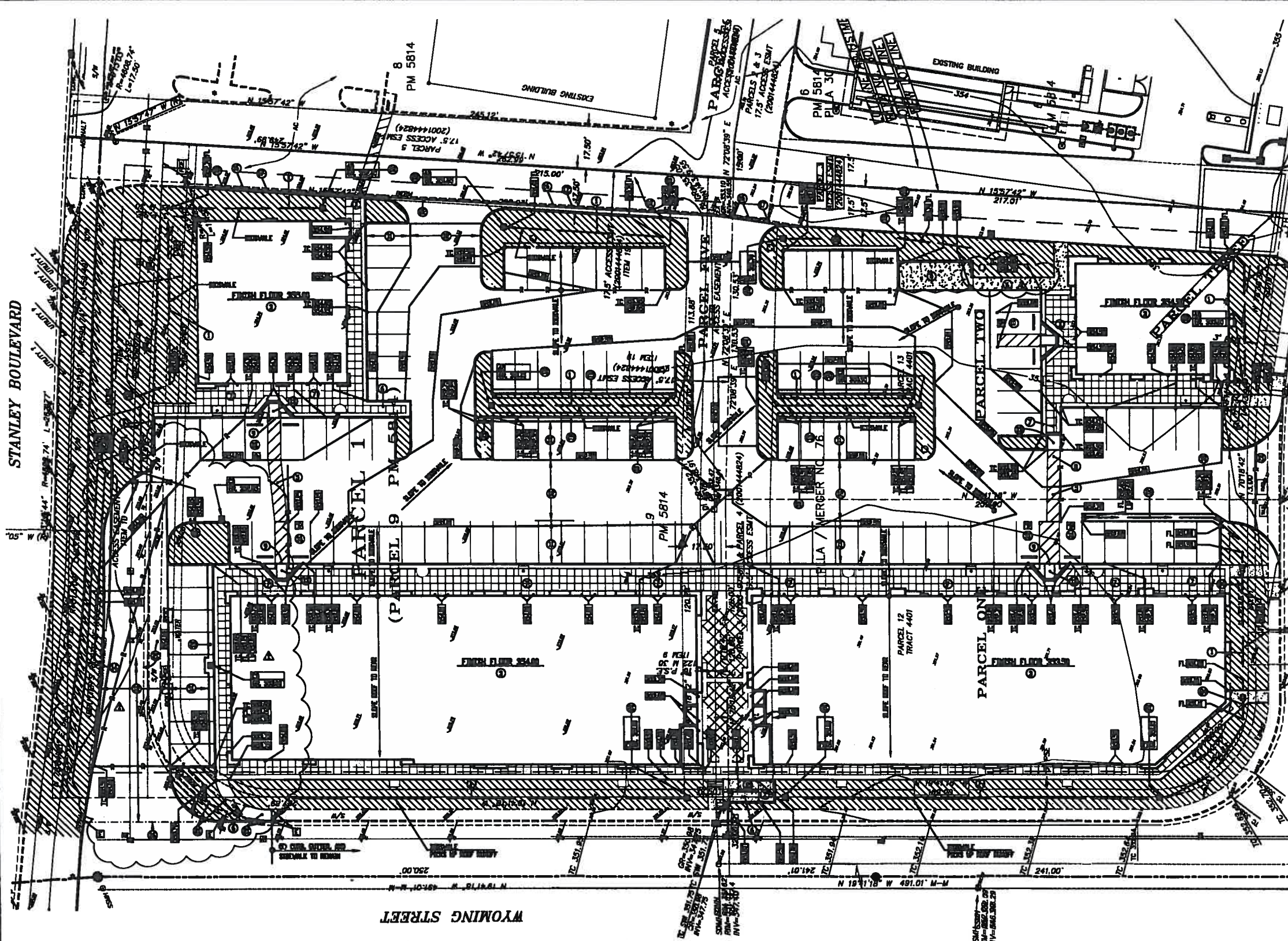
BLDG. 5:	SIGN AREA = 26 SQ. FT. NO. OF SIGN = 12 TOTAL SIGN AREA = 312 SQ. FT.
BLDG. 6:	SIGN AREA = 26 SQ. FT. NO. OF SIGN = 8 TOTAL SIGN AREA = 208 SQ. FT.
BLDG. 7:	SIGN AREA = 26 SQ. FT. NO. OF SIGN = 5 TOTAL SIGN AREA = 130 SQ. FT.
BLDG. 8:	SIGN AREA = 26 SQ. FT. NO. OF SIGN = 5 TOTAL SIGN AREA = 130 SQ. FT.

17 AREA LIGHT DETAIL	16 SIGN PROGRAM DETAIL
----------------------	------------------------

2011-10-28-09-305 Stanley Center.dwg (C:\ProgramData\Autodesk\LT2011\Projects\2011-10-28-09-305 Stanley Center.dwg) created by user1 at Thu Oct 28 2011 - 2:23pm

STEVAN H. MAKASHIMA, CONSULTING CIVIL ENGINEER 12/12/2006 1:01 AM 035321.dwg

STANLEY BOULEVARD



PROPOSED	EXISTING	PROPERTY LINE
---	---	88.50
---	---	100
---	---	TC (3)
---	---	EP (3)
---	---	FL (3)
---	---	FINISH FLOOR
---	---	SWITCH VALLEY
---	---	SWITCH RISE
---	---	SWITCH RISING GRADE
---	---	A.C. PAVING
---	---	CONCRETE
---	---	CURB
---	---	STORM DRAIN
---	---	STORM SEWER
---	---	WATER
---	---	OPEN DRAIN
---	---	CLEANSUIT TO GROUND
---	---	STORM MANHOLE
---	---	STORM MANHOLE
---	---	GPS
---	---	TELEPHONE
---	---	ELECTRICAL
---	---	CLEANSUIT TO FLOOR
---	---	TOP OF WALL

KEY NOTES

1. 60 SIDEWALK - SEE LANDSCAPE PLANS FOR DETAIL.
2. NOT USED.
3. PROVIDE 4" CONCRETE SLAB - SEE STRUCTURAL FOR REINFORCING OVER 2" SAND, 6" MIN. SLOPE OVER 4" DRAIN RIGID.
4. PROVIDE 6" CONCRETE SLAB W/VELOCITIES OR 60 AT 10' SPACING OVER 2" CL. 2 AGGREGATE BASE.
5. PROVIDE NEW ACCESSIBLE PATH WITH MAXIMUM 2% CROSS - SLOPE AND SLOPE IN THE DIRECTION OF TRAVEL OF LESS THAN 2%.
6. PROVIDE NEW CONCRETE WALK WITH MAXIMUM 2% CROSS - SLOPE AND SLOPE IN THE DIRECTION OF TRAVEL LESS THAN 2%.
7. PROVIDE CONCRETE WALK/LANDINGS WITH MAXIMUM 2% SLOPE IN ANY DIRECTION.
8. PROVIDE 4" AC LANDING WITH MAXIMUM 2% SLOPE IN ANY DIRECTION.
9. PROVIDE FLUSH CURB.
10. PROVIDE NEW AC PAVING WITH MAXIMUM SLOPE IN ALL DIRECTIONS OF 2% AT ALL ACCESSIBLE PARKING SPACES. VERIFY LOCATION WITH ARCHITECTURAL DRAWINGS.
11. PROVIDE 2 1/2" AC OVER 6" CL. 2 AGGREGATE BASE.
12. PROVIDE 3" AC OVER 10" CL. 2 AGGREGATE BASE.
13. PROVIDE CONCRETE CURB RAMP WITH MAXIMUM 2% SLOPE AND WITH SLOPE GREATER THAN 2%.
14. PROVIDE MAXIMUM 2% SLOPE.
15. PROVIDE CONCRETE DRIVE APRON PER CITY STANDARD.
16. SAWCUT 60 AC PAVING AND REMOVE.
17. PROVIDE NEW CONCRETE CURB 6" ABOVE 60 AC. SEE STA. PATCH DETAIL 3/C/L.
18. PROVIDE 6" CURB CUT TO SIDEWALK.
19. RAISE 60 ELEVATION TO 60 FINISH GRADE AND PROVIDE NEW SOLID COVER.
20. PROVIDE 60 OR 60 GRADE 3" ABOVE FINISH GRADE OF SWALK.
21. REMOVE 60 CURB, BUTTER, AND SIDEWALK.
22. REMOVE 60 BERM.
23. PROVIDE 1'-6" WIDE CONCRETE GUTTER WITH CURB ON EACH SIDE.
24. PROVIDE 16 LF OF PVC 36" DIA. UNDER WALK.
25. PROVIDE CONCRETE CURB AND GUTTER.
26. PROVIDE CONCRETE GUTTER.
27. PROVIDE CONCRETE RAMP.

GENERAL NOTE

1. REFER TO THE GEOTECHNICAL REPORT BY GEOTECHNICAL ENGINEERS, INC. PROJECT NO. 06-001 DATED JULY 20, 2006 FOR THE REQUIREMENTS FOR SITE CLEARING, GRADING, EXCAVATION, COMPACTED, AND FILL MATERIAL. RECOMMENDATIONS AS OUTLINED IN THE REPORT SHALL BECOME REQUIREMENTS FOR THIS DEVELOPMENT.
2. STENCIL ALL CATCH BASINS "NO DUMPING, DRAINS TO BAY" USING APPROVED STORMWATER LOGS.
3. ALL EXISTING CURB, GUTTER, AND SIDEWALK ALONG THE ENTIRE FRONTAGE OF THE SITE SHALL BE REPAIRED OR RECONSTRUCTED, AS DIRECTED BY THE CITY'S PUBLIC WORKS INSPECTOR TO CONFORM TO CITY STANDARDS, PRIOR TO RECEIVING AN OCCUPANCY PERMIT FOR THE NEW BUILDING.

PRELIMINARY GRADING AND DRAINAGE PLAN



SCALE: 1" = 20'-0"



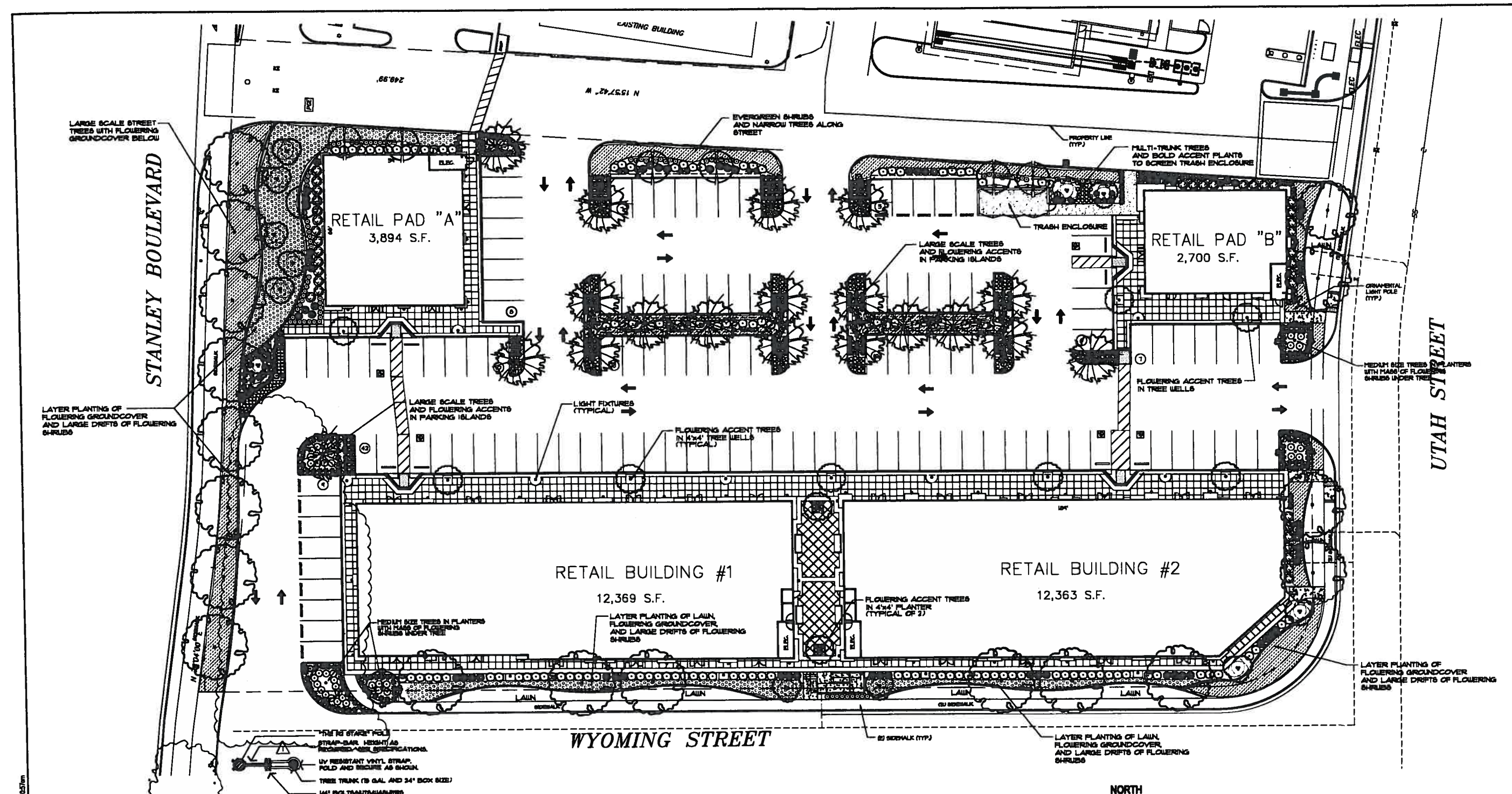
ARCHITECTUR
PLANNING
MANAGEMENT
DESIGN
2880 CAMINO MARINO
SUITE 100
WALNUT CREEK, CA
94597
925-257-1174 Tel
925-943-1881 Fax
925-878-9878 Cell
mth@mmarchitect.com

STANLEY CENTER
RETAIL SHOPPING CENTER
STANLEY BOULEVARD & WYOMING STREET
PLEASANTON, CALIFORNIA

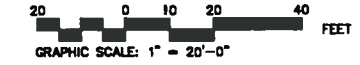
SIKE
STEVAN MAKASHIMA
CONSULTING CIVIL ENGINEER
1430 HOLLY AVENUE
LOS ALTOS, CA 94024
PHONE (650)864-8219
FAX (650)864-8229
WWW.SIKE.COM

DATE FOR GRADING	
DATE FOR PLAN CHECK	
DATE FOR PERMITS	
NO. DATE DESCRIPTION	
1 12-12-06 PER PLANNING DEPT COMMENT	

PRELIMINARY GRADING & DRAINAGE PLAN
PROJECT # 06-205/0682
DRAWN BY: SHH CHECKED BY: SHH
AS SHOWN DATE: 12-12-06



CONCEPTUAL LANDSCAPE PLAN



CONCEPTUAL LANDSCAPE PLAN IS PRELIMINARY AND SUBJECT TO CHANGES PER THE LOCAL GOVERNMENT REVIEW PROCESS. DO NOT USE THESE PLANS FOR CONSTRUCTION.

GENERAL LANDSCAPE NOTES

ALL LANDSCAPE AREA SHALL BE WATERED WITH A BURIED, AUTOMATICALLY CONTROLLED IRRIGATION SYSTEM. LOW VOLUME MFR NOZZLES AND DRIP WILL BE USED WHERE APPROPRIATE FOR WATER CONSERVATION.

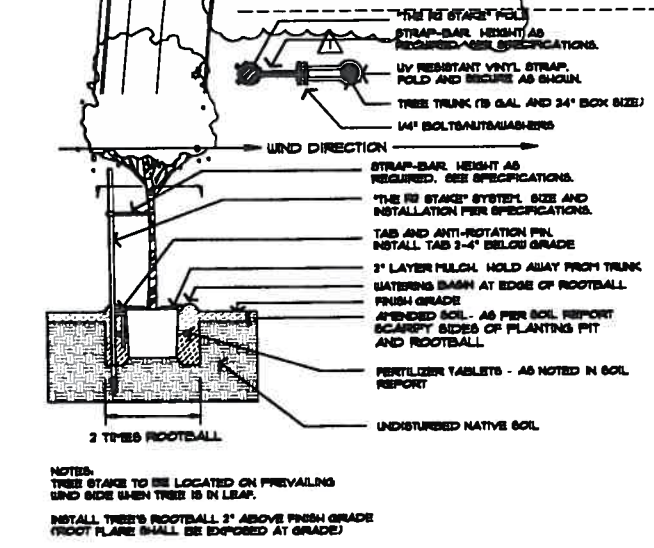
ALL LANDSCAPE AREAS SHALL BE COVERED WITH A 2" LAYER OF BARK MULCH TOP DRESSING.

ALL TREES SHALL BE INSTALLED AT A MINIMUM OF 15 GAL. SIZE. ALL SHRUBS SHALL BE INSTALLED AT A 5 GAL. SIZE, EXCEPT ACCENT AND GROUNDCOVER SHRUBS.

CONCEPTUAL PLANT LIST

SYMBOL	SIZE	BOTANICAL NAME	CULTIVAR NAME
	B GAL	LAGERSTROEMIA H. 'TUSCARORA'	MULTI-TRUNK GRAPE MYRTLE
	B GAL	LAGERSTROEMIA H. 'TUNKEEGEE'	STANDARD GRAPE MYRTLE
	B GAL	PISTACIA CHINENSIS	CHINESE PISTACHE
	B GAL	PLATANUS XACERPOLIA	LONDON PLANE TREE
	B GAL	PYRUS CALLERYANA	FLOWERING PEAR
	B GAL	PRUNUS CERASIFERA	FLOWERING PLUM

TREE PLANTING AND STAKING DETAIL
 CONTACT J. R. PARTNERS = (888) 333-3678 FOR TREE STAKES



M I Architects/Stanley Center/12-01-10/10/05-03/02/any modified by Administrator at Dec 02, 2010 - 10:57am



Architects

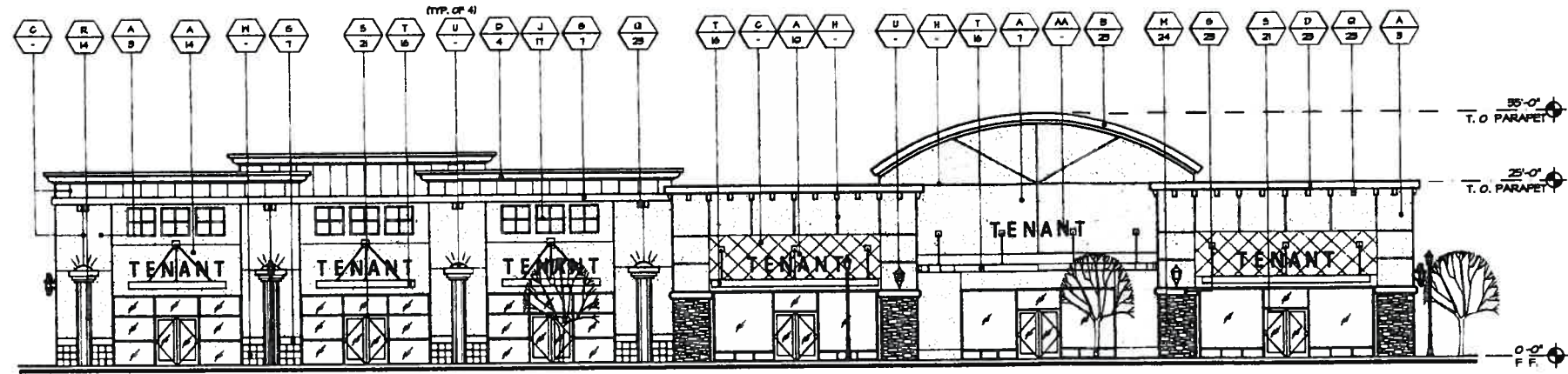
ARCHITECTURE
PLANNING
MANAGEMENT
DESIGN

2460 CAMINO DIABLO
SUITE 100
WALNUT CREEK, CA
94597

925-281-1174 Tel
925-443-1561 Fax
925-878-4875 Cell
mthana@marchitect.com

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PLEASANTON, CALIFORNIA

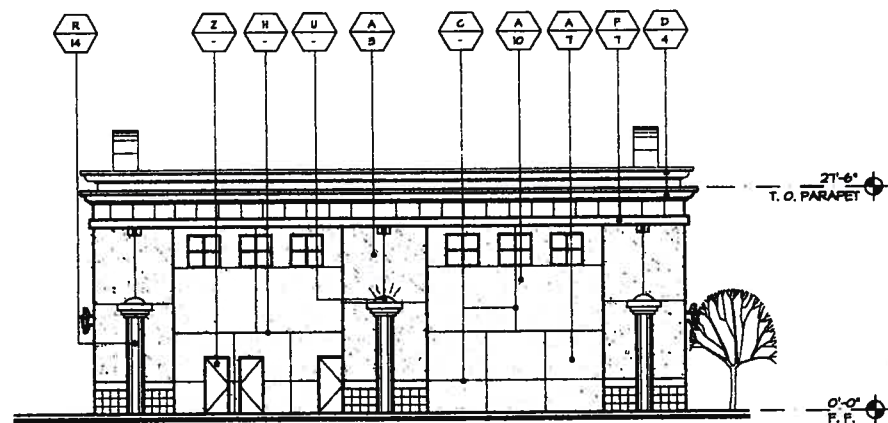
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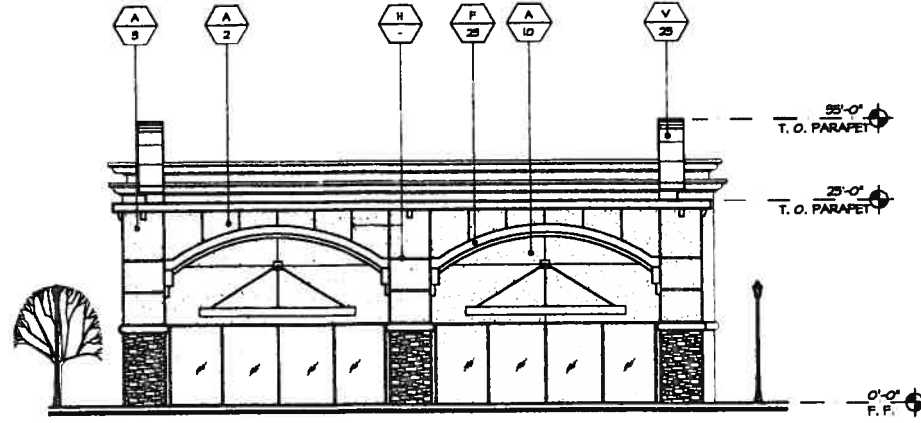
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SCALE: 3/32" = 1'-0"



B RETAIL BUILDING #1 WEST ELEVATION
SCALE: 3/32" = 1'-0"



C RETAIL BUILDING #1 SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



D RETAIL BUILDING #1 NORTH ELEVATION
SCALE: 3/32" = 1'-0"

MATERIALS		FINISHES	
A	SMOOTH FRESH CEMENT PLASTER	1	LA HABRA X-71 "MAH PEACH"
B	SMOOTH FRESH CEMENT PLASTER CORNICE	2	LA HABRA X-72 "ADOBE"
C	CEMENT PLASTER CONTROL JOINT	3	LA HABRA X-73 "SAGE SHELL"
D	E.J.F.S. CORNICE (PAINTED)	4	LA HABRA X-84 "SOUTHERN MOSS"
E	E.J.F.S. FREEZE (PAINTED)	5	LA HABRA X-85 "PURE NORTH"
F	E.J.F.S. HOLDING	6	LA HABRA X-270 "TRABUCO"
G	E.J.F.S. BAND	7	KCI # 573 "SUNNER ROOF"
H	1" ALUMINUM REVEAL	8	KCI # 562 "COPPERBRIGHT"
J	2" 50 STEEL TUBE TERRILLIS	9	KCI # 520 "COPPER"
K	3" 50 STEEL TUBE TERRILLIS	10	KCI # 264 "DEEP RISSET"
L	STEEL TUBE TERRILLIS	11	KCI # 472 "FORTRESS STONE"
M	STONE VENEER	12	KCI # 1025 "BANKER HILL"
N	BRICK VENEER	13	KCI # 471 "SUN VALLEY"
O	WOOD FINISH CORNICE	14	KCI # 204 "CLAY POT"
P	WOOD CORBEL	15	KCI # 48 "GREY FACADE"
Q	E.J.F.S. CORBEL	16	KCI # 329 "NERON GREY"
R	E.J.F.S. PLASTER	17	KCI # 1036 "ARMOR GREY"
S	ALUMINUM STOREFRONT	18	KCI # 1400 "BLACKBERRY FARM"
T	METAL AWNING & CABLE SUPPORT	19	KCI # 550 "BROWN LEATHER"
U	EXTERIOR MALL SCONCE	20	KCI # 121 "CLASSIC BURGUNDY"
V	METAL ROOFING	21	VISTAHALL STD502 "STONE WHITE"
W	TILE FINISH	22	H.C. MADDOX "OLD TOWN RED"
X	SCULPTURE MEDALLION	23	LA HABRA X-80 "CRYSTAL WHITE"
Y	SCULPTURE FREEZE (PAINTED)	24	EL DORADO STONE RUSTIC LEDGE "SEBOKIA"
Z	H.M. DOOR & FRAME (PAINTED)	25	KCI # 1064 "WHITE HING"
AA	TENANT SIGN (TYP) SEE DTL. 16 SHT. 502		

S:\Projects\06-205 Stanley Center\Drawings\06-205-001-01.dwg Drawing modified by mthana on Dec 14, 2005 - 11:05am

ISSUED FOR CONSTRUCTION	
ISSUED FOR PLAN CHECK	
ISSUED FOR PLANNING	
NO. DATE DESCRIPTION	
▲	
▲	
▲	
▲	
BUILDING # 1 ELEVATIONS	
PROJECT # 06-205	
DRAWN: HA	CHECKED: MJI
SCALE: AS NOTED	DATE: 12/15/05

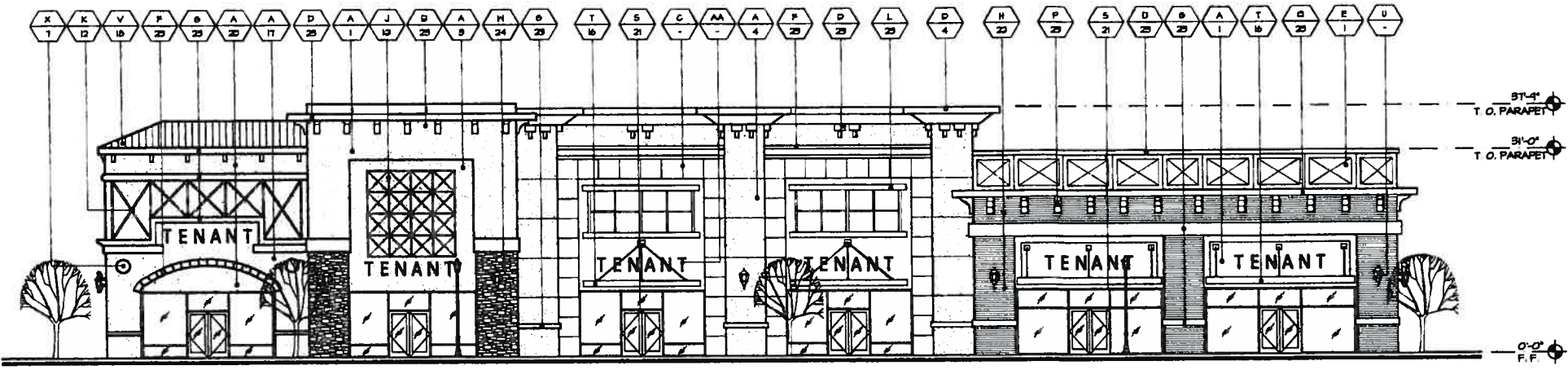
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SHEET 02

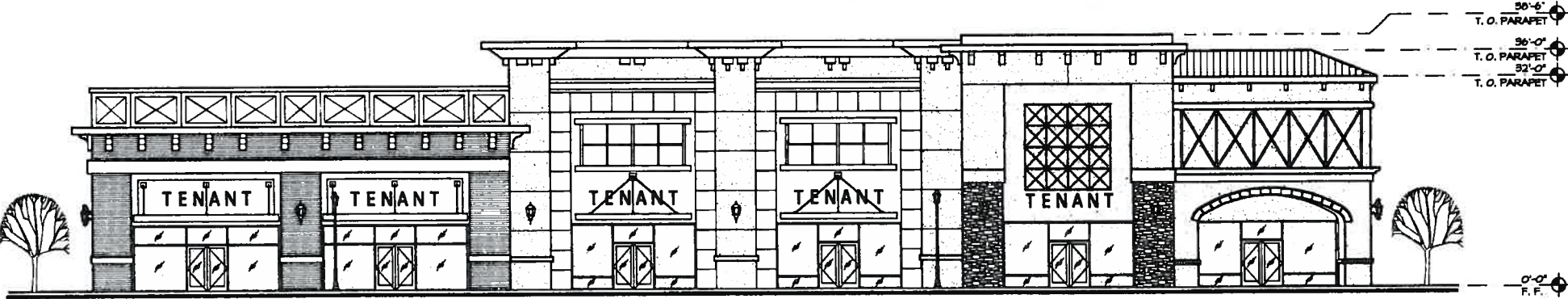
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	USED FOR PLAN CHECK	
08-20-09	USED FOR PLANNING	
NO.	DATE	DESCRIPTION

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PROJECT #	06-205	
DRAWN BY	CHECKED	MH
SCALE	AS NOTED DATE 12/10/06	

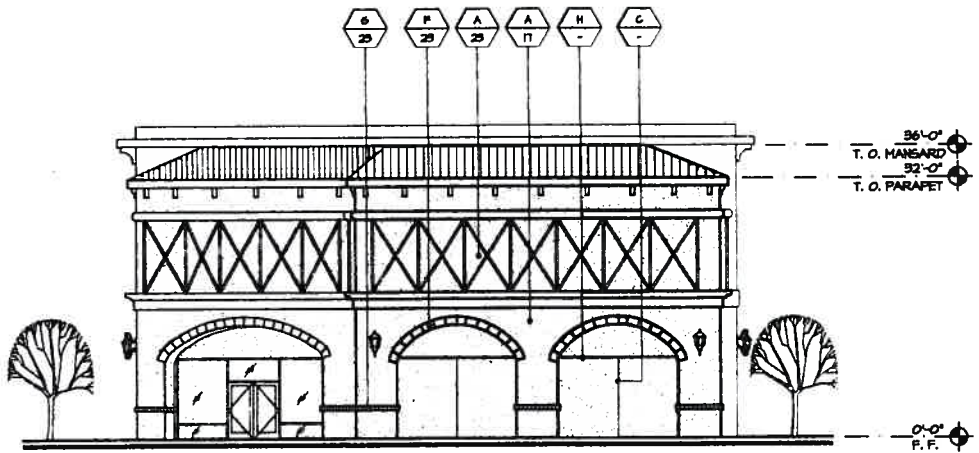
MATERIALS	FINISHES
A SMOOTH FRESH CEMENT PLASTER	1 LA HABRA X-71 'MADE PEACH'
B SMOOTH FRESH CEMENT PLASTER CORNICE	2 LA HABRA X-72 'ADOBE'
C CEMENT PLASTER CONTROL JOINT	3 LA HABRA X-73 '556 SHELL'
D E.J.P.S. CORNICE (PAINTED)	4 LA HABRA X-646 'SOUTHERN MOSS'
E E.J.P.S. FREEZE (PAINTED)	5 LA HABRA X-35 'PURE IVORY'
F E.J.P.S. HOLDING	6 LA HABRA X-278 'TRABUCO'
G E.J.P.S. BAND	7 ICI # 575 'SINKER ROOF'
H 1" ALUMINUM REVEAL	8 ICI # 362 'COPPERBRIGHT'
I 2" SG STEEL TUBE TERELLIS	9 ICI # 520 'COFFER'
J 3" SG STEEL TUBE TERELLIS	10 ICI # 264 'DEEP RISSET'
K STEEL TUBE TERELLIS	11 ICI # 472 'FORTRESS STONE'
L STONE VENEER	12 ICI # 1025 'SINKER HILL'
M BRICK VENEER	13 ICI # 417 '3M VALLEY'
N WOOD FINISH CORNICE	14 ICI # 204 'GLAY POT'
O WOOD CORBEL	15 ICI # 46 'GREY FACADE'
P E.J.P.S. CORBEL	16 ICI # 525 'MERON GREY'
Q E.J.P.S. PLASTER	17 ICI # 626 'ARMOR GREY'
R ALUMINUM STOREFRONT	18 ICI # 486 'BLACKBERRY FAIRY'
T METAL ANCHOR & CABLE SUPPORT	19 ICI # 556 'BROWN LEATHER'
U EXTERIOR MALL SCANCE	20 ICI # 12 'CLASSIC BURGUNDY'
V METAL ROOFING	21 VISTA HALL STUCCO 'BONE WHITE'
W TILE FRESH	22 H.C. HEDDOCK 'OLD TOWN RED'
X SCULPTSTONE MEDALLION	23 LA HABRA X-80 'CRYSTAL WHITE'
Y SCULPTSTONE FREEZE (PAINTED)	24 EL. DORADO STONE RUSTIC LEGGE 'SEGUNA'
Z H.M. DOOR & FRAME (PAINTED)	25 ICI # 1064 'WHITE PINK'
AA TENANT SIGN (TYP.) SEE DET. IN SHIT. 502	



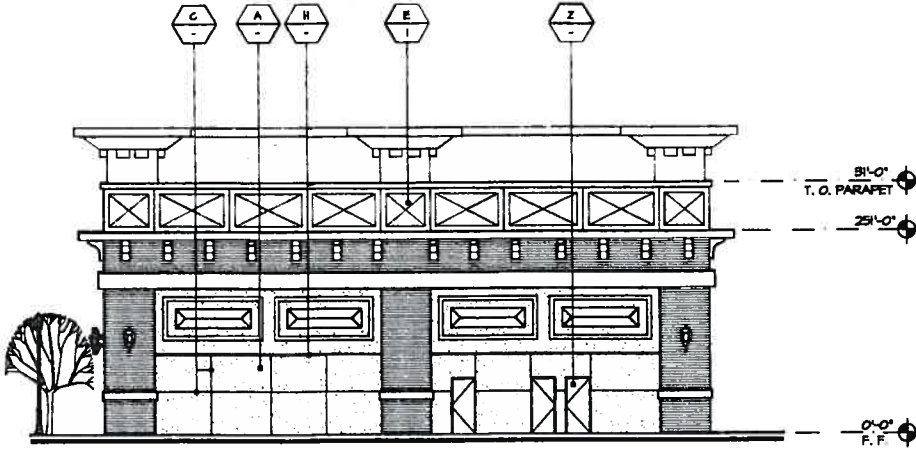
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SCALE: 3/32" = 1'-0"



B RETAIL BUILDING #2 WEST ELEVATION
SCALE: 3/32" = 1'-0"

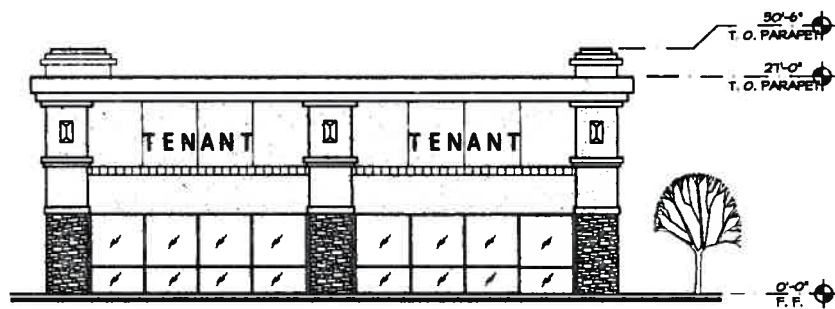


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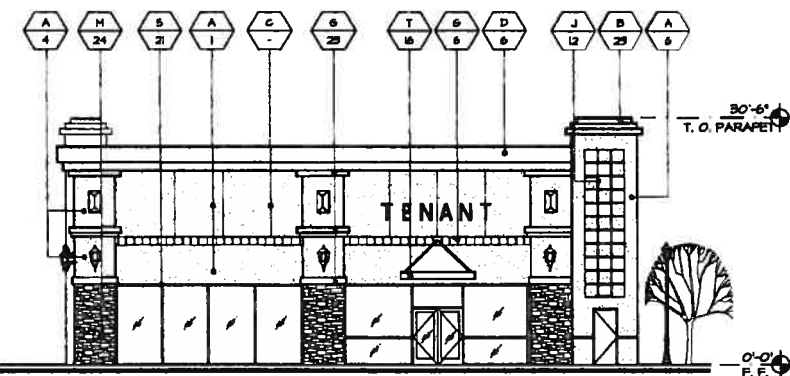


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SCALE: 3/32" = 1'-0"

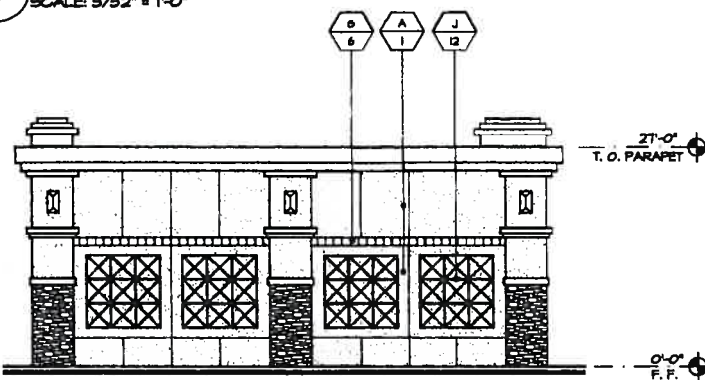
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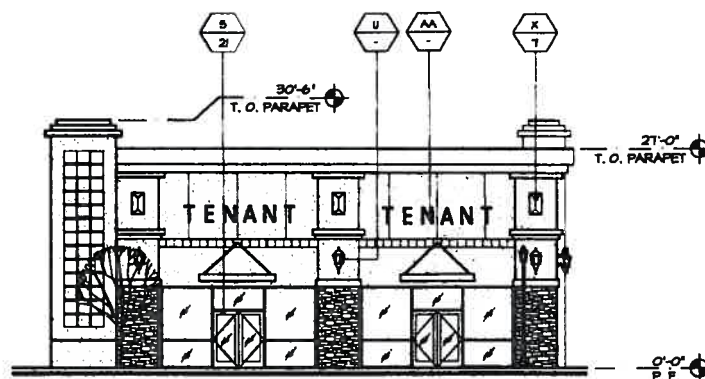
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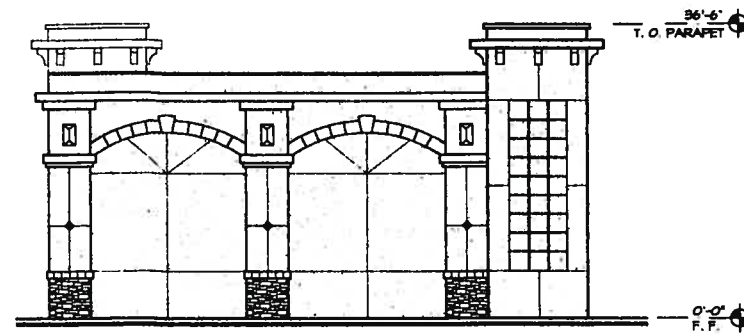
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SCALE: 3/32" = 1'-0"



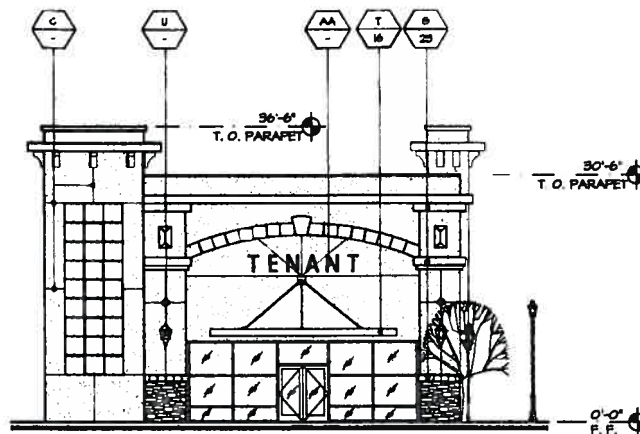
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SCALE: 3/32" = 1'-0"



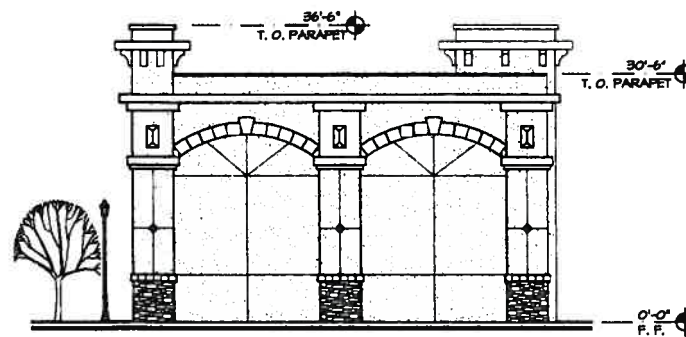
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SCALE: 3/32" = 1'-0"



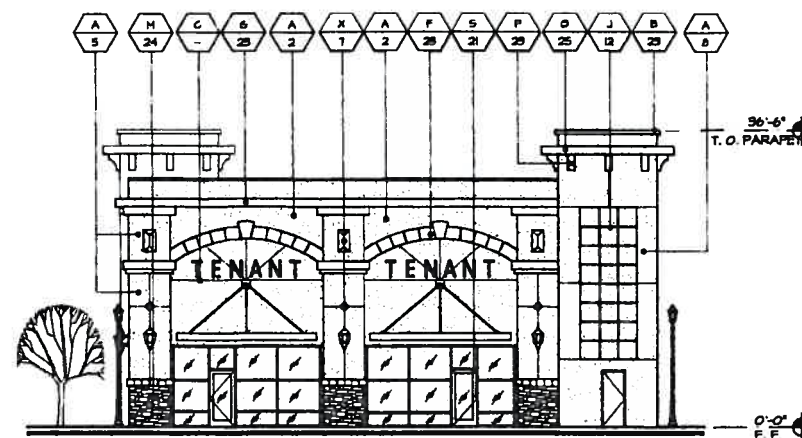
E RETAIL PAD "B" E. ELEVATION
SCALE: 3/32" = 1'-0"



F RETAIL PAD "B" N. ELEVATION
SCALE: 3/32" = 1'-0"



G RETAIL PAD "B" S. ELEVATION
SCALE: 3/32" = 1'-0"



H RETAIL PAD "B" W. ELEVATION
SCALE: 3/32" = 1'-0"

MATERIALS	FINISHES
A SMOOTH FINISH GYPSUM PLASTER	1 LA HABRA X-11 "MAH PEACH"
B SMOOTH FINISH GYPSUM PLASTER CORNICE	2 LA HABRA X-12 "ADOBE"
C GYPSUM PLASTER CONTROL JOINT	3 LA HABRA X-13 "EGG SHELL"
D E.J.P.S. CORNICE (PAINTED)	4 LA HABRA X-046 "SOUTHERN MOSS"
E E.J.P.S. FRIEZE (PAINTED)	5 LA HABRA X-26 "PURE MORTAR"
F E.J.P.S. MOLDINGS	6 LA HABRA X-218 "TRABUCO"
G E.J.P.S. BAND	7 ICI # 515 "BANKER ROOF"
H 1" ALUMINUM REVEAL	8 ICI # 562 "COFFERBRIGHT"
I 2" 90 STEEL TUBE TERRILLIS	9 ICI # 520 "COPPER"
J 5" 90 STEEL TUBE TERRILLIS	10 ICI # 264 "DEEP RISSET"
K STEEL TUBE TERRILLIS	11 ICI # 412 "FORTRESS STONE"
L STONE VENEER	12 ICI # 1025 "BANKER HILL"
M BRICK VENEER	13 ICI # 411 "SAN VALLEY"
N WOOD FINISH CORNICE	14 ICI # 304 "CLAY POT"
O WOOD CORBEL	15 ICI # 46 "GREY FACADE"
P E.J.P.S. CORBEL	16 ICI # 525 "HERON GREY"
Q E.J.P.S. PLASTER	17 ICI # 1626 "ARMOR GREY"
R ALUMINUM STOREFRONT	18 ICI # 1406 "BLACKBERRY PARCH"
S METAL ANCHORS & CABLE SUPPORT	19 ICI # 308 "BROWN LEATHER"
T EXTERIOR WALL SCANCE	20 ICI # 121 "CLASSIC BURGUNDY"
U METAL ROOFING	21 VISTAMALL STUNCOZ "STONE WHITE"
V TILE FINISH	22 H.C. MADDOX "OLD TOWN RED"
W SCULPTSTONE MEDALLION	23 LA HABRA X-50 "CRYSTAL WHITE"
X SCULPTSTONE FRIEZE (PAINTED)	24 EL DORADO STONE RUSTIC LEDGE "SOLIDIA"
Y H.I. DOOR & FRAME (PAINTED)	25 ICI # 1064 "WHITE PINS"
AA TENANT SIGN (TYP) SEE DET. 16 SH. 502	



ARCHITECTURE
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2960 CAMINO DIABLO
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925-678-4875 Cell
mthano@architect.com

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NO.	DATE	DESCRIPTION

PROJECT #: 06-205
DRAWN: HA CHECKED: M
SCALE: AS NOTED DATE: 12/25/06

A2.3

S:\1-Projects\06-205 Stanley Center\Draw\Planning\06-205-06g Elevating modified by mthano 1 of Dec 14, 2006 - 11:45am



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94597

925-287-1174 Tel
925-443-1581 Fax
925-878-4875 Cell
mthano@marchitect.com



A RETAIL BUILDING #1 EAST ELEVATION
SCALE: 3/32" = 1'-0"



C RETAIL BUILDING #1 SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



D RETAIL BUILDING #1 NORTH ELEVATION
SCALE: 3/32" = 1'-0"

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- ISSUED FOR PLAN CHECK
- ISSUED FOR PERMITS

NO.	DATE	DESCRIPTION

BUILDING # 1
ELEVATIONS
PROJECT # 06 205
DRAWN: HA CHECKED: MII
SCALE: AS NOTED DATE: 00/00/00

A2.1

S:\Projects\06_205 Stanley Center\06_205 Stanley Center.dwg modified by: mchaffin at Thu: 07, 2008 8:31pm



A RETAIL BUILDING #2 EAST ELEVATION
SCALE: 3/32" = 1'-0"



C RETAIL BUILDING #2 SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



D RETAIL BUILDING #2 NORTH ELEVATION
SCALE: 3/32" = 1'-0"

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ISSUED FOR PLAN CHECK	
ISSUED FOR PLANNING	
NO	DATE DESCRIPTION
△	
△	
△	
△	
BUILDING # 2 ELEVATIONS	
PROJECT #	06-205
DRAWN BY	HA
CHECKED BY	MI
SCALE	AS NOTED
DATE	00/00/00

S:\Projects\06_205 Stanley Center\Drawings\Exterior\06_205_Bldg_Ext_elevs.mxd by mthano on Dec 07, 2006 8:00am



A RETAIL PAD "A" N. ELEVATION
SCALE: 3/32" = 1'-0"



B RETAIL PAD "A" S. ELEVATION
SCALE: 3/32" = 1'-0"



D RETAIL PAD "A" W. ELEVATION
SCALE: 3/32" = 1'-0"



F RETAIL PAD "B" N. ELEVATION
SCALE: 3/32" = 1'-0"



G RETAIL PAD "B" S. ELEVATION
SCALE: 3/32" = 1'-0"



H RETAIL PAD "B" W. ELEVATION
SCALE: 3/32" = 1'-0"

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ISSUED FOR CONSTRUCTION		
ISSUED FOR PLAN CHECK		
ISSUED FOR PLANNING		
NO.	DATE	DESCRIPTION
△		
△		
△		
△		
RETAIL PAD "A" & "B" ELEVATIONS		
PROJECT #: 06-205		
DRAWN: HA	CHECKED: MII	
SCALE: AS NOTED DATE: 00/00/00		

Architect

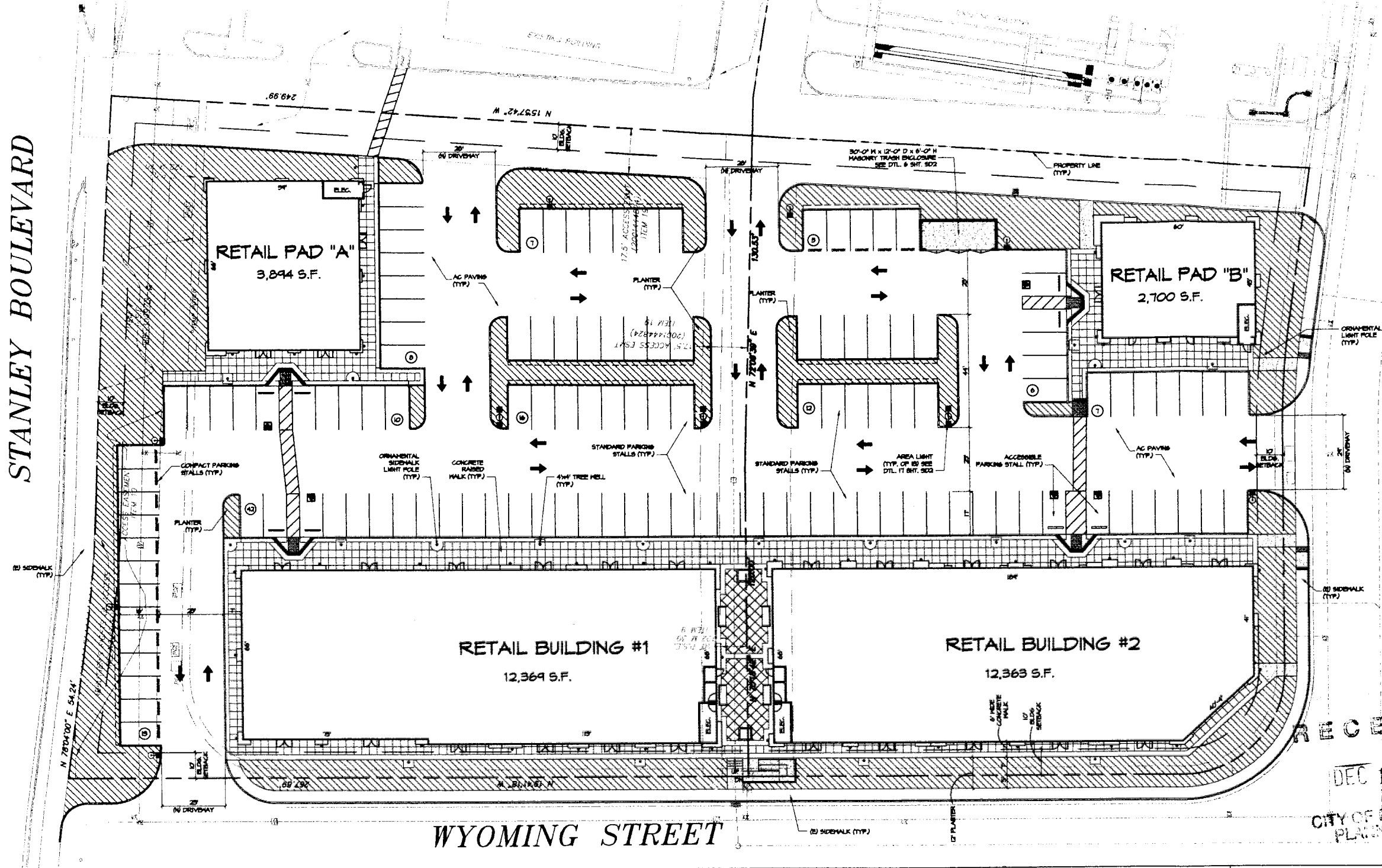
ARCHITECT
PLANNING
MANAGEMENT
DESIGN
2960 CAMINO DIABLO
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94597
925-287-1174
925-443-0561
925-878-4875
muthana@architect

STANLEY CENTER
RETAIL SHOPPING CENTER
STANLEY BOULEVARD & WYOMING STREET

STANLEY BOULEVARD

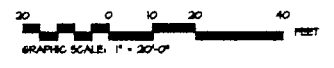
UTAH STREET

WYOMING STREET



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DEC 15 2006
CITY OF PLEASANTON
PLANNING DEPT.

1 SITE PLAN
SCALE: 1" = 20'-0"



VICINITY MAP	SITE INFORMATION	SITE PLAN LEGEND	DRAWING INDEX																						
	APN# 946-4542-021 & 022 JURISDICTION: CITY OF PLEASANTON ZONING: PUD-C SETBACKS: ADJACENT TO STREETS: 10 FEET REAR: 10 FEET SIDE: 0 FEET PARKING REQUIREMENTS: 1 SPACE PER 300 S.F., 31,526 S.F. / 300 = 105 PARKING REQUIRED: 105 SPACES PARKING PROVIDED: 126 SPACES STANDARD PARKING STALLS (9'x11'), 105 COMPACT PARKING STALLS (9'x6'), 10 ACCESSIBLE PARKING STALLS (14'x19'), 3 VAN ACCESSIBLE PARKING STALLS (11'x14'), 2 SITE COVERAGE: SITE: 16,544 S.F. (100%) BUILDINGS: 5,326 S.F. (26.1%) LANDSCAPING: 18,275 S.F. (10.7%) IMPERVIOUS AREA: 66,150 S.F. (51.4%)	<ul style="list-style-type: none"> NEW LANDSCAPING NEW CONCRETE PAVING 4 FT. WIDE (MIN.) ACCESSIBLE ROUTE OF TRAVEL, SHALL NOT EXCEED 5% SLOPE IN THE DIRECTION OF TRAVEL AND 2% CROSS SLOPE EXISTING TO REMAIN 	<table border="1"> <tr> <td>S01</td> <td>SITE PLAN</td> </tr> <tr> <td>S01-L</td> <td>SITE LIGHTING PLAN</td> </tr> <tr> <td>S02</td> <td>SITE DETAILS</td> </tr> <tr> <td>C-1</td> <td>PRELIMINARY GRADING & DRAINAGE PLAN</td> </tr> <tr> <td>L-1</td> <td>CONCEPTUAL LANDSCAPE PLAN</td> </tr> <tr> <td>A2.1</td> <td>BUILDING #1- BUILDING ELEVATIONS</td> </tr> <tr> <td>A2.2</td> <td>BUILDING #2- BUILDING ELEVATIONS</td> </tr> <tr> <td>A2.3</td> <td>RETAIL PAD "A" & "B"- BUILDING ELEVATIONS</td> </tr> <tr> <td>A2.1</td> <td>BUILDING #1- COLORED BUILDING ELEVATIONS</td> </tr> <tr> <td>A2.2</td> <td>BUILDING #2- COLORED BUILDING ELEVATIONS</td> </tr> <tr> <td>A2.3</td> <td>RETAIL PAD "A" & "B"- COLORED BUILDING ELEVATIONS</td> </tr> </table>	S01	SITE PLAN	S01-L	SITE LIGHTING PLAN	S02	SITE DETAILS	C-1	PRELIMINARY GRADING & DRAINAGE PLAN	L-1	CONCEPTUAL LANDSCAPE PLAN	A2.1	BUILDING #1- BUILDING ELEVATIONS	A2.2	BUILDING #2- BUILDING ELEVATIONS	A2.3	RETAIL PAD "A" & "B"- BUILDING ELEVATIONS	A2.1	BUILDING #1- COLORED BUILDING ELEVATIONS	A2.2	BUILDING #2- COLORED BUILDING ELEVATIONS	A2.3	RETAIL PAD "A" & "B"- COLORED BUILDING ELEVATIONS
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			PROJECT TEAM <table border="1"> <tr> <td> ARCHITECT M. MUTHANA ARCHITECTS 2960 CAMINO DIABLO, SUITE 100 WALNUT CREEK, CA 94597 TEL: (925) 878-4875 FAX: (925) 443-0561 CELL: (925) 878-4875 </td> <td> DEVELOPER STANLEY CENTER, LLC P.O. BOX 10294 SAN JOSE, CA 95157 TEL: (408) 691-0442 FAX: CELL: MR. MICHAEL AMINIAN </td> </tr> </table>	ARCHITECT M. MUTHANA ARCHITECTS 2960 CAMINO DIABLO, SUITE 100 WALNUT CREEK, CA 94597 TEL: (925) 878-4875 FAX: (925) 443-0561 CELL: (925) 878-4875	DEVELOPER STANLEY CENTER, LLC P.O. BOX 10294 SAN JOSE, CA 95157 TEL: (408) 691-0442 FAX: CELL: MR. MICHAEL AMINIAN																				
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<p style="text-align: center;">APPROVED PLEASANTON PLANNING COMMISSION</p> <p>BY <i>Jerry M. Jensen</i> DATE 6-27-2007</p>			<table border="1"> <tr> <td>PROJECT #</td> <td>06-20E</td> </tr> <tr> <td>DRAWN BY</td> <td>GA</td> </tr> <tr> <td>SCALE</td> <td>AS NOTED</td> </tr> </table>	PROJECT #	06-20E	DRAWN BY	GA	SCALE	AS NOTED																
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S:\1 - Projects\06-20E Stanley Center\Site\Planning\06-20E-SD1.dwg, modified by mmutani1 at Dec 14, 2006 - 1:04pm

SHEET

PDR-563, Stanley Center, LLC

Application for design review approval to construct an approximately 31,180-square-foot retail building, an approximately 3,940-square-foot retail pad, parking stalls, and landscaping at the property located at 3595 Utah Street. Zoning for the property is PUD-C (Planned Unit Development – Commercial) District.

Ms. Amos presented the staff report and described the background, scope and layout of the proposed project.

Chairperson Fox cited a section under Traffic Considerations on page 5 of the staff report: “As an example of this, the Bernal Retail Center (PDR-421) was required to prepare a traffic study although conforming to the General Plan and zoning land use designations. The Planning Commission did not agree with the assessment of the traffic study and therefore required the applicant to pay only traffic impact fees and not install or retrofit any additional intersection improvements.” She inquired whether that referred to the stoplight at Bernal Avenue and Nevada Street/Court. Ms. Decker confirmed that was the case and stated that the assessment evaluated for payment of that particular project was greater than the traffic impact fees, which included the improvements to that intersection by the provision of that streetlight. She added that there was considerable discussion among the Planning Commissioners that it may have been overinflated based on the size of the project and, therefore, did not require improvements to that intersection and reduced the traffic impact fees to the common calculation of traffic impact fees for the project.

Chairperson Fox noted that reference was made to Home Depot, which is not in place at this time as its ordinance has not had a second reading at the City Council level. She inquired whether it would be possible to condition this project to install the stoplight at Utah Street and Bernal Avenue. Ms. Decker noted the information was not available to answer that question at this time, although she believed it was unlikely. She added that the Planning Commission and the community had spoken that a light at that location was undesirable. She could not speak to future projects but stated that the traffic engineer would look closely at that particular issue at that time. She noted that the Bernal Retail Center was considered to be too small, and Home Depot was too large for a comparable assessment of traffic impacts. She reiterated that this was a discussion of fees and how much the fair share of traffic impact fees would be for a 30,000-square-foot project.

In response to an inquiry by Chairperson Fox regarding the volume of traffic at Valley Avenue and Stanley Boulevard during the a.m. and p.m. peak times, Ms. Decker noted that the analysis would provide this information.

She inquired whether a project had been approved in this area of the City without having a sense of the traffic impacts. Ms. Decker noted that in her conversations with the traffic engineer, she could not accurately reflect his sense of the traffic in those areas. However, he had a keen sense of confidence that this traffic study is to simply evaluate what the traffic impact fees would be. He did not anticipate that any additional improvement would be required with intersections. She noted that the condition of approval contained language to allow the traffic engineer to

recommend an enhancement; the applicant considered that a fair condition of approval. Staff wished to provide maximum flexibility to protect the interests of both the applicant and the City.

THE PUBLIC HEARING WAS OPENED.

Chairperson Fox disclosed that she met with Mr. Aminian several months ago.

Commissioner Blank disclosed that he recently met with Mr. Aminian to discuss another project and did not discuss this project.

Michael Aminian, applicant, complimented staff on doing an excellent job while working with him for the past few years. He was confident that those traffic issues would be resolved. He added that they would be happy to pay the traffic impact fee.

In response to an inquiry by Chairperson Fox regarding the types of uses to be considered for the Retail Center, Ms. Decker replied that the list of uses were included in Attachment 4.

Mary Roberts, 1666 Frog Hill Lane, recalled the Planning Commission's approval of Miracle Auto Painting, which has not been built yet. She noted that there had been no traffic study for that application because it was assumed that all of Stanley Business Park would be built out for the types of uses enumerated in the staff report. She noted that with the gas station application, the primary focus had been on design. She noted that the Home Depot proposal was a much larger project and believed that payment of the traffic impact fees would be sufficient.

THE PUBLIC HEARING WAS CLOSED.

**Commissioner Blank moved to approve PDR-563, subject to the conditions of approval as listed in Exhibit B of the staff report, as recommended by staff.
Commissioner Olson seconded the motion.**

Commissioner Narum expressed concern with respect to Condition No. 17 the proposed colors posed too much of a contrast to the buildings in that area. She would like some verbiage to review the colors one more time as the project progresses. With respect to Condition No. 18, she believed that Saturday construction should be allowed because the site was not in a residential neighborhood. In addition, access to the site would be through main streets.

Commissioner Blank noted that it was difficult to examine the colors accurately in the light provided in the Chambers. He suggested bringing this item back for a color review.

Commissioner Narum noted that the nearby buildings were all light in color with dark accents.

Commissioner Blank proposed an amendment to the motion to require the colors to be consistent with the surrounding architecture and buildings, subject to the approval of the Planning Department.

Ms. Decker suggested that larger color samples could be brought back to the Planning Commission as an information item.

Commissioner Blank proposed the following verbiage to be added to Condition No. 17: "Stucco samples will be supplied and information reported to the Planning Commission" and to modify Condition No. 18 be changed to allow site improvements and construction on Saturdays.

Commissioner Olson accepted the proposed amendment.

ROLL CALL VOTE:

AYES: Commissioners Blank, Fox, Narum, Olson, and Pearce.
NOES: None.
ABSTAIN: None.
RECUSED: None.
ABSENT: None.

Resolution No. PC-2007-31, approving PDR-563, was entered and adopted as motioned.

Except as noted below, permitted and conditionally permitted uses in the Commercial Service (C-S) District, as outlined in Table 18.44.090 of the Pleasanton Municipal Code, are allowed within Stanley Business Park.

Permitted

- a. Auto repairing, overhauling and painting
- b. Automobile rental, sales and/or leasing, no service
- c. Automobile sales and service, including new and used car sales
- d. Automobile upholstery and top shops
- e. Barbershops and beauty shops
- f. Blacksmith shop
- g. Boat sales
- h. Bookbinding
- i. Business consulting service offices
- j. Business services offices, including employment agencies, accountants, notaries, stenographic addressing, computing and related services.
- k. Delicatessen stores
- l. Design profession offices
- m. Electrical repair shops
- n. Feed and fuel stores
- o. Heating and ventilation shops
- p. Ice storage house
- q. Industries engaged in construction and related trades
- r. Laundry plants
- s. Research services offices
- t. Restaurants and soda fountains, including drive-ins and takeout food establishments

Conditionally Permitted

- u. Beverage distributors
- v. Cold storage plants
- w. Contractor's equipment storage areas
- x. Frozen food distributors
- y. Storage yards for recreational vehicles
- z. Testing, repair and maintenance services

- B. Multi-family dwellings shall be permitted in the C-C district provided that there shall be not less than 1,000 square feet of site area per dwelling unit, and provided that dwelling units not located above a permitted nonresidential use shall be subjected to the requirements for usable open space per dwelling unit of the RM-1,500 district.

Yards and courts at and above the first level occupied by dwelling units shall be as required by Section 18.84.100 of this title, except that where no side or rear yard is required for a nonresidential use on the site, no side or rear yard need be provided except adjoining walls with openings.

- C. Any other use which is determined by the planning commission, as provided in Chapter 18.128 of this title, to be similar to the uses listed in this section shall be a permitted use or a conditional use in the districts in which the uses to which it is similar are permitted uses or conditional uses.

Table 18.44.090

PERMITTED AND CONDITIONAL USES

The following uses shall be permitted uses or conditional uses in a C district where the symbol "P" for permitted use, "C" for conditional use, or "TC" for temporary conditional use appears in the column beneath the C district:							
Note:							
* Uses which are part of a completely enclosed mall complex, all activities take place entirely indoors.							
** Uses on peripheral sites physically separated from a central enclosed mall.							
	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
Accessory uses and structures, not including warehouses, located on the same site as a permitted use and the following accessory structures and uses located on the same site with a permitted use or with a conditional use which has been granted a use permit in accord with the provisions of Chapter 18.124 of this title:							
1. Emergency standby electricity generator, fuel cell, and/or battery facilities provided that the facilities shall be tested from 8:00 a.m. to 5:00 p.m. Monday through Friday or from 10:00 a.m. to 12:00 noon on Saturday or Sunday only, the facilities shall not be tested for more than one hour during any day, and no testing shall be on "Spare The Air Days" in Alameda County;	P	P	P	P	P	P	P
2. Photovoltaic facilities;	P	P	P	P	P	P	P
3. Small electricity generator facilities that meet the following criteria:							
a. The fuel source for the generators shall be natural gas, bio diesel, or the byproduct of an approved cogeneration or combined cycle facility;							
b. The facilities shall use the best available control technology to reduce air pollution;							
c. The facilities shall not create any objectionable odors at any point outside of the property plane where the facilities are located;							

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
d. The facilities shall not exceed a noise level of 45 dBA at any point on a residentially zoned property outside of the property plane where the facilities are located; and							
e. On a site with fuel cell facilities, small electricity generator facilities shall not be permitted unless the aggregate wattage of the two facilities is less than one megawatt. If the aggregate wattage of the two facilities is one megawatt or greater, the small electricity generator facilities shall be subject to all requirements and processes prescribed in this title for medium or large electricity generator facilities, whichever is the most applicable, in the subject zoning district;							
f. The facilities shall be cogeneration or combined cycle facilities, if feasible;	P	P	P	P	P	P	P
4. Small fuel cell facilities that meet the following criteria:							
a. The facilities shall not create any objectionable odors at any point outside of the property plane where the facilities are located;							
b. The fuel cell facilities shall not exceed a noise level of 45 dBA at any point on any residentially zoned property outside of the property plane where the facilities are located; and							
c. On a site with electricity generator facilities, small fuel cell facilities shall not be permitted unless the aggregate wattage of the two facilities is less than one megawatt. If the aggregate wattage of the two facilities is 1 megawatt or greater, the small fuel cell facilities shall be subject to all requirements and processes prescribed in this title for medium or large fuel cell facilities, whichever is the most applicable, in the applicable subject district;							
Small fuel cell facilities are encourages to be cogeneration or combined cycle facilities	P	P	P	P	P	P	P
Accessory uses and structures located on the same site as a conditional use and the following accessory structures and uses located on the same site as a permitted use or a conditional use that has been granted a use permit:							
1. Medium electricity generator facilities that meet the applicable standards of Section 18.124.290 of this title	C	C	C	C	C	C	C

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
2. Medium fuel cell facilities that meet the applicable standards of Section 18.124.290 of this title	C	C	C	C	C	C	C
Adult entertainment establishments (see Chapter 18.114 of this title)	P	P		P	P		
Ambulance services				C	P		
Amusement parks					C		
Antique stores, no firearm sales				P			
Antique stores with sales of antique firearms				C			
Appliance sales and repair, provided repair services shall be incidental to retail sales	P	P		P	P		
Art galleries and artists' supply stores	P	P	P	P			
Auction rooms				C	C	C	
Automobile racing stadiums and drag strips					C		
Automobile rental, sales and/or leasing; no service	P			P	C	C	P
Automobile repairing, overhauling and painting		C			C		P
Automobile sales and service including new and used car sales		P			C	C	P
Automobile supply stores, no service or shop work	P	P	C	P	P		P
Automobile upholstery and top shops						C	P
Barbershops and beauty shops	P	P	P	P			
Bars and brew pubs, as defined in Chapter 18.08 of this title	C	C		C		C	
Beauty shops including massage services which cannot meet the criteria for beauty shops including massage services as written in the use category below	C	C	C	C			
Beauty shops including massage services of three or fewer massage technicians at any one time for which the applicant has obtained a massage technician permit from the police department, provides massages only between 8:00 a.m. and 9:00 p.m., and can meet the parking requirements as established in Chapter 18.88 of this title. If operation of the use results in conflicts pertaining to parking noise, traffic, or other factors, the planning commission may modify or add conditions to mitigate such impacts, or may revoke the zoning certificate for said use	P	P	P	P			
Bed and breakfast inns				C			
Bicycle shops	P	P	P	P	P		
Birthing center				C			
Blacksmiths' shops, not less than 300 feet from an R or O district				C	C		
Boat sales, service and repair					C	C	P
Boat sales, no service or repair	P				P		

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
Bookbinding					C	C	
Bookstores and rental libraries	P	P	P	P			
Bottling works					C		
Bowling alleys	P	C		C	C		
Building materials sales		C			C		
Bus depots, provided buses shall not be stored on-site and no repair work shall be conducted on-site		P		P	P	P	
Candy stores	P	P	P	P			
Carpet, drapery and floor-covering stores	P	P	C	P	P		
Carpet and rug cleaning and dyeing					C		
Catalog stores, no firearm sales	P	P		P			
Catalog stores with firearm sales	C	C		C	C		
Catering establishments	P	P	P	P	P		
Charitable institutions and operations, including, but not limited to, lodging houses or dormitories providing temporary quarters for transient persons, organizations devoted to collecting or salvaging new or used materials, or organizations devoted principally to distributing food, clothing and other supplies on a charitable basis and other similar charitable operations				C	C		
Childcare centers, if located a minimum of 300 feet away from any personal wireless service facility approved after the adoption of the city's Personal Wireless Service Facility Ordinance, Chapter 18.110 of this title, not including those personal wireless service facilities exempted in Section 18.110.010 of this title, and provided that state-mandated outdoor play areas face new or existing landscaping sufficient to buffer the play area from view, are separated from customer parking areas by a heavy wood fence or comparable barrier, are isolated from loading docks and associated delivery truck circulation areas, and contain landscaping for outdoor children's activities	C	C	C				
Christmas tree sales lots	P	TC	TC	TC	TC	TC	TC
Churches, parsonages, parish houses, monasteries, convents and other religious institutions				C			
Circuses, carnivals and other transient amusement enterprises	P	TC	TC	TC	TC	TC	TC
Clothing and costume rental establishment	P	P	P	P			
Clothing, shoe and accessory stores	P	P	P	P			
Columbariums and crematories, not less than 300 feet from an R district					C		

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
Commercial radio and television aerials, antennas, and transmission towers with design review approval specified under Chapter 18.20 of this title, having a minimum distance of 300 feet from the property lines of all of the following:	P			P	P		
1. Existing or approved residences or agricultural zoning districts or in planned unit developments with a residential or agricultural zoning designation;							
2. Undeveloped residential or agricultural zoning districts or undeveloped planned unit developments with a residential or agricultural zoning designation and without an approved development plan, unless designated as a public and institutional land use in the general plan;							
3. Existing or approved public schools, private schools, and childcare centers, not including schools which only provide tutorial services;							
4. Neighborhood parks, community parks, or regional parks, as designated in the general plan; and							
5. Existing or approved senior care/assisted living facilities, including nursing homes.							
All commercial radio and television aerials, antennas, and transmission towers shall be located so as to minimize their visibility and, unless determined by the zoning administrator to be significantly hidden from view, designed to ensure that they will not appear as an aerial, antenna, and/or transmission tower. All such facilities determined by the zoning administrator to be visible from residential land uses, the I-580 and/or I-680 rights-of-way, or other sensitive land uses such as parks, schools, or major streets, shall incorporate appropriate stealth techniques to camouflage, disguise, and/or blend them into the surrounding environment, and shall be in scale and architecturally integrated with their surroundings in such a manner as to be visually unobtrusive. All applications for commercial radio and/or television aerials, antennas, and transmission towers shall include engineering analyses completed to the satisfaction of the zoning administrator. Said analyses shall be peer-reviewed by an outside consultant.							

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
If mounted on structures or on architectural details of a building, these facilities shall be treated to match the existing architectural features and colors found on the building's architecture through design, color, texture, or other measures deemed to be necessary by the zoning administrator.							
Roof-mounted aerials and antennas shall be located in an area of the roof where the visual impact is minimized. Roof-mounted and ground-mounted aerials, antennas, and transmission towers shall not be allowed in the direct sightline(s) or sensitive view corridors, or where they would adversely affect scenic vistas, unless the facilities incorporate the appropriate, creative techniques to camouflage, disguise, and/or blend them into the surrounding environment, as determined to be necessary by the zoning administrator.							
All commercial radio and television aerials, antennas, and transmission towers shall conform to the applicable requirements of Cal-OSHA and/or the FCC before commencement of, and during operation. Evidence of conformance shall be provided to the zoning administrator before final inspection of the facility by the director of building inspection.							
If the zoning administrator finds that an approved aerial, antenna, or transmission tower is not in compliance with this title, that conditions have not been fulfilled, or that there is a compelling public safety and welfare necessity, the zoning administrator shall notify the owner/operator of the aerial/antenna/transmission tower in writing of the concern, and state the actions necessary to cure. After 30 days from the date of notification, if compliance with this title is not achieved, the conditions of approval have not been fulfilled, or there is still a compelling public safety and welfare necessity, the zoning administrator shall refer the use to the planning commission for review. Such reviews shall occur at a noticed public hearing where the owner/operator of the aerial/antenna/transmission tower may present relevant evidence. If, upon such review, the planning commission finds that any of the above have occurred, the planning commission may modify or revoke all approvals and/or permits.							

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
Copying and related duplicating services and printing/publishing services using only computers, copy machines, etc., not including lithographing, engraving, or such similar reproduction services	P	P	P	P	P		
Dairy products plants					C		
Dairy products manufacturing for retail sale on premises only	P			C	P		
Dance halls (where no liquor is served)	P	C		C			
Delicatessen stores	P	P	P	P			
Department stores	P	P		P			
Department stores tire, battery and accessory shops	P	P					
Diaper supply services					P		
Drive-in theaters					C		
Drugstores and prescription pharmacies	P	P	P	P			
Dry goods stores	P	P	P	P			
Electrical equipment repair and electricians' shops					C		
Feed and fuel stores					C		
Financial institutions, including banks, savings and loan offices, finance companies, credit unions and related services	P	P	P	P	P		
Firearm sales	C	C		C			
Firearm sales in which no more than 10 firearms are stored on-site at any one time and the majority of firearms are sold through catalogs, mail order, or at trade shows	C	C		C	C		
Florists	P	P	P	P			
Food lockers	P			C	P		
Food market including supermarkets, convenience markets and specialty stores	P	P	C	C			
Freight forwarding terminals					C		
Full-service, self-service and quick-service stations not less than 60 feet from residentially planned or zoned property, provided all operations except the sale of gasoline and oil shall be conducted within a building enclosed on at least three sides, and provided that the minimum site area shall be 20,000 square feet. Direct sales to the public shall be limited to petroleum products, automotive accessories, tobacco, soft drinks, candy and gum	C	C	C	C	C	C	C
with truck and trailer rental					C	C	
with a convenience market, excluding the sale of alcoholic beverages					C	C	
with a drive-through car wash		C			C	C	
Full service car wash		C			C	C	

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
Furniture stores	P	P		P	P	P	
Furniture upholstery shops					C	C	
Game arcades as defined by Section 18.08.207 of this title	C	C	C	C			
Garden centers, including plant nurseries	P	C			C	C	
Gift shops	P	P	P	P			
Glass replacement and repair shops					C	P	
Guards' living quarters					C		
Gunsmiths	P	P		P	P		
Gymnasiums and health clubs	P	C	C	C	P		
Gymnasiums and health clubs including massage services which cannot meet the criteria for gymnasiums and health clubs with massage services as written in the use category below	C	C	C	C	C		
Gymnasiums and health clubs including massage services of three or fewer massage technicians at any one time for which the applicant has obtained a massage technician permit from the police department, provides massages only between 8:00 a.m. and 9:00 p.m. and can meet the parking requirements as established in Chapter 18.88 of this title. If operation of the use results in conflicts pertaining to parking noise, traffic, or other factors, the planning commission may modify or add conditions to mitigate such impacts, or may revoke the zoning certificate for said use	P	C	C	C	P		
Hardware stores	P	P	P	P	P		
Heating and air conditioning shops					C		
Hobby shops	P	P	P	P			
Hospital equipment, sales and rental	P	P		C	P		
Hotels and motels		C		P		P	
Household repair shops					C		
Ice cream sales	P	P	P	P			
Ice vending stations		C	C	C	C	C	
Interior decorating shops	P	P	P	P			
Janitorial services and supplies	P			C	P		
Jewelry stores	P	P	P	P			
Kennels, and other boarding facilities for small animals not less than 300 feet from an R or O district					C		
Laboratories		P		P	P		
Laundries and dry cleaners where service is provided	P	P	P	P	P		
Laundries, self-service		P	P	P			
Laundry plants				C			
Leather goods and luggage stores	P	P	P	P			
Linen supply services					P		
Liquor stores	P	P	C	C			

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
Locksmiths	P	P	P	P			
Lumberyards, not including planing mills or sawmills not less than 300 feet from an R or O district					C		
Machinery sales					P		
Massage establishments, not in conjunction with medical uses, which cannot meet the criteria for massage establishments as written in the use category below	C	C		C			
Massage establishments, not in conjunction with medical uses, of three or fewer massage technicians at any one time, for which the applicant has obtained a massage technician permit from the police department, provides massages only between 8:00 a.m. and 9:00 p.m., and can meet the parking requirements as established in Chapter 18.88 of this title. If operation of the use results in conflicts pertaining to parking noise, traffic, or other factors, the planning commission may modify or add conditions to mitigate such impacts or may revoke the zoning certificate for said use	P	P		P			
Medical and orthopedic appliance stores	P	P		P			
Meeting halls	P	C		C	C	C	
Microbrewery	p***	p***		p***	p***		
*** Permitted use subject to the following conditions:							
1. The zoning administrator finds that adequate parking is available for said use.							
2. If the zoning administrator determines that the use will be or is creating odor problems, an odor abatement device determined to be appropriate by the zoning administrator shall be installed within the exhaust ventilation system to mitigate brewery odors.							
3. The applicant is in compliance with all applicable requirements of Chapter 9.04 of this code.							
4. If operation of the use results in conflicts pertaining to parking, noise, odors, traffic, or other factors, the zoning administrator may modify or add conditions to mitigate such impacts, or may revoke the zoning certificate for the use.							
Miniature golf	P	C					
Mortuaries				C	P		
Motorcycle sales, no service or repair	P			P			P
Motorcycle sales and service					C	C	C
Music stores	P	P	P	P			
Music and dance facilities which cannot meet the criteria for music and dance facilities as written in the use category below	P	C	C	C	C	C	
Music and dance facilities with no more than 20 students in the facility at any one time are permitted uses subject to the following conditions:	P	P	P	P	P	P	
1. The facility shall adhere to all occupancy, ADA, California Building Code, and exiting requirements;							
2. The zoning administrator finds that adequate parking is available for the said use.							
The standard city noise ordinance applies.							
Newsstands	P	P	P	P	P		

	CR*(m)	CR**(p)	CN	CC	CS	CF	C A
Office buildings		P	C	P			
Office supply and business machines stores	P	P	P	P			
Offices, including, but not limited to, business, professional and administrative offices	P	P	P	P			
Outdoor art and craft shows		TC	TC	TC			
Paint, glass and wallpaper shops	P	P		P	P		
Parcel delivery services including garage facilities for trucks, and repair shops facilities					C		
Parking facilities, including required off-street parking facilities located on a site separated from the uses which the facilities serve and fee parking in accordance with the standards and requirements of Chapter 18.88 of this title				C			
Pest control shops				C	P		
Pet and bird stores	P	P	P	P	P		
Photographic studios	P	P	P	P			
Photographic supply stores	P	P	P	P	P		
Picture framing shops	P	P	P	P			
Plant shops	P	P	P	P			
Plumbing, heating and ventilating equipment showrooms with storage of floor samples only	P	P		P	P		
Plumbing shops					P		
Pool halls	P	C		C			
Post offices	P	P	C	P			
Prefabricated structure sales					C		
Printing, including also lithographing and engraving and other reproduction services				C	P		
Private clubs and lodges				C	C		
Private museums				C	C		
Public utility and public service facilities including pumping stations, power transmission stations, power distribution stations, equipment buildings, service yards, drainageways and structures, water reservoirs, percolation basins, well fields, and storage tanks. These facilities must be found by the planning commission to be necessary for the public health, safety, or welfare		C	C	C	C	C	
"Radioactive materials uses" as defined in Section 18.08.445 of this title					C		
-Radio and television broadcasting studios		P	P	C	P	P	
Record and recording and sound equipment stores	P	P	C	P			
Recreation and sport facilities, indoor, which cannot meet the recreation and sport facility criteria as written in the use category below	C	C	C	C	C	C	

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
Recreation and sport facilities, indoor, including massage services which cannot meet the criteria for recreation and sport facilities, indoor, with massage services as written in the use category below [Staff Comment— This use category is addressed in the use category above and the use category below]							
Recreation and sport facilities, indoor, with no more than 20 students in the facility at any one time, and with no massage services or with massage services of three or fewer massage technicians at any one time, for which the applicant has obtained a massage technician permit from the police department, provides massages only between 8:00 a.m. and 9:00 p.m., and can meet the parking requirements as established in Chapter 18.88 of this title, are permitted uses subject to the following conditions:	P	P	P	P	P	P	
1. The facility shall adhere to all occupancy, ADA, California Building Code, and exiting requirements;							
2. The zoning administrator finds that adequate parking is available for the said use.							
The standard city noise ordinance applies.							
Recreation and sports facilities, outdoor, including racetracks, golf driving ranges, skateboard parks, riding stables, etc.					C		
Recycling collection facilities, small	C	C	C	C	C	C	
Refrigeration equipment sales					P		
Rental yards, including the rental of hand tools, garden tools, power tools, trucks and trailers and other similar equipment					C		
Residential uses (see subsection B of this section) see also "guards' living quarters," and Chapter 18.108 of this title				P	C	C	
Restaurants and soda fountains not including drive-ins or take-out food establishments	P	P	P	P	C	P	
Restaurants and soda fountains including drive-ins and take-out food establishments	P	C	C	C	C	C	
Saddleries	P	P		P	P		
Schools and colleges including trade, business, music and art schools, but not including general purpose or nursery schools which cannot meet the criteria for schools and colleges as written in the use category below	P	C	C	C	C	C	
Schools and colleges including trade, business, music and art schools, but not including general purpose or nursery schools, with no more than 20 students in the facility at any one time are permitted uses subject to the following conditions:	P	P	P	P	P	P	P

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
1. The facility shall adhere to all occupancy, ADA, California Building Code, and exiting requirements;							
2. The zoning administrator finds that adequate parking is available for the said use.							
The standard city noise ordinance applies.							
Scientific instrument shops	P	P		P	P		
Secondhand stores and pawnshops				C			
Self-service car wash				C			
Sheet metal shops				C			
Shoe repair shops	P	P	P	P			
Shoe stores	P	P	P	P			
Shooting galleries, indoor	P			C	P		
Shooting galleries, indoor, with firearm sales	C			C	C		
Sign painting shops	P			C	P		
Skating rinks, indoor	P	P			P	C	
Specialty stores selling those items normally sold in department stores	P	P		P			
Sporting goods stores, no firearm sales	P	P	P	P			
Sporting goods stores with firearm sales	C	C		C			
Sports arenas or stadiums					C	C	
Stamp and coin stores	P	P	P	P			
Stationery stores	P	P	P	P			
Stone and monument yards					P		
Storage buildings for household goods						P	
Storage yards for commercial goods, supplies and equipment including fuel storage, no less than 300 feet from any R or O district					C		
Swimming pool sales, supplies and/or service	P		C	C	P	C	
Tailor or dressmaking shops	P	P	P	P			
Taxicab stands		P	P	P	P	P	P
Taxidermists	P	P		P	P		
Television and radio sales and repair shops	P	P	P	P	P		
Theaters and auditoriums	P	P	C	P		C	
Tire sales and service, not including retreading and recapping or mounting of heavy truck tires		C		C	P		P
Tires, batteries and accessories	P	P					
Tobacco stores	P	P	P	P			
Tool and cutlery sharpening or grinding				C	P		
Toy stores	P	P	P	P			
Trailers and mobilehome parks in accordance with the regulations prescribed in Chapter 18.108 of this title					C	C	
Truck, trailer and/or RVs, sales and service					C	C	P
Truck scales					P	C	
Trucking terminals, not less than 150 feet from an R or O district					C		
Tutoring which cannot meet the criteria for tutoring as written in the use category below	C	C	C	C	C	C	

	CR*(m)	CR**(p)	CN	CC	CS	CF	CA
Tutoring with no more than 20 students at the facility at any one time are permitted uses subject to the following conditions:	P	P	P	P	P	P	
1. The facility shall adhere to all occupancy, ADA, California Building Code, and exiting requirements;							
2. The zoning administrator finds that adequate parking is available for the said use.							
The standard city noise ordinance applies.							
Variety stores	P	P	P	P			
Vending machine sales and service				C	P		
Veterinarians' offices and out-patient clinics, excluding any overnight boarding of animals, and including incidental care such as bathing and trimming, provided that all operations are conducted entirely within a completely enclosed building which complies with specifications for soundproof construction prescribed by the director of building inspection			C				
Veterinarians' offices, out-patient clinics, and small animal hospitals, including short term overnight boarding of animals and incidental care such as bathing and trimming, provided that all operations are conducted entirely within a completely enclosed building which complies with specifications for sound-proof construction prescribed by the director of building inspection				C	P		
Veterinarians' offices and small animal hospitals including operations not conducted within an entirely enclosed building, not less than 300 feet from an R or O district					C		
Warehouses except for the storage of fuel or flammable liquids					C		
Watch and clock repair shops	P	P	P	P			
Waterbed shops including the sale of small incidentals, such as linens, wall hangings, and other similar items	P	P	P	P			
Wholesale establishments					C		
Wholesale establishments without stocks		P		P			

(Ord. 1950 § 2 (Exh. A), 2007; Ord. 1880, 2003; Ord. 1850 § 1, 2002; Ord. 1821 § 1, 2001; Ord. 1810 § 1, 2000; Ord. 1743, 1998; Ord. 1738 § 1, 1998; Ord. 1726 § 1, 1997; Ord. 1725 § 1, 1997; Ord. 1668 § 2, 1995; Ord. 1665 § 2, 1995; Ord. 1604 § 1, 1993; Ord. 1603 § 3, 1993; Ord. 1394 § 1, 1989; Ord. 1390 § 1, 1988; Ord. 1379 § 1, 1988; Ord. 1354 § 4, 1988; Ord. 1346 § 2, 1987; Ord. 1340 § 1, 1987; Ord. 1216 § 1, 1985; Ord. 1071 § 2, 1983; prior code § 2-7.08)

18.44.095 Prohibited uses.

The following uses shall not be permitted in the commercial districts:

Any use not specifically or conditionally permitted by this chapter, unless a determination is made under Chapter 18.128 of this title. (Ord. 1880, 2003)

18.44.100 Underground utilities.

Electric and communication service wires to a new structure shall be placed underground from the nearest utility pole. If the director of public works finds, upon application by the property owner, that compliance is not feasible or economically justifiable, he or she shall permit different service arrangements. The property owner shall comply with the requirements of this section without expense to the city and shall make the necessary arrangements with the public utility involved. (Prior code § 2-7.09)

18.44.110 Off-street parking.

Off-street parking facilities shall be provided for each use in the C districts as prescribed in Chapter 18.88 of this title. (Prior code § 2-7.10)

18.44.120 Off-street loading.

Off-street loading facilities shall be provided for each use in the C districts prescribed in Chapter 18.92 of this title, except in the C-R district where the zoning administrator and/or planning commission shall establish regulations on a case by case basis in accordance with the purposes of Chapter 18.20 of this title. (Ord. 1591 § 2, 1993; prior code § 2-7.11)

18.44.130 Signs.

No sign, outdoor advertising structure, or display of any character shall be permitted in the C districts, except as prescribed in Chapter 18.96 of this title. (Prior code § 2-7.12)

18.44.140 Design review.

All permitted and conditional uses in the C districts shall be subject to design review as prescribed in Chapter 18.20 of this title. Applicants are advised to confer with the zoning administrator before preparing detailed plans. (Prior code § 2-7.13)



August 30, 2007

Michael Tassano
City of Pleasanton
Department of Public Works
200 Old Bernal Avenue
P.O. Box 520
Pleasanton, CA 94566

Re: Pleasanton Stanley Center Traffic Study

Dear Mr. Tassano:

Fehr & Peers has completed the traffic analysis for the proposed Stanley Center retail development in the City of Pleasanton. The Stanley Center project is located adjacent to the recently approved Bernal Commercial retail development. The analysis of the Stanley Center project builds on the analysis presented in the *Bernal Commercial Development Traffic Study* (Dowling Associates, October 2005). The traffic volumes, trip generation, trip distribution, and analysis assumptions presented in this report are consistent with those contained in the *Bernal Commercial* study.

PROJECT DESCRIPTION AND STUDY AREA

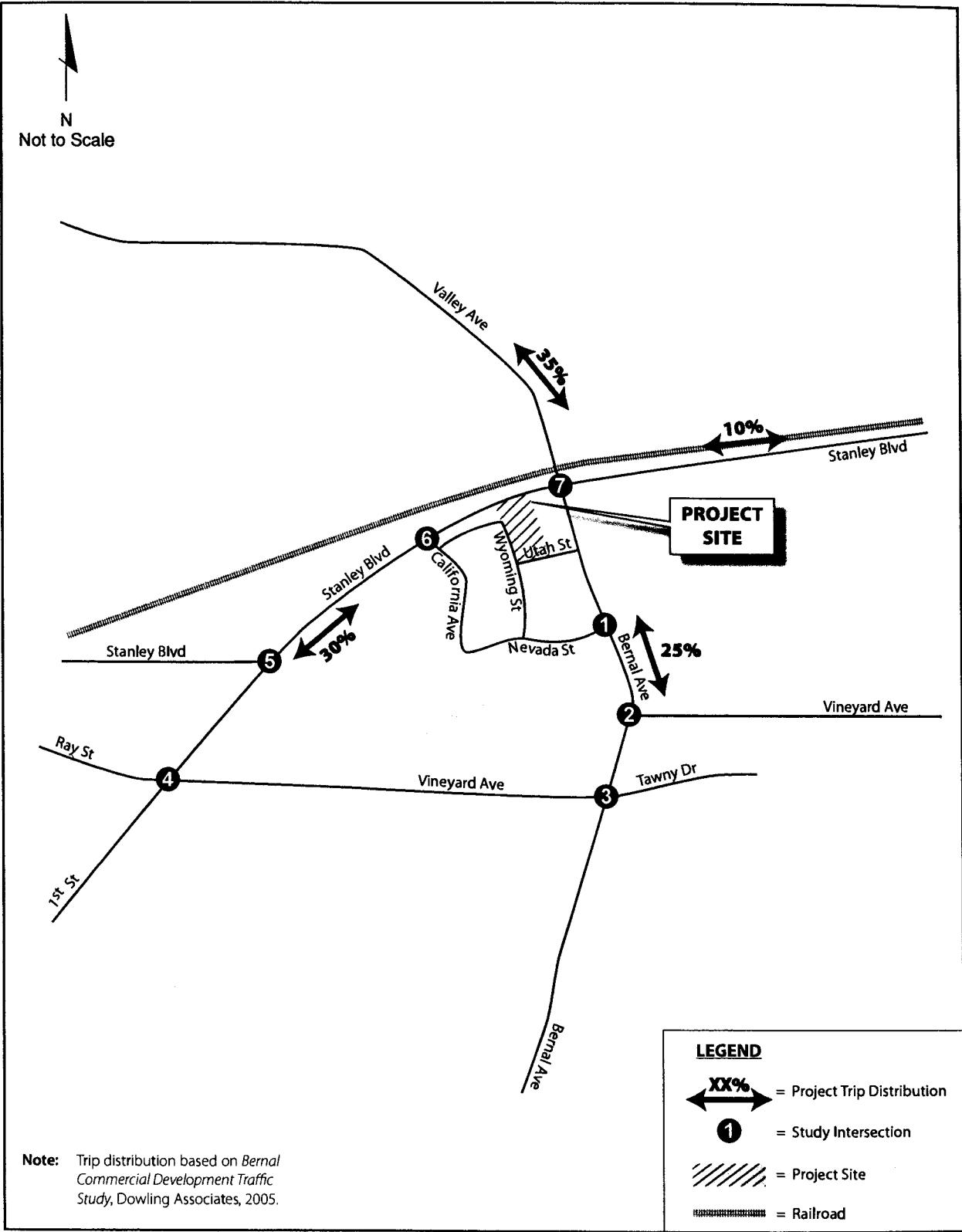
The Stanley Center is a 31,326 square foot commercial retail development located on a 2.67 acre site southwest of the Stanley Boulevard/Valley Avenue/Bernal Avenue intersection. A detailed site plan showing the project's location and the layout of its driveways has not been provided to Fehr & Peers. This analysis assumes that most project traffic will access the Stanley Center site from Utah and Wyoming Streets via intersections on Bernal Avenue.

The following intersections (with traffic control) were included in the analysis:

1. Bernal Avenue/Nevada Street (side-street stop control)
2. Bernal Avenue/Vineyard Avenue (signal)
3. Bernal Avenue/Vineyard Avenue/Tawny Drive (signal)
4. First Street/Ray Street/Vineyard Avenue (signal)
5. First Street/Stanley Boulevard (signal)
6. Stanley Boulevard/California Avenue (signal)
7. Stanley Boulevard/Valley Avenue/Bernal Avenue (signal)

Figure 1 presents the project location and the study intersections.

N
Not to Scale



Note: Trip distribution based on Bernal Commercial Development Traffic Study, Dowling Associates, 2005.

LEGEND

- = Project Trip Distribution
- = Study Intersection
- = Project Site
- = Railroad

Pleasanton Stanley Center Traffic Study

fp
FEHR & PEERS
TRANSPORTATION CONSULTANTS

August 2007
WC06-2349F_1

STUDY AREA

Figure 1

ANALYSIS METHODOLOGY

The analysis methodology and assumptions presented in this report follow the general framework presented in the *Bernal Commercial* study. The traffic analyses presented in this report were based on the City of Pleasanton's citywide Synchro model. The Synchro model contains existing turn volumes and traffic control parameters (e.g. lane configurations, signal timings, etc.) for most major intersections within the City.

Two scenarios were analyzed in this study:

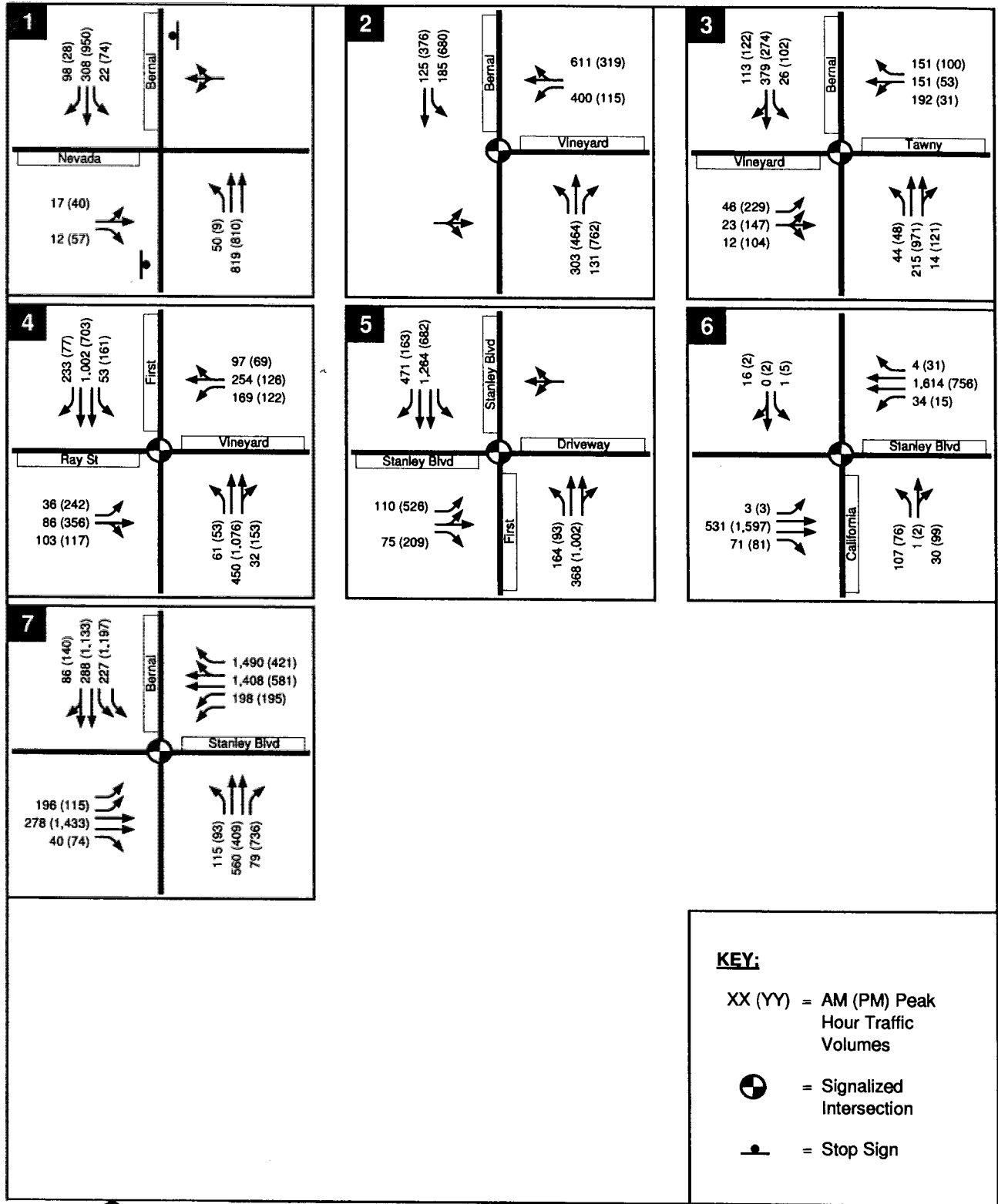
- Existing Plus Approved Projects (EPAP)
- EPAP Plus Project

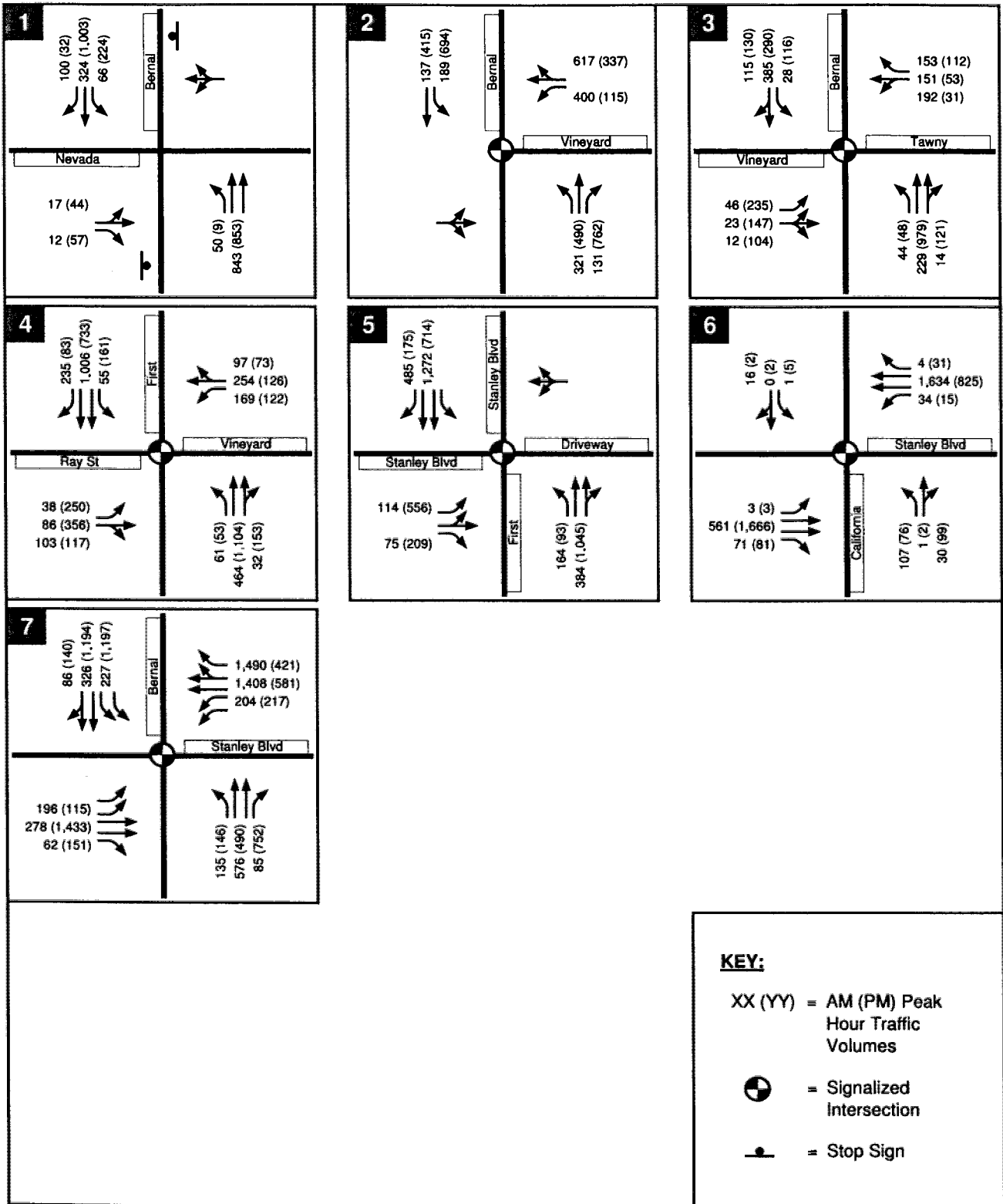
EPAP traffic volumes were developed using the City's Synchro model. The EPAP scenario includes the traffic generated from all approved projects within the City, including the Bernal Commercial project¹. The EPAP Plus Project traffic volumes were developed by adding the trips generated by the Stanley Center to the EPAP volumes. Figures 2 and 3 present the AM and PM peak hour turning movements for the EPAP and EPAP Plus Project scenarios, respectively.

For each analysis scenario, AM and PM peak hour traffic operations at the study intersections were analyzed using the City's Synchro model. Intersection operations analysis is typically performed using methodologies contained in the *Highway Capacity Manual (HCM)* (Transportation Research Board (TRB), 2000). The HCM provides analysis methods and equations that estimate the average delay experienced by vehicles at signalized and unsignalized intersections. The HCM uses these delay measures to assign a qualitative rating, level of service (LOS), which describes overall intersection operating conditions. LOS ranges from LOS A, indicating free flow traffic conditions with little or no delay, to LOS F, representing over-saturated conditions where traffic flows exceed design capacity (resulting in excessive queuing and delays). At signalized intersections, LOS is based on the weighted average delay (measured in seconds per vehicle) for all movements. At side-street stop-controlled intersections, LOS is based on the delay for the worst movement at the controlled (minor street) approach.

Table 1 summarizes the HCM delay thresholds and LOS classifications for signalized and unsignalized intersections. The City of Pleasanton defines acceptable intersection operations as LOS D or better, with some exceptions.

¹ The Existing + Approved + Project volumes from the *Bernal Commercial* study, which include the Bernal Commercial project, are equal to the EPAP volumes presented here. The traffic operations results for these two scenarios are consistent.





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August 2007
3.xls

Pleasanton Stanley Center Traffic Study

**PEAK HOUR VOLUMES
EXISTING PLUS APPROVED PLUS PROJECT**

FIGURE 3

TABLE 1 INTERSECTION LEVEL OF SERVICE THRESHOLDS			
LOS	Signalized Intersection Control Delay (sec/veh) ¹	Unsignalized Intersection Control Delay (sec/veh) ¹	General Description
A	0 – 10.0	0 – 10.0	Little to no congestion or delays.
B	10.1 – 20.0	10.1 – 15.0	Limited congestion. Short delays.
C	20.1 – 35.0	15.1 – 25.0	Some congestion with average delays.
D	35.1 – 55.0	25.1 – 35.0	Significant congestion and delays.
E	55.1 – 80.0	35.1 – 50.0	Severe congestion and delays.
F	> 80.0	> 50.0	Total breakdown with extreme delays.

Notes:
 1) HCM methodologies and delay thresholds based control delay, which includes initial deceleration delay, queue move-up time, stopped delay, and acceleration delay.
 Source: HCM, Chapter 16 (Signalized Intersections) and Chapter 17 (Unsignalized Intersections), TRB, 2000

The traffic analysis conducted in this report follows the same methodologies presented in the *Bernal Commercial* study. The *Bernal Commercial* study states that it used HCM methods to analyze intersections. While HCM was used for unsignalized intersections, a closer inspection of the Synchro technical calculations indicates that Synchro's default methodology, the **Percent Delay Method**, was reported for signalized intersections. The Synchro user manual states that the delays calculated by the Percent Delay Method are within a few seconds of the HCM methodology. To remain consistent with the *Bernal Commercial* study, all calculations for signalized intersections presented in this report follow the Percent Delay Method, but apply LOS ratings based on the HCM thresholds presented in Table 1.

TRIP GENERATION AND DISTRIBUTION

The trip generation for the Stanley Center development was calculated using trip rates for the "Neighborhood Shopping Center" land use category from *San Diego Trip Generators* (San Diego Association of Governments, 2003) and used in the *Bernal Commercial* analysis². Table 2 shows the AM and PM trip generation estimate for the project.

² Trip Generation rates obtained from Table 4, Page 8 of the *Bernal Commercial* study.

**TABLE 2
 STANLEY CENTER PROJECT TRIP GENERATION**

Land Use	Quantity	AM Trip Rates		PM Trip Rates		AM Trips		PM Trips	
		In	Out	In	Out	In	Out	In	Out
Neighborhood Shopping Center	31.625 ksf ²	2.88	1.92	6.60	6.60	91	61	209	209

Notes:
 1) ksf = thousand square feet
 Source: Fehr & Peers, 2007; Dowling Associates, 2005

The trip distribution used to assign project trips through the study intersections was also based on the one used in the *Bernal Commercial* study. The final project traffic volumes by turning movement at each of the study intersections are presented in Table 3.

**TABLE 3
 STANLEY CENTER PROJECT-ONLY TRIPS**

Intersection	Traffic Control	Peak Hour	Project-Only Trips											
			Northbound			Southbound			Eastbound			Westbound		
			L	T	R	L	T	R	L	T	R	L	T	R
1. Bernal Ave/ Nevada St	SSSC ¹	AM	0	24	0	44	165	2	0	0	0	0	0	0
		PM	0	43	0	150	3	4	4	0	0	0	0	0
2. Bernal Ave/ Vineyard Ave	Signal	AM	0	18	0	4	12	0	0	0	0	0	0	6
		PM	0	26	0	14	39	0	0	0	0	0	0	18
3. Bernal Ave/ Vineyard Ave /Tawny Dr	Signal	AM	0	14	0	2	6	2	2	0	0	0	0	2
		PM	0	8	0	14	16	8	6	0	0	0	0	12
4. First St/ Ray St/Vineyard Ave	Signal	AM	0	14	0	2	4	2	2	0	0	0	0	0
		PM	0	28	0	0	30	6	8	0	0	0	0	4
5. First St/ Stanley Blvd	Signal	AM	0	16	0	0	8	14	4	0	0	0	0	0
		PM	0	43	0	0	32	12	28	0	0	0	0	0
6. Stanley Blvd/ California Ave	Signal	AM	0	0	0	0	0	0	0	30	0	0	20	0
		PM	0	0	0	0	0	0	0	69	0	0	69	0
7. Stanley Blvd/ Valley Ave/Bernal Ave	Signal	AM	20	16	6	0	38	0	0	0	22	6	0	0
		PM	53	81	16	0	61	0	0	0	77	22	0	0

Notes:
 1) SSSC = side-street stop control
 Source: Fehr & Peers, 2007

INTERSECTION TRAFFIC OPERATIONS ANALYSIS

AM and PM peak hour traffic operations were analyzed for EPAP and EPAP Plus Project conditions. Intersections with LOS exceeding the City's LOS D threshold were identified as having unacceptable operations. Project impacts were identified by comparing the AM and PM peak hour LOS results between the EPAP and EPAP Plus Project scenarios. A significant project-related impact occurs if the addition of project traffic causes either of the following:

- An intersection operating at an acceptable LOS (LOS D or better) to degrade to an unacceptable LOS (LOS E or worse)
- An increase of greater than five seconds of delay at an intersection already operating at an unacceptable LOS (LOS E or worse)

Table 4 shows the AM and PM peak hour delay and LOS at each of the study intersections for the EPAP and EPAP Plus Project scenarios. Appendix A contains the technical calculations.

Intersection	Traffic Control	Peak Hour	EPAP		EPAP Plus Project	
			Delay (s/veh) ¹	LOS	Delay (s/veh) ¹	LOS
1. Bernal Ave/ Nevada St	SSSC ²	AM	1.0	A	1.3	A
		PM	>100	F	>100	F
2. Bernal Ave/ Vineyard Ave	Signal	AM	14.5	B	15.2	B
		PM	51.1	D	55.2	E
3. Bernal Ave/ Vineyard Ave /Tawny Dr	Signal	AM	20.3	B	20.5	C
		PM	27.7	C	30.9	C
4. First St/ Ray St/Vineyard Ave	Signal	AM	55.3	E	56.0	E
		PM	76.3	E	80.0	F
5. First St/ Stanley Blvd	Signal	AM	13.9	B	13.9	B
		PM	14.0	B	14.6	B
6. Stanley Blvd/ California Ave	Signal	AM	11.3	B	11.4	B
		PM	9.5	A	9.9	A
7. Stanley Blvd/Valley Ave/Bernal Ave	Signal	AM	107.3	F	109.3	F
		PM	73.4	E	90.1	F

Notes:
Bold font indicates unacceptable intersection operations (using the City's LOS D threshold). Shading indicates a significant project impact.
 1) For signalized intersections, delay (seconds per vehicle) is reported using Synchro's Percent Delay Method. For unsignalized intersections, HCM delay is reported for the worst movement at the controlled side-street approach.
 2) SSSC = side-street stop control
 Source: Fehr & Peers, 2007

Based on the significance criteria detailed above, the addition of project-related traffic causes a **significant impact** at three intersections:

- Bernal Avenue/Nevada Street (a greater than five second increase in the PM peak hour with the addition of project traffic)
- Bernal Avenue/Vineyard Avenue (LOS D to E during the PM peak hour with the addition of project traffic)
- Stanley Boulevard/Valley Avenue/Bernal Avenue (a greater than five second increase in the PM peak hour with the addition of project traffic)

Another intersection with unacceptable operations (LOS E), First Street/Ray Street/Vineyard Avenue, would worsen to LOS F in the PM peak hour with the addition of project traffic. However, the degradation is not enough to trigger a project-related impact according to the significance criteria.

MITIGATION ANALYSIS

The City of Pleasanton's General Plan update³ recommends capacity improvements for several intersections within the City by the year 2025. Appendix B contains a detailed list of these improvements. Mitigation measures were selected from this list for the four intersections identified in the previous section with project-related impacts or unacceptable traffic operations.

³ From *Assumed Intersection Changes to Reduce Delay in Various Network Alternatives, Draft Exhibit B General Plan Mitigation* (City of Pleasanton, August 15, 2005)

Table 6 summarizes the recommended mitigation measures and presents the mitigation analysis results.

TABLE 6 INTERSECTION LEVELS OF SERVICE – MITIGATION ANALYSIS						
Intersection	Peak Hour	EPAP Plus Project				
		Without Mitigation		With Mitigation		
		Delay ¹	LOS	General Plan Mitigation	Delay	LOS
1. Bernal Ave/ Nevada St	AM	1.3	A	Install Traffic Signal	2.5	A
	PM	>100	F		7.1	A
2. Bernal Ave/ Vineyard Ave	AM	15.2	B	Re-time signal in the PM peak hour. ²	15.2	B
	PM	55.2	E		50.4	D
4. First St/ Ray St/Vineyard Ave	AM	56.0	E	Provide protected/permissive phasing for east/west left-turns	28.7	C
	PM	80.0	F		51.3	D
7. Stanley Blvd/Valley Ave/Bernal Ave	AM	109.6	F	Convert the EB right-turn lane to a shared through/right-turn lane. Add a second WB right-turn lane ³ .	37.4	D
	PM	90.7	F		59.2	E

Notes:
Bold font indicates unacceptable intersection operations (using the City's LOS D threshold). Shading indicates a significant project impact.
 1) For signalized intersections, delay (seconds per vehicle) is reported using Synchro's Percent Delay Method. For unsignalized intersections, HCM delay is reported for the worst movement at the controlled side-street approach.
 2) The General Plan update also includes widening Bernal Avenue to four lanes (including the Arroyo Del Valle Bridge). However, re-timing the signal is adequate to mitigate the project impact.
 3) The second WB right-turn lane is recommended in the *Bernal Commercial* study, but it is not included in the General Plan list of improvements.
 Source: Fehr & Peers, 2007

With the implementation of the mitigation measures:

- The project impact at the Bernal Avenue/Nevada Street intersection is reduced to a **less-than-significant** level. Constructing a traffic signal results in LOS A.
- The project impact at the Bernal Avenue/Vineyard Avenue intersection is reduced to a **less-than-significant** level. Under EPAP Plus Project conditions, the LOS at this intersection is just over the LOS D/E threshold in the PM peak hour. Re-timing the traffic signal effectively mitigates impact back to LOS D. Additional mitigation is detailed in the General Plan update, including widening Bernal Avenue to four lanes (including the Arroyo Del Valle Bridge). While these additional measures would provide further operating benefits, they were not analyzed in this study.
- The project impact at the Stanley Boulevard/Valley Avenue/Bernal Avenue intersection is reduced to a **less-than-significant** level. This intersection operates at an unacceptable level (LOS F) under both EPAP and EPAP Plus Project conditions. The recommended improvements result in acceptable operating conditions in the AM (LOS D), and reduce the delay enough in the PM that the impact is effectively mitigated.

Table 7 shows the project's share of total traffic at each of the study intersections. Table 7 will help facilitate fair share calculations for the mitigation measures discussed above.

TABLE 7 PROJECT-ONLY TRIPS AS A PERCENTAGE OF TOTAL INTERSECTION VOLUME					
Intersection	Traffic Control	Peak Hour	Total Volume	Project-Only	
				Trips	Percent
1. Bernal Ave/ Nevada St	SSSC ¹	AM	1,412	86	6 %
		PM	2,222	254	11%
2. Bernal Ave/ Vineyard Ave	Signal	AM	1,795	40	2%
		PM	2,813	97	3%
3. Bernal Ave/Vineyard Ave/ Tawny Dr	Signal	AM	1,394	28	2%
		PM	2,366	64	3%
4. First St/ Ray St/ Vineyard Ave	Signal	AM	2,600	24	1%
		PM	3,331	76	2%
5. First St/ Stanley Blvd	Signal	AM	2,494	42	2%
		PM	2,792	115	4%
6. Stanley Blvd/ California Ave	Signal	AM	2,462	50	2%
		PM	2,807	138	5%
7. Stanley Blvd/ Valley Ave/Bernal Ave	Signal	AM	5,073	108	2%
		PM	6,837	310	5%

Notes:
 1) SSSC = side-street stop control
 Source: Fehr & Peers, 2007

Mr. Michael Tassano
August 30, 2007
Page 12 of 12



PARKING ANALYSIS

The proposed project provides 126 off-street parking spaces. The Municipal Code of the City of Pleasanton requires one off-street parking space for each 300 square feet of gross floor area for retail land use. Applying this rate to the 31,625 square foot Stanley Center project yields a total requirement of 106 parking spaces. Therefore, the proposed 126 spaces would exceed the City's parking requirement.

Please contact Mike Iswalt in our Walnut Creek office (Phone: 925-930-7100) if you have any questions regarding the information presented in this traffic study.

Sincerely,

FEHR & PEERS

Michael V. Iswalt
Transportation Engineer

Rob Rees, P.E.
Principal

WC06-2349F

Attachments:
Appendix A (Technical Appendix)
Appendix B (General Plan Intersection Improvements)

**Appendix A:
Technical
Calculations**

**Pleasanton Stanley Center Traffic Study
City of Pleasanton**

August 30, 2007

WC06-2349F



FEHR & PEERS
TRANSPORTATION CONSULTANTS

Lanes, Volumes, Timings
337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	0		0	175		0	175		200
Storage Lanes	1		1	0		0	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Right Turn on Red			Yes				Yes		Yes			Yes
Satd. Flow (RTOR)			83									496
Headway Factor	1.18	1.18	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		27			35			52			55	
Link Distance (ft)		1970			408			1401			1746	
Travel Time (s)		49.7			7.9			26.5			17.7	
Volume (vph)	110	0	75	0	0	0	164	388	0	0	1284	471
Confl. Peds. (#/hr)							12		12			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10									
Adj. Flow (vph)	122	0	83	0	0	0	182	409	0	0	1404	523
Lane Group Flow (vph)	61	61	83	0	0	0	182	409	0	0	1404	523
Turn Type	custom		Perm	Perm			Prot			Prot		Perm
Protected Phases	2	2			1		7	4		3	8	
Permitted Phases	2		2	1								
Detector Phases	2	2	2	1	1		7	4		3	8	8
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	21.1	21.1	21.1	9.1	9.1		9.1	9.1		9.1	19.1	19.1
Total Split (s)	21.1	21.1	21.1	9.1	9.1	0.0	13.0	40.7	0.0	9.1	36.8	36.8
Total Split (%)	26.4%	26.4%	26.4%	11.4%	11.4%	0.0%	16.3%	50.9%	0.0%	11.4%	46.0%	46.0%
Maximum Green (s)	17.0	17.0	17.0	5.0	5.0		8.9	36.8		5.0	32.7	32.7
Yellow Time (s)	3.1	3.1	3.1	3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	C-Max		None	None	None
Walk Time (s)	5.0	5.0	5.0								5.0	5.0
Flash Dont Walk (s)	12.0	12.0	12.0								10.0	10.0
Pedestrian Calls (#/hr)	20	20	20								20	20
Act Effct Green (s)	12.1	12.1	12.1				10.7	64.4			50.1	50.1

8/30/2007

Fehr & Peers Associates, Inc.

Lanes, Volumes, Timings
 337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
 Existing + Approved (AM Peak)

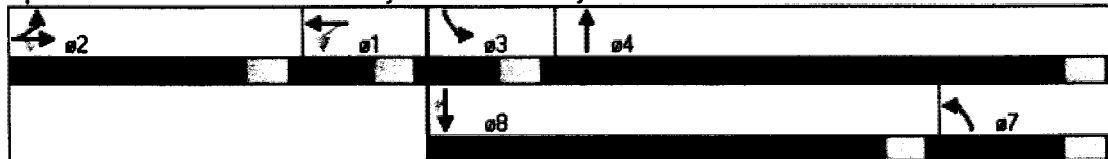


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated v/c Ratio	0.15	0.15	0.15				0.13	0.80			0.63	0.63
v/c Ratio	0.27	0.27	0.30				0.74	0.14			0.61	0.43
Control Delay	29.1	29.1	8.0				54.3	2.9			14.1	5.4
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	29.1	29.1	8.0				54.3	2.9			14.1	5.4
LOS	C	C	A				D	A			B	A
Approach Delay		20.6						18.7			11.7	
Approach LOS		C						B			B	

Intersection Summary

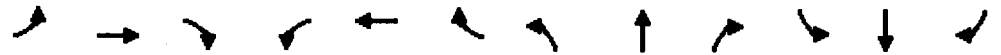
Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 4:NBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.74
 Intersection Signal Delay: 13.9
 Intersection LOS: B
 Intersection Capacity Utilization 61.2%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 337: Stanley Blvd & Driveway



Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕		↖	↕	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		175	0		100	100		100	125		250
Storage Lanes	1		1	1		1	1		1	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor		0.99			1.00			1.00				0.99
Frt		0.919			0.958			0.990				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	1756	0	1554	1562	0	1829	3610	0	1829	3657	1636
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1829	1756	0	1554	1562	0	1829	3610	0	1829	3657	1581
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		67			22			9				247
Headway Factor	0.96	0.96	0.96	1.16	1.16	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		21			30			52				55
Link Distance (ft)		268			1867			245				1401
Travel Time (s)		8.7			42.2			6.4				25.8
Volume (vph)	36	88	103	169	254	97	61	450	32	53	1002	231
Confl. Peds. (#/hr)			1			1			9			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)				10	10	10						
Adj. Flow (vph)	40	96	114	188	262	108	68	500	38	59	1113	259
Lane Group Flow (vph)	40	210	0	188	390	0	68	536	0	59	1113	259
Turn Type	Split			Split			Prot			Prot		Perm
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	7		8	8		5	2		1	6	6
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	23.1	23.1		23.1	23.1		9.1	20.1		9.1	16.1	16.1
Total Split (s)	23.8	23.8	0.0	24.1	24.1	0.0	19.9	26.1	0.0	11.0	17.2	17.2
Total Split (%)	28.0%	28.0%	0.0%	28.4%	28.4%	0.0%	23.4%	30.7%	0.0%	12.9%	20.2%	20.2%
Maximum Green (s)	19.7	19.7		20.0	20.0		15.8	22.0		6.9	13.1	13.1
Yellow Time (s)	3.1	3.1		3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max		None	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	5.0
Flash Dont Walk (s)	14.0	14.0		14.0	14.0			11.0			7.0	7.0
Pedestrian Calls (#/hr)	20	20		20	20			20			20	20
Act Effct Green (s)	14.3	14.3		21.1	21.1		14.8	31.8		7.7	24.6	24.6

Lanes, Volumes, Timings
338: Ray St & First

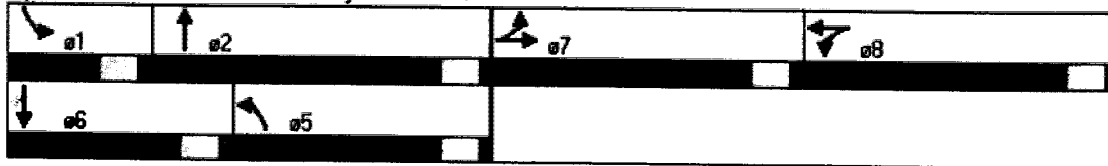
Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.17	0.17		0.25	0.25		0.17	0.37		0.09	0.29	0.29
v/c Ratio	0.13	0.60		0.49	0.97		0.21	0.40		0.36	1.05	0.41
Control Delay	27.8	23.7		32.4	69.1		24.7	18.4		42.0	76.6	7.4
Queue Delay	0.0	2.0		0.1	0.0		0.0	0.0		0.0	15.8	0.0
Total Delay	27.8	25.7		32.5	69.1		24.7	18.4		42.0	92.4	7.4
LOS	C	C		C	E		C	B		D	F	A
Approach Delay		26.1			57.2			19.1			74.9	
Approach LOS		C			E			B			E	

Intersection Summary

Area Type: Other
 Cycle Length: 85
 Actuated Cycle Length: 85
 Offset: 66 (76%), Referenced to phase 2:NBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 55.3
 Intersection LOS: E
 Intersection Capacity Utilization 68.7%
 ICU Level of Service C
 Analysis Period (min): 15

Splits and Phases: 338: Ray St & First



Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↔↔	↑↑	↗	↖	↑↑	↖	↔↔	↑↑	↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	200		400	200		200	250		0
Storage Lanes	2		1	2		1	1		1	2		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	0.91	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor			0.97		0.99				0.98			
Frt			0.850		0.960	0.850			0.850			0.965
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3547	3657	1636	3547	3332	1489	1829	3657	1636	3547	3529	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3547	3657	1588	3547	3332	1489	1829	3657	1599	3547	3529	0
Right Turn on Red			Yes		Yes		Yes		Yes			Yes
Satd. Flow (RTOR)			44		56	300		76			34	
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		52			55			30			30	
Link Distance (ft)		1325			714			565			1272	
Travel Time (s)		25.4			46.8			9.5			14.1	
Volume (vph)	196	278	40	196	1408	1490	115	580	79	227	288	84
Confl. Peds. (#/hr)			12			36			36			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	218	309	44	220	1564	1656	128	622	88	252	320	96
Lane Group Flow (vph)	218	309	44	220	2132	1088	128	622	88	252	416	96
Turn Type	Prot		Perm	Prot		Prot	Prot		Free	Prot		
Protected Phases	1	6		5	2	2	3	8		7	4	
Permitted Phases			6						Free			
Detector Phases	1	6		5	2	2	3	8		7	4	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	29.1	29.1	9.1	11.5	11.5	9.1	10.4		10.4	33.4	
Total Split (s)	12.1	53.3	53.3	16.3	57.5	57.5	11.0	30.5	0.0	14.9	34.4	0.0
Total Split (%)	10.5%	46.3%	46.3%	14.2%	50.0%	50.0%	9.6%	26.5%	0.0%	13.0%	29.9%	0.0%
Maximum Green (s)	6.0	47.2	47.2	12.2	51.4	51.4	6.9	25.1		9.5	29.0	
Yellow Time (s)	5.1	5.1	5.1	3.1	5.1	5.1	3.1	4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	C-Max	C-Max	None	None	None	None	None		None	None	
Walk Time (s)		5.0	5.0								5.0	
Flash Dont Walk (s)		18.0	18.0								23.0	
Pedestrian Calls (#/hr)		20	20								20	
Act Effct Green (s)	9.1	53.3	53.3	12.4	56.6	56.6	8.0	25.4	115.0	11.9	29.3	
Actuated g/C Ratio	0.08	0.46	0.46	0.11	0.49	0.49	0.07	0.22	1.00	0.10	0.25	

Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

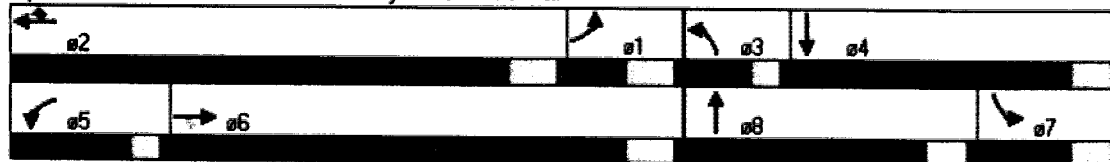
Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.78	0.18	0.06	0.58	1.28	1.23	1.01	0.77	0.06	0.69	0.45	
Control Delay	71.1	19.1	5.7	53.8	157.4	135.1	135.9	46.8	0.1	60.1	34.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	71.1	19.1	5.7	53.8	157.4	135.1	135.9	46.8	0.1	60.1	34.0	
LOS	E	B	A	D	F	F	F	D	A	E	C	
Approach Delay		37.9			143.7			55.5				43.9
Approach LOS		D			F			E				D

Intersection Summary

Area Type: Other
 Cycle Length: 115
 Actuated Cycle Length: 115
 Offset: 0 (0%), Referenced to phase 6:EBT, Start of Yellow
 Natural Cycle: 115
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.28
 Intersection Signal Delay: 107.3
 Intersection Capacity Utilization 96.5%
 Analysis Period (min) 15
 Intersection LOS: F
 ICU Level of Service F

Splits and Phases: 371: Stanley Blvd & Bernal



Lanes, Volumes, Timings
378: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)

Lane Group	EBE	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SBL	SBT	SBP
Lane Configurations	↘	↕			↕	↗	↘	↗		↘	↗	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		50	100		0	50		0
Storage Lanes	1		1	0		1	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00							0.99
Frt		0.958				0.850		0.991				0.965
Flt Protected	0.950	0.992			0.973		0.950			0.950		
Satd. Flow (prot)	1477	1470	0	0	1592	1391	1829	3624	0	1829	1845	0
Flt Permitted	0.950	0.992			0.973		0.153			0.571		
Satd. Flow (perm)	1477	1470	0	0	1588	1391	294	3624	0	1099	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			13			84			10			21
Headway Factor	1.18	1.18	0.98	0.98	1.18	1.18	0.98	0.98	0.98	0.98	0.98	0.98
Link Speed (mph)		30			36			30				30
Link Distance (ft)		1968			1297			2628				764
Travel Time (s)		44.7			15.8			57.5				17.1
Volume (vph)	46	23	12	192	151	151	44	218	14	26	378	117
Confl. Peds. (#/hr)			3	3			4					4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10	10	10	10						
Adj. Flow (vph)	51	26	13	213	168	168	49	239	16	29	421	129
Lane Group Flow (vph)	44	46	0	0	381	168	49	255	0	29	547	0
Turn Type	Split			Split		Perm	Perm			Perm		
Protected Phases	3	3		4	4			2				6
Permitted Phases						4	2			6		
Detector Phases	3	3		4	4	4	2	2		6		6
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	10.0	10.0		10.0		10.0
Minimum Split (s)	22.1	22.1		22.1	22.1	22.1	22.1	22.1		22.1		22.1
Total Split (s)	22.1	22.1	0.0	26.0	26.0	26.0	31.9	31.9	0.0	31.9	31.9	0.0
Total Split (%)	27.6%	27.6%	0.0%	32.5%	32.5%	32.5%	39.9%	39.9%	0.0%	39.9%	39.9%	0.0%
Maximum Green (s)	18.0	18.0		21.9	21.9	21.9	27.8	27.8		27.8	27.8	
Yellow Time (s)	3.1	3.1		3.1	3.1	3.1	3.1	3.1		3.1	3.1	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	None		None	None	None	Min	Min		Min	Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	20	20		20	20	20	20	20		20	20	
Act Effect Green (s)	10.9	10.9			19.3	19.3	22.5	22.5		22.5	22.5	

Lanes, Volumes, Timings
378: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)

Lane Group	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SBL	SBT	SBP
Actuated g/C Ratio	0.18	0.18		0.34	0.34	0.40	0.40			0.40	0.40	
v/c Ratio	0.17	0.17		0.71	0.32	0.42	0.18			0.07	0.74	
Control Delay	25.4	20.1		28.0	12.3	27.2	13.7			15.8	21.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0			0.0	0.0	
Total Delay	25.4	20.1		28.0	12.3	27.2	13.7			15.8	21.2	
LOS	C	C		C	B	C	B			B	C	
Approach Delay		22.7		21.8			15.9				20.9	
Approach LOS		C		C			B				C	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 56.8

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 20.3

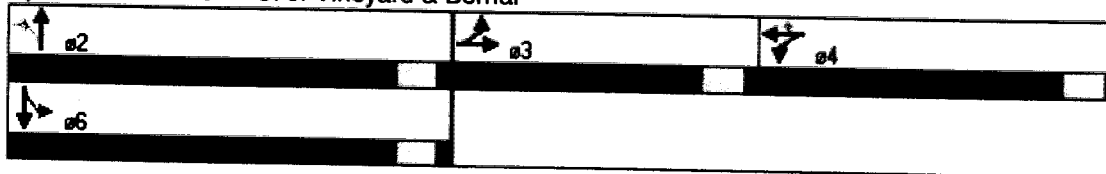
Intersection LOS: C

Intersection Capacity Utilization 68.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 378: Vineyard & Bernal

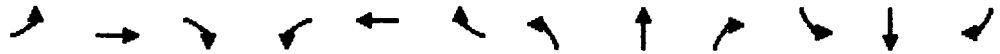




Lane Group	EBL	EBT	EBF	WBL	WBT	WBF	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↙	↘		↙	↘	↗	↖	↗	↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	75		0	75		0	75		0
Storage Lanes	0		0	1		0	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.97				0.97	0.98		
Frt					0.850				0.850			
Flt Protected				0.950					0.950			
Satd. Flow (prot)	0	1925	0	1829	1594	0	1925	1925	1636	1829	1925	0
Flt Permitted				0.950					0.950			
Satd. Flow (perm)	0	1925	0	1829	1594	0	1925	1925	1584	1815	1925	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					650				146			
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35			40			30			30	
Link Distance (ft)		205			1042			764			504	
Travel Time (s)		4.0			17.8			17.1			4.4	
Volume (vph)	0	0	0	400	0	611	0	303	131	185	125	0
Confl. Peds. (#/hr)						2			4	4		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	444	0	679	0	337	146	206	139	0
Lane Group Flow (vph)	0	0	0	444	679	0	0	337	146	206	139	0
Turn Type	Split			Split			Split		custom	Split		
Protected Phases	7	7		8	8		2	2	8	8	8	
Permitted Phases									28			
Detector Phases	7	7		8	8		2	2	8	8	8	
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.1	9.1		14.1	14.1		15.0	15.0	14.1	10.0	10.0	
Total Split (s)	9.1	9.1	0.0	22.0	22.0	0.0	16.0	16.0	22.0	12.9	12.9	0.0
Total Split (%)	15.2%	15.2%	0.0%	36.7%	36.7%	0.0%	26.7%	26.7%	36.7%	21.5%	21.5%	0.0%
Maximum Green (s)	5.0	5.0		17.9	17.9		11.0	11.0	17.9	7.9	7.9	
Yellow Time (s)	3.1	3.1		3.1	3.1		4.0	4.0	3.1	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lead	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Recall Mode	None	None		None	None		Min	Min	None	Min	Min	
Walk Time (s)				5.0	5.0		5.0	5.0	5.0			
Flash Dont Walk (s)				5.0	5.0		5.0	5.0	5.0			
Pedestrian Calls (#/hr)				20	20		20	20	20			
Act Effect Green (s)				16.7	16.7				12.5	29.3	9.6	9.6
Actuated g/C Ratio				0.35	0.35				0.26	0.61	0.20	0.20

Lanes, Volumes, Timings
443: Bernal &

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)



Lane Group	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SEL	SBT	SBP
v/c Ratio				0.70	0.69			0.67	0.14	0.56	0.36	
Control Delay				18.5	5.6			24.4	1.0	24.8	20.7	
Queue Delay				0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay				18.5	5.6			24.4	1.0	24.8	20.7	
LOS				B	A			C	A	C	C	
Approach Delay					10.7			17.3			23.1	
Approach LOS					B			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 46

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 14.5

Intersection Capacity Utilization 74.2%

Analysis Period (min): 15

Intersection LOS: B

ICU Level of Service D

Splits and Phases: 443: Bernal &



Lanes, Volumes, Timings
542: Stanley Blvd &

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↕	↗	↵	↕	↗	↵	↕	↗	↵	↕	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	125		100	100		0	50		0
Storage Lanes	1		1	1		1	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95				0.99	0.95		0.96	0.98	
Frt			0.850			0.850		0.854			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	3657	1636	1829	3657	1636	1554	1331	0	1829	1595	0
Flt Permitted	0.950			0.950			0.746			0.735		
Satd. Flow (perm)	1829	3657	1561	1829	3657	1636	1205	1331	0	1362	1595	0
Right Turn on Red			Yes			Yes		Yes			Yes	Yes
Satd. Flow (RTOR)			79			2		33			117	
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.16	1.18	0.96	0.96	0.96	0.96
Link Speed (mph)		52			55			35			35	
Link Distance (ft)		1746			1325			953			259	
Travel Time (s)		14.6			24.7			18.6			5.0	
Volume (vph)	3	531	71	34	1614	4	107	1	30	1	0	1
Confl. Peds. (#/hr)			12				12		36	36		12
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)							10	10	10			
Adj. Flow (vph)	3	590	79	38	1793	4	119	1	33	1	0	1
Lane Group Flow (vph)	3	590	79	38	1793	4	119	34	0	1	18	0
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2	2		6		
Detector Phases	7	4	4	3	8	8	2	2		6		6
Minimum Interval (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Minimum Split (s)	9.1	23.2	23.2	9.1	23.2	23.2	9.1	9.1		26.1		26.1
Total Split (s)	9.1	44.8	44.8	9.1	44.8	44.8	26.1	26.1	0.0	26.1		26.1
Total Split (%)	11.4%	56.0%	56.0%	11.4%	56.0%	56.0%	32.6%	32.6%	0.0%	32.6%		32.6%
Maximum Green (s)	5.0	39.6	39.6	5.0	39.6	39.6	22.0	22.0		22.0		22.0
Yellow Time (s)	3.1	4.2	4.2	3.1	4.2	4.2	3.1	3.1		3.1		3.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0		1.0
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5		1.5
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Recall Mode	None	None	None	None	C-Max	C-Max	None	None		None		None
Walk Time (s)		5.0	5.0		5.0	5.0				5.0		5.0
Flash Dont Walk (s)		13.0	13.0		13.0	13.0				17.0		17.0
Pedestrian Calls (#/hr)		20	20		20	20				20		20
Act Effect Green (s)	6.1	55.5	55.5	6.1	59.1	59.1	15.7	15.7		15.6		15.6

8/30/2007

Fehr & Peers Associates, Inc.

Lanes, Volumes, Timings
542: Stanley Blvd &

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)



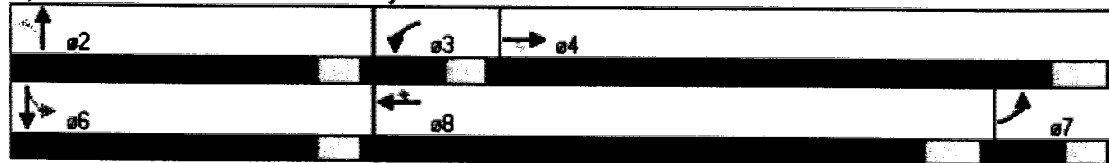
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.08	0.69	0.69	0.08	0.74	0.74	0.20	0.20		0.20	0.20	
v/c Ratio	0.02	0.23	0.07	0.27	0.66	0.00	0.50	0.12		0.00	0.04	
Control Delay	37.7	8.0	3.1	40.2	11.0	6.2	29.4	8.7		21.0	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.7	8.0	3.1	40.2	11.0	6.2	29.4	8.7		21.0	0.1	
LOS	D	A	A	D	B	A	C	A		C	A	
Approach Delay		7.5			11.6			24.6			1.2	
Approach LOS		A			B			C			A	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 8:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 11.3
 Intersection Capacity Utilization 64.4%
 Analysis Period (min): 15

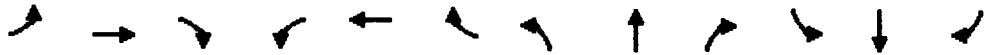
Intersection LOS: B
 ICU Level of Service C

Splits and Phases: 542: Stanley Blvd &



Lanes, Volumes, Timings
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEBT	SEBR
Lane Configurations		↑	↑		↑		↑	↑		↑	↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	50		0	200		0
Storage Lanes	0		1	0		0	1		0	1		1
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor												
Flt			0.850									0.850
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1634
Flt Permitted		0.950					0.950			0.950		
Satd. Flow (perm)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1634
Headway Factor	0.96	0.96	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35			35		30			30		30
Link Distance (ft)		1267			241		231			675		
Travel Time (s)		24.7			4.7		10.9			6.4		
Volume (vph)	17	0	12	0	0	0	50	819	0	22	308	98
Cont. Peds. (#/hr)	20						20					20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10		10									
Adj. Flow (vph)	19	0	13	0	0	0	56	910	0	24	342	109
Lane Group Flow (vph)	0	19	13	0	0	0	56	910	0	24	342	109
Sign Control		Stop			Stop			Free				Free

Area Type: Other
 Control Type: Unsignalized
 Intersection Capacity Utilization 39.3% ICU Level of Service A
 Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (AM Peak)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↕		↖	↕	↗
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	17	0	12	0	0	0	50	819	0	22	308	94
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	19	0	13	0	0	0	56	910	0	24	342	104
Pedestrians		20									20	
Lane Width (ft)		13.0									13.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		2									2	
Right turn flare (veh)			8									
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)								835			1270	
pX, platoon unblocked	0.96	0.96	0.96	0.96	0.96		0.96					
vC, conflicting volume	997	1432	362	1419	1541	475	471			910		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	997	1449	337	1435	1562	475	450			910		
tC, single (s)	7.5	6.5	6.8	7.5	6.5	6.8	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	100	98	100	100	100	95			97		
cm capacity (veh/h)	170	112	622	62	96	526	1045			744		
Summary	EBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR				
Volume Total	32	0	56	455	455	24	342	108				
Volume Left	19	0	56	0	0	24	0	0				
Volume Right	13	0	0	0	0	0	0	108				
cSH	290	1700	1045	1700	1700	744	1700	1700				
Volume to Capacity	0.11	0.00	0.05	0.27	0.27	0.03	0.20	0.06				
Queue Length 95th (ft)	9	0	4	0	0	3	0	0				
Control Delay (s)	21.4	0.0	8.6	0.0	0.0	10.0	0.0	0.0				
Lane LOS	C	A	A			B						
Approach Delay (s)	21.4	0.0	0.5			0.5						
Approach LOS	C	A										
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			39.3%		ICU Level of Service		A					
Analysis Period (min)	15											

Lanes, Volumes, Timings
337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



Lane Group	EBL	EBT	EBF	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↖		↕		↖	↗		↖	↗	↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	0		0	175		0	175		200
Storage Lanes	1		1	0		0	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232									181
Headway Factor	1.18	1.18	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		27			35			52				55
Link Distance (ft)		1970			406			1401				1748
Travel Time (s)		49.7			7.9			26.5				17.7
Volume (vph)	528	0	209	0	0	0	93	1002	0	0	682	168
Confl. Peds. (#/hr)						12			12			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10									
Adj. Flow (vph)	587	0	232	0	0	0	103	1113	0	0	758	181
Lane Group Flow (vph)	294	293	232	0	0	0	103	1113	0	0	758	181
Turn Type	custom		Perm	Perm			Prot			Prot		Perm
Protected Phases	2	2			1		7	4		3		8
Permitted Phases	2		2	1								
Detector Phases	2	2	2	1	1		7	4		3		8
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0		5.0
Minimum Split (s)	21.1	21.1	21.1	9.1	9.1		9.1	9.1		9.1	19.1	19.1
Total Split (s)	21.1	21.1	21.1	9.1	9.1	0.0	9.3	25.7	0.0	9.1	25.5	25.5
Total Split (%)	32.5%	32.5%	32.5%	14.0%	14.0%	0.0%	14.3%	39.5%	0.0%	14.0%	39.2%	39.2%
Maximum Green (s)	17.0	17.0	17.0	5.0	5.0		5.2	21.0		5.0	21.4	21.4
Yellow Time (s)	3.1	3.1	3.1	3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	C-Max		None	None	None
Walk Time (s)	5.0	5.0	5.0								5.0	5.0
Flash Dont Walk (s)	12.0	12.0	12.0								10.0	10.0
Pedestrian Calls (#/hr)	20	20	20								20	20
Act Effect Green (s)	16.6	16.6	16.6				8.5	42.4			32.8	32.8

Lanes, Volumes, Timings
337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Actuated g/C Ratio	0.26	0.26	0.26				0.13	0.65			0.50	0.50
v/c Ratio	0.78	0.78	0.44				0.43	0.47			0.41	0.20
Control Delay	33.6	33.6	5.6				33.9	6.7			12.0	2.4
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	33.6	33.6	5.6				33.9	6.7			12.0	2.4
LOS	C	C	A				C	A			B	A
Approach Delay		25.7						9.0			10.1	
Approach LOS		C						A			B	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 0 (0%), Referenced to phase 4:NBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 14.0

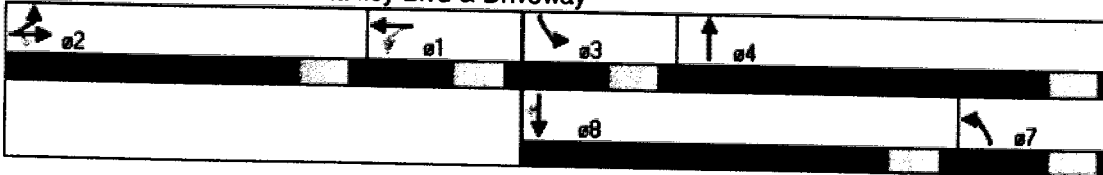
Intersection LOS: B

Intersection Capacity Utilization 63.2%

ICU Level of Service B

Analysis Period (min): 15

Splits and Phases: 337: Stanley Blvd & Driveway



Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↕	↗	↖	↕	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		175	0		100	100		100	125		250
Storage Lanes	1		1	1		1	1		1	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor		1.00			1.00			0.98				0.98
Frt		0.963			0.947			0.981				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	1847	0	1554	1542	0	1829	3564	0	1829	3657	1636
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1829	1847	0	1554	1542	0	1829	3564	0	1829	3657	1571
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			20			15				86
Headway Factor	0.96	0.96	0.96	1.16	1.16	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		21			30			52				55
Link Distance (ft)		268			1857			248				1401
Travel Time (s)		8.7			42.2			6.4				25.8
Volume (vph)	242	358	117	122	126	69	53	1076	153	161	703	71
Confl. Peds. (#/hr)			1			1			9			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)				10	10	10						
Adj. Flow (vph)	269	398	130	136	140	77	59	1196	170	179	781	86
Lane Group Flow (vph)	269	526	0	136	217	0	59	1366	0	179	781	86
Turn Type	Split			Split			Prot			Prot		Perm
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	7		8	8		5	2		1	6	6
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	23.1	23.1		23.1	23.1		9.1	20.1		9.1	16.1	16.1
Total Split (s)	35.0	35.0	0.0	23.1	23.1	0.0	12.3	48.9	0.0	15.0	49.6	49.6
Total Split (%)	29.2%	29.2%	0.0%	19.3%	19.3%	0.0%	10.3%	39.1%	0.0%	12.5%	41.3%	41.3%
Maximum Green (s)	30.9	30.9		19.0	19.0		6.2	42.6		10.9	45.5	45.5
Yellow Time (s)	3.1	3.1		3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max		None	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	5.0
Flash Dont Walk (s)	14.0	14.0		14.0	14.0			11.0			7.0	7.0
Pedestrian Calls (#/hr)	20	20		20	20			20			20	20
Act Effct Green (s)	32.0	32.0		18.8	18.8		8.8	45.2		12.0	50.3	50.3

Lanes, Volumes, Timings
338: Ray St & First

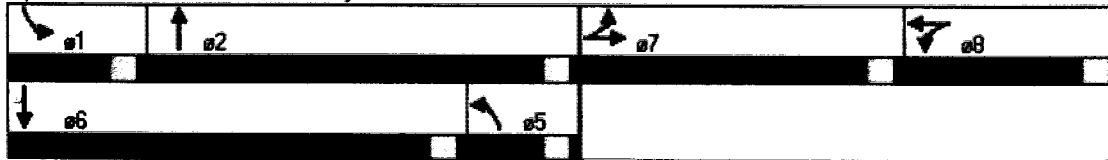
Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)

Lane Group	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SBL	SBT	SBP
Actuated g/C Ratio	0.27	0.27		0.16	0.16		0.07	0.36		0.10	0.42	0.42
v/c Ratio	0.55	1.05		0.56	0.84		0.44	1.01		0.98	0.51	0.12
Control Delay	42.9	95.2		54.2	65.0		62.2	64.5		115.4	28.2	5.3
Queue Delay	0.0	35.1		0.0	0.0		0.0	28.7		0.0	0.4	0.0
Total Delay	42.9	130.3		54.2	65.0		62.2	93.2		115.4	28.6	5.3
LOS	D	F		D	E		E	F		F	C	A
Approach Delay		100.7			60.8			91.9			41.6	
Approach LOS		F			E			F			D	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 76.3
 Intersection LOS: E
 Intersection Capacity Utilization 89.6%
 ICU Level of Service E
 Analysis Period (min): 15

Splits and Phases: 338: Ray St & First



Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SEB
Lane Configurations	↔	↕	↗	↔	↕	↗	↔	↕	↗	↔	↕	↗
Ideal Flow (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	200		400	200		200	250		0
Storage Lanes	2		1	2		1	1		1	2		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	0.91	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor			0.97		1.00				0.99			
Frt			0.850		0.990	0.850			0.850			0.983
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3547	3657	1636	3547	3459	1489	1829	3657	1636	3547	3595	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3547	3657	1588	3547	3459	1489	1829	3657	1599	3547	3595	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			58		7	420			140			13
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		52			55			30			30	
Link Distance (ft)		1325			714			604			1272	
Travel Time (s)		25.4			46.8			9.5			14.1	
Volume (vph)	115	1433	74	195	581	421	93	409	736	1197	1133	148
Confl. Peds. (#/hr)			12			36			36			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	1592	82	217	646	468	103	454	818	1330	1259	156
Lane Group Flow (vph)	128	1592	82	217	694	420	103	454	818	1330	1415	156
Turn Type	Prot		Perm	Prot		Prot	Prot		Free	Prot		
Protected Phases	1	6		5	2	2	3	5		7	4	
Permitted Phases			6						Free			
Detector Phases	1	6	6	5	2	2	3	5		7	4	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	29.1	29.1	9.1	11.5	11.5	9.1	10.4		10.4	33.4	
Total Split (s)	11.4	50.9	50.9	9.1	48.6	48.6	9.1	15.0	0.0	40.0	45.9	0.0
Total Split (%)	9.9%	44.3%	44.3%	7.9%	42.3%	42.3%	7.9%	13.0%	0.0%	34.8%	39.9%	0.0%
Maximum Green (s)	5.3	44.8	44.8	5.0	42.5	42.5	5.0	9.6		34.6	40.5	
Yellow Time (s)	5.1	5.1	5.1	3.1	5.1	5.1	3.1	4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	C-Max	C-Max	None	None	None	None	None		None	None	
Walk Time (s)		5.0	5.0									5.0
Flash Dont Walk (s)		18.0	18.0									23.0
Pedestrian Calls (#/hr)		20	20									20
Act Effct Green (s)	24.1	47.9	47.9	6.1	29.9	29.9	6.1	12.0	115.0	37.0	42.9	
Actuated g/C Ratio	0.21	0.42	0.42	0.05	0.26	0.26	0.05	0.10	1.00	0.32	0.37	

Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



Lane Group	EBL	EBT	EBF	WBL	WBT	WBF	NBL	NBT	NBF	SBL	SBT	SBF
v/c Ratio	0.17	1.05	0.12	1.15	0.77	0.00	1.06	1.19	0.51	1.17	1.05	
Control Delay	39.9	69.3	8.5	161.4	39.7	5.1	161.4	152.7	1.2	120.4	73.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	39.9	69.3	8.5	161.4	39.7	5.1	161.4	152.7	1.2	120.4	73.7	
LOS	D	E	A	F	D	A	F	F	A	F	E	
Approach Delay		64.4			48.6			63.2			96.3	
Approach LOS		E			D			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 0 (0%), Referenced to phase 6:EBT, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 73.4

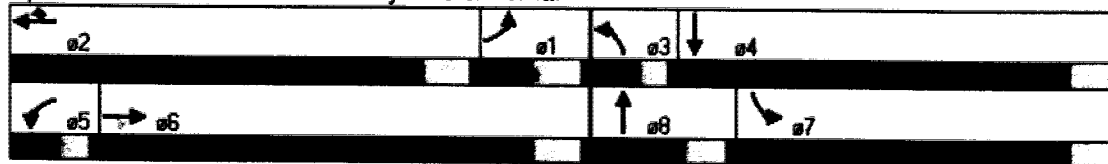
Intersection LOS: E

Intersection Capacity Utilization 105.4%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 371: Stanley Blvd & Bernal



Lanes, Volumes, Timings
378: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEL	SET	SEB
Lane Configurations	↙	↕			↕	↗	↙	↕			↙	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		50	100		0	50		0
Storage Lanes	1		1	0		1	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00		1.00				0.99	
Frt		0.938				0.850		0.983			0.954	
Flt Protected	0.950				0.982		0.950			0.950		
Satd. Flow (prot)	1477	1448	0	0	1607	1391	1829	3595	0	1829	1819	0
Flt Permitted	0.950				0.982		0.362			0.107		
Satd. Flow (perm)	1477	1448	0	0	1605	1391	694	3595	0	206	1819	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36				105		20			34	
Headway Factor	1.18	1.18	0.96	0.96	1.18	1.18	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		30			36		30		30		30	
Link Distance (ft)		1968			1297		2526		764			
Travel Time (s)		44.7			15.8		57.5		17.1			
Volume (vph)	228	147	104	31	53	100	48	971	121	102	274	121
Conf. Peds. (#/hr)			3	3			4					4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10	10	10	10						
Adj. Flow (vph)	254	163	116	34	59	111	53	1079	134	113	304	133
Lane Group Flow (vph)	254	279	0	0	93	111	53	1213	0	113	440	0
Turn Type	Spill			Spill		Perm	Perm			Perm		
Protected Phases	3	3		4	4			2			6	
Permitted Phases						4	2			6		6
Detector Phases	3	3		4	4	4	2	2		6	6	
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	22.1	22.1		22.1	22.1	22.1	22.1	22.1		22.1	22.1	
Total Split (s)	22.1	22.1	0.0	22.1	22.1	22.1	45.8	45.8	0.0	45.8	45.8	0.0
Total Split (%)	24.6%	24.6%	0.0%	24.6%	24.6%	24.6%	50.9%	50.9%	0.0%	50.9%	50.9%	0.0%
Maximum Green (s)	18.0	18.0		18.0	18.0	18.0	41.7	41.7		41.7	41.7	
Yellow Time (s)	3.1	3.1		3.1	3.1	3.1	3.1	3.1		3.1	3.1	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag				Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	None		None	None	None	C-Max	C-Max		Min	Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	20	20		20	20	20	20	20		20	20	
Act Effct Green (s)	18.3	18.3			12.5	12.5	50.2	50.2		50.2	50.2	

Lanes, Volumes, Timings
378: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)

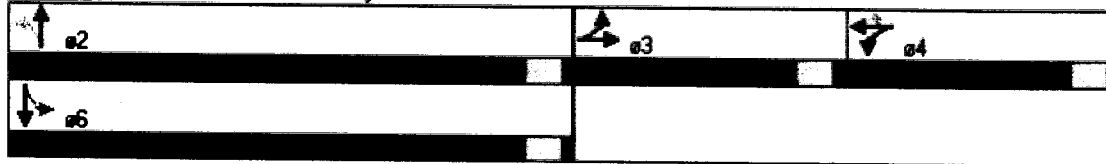
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated v/c Ratio	0.20	0.20		0.14	0.14	0.56	0.56	0.56	0.56	0.98	0.43	
v/c Ratio	0.85	0.86		0.42	0.39	0.14	0.60	0.60	0.60	0.98	0.43	
Control Delay	55.8	52.0		36.1	9.8	12.7	15.6	15.6	15.6	108.5	13.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	55.8	52.0		36.1	9.8	12.7	15.6	15.6	15.6	108.5	13.3	
LOS	E	D		D	A	B	B	B	B	F	B	
Approach Delay		53.8			21.6			15.5			32.7	
Approach LOS		D			C			B			C	

Intersection Summary:

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2-NBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.98
 Intersection Signal Delay: 27.7
 Intersection Capacity Utilization 70.3%
 Analysis Period (min) 15

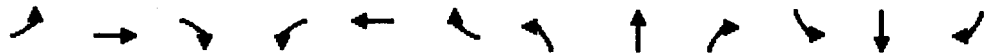
Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 378: Vineyard & Bernal



Lanes, Volumes, Timings
443: Vineyard & Bernal

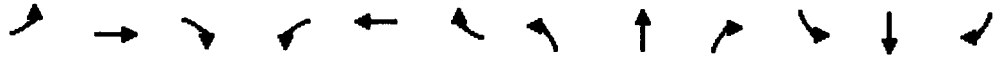
Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Lane Configurations		↔		↙	↘		↙	↘	↗	↖	↗	↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	75		0	75		0	75		0
Storage Lanes	0		0	1		0	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.97				0.96	0.99		
Frt				0.850				0.850				
Flt Protected				0.950					0.950			
Satd. Flow (prot)	0	1925	0	1829	1586	0	1925	1925	1636	1829	1925	0
Flt Permitted				0.950					0.950			
Satd. Flow (perm)	0	1925	0	1829	1586	0	1925	1925	1568	1809	1925	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					728				193			
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35			40			30			30	
Link Distance (ft)		205			1042			764			604	
Travel Time (s)		4.0			17.8			17.1			4.4	
Volume (vph)	0	0	0	115	0	319	0	464	762	680	376	0
Confl. Peds. (#/hr)						2			4	4		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	128	0	354	0	516	847	756	418	0
Lane Group Flow (vph)	0	0	0	128	354	0	0	516	847	756	418	0
Turn Type	Split			Split			Split	custom		Split		
Protected Phases	7	7		8	8		2	2	8	6	6	
Permitted Phases									2	8	6	6
Detector Phases	7	7		8	8		2	2	8	6	6	
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.1	9.1		14.1	14.1		15.0	15.0	14.1	10.0	10.0	
Total Split (s)	9.1	9.1	0.0	25.0	25.0	0.0	30.0	30.0	25.0	45.9	45.9	0.0
Total Split (%)	8.3%	8.3%	0.0%	22.7%	22.7%	0.0%	27.3%	27.3%	22.7%	41.7%	41.7%	0.0%
Maximum Green (s)	5.0	5.0		20.9	20.9		25.0	25.0	20.9	40.9	40.9	
Yellow Time (s)	3.1	3.1		3.1	3.1		4.0	4.0	3.1	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lead	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Recall Mode	None	None		None	None		Min	Min	None	C-Max	C-Max	
Walk Time (s)				5.0	5.0		5.0	5.0	5.0			
Flash Dont Walk (s)				5.0	5.0		5.0	5.0	5.0			
Pedestrian Calls (#/hr)				20	20		20	20	20			
Act Effect Green (s)				22.0	22.0		27.0	48.0	52.0	52.0		
Actuated g/C Ratio				0.20	0.20		0.25	0.45	0.47	0.47		

Lanes, Volumes, Timings
443: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



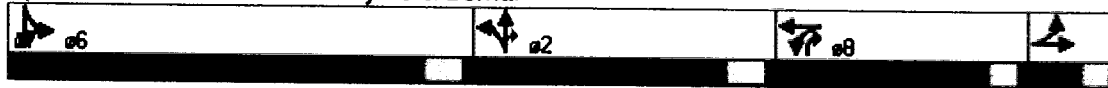
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio				0.35	0.39			1.09	1.03	0.87	0.48	
Control Delay				41.1	1.3			108.2	64.1	39.0	21.6	
Queue Delay				0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay				41.1	1.3			108.2	64.1	39.0	21.6	
LOS				D	A			F	E	D	C	
Approach Delay					11.9			80.8			32.8	
Approach LOS					B			F			C	

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Yellow
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.09
 Intersection Signal Delay: 51.1
 Intersection Capacity Utilization 92.1%
 Analysis Period (min) 15

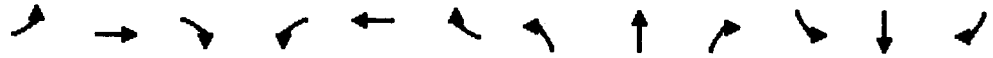
Intersection LOS: D
 ICU Level of Service F

Splits and Phases: 443: Vineyard & Bernal



Lanes, Volumes, Timings
542: Stanley Blvd & California

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



Lane Group	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SEB	SEB	SEB
Lane Configurations	↖	↕	↗	↖	↕	↗	↖	↕	↗	↖	↕	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	125		100	100		0	50		0
Storage Lanes	1		1	1		1	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95				0.95	0.95		0.97	0.99	
Frt			0.850			0.850		0.853			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	3657	1636	1829	3657	1636	1554	1329		0	1829	1758
Flt Permitted	0.950			0.950			0.755			0.662		
Satd. Flow (perm)	1829	3657	1561	1829	3657	1636	1219	1329		0	1232	1758
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64			34			110			2
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.18	1.18	0.96	0.96	0.96	0.96
Link Speed (mph)		52			55			35			35	
Link Distance (ft)		1746			1326			953			259	
Travel Time (s)		14.6			24.7			18.6			5.0	
Volume (vph)	3	1597	81	15	756	31	76	3	99	5	2	2
Confl. Peds. (#/hr)			12				12		36	36		12
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)							10	10	10			
Adj. Flow (vph)	3	1774	90	17	840	34	84	2	110	6	2	2
Lane Group Flow (vph)	3	1774	90	17	840	34	84	112	0	6	4	0
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			6	2	2		6		
Detector Phases	7	4	4	3	8	8	2	2		6	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.1	23.2	23.2	9.1	23.2	23.2	9.1	9.1		26.1	26.1	
Total Split (s)	9.1	44.8	44.8	9.1	44.8	44.8	26.1	26.1	0.0	26.1	26.1	0.0
Total Split (%)	11.4%	56.0%	56.0%	11.4%	56.0%	56.0%	32.6%	32.6%	0.0%	32.6%	32.6%	0.0%
Maximum Green (s)	5.0	39.6	39.6	5.0	39.6	39.6	22.0	22.0		22.0	22.0	
Yellow Time (s)	3.1	4.2	4.2	3.1	4.2	4.2	3.1	3.1		3.1	3.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	None	None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		5.0	5.0		5.0	5.0				5.0	5.0	
Flash Dont Walk (s)		13.0	13.0		13.0	13.0				17.0	17.0	
Pedestrian Calls (#/hr)		20	20		20	20				20	20	
Act Effct Green (s)	6.1	59.9	59.9	6.1	59.9	59.9	14.8	14.8		14.8	14.8	

Lanes, Volumes, Timings
542: Stanley Blvd & California

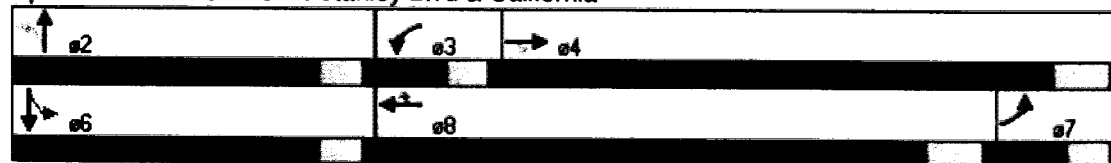
Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.06	0.75	0.75	0.06	0.75	0.75	0.18	0.18		0.18	0.18	
v/c Ratio	0.02	0.65	0.08	0.12	0.31	0.03	0.37	0.33		0.03	0.01	
Control Delay	34.7	10.5	3.3	36.7	6.1	3.2	27.5	6.4		21.8	17.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	34.7	10.5	3.3	36.7	6.1	3.2	27.5	6.4		21.8	17.5	
LOS	C	B	A	D	A	A	C	A		C	B	
Approach Delay		10.2			6.6			15.5			20.1	
Approach LOS		B			A			B			C	

Intersection Summary
 Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 8:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.65
 Intersection Signal Delay: 9.5
 Intersection LOS: A
 Intersection Capacity Utilization 63.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 542: Stanley Blvd & California



Lanes, Volumes, Timings
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Lane Configurations		↕	↗		↕		↗	↕	↗		↕	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	50		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.850									0.850
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1829
Flt Permitted		0.950					0.950			0.950		
Satd. Flow (perm)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1829
Headway Factor	0.96	0.96	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1267			241			231			665	
Travel Time (s)		24.7			4.7			10.9			6.4	
Volume (vph)	40	0	57	0	0	0	9	810	0	74	950	28
Confl. Peds. (#/hr)	20						20					20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10		10									
Adj. Flow (vph)	44	0	63	0	0	0	10	900	0	82	1056	31
Lane Group Flow (vph)	0	44	63	0	0	0	10	900	0	82	1056	31
Sign Control		Stop			Stop			Free			Free	

Area Type: Other
 Control Type: Unsignalized
 Intersection Capacity Utilization 66.7% ICU Level of Service C
 Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved (PM Peak)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↗		↔		↖	↕		↖	↕	↗
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	40	0	57	0	0	0	9	810	0	74	950	28
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	44	0	63	0	0	0	10	900	0	82	1056	31
Pedestrians		20									20	
Lane Width (ft)		13.0									13.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		2									2	
Right turn flare (veh)			8									
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)								835			1269	
pX, platoon unblocked	0.64	0.64	0.64	0.64	0.64		0.64					
vC, conflicting volume	1730	2160	1076	2172	2191	470	1107			900		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2149	2827	1119	2845	2876	470	1168			900		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	49	100	100	100	97			89		
cM capacity (veh/h)	15	9	125	2	9	530	370			751		

Direction Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	108	0	10	600	300	82	1056	31
Volume Left	44	0	10	0	0	82	0	0
Volume Right	63	0	0	0	0	0	0	31
cSH	33	1700	370	1700	1700	751	1700	1700
Volume to Capacity	3.29	0.00	0.03	0.35	0.18	0.11	0.62	0.02
Queue Length 95th (ft)	Err	0	2	0	0	9	0	0
Control Delay (s)	Err	0.0	15.0	0.0	0.0	10.4	0.0	0.0
Lane LOS	F	A	B			B		
Approach Delay (s)	Err	0.0	0.2			0.7		
Approach LOS	F	A						

Intersection Summary		
Average Delay		493.3
Intersection Capacity Utilization	66.7%	ICU Level of Service C
Analysis Period (min)		15

Lanes, Volumes, Timings
337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)



Line Group	EB1	EB2	EB3	WB1	WB2	WB3	NB1	NB2	NB3	SB1	SB2	SB3
Lane Configurations	↘	↙	↙	↘	↘	↘	↙	↙	↙	↘	↘	↘
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	0		0	175		0	175		200
Storage Lanes	1		1	0		0	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850									0.850
Frt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Frt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Right Turn on Red			Yes				Yes		Yes			Yes
Satd. Flow (RTOR)			232									194
Headway Factor	1.18	1.18	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		27			35			52			55	
Link Distance (ft)		1970			406			1401			1746	
Travel Time (s)		49.7			7.9			26.5			17.7	
Volume (vph)	558	0	209	0	0	0	93	1046	0	0	714	179
Confl. Peds. (#/hr)							12		12			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10									
Adj. Flow (vph)	618	0	232	0	0	0	103	1161	0	0	793	194
Lane Group Flow (vph)	309	309	232	0	0	0	103	1161	0	0	793	194
Turn Type	custom		Perm	Perm			Prot			Prot		Perm
Protected Phases	2	2			1		7	4		3		8
Permitted Phases	2		2	1								
Detector Phases	2	2	2	1	1		7	4		3		8
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	21.1	21.1	21.1	9.1	9.1		9.1	9.1		9.1	19.1	19.1
Total Split (s)	21.1	21.1	21.1	9.1	9.1	0.0	9.1	25.7	0.0	9.1	25.5	25.5
Total Split (%)	32.5%	32.5%	32.5%	14.0%	14.0%	0.0%	14.3%	39.5%	0.0%	14.0%	39.2%	39.2%
Maximum Green (s)	17.0	17.0	17.0	5.0	5.0		5.2	21.0		5.0	21.4	21.4
Yellow Time (s)	3.1	3.1	3.1	3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	C-Max		None	None	None
Walk Time (s)	5.0	5.0	5.0								5.0	5.0
Flash Dont Walk (s)	12.0	12.0	12.0								10.0	10.0
Pedestrian Call (#/hr)	20	20	20								20	20
Act Effect Green (s)	16.9	16.9	16.9				8.0	42.1			32.9	32.9

Lanes, Volumes, Timings
337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	0		0	175		0	175		200
Storage Lanes	1		1	0		0	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			83									508
Headway Factor	1.18	1.18	1.18	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Link Speed (mph)		27			35			52			55	
Link Distance (ft)		1970			408			1401			1748	
Travel Time (s)		49.7			7.9			26.5			17.7	
Volume (vph)	114	0	78	0	0	0	164	384	0	0	1272	488
Confl. Peds. (#/hr)						12			12			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10									
Adj. Flow (vph)	127	0	83	0	0	0	182	427	0	0	1413	539
Lane Group Flow (vph)	64	63	83	0	0	0	182	427	0	0	1413	539
Turn Type	custom		Perm	Perm			Prot			Prot		Perm
Protected Phases	2	2			1		7	4		3	8	
Permitted Phases	2		2	1								8
Detector Phases	2	2	2	1	1		7	4		3	8	8
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	21.1	21.1	21.1	9.1	9.1		9.1	9.1		9.1	19.1	19.1
Total Split (s)	21.1	21.1	21.1	9.1	9.1	0.0	13.0	48.7	0.0	9.1	36.8	36.8
Total Split (%)	26.4%	26.4%	26.4%	11.4%	11.4%	0.0%	16.3%	50.9%	0.0%	11.4%	46.0%	46.0%
Maximum Green (s)	17.0	17.0	17.0	5.0	5.0		8.8	35.6		5.0	32.7	32.7
Yellow Time (s)	3.1	3.1	3.1	3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	C-Max		None	None	None
Walk Time (s)	5.0	5.0	5.0								5.0	5.0
Flash Dont Walk (s)	12.0	12.0	12.0								10.0	10.0
Pedestrian Calls (#/hr)	20	20	20								20	20
Act Effect Green (s)	12.2	12.2	12.2				10.6	64.4			50.1	50.1

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Synchro 6 Report

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Lanes, Volumes, Timings
 337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
 Existing + Approved +Project (AM Peak)

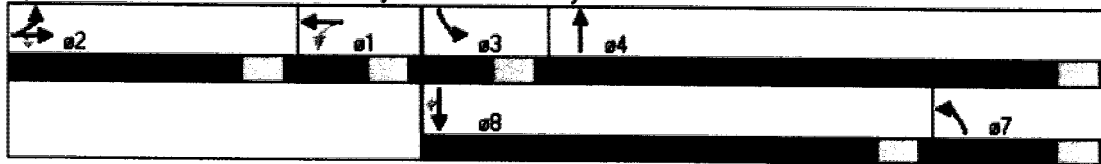


	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Actuated g/C Ratio	0.15	0.15	0.15				0.13	0.80			0.63	0.64
v/c Ratio	0.29	0.28	0.29				0.75	0.15			0.62	0.44
Control Delay	29.3	29.2	8.0				54.9	2.9			14.1	5.1
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	29.3	29.2	8.0				54.9	2.9			14.1	5.1
LOS	C	C	A				D	A			B	A
Approach Delay		20.6						18.4			11.8	
Approach LOS		C						B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 4:NBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 13.9
 Intersection LOS: B
 Intersection Capacity Utilization 61.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 337: Stanley Blvd & Driveway



Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	↖
Ideal Flow (vphf)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		175	0		100	100		100	125		250
Storage Lanes	1		1	1		1	1		1	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Red Bike Factor		0.99			1.00			1.00				0.99
Frt		0.919			0.958			0.990				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	1756	0	1554	1562	0	1829	3610	0	1829	3657	1636
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1829	1756	0	1554	1562	0	1829	3610	0	1829	3657	1581
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		67			22			8				248
Headway Factor	0.96	0.96	0.96	1.16	1.16	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		21			30			52				55
Link Distance (ft)		268			1857			245				1401
Travel Time (s)		8.7			42.2			6.4				25.8
Volume (vph)	34	86	103	169	254	97	61	464	32	55	1006	234
Confl. Peds. (#/hr)			1			1			9			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)				10	10	10						
Adj. Flow (vph)	42	96	114	188	282	108	68	518	36	61	1118	261
Lane Group Flow (vph)	42	210	0	188	390	0	68	552	0	61	1118	261
Turn Type	Split			Split			Prot			Prot		Part
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	7		8	8		5	2		1	6	6
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	23.1	23.1		23.1	23.1		9.1	20.1		9.1	16.1	16.1
Total Split (s)	23.8	23.8	0.0	24.1	24.1	0.0	19.9	26.1	0.0	11.0	17.2	17.1
Total Split (%)	28.0%	28.0%	0.0%	28.4%	28.4%	0.0%	23.4%	30.7%	0.0%	12.9%	20.2%	20.2%
Maximum Green (s)	19.7	19.7		20.0	20.0		15.8	22.0		6.9	13.1	13.1
Yellow Time (s)	3.1	3.1		3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max		None	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	5.0
Flash Dont Walk (s)	14.0	14.0		14.0	14.0			11.0			7.0	7.0
Pedestrian Calls (#/hr)	20	20		20	20			20			20	20
Act Effct Green (s)	14.3	14.3		21.1	21.1		14.8	31.8		7.7	24.6	24.6

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Synchro 6 Report
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Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)



Lane Group	EBL	EBT	EBN	WBL	WBT	WBN	NBL	NBT	NBN	SBL	SBT	SBN
Actuated v/c Ratio	0.17	0.17		0.25	0.25		0.17	0.37		0.09	0.29	0.29
v/c Ratio	0.14	0.60		0.49	0.97		0.21	0.41		0.37	1.05	0.41
Control Delay	27.9	23.7		32.4	69.1		24.9	18.7		42.3	78.1	7.8
Queue Delay	0.0	2.0		0.1	0.0		0.0	0.0		0.0	16.5	0.0
Total Delay	27.9	25.7		32.5	69.1		24.9	18.7		42.3	94.5	7.8
LOS	C	C		C	E		C	B		D	F	A
Approach Delay		26.1			57.2			19.4			76.5	
Approach LOS		C			E			B			E	

Intersection Summary

Area Type: Other

Cycle Length: 85

Actuated Cycle Length: 85

Offset: 66 (78%), Referenced to phase 2:NBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 58.0

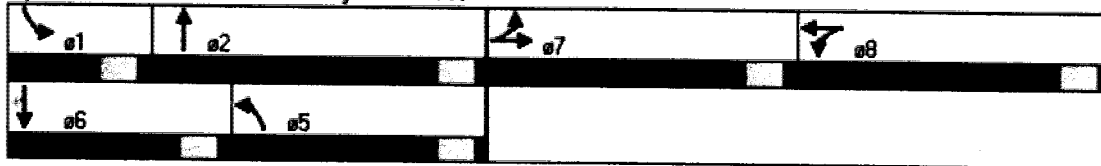
Intersection LOS: E

Intersection Capacity Utilization 68.8%

ICU Level of Service C













Analysis Period (min) 15

Splits and Phases: 338: Ray St & First



Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Lane Configurations	↵↵	↑↑	↗	↵↵	↑↑	↗	↵	↑↑	↗	↵↵	↑↑	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	200		400	200		200	250		0
Storage Lanes	2		1	2		1	1		1	2		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	0.91	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor			0.97		0.98				0.98			
Frt			0.850		0.960	0.850			0.850			0.969
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3547	3657	1636	3547	3332	1489	1829	3657	1636	3547	3544	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3547	3657	1588	3547	3332	1489	1829	3657	1599	3547	3544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			69		56	299			79			29
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Link Speed (mph)		52			55			30			30	
Link Distance (ft)		1325			714			505			1272	
Travel Time (s)		25.4			46.8			9.5			14.1	
Volume (vph)	198	278	62	204	1408	1498	135	578	85	227	328	88
Confl. Peds. (#/hr)			12			36			36			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	218	309	69	227	1564	1656	150	640	94	252	362	96
Lane Group Flow (vph)	218	309	69	227	2132	1088	150	640	94	252	458	96
Turn Type	Prot		Perm	Prot		Prot	Prot		Free	Prot		
Protected Phases	1	6		5	2	2	3	8		7	4	
Permitted Phases			6						Free			
Detector Phases	1	6	6	5	2	2	3	8		7	4	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	29.1	28.1	9.1	11.5	11.5	9.1	10.4		10.4	33.4	
Total Split (s)	12.1	53.3	53.3	16.3	57.5	57.5	11.0	30.5	0.0	14.9	34.4	0.0
Total Split (%)	10.5%	46.3%	46.3%	14.2%	50.0%	50.0%	9.8%	28.5%	0.0%	13.0%	29.9%	0.0%
Maximum Green (s)	6.0	47.2	47.2	12.2	51.4	51.4	6.9	25.1		9.5	29.0	
Yellow Time (s)	5.1	5.1	5.1	3.1	5.1	5.1	3.1	4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	C-Max	C-Max	None	None	None	None	None		None	None	
Walk Time (s)		5.0	5.0								5.0	
Flash Dont Walk (s)		18.0	18.0								23.0	
Pedestrian Calls (#/hr)		20	20								20	
Act Effect Green (s)	9.1	52.8	52.8	12.5	58.2	58.2	8.0	25.8	115.0	11.9	29.7	
Actuated g/C Ratio	0.08	0.46	0.46	0.11	0.49	0.49	0.07	0.22	1.00	0.10	0.26	

Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SB
v/c Ratio	0.78	0.18	0.09	0.58	1.29	1.23	1.18	0.78	0.06	0.69	0.49	
Control Delay	71.1	19.3	4.8	54.2	160.9	137.7	183.1	47.3	0.1	60.1	35.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	71.1	19.3	4.8	54.2	160.9	137.7	183.1	47.3	0.1	60.1	35.2	
LOS	E	B	A	D	F	F	F	D	A	E	D	
Approach Delay		36.6			146.6			65.3			44.1	
Approach LOS		D			F			E			D	

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 0 (0%), Referenced to phase 6:EBT, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 109.3

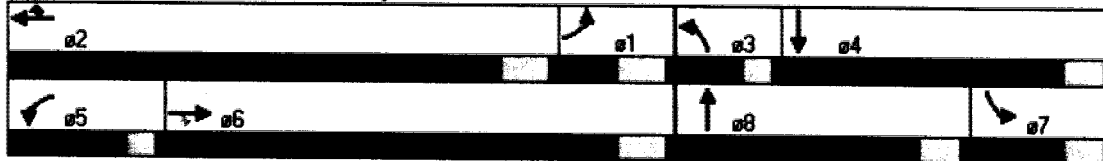
Intersection LOS: F

Intersection Capacity Utilization 96.9%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 371: Stanley Blvd & Bernal



Lanes, Volumes, Timings
378: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕			↖	↗	↖	↕		↖	↕	↖
Ideal Flow (vphpl)	1900	1900	1900	1800	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		50	100		0	50		0
Storage Lanes	1		1	0		1	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00						0.99	
Frt		0.959				0.850		0.991			0.965	
Flt Protected	0.950	0.932			0.973		0.950			0.950		
Satd. Flow (prot)	1477	1472	0	0	1592	1391	1829	3624	0	1829	1845	0
Flt Permitted	0.950	0.932			0.973		0.143			0.557		
Satd. Flow (perm)	1477	1472	0	0	1588	1391	275	3624	0	1072	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13				85		9			21	
Headway Factor	1.18	1.18	0.96	0.96	1.18	1.18	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		30			36		30		30		30	
Link Distance (ft)		1968			1297		2526		764			
Travel Time (s)		44.7			15.8		57.5		17.1			
Volume (vph)	48	23	12	192	151	153	44	229	14	28	385	115
Confl. Peds. (#/hr)			3	3			4					4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10	10	10	10						
Adj. Flow (vph)	53	26	13	213	166	170	49	254	16	31	428	124
Lane Group Flow (vph)	45	47	0	0	381	170	49	270	0	31	556	0
Turn Type	Split			Split		Perm	Perm			Perm		
Protected Phases	3	3		4	4			2				6
Permitted Phases						4	2			6		
Detector Phases	3	3		4	4	4	2	2		6	6	
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	22.1	22.1		22.1	22.1	22.1	22.1	22.1		22.1	22.1	
Total Split (s)	22.1	22.1	0.0	26.0	26.0	26.0	31.9	31.9	0.0	31.9	31.9	0.0
Total Split (%)	27.6%	27.6%	0.0%	32.5%	32.5%	32.5%	39.9%	39.9%	0.0%	39.9%	39.9%	0.0%
Maximum Green (s)	18.0	18.0		21.9	21.9	21.9	27.8	27.8		27.8	27.8	
Yellow Time (s)	3.1	3.1		3.1	3.1	3.1	3.1	3.1		3.1	3.1	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	None		None	None	None	Min	Min		Min	Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	20	20		20	20	20	20	20		20	20	
Act Effct Green (s)	10.9	10.9			19.3	19.3	22.7	22.7		22.7	22.7	

Lanes, Volumes, Timings
378: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated v/c Ratio	0.18	0.18			0.34	0.34	0.40	0.40		0.40	0.40	
v/c Ratio	0.17	0.17			0.71	0.32	0.45	0.19		0.07	0.74	
Control Delay	25.4	20.2			28.1	12.3	23.6	13.8		15.8	21.5	
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	25.4	20.2			28.1	12.3	23.6	13.8		15.8	21.5	
LOS	C	C			C	B	C	B		B	C	
Approach Delay		22.8			21.9			18.2			21.2	
Approach LOS		C			C			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 57

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 20.5

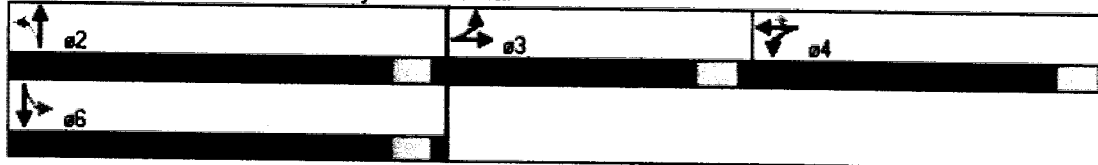
Intersection LOS: C

Intersection Capacity Utilization 68.5%

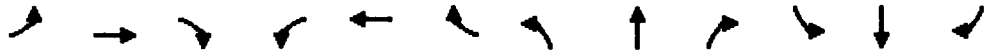
ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 378: Vineyard & Bernal



	↖		→		↗		↙		←		↘		↖		↗		↙		↘	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR								
Lane Configurations		↕		↕	↕		↕	↕	↕	↕	↕									
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Storage Length (ft)	0		0	75		0	75		0	75		0								
Storage Lanes	0		0	1		0	1		0	1		0								
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0								
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50								
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0								
Turning Speed (mph)	15		9	15		9	15		9	15		9								
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Ped Bike Factor					0.97					0.97		0.99								
Frnt					0.850					0.850		0.950								
Fit Protected				0.950								0.950								
Satd. Flow (prot)	0	1925	0	1829	1594	0	1925	1925	1636	1829	1925	0								
Fit Permitted				0.950								0.950								
Satd. Flow (perm)	0	1925	0	1829	1594	0	1925	1925	1584	1815	1925	0								
Right Turn on Red			Yes			Yes			Yes			Yes								Yes
Satd. Flow (RTOR)					642					146										
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98								
Link Speed (mph)		35			40				30			30								
Link Distance (ft)		205			1042				784			804								
Travel Time (s)		4.0			17.8				17.1			4.4								
Volume (vph)	0	0	0	400	0	617	0	321	131	189	137	0								
Confl. Peds. (#/hr)						2			4		4									
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90								
Adj. Flow (vph)	0	0	0	444	0	686	0	357	146	210	152	0								
Lane Group Flow (vph)	0	0	0	444	686	0	0	357	146	210	152	0								
Turn Type	Split			Split			Split		custom		Split									
Protected Phases	7	7		8	8		2	2	8	8	8									
Permitted Phases																				
Detector Phases	7	7		8	8		2	2	8	8	8									
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0									
Minimum Split (s)	9.1	9.1		14.1	14.1		15.0	15.0	14.1	10.0	10.0									
Total Split (s)	9.1	9.1	0.0	22.0	22.0	0.0	16.0	16.0	22.0	12.9	12.9	0.0								
Total Split (%)	15.2%	15.2%	0.0%	38.7%	38.7%	0.0%	28.7%	28.7%	38.7%	21.5%	21.5%	0.0%								
Maximum Green (s)	5.0	5.0		17.9	17.9		11.0	11.0	17.9	7.9	7.9									
Yellow Time (s)	3.1	3.1		3.1	3.1		4.0	4.0	3.1	4.0	4.0									
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0									
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lead	Lead	Lead									
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes									
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0									
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5									
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0									
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0									
Recall Mode	None	None		None	None		Min	Min	None	Min	Min									
Walk Time (s)				5.0	5.0		5.0	5.0	5.0											
Flash Dont Walk (s)				5.0	5.0		5.0	5.0	5.0											
Pedestrian Calls (#/hr)				20	20		20	20	20											
Act Effct Green (s)				16.8	16.8				12.8	29.5	9.7	9.7								
Actuated g/C Ratio				0.35	0.35				0.27	0.61	0.20	0.20								



Lane Group	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SBL	SBT	SBP
v/c Ratio				0.70	0.71			0.70	0.14	0.57	0.39	
Control Delay				18.6	6.0			26.2	1.0	25.3	21.2	
Queue Delay				0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay				18.6	6.0			26.2	1.0	25.3	21.2	
LOS				B	A			C	A	C	C	
Approach Delay					10.9			18.9			23.6	
Approach LOS					B			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 48.3

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 15.2 Intersection LOS: B

Intersection Capacity Utilization 75.8% ICU Level of Service D

























Analysis Period (min) 15

Splits and Phases: 443: Bernal &



Lanes, Volumes, Timings
542: Stanley Blvd &

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	125		100	100		0	50		0
Storage Lanes	1		1	1		1	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95				0.95	0.95		0.95	0.95	1.00
Frt			0.850			0.850		0.854			0.850	0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	3657	1636	1829	3657	1636	1554	1331	0	1829	1595	0
Flt Permitted	0.950			0.950			0.748			0.735		
Satd. Flow (perm)	1829	3657	1561	1829	3657	1636	1205	1331	0	1362	1595	0
Right Turn on Red			Yes			Yes		Yes				Yes
Satd. Flow (RTOR)			79			2		33				116
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.16	1.16	0.96	0.96	0.96	0.96
Link Speed (mph)		52			55			35			35	
Link Distance (ft)		1746			1325			953			259	
Travel Time (s)		14.6			24.7			18.6			5.0	
Volume (vph)	3	561	71	34	1834	4	107	1	30	1	0	14
Confl. Peds. (#/hr)			12				12		36	36		12
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)							10	10	10			
Adj. Flow (vph)	3	623	79	38	1816	4	119	1	33	1	0	14
Lane Group Flow (vph)	3	623	79	38	1816	4	119	34	0	1	18	0
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	7	4		3	8			2				6
Permitted Phases			4			8	2	2		6		
Detector Phases	7	4	4	3	8	8	2	2		6	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.1	23.2	23.2	9.1	23.2	23.2	9.1	9.1		26.1	26.1	
Total Split (s)	9.1	44.8	44.8	9.1	44.8	44.8	26.1	26.1	0.0	26.1	26.1	0.0
Total Split (%)	11.4%	56.0%	56.0%	11.4%	56.0%	56.0%	32.6%	32.6%	0.0%	32.6%	32.6%	0.0%
Maximum Green (s)	5.0	39.6	39.6	5.0	39.6	39.6	22.0	22.0		22.0	22.0	
Yellow Time (s)	3.1	4.2	4.2	3.1	4.2	4.2	3.1	3.1		3.1	3.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	None	None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		5.0	5.0		5.0	5.0				5.0	5.0	
Flash Dont Walk (s)		13.0	13.0		13.0	13.0				17.0	17.0	
Pedestrian Calls (#/hr)		20	20		20	20				20	20	
Act Effct Green (s)	6.1	55.5	55.5	6.1	59.1	59.1	15.7	15.7		15.6	15.6	

8/30/2007

Fehr & Peers Associates, Inc.

Lanes, Volumes, Timings
542: Stanley Blvd &

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)



Lane Group	EBL	EBT	EBP	WBL	WBT	WBP	NBL	NBT	NBP	SBL	SPT	SBP
Actuated v/c Ratio	0.08	0.69	0.69	0.08	0.74	0.74	0.20	0.20		0.20	0.20	
v/c Ratio	0.02	0.25	0.07	0.27	0.67	0.00	0.50	0.12		0.00	0.04	
Control Delay	38.0	8.1	3.0	40.2	11.2	6.2	29.4	8.7		21.0	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	38.0	8.1	3.0	40.2	11.2	6.2	29.4	8.7		21.0	0.1	
LOS	D	A	A	D	B	A	C	A		C	A	
Approach Delay		7.6			11.8			24.8			1.2	
Approach LOS		A			B			C			A	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 8:WBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

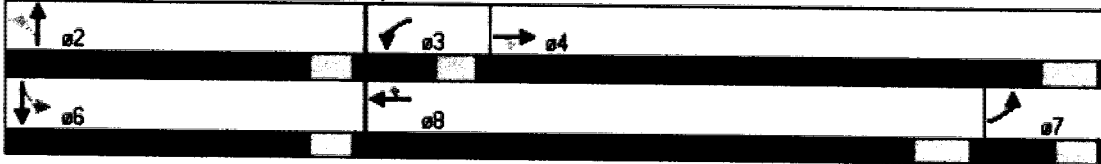
Maximum v/c Ratio: 0.67

Intersection Signal Delay: 11.4 Intersection LOS: B

Intersection Capacity Utilization 64.9% ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 542: Stanley Blvd &



Lanes, Volumes, Timings
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↕	↕		↖	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	50		0	200		0
Storage Lanes	0		1	0		0	1		0	1		1
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00
Ped Bike Factor			0.850									0.850
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1634
Flt Permitted		0.950					0.950			0.950		
Satd. Flow (perm)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1634
Headway Factor	0.96	0.96	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35			35			30				30
Link Distance (ft)		1267			241			231				675
Travel Time (s)		24.7			4.7			10.9				6.4
Volume (vph)	17	0	12	0	0	0	50	843	0	66	324	100
Confl. Peds. (#/hr)	20						20					20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10		10									
Adj. Flow (vph)	19	0	13	0	0	0	56	937	0	73	360	111
Lane Group Flow (vph)	0	18	13	0	0	0	56	937	0	73	360	111
Sign Control		Stop			Stop			Free				Free

Area Type: Other
 Control Type: Unsignalized
 Intersection Capacity Utilization 40.3% ICU Level of Service A
 Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved +Project (AM Peak)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↙	↕		↙	↕	↗
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	17	0	12	0	0	0	56	843	0	68	324	108
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	19	0	13	0	0	0	58	937	0	73	360	111
Pedestrians		20									20	
Lane Width (ft)		13.0									13.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		2									2	
Right turn flare (veh)			8									
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)								835			1270	
pX, platoon unblocked	1.00	1.00	1.00	1.00	1.00		1.00					
vC, conflicting volume	1128	1574	377	1564	1689	488	489			937		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1127	1577	377	1564	1689	488	489			937		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tP (s)	3.5	4.0	3.5	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	86	100	98	100	100	100	95			90		
cM capacity (veh/h)	134	90	606	64	77	516	1045			727		

Approach	EBL	WBL	NBL	NB3	SB3	EBT	WBT	NBT	NB2	SB2
Volume Total	32	0	56	488	488	73	360	111		
Volume Left	19	0	56	0	0	73	0	0		
Volume Right	13	0	0	0	0	0	0	111		
cSH	228	1700	1046	1700	1700	727	1700	1700		
Volume to Capacity	0.14	0.00	0.05	0.28	0.28	0.10	0.21	0.07		
Queue Length 95th (ft)	12	0	4	0	0	8	0	0		
Control Delay (s)	25.9	0.0	8.6	0.0	0.0	10.5	0.0	0.0		
Lane LOS	D	A	A			B				
Approach Delay (s)	25.9	0.0	0.5			1.4				
Approach LOS	D	A								

Intersection Summary	
Average Delay	1.3
Intersection Capacity Utilization	40.3%
ICU Level of Service	A
Analysis Period (min)	15

Lanes, Volumes, Timings
337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBP	WBL	WBT	WBR	NBL	NBT	NBP	SBL	SBT	SBP
Lane Configurations	↖	↖	↖	↖	↕	↖	↖	↕	↖	↖	↕	↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		100	0		0	175		0	175		200
Storage Lanes	1		1	0		0	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bkgs Factor												
Frt			0.850									0.850
Flt Protected	0.950	0.950					0.950					
Satd. Flow (prot)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Flt Permitted	0.950	0.950					0.950					
Satd. Flow (perm)	1477	1477	1391	0	1925	0	1829	3657	0	1925	3657	1636
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232									194
Headway Factor	1.18	1.18	1.18	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Link Speed (mph)		27			35			52			55	
Link Distance (ft)		1970			408			1401			1748	
Travel Time (s)		49.7			7.9			26.5			17.7	
Volume (vph)	556	0	208	0	0	0	93	1045	0	0	714	175
Conf. Peds. (#/hr)						12			12			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10									
Adj. Flow (vph)	618	0	232	0	0	0	103	1161	0	0	793	194
Lane Group Flow (vph)	309	309	232	0	0	0	103	1161	0	0	793	194
Turn Type	custom		Perm	Perm			Prot			Prot		Perm
Protected Phases	2	2			1		7	4		3	8	
Permitted Phases	2		2	1								8
Detector Phases	2	2	2	1	1		7	4		3	8	8
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	21.1	21.1	21.1	9.1	9.1		9.1	9.1		9.1	19.1	19.1
Total Split (s)	21.1	21.1	21.1	9.1	9.1	0.0	9.3	25.7	0.0	9.1	25.5	25.5
Total Split (%)	32.5%	32.5%	32.5%	14.0%	14.0%	0.0%	14.3%	39.5%	0.0%	14.0%	39.2%	39.2%
Maximum Green (s)	17.0	17.0	17.0	5.0	5.0		5.2	21.8		5.0	21.4	21.4
Yellow Time (s)	3.1	3.1	3.1	3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None	None	None	None		None	C-Max		None	None	None
Walk Time (s)	5.0	5.0	5.0								5.0	5.0
Flash Dont Walk (s)	12.0	12.0	12.0								10.0	10.0
Pedestrian Calls (#/hr)	20	20	20								20	20
Act Effct Green (s)	16.9	16.9	16.9				8.0	42.1			32.9	32.9

Lanes, Volumes, Timings
337: Stanley Blvd & Driveway

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)



Line Group	EBL	EBT	EBM	WBL	WBT	WBM	NBL	NBT	NBM	SBT	SBM	SBL
Actuated v/c Ratio	0.26	0.26	0.26				0.12	0.65			0.51	0.51
v/c Ratio	0.80	0.80	0.43				0.46	0.49			0.43	0.21
Control Delay	36.0	36.0	5.6				35.2	7.0			12.0	2.1
Queue Delay	0.0	0.0	0.0				0.0	0.0			0.0	0.0
Total Delay	36.0	36.0	5.6				35.2	7.0			12.0	2.1
LOS	D	D	A				D	A			B	A
Approach Delay	27.7						9.3				10.1	
Approach LOS	C						A				B	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 0 (0%), Referenced to phase 4:NBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 14.6

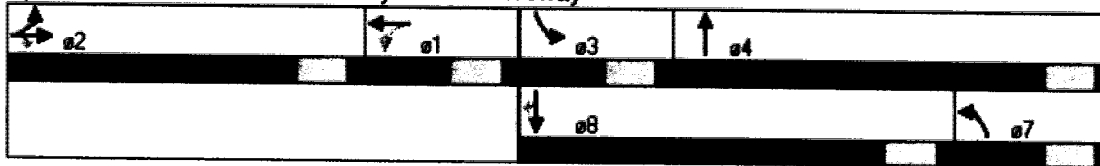
Intersection LOS: B

Intersection Capacity Utilization 65.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 337: Stanley Blvd & Driveway



Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		175	0		100	100		100	125		250
Storage Lanes	1		1	1		1	1		1	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor		1.00			0.99			0.99				0.99
Frt		0.963			0.945			0.982				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	1847	0	1554	1538	0	1829	3568	0	1829	3657	1636
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1829	1847	0	1554	1538	0	1829	3568	0	1829	3657	1571
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			21			14				92
Headway Factor	0.96	0.96	0.96	1.16	1.16	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		21			30			52				55
Link Distance (ft)		269			1857			245				1401
Travel Time (s)		8.7			42.2			6.4				25.8
Volume (vph)	250	356	117	122	128	73	53	1104	153	181	733	88
Confl. Peds. (#/hr)			1			1			9			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)				10	10	10						
Adj. Flow (vph)	278	306	130	136	140	81	59	1227	170	179	814	99
Lane Group Flow (vph)	278	526	0	136	221	0	59	1397	0	179	814	92
Turn Type	Split			Split			Prot			Prot		Perm
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	7		8	8		5	2		1	6	6
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	23.1	23.1		23.1	23.1		9.1	20.1		9.1	16.1	16.1
Total Split (s)	35.0	35.0	0.0	23.1	23.1	0.0	12.3	48.9	0.0	15.0	49.6	49.0
Total Split (%)	29.2%	29.2%	0.0%	19.3%	19.3%	0.0%	10.3%	39.1%	0.0%	12.5%	41.3%	41.3%
Maximum Green (s)	30.9	30.9		19.0	19.0		8.2	42.8		10.9	45.5	45.5
Yellow Time (s)	3.1	3.1		3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lead		Lag	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max		None	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	5.0
Flash Dont Walk (s)	14.0	14.0		14.0	14.0			11.0			7.0	7.0
Pedestrian Calls (#/hr)	20	20		20	20			20			20	20
Act Effct Green (s)	32.0	32.0		18.9	18.9		8.8	45.1		12.0	50.2	50.2

8/30/2007

Fehr & Peers Associates, Inc.

Synchro 6 Report

Page 3

Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)



Line Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SBR
Actuated g/C Ratio	0.27	0.27		0.16	0.16		0.07	0.38		0.10	0.42	0.44
v/c Ratio	0.57	1.05		0.56	0.85		0.44	1.04		0.98	0.53	0.13
Control Delay	43.5	95.2		54.1	66.2		62.2	71.2		115.4	28.7	5.2
Queue Delay	0.0	36.1		0.0	0.0		0.0	32.3		0.0	0.5	0.0
Total Delay	43.5	131.3		54.1	66.2		62.2	103.5		115.4	29.2	5.2
LOS	D	F		D	E		E	F		F	C	A
Approach Delay		100.9			61.6			101.8			41.4	
Approach LOS		F			E			F			D	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 80.0

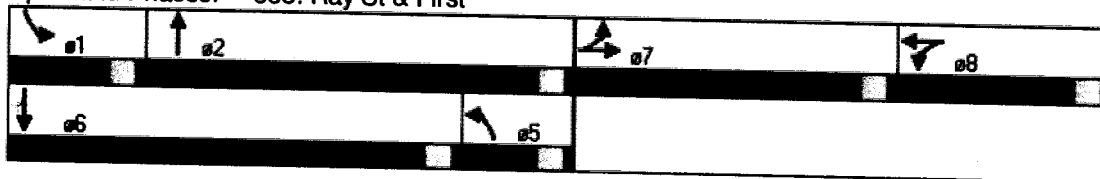
Intersection LOS: F

Intersection Capacity Utilization 90.4%

ICU Level of Service E

Analysis Period (min): 15

Splits and Phases: 338: Ray St & First



Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↕	↖↗	↖↗	↕	↖↗	↖↗	↕	↖↗	↖↗	↕	↖↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	200		400	200		200	250		0
Storage Lanes	2		1	2		1	1		1	2		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	0.91	1.00	0.95	1.00	0.97	0.95	0.95
Red Bike Factor			0.97		1.00				0.98			
Frt			0.850		0.990	0.850			0.850		0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3547	3657	1636	3547	3459	1489	1829	3657	1636	3547	3599	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3547	3657	1588	3547	3459	1489	1829	3657	1599	3547	3599	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			118		7	420			140		12	
Headway Factor	0.98	0.98	0.96	0.98	0.96	0.98	0.98	0.98	0.98	0.96	0.96	0.98
Link Speed (mph)		52			55			30			30	
Link Distance (ft)		1325			714			604			1272	
Travel Time (s)		25.4			46.8			9.5			14.1	
Volume (vph)	116	1433	151	217	581	421	146	400	752	1187	1194	140
Confl. Peds. (#/hr)			12			36			36			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	1592	168	241	646	468	162	544	836	1330	1327	156
Lane Group Flow (vph)	128	1592	168	241	646	468	162	544	836	1330	1327	156
Turn Type	Prot		Perm	Prot		Prot	Prot		Free	Prot		
Protected Phases	1	6		5	2	2	3	8		7	4	
Permitted Phases			6						Free			
Detector Phases	1	6	6	5	2	2	3	8		7	4	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	29.1	29.1	9.1	11.5	11.5	9.1	10.4		10.4	33.4	
Total Split (s)	11.4	50.9	50.9	9.1	48.6	48.6	9.1	15.0	0.0	40.0	45.9	0.0
Total Split (%)	9.9%	44.3%	44.3%	7.9%	42.3%	42.3%	7.9%	13.0%	0.0%	34.8%	39.9%	0.0%
Maximum Green (s)	5.3	44.8	44.8	5.0	42.5	42.5	5.0	9.6		34.6	40.5	
Yellow Time (s)	5.1	5.1	5.1	3.1	5.1	5.1	3.1	4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	C-Max	C-Max	None	None	None	None	None		None	None	
Walk Time (s)		5.0	5.0									5.0
Flash Dont Walk (s)		18.0	18.0									23.0
Pedestrian Calls (#/hr)		20	20									20
Act Effect Green (s)	24.1	47.9	47.9	6.1	29.9	29.9	6.1	12.0	115.0	37.0	42.9	
Actuated g/C Ratio	0.21	0.42	0.42	0.05	0.26	0.26	0.05	0.10	1.00	0.32	0.37	

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Fehr & Peers Associates, Inc.

Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)



Lane Group	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
v/c Ratio	0.17	1.05	0.23	1.28	0.77	0.60	1.07	1.42	0.52	1.17	1.10	
Control Delay	39.9	69.3	8.1	204.7	39.7	5.1	376.3	243.5	1.2	120.4	90.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	39.9	69.3	8.1	204.7	39.7	5.1	376.3	243.5	1.2	120.4	90.7	
LOS	D	E	A	F	D	A	F	F	A	F	F	
Approach Delay		61.8			58.3			126.1			104.7	
Approach LOS		E			E			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 0 (0%), Referenced to phase 6:EBT, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.67

Intersection Signal Delay: 90.1

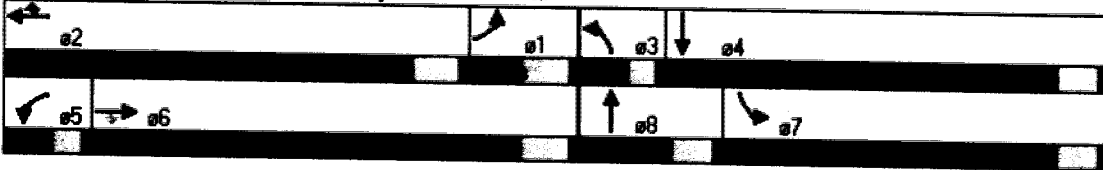
Intersection LOS: F

Intersection Capacity Utilization 106.8%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 371: Stanley Blvd & Bernal



Lanes, Volumes, Timings
378: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵	↵↗		↵	↵	↗	↵	↗↕		↵	↗↕	↵
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		50	100		0	50	100	0
Storage Lanes	1		1	0		1	1		0	1	1	0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00		1.00				0.99	
Frt		0.938				0.850		0.984			0.954	
Flt Protected	0.950				0.982		0.950			0.950		
Satd. Flow (prot)	1477	1448	0	0	1607	1391	1829	3599	0	1829	1819	0
Flt Permitted	0.950				0.982		0.339			0.105		
Satd. Flow (perm)	1477	1448	0	0	1605	1391	650	3599	0	202	1819	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36				101		20			34	
Headway Factor	1.18	1.18	0.98	0.98	1.18	1.18	0.98	0.98	0.98	0.98	0.98	0.98
Link Speed (mph)		30			36		30			30		30
Link Distance (ft)		1988			1297		2528			764		
Travel Time (s)		44.7			15.8		57.5			17.1		
Volume (vph)	235	147	104	31	59	112	48	979	121	116	280	130
Confl. Peds. (#/hr)			3	3			4					4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10	10	10	10	10	10						
Adj. Flow (vph)	261	163	116	34	59	124	53	1089	134	129	322	144
Lane Group Flow (vph)	261	279	0	0	93	124	53	1222	0	129	466	0
Turn Type	Split			Split		Perm	Perm			Perm		
Protected Phases	3	3		4	4			2			6	
Permitted Phases						4	2			6		
Detector Phases	3	3		4	4	4	2	2		6	6	
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	22.1	22.1		22.1	22.1	22.1	22.1	22.1		22.1	22.1	
Total Split (s)	22.1	22.1	0.0	22.1	22.1	22.1	45.8	45.8	0.0	45.8	45.8	0.0
Total Split (%)	24.6%	24.6%	0.0%	24.6%	24.6%	24.6%	50.9%	50.9%	0.0%	50.9%	50.9%	0.0%
Maximum Green (s)	18.0	18.0		18.0	18.0	18.0	41.7	41.7		41.7	41.7	
Yellow Time (s)	3.1	3.1		3.1	3.1	3.1	3.1	3.1		3.1	3.1	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	None		None	None	None	C-Max	C-Max		Min	Min	
Walk Time (s)	5.0	5.0		5.0	5.0	5.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	20	20		20	20	20	20	20		20	20	
Act Effect Green (s)	18.4	18.4			12.5	12.5	50.1	50.1		50.1	50.1	

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Fehr & Peers Associates, Inc.

Synchro 6 Report

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Lanes, Volumes, Timings
378: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)



Lane Group	EB	WB	NB	WB	WB	NB	NB	SB	SB
Actuated g/C Ratio	0.20	0.20		0.14	0.14	0.56	0.56	0.56	0.56
v/c Ratio	0.87	0.86		0.42	0.44	0.15	0.61	1.14	0.45
Control Delay	58.3	52.0		36.1	12.5	12.9	15.7	157.0	13.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.3	52.0		36.1	12.5	12.9	15.7	157.0	13.7
LOS	E	D		D	B	B	B	F	B
Approach Delay		55.0		22.0		15.6			44.8
Approach LOS		E		C		B			D

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.14

Intersection Signal Delay: 30.9

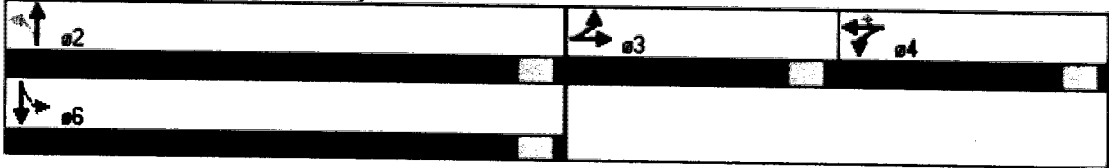
Intersection LOS: C

Intersection Capacity Utilization 70.7%

ICU Level of Service C

Analysis Period (min): 15

Splits and Phases: 378: Vineyard & Bernal



Lanes, Volumes, Timings
443: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

	↖		→		↗		↖		←		↗		↖		↑		↗		↖		↓		↖		
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR													
Lane Configurations		↕		↗	↖		↗	↖	↖	↖	↖														
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900													
Storage Length (ft)	0		0	75		0	75		0	75		0													
Storage Lanes	0		0	1		0	1		0	1		0													
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0													
Leading Detector (ft)	50	50		50	50		50	50		50	50														
Trailing Detector (ft)	0	0		0	0		0	0		0	0														
Turning Speed (mph)	15		9	15		9	15		9	15		9													
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00													
Ped Bikes Factor					0.97				0.96	0.99															
Frnt					0.850				0.850																
Flt Protected				0.950					0.950																
Satd. Flow (prot)	0	1925	0	1829	1586	0	1925	1925	1636	1829	1925	0													
Flt Permitted				0.950					0.950																
Satd. Flow (perm)	0	1925	0	1829	1586	0	1925	1925	1568	1810	1925	0													
Right Turn on Red			Yes			Yes			Yes			Yes													
Satd. Flow (RTOR)					725				189																
Headway Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98													
Link Speed (mph)		35			40			30			30														
Link Distance (ft)		208			1042			784			604														
Travel Time (s)		4.0			17.8			17.1			4.4														
Volume (vph)	0	0	0	115	0	337	0	498	782	694	415	0													
Conf. Peds. (#/hr)						2		4	4																
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90													
Adj. Flow (vph)	0	0	0	128	0	374	0	544	847	771	461	0													
Lane Group Flow (vph)	0	0	0	128	374	0	9	544	847	771	461	0													
Turn Type	Split			Split			Split	custom	Split																
Protected Phases	7	7		8	8		2	2	8	8	8														
Permitted Phases																									
Detector Phases	7	7		8	8		2	2	8	8	8														
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0														
Minimum Split (s)	9.1	9.1		14.1	14.1		15.0	15.0	14.1	10.0	10.0														
Total Split (s)	9.1	9.1	0.0	25.0	25.0	0.0	30.0	30.0	25.0	45.9	45.9	0.0													
Total Split (%)	8.3%	8.3%	0.0%	22.7%	22.7%	0.0%	27.3%	27.3%	22.7%	41.7%	41.7%	0.0%													
Maximum Green (s)	5.0	5.0		20.9	20.9		25.0	25.0	20.9	40.9	40.9														
Yellow Time (s)	3.1	3.1		3.1	3.1		4.0	4.0	3.1	4.0	4.0														
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0														
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lead	Lead	Lead														
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes														
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0														
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5														
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0														
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0														
Recall Mode	None	None		None	None		Min	Min	None	C-Max	C-Max														
Walk Time (s)				5.0	5.0		5.0	5.0	5.0																
Flash Dont Walk (s)				5.0	5.0		5.0	5.0	5.0																
Pedestrian Calls (#/hr)				20	20		20	20	20																
Act Effect Green (s)				22.0	22.0				27.0	49.0	52.0	52.0													
Actuated g/C Ratio				0.20	0.20				0.25	0.45	0.47	0.47													

Lanes, Volumes, Timings
443: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

	←		→		←		→		←		→	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
w/c Ratio				0.35	0.42			1.15	1.04	0.89	0.51	
Control Delay				41.1	1.4			128.0	65.0	40.9	22.6	
Queue Delay				0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay				41.1	1.4			128.0	65.0	40.9	22.6	
LOS				D	A			F	E	D	C	
Approach Delay					11.5			89.7			34.0	
Approach LOS					B			F			C	

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum w/c Ratio: 1.15

Intersection Signal Delay: 55.2

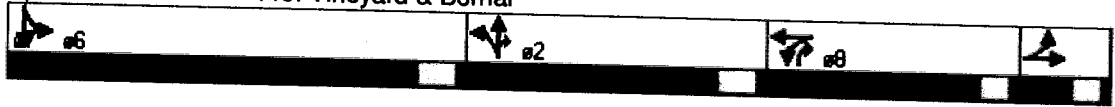
Intersection Capacity Utilization 95.3%

Analysis Period (min) 15

Intersection LOS: E

ICU Level of Service: F

Splits and Phases: 443: Vineyard & Bernal



Lanes, Volumes, Timings
542: Stanley Blvd & California

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

	↖	→	↘	↙	←	↖	↘	↑	↗	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↖	↖	↖	↖↖	↖	↖	↖	↖	↖	↖	↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		150	125		100	100		0	50		0
Storage Lanes	1		1	1		1	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95				0.99	0.95		0.97	0.99	1.00
Frt			0.850			0.850		0.853			0.925	
Fit Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	3657	1636	1829	3657	1636	1554	1329	0	1829	1758	0
Fit Permitted	0.950			0.950			0.755			0.662		0
Satd. Flow (perm)	1829	3657	1561	1829	3657	1636	1219	1329	0	1232	1758	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61			33		110				2
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.18	1.16	0.96	0.96	0.96	0.96
Link Speed (mph)		52			55			35				
Link Distance (ft)		1748			1325			853				35
Travel Time (s)		14.6			24.7			18.6				259
Volume (vph)	3	1688	81	15	825	31	76	2	99	5	2	2
Confl. Peds. (#/hr)			12				12		36	36		12
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)							10	10	10			
Adj. Flow (vph)	3	1851	90	17	917	34	84	2	110	6	2	2
Lane Group Flow (vph)	3	1851	90	17	917	34	84	2	110	6	2	2
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		0
Protected Phases	7	4		3	8							
Permitted Phases			4			8	2	2			6	
Detector Phases	7	4	4	3	8	8	2	2		6	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	9.1	23.2	23.2	9.1	23.2	23.2	9.1	9.1		26.1	26.1	
Total Split (s)	9.1	44.8	44.8	9.1	44.8	44.8	26.1	26.1	0.0	26.1	26.1	0.0
Total Split (%)	11.4%	56.0%	56.0%	11.4%	56.0%	56.0%	32.6%	32.6%	0.0%	32.6%	32.6%	0.0%
Maximum Green (s)	5.0	39.8	39.8	5.0	39.8	39.8	22.0	22.0		22.0	22.0	
Yellow Time (s)	3.1	4.2	4.2	3.1	4.2	4.2	3.1	3.1		3.1	3.1	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	None	None	None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		5.0	5.0		5.0	5.0				None	None	
Flash Dont Walk (s)		13.0	13.0		13.0	13.0				5.0	5.0	
Pedestrian Calls (#/hr)		20	20		20	20				17.0	17.0	
Act Effect Green (s)	6.1	59.9	59.9	6.1	59.9	59.9	14.8	14.8		14.8	14.8	

8/30/2007

Fehr & Peers Associates, Inc.

Lanes, Volumes, Timings
542: Stanley Blvd & California

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

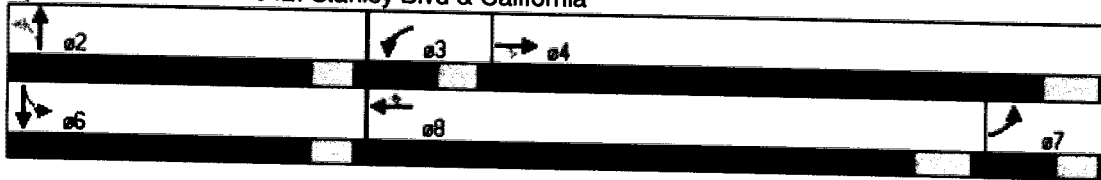


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	SBR
Actuated g/C Ratio	0.08	0.75	0.75	0.08	0.75	0.75	0.18	0.18		0.18	0.18	
v/c Ratio	0.02	0.68	0.68	0.12	0.33	0.03	0.37	0.33		0.03	0.01	
Control Delay	34.7	11.1	3.4	36.7	6.3	3.3	27.5	6.4		21.8	17.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	34.7	11.1	3.4	36.7	6.3	3.3	27.5	6.4		21.8	17.5	
LOS	C	B	A	D	A	A	C	A		C	B	
Approach Delay		10.8			6.7			15.5			20.1	
Approach LOS		B			A			B			C	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 8:WBT, Start of Yellow
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 9.9
 Intersection Capacity Utilization 65.3%
 Analysis Period (min): 15
 Intersection LOS: A
 ICU Level of Service C

Splits and Phases: 542: Stanley Blvd & California



Lanes, Volumes, Timings
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↕		↖	↕	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	50		0	200		0
Storage Lanes	0		1	0		0	1		0	1		1
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor			0.850									0.850
Flt Protected		0.950					0.950			0.950		0.950
Satd. Flow (prot)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1830
Flt Permitted		0.950					0.950			0.950		
Satd. Flow (perm)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1830
Headway Factor	0.96	0.96	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35			35			35			30	
Link Distance (ft)		1267			241			231			30	
Travel Time (s)		24.7			4.7			10.9			6.4	
Volume (vph)	44	0	57	0	0	0	9	853	0	224	1003	32
Cont. Peds. (#/hr)	20						20					20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10		10									10
Adj. Flow (vph)	49	0	63	0	0	0	10	948	0	249	1114	36
Lane Group Flow (vph)	0	49	63	0	0	0	10	948	0	249	1114	36
Sign Control		Stop			Stop			Free			Free	

Area Type: Other
 Control Type: Unsignalized
 Intersection Capacity Utilization 69.5% ICU Level of Service C
 Analysis Period (min) 15

HCM Unsignalized Intersection Capacity Analysis
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project (PM Peak)

Movement	EBL	EB	EBR	WBL	WB	WBR	NBL	NB	NBR	SBL	SB	SBR
Lane Configurations		↕	↗		↖	↗	↕	↖	↗		↖	↗
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	44	0	57	0	0	0	9	853	0	224	1003	36
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	49	0	63	0	0	0	10	948	0	249	1114	36
Pedestrians		20										
Lane Width (ft)		13.0									20	
Walking Speed (ft/s)		4.0									13.0	
Percent Blockage		2									4.0	
Right turn flare (veh)			8									2
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)								835			1269	
pX, platoon unblocked	0.66	0.66	0.66	0.66	0.66		0.66					
vC, conflicting volume	2146	2600	1134	2612	2636	494	1170			948		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2730	3415	1203	3433	3469	494	1257			948		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	45	100	100	100	97			65		
off capacity (veh/h)	4	3	115	1	3	512	357			720		
	EB	WB	NB	NB	NB	SB	SB	SB				
Volume Total	112	0	10	632	316	249	1114	36				
Volume Left	49	0	10	0	0	249	0	0				
Volume Right	63	0	0	0	0	0	0	0				
cSH	10	1700	357	1700	1700	720	1700	1700				
Volume to Capacity	11.71	0.00	0.03	0.37	0.19	0.35	0.86	0.02				
Queue Length 95th (ft)	Err	0	2	0	0	39	0	0				
Control Delay (s)	Err	0.0	15.4	0.0	0.0	12.6	0.0	0.0				
Lane LOS	F	A	C			B						
Approach Delay (s)	Err	0.0	0.2			2.2						
Approach LOS	F	A										
Intersection Summary												
Average Delay			455.8									
Intersection Capacity Utilization			69.5%			ICU Level of Service						C
Analysis Period (min)			15									

Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEB	SEB	SEB
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		175	0		100	100		100	125		250
Storage Lanes	1		1	1		1	1		1	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor		0.99			1.00			1.00			0.95	1.00
Frt		0.919			0.958			0.990				0.97
Flt Protected	0.950			0.950			0.950			0.950		0.950
Satd. Flow (prot)	1829	1756	0	1554	1562	0	1829	3610	0	1829	3657	1636
Flt Permitted	0.174			0.467			0.950			0.950		0.950
Satd. Flow (perm)	335	1756	0	764	1562	0	1829	3610	0	1829	3657	1579
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		64			21			8				261
Headway Factor	0.96	0.96	0.96	1.18	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		21			30			52				55
Link Distance (ft)		268			1857			245				1401
Travel Time (s)		8.7			42.2			6.4				25.8
Volume (vph)	38	66	103	169	254	97	61	454	32	55	1006	238
Confl. Peds. (#/hr)			1			1			9			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)				10	10	10						
Adj. Flow (vph)	42	96	112	188	282	108	68	516	36	61	1118	261
Lane Group Flow (vph)	42	210	0	188	390	0	68	552	0	61	1118	261
Turn Type	pm+pt			pm+pt			Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			6								6
Detector Phases	7	4		3	8		5	2		1	6	6
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	23.1	23.1		23.1	23.1		9.1	20.1		9.1	16.1	16.1
Total Split (s)	23.1	26.0	0.0	23.1	26.0	0.0	9.1	29.8	0.0	11.4	31.8	31.4
Total Split (%)	25.7%	28.9%	0.0%	25.7%	28.9%	0.0%	10.1%	32.8%	0.0%	12.7%	35.3%	35.3%
Maximum Green (s)	19.0	21.8		19.0	21.8		5.0	25.4		7.3	27.7	27.7
Yellow Time (s)	3.1	3.1		3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max		None	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	5.0
Flash Dont Walk (s)	14.0	14.0		14.0	14.0			11.0			7.0	7.0
Pedestrian Calls (#/hr)	20	20		20	20			20			20	20
Act Effect Green (s)	29.0	16.7		34.0	23.8		6.1	39.7		8.0	41.5	41.5

8/29/2007

Fehr & Peers Associates, Inc.

Synchro 6 Report
Page 1

Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (AM Peak)



Lane Group	EBL	EBT	EBN	WBL	WBT	WBN	NBL	NBT	NBN	SBL	SBN	SBR
Actuated v/c Ratio	0.32	0.19		0.38	0.26		0.07	0.44		0.09	0.48	0.48
v/c Ratio	0.13	0.56		0.44	0.91		0.55	0.35		0.37	0.66	0.30
Control Delay	14.0	24.2		19.7	57.9		58.1	20.4		44.7	25.1	4.1
Queue Delay	0.0	1.1		15.0	0.0		0.0	0.0		0.0	0.9	0.0
Total Delay	14.0	25.3		34.8	57.9		58.1	20.4		44.7	26.0	4.1
LOS	B	C		C	E		E	C		D	C	A
Approach Delay		23.4			50.4			24.5			22.8	
Approach LOS		C			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 66 (73%), Referenced to phase 2:NBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 28.7

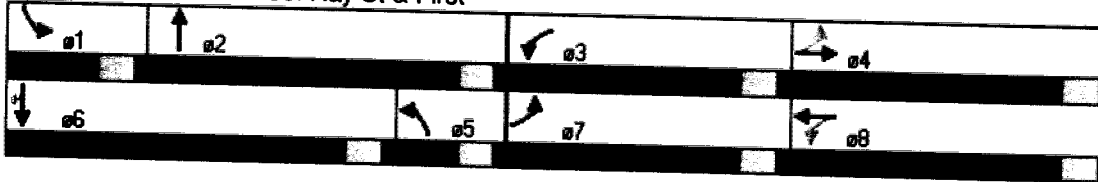
Intersection LOS: C

Intersection Capacity Utilization 68.8%

ICU Level of Service C

Analysis Period (min): 15

Splits and Phases: 338: Ray St & First



Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↖	↖↖↖		↖↖	↖↖	↖↖	↖	↖↖	↖	↖↖	↖↖	↖↖
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	200		400	200		200	250		0
Storage Lanes	2		1	2		2	1		1	2		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		15
Lane Util. Factor	0.97	0.91	0.91	0.97	0.95	0.88	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor		0.99							0.98			
Frt		0.973				0.850			0.850		0.969	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3547	5085	0	3547	3657	2880	1829	3657	1636	3547	3544	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3547	5085	0	3547	3657	2880	1829	3657	1599	3547	3544	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54				37			75			27
Headway Factor	0.98	0.96	0.98	0.98	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		52			55			30			30	
Link Distance (ft)		1325			714			505			1272	
Travel Time (s)		25.4			46.8			9.5			14.1	
Volume (vph)	194	276	69	204	1408	1493	135	576	85	227	326	84
Confl. Peds. (#/hr)			12			36			36			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	218	309	69	227	1564	1656	150	640	94	252	362	96
Lane Group Flow (vph)	218	378	0	227	1564	1656	150	640	94	252	458	0
Turn Type	Prot			Prot		pt-ov	Prot		Free	Prot		
Protected Phases	1	6		5	2	27	3	6		7	4	
Permitted Phases									Free			
Detector Phases	1	6		5	2	27	3	6		7	4	
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	29.1		9.1	11.1		5.0	10.4		5.0	5.0	
Total Split (s)	11.4	56.4	0.0	16.2	61.2	75.4	14.0	33.2	0.0	10.4	33.4	
Total Split (%)	9.5%	47.0%	0.0%	13.5%	51.0%	62.8%	11.7%	27.7%	0.0%	11.8%	27.8%	0.0%
Maximum Green (s)	5.3	50.3		12.1	55.1		9.9	27.8		8.8	28.0	
Yellow Time (s)	5.1	5.1		3.1	5.1		3.1	4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Lag	Lag	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Recall Mode	None	C-Max		None	None		None	None		None	None	
Walk Time (s)		5.0										5.0
Flash Dont Walk (s)		18.0										23.0
Pedestrian Calls (#/hr)		20										20
Act Effct Green (s)	6.7	57.0		12.5	60.8	75.0	11.0	27.2	120.0	11.2	27.4	
Actuated g/C Ratio	0.07	0.48		0.10	0.51	0.62	0.09	0.23	1.00	0.09	0.23	

Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.84	0.15		0.61	0.84	0.91	0.89	0.77	0.06	0.76	0.55	
Control Delay	82.9	16.0		57.7	31.3	28.9	100.3	47.6	0.1	61.9	33.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	82.9	16.0		57.7	31.3	28.9	100.3	47.6	0.1	61.9	33.6	
LOS	F	B		E	C	C	F	D	A	B	C	
Approach Delay		40.5			31.9			51.5				
Approach LOS		D			C			D				

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 6:EBT, Start of Yellow

Natural Cycle: 106

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 37.4

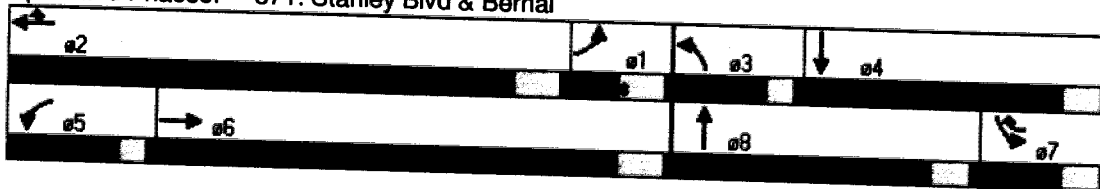
Intersection Capacity Utilization 86.8%

Analysis Period (min) 15

Intersection LOS: D

ICU Level of Service E

Splits and Phases: 371: Stanley Blvd & Bernal



Lanes, Volumes, Timings
443: Bernal &

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SEL	SBT	SEB
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	75		0	75		0	75		0
Storage Lanes	0		0	1		0	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.97			0.97		0.97		0.97	0.97
Frt				0.850			0.850		0.850		0.850	0.850
Flt Protected				0.950			0.950		0.950		0.950	0.950
Satd. Flow (prot)	0	1925	0	1829	1594	0	1925	1925	1636	1829	1925	0
Flt Permitted				0.950			0.950		0.950		0.950	0.950
Satd. Flow (perm)	0	1925	0	1829	1594	0	1925	1925	1584	1815	1925	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					642				146			
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35			40			30			30	
Link Distance (ft)		205			1042			764			604	
Travel Time (s)		4.0			17.8			17.1			4.4	
Volume (vph)	0	0	0	400	0	617	0	321	131	188	157	0
Confl. Peds. (#/hr)						2			4	4		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	444	0	686	0	357	146	210	152	0
Lane Group Flow (vph)	0	0	0	444	686	0	0	357	146	210	152	0
Turn Type	Split			Split			Split		custom		Split	
Protected Phases	7	7		8	8		2	2	8	8	8	
Permitted Phases												
Detector Phases	7	7		8	8		2	2	8	8	8	
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.1	9.1		14.1	14.1		15.0	15.0	14.1	10.0	10.0	
Total Split (s)	9.1	9.1	0.0	22.0	22.0	0.0	16.0	16.0	22.0	12.9	12.9	0.0
Total Split (%)	15.2%	15.2%	0.0%	36.7%	36.7%	0.0%	26.7%	26.7%	36.7%	21.5%	21.5%	0.0%
Maximum Green (s)	5.0	5.0		17.9	17.9		11.0	11.0	17.9	7.9	7.9	
Yellow Time (s)	3.1	3.1		3.1	3.1		4.0	4.0	3.1	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lead	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Recall Mode	None	None		None	None		Min	Min	None	Min	Min	
Walk Time (s)				5.0	5.0		5.0	5.0	5.0			
Flash Dont Walk (s)				5.0	5.0		5.0	5.0	5.0			
Pedestrian Calls (#/hr)				20	20		20	20	20			
Act Effct Green (s)				16.8	16.8		12.8	29.5	9.7	9.7		
Actuated g/C Ratio				0.35	0.35		0.27	0.61	0.20	0.20		

8/29/2007

Fehr & Peers Associates, Inc.

Lanes, Volumes, Timings
443: Bernal &

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (AM Peak)

	EB	EBT	EBL	WB	WBT	WBL	NB	NBT	NBL	SB	SBT	SBL
v/c Ratio				0.70	0.71			0.70	0.14	0.57	0.39	
Control Delay				18.6	6.0			26.2	1.0	25.3	21.2	
Queue Delay				0.0	0.0			0.0	0.0	0.0	0.0	
Total Delay				18.6	6.0			26.2	1.0	25.3	21.2	
LOS				B	A			C	A	C	C	
Approach Delay					10.9			18.9				
Approach LOS					B			B				C

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 48.3

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 15.2

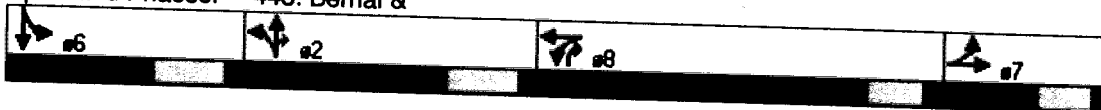
Intersection LOS: B

Intersection Capacity Utilization 75.8%

ICU Level of Service D

Analysis Period (min): 15

Splits and Phases: 443: Bernal &



Lanes, Volumes, Timings
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (AM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕	↗		↕	↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	50		0	200		0
Storage Lanes	0		1	0		0	1		0	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Loading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	2	0	2	2	0	0	0	0	2	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Ped Bkts Factor		0.98					0.98					0.98
Frnt			0.850									0.850
Flt Protected		0.950					0.950			0.950		
Satd. Flow (prot)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1636
Flt Permitted		0.757					0.464			0.220		
Satd. Flow (perm)	0	1424	1391	0	1925	0	876	3657	0	423	1925	1543
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			13									111
Headway Factor	0.98	0.98	1.18	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1267			241			231			676	
Travel Time (s)		24.7			4.7			10.9			6.4	
Volume (vph)	17	0	12	0	6	0	50	643	0	68	324	104
Confl. Peds. (#/hr)	20						20					20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10		10									
Adj. Flow (vph)	19	0	13	0	6	0	56	937	0	73	360	111
Lane Group Flow (vph)	0	19	13	0	0	0	56	937	0	73	360	111
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phases	4	4	4	8	8		2	2		6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	20.1	20.1	20.1	20.1	20.1		20.1	20.1		20.1	20.1	20.1
Total Split (s)	27.1	27.1	27.1	27.1	27.1	0.0	32.9	32.9	0.0	32.9	32.9	32.9
Total Split (%)	45.2%	45.2%	45.2%	45.2%	45.2%	0.0%	54.8%	54.8%	0.0%	54.8%	54.8%	54.8%
Maximum Green (s)	23.0	23.0	23.0	23.0	23.0		28.8	28.8		28.8	28.8	28.8
Yellow Time (s)	3.1	3.1	3.1	3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag												
Lead/Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	Min
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Call (#/hr)	20	20	20	20	20		20	20		20	20	20
Act Effect Green (s)		11.1	11.1				80.9	80.9		80.9	80.9	80.9

8/29/2007

Fehr & Peers Associates, Inc.

Lanes, Volumes, Timings
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (AM Peak)

	EB	EB	WB	WB	WB	SB	SB	SB
Actuated g/C Ratio	0.11	0.11	0.88	0.88	0.88	0.88	0.88	0.88
v/c Ratio	0.12	0.08	0.07	0.29	0.20	0.21	0.08	
Control Delay	11.1	6.1	2.7	2.4	4.4	2.5	1.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	11.1	6.1	2.7	2.4	4.4	2.5	1.0	
LOS	B	A	A	A	A	A	A	
Approach Delay	9.0							
Approach LOS	A							

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 91.7

Natural Cycle: 46

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.29

Intersection Signal Delay: 2.5

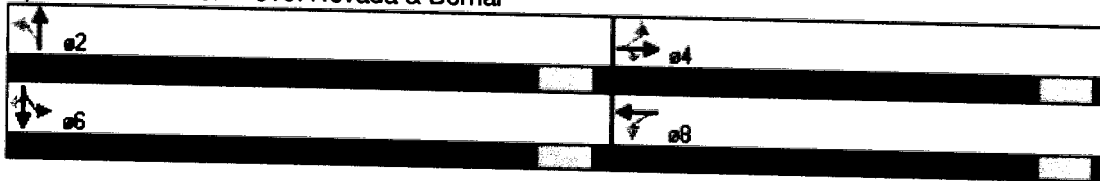
Intersection LOS: A

Intersection Capacity Utilization: 41.6%

ICU Level of Service: A

Analysis Period (min) 15

Splits and Phases: 610: Nevada & Bernal



Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (PM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		175	0		100	100		100	125		250
Storage Lanes	1		1	1		1	1		1	1		1
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor		1.00			1.00			0.95				0.95
Frt		0.963			0.945			0.982				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1829	1847	0	1554	1538	0	1829	3571	0	1829	3657	1636
Flt Permitted	0.434			0.160			0.950			0.950		
Satd. Flow (perm)	835	1847	0	262	1538	0	1829	3571	0	1829	3657	1577
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			28			16				92
Headway Factor	0.96	0.96	0.96	1.18	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		21			30			52				55
Link Distance (ft)		268			1857			248				1401
Travel Time (s)		8.7			42.2			6.4				25.8
Volume (vph)	250	350	117	122	126	73	53	1104	153	161	733	81
Confl. Peds. (#/hr)			1			1			9			4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)				10	10	10						
Act. Flow (vph)	278	396	130	136	140	81	59	1227	170	179	814	92
Lane Group Flow (vph)	278	526	0	136	221	0	59	1397	0	179	814	92
Turn Type	pm+pt			pm+pt			Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			6								
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	23.1	23.1		23.1	23.1		9.1	20.1		9.1	16.1	16.1
Total Split (s)	23.1	28.0	0.0	23.1	28.0	0.0	11.7	36.9	0.0	12.0	37.2	37.2
Total Split (%)	23.1%	28.0%	0.0%	23.1%	28.0%	0.0%	11.7%	36.9%	0.0%	12.0%	37.2%	37.2%
Maximum Green (s)	19.0	23.9		19.0	23.9		7.6	32.8		7.9	33.1	33.1
Yellow Time (s)	3.1	3.1		3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag							Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max		None	Max	Max
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	5.0
Flash Dont Walk (s)	14.0	14.0		14.0	14.0			11.0			7.0	7.0
Pedestrian Calls (#/hr)	20	20		20	20			20			20	20
Act Effect Green (s)	41.7	25.0		41.7	25.0		8.3	37.3		9.0	39.9	39.9

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Fehr & Peers Associates, Inc.

Lanes, Volumes, Timings
338: Ray St & First

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (PM Peak)



	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
Actuated v/c Ratio	0.42	0.25	0.42	0.25	0.08	0.37	0.09	0.40	0.40	0.40
v/c Ratio	0.54	1.11	0.42	0.54	0.39	1.04	1.08	0.56	0.13	0.13
Control Delay	20.9	110.2	19.2	34.1	38.8	47.9	139.0	26.5	5.0	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.9	110.2	19.2	34.1	38.8	47.9	139.0	26.5	5.0	5.0
LOS	C	F	B	C	D	D	F	C	A	A
Approach Delay	79.3		28.4		47.6		43.2			
Approach LOS	E		C		D		D			

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:NBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay: 51.3

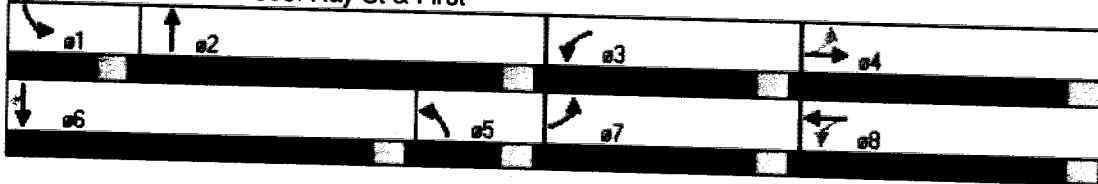
Intersection LOS: D

Intersection Capacity Utilization 90.4%

ICU Level of Service E

Analysis Period (min): 15

Splits and Phases: 338: Ray St & First



Lanes, Volumes, Timings
371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (PM Peak)

Lane Group	EB	EBT	EBP	WB	WBT	WBP	NB	NBT	NBP	SB	SBT	SBP
Lane Configurations	↖↗	↖↗		↖↗	↖↗	↖↗	↖	↖↗	↖	↖↗	↖↗	↖↗
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		0	200		400	200		200	250		0
Storage Lanes	2		1	2		2	1		1	2		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.91	0.91	0.97	0.95	0.88	1.00	0.95	1.00	0.97	0.95	0.95
Ped Bike Factor		1.00							0.98			
Frt		0.986				0.850			0.850		0.984	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3547	5167	0	3547	3657	2880	1829	3657	1636	3547	3599	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3547	5167	0	3547	3657	2880	1829	3657	1599	3547	3599	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17				468			222			13
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		52			55			30			30	
Link Distance (ft)		1325			714			604			1272	
Travel Time (s)		25.4			46.8			9.5			14.1	
Volume (vph)	115	1433	151	217	581	421	146	490	752	1197	1194	146
Confl. Peds. (#/hr)			12			36			36			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	128	1592	168	241	646	468	162	544	836	1330	1327	156
Lane Group Flow (vph)	128	1760	0	241	646	468	162	544	836	1330	1483	0
Turn Type	Prot			Prot		Prot	Prot		Free	Prot		
Protected Phases	1	6		5	2	2	3	8		7	4	
Permitted Phases									Free			
Detector Phases	1	6		5	2	2	3	8		7	4	
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	11.1	29.1		9.1	11.1	11.1	9.1	10.4		10.4	33.4	
Total Split (s)	11.4	41.6	0.0	11.0	41.2	41.2	13.2	19.4	0.0	43.0	49.2	0.0
Total Split (%)	9.9%	36.2%	0.0%	9.6%	35.8%	35.8%	11.5%	16.9%	0.0%	37.4%	42.5%	0.0%
Maximum Green (s)	5.3	35.5		6.9	35.1	35.1	9.1	14.0		37.6	43.8	
Yellow Time (s)	5.1	5.1		3.1	5.1	5.1	3.1	4.4		4.4	4.4	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Recall Mode	None	C-Max		None	None	None	None	None		None	None	
Walk Time (s)		5.0									5.0	
Flash Dont Walk (s)		18.0									23.0	
Pedestrian Calls (#/hr)		20									20	
Act Effct Green (s)	18.7	38.6		8.0	27.9	27.9	10.2	16.4	115.0	40.0	46.2	
Actuated g/C Ratio	0.16	0.34		0.07	0.24	0.24	0.09	0.14	1.00	0.35	0.40	

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Fehr & Peers Associates, Inc.

Synchro 6 Report
Page 3

Lanes, Volumes, Timings
 371: Stanley Blvd & Bernal

Pleasanton Stanley Center Traffic Study
 Existing + Approved + Project with Mitigations (PM Peak)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NSL	NSR	SEB	SEB	SEB
w/c Ratio	0.22	1.01		0.98	0.73	0.44	1.00	1.04	0.52	1.08	1.02
Control Delay	44.8	61.5		105.3	41.3	3.7	123.9	98.8	1.2	85.8	63.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.8	61.5		105.3	41.3	3.7	123.9	98.8	1.2	85.8	63.0
LOS	D	E		F	D	A	F	F	A	F	E
Approach Delay		60.4			39.7			48.5			73.8
Approach LOS		E			D			D			E

Signal Timing Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 0 (0%), Referenced to phase 6:EBT, Start of Yellow

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum w/c Ratio: 1.08

Intersection Signal Delay: 59.2

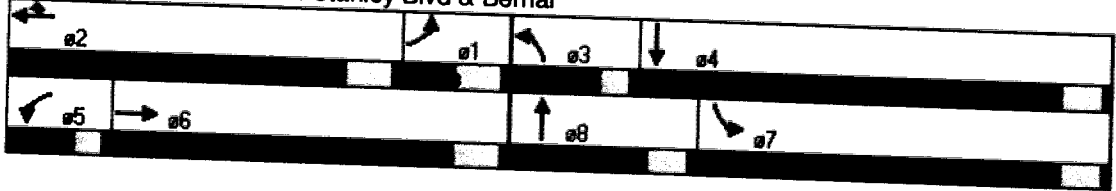
Intersection Capacity Utilization 98.4%

Analysis Period (min) 15

Intersection LOS: E

ICU Level of Service F

Splits and Phases: 371: Stanley Blvd & Bernal



Lanes, Volumes, Timings
443: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (PM Peak)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕	↕	↕	↕	↕	↕	↕	↕
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	75		0	75		0	75		0
Storage Lanes	0		0	1		0	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50		50	50		50	50	50	50		50
Trailing Detector (ft)	0	0		0	0		0	0	0	0		0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor					0.97				0.96	0.96		
Frt					0.850				0.850			
Fr Protected				0.950					0.950			
Satd. Flow (prot)	0	1925	0	1829	1586	0	1925	1925	1636	1829	1925	0
Fr Permitted				0.950					0.950			
Satd. Flow (perm)	0	1925	0	1829	1586	0	1925	1925	1568	1810	1925	0
Right Turn on Red			Yes		Yes			Yes		Yes		Yes
Satd. Flow (RTOR)				711				189				
Headway Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35		40				30			30	
Link Distance (ft)		200		1000				764			604	
Travel Time (s)		4.0		17.8				17.1			4.4	
Volume (vph)	0	0	0	115	0	337	0	490	762	694	415	0
Confl. Peds. (#/hr)						2		4	4			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	128	0	374	0	544	847	771	461	0
Lane Group Flow (vph)	0	0	0	128	374	0	0	544	847	771	461	0
Turn Type	Split			Split			Split	custom		Split		
Protected Phases	7	7		8	8		2	2	8	8	8	
Permitted Phases									28			
Detector Phases	7	7		8	8		2	2	8	8	8	
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.1	9.1		14.1	14.1		15.0	15.0	14.1	10.0	10.0	
Total Split (s)	9.1	9.1	0.0	23.1	23.1	0.0	32.0	32.0	23.1	45.8	45.8	0.0
Total Split (%)	8.3%	8.3%	0.0%	21.0%	21.0%	0.0%	29.1%	29.1%	21.0%	41.6%	41.6%	0.0%
Maximum Green (s)	5.0	5.0		19.0	19.0		27.0	27.0	19.0	40.8	40.8	
Yellow Time (s)	3.1	3.1		3.1	3.1		4.0	4.0	3.1	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5	
Time Before Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Time To Reduce (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Recall Mode	None	None		None	None		Min	Min	None	C-Max	C-Max	
Walk Time (s)				5.0	5.0		5.0	5.0	5.0			
Flash Dont Walk (s)				5.0	5.0		5.0	5.0	5.0			
Pedestrian Calls (#/hr)				20	20		20	20	20			
Act Effct Green (s)				20.1	20.1		25.0	43.1	51.9	51.9		
Actuated g/C Ratio				0.18	0.18		0.26	0.45	0.47	0.47		

8/29/2007

Fehr & Peers Associates, Inc.

Synchro 6 Report
Page 5

Lanes, Volumes, Timings
443: Vineyard & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (PM Peak)



	EB	WB	SB	NB
v/c Ratio	0.38	0.43	1.07	1.04
Control Delay	43.4	1.5	99.8	64.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	43.4	1.5	99.8	64.9
LOS	D	A	F	E
Approach Delay		12.2	78.6	
Approach LOS		B	E	C

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 6:SBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 50.4

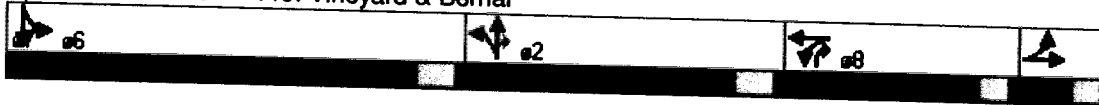
Intersection LOS: D

Intersection Capacity Utilization 95.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 443: Vineyard & Bernal



Lanes, Volumes, Timings
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (PM Peak)

Lane Group	EBL	EBT	EBB	WBL	WBT	WBB	NBL	NBT	NBB	SEB	SEBT	SEBB
Lane Configurations		↑	↑		↕		↑	↑↑		↑	↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	50		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	2	0	2	2	0	0	0	0	2	0	0
Turning Speed (mph)	15		15	15		15			15		15	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.97										
Frt			0.850									0.850
Ft Protected		0.950					0.950			0.950		0.950
Satd. Flow (prot)	0	1829	1391	0	1925	0	1829	3657	0	1829	1925	1636
Ft Permitted		0.757					0.106			0.271		
Satd. Flow (perm)	0	1413	1391	0	1925	0	204	3657	0	522	1925	1523
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			63									36
Headway Factor	0.96	0.96	1.18	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1267			241			231			665	
Travel Time (s)		24.7			4.7			10.9			6.4	
Volume (vph)	44	63	57	0	0	0	9	853	0	224	1003	39
Confl. Peds. (#/hr)	20						20					
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)	10		10									
Adj. Flow (vph)	48	0	63	0	0	0	16	948	0	249	1114	36
Lane Group Flow (vph)	0	49	63	0	0	0	10	948	0	249	1114	36
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Detector Phases	4	4	4	8	8		2	2		6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	20.1	20.1	20.1	20.1	20.1		20.1	20.1		20.1	20.1	20.1
Total Split (s)	20.1	20.1	20.1	20.1	20.1	0.0	59.9	59.9	0.0	59.9	59.9	59.9
Total Split (%)	25.1%	25.1%	25.1%	25.1%	25.1%	0.0%	74.9%	74.9%	0.0%	74.9%	74.9%	74.9%
Maximum Green (s)	16.0	16.0	16.0	16.0	16.0		55.8	55.8		55.8	55.8	55.8
Yellow Time (s)	3.1	3.1	3.1	3.1	3.1		3.1	3.1		3.1	3.1	3.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5	1.5	1.5	1.5		1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Time To Reduce (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	None	None	None	None		Max	Max		Max	Max	Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	20	20	20	20	20		20	20		20	20	20
Act Effct Green (s)		12.4	12.4				77.9	77.9		77.9	77.9	77.9

Lanes, Volumes, Timings
610: Nevada & Bernal

Pleasanton Stanley Center Traffic Study
Existing + Approved + Project with Mitigations (PM Peak)

Lane Group	EBL	EBT	EBB	WBL	WBT	WBB	NBL	NBT	NBB	SEB	SEB	SEB
Actuated g/C Ratio		0.13	0.13				0.83	0.83		0.83	0.83	0.83
v/c Ratio		0.27	0.27				0.06	0.31		0.58	0.70	0.03
Control Delay		28.9	9.1				4.1	3.1		12.0	8.6	1.3
Queue Delay		0.0	0.0				0.0	0.0		0.0	0.0	0.0
Total Delay		28.9	9.1				4.1	3.1		12.0	8.6	1.3
LOS		C	A				A	A		B	A	A
Approach Delay		17.7						3.1			9.0	
Approach LOS		B						A			A	

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 94.3

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum w/c Ratio: 0.70

Intersection Signal Delay: 7.1

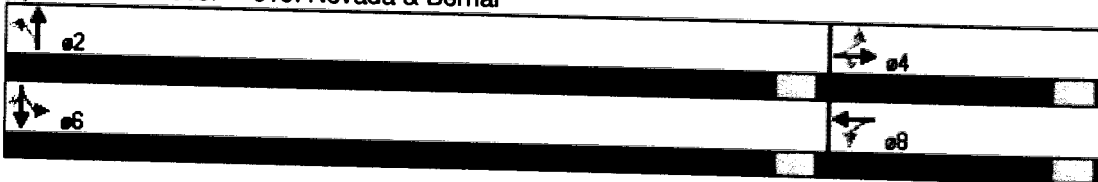
Intersection LOS: A

Intersection Capacity Utilization 71.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 610: Nevada & Bernal



**Appendix B:
General Plan
Intersection Improvements**

**Pleasanton Stanley Center Traffic Study
City of Pleasanton**

August 30, 2007

WC06-2349F



FEHR & PEERS
TRANSPORTATION CONSULTANTS

Assumed Intersection Changes to Reduce Delay in Various Network Alternatives

The Level of Service tables provided in this report assume the following intersection changes are in place by the Year 2025 to help reduce congestion, stops and delay at the study intersections. Modification or deletion of any of these assumptions will result in changes to the LOS tables, with increases in delay and congestion in most cases. These assumptions are similar in nature to the changes shown in the 1996 General Plan in Figures III-5, III-6 and III-7 that detail the assumed roadway widening, new traffic signals, and intersection widening anticipated for the future, and assumed for the purpose of calculating the LOS values in that 1996 document and subsequent Traffic Baseline Reports.

The circulation system changes described below are not necessarily recommended for immediate construction, but would be constructed over the next 20 years as they became necessary. Inclusion of these projects allows the City to collect traffic mitigation fees to cover much of the design and construction cost for this work, and allows the City to acquire right-of-way and require roadway improvements by developers as property is improved or redeveloped. This minimizes the impact to the City's General Fund when construction of these projects becomes necessary to maintain the City's adopted congestion management standards.

Triple Left Turns

Pleasanton currently has a triple left turn from southbound Stoneridge Mall Road to eastbound Stoneridge Drive. Staff's review of traffic collisions at triple left turns compared to double left turn lanes indicates that triple left turns are just as safe if designed properly. Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour.

Pleasanton has existing and future left turn volumes that exceed 600 vehicles per hour. Using triple left turns can significantly reduce delay, and left turn pocket overflow into adjacent through lanes, while maximizing landscaped median area.

Bernal Avenue at Angela Street

Mitigation – Right Turn Only restrictions from 7-9 AM and 4:40-6:30 PM

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue becomes so continuous, that not enough gaps are available for drivers on Angela Street to turn left or go straight through the intersection. The extreme delay on Angela Street creates LOS F conditions at the intersection. This increases traffic risks for all drivers at the intersection as Angela Street traffic tries to force its way across Bernal Avenue through inadequate gaps in 35 MPH traffic. Limiting Angela Street traffic to right turns only during the morning and evening peak hours would increase traffic safety and reduce delay to LOS A conditions overall. Building a traffic signal would also improve conditions to LOS C or better, but would increase stops and delay along Bernal Avenue.

Bernal Avenue at Case Avenue

Mitigation – Widen southbound to provide a right turn only lane

The 1996 General Plan includes the widening of Bernal Avenue to provide a third southbound lane. This new lane should be striped as a right turn only lane and should be constructed at the time the vacant property on the northwest corner is developed.

Bernal Avenue at Foothill Road

Mitigation – Widen Bernal Avenue to 4 lanes

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes between Foothill Road and I-680. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous westbound lanes approaching Foothill Road.

Bernal Avenue at I-680 Northbound Ramps

Mitigation – Widen Bernal Avenue to 4 lanes

About 50% of westbound traffic on Bernal Avenue turns left onto the southbound I-680 on-ramp. This volume exceeds the capacity of the left turn pocket and causes too much traffic to all use the #1 through lane at the intersection of the northbound I-680 ramps. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that the existing #1 westbound through lane is restriped as the #2 westbound left turn lane and that the on-ramp is widened to accept two lanes.

Bernal Avenue at Kottinger Drive

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Bernal Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Bernal Avenue at Main Street

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue becomes so continuous, that not enough gaps are available for drivers on Main Street to turn left or right at the intersection. The extreme delay on Main Street creates LOS F conditions at the intersection. Installing a traffic signal at this intersection would improve pedestrian and traffic safety, while reducing delay for downtown visitors. The 1996 General Plan shows this intersection as a future traffic signal location. Computer simulations show that the signal can be coordinated with other signals along Bernal Avenue to minimize stops and delay.

Bernal Avenue at Meadowlark Drive

Mitigation – Widen Bernal Avenue to 4 lanes

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes between Foothill Road and I-680. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous east and westbound lanes approaching this intersection.

Bernal Avenue at Nevada Street

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue becomes so continuous, that not enough gaps are available for drivers on Nevada Street to turn left or continue straight through the intersection. The extreme delay on Nevada Street creates LOS F conditions at the intersection. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Bernal Avenue at Puerto Vallarta Drive

Mitigation – Right Turn Only restrictions from 7-9 AM and 4:40-6:30 PM

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue becomes so continuous, that not enough gaps are available for drivers on Main Street to turn left or right at the intersection. The extreme delay on Main Street creates LOS F conditions at the intersection. This increases traffic risks for all drivers at the intersection as Puerto Vallarta traffic tries to force its way across Bernal Avenue through inadequate gaps in 35 MPH traffic. Limiting Puerto Vallarta traffic to right turns only during the morning and evening peak hours would increase traffic safety and reduce delay to LOS A conditions overall. Building a traffic signal would also improve conditions to LOS C or better, but would increase stops and delay along Bernal Avenue.

The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous east and westbound lanes on Bernal Avenue approaching this intersection.

Bernal Avenue at Valley Avenue

Mitigation – Widen Valley to provide 2nd southbound right turn only lane and 3 wider northbound through lanes.

Without the West Las Positas Interchange, this is one of the few gateways into the residential area north of Bernal Avenue and east of I-680. Westbound Bernal Avenue was constructed to provide three left turn lanes onto northbound Valley Avenue. However, one of these lanes has remained closed until Valley Avenue can be widened adjacent to the fairgrounds to provide three adequately wide through lanes to receive traffic from a triple left turn. Valley Avenue north of Bernal Avenue also needs to be widened to provide a second southbound right turn only lane to serve the 1,000+ cars per hour that are forecast to make this right turn movement.

Bernal Avenue at Meadowlark Drive

Mitigation – Widen Bernal Avenue to 4 lanes

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes between Foothill Road and I-680. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous east and westbound lanes approaching this intersection.

Bernal Avenue at Vineyard Avenue / Tawny Drive

Mitigation – Widen Bernal Avenue to 4 lanes and upgrade traffic signal

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes north of Angela Street. This includes Bernal Avenue north and south of this intersection. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous north and southbound lanes approaching this intersection. This roadway widening results in increased traffic volumes along Bernal Avenue to the point that protected/permissive left turn arrows may need to be installed due to a lack of adequate gaps in through traffic to permit safe left turns during the peak hours.

Bernal Avenue at Vineyard Avenue (N)

Mitigation – Widen Bernal Avenue to 4 lanes including Arroyo Del Valle Bridge

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes north of Angela Street. This includes Bernal Avenue north and south of this intersection. Widening the bridge over Arroyo Del Valle will provide increased southbound left turn capacity from Bernal Avenue to Vineyard Avenue. It will also allow the traffic signal at the intersection to be upgraded to a far more efficient operation. These changes will significantly reduce congestion and delay at the intersection for Pleasanton residents. However it will also likely facilitate an increase in traffic along the Vineyard Corridor.

El Charro Road at Busch Road

Mitigation – Widen both El Charro Road and Busch Road into 4-lane divided roadways

The 1996 General Plan includes the widening of Busch Road and El Charro Road as 4-lane divided roadways. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that both of these roadways are 4-lane divided roads.

First Street at Kottinger Drive / Spring Street

Mitigation – Make Spring Street one-way westbound between First Street and Railroad Street. Constructing a traffic signal at this intersection has resulted in significant increases in traffic volumes along Spring Street and Kottinger Drive resulting in severe LOS F conditions at this intersection. The smooth flow of traffic along First Street helps to improve Transit service time, improved emergency vehicle access, and reduces traffic volumes along Second Street.

The Year 2025 scenarios studied assume that First Street remains a 3-lane road, with Spring Street being made one-way westbound between First Street and Railroad Street. This reduces traffic along the narrowest section of Spring Street and reduces congestion and delay at First Street by eliminating the eastbound approach to the intersection. This change would have no impact on pedestrian circulation at the intersection, and would increase pedestrian safety by eliminating eastbound left turns over the north crosswalk.

First Street at Ray Street / Vineyard Avenue

Mitigation – Upgrade the traffic signal to provide protected/permissive left turn arrows.

The existing signal operations for Vineyard Avenue and Ray Street are very inefficient and reduce green time along First Street. East and westbound traffic moves separately, with each direction timed long enough for pedestrians to cross First Street. By providing left turn arrows for both directions and allowing east/west through traffic and pedestrians to cross concurrently, more green time will be available for residents on First Street traveling through, or making left turns at the intersection.

Foothill Road at Canyon Way / Dublin Canyon Road

Mitigation – Restripe and upgrade traffic signal to provide triple southbound and eastbound left turn lanes.

Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. The southbound left turn at this intersection is forecast to reach over 700 vehicles per hour in the morning as drivers try to access the Mall, BART and all of the offices in the Mall area. Restriping and reconfiguring the traffic signal to convert the #1 southbound through lane into a third left turn lane significantly reduces left turn delay and queuing, while still providing LOS C conditions for southbound through traffic. Canyon Way will need to be widened to accept traffic from three left turn lanes.

Restriping eastbound Dublin Canyon Road to provide a triple left turn and a through/right turn option lane will provide LOS C and D conditions in the Year 2025. The 1996 General Plan assumed Foothill Road would be widened to provide four northbound through lanes, but this would not provide LOS D or better condition with current traffic model forecasts.

Another option is to eliminate the southbound left turn completely, and have this traffic instead turn left at Deodar Way, which is a much less congested “T” intersection. This would provide LOS D or better conditions at both intersections, and help reduce the existing weaving problem between the eastbound I-580 off ramp and canyon Way. However, it is assumed that the mall and other businesses would oppose this option.

Foothill Road at Castlewood Drive

Mitigation – Construct new speed sensitive traffic signal and westbound left turn pocket
In all Year 2025 scenarios, the traffic volume northbound and westbound exceeds that capacity of the existing 4-way stop at this intersection. Constructing a traffic signal some time in the future would significantly increase capacity at this intersection and reduce delay for nearby residents. Due to the heavy westbound left turn volume, a short left turn pocket would need to be constructed between Foothill Road and the bridge over Arroyo De La Laguna.

This is a gateway into the City and is used by existing and future cut-through traffic. But it is also along one of the few routes residents in southwest Pleasanton have to access the rest of Pleasanton. It is recommended that this intersection be included in the list of future traffic signals so that it can be included in developer traffic impact fee calculations for construction at some future time.

Foothill Road at Deodar Way

Mitigation – Widen/restripe Foothill Road for 3 southbound lanes and eliminate the crosswalk crossing Foothill Road

The 1996 General Plan assumes three lanes southbound on Foothill Road between I-580 and Stoneridge Drive. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are three continuous southbound lanes on Foothill Road approaching this intersection.

There is an existing crosswalk at this intersection crossing Foothill Road on the south leg of the intersection. There is no sidewalk, pedestrian path, but stop, housing or other destination a pedestrian needs to access along the west side of Foothill Road near this intersection. However, the traffic signal must be programmed to accommodate a pedestrian crossing Foothill Road as long as this crosswalk exists. This pedestrian crossing time far exceeds the amount of green time needed by vehicles exiting Deodar Way. This needlessly complicates coordinating this signal with the other signals along Foothill Road, and takes green time away from other residents driving through the intersection. Removing the crosswalk would reduce delay and improve signal coordination along Foothill Road.

Foothill Road at Highland Oaks Drive

Mitigation – Widen Foothill Road to 4 lanes

The 1996 General Plan includes the widening of Foothill Road to 4 lanes between Stoneridge Drive and Muirwood Drive South. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous north and southbound lanes on Foothill Road approaching this intersection.

Foothill Road at I-580 Eastbound

The 1996 General Plan assumed that the I-580 eastbound off ramps would be reconstructed to create a signalized intersection like the one constructed by Dublin at the westbound I-580 ramps. The Year 2025 General Plan update scenarios assume the free right turn loop ramps remain as they are today. The existing ramp configuration minimizes traffic delays and avoids the expenditure of several million dollars to construct this project.

Foothill Road at Laurel Creek Way

Mitigation – Widen/restripe Foothill Road for 3 southbound lanes and eliminate the crosswalk crossing Foothill Road

The 1996 General Plan assumes three lanes southbound on Foothill Road between I-580 and Stoneridge Drive. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are three continuous southbound lanes on Foothill Road approaching this intersection.

There is an existing crosswalk at this intersection crossing Foothill Road on the south leg of the intersection. There is no sidewalk, pedestrian path, but stop, housing or other destination a pedestrian needs to access along the west side of Foothill Road near this intersection. However, the traffic signal must be programmed to accommodate a pedestrian crossing Foothill Road as long as this crosswalk exists. This pedestrian crossing time far exceeds the amount of green time needed by vehicles exiting Laurel Creek Way. This needlessly complicates coordinating this signal with the other signals along Foothill Road, and takes green time away from other residents driving through the intersection. Removing the crosswalk would reduce delay and improve signal coordination along Foothill Road.

Foothill Road at Muirwood Drive / Serenity Terrace

Mitigation – Widen Foothill Road to 4 lanes

The 1996 General Plan includes the widening of Foothill Road to 4 lanes between Stoneridge Drive and Muirwood Drive South. The Year 2025 scenarios that include some of the 1996

General Plan road widenings assume that there are two continuous north and southbound lanes on Foothill Road approaching this intersection.

Foothill Road at Muirwood Drive South

Mitigation – Widen southbound Foothill Road to 2 lanes

The 1996 General Plan includes the widening of Foothill Road to 4 lanes between Stoneridge Drive and Muirwood Drive South. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous southbound lanes on Foothill Road approaching this intersection.

Foothill Road at Stoneridge Drive / Laurel Creek Drive

Mitigation – Widen/restripe Foothill Road for 3 southbound lanes and upgrade traffic signal to create a third southbound left turn lane.

The 1996 General Plan assumes three lanes southbound on Foothill Road between I-580 and Stoneridge Drive. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are three continuous southbound lanes on Foothill Road approaching this intersection.

More than 50% of morning and almost 50% of southbound traffic on Foothill Road turns left onto Stoneridge Drive. The projected left turn volume exceeds 650 vehicle per hour in the Year 2025. Restriping the #1 southbound through lane as a third southbound left turn lane would reduce delay and queuing at the intersection, while maintaining LOS A and B in the remaining southbound through lanes.

Foothill Road at West Las Positas Boulevard

Mitigation – Widen Foothill Road and West Las Positas Boulevard to 4 lanes

The 1996 General Plan includes the widening of Foothill Road and West Las Positas Boulevard to 4 continuous lanes approaching this intersection. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous north and southbound lanes on Foothill Road and 2 continuous westbound lanes on West Las Positas Boulevard approaching this intersection.

Gibraltar Drive at Chabot Drive

Mitigation – Upgrade traffic signal

The LOS rating improves at this intersection relative to the 2003 LOS because the City changed the traffic signal operation to reduce delay at the intersection in 2005. By eliminating the north/south split phasing, and the east/west left turn arrows, delay was reduced by about 50%. Year 2025 forecasts using “Approved” Pleasanton land development projections indicate that this more efficient signal operation can stay in operation through the Year 2025.

Gibraltar Drive at Willow Drive

Mitigation – Upgrade traffic signal

Due to the relatively low through and left turn volumes on Gibraltar Drive at Willow Drive, eliminating the east/west left turn arrows should safely reduce delay at this intersection through the Year 2025. This delay reduction was recently demonstrated at the intersection of Gibraltar Drive and Chabot Drive.

Hacienda Drive at I-580 Eastbound

Mitigation – Restripe Off-ramp

Full development of the Hacienda Business Park is forecast to increase I-580 off-ramp right turn volumes to over 1,300 vehicles per hour. Restriping the #2 left turn lane to be a left/right turn option lane would significantly reduce congestion and delay at this intersection.

Hacienda Drive at Owens Drive

Mitigation – Restripe intersection and upgrade signal to provide three eastbound and southbound left turn lanes, and eliminate the north crosswalk.

Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. The southbound and eastbound left turn volumes at this intersection are forecast to reach about 900 vehicles per hour during peak commute periods. Restriping and reconfiguring the traffic signal to convert the #1 southbound lane on Hacienda Drive, and the #1 eastbound lane on Owens Drive into left turn lanes, lane significantly reduces left turn delay and queuing, while still providing LOS C conditions for southbound and eastbound through traffic.

As at the intersection of Hopyard Road at Owens Drive, the north pedestrian crossing area experiences the highest level of conflicts with through and turning vehicles. The westbound through traffic movement is relatively light, while the time it takes for a pedestrian to cross Hacienda Drive is very long. This disproportionately takes green time away from all of the other people trying to get through this busy intersection. The Year 2025 LOS calculations assume that the north crosswalk at this intersection is removed. This reduces congestion by allowing a shorter green light for westbound traffic, which in turn provides more green time for the heavier directions of travel.

Hacienda Drive at West Las Positas Boulevard

Mitigation – Upgrade traffic signal to unsplit north/south phasing.

Modifying the traffic signal and striping at this intersection so that southbound Hacienda Drive and northbound driveway traffic move simultaneously, will significantly increase the amount of green time available for drivers along West Las Positas Boulevard, thus decreasing stops and delay at the intersection.

Hopyard Road at Del Valle Parkway

Mitigation – Construct new speed sensitive traffic signal

In all Year 2025 scenarios, the flow of traffic along Hopyard Road exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Hopyard Road. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. A speed sensitive traffic signal would decrease traffic congestion at this intersection, while still controlling speeds along Division Street. The 1996 General Plan shows this intersection as a future traffic signal location.

Hopyard Road at I-580 Eastbound Off-ramp

Mitigation – Minor traffic signal upgrade

Upgrading the traffic signal to allow eastbound right turn off-ramp traffic to move concurrently with northbound through traffic for an adjustable period of time would make this signal more efficient and thus reduces delay significantly for local traffic.

Hopyard Road at I-580 Westbound Off-ramp

Mitigation – Restripe off-ramp and minor traffic signal upgrade

About 75% of traffic exiting the westbound I-580 off-ramp turns right into Dublin. Modifying the off ramp striping and traffic signal to convert the #2 left turn lane into a left/right turn option lane would reduce congestion and delay at this intersection.

Hopyard Road at Owens Drive

Mitigation – Widen intersection to add an additional east and westbound lane.

Narrowing the raised median and widening Owens Drive along the north side of the street would allow eastbound Owens Drive to be striped as a triple left and a through/right lane, and westbound Owens Drive with a left, left/through, and double right turn lanes. This would reduce overall delay at the intersection to LOS D, with some movements still experiencing LOS E and F conditions in the Year 2025.

Hopyard Road at Stoneridge Drive

Mitigation – Restripe intersection and upgrade signal to provide three northbound left turn lanes.

Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. The northbound left turn volume at this intersection is forecast to reach about 550 vehicles per hour. The northbound left turn volume represents about 30% of all northbound traffic. Designating one of the three northbound lanes as a left turn only lane, better distributes northbound traffic over the available lanes. Restriping and reconfiguring the traffic signal to convert the #1 northbound lane on Hopyard Road into a left turn lane, lane significantly reduces left turn delay and queuing (down to LOS E), while providing LOS C for northbound through traffic.

Hopyard Road at Valley Trails Drive / Parkside Drive

Mitigation – Minor traffic signal upgrade and striping change option

A coding error may have resulted in the traffic forecast being too high for northbound left turns at this intersection. But if this volume does develop, restriping the northbound #1 through lane as a second northbound left turn lane would solve the congestion problem that would result. With only two northbound lanes south of Valley Avenue, and only two eastbound left turn lanes from Valley Avenue to Hopyard Road, only two northbound through lanes are needed at Parkside Drive. However, staff believes that northbound left turns into the Valley Trails area will distribute themselves between the North and South Valley Trails entries, and a double northbound left turn will probably not be necessary.

Hopyard Road at West Las Positas Boulevard

Mitigation – Restripe intersection and upgrade signal to provide three westbound and northbound left turn lanes.

Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. The westbound left turn volume at this intersection is forecast to reach about 700

vehicles per hour. Restriping and reconfiguring the traffic signal to convert the #1 westbound lane on West Las Positas Boulevard into a left turn lane, lane significantly reduces left turn delay and queuing (down to LOS E), while providing LOS D for westbound through traffic.

If the West Las Positas Interchange is constructed, northbound left turn volumes will increase from Hopyard Road to West Las Positas Boulevard. Converting the #1 northbound through lane into a third left turn lane would significantly reduce delay and queuing at the intersection under those circumstances.

Johnson Drive at Providian Way

Mitigation – Minor traffic signal upgrade to remove split phasing and left turn arrows. Due to the relatively low traffic volumes and good visibility, stops and delay can be reduced at this intersection by removing the left turn arrows on Johnson Drive and allowing east and westbound Providian Way traffic to move concurrently.

Main Street at Ray Street

Mitigation – Minor traffic signal upgrade to add protected/permissive southbound left turn arrows.

This intersection is in the Downtown area and is exempt from the City's LOS D standard. However, installing protected/permissive southbound left turn arrows would significantly reduce delay and southbound queuing at peak hours. It is also hoped that the proposed double southbound left turn from Santa Rita Road to Stanley Boulevard will help to reduce delay at Main Street and Ray Street. Protected/permissive left turn phasing is assumed at this intersection in all Year 2025 scenarios.

Main Street at St Marys Street

Mitigation – None – LOS Policy Exempt Downtown Intersection

This intersection will operate at LOS E and F conditions in the Year 2025 as a stop sign controlled intersection. The intersection is exempt from the City's LOS D standard and is assumed to remain stop sign controlled in all Year 2025 scenarios.

Santa Rita Road at Black Avenue and Francisco Street

Mitigation – New signal at Francisco Street and eliminate westbound traffic at Black Avenue
This mitigation attempts to address two separate problems: pedestrian safety crossing Santa Rita Road at Francisco Street, and morning school congestion at Black Avenue.

Studies show that there is an elevated risk of pedestrian collisions in painted crosswalks crossing busy multi-lane roads. The City has installed extra pedestrian crossing signs, and has created Keep Clear zones to improve pedestrian safety at Francisco Street. But the ultimate solution to this problem is to remove the painted crosswalk, or to install a traffic signal.

A significant amount of traffic traveling to and from Alisal, Amador High, Harvest Park, and Walnut Grove schools, plus morning commuter traffic all try to get through the intersection of Santa Rita Road at Black Avenue during the morning commute period. This creates LOS E conditions under existing conditions, and severe LOS F conditions in future years.

Installing a traffic signal at Francisco Street and Santa Rita Road would significantly improve pedestrian and traffic safety at this intersection. The Alisal school driveway opposite Black Avenue is striped as three in-only lanes. Signalizing Francisco Street provides an opportunity to reroute traffic exiting the Santa Rita Frontage Road opposite Black Avenue, north to exit the frontage road at the new signal at Francisco Street. Eliminating westbound traffic from the frontage road opposite Black Avenue, and eliminating the north crosswalk, would reduce congestion to LOS D in the morning, and LOS C in the afternoon at Black Avenue.

Santa Rita Road at Pimlico Drive/I-580 Ramps

Mitigation – Eliminate the south crosswalk,

The year 2025 LOS calculations assume that the south crosswalk at this intersection is removed. Almost every freeway off-ramp signal in the City prohibits pedestrians from crossing the wide City street at the interchange. This increases pedestrian safety and reduces congestion by eliminating this vehicle/pedestrian conflict at intersections with very heavy turning movements. A pedestrian crossing Santa Rita Road in this crosswalk requires a much longer green light than do the cars exiting the off-ramp. This disproportionately takes green time away from all of the other people trying to get through this busy intersection.

Santa Rita Road at Stanley Boulevard

Mitigation – Convert the #1 southbound through lane into a left turn lane and widen Stanley Boulevard to accept two eastbound lanes.

Under existing conditions, long southbound traffic backups occur during the peak afternoon school and commute hours extending north from the intersection of Main Street and Ray Street (which operates at LOS F), over the Arroyo Del Valle bridge, and through the intersection at Del Valle Parkway. The 1996 General Plan assumed that Stanley Boulevard would be widened to provide two westbound left turn lanes and one through/right lane. To help ease existing and future traffic congestion, the #1 southbound through lane at Stanley Boulevard could be converted to a second southbound left turn lane. This would eliminate the existing southbound merge of two lanes down to one lane over the Arroyo Del Valle bridge, and help reduce congestion at Main Street and Ray Street by drawing away some of the southbound left turn traffic.

Santa Rita Road at Stoneridge Drive

Mitigation – Construct a southbound right turn lane, convert the #1 northbound through lane into a left turn lane (Alternatives A & B), convert the #1 eastbound right turn lane into a third through lane (Alternative C).

All Year 2025 alternatives assume the construction of a new southbound right turn only lane at this intersection.

Alternative Networks A and B assume that the #1 northbound through lane will be restriped as a new left turn lane. About 30% of northbound traffic turns left from Santa Rita Road to Stoneridge Drive during both the peak morning and evening commute periods. This results in significant delays, with drivers often waiting for multiple green lights to get through the intersection even under existing conditions. The two remaining northbound through lanes are forecast to operate at LOS D or better through the year 2025.

Alternative C includes the Stoneridge Extension, which reduces the northbound left turn and eastbound right turn volumes at this intersection. Congestion and delay is reduced in this Alternative by maintaining the existing three northbound through and double left turn lane configuration, and converting the #1 eastbound right turn lane (one of two eastbound right turn only lanes) into a third eastbound through lane. This also improves pedestrian safety in the south crosswalk.

Santa Rita Road at Valley Avenue

Mitigation – Add a third southbound and second westbound left turn lane

All traffic model forecasts of future traffic conditions assume that a third southbound left turn lane and a second westbound left turn lane will be constructed at this intersection. This project was included in the 1996 General Plan and has been in design since the year 2000. This project involves reconstructing the existing raised medians on Santa Rita Road and widening portions of Valley Avenue east of the intersection. Funding for this project primarily comes from excess NPID traffic mitigation funds.

Stanley Boulevard at Valley/Bernal Avenue

Mitigation – Widen Stanley Boulevard to accept a third eastbound through lane

Widening Stanley Boulevard by one lane when the now vacant southeast corner property develops will significantly reduce delay at the intersection. This will allow the lightly used eastbound right turn only lane to be converted into a through/right option lane. Having three eastbound lanes at this intersection was included in the 1996 General Plan.

Stoneridge Drive at I-680 Northbound Off-ramp

Mitigation – Minor traffic signal upgrade

Upgrading the traffic signal to allow northbound right turn traffic to move concurrently with westbound through traffic for an adjustable period of time would make this signal more efficient and thus reduces delay significantly for local traffic.

Stoneridge Drive at Springdale Avenue

Mitigation – Upgrade traffic signal and restripe Springdale Avenue.

The existing signal operations for Springdale Avenue are very inefficient and reduce green time along Stoneridge Drive. Without the West Las Positas Interchange, this is one of the few gateways into the residential tract south of Stoneridge Drive and west of I-680. Restriping the northbound and southbound approaches to allow north/south traffic to flow concurrently, and removing the east crosswalk would reduce overall delay at the intersection, and increase green time on Stoneridge Drive, including the westbound left turn into the residential area. The time it takes a pedestrian to cross Stoneridge Drive in the east crosswalk, directly conflicts with the heavy southbound left turn movement coming out of the mall area. Shifting these pedestrians to the west crosswalk allows them to cross Stoneridge Drive concurrently with the heavy southbound left turn movement, thus freeing up green time for other residents.

Stoneridge Drive at West Las Positas Boulevard

Mitigation – Convert the #3 northeast bound through lane into a right turn only lane.

In Alternative C, there is a significant increase in traffic turning right from eastbound West Las Positas Boulevard onto Stoneridge Drive to access the Stoneridge Drive Extension.

Congestion and delay is significantly reduced by restriping the #3 eastbound through lane as a right turn only lane.

Stoneridge Mall Road at Deodar Way

Mitigation – Construct new traffic signal and add 2nd northbound left turn

In all Year 2025 scenarios, the flow of traffic along Stoneridge Mall Road approaches the capacity of the stop sign controls at this intersection, resulting in LOS E conditions on Stoneridge Mall Road. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal and restriping the #1 northbound through lane as a second left turn lane reduces delay at this intersection by about 75%. This should help to draw some traffic off of Canyon Way, and thus help reduce congestion at the intersection of Foothill Road and Canyon Way. It is recommended that this intersection be included in the list of future traffic signals so that it can be included in developer traffic impact fee calculations for construction in the future when needed.

Stoneridge Mall Road at Embarcadero Court

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Stoneridge Mall Road exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Stoneridge Mall Road. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Local developers are required to fund the design and construction of a traffic signal at this intersection when signal warrants are met. Existing traffic counts now show that the state and federal warrants for a traffic signal are met.

Sunol Boulevard at Castlewood Drive

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Sunol Boulevard becomes so continuous, that not enough gaps are available for drivers on Castlewood Drive to turn left towards downtown Pleasanton. The 2-½ minute delay per vehicle on Castlewood Drive creates LOS F conditions at the intersection.

This is a gateway into the City and is used by existing and future cut-through traffic. But it is also along one of the few routes residents in southwest Pleasanton have to access the rest of Pleasanton. Installing a 3-way stop would significantly reduce delay for these Pleasanton residents, but in future years, it may back-up traffic through the Sunol Boulevard at I-680 southbound intersection. The state and federal warrants for installing a 3-way stop are currently met by 116%.

It is recommended that a 3-way stop be initially installed to reduce delay for Pleasanton residents. It is also recommended that this intersection be included in the list of future traffic signals so that it can be included in developer traffic impact fee calculations for construction in the future if traffic does indeed backup into the I-680 interchange. Building a traffic signal here

would further reduce delay for Pleasanton residents, and can provide a means of metering inbound cut-through traffic using the more heavily traveled Pleasanton-Sunol Road.

Sunol Boulevard at I-680 Northbound Ramps

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Sunol Boulevard becomes so continuous, that not enough gaps are available for drivers coming off of the northbound I-680 off-ramp. This increases traffic risks for all drivers at the intersection as off-ramp traffic tries to force its way across Sunol Boulevard through inadequate gaps in 45 MPH traffic.

This is a gateway into the City and is used by existing and future cut-through traffic. But about 1/3 of the off-ramp traffic is local resident traffic. Building a traffic signal here would increase traffic safety at the intersection, and would reduce delay for Pleasanton residents. Cut-through traffic will be delayed downstream at Sunol Boulevard and Sycamore Road and at Bernal Avenue. The 1996 General Plan shows this intersection as a future traffic signal location.

Sunol Boulevard at I-680 Southbound Ramps

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Sunol Boulevard becomes so continuous, that not enough gaps are available for drivers coming off of the southbound I-680 off-ramp. This increases traffic risks for all drivers at the intersection as off-ramp traffic tries to force its way across Sunol Boulevard through inadequate gaps in 45 MPH traffic.

This is a gateway into the City and is used by existing and future cut-through traffic. But most of the off-ramp traffic is local resident and employee traffic. Installing a 3-way stop here would increase traffic safety at the intersection, and would control cut-through traffic volumes. However, by the Year 2025 forecast show that a traffic signal would be necessary to avoid LOS F conditions. Cut-through traffic will be delayed downstream at Sunol Boulevard and Sycamore Road and at Bernal Avenue. The 1996 General Plan shows this intersection as a future traffic signal location.

It is recommended that a 3-way stop be initially installed to improve traffic safety and limit cut-through traffic at this intersection. It is also recommended that this intersection be included in the list of future traffic signals so that it can be included in developer traffic impact fee calculations for construction in the future if traffic delays begin to impact residents in southwest Pleasanton.

Sunol Boulevard at Sycamore Road

Gateway Traffic Metering – LOS Policy Exemption

All Year 2025 traffic model forecasts assume full occupancy of the Applied Biosystems site. Under these conditions, traffic delays increase to LOS E and F conditions. The traffic model has been set to calculate LOS conditions assuming enough green time will be given to east/west traffic to clear local traffic in one green light, and whatever time is left over will be given to inbound traffic on Sunol Boulevard which contains 50% or more cut-through traffic at this intersection. This policy helps to minimize local resident delay, while also limiting cut-through traffic volumes.

However, favoring the local residents on Sycamore Road will increase delay on Sunol Boulevard during the evening commute period, and the overall intersection LOS degrades to LOS E and F conditions. Allowing this gateway to be constrained requires a gateway LOS exemption of the citywide LOS D standard.

Valley Avenue at Blackbird Drive / Northway Road (W)

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents, and would also help to reduce traffic diversion onto Black Avenue and Del Valle Parkway.

Valley Avenue at Busch Road

Mitigation – Construct second westbound right turn lane

If Busch Road is extended to El Charro Road, and El Charro Road provides a connection to Stanley Boulevard, a second westbound right turn lane will need to be constructed for traffic turning from Busch Road to Valley Avenue. This mitigation is assumed in all scenarios that include the Busch Road and El Charro Road extensions.

Valley Avenue at Crestline Road

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents, and would also help to reduce traffic diversion onto Black Avenue and Del Valle Parkway.

Valley Avenue at Hansen Drive

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Valley Avenue at Koll Center Parkway (N)

Mitigation – Striping change and traffic signal upgrade

The existing signal operations for Koll Center Parkway are very inefficient and reduce green time along Valley Avenue. Restriping the eastbound and westbound approaches to allow east/west traffic to flow concurrently would reduce overall delay at the intersection, especially for residents along Valley Avenue.

Valley Avenue at Koll Center Parkway (S)

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue becomes so continuous, that not enough gaps are available for drivers on Koll Center Parkway to turn left or continue straight through the intersection. The extreme delay on Koll Center Parkway (up to 10 minute delays) creates LOS D conditions at the intersection overall and reduces traffic safety. Installing a traffic signal at this intersection would improve traffic and pedestrian safety, however it would increase stops and delay along Valley Avenue. Safety could be improved and delay reduced by restricting Koll Center Parkway (south) drivers to right turns only during the morning and evening peak hours. However, staff anticipates opposition from local businesses and the fairgrounds to such restrictions.

Valley Avenue at Paseo Santa Cruz (N)

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Valley Avenue at Paseo Santa Cruz (S)

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Vineyard Avenue at Ruby Hill Boulevard

Gateway Traffic Metering – LOS Policy Exemption

All traffic model forecasts assume that westbound traffic on Vineyard Avenue will be metered in the morning to allow no more than 200 vehicles per hour to enter the City from the east. This requires a gateway LOS exemption as this may result in high enough delays on the westbound approach to the intersection that overall intersection delay exceeds LOS D. Without metering, traffic volumes along the Vineyard Corridor may increase by up to 1,000 vehicles per hour and traffic volumes and delays downstream from Vineyard Avenue would also increase.

West Las Positas Boulevard at Muirwood Drive

Mitigation – Construct new speed sensitive traffic signal

In all Year 2025 scenarios, the flow of traffic along West Las Positas Boulevard exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on West Las Positas Boulevard. Traffic already backs up at this intersection during the morning peak school traffic period as was mentioned by residents at neighborhood workshops. These stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a speed sensitive traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents.

West Las Positas Boulevard at Payne Road

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along West Las Positas Boulevard becomes so continuous, that not enough gaps are available for drivers on Payne Road to turn left at the intersection. The extreme delay on Payne Road creates LOS F conditions at the intersection. Limiting Payne Road drivers to right turns only would increase safety and reduce overall delay at the intersection, but would probably increase traffic on Singletree Way and Dorman Road. The 1996 General Plan shows this intersection as a future traffic signal location.

**Appendix B:
General Plan
Intersection Improvements**

**Pleasanton Stanley Center Traffic Study
City of Pleasanton**

August 30, 2007

WC06-2349F

Assumed Intersection Changes to Reduce Delay in Various Network Alternatives

The Level of Service tables provided in this report assume the following intersection changes are in place by the Year 2025 to help reduce congestion, stops and delay at the study intersections. Modification or deletion of any of these assumptions will result in changes to the LOS tables, with increases in delay and congestion in most cases. These assumptions are similar in nature to the changes shown in the 1996 General Plan in Figures III-5, III-6 and III-7 that detail the assumed roadway widening, new traffic signals, and intersection widening anticipated for the future, and assumed for the purpose of calculating the LOS values in that 1996 document and subsequent Traffic Baseline Reports.

The circulation system changes described below are not necessarily recommended for immediate construction, but would be constructed over the next 20 years as they became necessary. Inclusion of these projects allows the City to collect traffic mitigation fees to cover much of the design and construction cost for this work, and allows the City to acquire right-of-way and require roadway improvements by developers as property is improved or redeveloped. This minimizes the impact to the City's General Fund when construction of these projects becomes necessary to maintain the City's adopted congestion management standards.

Triple Left Turns

Pleasanton currently has a triple left turn from southbound Stoneridge Mall Road to eastbound Stoneridge Drive. Staff's review of traffic collisions at triple left turns compared to double left turn lanes indicates that triple left turns are just as safe if designed properly. Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. Pleasanton has existing and future left turn volumes that exceed 600 vehicles per hour. Using triple left turns can significantly reduce delay, and left turn pocket overflow into adjacent through lanes, while maximizing landscaped median area.

Bernal Avenue at Angela Street

Mitigation – Right Turn Only restrictions from 7-9 AM and 4:40-6:30 PM

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue becomes so continuous, that not enough gaps are available for drivers on Angela Street to turn left or go straight through the intersection. The extreme delay on Angela Street creates LOS F conditions at the intersection. This increases traffic risks for all drivers at the intersection as Angela Street traffic tries to force its way across Bernal Avenue through inadequate gaps in 35 MPH traffic. Limiting Angela Street traffic to right turns only during the morning and evening peak hours would increase traffic safety and reduce delay to LOS A conditions overall. Building a traffic signal would also improve conditions to LOS C or better, but would increase stops and delay along Bernal Avenue.

Bernal Avenue at Case Avenue

Mitigation – Widen southbound to provide a right turn only lane

The 1996 General Plan includes the widening of Bernal Avenue to provide a third southbound lane. This new lane should be striped as a right turn only lane and should be constructed at the time the vacant property on the northwest corner is developed.

Bernal Avenue at Foothill Road

Mitigation – Widen Bernal Avenue to 4 lanes

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes between Foothill Road and I-680. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous westbound lanes approaching Foothill Road.

Bernal Avenue at I-680 Northbound Ramps

Mitigation – Widen Bernal Avenue to 4 lanes

About 50% of westbound traffic on Bernal Avenue turns left onto the southbound I-680 on-ramp. This volume exceeds the capacity of the left turn pocket and causes too much traffic to all use the #1 through lane at the intersection of the northbound I-680 ramps. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that the existing #1 westbound through lane is restriped as the #2 westbound left turn lane and that the on-ramp is widened to accept two lanes.

Bernal Avenue at Kottinger Drive

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Bernal Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Bernal Avenue at Main Street

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue becomes so continuous, that not enough gaps are available for drivers on Main Street to turn left or right at the intersection. The extreme delay on Main Street creates LOS F conditions at the intersection. Installing a traffic signal at this intersection would improve pedestrian and traffic safety, while reducing delay for downtown visitors. The 1996 General Plan shows this intersection as a future traffic signal location. Computer simulations show that the signal can be coordinated with other signals along Bernal Avenue to minimize stops and delay.

Bernal Avenue at Meadowlark Drive

Mitigation – Widen Bernal Avenue to 4 lanes

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes between Foothill Road and I-680. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous east and westbound lanes approaching this intersection.

Bernal Avenue at Nevada Street

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue becomes so continuous, that not enough gaps are available for drivers on Nevada Street to turn left or continue straight through the intersection. The extreme delay on Nevada Street creates LOS F conditions at the intersection. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Bernal Avenue at Puerto Vallarta Drive

Mitigation – Right Turn Only restrictions from 7-9 AM and 4:40-6:30 PM

In all Year 2025 scenarios, the flow of traffic along Bernal Avenue becomes so continuous, that not enough gaps are available for drivers on Main Street to turn left or right at the intersection. The extreme delay on Main Street creates LOS F conditions at the intersection. This increases traffic risks for all drivers at the intersection as Puerto Vallarta traffic tries to force its way across Bernal Avenue through inadequate gaps in 35 MPH traffic. Limiting Puerto Vallarta traffic to right turns only during the morning and evening peak hours would increase traffic safety and reduce delay to LOS A conditions overall. Building a traffic signal would also improve conditions to LOS C or better, but would increase stops and delay along Bernal Avenue.

The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous east and westbound lanes on Bernal Avenue approaching this intersection.

Bernal Avenue at Valley Avenue

Mitigation – Widen Valley to provide 2nd southbound right turn only lane and 3 wider northbound through lanes.

Without the West Las Positas Interchange, this is one of the few gateways into the residential area north of Bernal Avenue and east of I-680. Westbound Bernal Avenue was constructed to provide three left turn lanes onto northbound Valley Avenue. However, one of these lanes has remained closed until Valley Avenue can be widened adjacent to the fairgrounds to provide three adequately wide through lanes to receive traffic from a triple left turn. Valley Avenue north of Bernal Avenue also needs to be widened to provide a second southbound right turn only lane to serve the 1,000+ cars per hour that are forecast to make this right turn movement.

Bernal Avenue at Meadowlark Drive

Mitigation – Widen Bernal Avenue to 4 lanes

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes between Foothill Road and I-680. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous east and westbound lanes approaching this intersection.

Bernal Avenue at Vineyard Avenue / Tawny Drive

Mitigation – Widen Bernal Avenue to 4 lanes and upgrade traffic signal

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes north of Angela Street. This includes Bernal Avenue north and south of this intersection. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous north and southbound lanes approaching this intersection. This roadway widening results in increased traffic volumes along Bernal Avenue to the point that protected/permissive left turn arrows may need to be installed due to a lack of adequate gaps in through traffic to permit safe left turns during the peak hours.

Bernal Avenue at Vineyard Avenue (N)

Mitigation – Widen Bernal Avenue to 4 lanes including Arroyo Del Valle Bridge

The 1996 General Plan includes the widening of Bernal Avenue to 4 lanes north of Angela Street. This includes Bernal Avenue north and south of this intersection. Widening the bridge over Arroyo Del Valle will provide increased southbound left turn capacity from Bernal Avenue to Vineyard Avenue. It will also allow the traffic signal at the intersection to be upgraded to a far more efficient operation. These changes will significantly reduce congestion and delay at the intersection for Pleasanton residents. However it will also likely facilitate an increase in traffic along the Vineyard Corridor.

El Charro Road at Busch Road

Mitigation – Widen both El Charro Road and Busch Road into 4-lane divided roadways

The 1996 General Plan includes the widening of Busch Road and El Charro Road as 4-lane divided roadways. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that both of these roadways are 4-lane divided roads.

First Street at Kottinger Drive / Spring Street

Mitigation – Make Spring Street one-way westbound between First Street and Railroad Street. Constructing a traffic signal at this intersection has resulted in significant increases in traffic volumes along Spring Street and Kottinger Drive resulting in severe LOS F conditions at this intersection. The smooth flow of traffic along First Street helps to improve Transit service time, improved emergency vehicle access, and reduces traffic volumes along Second Street.

The Year 2025 scenarios studied assume that First Street remains a 3-lane road, with Spring Street being made one-way westbound between First Street and Railroad Street. This reduces traffic along the narrowest section of Spring Street and reduces congestion and delay at First Street by eliminating the eastbound approach to the intersection. This change would have no impact on pedestrian circulation at the intersection, and would increase pedestrian safety by eliminating eastbound left turns over the north crosswalk.

First Street at Ray Street / Vineyard Avenue

Mitigation – Upgrade the traffic signal to provide protected/permissive left turn arrows.

The existing signal operations for Vineyard Avenue and Ray Street are very inefficient and reduce green time along First Street. East and westbound traffic moves separately, with each direction timed long enough for pedestrians to cross First Street. By providing left turn arrows for both directions and allowing east/west through traffic and pedestrians to cross concurrently, more green time will be available for residents on First Street traveling through, or making left turns at the intersection.

Foothill Road at Canyon Way / Dublin Canyon Road

Mitigation – Restripe and upgrade traffic signal to provide triple southbound and eastbound left turn lanes.

Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. The southbound left turn at this intersection is forecast to reach over 700 vehicles per hour in the morning as drivers try to access the Mall, BART and all of the offices in the Mall area. Restriping and reconfiguring the traffic signal to convert the #1 southbound through lane into a third left turn lane significantly reduces left turn delay and queuing, while still providing LOS C conditions for southbound through traffic. Canyon Way will need to be widened to accept traffic from three left turn lanes.

Restriping eastbound Dublin Canyon Road to provide a triple left turn and a through/right turn option lane will provide LOS C and D conditions in the Year 2025. The 1996 General Plan assumed Foothill Road would be widened to provide four northbound through lanes, but this would not provide LOS D or better condition with current traffic model forecasts.

Another option is to eliminate the southbound left turn completely, and have this traffic instead turn left at Deodar Way, which is a much less congested “T” intersection. This would provide LOS D or better conditions at both intersections, and help reduce the existing weaving problem between the eastbound I-580 off ramp and canyon Way. However, it is assumed that the mall and other businesses would oppose this option.

Foothill Road at Castlewood Drive

Mitigation – Construct new speed sensitive traffic signal and westbound left turn pocket
In all Year 2025 scenarios, the traffic volume northbound and westbound exceeds that capacity of the existing 4-way stop at this intersection. Constructing a traffic signal some time in the future would significantly increase capacity at this intersection and reduce delay for nearby residents. Due to the heavy westbound left turn volume, a short left turn pocket would need to be constructed between Foothill Road and the bridge over Arroyo De La Laguna.

This is a gateway into the City and is used by existing and future cut-through traffic. But it is also along one of the few routes residents in southwest Pleasanton have to access the rest of Pleasanton. It is recommended that this intersection be included in the list of future traffic signals so that it can be included in developer traffic impact fee calculations for construction at some future time.

Foothill Road at Deodar Way

Mitigation – Widen/restripe Foothill Road for 3 southbound lanes and eliminate the crosswalk crossing Foothill Road

The 1996 General Plan assumes three lanes southbound on Foothill Road between I-580 and Stoneridge Drive. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are three continuous southbound lanes on Foothill Road approaching this intersection.

There is an existing crosswalk at this intersection crossing Foothill Road on the south leg of the intersection. There is no sidewalk, pedestrian path, but stop, housing or other destination a pedestrian needs to access along the west side of Foothill Road near this intersection. However, the traffic signal must be programmed to accommodate a pedestrian crossing Foothill Road as long as this crosswalk exists. This pedestrian crossing time far exceeds the amount of green time needed by vehicles exiting Deodar Way. This needlessly complicates coordinating this signal with the other signals along Foothill Road, and takes green time away from other residents driving through the intersection. Removing the crosswalk would reduce delay and improve signal coordination along Foothill Road.

Foothill Road at Highland Oaks Drive

Mitigation – Widen Foothill Road to 4 lanes

The 1996 General Plan includes the widening of Foothill Road to 4 lanes between Stoneridge Drive and Muirwood Drive South. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous north and southbound lanes on Foothill Road approaching this intersection.

Foothill Road at I-580 Eastbound

The 1996 General Plan assumed that the I-580 eastbound off ramps would be reconstructed to create a signalized intersection like the one constructed by Dublin at the westbound I-580 ramps. The Year 2025 General Plan update scenarios assume the free right turn loop ramps remain as they are today. The existing ramp configuration minimizes traffic delays and avoids the expenditure of several million dollars to construct this project.

Foothill Road at Laurel Creek Way

Mitigation – Widen/restripe Foothill Road for 3 southbound lanes and eliminate the crosswalk crossing Foothill Road

The 1996 General Plan assumes three lanes southbound on Foothill Road between I-580 and Stoneridge Drive. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are three continuous southbound lanes on Foothill Road approaching this intersection.

There is an existing crosswalk at this intersection crossing Foothill Road on the south leg of the intersection. There is no sidewalk, pedestrian path, but stop, housing or other destination a pedestrian needs to access along the west side of Foothill Road near this intersection. However, the traffic signal must be programmed to accommodate a pedestrian crossing Foothill Road as long as this crosswalk exists. This pedestrian crossing time far exceeds the amount of green time needed by vehicles exiting Laurel Creek Way. This needlessly complicates coordinating this signal with the other signals along Foothill Road, and takes green time away from other residents driving through the intersection. Removing the crosswalk would reduce delay and improve signal coordination along Foothill Road.

Foothill Road at Muirwood Drive / Serenity Terrace

Mitigation – Widen Foothill Road to 4 lanes

The 1996 General Plan includes the widening of Foothill Road to 4 lanes between Stoneridge Drive and Muirwood Drive South. The Year 2025 scenarios that include some of the 1996

General Plan road widenings assume that there are two continuous north and southbound lanes on Foothill Road approaching this intersection.

Foothill Road at Muirwood Drive South

Mitigation – Widen southbound Foothill Road to 2 lanes

The 1996 General Plan includes the widening of Foothill Road to 4 lanes between Stoneridge Drive and Muirwood Drive South. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous southbound lanes on Foothill Road approaching this intersection.

Foothill Road at Stoneridge Drive / Laurel Creek Drive

Mitigation – Widen/restripe Foothill Road for 3 southbound lanes and upgrade traffic signal to create a third southbound left turn lane.

The 1996 General Plan assumes three lanes southbound on Foothill Road between I-580 and Stoneridge Drive. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are three continuous southbound lanes on Foothill Road approaching this intersection.

More than 50% of morning and almost 50% of southbound traffic on Foothill Road turns left onto Stoneridge Drive. The projected left turn volume exceeds 650 vehicle per hour in the Year 2025. Restriping the #1 southbound through lane as a third southbound left turn lane would reduce delay and queuing at the intersection, while maintaining LOS A and B in the remaining southbound through lanes.

Foothill Road at West Las Positas Boulevard

Mitigation – Widen Foothill Road and West Las Positas Boulevard to 4 lanes

The 1996 General Plan includes the widening of Foothill Road and West Las Positas Boulevard to 4 continuous lanes approaching this intersection. The Year 2025 scenarios that include some of the 1996 General Plan road widenings assume that there are two continuous north and southbound lanes on Foothill Road and 2 continuous westbound lanes on West Las Positas Boulevard approaching this intersection.

Gibraltar Drive at Chabot Drive

Mitigation – Upgrade traffic signal

The LOS rating improves at this intersection relative to the 2003 LOS because the City changed the traffic signal operation to reduce delay at the intersection in 2005. By eliminating the north/south split phasing, and the east/west left turn arrows, delay was reduced by about 50%. Year 2025 forecasts using “Approved” Pleasanton land development projections indicate that this more efficient signal operation can stay in operation through the Year 2025.

Gibraltar Drive at Willow Drive

Mitigation – Upgrade traffic signal

Due to the relatively low through and left turn volumes on Gibraltar Drive at Willow Drive, eliminating the east/west left turn arrows should safely reduce delay at this intersection through the Year 2025. This delay reduction was recently demonstrated at the intersection of Gibraltar Drive and Chabot Drive.

Hacienda Drive at I-580 Eastbound

Mitigation – Restripe Off-ramp

Full development of the Hacienda Business Park is forecast to increase I-580 off-ramp right turn volumes to over 1,300 vehicles per hour. Restriping the #2 left turn lane to be a left/right turn option lane would significantly reduce congestion and delay at this intersection.

Hacienda Drive at Owens Drive

Mitigation – Restripe intersection and upgrade signal to provide three eastbound and southbound left turn lanes, and eliminate the north crosswalk.

Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. The southbound and eastbound left turn volumes at this intersection are forecast to reach about 900 vehicles per hour during peak commute periods. Restriping and reconfiguring the traffic signal to convert the #1 southbound lane on Hacienda Drive, and the #1 eastbound lane on Owens Drive into left turn lanes, lane significantly reduces left turn delay and queuing, while still providing LOS C conditions for southbound and eastbound through traffic.

As at the intersection of Hopyard Road at Owens Drive, the north pedestrian crossing area experiences the highest level of conflicts with through and turning vehicles. The westbound through traffic movement is relatively light, while the time it takes for a pedestrian to cross Hacienda Drive is very long. This disproportionately takes green time away from all of the other people trying to get through this busy intersection. The Year 2025 LOS calculations assume that the north crosswalk at this intersection is removed. This reduces congestion by allowing a shorter green light for westbound traffic, which in turn provides more green time for the heavier directions of travel.

Hacienda Drive at West Las Positas Boulevard

Mitigation – Upgrade traffic signal to unsplit north/south phasing.

Modifying the traffic signal and striping at this intersection so that southbound Hacienda Drive and northbound driveway traffic move simultaneously, will significantly increase the amount of green time available for drivers along West Las Positas Boulevard, thus decreasing stops and delay at the intersection.

Hopyard Road at Del Valle Parkway

Mitigation – Construct new speed sensitive traffic signal

In all Year 2025 scenarios, the flow of traffic along Hopyard Road exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Hopyard Road. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. A speed sensitive traffic signal would decrease traffic congestion at this intersection, while still controlling speeds along Division Street. The 1996 General Plan shows this intersection as a future traffic signal location.

Hopyard Road at I-580 Eastbound Off-ramp

Mitigation – Minor traffic signal upgrade

Upgrading the traffic signal to allow eastbound right turn off-ramp traffic to move concurrently with northbound through traffic for an adjustable period of time would make this signal more efficient and thus reduces delay significantly for local traffic.

Hopyard Road at I-580 Westbound Off-ramp

Mitigation – Restripe off-ramp and minor traffic signal upgrade

About 75% of traffic exiting the westbound I-580 off-ramp turns right into Dublin. Modifying the off ramp striping and traffic signal to convert the #2 left turn lane into a left/right turn option lane would reduce congestion and delay at this intersection.

Hopyard Road at Owens Drive

Mitigation – Widen intersection to add an additional east and westbound lane.

Narrowing the raised median and widening Owens Drive along the north side of the street would allow eastbound Owens Drive to be striped as a triple left and a through/right lane, and westbound Owens Drive with a left, left/through, and double right turn lanes. This would reduce overall delay at the intersection to LOS D, with some movements still experiencing LOS E and F conditions in the Year 2025.

Hopyard Road at Stoneridge Drive

Mitigation – Restripe intersection and upgrade signal to provide three northbound left turn lanes.

Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. The northbound left turn volume at this intersection is forecast to reach about 550 vehicles per hour. The northbound left turn volume represents about 30% of all northbound traffic. Designating one of the three northbound lanes as a left turn only lane, better distributes northbound traffic over the available lanes. Restriping and reconfiguring the traffic signal to convert the #1 northbound lane on Hopyard Road into a left turn lane, lane significantly reduces left turn delay and queuing (down to LOS E), while providing LOS C for northbound through traffic.

Hopyard Road at Valley Trails Drive / Parkside Drive

Mitigation – Minor traffic signal upgrade and striping change option

A coding error may have resulted in the traffic forecast being too high for northbound left turns at this intersection. But if this volume does develop, restriping the northbound #1 through lane as a second northbound left turn lane would solve the congestion problem that would result. With only two northbound lanes south of Valley Avenue, and only two eastbound left turn lanes from Valley Avenue to Hopyard Road, only two northbound through lanes are needed at Parkside Drive. However, staff believes that northbound left turns into the Valley Trails area will distribute themselves between the North and South Valley Trails entries, and a double northbound left turn will probably not be necessary.

Hopyard Road at West Las Positas Boulevard

Mitigation – Restripe intersection and upgrade signal to provide three westbound and northbound left turn lanes.

Double left turn lanes are recommended when left turn traffic volumes reach 300 vehicles per hour. The westbound left turn volume at this intersection is forecast to reach about 700

vehicles per hour. Restriping and reconfiguring the traffic signal to convert the #1 westbound lane on West Las Positas Boulevard into a left turn lane, significantly reduces left turn delay and queuing (down to LOS E), while providing LOS D for westbound through traffic.

If the West Las Positas Interchange is constructed, northbound left turn volumes will increase from Hopyard Road to West Las Positas Boulevard. Converting the #1 northbound through lane into a third left turn lane would significantly reduce delay and queuing at the intersection under those circumstances.

Johnson Drive at Providian Way

Mitigation – Minor traffic signal upgrade to remove split phasing and left turn arrows. Due to the relatively low traffic volumes and good visibility, stops and delay can be reduced at this intersection by removing the left turn arrows on Johnson Drive and allowing east and westbound Providian Way traffic to move concurrently.

Main Street at Ray Street

Mitigation – Minor traffic signal upgrade to add protected/permissive southbound left turn arrows.

This intersection is in the Downtown area and is exempt from the City's LOS D standard. However, installing protected/permissive southbound left turn arrows would significantly reduce delay and southbound queuing at peak hours. It is also hoped that the proposed double southbound left turn from Santa Rita Road to Stanley Boulevard will help to reduce delay at Main Street and Ray Street. Protected/permissive left turn phasing is assumed at this intersection in all Year 2025 scenarios.

Main Street at St Marys Street

Mitigation – None – LOS Policy Exempt Downtown Intersection

This intersection will operate at LOS E and F conditions in the Year 2025 as a stop sign controlled intersection. The intersection is exempt from the City's LOS D standard and is assumed to remain stop sign controlled in all Year 2025 scenarios.

Santa Rita Road at Black Avenue and Francisco Street

Mitigation – New signal at Francisco Street and eliminate westbound traffic at Black Avenue
This mitigation attempts to address two separate problems: pedestrian safety crossing Santa Rita Road at Francisco Street, and morning school congestion at Black Avenue.

Studies show that there is an elevated risk of pedestrian collisions in painted crosswalks crossing busy multi-lane roads. The City has installed extra pedestrian crossing signs, and has created Keep Clear zones to improve pedestrian safety at Francisco Street. But the ultimate solution to this problem is to remove the painted crosswalk, or to install a traffic signal.

A significant amount of traffic traveling to and from Alisal, Amador High, Harvest Park, and Walnut Grove schools, plus morning commuter traffic all try to get through the intersection of Santa Rita Road at Black Avenue during the morning commute period. This creates LOS E conditions under existing conditions, and severe LOS F conditions in future years.

Installing a traffic signal at Francisco Street and Santa Rita Road would significantly improve pedestrian and traffic safety at this intersection. The Alisal school driveway opposite Black Avenue is striped as three in-only lanes. Signalizing Francisco Street provides an opportunity to reroute traffic exiting the Santa Rita Frontage Road opposite Black Avenue, north to exit the frontage road at the new signal at Francisco Street. Eliminating westbound traffic from the frontage road opposite Black Avenue, and eliminating the north crosswalk, would reduce congestion to LOS D in the morning, and LOS C in the afternoon at Black Avenue.

Santa Rita Road at Pimlico Drive/I-580 Ramps

Mitigation – Eliminate the south crosswalk,

The year 2025 LOS calculations assume that the south crosswalk at this intersection is removed. Almost every freeway off-ramp signal in the City prohibits pedestrians from crossing the wide City street at the interchange. This increases pedestrian safety and reduces congestion by eliminating this vehicle/pedestrian conflict at intersections with very heavy turning movements. A pedestrian crossing Santa Rita Road in this crosswalk requires a much longer green light than do the cars exiting the off-ramp. This disproportionately takes green time away from all of the other people trying to get through this busy intersection.

Santa Rita Road at Stanley Boulevard

Mitigation – Convert the #1 southbound through lane into a left turn lane and widen Stanley Boulevard to accept two eastbound lanes.

Under existing conditions, long southbound traffic backups occur during the peak afternoon school and commute hours extending north from the intersection of Main Street and Ray Street (which operates at LOS F), over the Arroyo Del Valle bridge, and through the intersection at Del Valle Parkway. The 1996 General Plan assumed that Stanley Boulevard would be widened to provide two westbound left turn lanes and one through/right lane. To help ease existing and future traffic congestion, the #1 southbound through lane at Stanley Boulevard could be converted to a second southbound left turn lane. This would eliminate the existing southbound merge of two lanes down to one lane over the Arroyo Del Valle bridge, and help reduce congestion at Main Street and Ray Street by drawing away some of the southbound left turn traffic.

Santa Rita Road at Stoneridge Drive

Mitigation – Construct a southbound right turn lane, convert the #1 northbound through lane into a left turn lane (Alternatives A & B), convert the #1 eastbound right turn lane into a third through lane (Alternative C).

All Year 2025 alternatives assume the construction of a new southbound right turn only lane at this intersection.

Alternative Networks A and B assume that the #1 northbound through lane will be restriped as a new left turn lane. About 30% of northbound traffic turns left from Santa Rita Road to Stoneridge Drive during both the peak morning and evening commute periods. This results in significant delays, with drivers often waiting for multiple green lights to get through the intersection even under existing conditions. The two remaining northbound through lanes are forecast to operate at LOS D or better through the year 2025.

Alternative C includes the Stoneridge Extension, which reduces the northbound left turn and eastbound right turn volumes at this intersection. Congestion and delay is reduced in this Alternative by maintaining the existing three northbound through and double left turn lane configuration, and converting the #1 eastbound right turn lane (one of two eastbound right turn only lanes) into a third eastbound through lane. This also improves pedestrian safety in the south crosswalk.

Santa Rita Road at Valley Avenue

Mitigation – Add a third southbound and second westbound left turn lane

All traffic model forecasts of future traffic conditions assume that a third southbound left turn lane and a second westbound left turn lane will be constructed at this intersection. This project was included in the 1996 General Plan and has been in design since the year 2000. This project involves reconstructing the existing raised medians on Santa Rita Road and widening portions of Valley Avenue east of the intersection. Funding for this project primarily comes from excess NPID traffic mitigation funds.

Stanley Boulevard at Valley/Bernal Avenue

Mitigation – Widen Stanley Boulevard to accept a third eastbound through lane

Widening Stanley Boulevard by one lane when the now vacant southeast corner property develops will significantly reduce delay at the intersection. This will allow the lightly used eastbound right turn only lane to be converted into a through/right option lane. Having three eastbound lanes at this intersection was included in the 1996 General Plan.

Stoneridge Drive at I-680 Northbound Off-ramp

Mitigation – Minor traffic signal upgrade

Upgrading the traffic signal to allow northbound right turn traffic to move concurrently with westbound through traffic for an adjustable period of time would make this signal more efficient and thus reduces delay significantly for local traffic.

Stoneridge Drive at Springdale Avenue

Mitigation – Upgrade traffic signal and restripe Springdale Avenue.

The existing signal operations for Springdale Avenue are very inefficient and reduce green time along Stoneridge Drive. Without the West Las Positas Interchange, this is one of the few gateways into the residential tract south of Stoneridge Drive and west of I-680. Restriping the northbound and southbound approaches to allow north/south traffic to flow concurrently, and removing the east crosswalk would reduce overall delay at the intersection, and increase green time on Stoneridge Drive, including the westbound left turn into the residential area. The time it takes a pedestrian to cross Stoneridge Drive in the east crosswalk, directly conflicts with the heavy southbound left turn movement coming out of the mall area. Shifting these pedestrians to the west crosswalk allows them to cross Stoneridge Drive concurrently with the heavy southbound left turn movement, thus freeing up green time for other residents.

Stoneridge Drive at West Las Positas Boulevard

Mitigation – Convert the #3 northeast bound through lane into a right turn only lane.

In Alternative C, there is a significant increase in traffic turning right from eastbound West Las Positas Boulevard onto Stoneridge Drive to access the Stoneridge Drive Extension.

Congestion and delay is significantly reduced by restriping the #3 eastbound through lane as a right turn only lane.

Stoneridge Mall Road at Deodar Way

Mitigation – Construct new traffic signal and add 2nd northbound left turn

In all Year 2025 scenarios, the flow of traffic along Stoneridge Mall Road approaches the capacity of the stop sign controls at this intersection, resulting in LOS E conditions on Stoneridge Mall Road. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal and restriping the #1 northbound through lane as a second left turn lane reduces delay at this intersection by about 75%. This should help to draw some traffic off of Canyon Way, and thus help reduce congestion at the intersection of Foothill Road and Canyon Way. It is recommended that this intersection be included in the list of future traffic signals so that it can be included in developer traffic impact fee calculations for construction in the future when needed.

Stoneridge Mall Road at Embarcadero Court

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Stoneridge Mall Road exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Stoneridge Mall Road. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Local developers are required to fund the design and construction of a traffic signal at this intersection when signal warrants are met. Existing traffic counts now show that the state and federal warrants for a traffic signal are met.

Sunol Boulevard at Castlewood Drive

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Sunol Boulevard becomes so continuous, that not enough gaps are available for drivers on Castlewood Drive to turn left towards downtown Pleasanton. The 2-½ minute delay per vehicle on Castlewood Drive creates LOS F conditions at the intersection.

This is a gateway into the City and is used by existing and future cut-through traffic. But it is also along one of the few routes residents in southwest Pleasanton have to access the rest of Pleasanton. Installing a 3-way stop would significantly reduce delay for these Pleasanton residents, but in future years, it may back-up traffic through the Sunol Boulevard at I-680 southbound intersection. The state and federal warrants for installing a 3-way stop are currently met by 116%.

It is recommended that a 3-way stop be initially installed to reduce delay for Pleasanton residents. It is also recommended that this intersection be included in the list of future traffic signals so that it can be included in developer traffic impact fee calculations for construction in the future if traffic does indeed backup into the I-680 interchange. Building a traffic signal here

would further reduce delay for Pleasanton residents, and can provide a means of metering inbound cut-through traffic using the more heavily traveled Pleasanton-Sunol Road.

Sunol Boulevard at I-680 Northbound Ramps

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Sunol Boulevard becomes so continuous, that not enough gaps are available for drivers coming off of the northbound I-680 off-ramp. This increases traffic risks for all drivers at the intersection as off-ramp traffic tries to force its way across Sunol Boulevard through inadequate gaps in 45 MPH traffic.

This is a gateway into the City and is used by existing and future cut-through traffic. But about 1/3 of the off-ramp traffic is local resident traffic. Building a traffic signal here would increase traffic safety at the intersection, and would reduce delay for Pleasanton residents. Cut-through traffic will be delayed downstream at Sunol Boulevard and Sycamore Road and at Bernal Avenue. The 1996 General Plan shows this intersection as a future traffic signal location.

Sunol Boulevard at I-680 Southbound Ramps

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Sunol Boulevard becomes so continuous, that not enough gaps are available for drivers coming off of the southbound I-680 off-ramp. This increases traffic risks for all drivers at the intersection as off-ramp traffic tries to force its way across Sunol Boulevard through inadequate gaps in 45 MPH traffic.

This is a gateway into the City and is used by existing and future cut-through traffic. But most of the off-ramp traffic is local resident and employee traffic. Installing a 3-way stop here would increase traffic safety at the intersection, and would control cut-through traffic volumes. However, by the Year 2025 forecast show that a traffic signal would be necessary to avoid LOS F conditions. Cut-through traffic will be delayed downstream at Sunol Boulevard and Sycamore Road and at Bernal Avenue. The 1996 General Plan shows this intersection as a future traffic signal location.

It is recommended that a 3-way stop be initially installed to improve traffic safety and limit cut-through traffic at this intersection. It is also recommended that this intersection be included in the list of future traffic signals so that it can be included in developer traffic impact fee calculations for construction in the future if traffic delays begin to impact residents in southwest Pleasanton.

Sunol Boulevard at Sycamore Road

Gateway Traffic Metering – LOS Policy Exemption

All Year 2025 traffic model forecasts assume full occupancy of the Applied Biosystems site. Under these conditions, traffic delays increase to LOS E and F conditions. The traffic model has been set to calculate LOS conditions assuming enough green time will be given to east/west traffic to clear local traffic in one green light, and whatever time is left over will be given to inbound traffic on Sunol Boulevard which contains 50% or more cut-through traffic at this intersection. This policy helps to minimize local resident delay, while also limiting cut-through traffic volumes.

However, favoring the local residents on Sycamore Road will increase delay on Sunol Boulevard during the evening commute period, and the overall intersection LOS degrades to LOS E and F conditions. Allowing this gateway to be constrained requires a gateway LOS exemption of the citywide LOS D standard.

Valley Avenue at Blackbird Drive / Northway Road (W)

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents, and would also help to reduce traffic diversion onto Black Avenue and Del Valle Parkway.

Valley Avenue at Busch Road

Mitigation – Construct second westbound right turn lane

If Busch Road is extended to El Charro Road, and El Charro Road provides a connection to Stanley Boulevard, a second westbound right turn lane will need to be constructed for traffic turning from Busch Road to Valley Avenue. This mitigation is assumed in all scenarios that include the Busch Road and El Charro Road extensions.

Valley Avenue at Crestline Road

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents, and would also help to reduce traffic diversion onto Black Avenue and Del Valle Parkway.

Valley Avenue at Hansen Drive

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Valley Avenue at Koll Center Parkway (N)

Mitigation – Striping change and traffic signal upgrade

The existing signal operations for Koll Center Parkway are very inefficient and reduce green time along Valley Avenue. Restriping the eastbound and westbound approaches to allow east/west traffic to flow concurrently would reduce overall delay at the intersection, especially for residents along Valley Avenue.

Valley Avenue at Koll Center Parkway (S)

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue becomes so continuous, that not enough gaps are available for drivers on Koll Center Parkway to turn left or continue straight through the intersection. The extreme delay on Koll Center Parkway (up to 10 minute delays) creates LOS D conditions at the intersection overall and reduces traffic safety.

Installing a traffic signal at this intersection would improve traffic and pedestrian safety, however it would increase stops and delay along Valley Avenue. Safety could be improved and delay reduced by restricting Koll Center Parkway (south) drivers to right turns only during the morning and evening peak hours. However, staff anticipates opposition from local businesses and the fairgrounds to such restrictions.

Valley Avenue at Paseo Santa Cruz (N)

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Valley Avenue at Paseo Santa Cruz (S)

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along Valley Avenue exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on Valley Avenue. Stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents. The 1996 General Plan shows this intersection as a future traffic signal location.

Vineyard Avenue at Ruby Hill Boulevard

Gateway Traffic Metering – LOS Policy Exemption

All traffic model forecasts assume that westbound traffic on Vineyard Avenue will be metered in the morning to allow no more than 200 vehicles per hour to enter the City from the east.

This requires a gateway LOS exemption as this may result in high enough delays on the westbound approach to the intersection that overall intersection delay exceeds LOS D.

Without metering, traffic volumes along the Vineyard Corridor may increase by up to 1,000 vehicles per hour and traffic volumes and delays downstream from Vineyard Avenue would also increase.

West Las Positas Boulevard at Muirwood Drive

Mitigation – Construct new speed sensitive traffic signal

In all Year 2025 scenarios, the flow of traffic along West Las Positas Boulevard exceeds the capacity of the stop sign controls at this intersection, resulting in LOS F conditions on West Las Positas Boulevard. Traffic already backs up at this intersection during the morning peak school traffic period as was mentioned by residents at neighborhood workshops. These stop sign controls have far less capacity than traffic signal control. This was recently demonstrated at Vineyard Avenue at Montevino Drive where traffic backups were eliminated when the signal replaced the previous 4-way stop. Installing a speed sensitive traffic signal at this intersection would improve pedestrian safety, while reducing delay for Pleasanton residents.

West Las Positas Boulevard at Payne Road

Mitigation – Construct new traffic signal

In all Year 2025 scenarios, the flow of traffic along West Las Positas Boulevard becomes so continuous, that not enough gaps are available for drivers on Payne Road to turn left at the intersection. The extreme delay on Payne Road creates LOS F conditions at the intersection. Limiting Payne Road drivers to right turns only would increase safety and reduce overall delay at the intersection, but would probably increase traffic on Singletree Way and Dorman Road. The 1996 General Plan shows this intersection as a future traffic signal location.



LEED 2009 for New Construction and Major Renovations

Project Checklist

Project Name

Date

5 7 2 Sustainable Sites Possible Points: 26

Y	?	N	Prereq	Description	Possible Points
Y			Prereq 1	Construction Activity Pollution Prevention	1
			Credit 1	Site Selection	5
			Credit 2	Development Density and Community Connectivity	1
			Credit 3	Brownfield Redevelopment	6
			Credit 4.1	Alternative Transportation—Public Transportation Access	1
			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	3
			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	2
			Credit 4.4	Alternative Transportation—Parking Capacity	1
			Credit 5.1	Site Development—Protect or Restore Habitat	1
			Credit 5.2	Site Development—Maximize Open Space	1
			Credit 6.1	Stormwater Design—Quantity Control	1
			Credit 6.2	Stormwater Design—Quality Control	1
			Credit 7.1	Heat Island Effect—Non-roof	1
			Credit 7.2	Heat Island Effect—Roof	1
			Credit 8	Light Pollution Reduction	1

2 1 Water Efficiency Possible Points: 10

Y	?	N	Prereq	Description	Possible Points
Y			Prereq 1	Water Use Reduction—20% Reduction	2 to 4
			Credit 1	Water Efficient Landscaping	2
			Credit 2	Innovative Wastewater Technologies	2 to 4
			Credit 3	Water Use Reduction	3

5 5 Energy and Atmosphere Possible Points: 35

Y	?	N	Prereq	Description	Possible Points
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	5
			Prereq 2	Minimum Energy Performance	5
			Prereq 3	Fundamental Refrigerant Management	1 to 19
			Credit 1	Optimize Energy Performance	1 to 7
			Credit 2	On-Site Renewable Energy	2
			Credit 3	Enhanced Commissioning	2
			Credit 4	Enhanced Refrigerant Management	3
			Credit 5	Measurement and Verification	2
			Credit 6	Green Power	2

5 2 Materials and Resources Possible Points: 14

Y	?	N	Prereq	Description	Possible Points
Y			Prereq 1	Storage and Collection of Recyclables	1 to 3
			Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1
			Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1 to 2
			Credit 2	Construction Waste Management	1 to 2
			Credit 3	Materials Reuse	1 to 2

Materials and Resources, Continued

Y	?	N	Prereq	Description	Possible Points
			Credit 4	Recycled Content	1 to 2
			Credit 5	Regional Materials	1 to 2
			Credit 6	Rapidly Renewable Materials	1
			Credit 7	Certified Wood	1

Indoor Environmental Quality Possible Points: 15

Y	?	N	Prereq	Description	Possible Points
Y			Prereq 1	Minimum Indoor Air Quality Performance	1
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	1
			Credit 1	Outdoor Air Delivery Monitoring	1
			Credit 2	Increased Ventilation	1
			Credit 3.1	Construction IAQ Management Plan—During Construction	1
			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
			Credit 5	Indoor Chemical and Pollutant Source Control	1
			Credit 6.1	Controllability of Systems—Lighting	1
			Credit 6.2	Controllability of Systems—Thermal Comfort	1
			Credit 7.1	Thermal Comfort—Design	1
			Credit 7.2	Thermal Comfort—Verification	1
			Credit 8.1	Daylight and Views—Daylight	1
			Credit 8.2	Daylight and Views—Views	1

Innovation and Design Process Possible Points: 6

Y	?	N	Prereq	Description	Possible Points
1			Credit 1.1	Innovation in Design: Specific Title	1
1			Credit 1.2	Innovation in Design: Specific Title	1
1			Credit 1.3	Innovation in Design: Specific Title	1
1			Credit 1.4	Innovation in Design: Specific Title	1
1			Credit 1.5	Innovation in Design: Specific Title	1
1			Credit 2	LEED Accredited Professional	1

Regional Priority Credits Possible Points: 4

Y	?	N	Prereq	Description	Possible Points
4			Credit 1.1	Regional Priority: Specific Credit	1
1			Credit 1.2	Regional Priority: Specific Credit	1
1			Credit 1.3	Regional Priority: Specific Credit	1
1			Credit 1.4	Regional Priority: Specific Credit	1
26	29	4	Total		Possible Points: 110

Certified: 40 to 49 points Silver: 50 to 59 points Gold: 60 to 79 points Platinum: 80 to 110

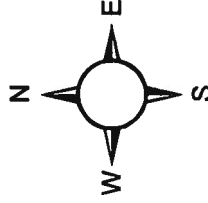
Location Map

City of Pleasanton

GIS

Department

PDR-928



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